THE STATE of ALASKA
GOVERNOR BILL WALKER

Department of Health and Social Services

Office of the Commissioner

Anchorage
3601 C Street, Suite 902
Anchorage, Alaska 99503-5924
Main: 907.269.7800
Fax: 907.269.0060

Juneau
PO Box 110601
Juneau, Alaska 99811-0601
Main: 907.465.3030
Fax: 907.465.3068

November 15, 2018

Pete Kelly
Senate President
Alaska State Senate
Room 111
Alaska State Capitol
Juneau, AK 99801

Bryce Edgmon
Speaker
Alaska House of Representatives
Room 208
Alaska State Capitol
Juneau, AK 99801

Senate Bill 74, signed into law in June 2016, established the Medical Assistance Reform Program under AS 47.05.270. This program requires the Department of Health & Social Services to submit an annual report to the legislature on the status and results of Medical Assistance reforms by November 15 of each year. Attached is the annual report submitted in compliance with AS 47.05.270.

For questions regarding this report, please contact Tony Newman, DHSS Legislative Liaison, via email at anthony.newman@alaska.gov or 465-1611.

Sincerely,

Jay C. Butler, MD
Commissioner
Department of Health & Social Services

cc: Darwin Peterson, Legislative Director, Office of Governor Bill Walker

AK DHSS Annual Medicaid Reform Report

FY2018

AS 47.05.270 requires the Department of Health & Social Services to submit an Annual Report to the legislature by November 15 of each year on the status of reforms enacted by that statute.

In compliance with AS 47.05.270

Jay Butler, MD
Commissioner
Department of Health & Social Services

FY 2018 Annual Medicaid Reform Report

EXECUTIVE SUMMARY

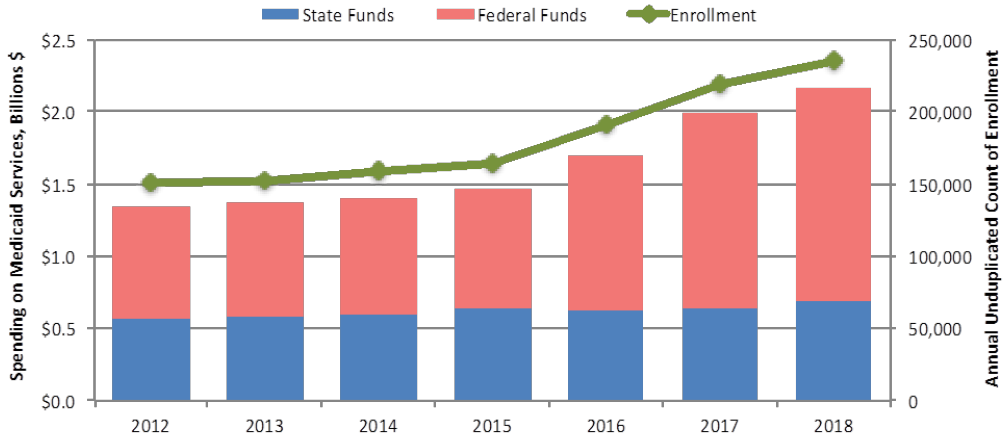
The Medical Assistance Reform Program was established under AS 47.05.270 by Senate Bill 74 (SB 74) in 2016. Under this statute the Department of Health & Social Services (the department) is required to submit an annual report to the legislature by November 15th of each year on the status and results of Medicaid reform activities.

This report outlines how nearly $140 million in state general fund savings and cost avoidance was achieved in FY 2018. Some of these savings are actual reductions in spending compared to prior year spending. Some are estimates of costs that would have been incurred had the described initiative not been implemented. Others are actual returns to the state budget in the form of reimbursement from the federal government or providers that offset state general fund expenditures. The following table summarizes state general fund savings and avoided costs identified throughout the report. These savings were all factored into the current year budget and into short-term (3-year) future spending projections.

FY 2018 General Fund Savings and Cost Avoidance Resulting from Medicaid Reforms and Cost Containment Initiatives	
SB 74 Medicaid Reform GF Savings/Cost Avoidance — DHSS	
Federal Tribal Reimbursement Policy	$ 44,765,420
Alaska Medicaid Coordinated Care Initiative (Primary Care Case Management)	$ 2,850,000
Subtotal	**$ 47,615,420**
SB 74 Medicaid Reform GF Cost Avoidance — DOC	
Medicaid enrollment for prisoners; out-of-facility hospital services	$ 4,645,983
GF Savings/Cost Avoidance from Other Medicaid Reforms — DHSS	
Pharmacy Preferred Drug List	$ 2,500,000
Pharmacy Prospective Drug Utilization Reviews	$ 2,500,000
Pharmacy Payment Reform: NADAC Implementation	$ 12,250,000
Pharmacy Hepatitis C Initiatives	$ 3,000,000
On-going Tribal Health System Capacity Development	$ 22,500,000
Subtotal	**$ 42,750,000**
GF Savings/Cost Avoidance from On-Going Care Improvement/Cost Containment Initiatives — DHSS	
Home & Community Based Services Utilization Control & Process Improvement	$ 10,430,676
Surveillance & Utilization Review Subsystem (SURS) Overpayment Collections	$ 26,587
SURS Account Reconciliation Management Project	$ 18,000,000
Medicaid Program Integrity Overpayment Collected from Providers	$ 1,135,723
Third-Party Liability Contract and HMS Audit Recovery	$ 9,000,000
Care Management Program	$ 832,200
Case Management	$ 995,313
Utilization Management Services	$ 3,892,146
Subtotal	**$ 44,312,645**
TOTAL	**$139,324,048**

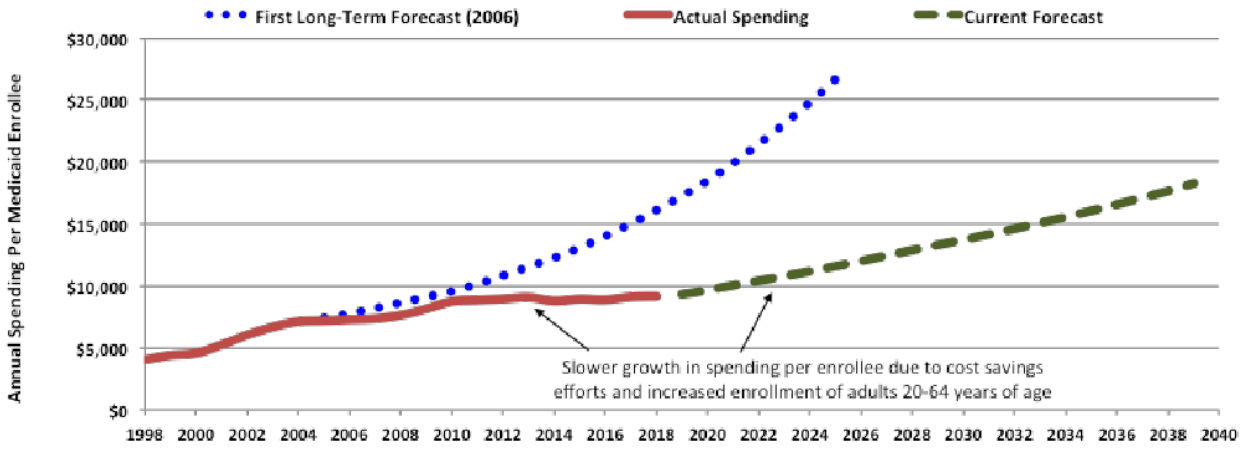
For context it is helpful to understand how enrollment and spending have changed in recent years. The following graph from the Medicaid long-term forecast published in September[1] illustrates how enrollment has grown over the past four years due to Alaska's economic recession and Medicaid expansion. With the help of the reforms enacted by the Legislature, the department has held state general fund spending virtually flat, while total Medicaid spending has grown.

Medicaid Enrollment & Spending in Alaska
2012 – 2018 Date-of-Service Actuals



The reforms instituted by the Legislature through SB 74 and other cost saving efforts by the department have helped hold Medicaid spending per enrollee flat. The graph below, also from the long-term forecast, depicts how the per-enrollee cost curve was turned down and has held steady, well below the original forecast. The graph also shows how turning the cost curve can contribute to much slower growth rates and increased savings well into the future.

Total Medicaid Spending per Enrollee (all fund sources)
1998 – 2018 Actuals and 2019 – 2039 Projected



[1] Evergreen Economics. (September 25, 2018). Long Term Forecast of Medicaid Enrollment & Spending in Alaska ("MESA"): FY 2019 – FY 2039.
http://dhss.alaska.gov/fms/Documents/AK%20LongTermMedicaidFcast_MESA%20FY2019%20to%20FY2039.pdf

Following is a brief summary of FY 2018 Medicaid reform activities and accomplishments.

Explanation of Benefits: Electronic explanations of medical benefits (EOMBs) are now available to adult Medicaid recipients via computer and smart phone. The EOMBs display a selection of data fields from claims that providers have billed on the member's behalf.

Telehealth: Medicaid expenditures for services delivered via telehealth increased 23 percent over the past two years. The top diagnosed conditions treated via telehealth in FY 2018 were behavioral health, followed by ear infections and injuries. The Telehealth Stakeholder Workgroup convened two years ago submitted their report to the department in August 2017 (Appendix F). The department provided a response to the Workgroup's recommendations in April (Appendix G).

Fraud, Waste & Abuse: During FY 2018 Medicaid Program Integrity (MPI) recovered $2.5 million in overpayments paid to providers, and 16 payment suspensions were initiated based on credible allegation of fraud determinations. MPI coordinated the Payment Error Rate Measurement (PERM) program for FFY 2017, the results of which are expected in late November 2018. In addition, MPI promulgated regulations addressing provider recordkeeping and self-audits as required by AS 47.05.235 and AS 47.05.270. The Division of Health Care Services continued provider and recipient fraud prevention detection and enforcement through the Surveillance and Utilization Review System (SURS). SURS also led the Account Reconciliation Management Program, which saved $18 million.

Home & Community-Based Services (Long-Term Services and Supports Reforms): The department received federal approval for a new 1915(c) waiver for Individualized Supports, for the 1915(k) Community First Choice (CFC) state plan option, and for a new Long Term Services and Supports Targeted Case Management service. The 1915(c) waiver allows up to 600 people with developmental disabilities previously served by state general-funded grants to receive up to $17,500 in waiver services annually. Implementation of the CFC provides personal care and other services to people who meet an institutional level of care need while allowing the state to receive a six percent enhanced federal funding match. The Division of Senior & Disabilities Services expanded the use of a prescreening tool and options counseling through Aging & Disability Resource Centers, and also implemented new utilization controls and process improvements, contributing to a reduction in state general fund spending of $10.4 million in FY 2018 compared to prior year.

Pharmacy Initiatives: Active management of the Medicaid pharmacy benefit resulted in savings and cost avoidance of over $20.2 million GF in FY 2018. Initiatives included use of the Preferred Drug List and Prospective Utilization Review, use of generic drugs, pharmacy payment reform through National Average Drug Acquisition Costs (NADAC) implementation and investigation of other alternate payment models, more cost-effective Hepatitis C treatment, opioid utilization control, research into the viability of reimbursing infused medications in an Ambulatory Infusion Center setting, and drafting of regulations to provide a mechanism to add pharmacists as an independent provider type separate from pharmacies to recognize expanded scope of practice.

Enhanced Care Management: The department continued two long-standing contracts for case management and the care management program with resulting savings. As an interim measure to further enhance care management while the Coordinated Care Demonstration Projects are implemented, the Alaska Medicaid Coordinated Care Initiative (also known as the "Super-Utilizer" initiative) was expanded beyond recipients with excessive hospital emergency department utilization, to include those who over-utilize other medical services. 78,385 recipients received these services during FY 2018.

Redesigning the Payment Process: Payment reform continues for pharmacy, and new reimbursement models will be piloted through the Coordinated Care Demonstration Projects. The department also convened the Innovative Provider Payment Workgroup in FY 2018 to identify alternate payment strategies of interest to the provider community. Milliman, Inc. produced two studies for that group, one on bundled payments and another on Health Homes, included as Appendices A and B.

Quality & Cost Effectiveness Targets: The department is able to report 1st year Medicaid program performance on the measures and targets established by the Quality & Cost Effectiveness Targets Stakeholder Workgroup. Medicaid met 10 of the 16 performance targets identified by the workgroup, and partially met another three targets. Complete data is included in the Workgroup's report, available in Appendix C.

Results of 2017 First-Year Performance on Quality & Cost Effectiveness Measures

Measure	Met 2017 Performance Target
A.1 Child and Adolescents' Access to Primary Care	N
A.2 Ability to Get Appointment With Provider As Needed	Y
B.1 Follow-up After Hospitalization for Mental Illness	Y
B.3[2] Alcohol and Other Drug Dependence Treatment	Y
CH.1 Emergency Department Utilization	N
CH.2 Diabetic A1C Testing	Y
CH.3 Hospital Readmission Within 30 days - All Diagnoses	On Hold
C.1 Medicaid Spending Per Enrollee	N
C.2 Hospitalization Chronic Obstructive Pulmonary Disease	Y
C.3 Hospitalizations Attributed to Diabetic Condition	Y
C.4 Hospitalizations Attributed Congestive Heart Failure	P
M.1 Live Births Weighing Less Than 2,500 Grams	Y
M.2 Follow-up After Delivery	Y
M.3 Prenatal Care During First Trimester	Y
P.1 Childhood Immunization Status	Y
P.2 Well-Child Visits for Children 0-6 by Age	P
P.3 Developmental Screening in the First Three Years of Life	P

Y = Met Performance Goal; N = Did Not Meet Performance Goal; P = Partially Met Performance Goal

Travel Costs: Travel cost containment continued in FY 2018 through enforcement of current policies and training. State general fund spending for travel is down $20.9 million, or 63.6%, over the last two years in large part due to the new Tribal Medicaid Reimbursement Policy and Tribal organizations taking over administration of the travel benefit.

Disease Prevention & Wellness: The Medicaid program participated in the Medicaid Innovation Accelerator Program for State Medicaid Housing Agency Partnerships, which completed the Alaska State Plan for Supportive Housing and contributed to the federal plan released in July 2018. Alaska Medicaid and the Division of Public Health also partnered under the CDC 6|18 initiative to implement a series of 11 preventive interventions addressing some of the most costly health conditions, including diabetes, high blood pressure, health-care associated infections, and tobacco use.

[2] Measure B.2, Medical Assistance with Smoking and Tobacco Cessation, was moved to the Potential Future Measures List by the QCE workgroup in 2018.

Behavioral Health System Reform: The 1115 waiver for behavioral health reform required by SB 74 was submitted to the Centers for Medicare & Medicaid Services (CMS) in January 2018. The proposal is to establish an enhanced set of benefits for three specific populations of Medicaid recipients, including children and their parent/caretakers with or at risk of mental health or substance use disorders (SUD), transitional age youth and adults with acute mental health needs, and adolescents and adults with substance use disorders. CMS is fast-tracking the component of the waiver that addresses SUD, including an exemption from the Institutions for Mental Diseases (IMD) prohibition against billing Medicaid.

The department also drafted the Request for Proposals (RFP) for a contract with an Administrative Services Organization (ASO) to help administer an integrated behavioral health program that uses evidence-based practices and improves accountability. The solicitation process under the ASO RFP will close November 26, 2018. Work also continued on other aspects of reform, including removal of the grantee requirement to bill Medicaid, expansion of the types of behavioral health providers who can deliver and bill for Medicaid services, rate-rebasing for community behavioral health clinics, and readiness training for providers and for state agency staff.

Emergency Care Improvement: Real-time electronic exchange of patient information among hospital Emergency Departments (ED) is now live in 11 hospitals, and approximately 1,500 notifications were sent in FY 2018 to help ED physicians care for patients. Six hospitals are also now receiving automatic notifications from the Prescription Drug Monitoring Program (PDMP). Uniform statewide guidelines for prescribing narcotics in an ED have been in place for two years, and are helping to combat the opioid epidemic.

Coordinated Care Demonstration Project: Negotiations with Coordinated Care Demonstration Project offerors began in FY 2018, and two Notices of Intent to Award were released. A contract was awarded to Providence Family Medicine Center to demonstrate a patient-centered medical home model in Anchorage, and that project went live September 1, 2018. Negotiations and actuarial rate-setting work continue with United Healthcare to demonstrate a managed care organization model in Anchorage and the Mat-Su. The anticipated managed care project go-live date is April 1, 2019.

Health Information Infrastructure Plan: SB 74 under Section 56 (uncodified) required the department to develop a plan to strengthen the health information infrastructure. The department contracted with HealthTech Solutions to provide technical assistance and prepare the plan, and convened a stakeholder workgroup to inform the gap analysis and plan recommendations. The final report was submitted to the department in August 2018 and the department has prepared an implementation plan. Both are included here as Appendices D and E.

Tribal Medicaid Reimbursement Policy: The department's Tribal Health Unit tracked 1,450 Coordinated Care Agreements between Tribal and non-Tribal providers, reviewed 19,207 referrals, and tracked as many as 1,200 travel arrangements, achieving a state general fund savings of $44.8 million in FY 2018.

State GF Savings from Implementation of the Tribal Medicaid Reimbursement Policy

State Fiscal Year	State GF Savings: Transportation	State GF Savings: Other Services	Total GF Savings
2017	$ 10,589,538	$ 24,192,302	**$ 34,781,839**
2018	$ 28,863,462	$ 15,901,959	**$ 44,765,420**
TOTALS	**$ 39,453,000**	**$ 40,094,260**	**$ 79,547,260**

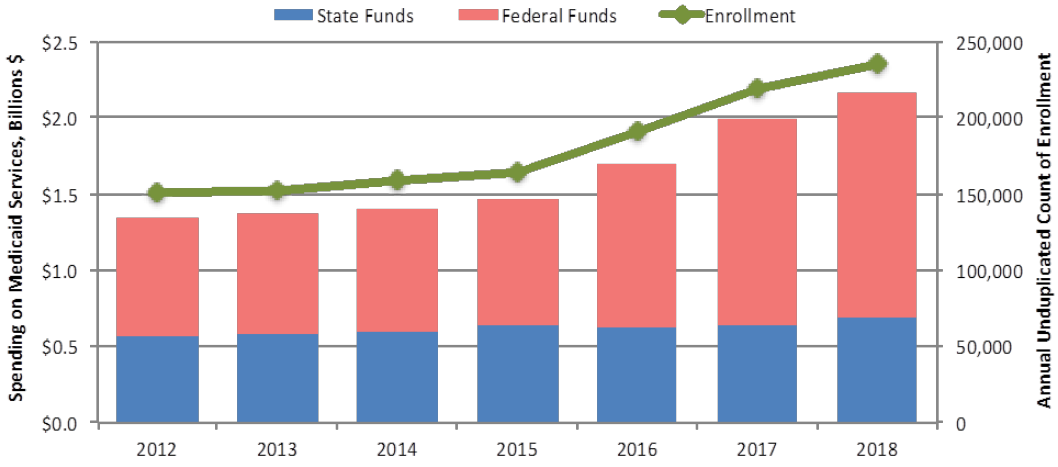
I. Introduction

The Medical Assistance Reform Program was established under AS 47.05.270 by Senate Bill 74 (SB 74) in 2016. Under this statute the Department of Health & Social Services (the department) is required to submit an annual report to the legislature by November 15th of each year on the status and results of Medicaid reform activities. SB 74 (2016) also mandated a separate annual report on Medicaid fraud, waste and abuse activities and savings, also due by November 15th. Issues related to fraud are primarily addressed separately in that report, which is produced jointly with the Department of Law.

This report outlines how nearly $140 million in state general fund savings and cost avoidance was achieved in FY 2018. Some of these savings are actual reductions in spending compared to prior year spending. Some are estimates of costs that would have been incurred had the described initiative not been implemented. Others are actual returns to the state budget in the form of reimbursement from the federal government or providers. These savings were all factored into the current year budget and into short-term (3-year) future spending projections.

For context when reading this report it is helpful to understand how enrollment and spending in the program have changed over time. The recently published update to the Medicaid long-range forecast, the Medicaid Enrollment & Spending in Alaska ("MESA") report produced by Northern Economics,[3] provides an analysis of these changes. The following graph from the MESA illustrates how enrollment has grown over the past four years due to both Alaska's economic recession and to Medicaid expansion. The department has held state general fund spending virtually flat in large part due to the reforms passed by the Legislature and other cost containment measures described in this report.

Medicaid Enrollment & Spending in Alaska
2012 – 2018 Date-of-Service Actuals

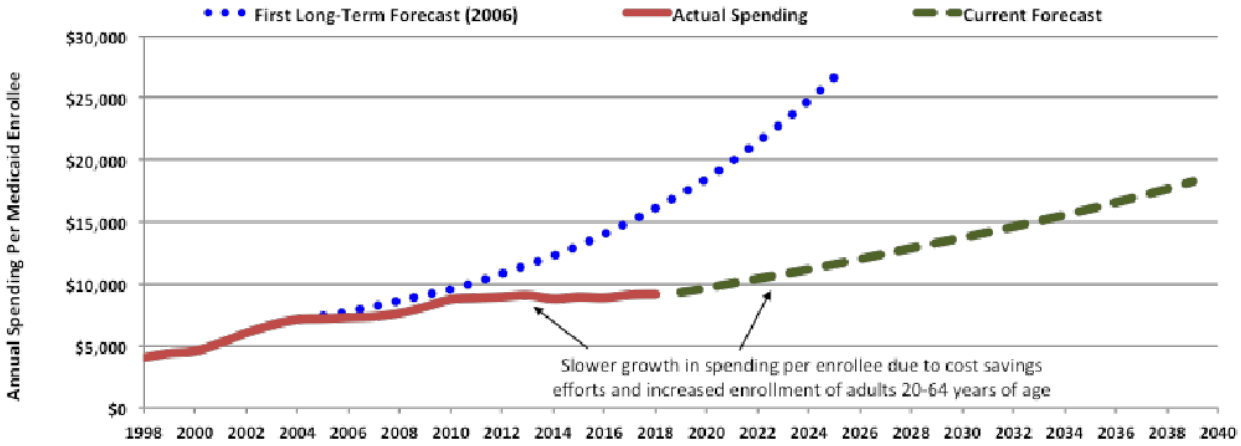


While overall spending has increased with support from federal dollars, the reforms instituted by the legislature through SB 74 and other cost saving efforts by the department have helped hold total

[3] Evergreen Economics. (September 25, 2018). Long Term Forecast of Medicaid Enrollment & Spending in Alaska ("MESA"): FY 2019 – FY 2039.
http://dhss.alaska.gov/fms/Documents/AK%20LongTermMedicaidFcast_MESA%20FY2019%20to%20FY2039.pdf

Medicaid spending per enrollee flat. The graph below, also from the MESA, depicts how the per-enrollee cost curve was turned and has held steady, well below the original forecast. It also shows how turning the cost curve can contribute to much slower growth rates and increased savings well into the future.

Total Medicaid Spending per Enrollee (all fund sources)
1998 – 2018 Actuals and 2019 – 2039 Projected



The main body of this report (Part II) addresses all of the reporting requirements specified in AS 47.05.270(d). Additional reports and information relevant to the reforms described in this report and required under SB 74 are included as appendices. Note that different services and populations are subject to different federal match rates, and so the proportion of total program savings allocated as state general fund savings varies throughout the report. The department recommends caution in drawing any conclusions from single-year comparisons of financial data presented in this report because of the many variables that can impact the timing of claims payment.

II. Responses to AS 47.05.270(d) Reporting Requirements

A. Status & Realized Cost Savings Related to Reforms

This part of the report (II.A) responds to the reporting requirements specified in AS 47.05.270(d)(1), related to realized cost savings from reforms required under AS 47.05.270. Information on project status is provided, in addition to realized cost savings and cost avoidance for those projects for which cost data is available.

1) Referrals to Community and Social Support Services

AS 47.05.270(a)(1): Referrals to community and social support services, including career and education training services available through the Department of Labor and Workforce Development under AS 23.15, the University of Alaska, or other sources.

The Division of Public Assistance (DPA) currently provides case management services and access to supports that promote employment and self-sufficiency for families in the Alaska Temporary Assistance Program (ATAP). ATAP recipients complete a Family Self-Sufficiency plan that includes specific goals, tasks, and deadlines. Tasks and supports may include, but are not limited to: identifying child care, help with job search, short term training leading to employment, and removal of medical or psychological barriers.

Similar services have been developed for Anchorage residents receiving Supplemental Nutrition Assistance Program (SNAP) benefits. DPA has entered into agreements with four non-profit agencies in the Anchorage area. These agencies assist SNAP recipients with job search, GED completion, English as a second language, barrier removal, and job training. The agreements are funded through the SNAP Employment & Training Program. Related expenses are met at no cost to the state. Each agency agrees to provide the services to SNAP recipients and receives a reimbursement of 50 percent from the Food & Nutrition Service of the U.S. Department of Agriculture. 1,795 participants were provided services during SFY 18.

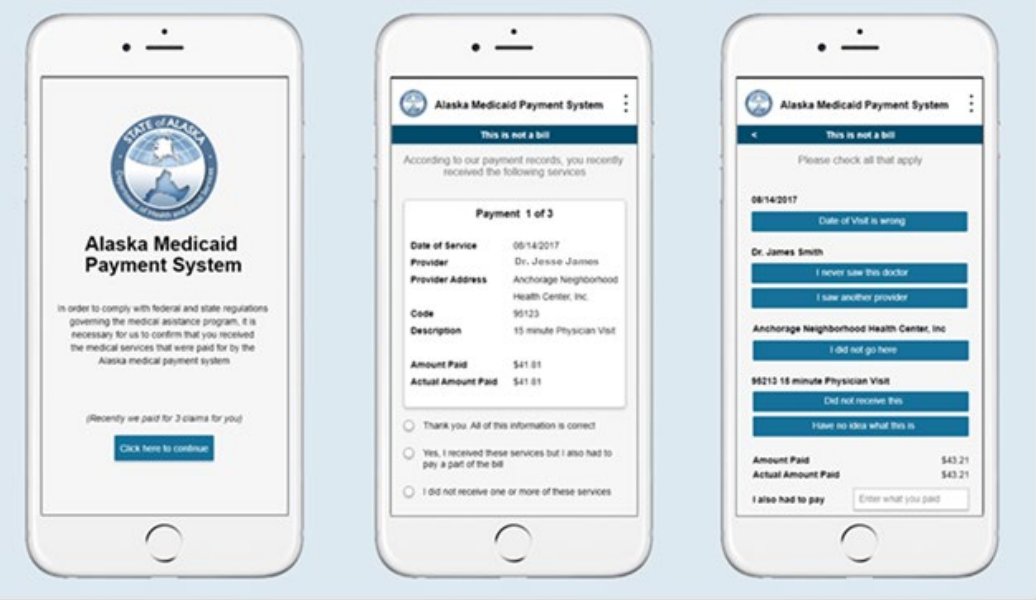
In the coming year DPA will enter into an agreement with the Department of Labor & Workforce Development (DOLWD) to participate as a provider through their State Training and Employment Program (STEP), which is funded by a set-aside from the Unemployment Insurance Trust Fund. The purpose of STEP is to make Alaska job training and employment assistance easily available to employers, employees, and future workers. DPA's Employment & Training program will provide 50% federal pass-through reimbursement to DOLWD for the allowable costs incurred by the STEP program in providing job training services to individuals. Individuals are eligible if they have worked in a position covered by unemployment insurance within the last 5 years, are a current Alaska resident, need in-demand skills to increase their employment outlook, have a SNAP application on file, and are not on ATAP. DPA is also in talks with the University of Alaska about their ability to provide job training.

In addition to the DPA programs and activities described above, the Division of Senior and Disabilities Services began using Aging and Disability Resource Centers (ADRCs) in 2017 as the entry point for all individuals seeking waiver services under the Adults Living Independently or the Adults with Physical and Developmental Disabilities waivers. ADRCs now provide options counselling for these individuals, which has increased referrals to other community-based supports that might more appropriately meet their needs. Please see Part II.A.5 for more information on this program.

2) Explanation of Benefits

AS 47.05.270(a)(2): Electronic distribution of an explanation of medical assistance benefits to recipients for health care services received under the program.

Electronic explanations of medical benefits (EOMBs) are now available to adult Medicaid recipients via computer and smart phone. During FY 2018 the department ruled out the use of the MyAlaska state service portal for providing electronic distribution of explanations of medical assistance benefits to recipients because MyAlaska was found to not meet Health Insurance Portability and Accountability Act (HIPAA) security standards. An alternate approach was taken to contract with MedExpert, a company already working with Alaska's Medicaid program to provide care coordination services for recipients. The contractor developed a Medicaid member portal and began delivery of the EOMB for all eligible adult recipients beginning on October 10, 2018. The following graphic provides a view of an Alaska EOMB smart phone application.



The EOMBs display a limited selection of data fields from the claims that providers have billed on the member's behalf, and include the following elements:

- A brief summary at the top of the statement listing total charges, the amount approved by Medicaid, the total amount paid to the rendering provider, and any amounts paid by a member;
- Details of the date and nature of each service received;
- A way for members to correct the presented information;
- A way for members to request help via an immediate phone call or other communication with one "click";
- A way for members to generate a PDF that can be printed or saved to a device;
- A way for members to review and comment on historical claims and communications, with these comments stored by MedExpert with a date/time stamp;
- Electronic Release of Information, "ROI," completion;
- A way for members to request additional medical assistance from MedExpert.

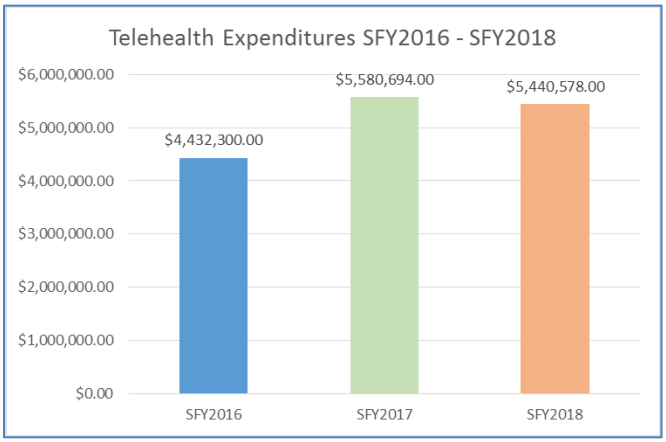
For more information, please see "Medicaid Explanation of Medical Benefits FAQs"[4] available on the Alaska Medicaid-Health Enterprise website.

[4] http://manuals.medicaidalaska.com/docs/dnld/Update_Medicaid_EOMB_FAQ.pdf

3) Telehealth

AS 47.05.270(a)(3): expanding the use of telehealth for primary care, behavioral health, and urgent care.

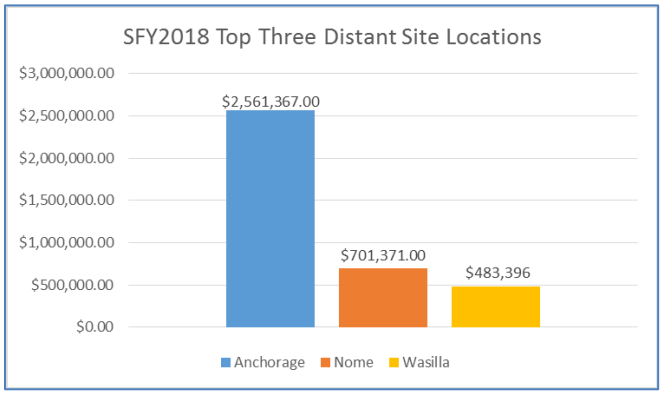
Telehealth is a mode of delivering a covered service and is not reimbursed as a separate and distinct service by the Alaska Medicaid program; however, Medicaid does pay enrolled providers for medical services delivered through telehealth methods if the service is: 1) covered under traditional, non-telehealth modes; 2) provided by a Medicaid-enrolled treating, consulting, presenting, or referring provider; and, 3) can be provided via telehealth. In FY 2018 the Medicaid program paid $5,440,578 in claims for services delivered via telehealth methods, an increase of 23 percent over the amount paid for services delivered via telehealth in FY 2016.



A service delivered via telehealth is reimbursed at the same rate as the same service delivered in a face-to-face setting. Alaska Medicaid currently restricts telehealth coverage to services provided through one of these three modes:

- **Interactive method:** Provider and patient interact in "real time" using video/camera and/or dedicated audio conference equipment.
- **Store-and-forward method:** The provider sends digital images, sounds, or previously recorded video to a distant site provider at a different location. The distant site provider reviews the information and reports back his or her analysis.
- **Self-monitoring method:** The patient is monitored in his or her home via a telehealth application, with the provider indirectly involved from another location.

In FY 2018 the top three distant site locations (locations of the health care provider delivering the service via telehealth) were Anchorage, Nome, and Wasilla.



The following table lists the top disease categories and diagnoses for telehealth-delivered service claims billed in FY 2018.

Top Disease Categories	# of Medicaid Claims	Top Diagnoses in Each Category
Mental, Behavioral, and Neurodevelopmental Disorders	7,662	• Opioid dependence • Attention-deficit hyperactivity disorder • Major depressive disorder • Autistic disorder
Diseases of the Ear and Mastoid Process	3,316	• Otitis media (inflammatory disease of the middle ear) • Otorrhea (ear drainage) • Otalgia (ear pain)
Injury, Poisoning, and Certain other Consequences of External Causes	3,062	• Fractures of the arm, hand or finger • Fractures of the leg or foot • Fractures of the collarbone
Factors Influencing Health Status and Contact with Health Services	878	• Malignant neoplasm (cancerous tumor) • Disease of nervous system/sense organs • Screening • Orthopedic aftercare • Surgical aftercare

Estimated savings from transportation costs avoided due to services delivered in a recipient's home community via telehealth have not been quantified. The department is currently working on updates to Medicaid telehealth regulations to ensure reimbursement policies support increased access to care in underserved communities in the most cost-effective manner. Please see Part II.B.7 of this report starting on page 31 for additional information about the department's efforts to improve Medicaid telehealth policy.

4) Fraud Prevention, Detection, and Enforcement

AS 47.05.270(a)(4): Enhancing fraud prevention, detection, and enforcement.

The Medicaid Program Integrity section within the Division of Finance and Management Services oversees the audit contract required under AS 47.05.200. In addition to managing the audit contract, which requires a minimum of 50 audits annually, the Medicaid Program Integrity section conducts reviews of Medicaid provider claims submission and documentation to ensure Alaska's Medicaid program is paying for quality services in accordance with the regulations and policies adopted by the Department.

During FY 2018, Medicaid Program Integrity promulgated regulations addressing provider recordkeeping and self-audits as required by AS 47.05.235 and AS 47.05.270. Medicaid Program Integrity recovered $2.5 million in overpayments paid to providers, and 16 payment suspensions were initiated after credible allegation of fraud determinations were made by Program Integrity working in conjunction with the Department of Law, Medicaid Fraud Control Unit. As a result of the self-audit requirement from Medicaid reform, Medicaid Program Integrity is experiencing an increase in the number of provider self-disclosed overpayments.

Also during 2018, Medicaid Program Integrity helped form the Alaska Health Care Fraud Workgroup in collaboration with law enforcement and other state and federal agencies in an effort to enhance information sharing and foster communication between agencies.

Medicaid Program Integrity coordinated the Payment Error Rate Measurement (PERM) program for federal fiscal year 2017. The PERM program is conducted by the Centers for Medicare and Medicaid Services (CMS) and measures the estimated payment error rates for the Medicaid and Children's Health Insurance Program (Denali Kid Care). The results of the latest PERM review are anticipated to be released in late November of 2018.

Overall Medicaid Program Integrity saved the Medicaid program $3,785,742 ($2,478,031 in recoveries plus $1,307,711 in cost avoidance), approximately 30 percent of which, or $1,135,723, was state general fund dollars; for a total return on investment of $3.94 for each dollar spent.

The Division of Health Care Services also conducts both provider and recipient fraud prevention, detection, and enforcement through its Surveillance and Utilization Review System (SURS). Provider claims are analyzed and outliers are identified based on state and federal regulations and guidelines, and medical records are used to support or refute claims analysis. Provider SURS is also responsible for the review and evaluation of complaints lodged against Medical providers. Some complaints can be handled through desk audits and provider training, while other, more egregious accusations are referred to Program Integrity and/or the Medicaid Fraud Control Unit. During FY 2018, 259 Provider Surveillance and Utilization Review (SURS) desk audits were completed resulting in the collection of overpayments in the amount of $88,264, approximately 30 percent of which, or $26,587, was state general funds.

Member SURS efforts include resolution of complaints submitted to the fraud and abuse hotline concerning member misuse of Medicaid. Most recipients for whom a complaint is received are placed in the Care Management Program, Case Management, or other Coordinated Care program. Thus, cost savings from those programs, such as the $2.8 million in FY 2018 savings from the Care Management Program noted on page 14 of this report, are in part reflective of recipient SURS efforts.

Also during FY 2018, SURS led the Account Reconciliation Management Project (ARM), which resulted in $18 million in state savings. The ARM project involved working directly with providers to investigate assertions that they were owed money related to the implementation of the new Medicaid Management Information System by Conduent (then Xerox) back in FY 2014. The CMS timely filing waiver was set to expire in FY 2018, and SURS made a significant push to resolve and re-adjudicate claims errors for which the state was at risk of losing federal funds. This effort prompted providers to repay their advance payments after it was demonstrated that no additional funds were owed to them. Advance payment retrievals related to the ARM project totaled $9 million in repayment back to the general fund, and cost avoidance from re-adjudicated claims saved an additional $9 million in general fund dollars.

For additional information about other Department of Health and Social Services and Department of Law efforts and results please see the separate FY 2018 *Fraud, Abuse, and Waste, Payment and Eligibility Errors* report submitted to the legislature as required by AS 47.07.076.

5) Home and Community-Based Waivers

AS 47.05.270(a)(5): Reducing the cost of behavioral health, senior, and disabilities services provided to recipients of medical assistance under the state's home and community-based services waiver under AS 47.07.045.

Home and community-based services (HCBS) help people, many of whom have a level of need that would otherwise be provided in an institution such as a nursing facility, to remain in their home or community. HCBS services include 1915(c) waiver services and personal care services. Participation in a waiver requires the recipient to have a determination made that the recipient would otherwise qualify for placement in an institution. The Centers for Medicare and Medicaid Services allows states to "waive out" of providing institutional care for these recipients by offering them services through federally-approved 1915(c) waivers that can be targeted to different groups. Personal care services assist recipients who do not necessarily meet an institutional level of care with needed activities of living, such as toileting and dressing, or instrumental activities of daily living, such as shopping and meal preparation.

Waivers help contain Medicaid spending by providing an option to people who otherwise qualify for services provided in an institution because waiver services are only available to individuals who require an institutional level of care, and skilled nursing and intermediate care facility services are mandatory services under Medicaid. Institutions are the most expensive type of long term care service. The following table illustrates how the cost of waiver services in FY 2017 compared to what the cost of nursing home and intermediate care facility services would have been if waiver services were not available.

Cost of Institutional Care without Home and Community Based Waiver Services Options

SFY 2017 Costs by Funding Source and Average Cost per Person by Service Type (based on services that were rendered during FY2017)

Program	# served	Avg cost per person	Total costs
Home & Community Based Waivers			
ALI Waiver	1,933	37,330	$72,158,890
APDD Waiver	88	96,083	$8,455,304
CCMC Waiver	222	48,391	$10,742,802
IDD Waiver	2,085	89,542	$186,695,070
TOTAL HCB Waivers			**$278,052,066**
Institutional Placements			
Nursing Home	840	164,234	$137,956,560
ICF/IID	15	201,663	$3,024,945
TOTAL Institutional Placements			$140,981,505
TOTAL HCB Waivers and Institutional Placements			**$419,033,571**

Institutional Placements if no HCB Waiver services existed			**Total cost based on average cost per person for NH and ICF/IID services.**
Nursing Home + ALI, APDD and CCMC Waiver service recipients	3,083		$506,333,422
ICF/IID + IDD Waiver service recipients	2,100		$423,492,300
TOTAL if HCB Waivers did not exist and individuals eligible for Nursing home or ICF/IID care received services in institutional placements			**$929,825,722**

Home & Community-Based Services Utilization Control and Process Improvement

The department continues efforts to improve utilization controls and address fraud and abuse in the provision of waiver and personal care services. Amended regulations took effect at the beginning of the second quarter of FY 2018 that capped the number of hours of day habilitation services available under the waivers at 624 hours per year (12 hours per week on average). Improvements were also made in the service authorization process to ensure regulatory requirements are clear and are followed consistently.

Amended personal care services regulations and application form took effect at the beginning of FY 2018 (on July 22, 2017). The new regulations added limits to tasks that personal care assistants can perform. The revised personal care services application form now requires statements by both the applicant and personal care services agency that the contents of the application are accurate, under penalty of perjury.

Home & Community-Based Services Prescreening Tool and Options Counseling

In FY 2018 the department continued the work of fully implementing the use of a prescreening tool and provision of options counseling for individuals seeking receipt of personal care services or enrollment in one of the waiver programs. This project began as a limited 2-year pilot back in FY 2014, which demonstrated the value of directing new applicants to Aging and Disability Resource Centers (ADRCs), where they went through a prescreening process and participated in options counselling before referral to the Division of Senior & Disabilities Services (SDS) as a potential Medicaid client. The pilot successfully demonstrated a reduction in the number of inappropriate assessments by screening out people who would not qualify for services, and redirected clients through referrals to other community-based supports that were better suited to meet their needs.

Following completion of the pilot in FY 2016, SDS transitioned individuals seeking services under the Adults Living Independently and the Adults with Physical and Developmental Disabilities waivers to the ADRCs as the new "front door" for those waivers in FY 2017. In FY 2018 the department began to transition those interested in enrolling in the Children with Complex Medical Conditions waiver through the "front door" of the ADRCs. This new process is not only helping to contain Medicaid costs, but also allows SDS to better allocate its limited resources and meet its performance measures for timely assessments.

As the table on the next page reflects, the utilization controls and process improvements described in this and the above section contributed to a reduction in total spending for waiver services of 4.2 percent in FY 2018 compared to FY 2017[5], and a 14.0 percent reduction in total spending for Personal Care Services over the same period, resulting in a net decrease in HCBS spending of 6.2 percent last year. The overall savings to the state general fund in FY 2018 compared to FY 2017 spending was $10,430,676 (6.1 percent).

[5] Note that the FY 2017 waiver spending reported in this table is slightly different than the FY 2017 waiver services spending amount reflected in the chart on page 8. This is because the data in the previous chart is based on date-of-service spending, and the data in this table is based on date-of-payment for budgetary and financial management purposes.

FY 2017 and FY 2018 Expenditures for Waiver and Personal Care Services

Fund Source	FY 2017	FY 2018	$ Change	% Change
Waivers				
State GF	$ 135,475,718	$ 130,109,883	$ (5,365,835)	-4.0%
Federal	$ 142,628,578	$ 136,433,699	$ (6,194,879)	-4.3%
TOTAL	**$ 278,104,296**	**$ 266,543,582**	**$ (11,560,714)**	**-4.2%**
Personal Care Services				
State GF	$ 35,822,580	$ 30,757,739	$ (5,064,841)	-14.1%
Federal	$ 36,373,817	$ 31,329,077	$ (5,044,740)	-13.9%
TOTAL	**$ 72,196,397**	**$ 62,086,816**	**$ (10,109,581)**	**-14.0%**
Total HCBS				
State GF	$ 171,298,298	$ 160,867,622	$ (10,430,676)	-6.1%
Federal	$ 179,002,395	$ 167,762,776	$ (11,239,619)	-6.3%
TOTAL	**$ 350,300,693**	**$ 328,630,398**	**$ (21,670,295)**	**-6.2%**

1915(i) and 1915(k) Home & Community Based Service State Plan Options

SB 74 authorized the department to apply for 1915(i) and 1915(k) home and community based state plan service options. A subsequent in-depth analysis by the consulting firm Health Management Associates (HMA) determined that adding new HCBS services under the 1915(i) option would not be cost effective for Alaska. In lieu of that approach, and based on HMA recommendations, the department chose to create a new waiver for people with intellectual and developmental disabilities under existing 1915(c) authority. Also based on HMA recommendations, and with input from stakeholders (the Inclusive Community Choices Council), the department developed and implemented the 1915(k) state plan option. Also known as Community First Choice (CFC), the 1915(k) option provides enhanced personal care services for individuals who meet nursing facility-level of care criteria. Federal funding reimbursement is also six percentage points higher for these services than for regular personal care services, resulting in additional savings of state general fund dollars.

During FY 2018 the department crafted the regulations, analyzed the changes necessary for payment systems and internal operations, and developed the related waiver application and state plan amendment for federal approval. Federal approval of both the 1915(k) state plan option and the new 1915(c) Individualized Supports Waiver was granted by the Centers for Medicare and Medicaid Services at the end of FY 2018 (June 2018), and the corresponding state regulations for these new programs became effective October 1, 2018.

6) Pharmacy Initiatives.

AS 47.05.270(a)(6): Pharmacy initiatives.

State General Fund Savings/Cost Avoidance from Pharmacy Initiatives

Program	FY 2018
Preferred Drug List	$2,500,000
Prospective Drug Utilization Reviews	$2,500,000
Pharmacy Payment Reform: NADAC Implementation	$12,250,000
Hepatitis C Initiatives	$3,000,000
TOTAL	**$20,250,000**

Over the past two years negotiated pricing and utilization management within the Pharmacy program contributed to an overall decrease of 0.6 percent in final net program cost per prescription. This net decrease was achieved in spite of experiencing a 1.2 percent overall increase in pharmacy reimbursement per prescription due to steadily increasing drug acquisition costs; a 110 percent average increase in pharmacy utilizers between FY 2017 and FY 2018; a traditional medication net spend decrease of 1.7 percent (inclusive of negotiated pricing); and a specialty medication net spending increase of 3 percent as compared to FY 2017.

Preferred Drug List and Prospective Drug Utilization Review

Utilizing the current preferred drug list realized more than $5M dollar in final direct program savings from negotiated pricing on preferred drugs. This savings is exclusive of the cost avoidance achieved through therapeutic substitution by guiding use of preferred agents. Systematic prospective drug utilization reviews resulted in an additional savings of approximately $5M in pharmacy cost avoidance by preventing dispensing of inappropriate medications. Approximately half of these savings are GF.

Use of Generic Drugs

Use of generic drugs provides comparable quality but is typically far less costly than brand name drugs. In Alaska's Medicaid program average generic drug utilization remained high during FY 2018 at 83.1 percent of total prescriptions — slightly higher than the national average. The average percentage of generic utilization among all Medicaid fee-for-service programs nationally was 82 percent in FFY 2016, while accounting for just 22 percent of the total amount paid for drugs by Medicaid that year.[6]

Pharmacy Payment Reform: National Average Drug Acquisition Costs (NADAC) implementation

Pharmacy reimbursement methodology reform continues to realize significant annual savings. Approximately $24.5M in pharmacy reimbursement savings was achieved in SFY2018 through utilization of the CMS National Average Drug Acquisition Cost as the State Maximum Allowable Cost. The department changed the Medicaid program's pharmacy reimbursement methodology to include the CMS National Average Drug Acquisition Cost pricing benchmark in FY 2015. Total savings is the amount paid compared to the wholesale acquisition cost benchmark. Approximately 50 percent of the FY 2018 savings of $24.5M was state general fund dollars.

[6] https://www.medicaid.gov/medicaid-chip-program-information/by-topics/prescription-drugs/downloads/2016-dur-summary-report.pdf

Hepatitis C

Hepatitis C initiatives between October 1, 2017 and September 30, 2018 achieved a savings of over $3.6M on pharmacy reimbursement costs over the previous 12 months, while the number of individuals treated increased by 160%. Cost avoidance estimates as a result of targeted product selection resulting from evidence-based clinical reviews exceeded $6M and represented over $10M when compared to the previous preferred product.[7]

Starting in 2014, the department has worked to identify opportunities to transition to a public health model in the treatment of chronic hepatitis C virus (HCV) infection following the Food & Drug Administration's (FDA) approval of newer direct-acting antiviral drugs. The pharmacy reimbursement costs of these medications exceeded $300 million dollars in one year to treat approximately 3,500 individuals. This far exceeded the appropriations for the entire Medicaid pharmacy program for over three years.

During FY 2018 the Drug Utilization Review (DUR) Committee approved the state's leveraging of a new, equally efficacious, more cost-effective HCV treatment FDA-approved to treat the majority of hepatitis C virus variants in an 8-week regimen as compared to the previous 12-week regimen. This decision allowed for the savings of $3.6M while treating 60 percent more individuals than in the prior period. The late summer 2017 release of new FDA-approved HCV medications allowed more significant competition and decreased upfront pricing in addition to further negotiated rates. Action by the department resulted in pharmacy reimbursement cost avoidance estimates in excess of $6M against another clinically-similar, recently available product and over $10M as compared to the previously preferred agent.

Pharmacy Professional Dispensing Fee Study

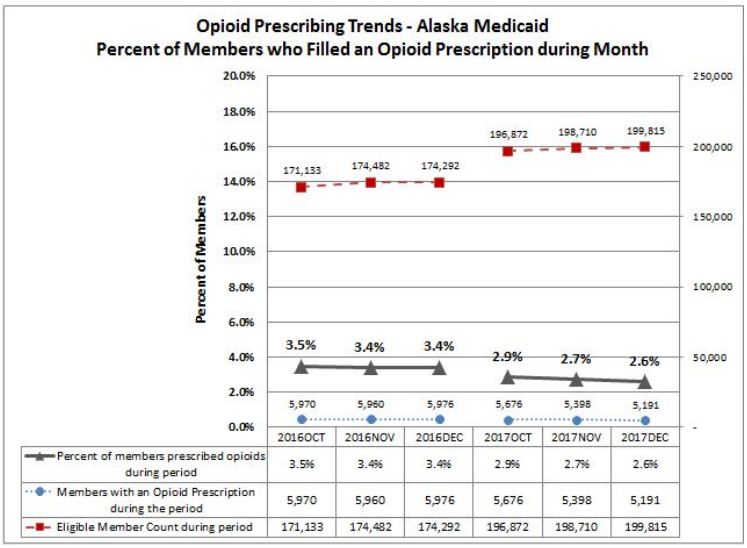
Regulations were proposed in FY 2018 to provide a mechanism to add pharmacists as an independent provider type separate from pharmacies to recognize state-authorized pharmacist scope of practice, to include independent prescribing of opioid reversal agents and vaccines. Adoption of these regulations, expected during FY 2019, will pave the way to provide a mechanism to reimburse pharmacists for cognitive services, such as drug regimen reviews and situations where a prescription medication was not dispensed due to clinical intervention by the pharmacist. The current reimbursement model only reimburses pharmacists for their professional services if a medication is dispensed, presenting an unintended incentive. Pharmacist cognitive services support transitions of care and chronic care management as well as wellness programs. Expanding the number of available health care professionals with medication expertise to provide clinical services assists with access to care issues in Alaska, where we have difficulty recruiting and retaining health care professionals.

The Pharmacy Professional Dispensing Fee survey that will be conducted during FY 2019 will include data collection to inform rate setting for this new provider type and to update the professional dispensing fee reimbursement. While it may appear that adding a new provider type could increase overall Medicaid payments for services, the opportunity for savings and improved quality is high due to the potential for 1) decreased adverse drug events and medication errors, 2) improved health outcomes from medication compliance and minimized side effects, and 3) cost avoidance from pharmacists choosing not to dispense inappropriate medication. Notable returns on this strategy have been documented in evidence-based literature. Furthermore, shifting reimbursement from the payment of inappropriate pharmaceuticals (which results in dollars leaving the state), to payment of local pharmacists for professional services, results in dollars remaining in the state, and can have a net positive impact on healthy individuals, communities, and economies.

[7] Because of the variety of ways to estimate these savings, the middle estimate of $6M ($3M GF) is used in the summary.

Opioid Utilization Initiatives

Pharmacy reimbursement payments for opioid drug products decreased by $0.3M in FY 2018 as compared to FY 2017 due to opioid utilization initiatives. The following graph illustrates the decline in the percent of members who filled opioid prescriptions during the 2nd quarter of FY 2018 compared to the same quarter during the prior fiscal year.



	2016OCT	2016NOV	2016DEC	2017OCT	2017NOV	2017DEC
Percent of members prescribed opioids during period	3.5%	3.4%	3.4%	2.9%	2.7%	2.6%
Members with an Opioid Prescription during the period	5,970	5,960	5,976	5,676	5,398	5,191
Eligible Member Count during period	171,133	174,482	174,292	196,872	198,710	199,815

The department continually researches evolving clinical guidelines and strategies to address the opioid abuse epidemic. Ensuring medically appropriate use of opioids and preventing non-medical use of opioids minimizes opioid overdose and overdose death, opioid dependence, and neonatal abstinence syndrome. The department continues to work with the DUR Committee and other agencies to further refine, frame, and prioritize the initiative work over the next year as well as track success of the various initiatives utilizing process and outcomes measures.

Alternate Payment Models (APM)

Through a grant from the Laura and John Arnold Foundation, the department began working with the Oregon Health & Science University's Center for Evidence-Based Policy during FY 2017 to determine the feasibility and department readiness to employ alternate payment models within the Medicaid Pharmacy Program. A particular area of focus is newer high cost specialty medications. The first phase of the project included research into the landscape of pharmaceutical pricing and reimbursement in Medicaid programs in various states.

During FY 2018, for the second phase of this project, the department completed a readiness assessment and identified key directions in scalable areas, such as hemophilia, for the development of standards of care to address cross-sectional impacts of high impact drug classes. The Alaska Medicaid Drug Utilization Review (DUR) Committee approved Standards of Care for hemophilia and is working with providers to ensure that any transition to an alternate payment model is preceded by clear expectations for quality service delivery.

Ambulatory Infusion Center (AIC) Enrollment and Reimbursement

The department continues to research the viability of Medicaid reimbursement of infused medications in an Ambulatory Infusion Center (AIC) setting. An increasing number of specialty medications, particularly biological agents, are available for a number of conditions, including Multiple Sclerosis, Psoriasis, Inflammatory Bowel Disease, and Immunodeficiencies. Many of these products have the

potential of being administered in the home, which is reimbursed under the current Home Infusion Therapy program. However, to gauge a patient's tolerability of the product, many of these drugs require initial doses to be administered in a health care setting for patient safety purposes.

Under the current structure, these medications are administered and reimbursed through physician offices and clinics, hospital-based infusion clinics, and home infusion therapy. Continuity of care, regimen complexity, patient choice, safety, and a number of other factors warranted research into care delivery options. The department has researched other state Medicaid programs, clinical literature, and regulatory/accrediting body standards to inform the drafting of regulations for AIC enrollment and payment, in conjunction with providers and a representative of the Alaska State Hospital and Nursing Home Association (ASHNHA). The Alaska Medicaid Drug Utilization Review (DUR) Committee is scheduled to review a list of pharmaceutical products clinically appropriate for administration outside the direct supervision of a physician at its upcoming meeting to evaluate feasibility.

7) Enhanced Care Management.

AS 47.05.270(a)(7): Enhanced care management.

The Alaska Medicaid Program includes a number of care coordination and case management programs and initiatives. Current programs are expanding, and new initiatives under SB 74 are under development to enhance care coordination and care management. The following table summarizes state general fund cost savings/cost avoidance from the various programs.

State General Fund Savings/Cost Avoidance
Due to Current Care Management Programs

Program	FY 2018
Case Management	$995,313
Care Management Program	$832,200
Alaska Medicaid Coordinated Care Initiative	$2,850,000
TOTAL	**$4,677,513**

Case Management

The Medicaid program contracts with a health management firm, Qualis Health, to provide evidence-based case management services for recipients with the most medically complex and costly conditions. Medicaid recipients may self-refer to the program, or may be referred by a health care provider or agency staff. Case management services include patient assessment, education and referral; medication reconciliation; care coordination; and facilitation of collaborative efforts of the recipient's entire healthcare team. Case management services were provided to an average of 170 Medicaid recipients per month during FY 2018 and yielded net Medicaid program savings (in the form of avoided costs) of $3,317,710, approximately 30 percent of which, or $995,313, was state general funds (GF). The return on investment for this program was $4.68 of every $1.00 spent through avoided inpatient stays and duplication of services.

Care Management Program

Established during the mid-1990s, the department's Care Management Program (CMP) addresses inappropriate use of Medicaid-covered services. Medicaid recipients who overuse or misuse Medicaid covered services or who would otherwise benefit from CMP enrollment are identified through post-payment review and are assigned to the program. The department also accepts CMP referrals from medical providers. For recipients who are enrolled, participation is mandatory. An initial CMP placement typically lasts 12 months, during which time the recipient is assigned a primary care provider and limited

to one pharmacy. All non-emergent care must be delivered by the assigned primary care provider, and all drugs must be dispensed by the selected pharmacy.

The CMP program saved $2,774,000 during FY 2018 (all funding sources; approximately 30 percent, or $832,200, was GF). Savings were achieved through cost avoidance due to improved continuity of care that reduced the use of inappropriate services (e.g., use of hospital emergency departments for non-emergent care), visits to multiple providers for the same issue, and duplicative prescriptions. FY 2018 CMP enrollment averaged 297 recipients per month, a 17 percent increase over FY 2017.

Alaska Medicaid Coordinated Care Initiative/SB 74 Primary Care Case Management

The Alaska Medicaid Coordinated Care Initiative (AMCCI), also known as the "Super-Utilizer" initiative, was launched in December 2014 to enhance care coordination for Medicaid recipients with excessive hospital emergency department (ED) utilization. The project was subsequently expanded to include recipients who over-utilize other medical services. Recipient participation in this program is voluntary. Enrollees are provided individualized case management services including care coordination and referrals to specialists and social service supports. The department currently contracts with MedExpert to provide these services telephonically. In addition, Qualis Health provides more intensive in-person case management services for 65 of the highest utilizers of ED services.

Based on an average ED cost per visit, AMCCI's reduction in ED utilization saved the Alaska Medicaid program more than $9.5 million in FY 2018, approximately 30 percent of which ($2,850,000) was state GF dollars. Of the more than 145,000 Medicaid recipients who were eligible to participate in AMCCI, 78,385 Medicaid enrollees received AMCCI services.

SB 74, under AS 47.07.030(d), requires the department to establish a primary care case management system and enroll Medicaid recipients with multiple hospitalizations. As an interim strategy for implementing this new requirement, the department continues to expand AMCCI participation, with the ultimate goal of including all who are eligible to participate. This will allow for more immediate statewide access to episodic care management services while new care models are tested through the Coordinated Care Demonstration Project established under AS 47.07.039.

SB91-SB74 Integration/Department of Corrections Partnership

In FY 2018 the Medicaid program forged a new partnership with the Department of Corrections (DOC) to provide support to individuals newly released from incarceration. Medicaid is using AMCCI to work with DOC staff to identify an individual's needs at release. AMCCI helps to coordinate doctor visits, prescription medications, and transportation. Offender/member participation in these services is voluntary, and ten individuals received services during the initial start-up in FY 2018. AMCCI has the capacity to serve all released inmates, and through this continued partnership significant program growth is expected in FY2019.

8) Redesigning the payment process

AS 47.05.270(a)(8): Redesigning the payment process by implementing fee agreements that include one or more of the following: (A) premium payments for centers of excellence; (B) penalties for hospital-acquired infections, readmissions, and outcome failures; (C) bundled payments for specific episodes of care; or (D) global payments for contracted payers, primary care managers, and case managers for recipient or for care related to specific diagnosis.

The department implemented fee conditions that comply with AS 47.05.270(a)(8)(B) back in 2012, instituting penalties for episodes of care that result in hospital-acquired infections and other hospital-acquired conditions, such as those caused by medical errors.

With the implementation of SB 74 in FY 2017, the department increased focus on innovative payment model opportunities. The department continued work on pharmacy payment reform (see Section II.A.6. Pharmacy Initiatives, page 11); and also developed the demonstration projects authorized under the Coordinated Care Demonstration program (AS 47.07.030) and behavioral health reform (AS 47.05.270(b); AS 47.07.036(f)). Both demonstration projects have the potential to test new payment models, such as bundled payments and global payments. Please see Section II.A.12 (page 21) and Section II.A.15 (page 24) for more information on the demonstration projects.

To assist with these payment model reform efforts the department contracted with Milliman, Inc., a health care actuarial consulting firm, and is in the third year of a four-year contract. One important tool Milliman has provided under this contract is the Medicaid Data Book, which utilizes FY 2015, 2016, and 2017 Medicaid claims data to provide information on spending and utilization by region, eligibility group, and other factors. An on-line pdf version of the data books is available at: http://dhss.alaska.gov/HealthyAlaska/Pages/Redesign/Milliman.aspx.

In addition to progress made in these other areas, the department engaged a workgroup of provider stakeholders beginning in FY 2018 to help identify alternate provider payment strategies of interest to the provider community. The 18-member Innovative Provider Payment workgroup includes representatives from primary care, physician specialists, hospitals, federally qualified health centers, home and community based services and tribal health organizations. The group met March-October, 2018 and discussed models such as bundled payments, shared-savings, health homes, patient-centered medical homes and accountable care organizations. Their final report to the department is expected by December 2018.

The workgroup heard a variety of presentations from other providers and technical experts who had experience working with each of the identified models. Members were able to ask questions regarding implementation, administrative challenges and resources necessary to implement the given model. In addition to the technical experts that shared information on the models, Milliman, Inc., completed an assessment of the feasibility of the use of bundled payments and health homes within the Alaska Medicaid program. Using information from the Alaska Medicaid claims system, Milliman was able to evaluate which services might work best for a bundled payment option, and which chronic illnesses may be best suited for health homes.

The analysis Milliman performed on the potential use of bundled payments in Alaska focused on the use of such payments in Fairbanks and/or Juneau to expand the use of innovative payment strategies in areas of the state not covered by one of the Coordinated Care Demonstration Projects. Milliman identified that for a bundled payment option to be successful in either of these communities, the Medicaid program will need to partner with other payers. Their assessment is that additional payers will be necessary to build the volume of services that will attract and sustain provider interest in such a model.

Please see Milliman's "Bundled Payments: Considerations for the Alaska Medicaid Program" report, included as Appendix A of this report, for more information.

Milliman's health home analysis identified nine chronic conditions that may be well suited for development of health homes within the Alaska Medicaid program. These conditions include: psychiatric; cardiovascular; gastro intestinal; pulmonary; central nervous system; metabolic; renal; substance abuse; and diabetes. Although Milliman found this model has potential in Alaska, the provider workgroup has expressed concerns regarding the complexity of the model's design and the uncertainty

about the department's ability to support the model long-term. Please see Milliman's "Health Homes: Considerations for the Alaska Medicaid Program" report, included as Appendix B of this report, for more information.

9) Quality & Cost Effectiveness Targets Stakeholder Involvement

AS 47.05.270(a)(9): Stakeholder involvement in setting annual targets for quality and cost-effectiveness.

The Medicaid Redesign Quality and Cost Effectiveness (QCE) Targets External Stakeholder workgroup was convened in FY 2017, and brought forward 18 quality and cost effectiveness performance measures with corresponding annual targets and five-year performance goals the workgroup felt could evaluate Medicaid program performance throughout redesign efforts. The QCE Stakeholder Workgroup's first report was described and included as an appendix in the FY 2017 Annual Medicaid Reform Report.

Transitioning into the second phase of this work in FY 2018, the department finalized the algorithms necessary to calculate the measures identified by the workgroup. As work on the algorithms progressed, the department was unable to overcome issues with measure and algorithm design for two of the 18 measures. As a result, these measures will undergo further development prior to being operationalized.

To ensure reliability and consistency from year-to-year, both the calculation process and algorithms for the most complex measures were validated by an external contractor, Milliman, Inc., who had calculated the initial results on the measures used by the QCE Stakeholder Workgroup in FY 2017 to establish the annual performance targets and five-year performance goals.

After receiving verification from Milliman, baseline calculations were developed by the department for each of the remaining 16 measures. Given the rigor with which the department's process was scrutinized, baseline calculations using FY 2016 Medicaid claims data were developed, which is one year earlier than anticipated. As its final tasks, the QCE Stakeholder Workgroup affirmed the baseline and both the process and approach used by the department to validate the reliability of the measure calculations.

With the baseline validated a year earlier than expected, the department was also able to calculate first-year performance results using FY 2017 Medicaid claims. Given that Medicaid providers are allowed 12 months to file claims for delivered services, FY 2017 is the most recent year for which performance calculations can be tabulated. The first-year performance results are reported in Section II.B.2 on page 28 of this report, and in the QCE Stakeholder Workgroup's FY 2018 and final report, included in this report as Appendix C.

10) Travel Costs

AS 47.05.270(a)(10): To the extent consistent with federal law, reducing travel costs by requiring a recipient to obtain medical services in the recipient's home community, to the extent appropriate services are available in the recipient's home community.

The Alaska Medicaid program only covers travel costs for medically necessary travel required for the recipient to receive services not otherwise available in the recipient's home community. All non-emergency medically necessary transportation must be authorized by the Medicaid Program in advance. Emergency medical transportation is only covered to the nearest facility offering emergency medical

care. Travel segments are arranged to utilize the least costly and most appropriate mode of transportation with the fewest number of overnight accommodation services.

In many rural communities, non-emergent diagnostic and treatment services are unavailable or are available periodically by locum tenens. Travel is not approved when non-emergent services are available via telehealth or are expected to be available locally from a traveling provider, such as a Public Health Nurse, within a 3-month timeframe. Providers are reminded of these travel requirements through remittance advice messages, flyers, training presentations, provider billing manual updates, and newsletter articles. A memorandum from the Director of the Division of Health Care Services offers clarification to providers regarding travel policy, and provides guidance for frequently occurring and problematic travel situations. The memorandum includes identification of non-covered services and also reinforces other existing requirements, such as combining multiple appointments into a single travel episode, denial of non-emergent travel when services are available locally within a reasonable time period, and ensuring that medical necessity exists for all travel referrals.

The department continued to make improvements during FY 2018 to contain transportation cost growth; for example, through employee training in procurement to support contracting for non-emergent travel, and beginning project planning to develop a database to track escort transportation associated with EPSDT services to assist with identifying abuse and provide accurate monthly reports. The significant decline in state general fund spending for transportation services experienced over the past two years, as noted in the table below, is due to the department's implementation of the new Centers for Medicare and Medicaid Services (CMS) tribal Medicaid reimbursement policy described in Part II.B.14 of this report (page 36). Under this new policy three tribal entities now issue transportation authorizations, allowing the department to claim 100 percent federal funding reimbursement for transportation services they arrange. The department continues to work with additional tribal entities that express interest in providing transportation authorization services.

				2016 to 2017 change		2017 to 2018 change		2016 to 2018 change	
Fund Source	**2016**	**2017**	**2018**	**Dollar**	**Percent**	**Dollar**	**Percent**	**Dollar**	**Percent**
Federal Funds	$ 45,318,177	$ 84,556,868	$73,781,312	$ 39,238,691	86.6%	$ (10,775,556)	-12.7%	$ 28,463,135	62.8%
State General Funds	$ 32,834,487	$ 7,891,016	$11,965,716	$ (24,943,471)	-76.0%	$ 4,074,700	51.6%	$ (20,868,771)	-63.6%
Total Expenditures	**$ 78,152,664**	**$ 92,447,884**	**$85,747,028**	**$ 14,295,220**	**18.3%**	**$ (6,700,856)**	**-7.2%**	**$ 7,594,364**	**9.7%**

In FY 2018 total travel expenditures decreased by $6,700,856 compared to FY 2017, a reduction of seven percent. State general fund (GF) spending for these services increased over this period, but it is more informative to look at the change in GF spending from FY 2016 to FY 2018. FY 2018 GF spending was $20,868,771 less than it was in FY 2016, a decrease of 63.6 percent. The increase in total spending between FY 2016 and FY 2018 of 9.7 percent was due to enrollment growth in the program, which grew by 24.6 percent over that same period (when measuring annual unduplicated count). The Medicaid program was able to contain total cost growth well below enrollment growth due to the measures noted above, and was able to attain significant cost savings in state GF due to the tribal initiative described above.

11) Disease Prevention and Wellness

AS 47.05.270(a)(11): Guidelines for health care providers to develop health care delivery models supported by evidence-based practices that encourage wellness and disease prevention.

Preventive Services Benefit Development

The department continues to move toward updating Medicaid coverage policies to ensure efficient delivery and availability, and to ensure wellness and preventive services are evidence-based. The department's internal task force is working to refine and modernize Alaska Medicaid's wellness benefits

to ensure evidence-based coverage for key preventive services based on recommendations from the U.S. Preventive Services Task Force and the Medicaid Evidence-Based Decisions (MED) Project, a collaborative of 19 state Medicaid programs and agencies and the Oregon Health & Science University's Center for Evidence-Based Policy.

A coverage benefit proposal is under review by department leadership. Once approved, regulatory changes will be needed to support any new policies that are adopted. These changes, once fully implemented, will result in the efficient delivery and availability of evidence-based wellness and preventive services.

HIV Health Improvement Affinity Group

The Division of Health Care Services and Division of Public Health participated in developing and implementing performance improvement projects that address gaps along the HIV care continuum to improve outcomes for Medicaid and CHIP enrollees living with HIV. This work was completed in July 2018 and the project outcomes ensured all Medicaid recipients with HIV were in active care and had proper viral load suppression. Alaska was also the only state that was able to work out the proper data agreements to share Medicaid information with the Division of Public Health and other states are now following our model.

CMS Innovation Grant

The department participated in the Medicaid Innovation Accelerator Program (IAP) for State Medicaid Housing Agency Partnerships. This IAP is a partnership between the Centers for Medicare and Medicaid Services and a number of other federal agencies, including the U.S. Department of Housing and Urban Development (HUD). The final action plan was submitted in May 2018, and the federal plan[8], which includes the work of the Alaska team who will implement the formal Alaska State Plan for Supportive Housing, was released in July 2018. The Alaska team's goal is to in three years, through sustainable private and public partnerships, establish a process to provide permanent supportive housing for an additional 250 of the most at-risk individuals and their families.

The Alaska project's top three accomplishments under the IAP are:

1. A cross-agency team was created representing several agencies within the Department of Health and Social Services, the Mental Health Trust Authority, the Alaska Housing Finance Corporation, the Association of Alaska Housing Authorities, the Alaska Coalition on Housing and Homelessness, the HUD Field Office and the Governor's Office.
2. The team completed a cross-agency review of current services and housing resources to inform the Alaska Plan for Permanent Supportive Housing.
3. The team will be implementing the formal Alaska State Plan for Permanent Supportive Housing, and has created workgroups to oversee progress in the following four areas: Data Matching, Services Crosswalk, Housing Assessment, and the Alaska State Plan for Permanent Supportive Housing.

CDC 6|18 Initiative Grant

The Centers for Disease Control and Prevention (CDC) is partnering with health care purchasers, payers, and providers to improve health and control health care costs. CDC provides these partners with rigorous evidence about high-burden health conditions and associated interventions to inform their decisions to have the greatest health and cost impact. The 6|18 initiative targets the six most costly

[8] http://campaign.r20.constantcontact.com/render?m=1011269667270&ca=ef44f871-1a1a-4cfd-8852-ec2d0da2fea9

health conditions (tobacco use, hypertension, healthcare-associated infections, asthma, unintended pregnancies, and diabetes) and offers 18 proven interventions that prevent chronic and infectious diseases by increasing their coverage, access, utilization and quality. Additionally, it aligns evidence-based preventive practices with emerging value-based payment and delivery models.

Alaska's participation in the CDC 6|18 focused on diabetes prevention, tobacco use cessation, blood pressure control, and the prevention of healthcare associated infections. The project has been successful in all areas and officially ended on October 10, 2018. Following are the measures implemented by Medicaid under this initiative.

Diabetes Prevention:

- Implemented quality control measures for those with diabetes and included them in the draft managed care contract currently under negotiation with United Healthcare and the Centers for Medicare and Medicaid Services as part of the Coordinated Care Demonstration Project.

Control High Blood Pressure:

- Investigated ways to reimburse Community Health Workers (CHW) for hypertension control; moving forward with training CHWs to conduct home visits for follow-up care with individuals in the tribal population.
- Use of 90-day prescriptions, and timing refills to allow dispensing before the 90 days are up.

Prevent Healthcare-Associated Infections:

- National Healthcare Safety Network (NHSN) Antimicrobial Use and Resistance (AUR) module training via Webinar.
- Continuing to work with the Alaska Antimicrobial Stewardship Collaborative, Alaska State Hospital and Nursing Home Association, and Mountain Pacific Quality Health Foundation through an advisory council that meets quarterly.
- Compiling Long-term Care Facility (LTCF) survey information collected earlier in the year, and considering combining it with CRE data for presentation after NHSN AUR training.
- Continuing education for multiple professionals.

Tobacco Use Cessation:

- Removal of copays for tobacco cessation medications.
- Media campaign to increase access to available services.
- E-referrals to Quitline.
- Broadening scope of practice for delivering cessation treatments (i.e. behavioral health providers).

12) Behavioral Health System Reform

SB 74 included a series of measures aimed at reforming the behavioral health system.

- AS 47.05.270(b) requires the department to develop and manage a comprehensive and integrated behavioral health program that uses evidence-based, data-driven practices to achieve positive outcomes for people with mental health or substance abuse disorders and children with severe emotional disturbances.
- AS 47.07.036(f) requires the department to apply for a section 1115 waiver under 42 U.S.C. 1315(a) to establish one or more demonstration projects focused on improving the state's behavioral health system for Medicaid beneficiaries.
- AS 47.07.900(4) was amended to remove the requirement that community mental health clinics be a state behavioral health grantee in order to enroll as a Medicaid provider.

A focus on behavioral health system reform was included as part of the Medicaid reform legislation because there is a shortage of psychiatric inpatient beds and residential substance use disorder (SUD) treatment programs in Alaska, a fragmented system of community-based behavioral health providers, as well as insufficient treatment services of any kind in rural areas. The shortage has put a heavy burden on hospitals in urban areas, as well as the entire health care system, and severely limits access to care for the Alaskans who need these services. Inadequate access to the appropriate level of care at the preventive, early intervention, and lower acuity end of the continuum of care, and the facility-based treatment end, not only fails to provide timely interventions for patients and burdens providers, it drives higher costs for the Medicaid program. For an example, see the proportion of hospital emergency department service claims for frequent ED users on Medicaid, as well as the proportion of hospital readmissions, attributable to a behavioral health condition in FY 2018 in the tables on pages 32-33.

<u>1115 Waiver: Behavioral Health Demonstration Project</u>

The 1115 waiver will establish a network of behavioral health services at the community and regional level to reduce the need for crisis-driven and urban-based emergency, acute, and residential care by supporting development of missing components of the care continuum. With the assistance of a series of stakeholder workgroups that helped design the demonstration project during FY 2017, the department submitted the 1115 waiver application to the Centers for Medicare and Medicaid Services (CMS) on January 31, 2018. Following a federal public comment period, CMS entered into negotiations with the department in March of 2018. Those negotiations are on-going. The waiver application is available at:
http://dhss.alaska.gov/HealthyAlaska/Documents/redesign/AK_1115_WaiverApplication.pdf

The application is for a five-year demonstration project, which will be implemented in three phases. The underlying hypotheses of the demonstration is that early intervention and prevention, combined with increased community-based mental health and substance use disorder services, will result in a reduced need for high-cost, urban-based acute care services. A reduction in the use of acute care will improve health outcomes for recipients, while reducing high-end service costs. The proposal is to establish an enhanced set of benefits for three specific populations of Medicaid recipients:

1) Children, adolescents, and their parents or caretakers with, or at risk of, mental health and substance use disorders;
2) Transitional age youth and adults with acute mental health needs; and,
3) Adolescents and adults with substance use disorders.

The 1115 waiver application process, because of its nature as a demonstration project, requires states to enter into lengthy negotiations with CMS to determine final project design and obtain approval. Negotiations can take from several months to years. However, in September 2018 CMS offered the department an opportunity to "fast track" the components of the waiver application that address

substance use disorder (SUD), with an aggressive timeline to demonstrate measurable impact on the opioid and SUD crisis. The department is currently negotiating the final details of the SUD implementation plan and approval is expected soon.

The first phase of the SUD implementation plan will expand SUD services in the Anchorage, Fairbanks, Mat-Su, and Northern Southeast Regions of the state. CMS will require achievement of a number of milestones to improve the quality of care as well as accountability for the overall system, including:

- Access to critical levels of care for SUD treatment
- Use of evidence-based SUD-specific patient placement criteria
- Use of nationally recognized SUD-specific program standards for residential treatment facility provider qualifications
- Sufficient provider capacity at critical levels of care
- Implementation of comprehensive treatment and prevention strategies to address opioid abuse
- Improved care coordination and transitions between levels of care

The SUD implementation plan also includes a waiver of the exemption from the Medicaid exclusion for Institutions for Mental Diseases (IMD). The IMD exclusion prohibits the use of federal Medicaid funds for care provided to adults in mental health and substance use disorder residential treatment facilities larger than 16 beds. Waiver of this exclusion will allow the state to expand capacity for residential addiction treatment services with financial support through Medicaid reimbursement.

Administrative Services Organization (ASO)

As documented in the SB 74 fiscal notes, the department will achieve the statutory requirement to develop and manage an integrated behavioral health program that uses evidence-based practices and improves accountability through a contract with an Administrative Services Organization (ASO). All publicly funded behavioral health services administered by the department, in addition to the 1115 waiver services, will be supported by the ASO. Beneficiaries who receive those services will be offered treatment options based on medical necessity. Those who meet the waiver criteria will be offered the enhanced services allowable under the waiver. Individual beneficiaries will not enroll with the ASO.

The Request for Proposals (RFP) for the ASO contract was released in September of 2018 and closes on November 26th. The department anticipates awarding the contract by the end of FY 2019.

Behavioral Health System Capacity

There are numerous other initiatives underway to support behavioral health system reform, primarily targeted at helping create needed capacity and capabilities in the system. In addition to the SB 74 amendment of AS 47.07.900 to remove the grantee requirement, two more recent bills further open up opportunities to become a Medicaid provider. SB 105, passed by the legislature in 2017, amended AS 47.07.030 to add marital and family therapy services as an optional Medicaid service. SB 169, passed in 2018, further amended AS 47.07.030 to allow any physician to operate a mental health physician clinic and to supervise the provision of care in the clinic via distance delivery. The department is currently working on regulations to implement these provisions, and to expand the ability of independent licensed providers (psychologists, psychological associates, clinical social workers, and marital and family therapists) to provide Medicaid services. While regulations in support of the statutory changes have not yet been adopted, in August 2016 the Department of Law and the department determined that interested parties could immediately seek department approval and eligibility to provide Medicaid behavioral health services.

In FY 2017 the department conducted readiness assessments of department staff and the behavioral health provider community to determine capabilities for helping to reform and operate within a

reformed system of care. Informatics and financial, clinical, contract, and organizational management are examples of some of the domains covered by the assessments. Training and technical assistance programs to address readiness gaps were implemented, continued during FY 2018, and will be sustained into the future as the reforms are fully implemented.

Another important component of these reform efforts is an initiative to rebase the Medicaid fee-for-service rates for community behavioral health clinics, which had not been increased since 2011. New rebased rates are essential to support provider capacity and ensure stability during this time of transition to the reformed system. A rate increase was approved in FY 2017, and the new rebased rates will take effect in January 2019.

Additionally, the legislature funded an expansion of substance use disorder treatment with a $12 million appropriation. The Department issued a Request for Proposal to fund: Medically Monitored Inpatient Withdrawal services, Clinically Managed Residential Substance Use Disorder Treatment, Crisis Residential Stabilization Center services, Ambulatory Withdrawal Management, and Short Term Housing Assistance. The solicitation closed on October 19, 2018, and a Notice of Intent to Award will be issued soon.

One final component currently under consideration is an increase in Medicaid Disproportionate Share Hospital funding for behavioral health treatment services, which was funded by the legislature for FY 2019 and FY 2020. Letters of agreement for the distribution of funds began rolling out to qualifying hospitals the week of November 5th.

13) Eligibility Verification System

SB 74 established AS 47.05.105, which requires the department to implement an enhanced computerized income, asset, and identity eligibility verification system. The purpose of this system is to verify eligibility, eliminate duplication of public assistance payments, and deter waste and fraud in public assistance programs. At this time last year, as noted in last year's report, the department was considering entering into an agreement with the New England States Consortium Systems Organization to procure an Asset Verification System. However, upon further analysis, it was determined that the agreement would not meet the statute's requirement for a competitive bidding process.

A Request for Interest (RFI) was released, and closed at the end of September 2018. Potentially viable and affordable system options were identified through the RFI process, so the department will release a Request for Proposals (RFP) to solicit a contract with a system provider. Because the department is in the process of transitioning the public assistance programs' Eligibility Information System (EIS) to the new Alaska's Resource for Integrated Eligibility Services (ARIES) system, the eligibility verification system will initially be established through a stand-alone internet portal. Once the EIS is fully transitioned to ARIES, the eligibility verification system will be interfaced to ARIES.

14) Emergency Care Improvement

The Emergency Department Coordination Project (EDCP) is a collaborative effort between the Alaska State Hospital and Nursing Home Association (ASHNHA), the Alaska Chapter of the American College of Emergency Physicians (ACEP), and the department. EDCP was developed in response to AS 47.07.038, which requires the department, in collaboration with Alaska's statewide professional hospital association, to establish a hospital-based project to reduce the use of emergency department services by Medicaid recipients.

EDCP includes the development and implementation of a system for real-time electronic exchange of patient information among Emergency Departments (EDs). 11 hospitals are now live on Collective Medical's Emergency Department Information Exchange (EDie) system. During the month of September 2018, approximately 1,500 EDie notifications were sent to Alaska hospitals providing valuable insights to help providers care for their patients. Six of these hospitals also now receive automatic notifications from the state Prescription Drug Monitoring Program (PDMP) through the EDie system, which enables providers to have real-time information to quickly identify patients with a high-risk prescription history.

The EDCP also includes a patient education component, to help direct care to the most appropriate setting. Another component has been the implementation of uniform statewide guidelines[9] for prescribing narcotics in an ED. These guidelines have been in place for two years, and are helping to combat the opioid epidemic.

Hospitals Currently Live or in the Process of Connecting to EDie

Hospital	Status
Providence Alaska Medical Center	Live
Providence Kodiak Island Medical Ctr.	Live
Providence Seward Medical Center	Live
Providence Valdez Medical Center	Live
Mat-Su Regional Medical Center	Live
Central Peninsula Hospital	Live
South Peninsula Hospital	Live
Bartlett Regional Hospital	Live
PeaceHealth Ketchikan Medical Center	Live
Petersburg Medical Center	Live
Wrangell Medical Center	Live
Alaska Regional Hospital	In progress
Alaska Native Medical Center	In progress
Fairbanks Memorial Hospital	In progress

15) Coordinated Care Demonstration Project

SB 74 established the Coordinated Care Demonstration Project (CCDP) under AS 47.07.039. The purpose of the CCDP is to assess the efficacy of various health care delivery models with respect to cost, access, and quality of care. Under the statute, the department is permitted to contract with provider-led entities, Accountable Care Organizations, managed care organizations, primary care case managers, and prepaid ambulatory health plans. The department issued a Request for Proposals (RFP) in FY 2017 soliciting proposals in any of three different health care models:

- Managed Care Organizations
- Case Management Entities
- Provider-Based Reforms

[9] http://www.ashnha.com/wp-content/uploads/2017/01/OpioidGuidlinesPoster_FINALJune2017.pdf

During FY 2018 the department conducted negotiations with four respondents to the RFP, and in June 2018 released Notices of Intent to Award contracts to two, United Healthcare to demonstrate a managed care model in Anchorage and the Mat-Su, and Providence Family Medicine Center to demonstrate a patient-centered medical home model (under the Provider-Based Reform category) in the Anchorage area. Negotiations continue with one remaining offeror, under the Case Management Entity model, for a bundled payment demonstration project.

Managed Care Organization (United Healthcare)

The department is currently working on the draft managed care contract with United Healthcare (UHC), which will be implemented using 1915(a) federal statutory authority, and submitted to CMS for final approval. The actuarial services of Milliman Inc. have been procured to assist with the development and certification of the managed care organization's capitation rate, as required by CMS. The rates are expected to be finalized by the end of CY 2018. The contract will be finalized once CMS approves the contract and the capitation rates have been certified.

The anticipated project go-live date is April 1, 2019. As a baseline, UHC will provide their members with the same scope of services as the current Alaska Medicaid program unless specifically carved out within the contract. Pharmacy, behavioral health services, waiver services, and long-term care will not be included. UHC will also offer care coordination, case management, wellness programs, a 24-hour nurse hotline, and other services that are currently not provided as regular benefits in the Alaska Medicaid program. Enrollment in the managed care plan will be voluntary for beneficiaries, who may opt-out of the program during open enrollment. Enrollment in the managed care plan will be voluntary for Alaska Native/American Indian beneficiaries, who may opt-in to the program during open enrollment. Enrollment in the UHC provider network is also voluntary for providers, who may choose to join the UHC network or remain solely a Medicaid fee-for-service provider.

Patient Centered Medical Home (Providence Family Medicine Center)

The state executed a contract in July 2018 with Providence Family Medicine Center (PFMC) to demonstrate a patient-centered medical home model (PCMH) in the Medicaid program. The project go-live date was September 1, 2018. The state is currently working with PFMC on implementation and oversight activities. PFMC will provide current Medicaid patients the services of a physician-led interdisciplinary care team (IDCT), which includes primary care-based management for medical assistance services, case management, care coordination, social work, health education, and transitional and follow-up care. The state will pay a partial capitation rate for the additional IDCT services and the program is voluntary for patients, who may opt-out of receiving the additional services at any time.

Care Management Entity Model — Bundled Payment Project

The department is continuing negotiations and considering an array of payment redesign options that would affect how providers who serve Medicaid beneficiaries in the state would be paid, including bundled payment to providers. To support this effort and also the work of the Innovative Provider Payment Workgroup noted in Section II.A.8 on page 15, the department contracted with Milliman to provide an analysis of bundled payment opportunities for certain episodes of care, specifically for the Juneau and Fairbanks region (the two largest population centers not covered by the managed care demonstration project).

16) Health Information Infrastructure Plan

Section 56 of SB 74 (uncodified) requires the department to develop a plan to strengthen the health information infrastructure, including health data analytics capability. The purpose of the plan is to

transform the health care system by providing data required by providers for care coordination and quality improvement, and by providing information support for development and implementation of Medicaid reform. The Health Information Infrastructure Plan is required to leverage existing resources, such as the statewide health information exchange, to the greatest extent possible.

The department contracted with HealthTech Solutions to provide technical assistance. The department also established a stakeholder workgroup that included representatives from health care facilities, provider practices, medical associations, tribal entities, mental health practices, the statewide health information exchange, and the department. The contractor facilitated a series of stakeholder workgroup meetings and conducted a gap analysis to inform development of plan recommendations during FY 2017 and FY 2018, and presented their final report to the department in August 2018.

Common themes that emerged in the course of workgroup discussions and were used to guide development of the Health Information Infrastructure Plan included:

- Inconsistent rate of adoption and lack of interoperability of Electronic Health Record systems;
- Limitations in functionality and capabilities of healtheConnect Alaska, the statewide health information exchange (HIE);
- Limited use of telehealth throughout the state and ways to increase telehealth use;
- Lack of data governance policies and standards;
- A high degree of redundancy in reporting requirements within the state;
- Limitation of data analytics capabilities;
- Lack of a comprehensive statewide provider directory/registry; and
- Limitations of public health systems.

The final recommendations address:

1. Health information exchange platform modernization
2. Medicaid information technology architecture self-assessment
3. Master Client Index development
4. Fraud, waste and abuse detection
5. MyAlaska portal secure identity and access management
6. Eligibility and Enrollment system self-assessment, data hub, and asset verification
7. Referral management module in the HIE
8. Care management module in the HIE
9. Provider directory module in the HIE to support care management and telehealth
10. Document management system for the Department of Health & Social Services
11. Telehealth policies and tools
12. Provider enrollment and management
13. Electronic health record adoption
14. Public health registry modernization
15. Data governance
16. Enterprise architecture
17. Enterprise project management
18. Independent verification and validation services
19. Testing and quality assurance services
20. System integrator

The Health Information Infrastructure Plan final report from HealthTech Solutions is included as Appendix D in this report. The department's response to the Health Information Infrastructure Plan recommendations is included as Appendix E in this report.

B. Additional Reporting Requirements

This section of the report (II.B) responds to the reporting requirements specified in AS 47.05.270(d)(2) through AS 47.05.270(d)(15).

1) Realized Cost Savings Related to Other Reform Efforts

AS 47.05.270(d)(2)

State General Fund Savings/Cost Avoidance
Due to Other Reform & Cost Containment Efforts

Program	FY 2018
Utilization Management	$3,892,146
HMS Third-Party Liability & Audit Recovery	$9,000,000
Tribal Health System Partnerships	$22,500,000
DOC Inpatient Care Cost Avoidance	$4,645,983
TOTAL	**$40,038,129**

Utilization Management

The department contracts with a health management firm to provide utilization management services, also known as service authorization, for all inpatient hospital stays that exceed three days; inpatient stays and outpatient services for selected procedures and diagnoses, regardless of length of stay; and all outpatient magnetic resonance imaging (MRI), positron emission tomography (PET), magnetic resonance angiography (MRA), and single-photon emission computed tomography (SPECT). During FY 2018, these utilization management services yielded net Medicaid program savings of $12,973,820, approximately 30 percent of which or $3,892,146, was state general funds, and a return on investment of $9.30 for every $1.00 spent through the avoidance of unnecessary or untimely medical care.

Healthcare Management Systems Third-Party Liability and Audit Recovery

The department contracts with Healthcare Management Systems (HMS) to manage coordination of benefits for Alaska Medicaid recipients with a third party payer. HMS also audits provider claims and associated financial records to identify underpayments and overpayments, and recovers any overpayments made to providers. During FY 2018, HMS recoveries and savings exceeded $30 million, approximately 30 percent of which, or $9 million, was state general funds.

Tribal Health System Partnerships

The federal government reimburses the state at 100 percent FMAP (federal medical assistance percentage) for services provided to American Indian/Alaska Native (AI/AN) Medicaid enrollees served through a tribal health facility. Development of tribal health system infrastructure and capacity to meet the needs of the AI/AN population has been recognized and supported by the legislature for many years. Examples include: system planning support under SB 61(2007), subsequent capital project funding in FY 2009 for long term care beds in Kotzebue and Bethel, bond authorization for residential housing to serve the Alaska Native Medical Center campus under SB 88(2013), and access to bond bank financing through SB 46 (2015). Policies enacted through legislation and related department activities continues to save state general fund dollars by increasing access to Medicaid services within the tribal health system.

New or continued expansion of services in the tribal health system in FY 2018 include expanded service provision and payment to over 350 Community Health Aide and Behavioral Health Aides, expanded dental services in certain rural communities, continued support of long term care beds in the northern and western regions, continued support of additional newborn intensive care beds, obstetric services, extended hours for orthopedic surgeries in Anchorage, and the additional residential capacity in Anchorage to accommodate recipients on the Alaska Native Medical Center campus. Increased service

capacity at tribal health facilities resulted in increased claims for those services by approximately $75 million in FY 2018. In lieu of this increased capacity at tribal facilities, these services would have been provided in a non-tribal setting and reimbursed by the federal government at a lower match rate if not covered under the new tribal reimbursement policy. The state saved an estimated 30 percent of this total, or approximately $22.5 million in FY 2018.

Medicaid Payment for Inpatient Care for Incarcerated Individuals

The department began providing Medicaid reimbursement for inpatient care provided outside correctional facilities for incarcerated individuals in FY 2015. This state policy change was based on earlier policy clarification from CMS, and expansion of Medicaid eligibility to low-income adults in September of 2015 extended coverage to a greater number of those incarcerated. In FY 2018 Medicaid paid claims billed in the amount of $4.65 million for inpatient care for Department of Corrections (DOC) inmates. In the past these fees would have been paid by DOC with 100 percent general fund dollars.

2) Achievement of Quality & Cost-Effectiveness Targets

AS 47.05.270(d)(3)

The department is able to report performance results on achievement of quality and cost-effectiveness targets established by the stakeholder workgroup, as described in Section II.A.9 of this report on page 17, one year earlier than projected. Baseline measures use FY 2016 Medicaid claims data, and the first-year performance results use FY 2017 Medicaid claims. Given that Medicaid providers are allowed 12 months to file claims for delivered services, 2017 is the most recent year for which performance calculations can be tabulated.

Results of 2017 First-Year Performance on Quality & Cost Effectiveness Measures

Measure	Met 2017 Performance Target
A.1 Child and Adolescents' Access to Primary Care	N
A.2 Ability to Get Appointment With Provider As Needed	Y
B.1 Follow-up After Hospitalization for Mental Illness	Y
B.3[10] Alcohol and Other Drug Dependence Treatment	Y
CH.1 Emergency Department Utilization	N
CH.2 Diabetic A1C Testing	Y
CH.3 Hospital Readmission Within 30 days - All Diagnoses	On Hold
C.1 Medicaid Spending Per Enrollee	N
C.2 Hospitalization Chronic Obstructive Pulmonary Disease	Y
C.3 Hospitalizations Attributed to Diabetic Condition	Y
C.4 Hospitalizations Attributed Congestive Heart Failure	P
M.1 Live Births Weighing Less Than 2,500 Grams	Y
M.2 Follow-up After Delivery	Y
M.3 Prenatal Care During First Trimester	Y
P.1 Childhood Immunization Status	Y
P.2 Well-Child Visits for Children 0-6 by Age	P
P.3 Developmental Screening in the First Three Years of Life	P

Y = Met Performance Goal; N = Did Not Meet Performance Goal; P = Partially Met Performance Goal

[10] Measure B.2, Medical Assistance with Smoking and Tobacco Cessation, was moved to the Potential Future Measures List by the QCE workgroup in 2018.

Summary first-year performance results for each of the measures are provided in the table on the previous page. The Alaska Medicaid Program met the established performance targets for 10 of the measures, partially met performance on an additional three measures, and did not meet the performance targets on three measures. The QCE Stakeholder Workgroup's final report detailing the work completed in 2018 includes the baseline, target, and performance data for each measure. That report is included as Appendix C.

3) Recommendations for Legislative or Budgetary Changes

AS 47.05.270(d)(4)

At present, the department has no recommendations for additional changes to legislation or budgeting related to medical assistance reforms. The department is continually evaluating the Medicaid program's effectiveness and efficiency and will work closely with the Governor's Office and the Legislature on recommendations as they evolve.

4) Federal Law Changes that Impact the Budget

AS 47.05.270(d)(5)

The department is unaware of any changes made in SFY 2018 in federal law, regulation or policy that may result in a cost or savings to the state of more than $1 million.

5) Applications for Medicaid Grants, Options, or Waivers

AS 47.05.270(d)(6)

Waivers

The department applied to CMS for two new Medicaid waivers during FY 2018, the 1115 waiver for Behavioral Health Reform, and a new 1915(c) waiver for Individualized Supports. The application for the 1115 waiver was submitted to the federal government on January 30, 2018, and the department is currently in negotiations with CMS regarding implementation plans. Please see Section II.A.12 beginning on page 21 of this report for more information on the 1115 waiver.

CMS approved the new 1915(c) Individualized Supports waiver in June 2018. This waiver serves individuals who had previously received services funded with 100 percent state general funds through the Community Developmental Disabilities Grant Program. It allows up to 600 people to receive up to $17,500 (indexed to recognize a geographic differential) in waiver services every year. Effective on October 1, 2018, this new waiver joins the department's existing four long term services and supports waivers:

- AK.0260.R05.00 – 1915(c) HCBS Waiver for People with Intellectual or Developmental Disabilities
- AK.0261.R05.00 – 1915(c) HCBS Waiver for Alaskans Living Independently
- AK.0262.R05.00 – 1915(c) HCBS Waiver for Adults with Physical and Developmental Disabilities
- AK.0263.R05.00 – 1915(c) HCBS Waiver for Children with Complex Medical Conditions

In addition, three of the four existing waivers (all but the one that serves only adults) were amended in FY 2018 to align with regulations that removed intensive active treatment services for children. Children can now receive this service as part of regular Medicaid under the Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) benefit. EPSDT is a federally required benefit that provides comprehensive and preventive health care services for children.

State Plan Options

The department applied for one new Medicaid state plan option during FY 2018, the 1915(k) Community First Choice (CFC) Option; and also submitted a State Plan Amendment request for a new service under an existing state plan option, the Long Term Services and Supports Targeted Case Management (LTSS-TCM) service under the current Targeted Case Management Option.

Community First Choice (1915(k)) was approved by CMS in June 2018 and took effect October 1, 2018, providing personal care and other services to people who meet an institutional level of care. This new option provides an enhanced federal match of six percent on CFC services (increasing the standard federal match from 50 percent to 56 percent for those services). The personal care services of roughly 1,000 participants who also receive waiver services were transferred to the Community First Choice program as of October 1, 2018.

The Long Term Services and Supports Targeted Case Management (LTSS-TCM) service also took effect October 1, 2018. LTSS-TCM provides case management services for individuals on Community First Choice who require the services of a case manager, but who do not want to receive full waiver services. LTSS-TCM also centralizes initial application and annual support plan development with the case management services. These were formerly waiver services, and this transfer to LTSS-TCM has no effect on applicants or participants. It only affects care coordinators, who will use different billing codes for these services. The department does not anticipate any savings as a result of implementing Targeted Case Management; the fiscal note for SB 74 included estimates of costs for new recipients on the Community First Choice program (who must have the LTSS-TCM services in order to access the CFC services), off-set by the savings resulting from the six percent enhanced federal match.

Grants

In May 2018 the department received a National Governors Association (NGA) Center for Best Practices grant that provides technical assistance to assist with building data evaluation into the development and implementation of new Medicaid policies. The goal of the policy evaluation process is to identify how a new policy will impact Medicaid enrollees and further the objectives of the Medicaid Program. This is a 12-month project during which NGA will engage with consultants and other national experts in providing the technical assistance. Note that this is a non-monetary grant.

6) Demonstration Project Results

AS 47.05.270(d)(7)

The department is in the process of implementing two demonstration projects under SB 74:

- 1115 Demonstration Waiver for Behavioral Health System Reform, required under AS 47.05.270(b) and AS 47.07.036(f). Please see Section II.A.12 on page 21 of this report for information about this project.
- The Coordinated Care Demonstration Project, required under AS 47.07.039. Please see Section II.A.15 on page 24 of this report for information about this project.

Because these projects are still in the implementation stage results are not yet available.

7) Telehealth Barriers, Improvements, and Recommendations

AS 47.05.270(d)(8)

In response to AS 47.05.270 telehealth requirements, the department convened a Telehealth Stakeholder Workgroup during FY 2017 comprised of tribal and non-tribal health care providers, representatives from tribal health organizations and professional associations, Medicaid recipients, and state staff members. The workgroup delivered its report to the department early in FY 2018 (August 2017), and their report is included with this report as Appendix F. A summary of the workgroup's recommendations is presented in the table below. The department's response to these recommendations is included here as Appendix G.

Medicaid Redesign Telehealth Stakeholder Workgroup Recommendations	
Recommendation 1	Reimburse Care Management and Use of Remote Monitoring Strategies in Home Settings
Recommendation 2	Revise Regulations Regarding Prescriptions for Controlled Substances
Recommendation 3	Monitor Medical Board Licensing Regulations Regarding Delivery of Telehealth Services
Recommendation 4	Require All Payers to Reimburse Telehealth at Parity
Recommendation 5	Improve Coordination Between Schools and Providers to Expand the Use of Telehealth
Recommendation 6	Support Collaborative Efforts to Leverage Federal Funding for Internet Coverage in Rural Areas
Recommendation 7	Work with the Health Information Exchange and Department of Commerce to Develop Telehealth Central Network
Recommendation 8	Help Providers Invest in Equipment and Connectivity to Support Telehealth Strategies
Recommendation 9	Develop Baseline Data of Telehealth Utilization and Analyze Use and Need Patterns
Recommendation 10	Continue Medicaid Redesign Telehealth Stakeholder Workgroup

The department is currently working on phase one of a two-phase telehealth regulation update project. The initial phase is focused on clarifying current definitions and better defining modes of telehealth delivery. The second phase will focus on identifying and adding services and modes of delivery that will increase access to care in underserved communities in the most cost-effective manner.

Several divisions within the department are also evaluating varied telemedicine strategies aimed at improving recipient access to necessary services as they pertain to their specific programs. Efforts within the Division of Senior and Disabilities Services and the Division of Behavioral Health are each exploring ways in which advances in new technology may streamline services and expand access to care. Further development of these strategies is necessary to determine whether the options can reliably provide services long-term and will be cost effective for the program in the long-run.

8) Medicaid Travel Costs

AS 47.05.270(d)(9)

				2016 to 2017 change		2017 to 2018 change		2016 to 2018 change	
Fund Source	**2016**	**2017**	**2018**	**Dollar**	**Percent**	**Dollar**	**Percent**	**Dollar**	**Percent**
Federal Funds	$ 45,318,177	$ 84,556,868	$73,781,312	$ 39,238,691	86.6%	$ (10,775,556)	-12.7%	$ 28,463,135	62.8%
State General Funds	$ 32,834,487	$ 7,891,016	$11,965,716	$ (24,943,471)	-76.0%	$ 4,074,700	51.6%	$ (20,868,771)	-63.6%
Total Expenditures	**$ 78,152,664**	**$ 92,447,884**	**$85,747,028**	**$ 14,295,220**	**18.3%**	**$ (6,700,856)**	**-7.2%**	**$ 7,594,364**	**9.7%**

In FY 2018 total travel expenditures decreased by $6,700,856 compared to FY 2017, a reduction of seven percent. State general fund (GF) spending for these services increased over this period, but it is more informative to look at the change in GF spending from FY 2016 to FY 2018. FY 2018 GF spending was $20,868,771 less than it was in FY 2016, a decrease of 63.6 percent. The increase in total spending between FY 2016 and FY 2018 of 9.7 percent was due to enrollment growth in the program, which grew by 24.6 percent over that same period (when measuring annual unduplicated count). The Medicaid program was able to contain total cost growth well below enrollment growth due to the measures described in Section II.A.10 on page 17, and most notably due to implementation of the tribal claiming policy noted in that section and described in Section II.B. 14 on page 36.

9) Emergency Department Frequent Utilizers

AS 47.05.270(d)(10)

The following table depicts the number of frequent users of emergency departments in FY 2017 and FY 2018. The threshold for frequent users was five visits within the fiscal year. Medicare crossover claims were excluded from this analysis. The increased number in frequent users is attributable at least in part to the increased enrollment in Medicaid between FY 2017 and FY 2018.

Number of Medicaid Recipients Identified as Frequent Emergency Department Users		
FY 2017	**FY 2018**	**Percent Change**
4,442	5,457	22.9%

FY 2018 Top Diagnoses at ED Visit of Medicaid Recipients Identified as Frequent ED Users	
Diagnosis	**Number of Claims**
Unclassified (e.g., fever, chest pain)	26,829
Injury	22,893
Respiratory Disease	17,605
Behavioral Health Condition	12,265

10) Hospital Readmissions

AS 47.05.270(d)(11)

The following table depicts the number of hospitalized Medicaid recipients who were readmitted to the hospital within 30 days of discharge. Readmissions are counted for the two- to 30-day period following a hospital stay to omit hospital-to-hospital transfers that are captured as one-day readmissions. The increased number of readmissions may be attributable in part to the increased enrollment in Medicaid between FY 2017 and FY 2018. Of the 1,913 recipients with a readmission in FY2017, only 262 had a hospitalization and subsequent readmission in FY2018.

Number of Hospital Readmissions (2 – 30 days following discharge)		
FY 2017	**FY 2018**	**Percent Change**
1,913	2,292	19.8%

FY 2018 Top Diagnoses for Hospital Readmissions of all Medicaid Recipients	
Diagnosis	**Number of Claims**
Behavioral Health Condition	967
Unclassified (e.g., fever, nausea)	428
Respiratory Disease	314
Diseases of the Circulatory System	233
Injury	231

11) State General Fund Spending per Recipient

AS 47.05.270(d)(12)

State general fund spending for the average medical assistance recipient decreased 11.5 percent in FY 2018 compared to FY 2017. In FY 2017 the state general fund spending averaged $3,537 per recipient and in FY 2018 it averaged $3,129. The decrease is attributed in part to implementation of the federal tribal reimbursement policy, as well as other reforms and cost control measures described throughout this report. In FY 2017 there were 184,956 recipients and state general fund spending was $654,223,953 ($638,296,477 Medicaid component GF and $15,927,476 DHSS GF through Interagency) and in FY 2018 there were 202,806 recipients[11] and state general fund spending was $634,637,986.[12]

Average State General Fund Spending per Medicaid Recipient

FY 2017	FY 2018	Percent Change
$3,537	$3,129	-11.5%

[11] The number of recipients will differ from the number of enrollees reported elsewhere in this report. Enrollees are counted as recipients only if they receive a Medicaid service at some point during the fiscal year.

[12] State general fund spending per recipient would have been higher if claims that would normally have been paid at the end of FY 2018 had not been pushed forward for payment in FY 2019 due to insufficient funding in FY 2018. Had those FY 2018 claims been paid in FY 2018, GF spending per recipient would have reflected a seven percent decrease, at $3,298 per recipient (based on $672,483,116 GF expenditures for 204,471 recipients (note that the additional claims paid increase the unduplicated recipient count)).

12) Uncompensated Care Costs

AS 47.05.270(d)(13)

Following are the 2011 – 2016 uncompensated care costs incurred by hospitals in Alaska that complete standard Medicare cost reports and for which this information is available (16 hospitals represented). Due to difference in hospital fiscal years the data may represent different periods. For example, 2016 includes data from July 1, 2016 through June 30, 2017 for hospitals on a July – June fiscal year; and October 1, 2016 through September 30, 2017 for those on an October – September fiscal year.

	Uncompensated Care Amount	% Change from Prior Year
2011	$85,592,723	N/A
2012	$90,813,377	6.1%
2013	$95,402,055	5.1%
2014	$91,058,081	-4.6%
2015	$95,261,077	4.6%
2016	$50,464,033	-47.0%

Source: Alaska State Hospital & Nursing Home Association, October 2018.

Note that prior year hospital uncompensated care data reported in the FY 2016 and FY 2017 Annual Medicaid Reform Report may differ from the amounts reported here because this data is revised as updated cost reports are processed.

The following information is provided by the Alaska Division of Insurance in response to the question regarding the change in health insurance premiums.

Year/Market	Member Months	Total Direct Premiums Paid	Premium Per Member Per Month PMPM	PMPM Increase From Previous Year
CY 2014				
Individual Market	266,002	$117,103,505	$440.24	
Small Group Market	205,017	$123,538,386	$602.58	
CY 2015				
Individual Market	326,711	$200,892,206	$614.89	39.67%
Small Group Market	208,435	$133,752,599	$641.70	6.49%
CY 2016				
Individual Market	256,629	$215,793,787	$840.88	36.75%
Small Group Market	202,711	$134,307,229	$662.56	3.25%
CY 2017				
Individual Market	221,398	$208,006,966	$939.52	11.73%
Small Group Market	195,703	$138,548,645	$707.95	6.85%

Source: Alaska Division of Insurance, October 2018

13) Optional Services Expenditures by Fund Source

AS 47.05.270(d)(14)

SFY 2018 spending for provision of optional services is presented in the table below with a breakdown by service category and funding source. Please see the white paper on optional services included as Appendix H for more information. *Note: Totals below may not exactly equal sum of column/row due to rounding.*

	STATE	FEDERAL	TOTAL SPENDING
ADULT DAY CARE	$2,456,471	$2,456,471	$4,912,941
CARE COORDINATION	$6,253,145	$6,813,641	$13,066,785
CHORE SERVICES	$852,059	$855,859	$1,707,918
DAY HABILITATION	$22,701,453	$23,600,396	$46,301,848
ENVIRONMENTAL MODIFICATIONS	$197,811	$197,811	$395,621
INTENSIVE ACTIVE TREATMENT/THERAPY	$859,128	$873,220	$1,732,348
MEALS	$1,118,461	$1,119,054	$2,237,516
RESIDENTIAL HABILITATION	$62,388,443	$65,678,099	$128,066,542
RESIDENTIAL SUPPORTED LIVING	$22,675,776	$23,059,337	$45,735,113
RESPITE CARE	$6,109,218	$6,471,069	$12,580,287
SPECIALIZED EQUIPMENT AND SUPPLIES	$90,044	$90,044	$180,088
SPECIALIZED PRIVATE DUTY NURSING	$71,340	$71,340	$142,679
SUPPORTED EMPLOYMENT	$4,023,110	$4,023,110	$8,046,221
TRANSPORTATION	$1,159,502	$1,159,550	$2,319,051
TOTAL WAIVER EXPENDITURES	**$130,955,959**	**$136,469,000**	**$267,424,959**
CASE MANAGEMENT SERVICES	$0	$1,425	$1,425
CHIROPRACTIC SERVICES	$27,473	$27,352	$54,825
DENTAL SERVICES.	$10,300,622	$32,053,787	$42,354,409
DRUG ABUSE CENTER	$1,895,108	$18,261,346	$20,156,454
DURABLE MEDICAL EQUIPMENT/MEDICAL SUPPLIES	$2,736,865	$4,465,808	$7,202,673
END STAGE RENAL DISEASE SERVICES	$2,661,159	$3,276,476	$5,937,636
HEARING SERVICES	$1,016,960	$1,915,883	$2,932,843
HOSPICE CARE	$197,925	$328,091	$526,016
INPATIENT PSYCH SERVICE	$153,368	$153,368	$306,737
INTENSIVE CARE FACILITY/INTELLECTUALLY DISABLED SERVICE	$911,097	$1,079,736	$1,990,834
MEDICAL SUPPLIES SERVICE	$2,983,272	$3,453,367	$6,436,639
MENTAL HEALTH SERVICE	$14,620,935	$52,905,534	67,526,469
NUTRITION SERVICES	$7,951	$14,003	$21,954
OCCUPATIONAL THERAPY	$198,563	$462,093	$660,656
PERSONAL CARE SERVICES	$29,886,477	$30,372,824	$60,259,301
PODIATRY	$41,716	$47,096	$88,811
PRESCRIBED DRUGS	$26,086,317	$84,334,087	$110,420,403
PROSTHETICS & ORTHOTICS	$316,794	$637,490	$954,284
PSYCHOLOGY SERVICES	$277,877	$796,715	$1,074,592
REHABILITATIVE SERVICES	$2,326,947	$5,281,908	$7,608,855
VISION SERVICES	$2,159,161	$4,161,416	$6,320,578
TOTAL OPTIONAL SERVICE EXPENDITURES	**$98,806,586**	**$244,029,807**	**$342,836,393**
GRAND TOTAL	**$229,762,545**	**$380,498,806**	**$610,261,352**

14) Tribal Medicaid Reimbursement Policy Savings

AS 47.05.270(d)(15)

On February 26, 2016, the Centers for Medicare and Medicaid Services (CMS) released State Health Official (SHO) letter #16-002 updating its policy regarding circumstances in which 100 percent federal funding is available for services to American Indian/Alaskan Native (AI/AN) "received through" facilities of the Indian Health Service (IHS), including Tribal health organizations.

The SHO letter requires care coordination agreements (CCAs) between tribal and non-tribal providers to claim the enhanced federal match for services provided to an AI/AN Medicaid enrollee by a non-tribal provider. The department has been working with the Tribal Health Organizations (THOs) to facilitate initiation of CCAs with non-tribal organizations since February 2016. The SHO letter further requires the validation that a referral was made for each episode of care, and that an exchange of electronic health records occurred for each episode of care. There are currently a total of 1,450 CCAs in place between 18 THOs and 137 non-tribal providers. Note that some, but not all, of the THOs have signed an agreement with each of the 137 non-tribal providers.

The department's Tribal Section tracks the 1,450 CCAs, and must verify that a valid referral and exchange of health records occurred for each episode of care before the state can claim 100 percent federal funding. The number of referrals requested and verified by the department since the new policy was implemented through the end of FY 2018 was 25,078. The number for which sufficient documentation was available to validate the referral was 5,594, or 22.3 percent of requested referrals. In addition, the department must also track the transportation arrangements made by the Alaska Native Tribal Health Consortium, Yukon Kuskokwim Health Corporation, and Tanana Chiefs Conference for AI/AN recipients, which account for approximately 1,000 – 1,200 travel arrangements per week.

State Fiscal Year	Total # of Referrals Requested	# of Referrals that could be Verified	% of Referrals that could be Verified
2017	5,871	1,363	23.2%
2018	19,207	4,231	22.0%
TOTALS	**25,078**	**5,594**	**22.3%**

Based on the efforts described above, the department has been able to save $79,547,260 in state general funds from the February 2016 date of the SHO letter through the end of FY 2018. Alaska is the only state in the nation refinancing claims at this level, and has been providing leadership for the other states' Medicaid programs in this area.

State Fiscal Year	State GF Savings: Transportation	State GF Savings: Other Services	Total GF Savings
2017	$ 10,589,538	$ 24,192,302	**$ 34,781,839**
2018	$ 28,863,462	$ 15,901,959	**$ 44,765,420**
TOTALS	**$ 39,453,000**	**$ 40,094,260**	**$ 79,547,260**

MILLIMAN REPORT

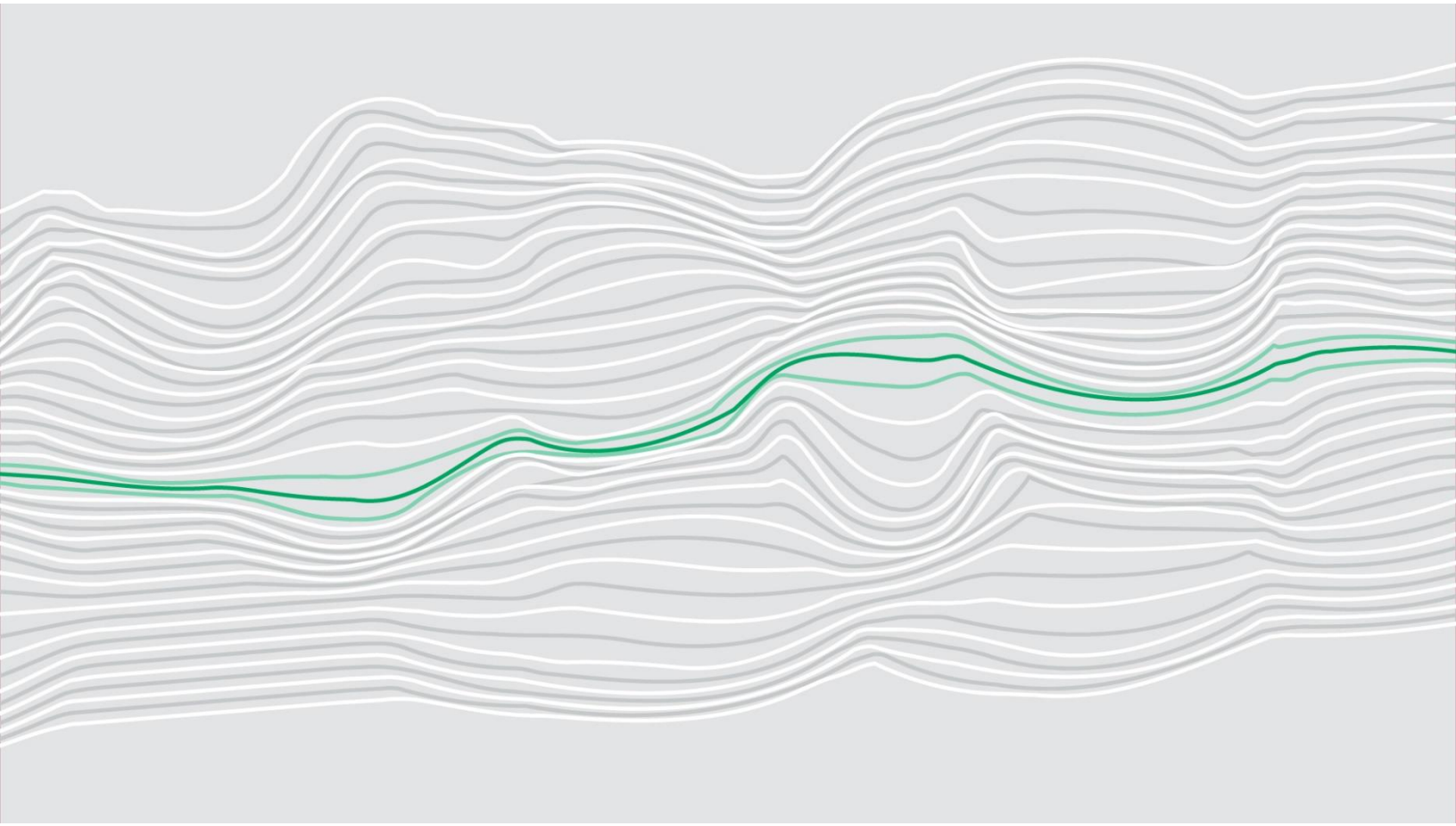
Bundled Payments

Considerations for the Alaska Medicaid Program

Prepared for:
State of Alaska Department of Health and Social Services

September 28, 2018

Susan Philip, MPP
Jeremy Cunningham, FSA, MAAA
Dan Henry, FSA, MAAA
Susan Pantely, FSA, MAAA



Milliman

FY 2018 Alaska DHSS Annual Medicaid Reform Report: **APPENDIX A**

Table of Contents

Executive Summary

Under SB 74 the Alaska Department of Health and Social Services (DHSS) is required to consider and implement Medicaid payment redesign that include one or more of the following: "(A) premium payments for centers of excellence; (B) penalties for hospital acquired infections, readmissions, and outcome failures; (C) bundled payments for specific episodes of care; or (D) global payments for contracted payers, primary care managers, and case managers for recipient or for care related to specific diagnosis." DHSS is considering an array of payment redesign options that would affect how providers who serve Medicaid beneficiaries in the state would be paid, including bundled payment to providers. DHSS requested Milliman to provide information that will assist the state in considering bundled payments for specific episodes of care, specifically for the Juneau and Fairbanks region. This report provides (1) context of bundled payments, definitions and how they are used to address healthcare costs; (2) criteria for selecting bundles as agreed upon by DHSS; and (3) examination of Alaska's inpatient claims to identify services that may meet the criteria for selection and require further examination. We discuss methods, assumptions, caveats, and limitations that are important to consider.

Broadly defined, bundled payments are arrangements that establish a fixed price for a set of services that are related based on diagnosis and/or a defined episode of care.

- **Diagnostic related groups:** Diagnostic related groups (DRGs) classification system is an early mechanism used by payers to make a single "bundled" payment for related procedures provided during a patient's inpatient stay. It classifies inpatient hospital stays into clinically meaningful groups based on patient condition (diagnoses)
- **Bundled or Episode-based Payments:** Bundled payments, sometime also called "episode-based" payments, are distinguished from DRGs in that they typically bundle a wide variety of services provided across multiple provider types and settings of care.

The following lays out the working criteria to select episodes for a bundled payment initiative.

- **Sufficient Volume of Bundled Services:** Sufficient volume of bundled services are necessary to establish a fixed or "target" price.
- **Bundles include services that have high variation in cost across patient population.** There should be sufficient variation in the total costs for the bundled services that are not explained by the patients' underlying condition.
- **For services included in the bundle, changes in practice patterns or shift to lower-intensity services can reduce overall spending without compromising quality of care.** To affect the cost of care associated with bundle providers must have the ability to apply appropriate evidence-based utilization controls and interventions to reduce variation and alter practice patterns in a coordinated manner.
- **Implementation ease for providers as well as the DHSS.** Administering a bundled payment program means providers would need to implement administrative, operational, and clinical changes. The state would also face administrative and operational requirements to design, establish, and implement a bundled payment approach.

FINDINGS

- To assess whether specific bundles meet the criteria for bundled payment, we examined inpatient facility cases and examined volume for the top 25 DRGs by paid amount for all regions, non-tribal providers; all regions, tribal providers; and providers (all are non-tribal) in Fairbanks and in Juneau respectively. Key findings include:
  - **Maternity and newborn.** We found that, among the top 25 DRGs in total paid claims for all regions, 17% of total paid is for maternity; in Fairbanks, maternity represents 22% of total paid and in Juneau, this represents 10%. An additional 35% of the dollars paid for the top 25 DRGs is for newborn care. Maternity and newborn care are amenable to bundled payments but savings associated with bundled payment initiatives, may be dampened due to other quality of care and payment policies that are in place or have recently been implemented.
  - **Behavioral health.** An additional 22% of total paid claims for all regions are for behavioral health services (including mental health and substance use disorder DRGs). In Fairbanks, behavioral health represent 37% of total paid claims and in Juneau, this represents 48%. This category of services can certainly benefit from

care coordination and care management initiatives, however, bundled payment programs for behavioral health are not widely adopted because of the wide variety of conditions, treatments, provider types and services included under this category of services.

  - **Septicemia and Infections**. Septicemia and Infection related to an operating room procedure are conditions usually acquired during a hospital inpatient stay, and represent another 12% of the total spending among the top DRGs for all regions, 2% for Fairbanks and 4% for Juneau. Our understanding is that DHSS recently implemented payment policies reducing payments to inpatient facilities associated with certain hospital acquired conditions (HACs). Because these are largely hospital-acquired conditions these payment policies are likely to more directly reduce Medicaid related costs associated with HACs than bundled payments.

- Selecting bundles that providers already have experience with may assist with implementation and administrative ease (a criterion for selection as noted above). Because certain providers in Alaska currently participate in Medicare bundled payment program, Milliman assessed the volume of inpatient cases that would be associated with those inpatient stays that might "trigger" a BPCI Advanced episode for all regions, non-tribal providers; all regions, tribal providers; providers (all are non-tribal) in Fairbanks and in Juneau respectively. Based on this review, it does not appear that there is sufficient volume to implement any specific BPCI bundle to the Medicaid population in isolation. If DHSS is interested in pursuing specific BPCI bundles, a multi-payer strategy would likely be more promising to encourage provider participation and make it worth their time and investment.

Background and Scope

Under SB 74 (AS Section 47.05.270(a)(8)) the Alaska Department of Health and Social Services (DHSS) is required to consider and implement Medicaid payment redesign that include one or more of the following: "(A) premium payments for centers of excellence; (B) penalties for hospital acquired infections, readmissions, and outcome failures; (C) bundled payments for specific episodes of care; or (D) global payments for contracted payers, primary care managers, and case managers for recipient or for care related to specific diagnosis."

DHSS is considering an array of payment redesign options that would affect how providers who serve Medicaid beneficiaries in the state would be paid. For context, other efforts underway include:

- **Bundled payment proposal under the coordinated care demonstration projects (CCDPs):** The purpose of the CCDPs is to assess which of the demonstration models are effective and successful in reducing costs, while improving or at least maintaining quality and access to care. Under the CCDP project, Alaska Innovative Medicine, Inc. (AIM) and Remedy Partners, under a joint venture called, "AIM Partners," submitted a bundled payment program as part of its proposal. AIM is a care coordination organization formed by primary care physicians and hospitalists in Alaska. Remedy is a payment platform that has experience in developing and administering bundled payments nationally and for the Medicare program. AIM proposed a care management program leveraging a multidisciplinary care team to coordinate care, support care providers and improve quality to all Medicaid beneficiaries statewide. They proposed payments be made on a bundled service basis, including 48 acute care, maternity, and pediatric bundles in the initial years. Based on feedback from DHSS and a review of Alaska Medicaid claims data, AIM Partners reconsidered their proposal and suggested 7 bundles consisting of 3 maternity bundles (Vaginal Delivery, C-Section, Pregnancy), 2 GI bundles (Upper GI Endoscopy, Colonoscopy) and 2 general surgery bundles (Tonsillectomy, Gall Bladder Surgery). However, they found that the 7 bundles did not produce sufficient incentive for AIM Partners for successful implementation. They found that "there needs to be greater spend in each bundle and thus greater savings opportunity." They proposed that Alaska Medicaid consider a multi-payer approach and invite other commercial payers to join the pilot initiative. Our understanding is that DHSS is currently considering a version of the proposal by AIM Partners.[1]
- **Alternative payment models under the managed care organization (MCO) model:** UnitedHealthcare (United) was the only offeror to propose a managed care organization model under the CCDP solicitation, described above. They proposed to conduct all the functions of an MCO such as establishing a provider network, eligibility and enrollment functions, claims processing and payment, ensuring access and delivery of care, and risk management. They proposed to provide services in the areas of the state where a substantial portion of Alaska's Medicaid population resides: the boroughs of Anchorage and Mat-Su. United Healthcare proposed being paid by Alaska on a capitated per member per month (PMPM) basis. The proposal included a wide range of programs to engage providers and improve care coordination and management, including a primary care incentive model, a collaborative care model, and a PCMH practice support program. Our understanding is that DHSS is currently working with United to establish an agreement. As part of that agreement, the MCO will need to work to develop an alternative payments method of payment for primary care services.[2]

To further consider bundled payments as a payment redesign option, DHSS requested Milliman provide information to consider bundled payments for specific episodes of care, specifically for the Juneau and Fairbanks region. This report provides (1) context of bundled payments, definitions and how they are used to address healthcare costs; (2) criteria for selecting bundles as agreed upon by DHSS; and (3) examination of Alaska's inpatient claims to identify services that may meet the criteria for selection and require further examination. We discuss methods, assumptions, caveats, and limitations that are important to consider.

[1] Note, Milliman submitted an analysis of AIM Partners initial proposal on October 17, 2017 in accordance with DHSS's request for financial analysis of CCDP proposals.

[2] Note, Milliman submitted an analysis of UnitedHealthCare initial proposal on October 17, 2018 in accordance with DHSS's request for financial analysis of CCDP proposals. In addition, Milliman is supporting DHSS to establish rates for the MCO program.

Bundled Payments: Definitions and Examples

Bundled payments are arrangements that establish a fixed price for a set of services that are related based on diagnosis and/or a defined episode of care.

DIAGNOSIS RELATED GROUPS (DRGS) FOR BUNDLING HOSPITAL INPATIENT SERVICES

Diagnostic related groups (DRGs) classification system is an early mechanism used by payers for over 30 years to make a single "bundled" payment for related procedures provided during a patient's inpatient stay. It classifies inpatient hospital stays into clinically meaningful groups based on patient condition (diagnoses). There are variations of DRGs grouping systems, including the Medicare Severity Diagnosis Related Groups (MS-DRG) and All Patient Refined Diagnosis Related Groups (APR DRG) system. The Medicare program uses MS-DRGs as the "bundling" mechanism for the inpatient prospective payment system (IPPS). Under IPPS, each inpatient stay is categorized into a MS-DRG which has an assigned weight. The weight is determined based on the average resources used to treat Medicare beneficiaries within the same DRG. The patient's principal diagnosis and up to 24 secondary diagnoses that may include comorbidities or complications will determine the MS-DRG assignment. The MS-DRG assignment can also be affected by up to 25 procedures furnished during the stay, as well as a patient's gender, age, or discharge status disposition.[3] By paying a single "bundled" payment for all hospital services provided in a hospital inpatient stay, hospitals are financially incentivized to reduce utilization of unnecessary services and, through bundling logic that excludes certain complications of care from contributing to DRG assignment, reduce rates of hospital acquired complications, infections, and accidents. Additionally, DRGs can provide the basis for evaluating variation in service mix and cost structures across hospitals, supporting pragmatic, data-driven decision-making in the design and management of inpatient hospital payment systems that align with Medicaid program goals and objectives.

Although hospitals may be more familiar with MS-DRGs due to their use in the Medicare IPPS, many state Medicaid programs are now using APR DRGs to pay for inpatient hospitalizations for a few key reasons depicted in Exhibit 1 (below).[4] [5] The APR DRG system has approximately 500 more DRG categories and uses additional factors in its classification algorithm compared with the MS-DRG system. APR DRGs also assign each case a severity of illness (SOI) subclass and risk of mortality (ROM) subclass whereas MS-DRGs does not.[6] Finally, APR DRGs were developed to be a basis for payments for *all* patient populations—rather than just the Medicare population—and provide more granularity for classifying neonatal, pediatric, maternity, and mental health services. The additional detail provided for these services is particularly important for implementing payment systems for Medicaid populations.

EXHIBIT 1: COMPARISON OF APR DRG AND MS-DRG CLASSIFICATION SYSTEMS

ALGORITHM	NUMBER POSSIBLE ASSIGNMENTS	POPULATION DEVELOPED FOR	SEVERITY CLASSIFICATIONS	DEVELOPED TO REFLECT†	NON-DIAGNOSIS-RELATED FACTORS CONDSIDERED
MS-DRGs	750	Medicare	3	Average cost of diagnosis in population	None
APR DRGs	1262	Full beneficiary population	4†	Cost and clinical complexity of diagnosis in population	Age, sex, discharge disposition

Notes: Adapted from Pantely, S., & Lee, C. (April 2017). Primer on DRGs. Milliman, Inc.

† Source: Sturgeon, J., (March 2013). APR-DRGs in the Medicaid Population. Retrieved September 10, 2018 from For the Record: http://www.fortherecordmag.com/archives/0313p6.shtml.

[3] CMS. (March 2018) MLN booklet. Acute Care Hospital Inpatient Prospective Payment System.

[4] Pantely, S., & Lee, C. (April 2017). Primer on DRGs. Milliman, Inc.

[5] Sturgeon, J., (March 2013). APR-DRGs in the Medicaid Population. Retrieved September 10, 2018 from For the Record: http://www.fortherecordmag.com/archives/0313p6.shtml.

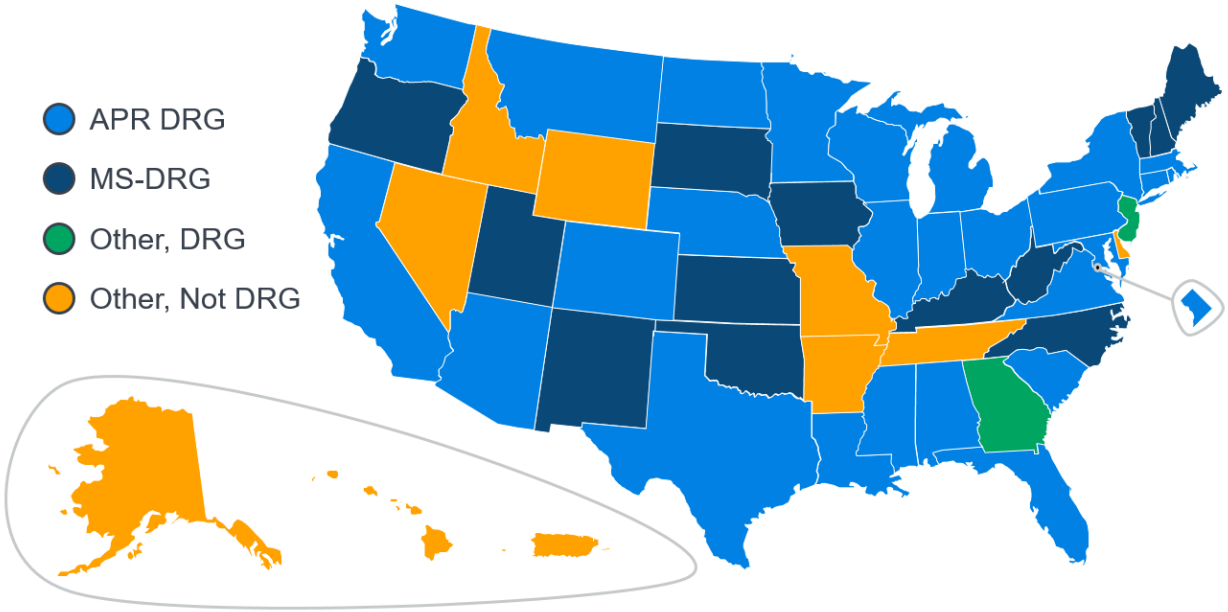
[6] Severity of Illness is" the extent of physiologic decomposition or organ system loss of function." Risk of Mortality is the likelihood of dying.

Since DRGs were first implemented in New Jersey in 1980 and subsequently implemented by Medicare in 1983, all but a handful of Medicaid programs have implemented DRG-based payment systems. Based on a recent Milliman analysis of hospital inpatient payment systems in use by the 50 state, District of Columbia, and Puerto Rico Medicaid programs, 27 programs were using APR DRGs, 13 programs were using MS-DRGs, two programs were using other versions of DRGs, and 10 programs were not using DRGs. We summarize the results of our analysis in the map provided in Exhibit 2 (below).

Note DRG-based system does not necessarily have minimum volume thresholds per se as it is seen as a method for grouping closely-related inpatient services for payment and DRG-based fee schedules are used rather than more granular inpatient procedure based fee schedules. Even states with smaller Medicaid program enrollment and inpatient claims at a provider level have implemented DRG-based payments.

It is also important to note that there are real financial impacts for moving to DRGs or bundled payments that can affect a providers' revenue—in some cases creating winners and losers in the market. Milliman recommends conducting financial analyses to estimate changes in provider payment under these scenarios.

EXHIBIT 2: NATIONAL LANDSCAPE OF MEDICAID PAYMENT SYSTEMS FOR INPATIENT HOSPITAL SERVICES



BUNDLED PAYMENTS IN MEDICARE AND MEDICAID PROGRAMS

Bundled payments, sometime also called "episode-based" payments, have gained traction in recent years given Medicare's focus and investment in moving from volume-based to value-based payments. Bundled payments in the context of new value-based payment arrangements are distinguished from DRGs in that they typically bundle services provided across multiple provider types and settings of care. For example, Medicare's Bundled Payments for Care Improvement (BPCI) Initiative includes four voluntary models, two of which (Model 2 and Model 3) involve retrospective bundled payment arrangements.[7] In Model 2, an episode of care includes the inpatient stay and post-acute care up to 90 days after hospital discharge. In Model 3, an episode of care is prompted by an inpatient stay, however the bundle does not include the acute inpatient stay, but includes post-acute care from a skilled nursing facility (SNF), inpatient rehabilitation facility, long-term care hospital, or home health agency. In both Models, Medicare continues to make fee-for-service payments for services included in the episode of care, but actual

[7] Centers for Medicare & Medicaid Services. (n.d.). Bundled Payments for Care Improvement (BPCI) Initiative: General Information. Retrieved September 10, 2018 from CMS.gov: https://innovation.cms.gov/initiatives/bundled-payments/.

expenditures are retrospectively reconciled against a bundled payment target price for the episode of care and Medicare pays or collects a financial settlement with a risk-taking entity based on the difference between the actual expenditures and the target price. In Alaska, both Model 2 and Model 3 are being tested by The Alaska Hospitalists Group Anchorage and the Liberty Health Partners, LLC.[8] More recently developed and slated to begin in October of 2018, the BPCI Advanced initiative is a voluntary model in which Medicare continues to make fee-for-service payments for services included in the episode of care and retrospectively reconcile actual expenditures against a bundled payment target price. However, BPCI Advanced also includes payment adjustment based on performance on clinically relevant quality measures and will qualify as an Advanced Alternative Payment Model (APM) under the Quality Payment Program.[9]

Some Medicaid programs have also implemented or are pursuing implementation of bundled payment arrangements. Similar to Medicare, these bundled payment arrangements are being designed and implemented at the same time that these programs are also designing or implementing managed care, accountable care organizations (ACOs), and other delivery system transformation initiatives. For example, in Tennessee managed care organizations (MCOs) are required to implement patient-centered medical homes (PCMHs), and under the Episodes of Care (EOC) Initiative, receive retrospective episode-of-care based payments.[10] Similarly, Arkansas's Health Care Payment Improvement Initiative (AHCPII) includes implementation of PCMHs, a retrospective episode-of-care payment model, and client-based support strategies for enrollees with needs greater than the medical home model can support.[11] These models seek to standardize care delivery requirements and payment arrangements across MCOs, reducing provider participation burden, increasing quality of care, and decreasing costs.

One episode of care that multiple public and private healthcare payers have targeted for bundled payment arrangements is maternity care. Various stakeholders have indicated that episode-based payments for maternity care would incentivize full-spectrum, coordinated care in order to improve patient outcomes such as high rates of unnecessary cesarean deliveries and utilization of high-cost care settings.[12] An example of a hypothetical maternity bundle can be found in Exhibit 3 below.

[8] Centers for Medicare & Medicaid Services. (n.d.). Where Innovation is Happening. Retrieved September 10, 2018 from CMS.gov: https://innovation.cms.gov/initiatives/map/index.html#state=AK&model=health-care-innovation-awards+transforming-clinical-practices-initiative+bpci-initiative-model-2+bpci-initiative-model-3+federally-qualified-health-center-fqhc-advanced-primary-care-practice-demonstration+million-hearts-cardiovascular-disease-risk-reduction-model+strong-start-for-mothers-and-newborns-initiative.

[9] Centers for Medicare & Medicaid Services. (n.d.). BPCI Advanced. Retrieved September 10, 2018 from CMS.gov: https://innovation.cms.gov/initiatives/bpci-advanced.

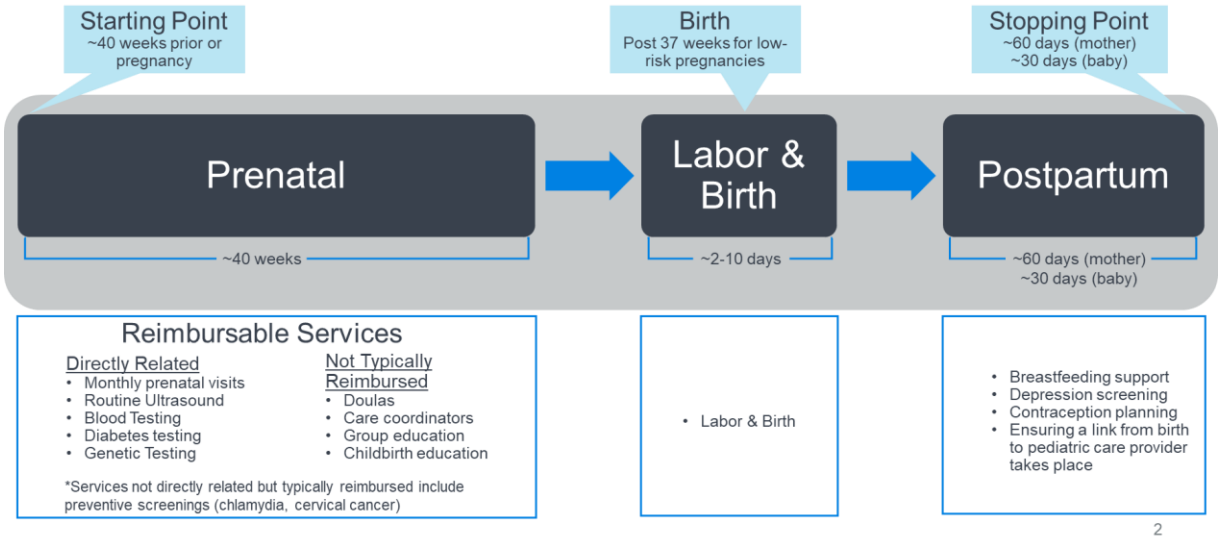
[10] Leddy, T., McGinnis, T., & Howe, G. (February 2016). Value-Based Payments in Medicaid Managed Care: An Overview of State Approaches. Retrieved September 10, 2018 from Center for Health Care Strategies: https://www.chcs.org/media/VBP-Brief_022216_FINAL.pdf.

[11] Arkansas Center for Health Improvement. (January 2016). Arkansas Health Care Payment Improvement Initiative: 2nd Annual Statewide Tracking Report. Retrieved September 10, 2018 from: http://www.achi.net/Content/Documents/ResourceRenderer.ashx?ID=338.

[12] Maternity Multi-Stakeholder Action Collaborative. (n.d.). The Current State of Maternity Care. Retrieved September 10, 2018 from Health Care Payment Learning & Action Network: http://hcp-lan.org/workproducts/current-state-of-MC-infographic.pdf.

EXHIBIT 3: MATERNITY EPISODE-OF-CARE BUNDLE, TIMELINE FROM PRENATAL THROUGH POSTPARTUM PERIOD

Notes: Adapted from Health Care Payment Learning & Action Network. (n.d.). Maternity Episodes of Care, A Clinical Episode Payment Model Impacting the Health of Women and Children. Retrieved September 10, 2018 from Health Care Payment Learning & Action Network: http://hcp-lan.org/workproducts/maternity-infographic.pdf.



As illustrated, the episode of care includes maternity and newborn care, and is triggered by a pregnancy diagnosis. The episode spans 40 weeks of pregnancy and 60-days postpartum for the woman, and 30 days post-birth for the baby. All services provided during the pregnancy, labor, birth, and postpartum- and post-birth-periods are included in the bundled payment. This type of payment arrangement is intended to be targeted at lower-risk women and newborns, as well as high-risk women with conditions with defined and predictable care trajectories.[13]

[13] Health Care Payment Learning & Action Network. (n.d.). Maternity Episodes of Care, A Clinical Episode Payment Model Impacting the Health of Women and Children. Retrieved September 10, 2018 from Health Care Payment Learning & Action Network: http://hcp-lan.org/workproducts/maternity-infographic.pdf.

Criteria for Episode Selection

When selecting episodes of care to serve as a lever for addressing healthcare costs, it is helpful to have a criteria to guide decision making. Based on prior discussions with DHSS, discussions gleaned from the Innovative Payment Provider (IPP) workgroup as well as Milliman's research and experience, the following can serve as a general criteria for selection.

Sufficient Volume of Bundled Services : As mentioned, bundled payments establish a fixed per-episode price for a set of services that are related based on diagnosis and/or a clinical episode. To set a credible fixed price, sufficient volume of bundled services are necessary. While there is no set threshold for how many bundled services constitute "sufficient" volume, low volume of bundled services can lead to a fixed price which is too high or too low because of general fluctuation in the severity of cases from year to year.[14] The target price can leave a provider vulnerable to risk associated with high-cost cases or lead to systematic over- or under-payment if it is not set using credible, sufficient volume of claims data. From an administrative perspective, there must also be sufficient volume to give providers incentive to do the hard work of transformation. Results of a failed orthopedic bundled payment pilot in California cited a health plan representative summarizing the rationale for nonparticipation: "There's just not enough volume in those bundled orthopedic payments for a commercial population. Without bundles that focus on those medical procedures that a commercial population is likely to use, there's no return on investment, there's no financial incentive for us or the providers to spend a lot of time developing and administering these bundled payment programs."[15]

Bundles include services that have high variation in cost across patient population. Assuming there is sufficient volume of bundled services, there should be sufficient variation in the total costs for the bundled services that are not explained by the patients' underlying condition. Knee and hip replacement surgeries became a focus of bundle payment initiatives after studies showed dramatic variations in cost for the same surgery for similar populations in the same market.[16] [17]

For services included in the bundle, changes in practice patterns or shift to lower-intensity services can reduce overall spending without compromising quality of care. To affect the cost of care associated with bundle there are a few levers that providers can apply: (1) reduce utilization for specific services in the episode (2) reduce the intensity of services (e.g. shift to lower acuity settings or treatments) and/or (3) reduce the per-unit cost of specific services or elements in the bundle. All the while, quality of care must be monitored and maintained. Ultimately, providers must have the ability to apply appropriate evidence-based utilization controls and interventions to reduce variation and alter practice patterns in a coordinated manner. For example, maternity care bundles were implemented by payers whose goal was to improve prenatal care, reduce early induction or elective C-section deliveries before 39 weeks that are not medically necessary.[18] Recent evaluation of the Comprehensive Care for Joint Replacement Model showed that participating hospitals were able to reduce spending for the total episode by shifting patients to less intensive (and less expensive) post-acute care setting.[19] It is important to note, the providers are likely to need sufficient incentives to participate, for example, through opportunity for shared savings or increased market share. A bundled payment initiative by itself will not lead to sustainable cost reductions if participating providers do not feel their contributions are valued.

[14] Further statistical analysis would be required to establish minimum thresholds, such as assessing how many services within a bundle fall within the 5% of the mean with 95% confidence.

[15] Ridgely, S.M., de Vries, D., Bozic, K.J., and Hussey, P.S., (August 2014) Bundled Payment Fails To Gain A Foothold In California: The Experience Of The IHA Bundled Payment Demonstration. Health Affairs 33, NO. 8 (2014): 1345–1352

16 Blue Cross Blue Shield Association and Blue Health Intelligence (January 21, 2015). Blue Cross Blue Shield Association Study Reveals Extreme Cost Variations for Knee and Hip Replacement Surgeries: The Health of America Report.

[17] CMS. (August 2018) Comprehensive Care for Joint Replacement Model. https://innovation.cms.gov/initiatives/cjr. Retrieved September 11, 2018

[18] Lally, S., September 2013. Transforming Maternity Care: A Bundled Payment Approach. Integrated Healthcare Association; American College of Obstetrics and Gynecology (ACOG). Guidelines regarding Deliveries before 39 Weeks. Available at: https://www.acog.org/About-ACOG/ACOG-Departments/Deliveries-Before-39-Weeks. Retrieved September 20, 2018

[19] The Lewin Group. August 2018. CMS Comprehensive Care for Joint Replacement Model: Performance Year 1 Evaluation Report. https://innovation.cms.gov/Files/reports/cjr-firstannrpt.pdf. Retrieved on September 11, 2018.

Administrative ease for providers as well as the DHSS: Administering a bundled payment program means providers would need to establish or enhance care management and care coordination programs, address process and workflow changes, standardize care through care pathways, examine per-unit costs in their supply chain, identify and steer patients to high-value providers, and conduct data collection and reporting to support providers identify opportunities and achieve savings, monitor quality, and manage prospective payments or retrospective financial settlements. In particular, because bundled payment arrangements are designed to encourage coordination of care across provider types and settings of care, the analysis and sharing of patient data across all services provided in the bundled episode is critically important to the success of the "lead" entity designated to quarterback the management of care and share in the financial risk for the bundled episode. Additionally, the risk-taking entity will need to be able to track and project their financial performance so that they can evaluate what is working and what is not in managing the episodes of care to adequately manage their own businesses. Leveraging the experience of providers who already have experience with administering bundles—for example with a commercial payer—would help ease some administrative burden. (A multi-payer approach may also provide additional volume to sufficiently encourage participation in bundled payment programs.)

State agencies also face administrative and operational requirements to design, establish, and implement a bundled payment approach. This includes making key decisions regarding:

- which episodes of care are selected for bundled payments;
- what type of entity should take the financial risk (e.g. hospital, physician, post-acute provider, or some other "convener")?
- how the episodes are defined
    - trigger event, typically an "anchor" admission for acute episodes of care or a specific combination of service, provider type, and diagnosis for non-acute episodes of care
    - time period (e.g., 90 days following trigger event);
    - the services included in the bundle (e.g. all services in the specified time period or only services related to the trigger event);
- episode price (e.g. historical experience to set base price, up-front discount on base price, adjustments based on quality measures, etc.);
- methods for payment (e.g. retrospective via continued fee-for-service payments for services included in the episode and settlement with risk-taking entity or prospective via single payment to risk-taking entity);
- frequency of settlement if retrospective (e.g. quarterly, annual, etc.);
- risk adjustment methods;
- quality metrics and reporting requirements; and,
- the basis for "actual expenditures" in performing retrospective settlement, as well as considerations for potential unintended consequences, to the extent that certain fee-for-service payment methodologies are not prospective and/or standardized.

Systems to support the administration of bundled payments would require careful planning and sufficient lead time to design and implement. Conducting a needs assessment to determine steps required to "ramp" up systems, conduct trainings, and develop staff and agency capacity would be a first step that DHSS would need to undertake. For example, eligibility policies may need to be reviewed to make a bundle feasible and ensure a patient is actually enrolled in Medicaid during the duration of the entire bundle. In a best case scenario, it would include thoughtful coordination with and input from other stakeholders, including the providers who will be sharing financial risk, other clinicians who will be involved in the delivery of care for services included in the bundle, payers (including commercial and Medicare if there is a desire to implement multi-payer bundles), as well as patients and patient-advocacy groups, as appropriate. Additionally, DHSS should consider how this initiative may interact with the managed care organization (MCO) initiative if there is regional overlap. Finally, if bundled services will include any mental health or substance use related services, interaction with the 1115 Behavioral Health Waiver activities will also need to be considered.

High Volume Inpatient Admissions by Diagnosis

To assess whether specific bundles meet the criteria for bundled payment, Milliman first examined inpatient facility cases and examined volume for the top 25 DRGs by paid amount. Note, we used the MS-DRG grouper but applied additional grouping steps to further parse out certain categories of service (e.g. newborns). Please see the Methods and Data Sources section for further detail. Exhibits 4, 5, 6 and 7 illustrate the total paid expenditures for the top 25 DRGs for all regions, non-tribal providers; all regions, tribal providers; and providers (all are non-tribal) in Fairbanks and in Juneau respectively.

EXHIBIT 4: TOP 25 DRG BY TOTAL PAID, INCURRED JAN 2016 THRU DEC 2017 AND PAID THRU MAR 2018; NON-TRIBAL PROVIDERS, ALL REGIONS

MS-DRG	Description	Percentage Share of Total Paid Claims	Total Paid Claims	Total Admits	Paid per Admit
885	Psychoses	10%	$47,244,863	2,914	$16,213
795	Normal newborn	4%	$21,298,870	3,876	$5,495
775	Vaginal delivery w/o complicating diagnoses	4%	$18,106,964	3,054	$5,929
791	Prematurity w major problems	4%	$18,254,835	314	$58,136
790	Extreme immaturity or respiratory distress syndrome, neonate	4%	$20,976,562	258	$81,305
871	Septicemia or severe sepsis w/o MV 96+ hours w MCC	3%	$12,523,792	703	$17,815
793	Full term neonate w major problems	3%	$13,100,257	547	$23,949
794	Neonate w other significant problems	2%	$10,163,636	1,317	$7,717
999	Ungroupable	2%	$11,212,844	989	$11,338
853	Infectious & parasitic diseases w O.R. procedure w MCC	2%	$10,333,815	241	$42,879
792	Prematurity w/o major problems	2%	$9,606,911	342	$28,090
765	Cesarean section w CC/MCC	2%	$10,221,528	845	$12,096
774	Vaginal delivery w complicating diagnoses	1%	$5,505,513	754	$7,302
882	Neuroses except depressive	2%	$9,987,968	692	$14,433
886	Behavioral & developmental disorders	2%	$8,974,212	727	$12,344
003	ECMO or trach w MV 96+ hrs or PDX exc face, mouth & neck w maj O.R.	1%	$6,616,479	63	$105,023
872	Septicemia or severe sepsis w/o MV 96+ hours w/o MCC	1%	$5,189,507	418	$12,415
603	Cellulitis w/o MCC	1%	$3,608,294	400	$9,021
766	Cesarean section w/o CC/MCC	1%	$5,649,361	609	$9,276
208	Respiratory system diagnosis w ventilator support <=96 hours	1%	$4,131,129	233	$17,730
881	Depressive neuroses	1%	$4,737,029	421	$11,252
189	Pulmonary edema & respiratory failure	1%	$4,004,453	286	$14,002
004	Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	0%	$2,335,399	42	$55,605
918	Poisoning & toxic effects of drugs w/o MCC	1%	$3,319,128	342	$9,705
014	Allogeneic Bone Marrow Transplant	1%	$4,282,244	22	$194,647

Notes:

(1) Claims are only for inpatient claims with assigned MS-DRG

(2) Top 25 MS-DRGs by paid claims across all provider types

EXHIBIT 5: TOP 25 DRG BY TOTAL PAID, INCURRED JAN 2016 THRU DEC 2017 AND PAID THRU MAR 2018; TRIBAL PROVIDERS, ALL REGIONS

MS-DRG	Description	Percentage Share of Total Paid Claims	Total Paid Claims	Total Admits	Paid per Admit
885	Psychoses	1%	$1,263,970	131	$9,649
795	Normal newborn	6%	$9,899,479	1,554	$6,370
775	Vaginal delivery w/o complicating diagnoses	7%	$11,408,428	1,648	$6,923
791	Prematurity w major problems	3%	$4,341,335	108	$40,198
790	Extreme immaturity or respiratory distress syndrome, neonate	1%	$1,123,835	28	$40,137
871	Septicemia or severe sepsis w/o MV 96+ hours w MCC	4%	$7,194,548	344	$20,914
793	Full term neonate w major problems	3%	$4,654,290	244	$19,075
794	Neonate w other significant problems	3%	$5,768,464	749	$7,702
999	Ungroupable	3%	$4,665,043	365	$12,781
853	Infectious & parasitic diseases w O.R. procedure w MCC	3%	$4,500,689	89	$50,570
792	Prematurity w/o major problems	3%	$4,392,040	186	$23,613
765	Cesarean section w CC/MCC	1%	$2,216,174	196	$11,307
774	Vaginal delivery w complicating diagnoses	3%	$5,336,782	655	$8,148
882	Neuroses except depressive	0%	$151,459	20	$7,573
886	Behavioral & developmental disorders	0%	$148,398	16	$9,275
003	ECMO or trach w MV 96+ hrs or PDX exc face, mouth & neck w maj O.R.	1%	$1,724,470	16	$107,779
872	Septicemia or severe sepsis w/o MV 96+ hours w/o MCC	1%	$1,678,294	151	$11,115
603	Cellulitis w/o MCC	2%	$3,254,038	282	$11,539
766	Cesarean section w/o CC/MCC	1%	$1,021,899	112	$9,124
208	Respiratory system diagnosis w ventilator support <=96 hours	1%	$1,193,525	45	$26,523
881	Depressive neuroses	0%	$491,341	44	$11,167
189	Pulmonary edema & respiratory failure	1%	$1,166,926	47	$24,828
004	Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	2%	$2,627,960	32	$82,124
918	Poisoning & toxic effects of drugs w/o MCC	1%	$1,321,654	144	$9,178
014	Allogeneic Bone Marrow Transplant	0%	$0	-	

Notes:

(1) Claims are only for inpatient claims with assigned MS-DRG

(2) Top 25 MS-DRGs by paid claims across all provider types

EXHIBIT 6: TOP 25 DRG BY TOTAL PAID, INCURRED JAN 2016 THRU DEC 2017 AND PAID THRU MAR 2018, FAIRBANKS, (ALL PROVIDERS ARE NON-TRIBAL)

MS-DRG	Description	Percentage Share of Total Paid Claims	Total Paid Claims	Total Admits	Paid per Admit
885	Psychoses	19%	$7,085,583	459	$15,437
775	Vaginal delivery w/o complicating diagnoses	9%	$3,495,150	614	$5,692
794	Neonate w other significant problems	6%	$2,415,461	383	$6,307
795	Normal newborn	6%	$2,337,265	480	$4,869
881	Depressive neuroses	6%	$2,197,106	211	$10,413
793	Full term neonate w major problems	3%	$1,215,383	104	$11,686
791	Prematurity w major problems	3%	$1,018,572	31	$32,857
999	Ungroupable	3%	$1,000,863	103	$9,717
765	Cesarean section w CC/MCC	3%	$960,719	94	$10,220
766	Cesarean section w/o CC/MCC	2%	$911,792	99	$9,210
792	Prematurity w/o major problems	2%	$779,247	43	$18,122
918	Poisoning & toxic effects of drugs w/o MCC	2%	$718,397	55	$13,062
790	Extreme immaturity or respiratory distress syndrome, neonate	2%	$681,859	19	$35,887
774	Vaginal delivery w complicating diagnoses	1%	$554,576	91	$6,094
882	Neuroses except depressive	1%	$514,205	45	$11,427
871	Septicemia or severe sepsis w/o MV 96+ hours w MCC	1%	$390,256	36	$10,840
432	Cirrhosis & alcoholic hepatitis w MCC	1%	$332,779	32	$10,399
767	Vaginal delivery w sterilization &/or D&C	1%	$284,588	49	$5,808
202	Bronchitis & asthma w CC/MCC	1%	$279,096	28	$9,968
330	Major small & large bowel procedures w CC	1%	$268,442	18	$14,913
603	Cellulitis w/o MCC	1%	$255,346	27	$9,457
194	Simple pneumonia & pleurisy w CC	1%	$255,296	30	$8,510
853	Infectious & parasitic diseases w O.R. procedure w MCC	1%	$235,109	13	$18,085
329	Major small & large bowel procedures w MCC	1%	$232,461	11	$21,133
203	Bronchitis & asthma w/o CC/MCC	1%	$224,007	28	$8,000

Notes:

(1) Claims are only for inpatient claims with assigned MS-DRG

EXHIBIT 7: TOP 25 DRG BY TOTAL PAID, INCURRED JAN 2016 THRU DEC 2017 AND PAID THRU MAR 2018; JUNEAU, (ALL PROVIDERS ARE NON-TRIBAL)

MS-DRG	Description	Percentage Share of Total Paid Claims	Total Paid Claims	Total Admits	Paid per Admit
885	Psychoses	32%	$6,058,198	337	$17,977
999	Ungroupable	11%	$2,151,291	240	$8,964
795	Normal newborn	5%	$896,186	184	$4,871
775	Vaginal delivery w/o complicating diagnoses	4%	$815,047	149	$5,470
794	Neonate w other significant problems	3%	$566,939	84	$6,749
881	Depressive neuroses	3%	$536,724	41	$13,091
603	Cellulitis w/o MCC	2%	$431,760	43	$10,041
871	Septicemia or severe sepsis w/o MV 96+ hours w MCC	2%	$364,324	30	$12,144
882	Neuroses except depressive	2%	$293,281	32	$9,165
765	Cesarean section w CC/MCC	1%	$280,491	27	$10,389
872	Septicemia or severe sepsis w/o MV 96+ hours w/o MCC	1%	$268,659	26	$10,333
766	Cesarean section w/o CC/MCC	1%	$259,646	31	$8,376
774	Vaginal delivery w complicating diagnoses	1%	$229,206	37	$6,195
439	Disorders of pancreas except malignancy w CC	1%	$227,244	17	$13,367
918	Poisoning & toxic effects of drugs w/o MCC	1%	$210,293	31	$6,784
392	Esophagitis, gastroent & misc digest disorders w/o MCC	1%	$206,947	24	$8,623
433	Cirrhosis & alcoholic hepatitis w CC	1%	$199,951	11	$18,177
641	Misc Disorders of Nutrition, Metabolism, Fluids/Electrolytes w/o MCC	1%	$188,196	18	$10,455
189	Pulmonary edema & respiratory failure	1%	$181,966	11	$16,542
793	Full term neonate w major problems	1%	$168,754	19	$8,882
602	Cellulitis w MCC	1%	$165,669	12	$13,806
883	Disorders of personality & impulse control	1%	$147,555	15	$9,837
470	Major Hip And Knee Joint Replacement	1%	$136,457	20	$6,823
194	Simple pneumonia & pleurisy w CC	1%	$130,383	13	$10,029
638	Diabetes w CC	1%	$110,039	14	$7,860

Notes:

(1) Claims are only for inpatient claims with assigned MS-DRG

DISCUSSION

As noted, we isolated the 25 DRGs which represent the largest shares of total paid claims among the Alaska Medicaid population, for all regions, and Fairbanks and Juneau since these DRGs are most likely to satisfy the requirement of sufficient volume to justify bundled payment arrangement.

Maternity and newborn. We found that, among the top 25 DRGs in total paid claims for all regions, 17% of total paid is for maternity; in Fairbanks, maternity represents 22% of total paid and in Juneau, this represents 10%. An additional 35% of the dollars paid for the top 25 DRGs is for newborn care. We have already discussed the amenability of maternity and newborn care to bundled payments. For many states, one key opportunity for savings is the reduction of reduce early induction or elective C-section deliveries before 39 weeks that are not medically necessary. However, based on recent review of C-Section rates by Milliman, we found that the composite C-section

rates for all Alaska providers are lower than the national average for Medicaid and Commercial populations—at about 21 per 100 compared to the national average of about 33 per 100.[20] See Appendix 1 for an analysis of Alaska's Medicaid C-Section rates by hospital. Our understanding is that Alaska has reduced its C-section rates because payment policies prohibit payment for "scheduled" C-sections that are not medically necessary. Thus, it is likely that further savings associated with C-Sections are limited.

Providing appropriate prenatal care is associated with improved maternal and newborn outcomes and reduced delivery and postpartum costs. Based on Alaska's quality indicators, 80.6% of newborns' mothers had a prenatal visit during her first trimester. This is not to say there is no room for improved efficiencies and savings for maternal and newborn care; however, savings associated with bundled payment initiatives may be dampened due to other quality of care and payment policies that are in place or have recently been implemented.

Behavioral health. An additional 22% of total paid claims for all regions are for behavioral health services (including mental health and substance use disorder DRGs). In Fairbanks, behavioral health represent 37% of total paid claims and in Juneau, this represents 48%. This category of services can certainly benefit from care coordination and care management initiatives, however, bundled payment programs for behavioral health are not widely adopted because of the wide variety of conditions, treatments, provider types and services included. However, there are few bundled payment initiatives worth noting:

- Minnesota undertook a multi-payer bundled payment initiative called the DIAMOND (Depression Improvement Across Minnesota, Offering a New Direction) program in 2008 to care for patients with depression. A single code for DIAMOND services was established for clinics to use when billing. The single bundle includes care manager services, psychiatrists' weekly consultation and case review. Eligibility was limited to adults who had a diagnosis of major depression disorder or dysthymia and a Patient Health Questionnaire (PHQ-9) score of 10 or higher. Commercial health plans negotiated with DIAMOND clinics to establish the DIAMOND case rate with primary care providers continued to receive FFS rates for non-DIAMOND services. Medicare and Medicaid, which accounted for about one third of the enrollees in the DIAMOND program, did not pay for DIAMOND services. Evaluations of this program had mixed results with some showing no differences in outcomes for those in the program versus a comparison cohort.[21]
- As a variety of clinics and provider types begin to provider opioid related treatment, payment methods that adequately pay for necessary services while incentivizing effective treatments are needed. The American Society of Addiction Medicine has proposed a bundled payment approach to improve medication-assisted treatment (MAT), through the Patient-Centered Opioid Addiction Treatment Payment (P-COAT). They have created a bundled payment structure representing three phases of care—treatment planning; initiation of MAT and maintenance of MAT. Each bundle includes a set of services related to the phase of care. For example, the initiation of MAT bundle is a one-time payment to include supervised induction of buprenorphine therapy, appropriate psychological and/or counseling therapy, and care management and coordination services.[22]

In addition it is important to consider that Alaska has also submitted an 1115 Waiver Application to CMS to develop an integrated behavioral health system of care for children, youth, and adults with serious mental illness (SMI), severe emotional disturbance (SED), and / or substance use disorders (SUD). Any bundled payment initiatives targeting mental health or substance use related services, should consider interaction with the 1115 Behavioral Health Waiver activities.

Septicemia and Infections. Septicemia and Infection related to an operating room procedure are conditions usually acquired during a hospital inpatient stay, and represent another 12% of the total spending among the top DRGs for all regions, 2% for Fairbanks and 4% for Juneau. Pulmonary edema and respiratory failure (DRG 189) may also be related to a hospital inpatient stay if, for example, it is a result of pneumonia postsurgical procedure and during an

[20] Mistry, K., et al. (September 2016) Variation in the Rate of Cesarean Section Across U.S. Hospitals, 2013 https://www.hcup-us.ahrq.gov/reports/statbriefs/sb211-Hospital-Variation-C-sections-2013.jsp.

[21] Solberg, L.I., et al., (September/October 2015) A Stepped-Wedge Evaluation of an Initiative to Spread the Collaborative Care Model for Depression in Primary Care. Ann Fam Med 13:412-420.

[22] Payment Reform and Opportunities for Behavioral Health: Alternative Payment Model Examples (September 2017) http://www.scattergoodfoundation.org/sites/default/files/Scattergood_APM_Final_digital.pdf

inpatient stay. Our understanding is that DHSS recently implemented payment policies reducing payments to inpatient facilities associated with certain hospital acquired conditions (HACs). Because these are largely hospital-acquired conditions these payment policies are likely to more directly reduce Medicaid related costs associated with HACs than bundled payments.

Cases Grouped by BPCI Advanced Inpatient Triggers

Selecting bundles that providers already have experience with may assist with implementation and administrative ease (a criterion for selection as noted above). Because certain providers in Alaska currently participate in Medicare bundled payment program, Milliman assessed the volume of inpatient cases that would be associated with those inpatient stays that might "trigger" a BPCI Advanced episode. Again, a trigger event is typically an "anchor" admission for acute episodes of care or a specific combination of service, provider type, and diagnosis for non-acute episodes of care. Exhibits 8, 9, 10 and 1 summarize these inpatient DRGs by BPCI categories for all regions, non-tribal providers; all regions, tribal providers; providers (all are non-tribal) in Fairbanks and in Juneau respectively.

EXHIBIT 8: BPCI ADVANCED BUNDLES BY TOTAL PAID, INCURRED JAN 2016 THRU DEC 2017 AND PAID THRU MAR 2018; NON-TRIBAL PROVIDERS, ALL REGIONS

BPCI Category	Percentage Share of Total Paid Claims	Total Paid Claims	Total Admits	Paid per Admit
No Bundle	84%	$411,795,465	29,142	$14,131
Sepsis	4%	$19,191,543	1,158	$16,573
Simple pneumonia and respiratory infections	1%	$6,487,502	576	$11,263
Chronic obstructive pulmonary disease, bronchitis/asthma	1%	$5,349,296	616	$8,684
Cellulitis	1%	$4,323,867	450	$9,609
Major bowel procedure	1%	$4,943,465	238	$20,771
Cardiac Valve	1%	$5,841,411	97	$60,221
Congestive heart failure	1%	$3,472,222	276	$12,581
Stroke	1%	$3,815,714	272	$14,028
Major joint replacement of the lower extremity	1%	$3,689,501	415	$8,890
Lower extremity and humerus procedure except hip, foot, femur	0%	$2,169,241	170	$12,760
Renal failure	1%	$2,535,028	206	$12,306
Gastrointestinal hemorrhage	0%	$1,633,400	165	$9,899
Hip and femur procedures except major joint	0%	$1,254,851	102	$12,302
Disorders of liver except malignancy, cirrhosis or alcoholic hepatitis	0%	$1,668,271	114	$14,634
Spinal fusion (non-Cervical)	0%	$1,975,341	154	$12,827
Urinary tract infection	0%	$1,258,971	154	$8,175
Cervical spinal fusion	0%	$1,737,838	184	$9,445
Percutaneous coronary intervention	0%	$1,775,075	191	$9,294
Cardiac arrhythmia	0%	$1,112,854	123	$9,048
Coronary artery bypass graft surgery	0%	$1,537,125	54	$28,465
Gastrointestinal obstruction	0%	$960,594	111	$8,654
Back and neck except spinal fusion	0%	$520,915	50	$10,418
Combined anterior posterior spinal fusion	0%	$690,553	30	$23,018
Pacemaker	0%	$586,828	28	$20,958
Major joint replacement of upper extremity	0%	$410,987	58	$7,086
Cardiac defibrillator	0%	$406,321	19	$21,385
Fractures femur and hip/pelvis	0%	$272,892	33	$8,269
Double joint replacement of the lower extremity	0%	$139,359	10	$13,936

Notes:

(1) Claims are only for inpatient claims with assigned MS-DRG
(2) Sorted by total paid across all provider types

EXHIBIT 9: BPCI ADVANCED BUNDLES BY TOTAL PAID, INCURRED JAN 2016 THRU DEC 2017 AND PAID THRU MAR 2018; TRIBAL PROVIDERS, ALL REGIONS

BPCI Category	Percentage Share of Total Paid Claims	Total Paid Claims	Total Admits	Paid per Admit
No Bundle	76%	$126,652,153	10,154	$12,473
Sepsis	6%	$10,509,837	526	$19,981
Simple pneumonia and respiratory infections	3%	$5,780,576	477	$12,119
Chronic obstructive pulmonary disease, bronchitis/asthma	3%	$5,269,946	471	$11,189
Cellulitis	2%	$3,853,978	302	$12,762
Major bowel procedure	2%	$3,183,301	124	$25,672
Cardiac Valve	0%	$0	-	
Congestive heart failure	1%	$1,920,115	124	$15,485
Stroke	1%	$1,367,225	78	$17,529
Major joint replacement of the lower extremity	0%	$664,702	64	$10,386
Lower extremity and humerus procedure except hip, foot, femur	1%	$1,631,318	88	$18,538
Renal failure	0%	$632,601	48	$13,179
Gastrointestinal hemorrhage	1%	$1,221,641	111	$11,006
Hip and femur procedures except major joint	1%	$1,158,446	58	$19,973
Disorders of liver except malignancy, cirrhosis or alcoholic hepatitis	0%	$711,086	46	$15,458
Spinal fusion (non-Cervical)	0%	$381,760	15	$25,451
Urinary tract infection	1%	$851,700	91	$9,359
Cervical spinal fusion	0%	$173,355	12	$14,446
Percutaneous coronary intervention	0%	$111,990	11	$10,181
Cardiac arrhythmia	0%	$666,357	60	$11,106
Coronary artery bypass graft surgery	0%	$0	-	
Gastrointestinal obstruction	0%	$436,258	38	$11,480
Back and neck except spinal fusion	0%	$193,965	12	$16,164
Combined anterior posterior spinal fusion	0%	$0	-	
Pacemaker	0%	$0	-	
Major joint replacement of upper extremity	0%	$59,230	5	$11,846
Cardiac defibrillator	0%	$0	-	
Fractures femur and hip/pelvis	0%	$104,549	6	$17,425
Double joint replacement of the lower extremity	0%	$0	-	

Notes:

(1) Claims are only for Inpatient Claims with assigned MS-DRG

(2) Sorted by total paid across all provider types

EXHIBIT 10: BPCI ADVANCED BUNDLES BY TOTAL PAID, INCURRED JAN 2016 THRU DEC 2017 AND PAID THRU MAR 2018; FAIRBANKS, (ALL PROVIDERS ARE NON-TRIBAL)

BPCI Category	Percentage Share of Total Paid Claims	Total Paid Claims	Total Admits	Paid per Admit
No Bundle	87%	$33,340,057	3,595	$9,274
Chronic obstructive pulmonary disease, bronchitis/asthma	2%	$736,460	84	$8,767
Major bowel procedure	2%	$644,391	40	$16,110
Simple pneumonia and respiratory infections	2%	$609,054	60	$10,151
Sepsis	2%	$604,145	55	$10,984
Cellulitis	1%	$269,399	29	$9,290
Major joint replacement of the lower extremity	1%	$218,816	21	$10,420
Lower extremity and humerus procedure except hip, foot, femur	1%	$194,355	20	$9,718
Hip and femur procedures except major joint	1%	$193,711	16	$12,107
Renal failure	1%	$192,669	22	$8,758
Congestive heart failure	0%	$189,628	17	$11,155
Gastrointestinal hemorrhage	0%	$183,253	22	$8,330
Disorders of liver except malignancy, cirrhosis or alcoholic hepatitis	0%	$157,014	21	$7,477
Cardiac arrhythmia	0%	$153,782	13	$11,829
Percutaneous coronary intervention	0%	$152,336	21	$7,254
Urinary tract infection	0%	$113,399	13	$8,723
Stroke	0%	$106,053	14	$7,575
Gastrointestinal obstruction	0%	$74,903	9	$8,323
Fractures femur and hip/pelvis	0%	$72,374	5	$14,475
Pacemaker	0%	$19,193	3	$6,398
Spinal fusion (non-Cervical)	0%	$11,043	2	$5,521
Major joint replacement of upper extremity	0%	$2,761	1	$2,761

Notes:

(1) Claims are only for inpatient claims with assigned MS-DRG

(2) Sorted by total paid across all provider types

EXHIBIT 11: BPCI ADVANCED BUNDLES BY TOTAL PAID, INCURRED JAN 2016 THRU DEC 2017 AND PAID THRU MAR 2018; JUNEAU, (ALL PROVIDERS ARE NON-TRIBAL)

BPCI Category	Percentage Share of Total Paid Claims	Total Paid Claims	Total Admits	Paid per Admit
No Bundle	86%	$16,463,252	1,643	$10,020
Sepsis	3%	$632,983	56	$11,303
Cellulitis	3%	$597,429	55	$10,862
Simple pneumonia and respiratory infections	2%	$301,393	31	$9,722
Chronic obstructive pulmonary disease, bronchitis/asthma	1%	$287,362	27	$10,643
Gastrointestinal hemorrhage	1%	$175,244	21	$8,345
Congestive heart failure	1%	$161,462	12	$13,455
Major joint replacement of the lower extremity	1%	$141,848	21	$6,755
Urinary tract infection	1%	$107,296	18	$5,961
Cardiac arrhythmia	0%	$61,112	6	$10,185
Gastrointestinal obstruction	0%	$54,416	9	$6,046
Major bowel procedure	0%	$49,055	2	$24,528
Renal failure	0%	$42,318	7	$6,045
Disorders of liver except malignancy, cirrhosis or alcoholic hepatitis	0%	$32,944	5	$6,589
Stroke	0%	$28,495	6	$4,749
Hip and femur procedures except major joint	0%	$18,256	1	$18,256
Fractures femur and hip/pelvis	0%	$13,585	4	$3,396
Major joint replacement of upper extremity	0%	$10,033	1	$10,033
Lower extremity and humerus procedure except hip, foot, femur	0%	$5,491	1	$5,491

Notes:
(1) Claims are only for Inpatient Claims with assigned MS-DRG
(2) Sorted by total paid across all provider types

DISCUSSION

Based on this initial review of the trigger DRGs, grouped into the BPCI categories, it does not appear that there is sufficient volume to implement any specific BPCI bundle to the Medicaid population in isolation. If DHSS is interested in pursuing specific BPCI bundles, a multi-payer strategy would likely be more promising to encourage provider participation and make it worth their time and investment.

Methods and Data Sources

HIGH VOLUME INPATIENT ADMISSIONS BY DIAGNOSIS

To examine inpatient facility cases and determine volume for the top 25 DRGs by paid amount, we used data of inpatient claims incurred from January 2016 through December 2017 and paid through March 2018. We used the MS-DRG grouper and summarized the data at the DRG level. We applied the MS-DRG grouper but, given limitations of the grouper, we applied additional grouping steps to further parse out certain categories of service (e.g. newborns). For example, we manually applied the v35 MS-DRG grouping logic to the Newborns & Other Neonates with Conditions Originating in Perinatal Period Major Diagnostic Category (MDC 15). We first identified newborns with the appropriate ICD10 diagnosis codes and then further segmented them into the MDC 15 MS-DRGs according to primary and secondary diagnoses.

A certain portion of claims data that remained "ungroupable" are summarized in Exhibits 4-7. The reasons certain claims were deemed ungroupable are that their principal diagnosis code is invalid, or their age and/or discharge status are missing and these fields are necessary for MS-DRG assignment.[23]

CASES GROUPED BY BPCI ADVANCED INPATIENT TRIGGERS

To develop the "BPCI Advanced Bundles By Total Paid" tables, we also used inpatient claims incurred from January 2016 through December 2017 and paid through March 2018. These were grouped into DRGs as a result of the prior analysis. We then further grouped DRGs into the BPCI Advanced bundles. We did this to understand the volume of potential triggering inpatient admissions that would result in distinct episodes. We relied on the CMS's methods to map the inpatient DRGs to the 29 Inpatient Clinical Episodes retrieved from https://innovation.cms.gov/initiatives/bpci-advanced on August 28, 2018. Costs related to BPCI Advanced *outpatient* triggers are not included. Only inpatient claims that were grouped into DRGs were included in the analysis. To fully understand the cost associated with each bundle, all procedures associated with that bundle would need to be included. This means including inpatient, outpatient and professional services for non-excluded items and services furnished during the anchor DRG, during the 90-day period following the anchor stay or procedure, and 3-days prior to the anchor stay or procedure. Such an analysis was considered outside of scope given the purpose of the exercise was to understand the volume of potential inpatient admissions which may trigger an episode or bundled payment if the BPCI Advanced model were to be used.

DATA SOURCES

DHSS provided us with the quarterly legislative audit data that included eligibility, medical, and retail pharmacy data. Milliman used a subset of that data for this analysis, specifically inpatient claims data paid from July 2017 through December 2017 for this analysis. Alaska FFS Medicaid data provided by the Alaska DHSS consisted of claims incurred January 2016 through December 2017 and paid through March 2018.

23 Design and Development of the DRGs PDF file found on CMS https://www.cms.gov/ICD10Manual/version35-fullcode-cms/fullcode_cms/P0001.html

Caveats and Limitations

The services provided for this correspondence were performed under the signed contract between Milliman and the State of Alaska Department of Health and Social Services approved October 27, 2016 and amended effective July 1, 2018.

This report has been prepared solely for the internal business use of and is only to be relied upon by the State of Alaska Department of Health and Social Services, related Divisions, and their advisors. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work. Any distribution of the information should be in its entirety. Any user of the data must possess a certain level of expertise in actuarial science and healthcare modeling so as not to misinterpret the information presented.

In performing this analysis, we relied on data and other information provided by the State of Alaska Department of Health and Social Services, related Divisions, and their advisors. We have not audited or verified this data and other information. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete.

We performed a limited review of the data used directly in our analysis for reasonableness and consistency and have not found material defects in the data. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or for relationships that are materially inconsistent. Such a review was beyond the scope of our assignment.

Differences between our projections and actual amounts depend on the extent to which future experience conforms to the assumptions made for this analysis. It is certain that actual experience will not conform exactly to the assumptions used in this analysis. Actual amounts will differ from projected amounts to the extent that actual experience deviates from expected experience.

Qualifications:

Guidelines issued by the American Academy of Actuaries require actuaries to include their professional qualifications in all actuarial communications. Susan Pantely, Dan Henr,y and Jeremy Cunningham are members of the American Academy of Actuaries, and they meet the qualification standards for performing the analyses in this report.

Appendix A: Vaginal versus Cesarean Section Delivery, by Provider, 2017

State of Alaska Department of Health and Social Services
Bundled Payments
SFY 2017 Vaginal vs. Cesarean Delivery Summary - Statewide

Provider ID	Provider Name	Region	Vaginal Delivery	Cesarean Delivery	Total	Vaginal Mix	Cesarean Mix
5630	Providence Health & Services Washington	Anchorage Municipality	826	319	1,145	72.1%	27.9%
5643	AK Native Tribal Health Consortium	Anchorage Municipality	873	143	1,016	85.9%	14.1%
6079	Mat-Su Valley Medical Center LLC	MatSu Borough	239	114	353	67.7%	32.3%
5573	Yukon-Kuskokwim Health Corporation	Western Region	324	8	332	97.6%	2.4%
5744	Galen Hospital Alaska, Inc	Anchorage Municipality	179	74	253	70.8%	29.2%
5551	Fairbanks Memorial Hospital	Fairbanks North Star Borough	192	52	244	78.7%	21.3%
50086903	Fairbanks Memorial Hospital, LLC	Fairbanks North Star Borough	179	44	223	80.3%	19.7%
5528	Central Peninsula Hospital	Kenai Peninsula Borough	144	49	193	74.6%	25.4%
5539	Bartlett Regional Hospital	Northern Southeast Region	98	30	128	76.6%	23.4%
5563	Peacehealth	Southern Southeast Region	75	25	100	75.0%	25.0%
5653	South Peninsula Hospital, Inc	Kenai Peninsula Borough	67	15	82	81.7%	18.3%
5622	Providence Health & Services Washington	Gulf Coast/Aleutian Region	46	10	56	82.1%	17.9%
5753	Norton Sound Regional Hospital	Western Region	35	-	35	100.0%	0.0%
5794	BRISTOL BAY AREA HEALTH CORP	Gulf Coast/Aleutian Region	26	-	26	100.0%	0.0%
5604	Southeast Alaska Regional Health Consortiun	Northern Southeast Region	11	5	16	68.8%	31.3%
5674	Sitka Community Hospital	Northern Southeast Region	10	6	16	62.5%	37.5%
5681	Maniilaq Association	Western Region	13	-	13	100.0%	0.0%
5774	Arctic Slope Native Association	Northern and Interior Region	13	-	13	100.0%	0.0%
6255	University of Washington	Out of State	8	5	13	61.5%	38.5%
5536	City of Valdez	Gulf Coast/Aleutian Region	10	-	10	100.0%	0.0%
6184	Swedish Health Services	Out of State	6	4	10	60.0%	40.0%
5679	Harrison Memorial Hospital	Out of State	1	-	1	100.0%	0.0%
6143	Orlando Health Inc	Out of State	-	1	1	0.0%	100.0%
6538	Legacy Emanuel Hospital & Health Center	Out of State	1	-	1	100.0%	0.0%
6667	Lucile Salter Packard Chlds	Out of State	-	1	1	0.0%	100.0%
5663	Peacehealth Southwest	Out of State	-	-	-	0.0%	0.0%
	Total/Composite		**3,376**	**905**	**4,281**	**78.9%**	**21.1%**

This Page Intentionally Blank

MILLIMAN REPORT

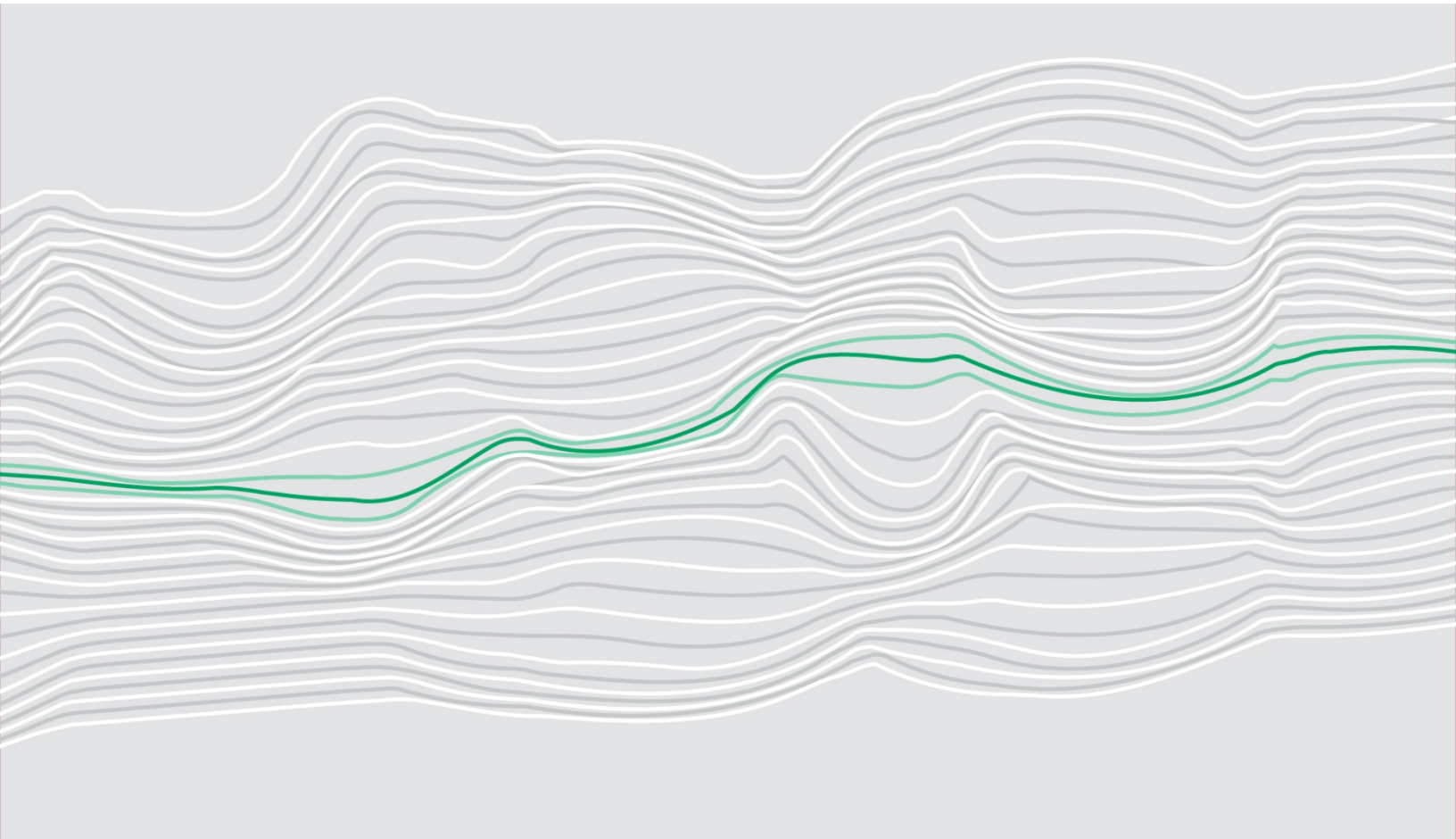
Health Homes

Considerations for the Alaska Medicaid Program

Prepared for:
State of Alaska Department of Health and Social Services

October 1, 2018

Susan Philip, MPP
Jeremy Cunningham, FSA, MAAA
Chankyu Lee, MBA, ASA
Susan Pantely, FSA, MAAA



FY 2018 Alaska DHSS Annual Medicaid Reform Report: **APPENDIX B**

Milliman

Table of Contents

I. Executive Summary

SB 74 requires the Alaska Department of Health and Social Services (DHSS) to consider and implement Medicaid payment redesign that includes some form of alternative payment model such as "global payments for contracted payers, primary care managers, and case managers for recipient or for care related to specific diagnosis." As part of this effort DHSS is considering establishing Health Homes, a specific option added by Section 2703 of the Patient Protection and Affordable Care Act of 2010 (ACA), entitled, "State Option to Provide Health Homes for Enrollees with Chronic Conditions."

DHSS requested Milliman to review the Health Home option, laying out considerations for design and implementation with a particular focus on feasibility. DHSS also asked to Milliman convey any best practices or lessons learned from other states that have considered or implemented the Health Home option. Our report presents (1) health home option as outlined by the ACA; (2) other states' experiences and lessons learned; (3) analysis of prevalent chronic conditions for three health home regions; and (4) considerations for design and implementation.

HEALTH HOME FEATURES AND OTHER STATES' EXPERIENCE

A health home is a Medicaid State Plan Option that provides comprehensive care coordination for Medicaid enrollees with chronic conditions. Health home providers integrate and coordinate all primary, acute, and behavioral healthcare, as well as long-term services and supports (LTSS). The goals of the health home option are fourfold: to provide timely, accessible, comprehensive, systematic, "whole-person" care across the lifespan for Medicaid enrollees with chronic conditions; to improve the experience of care; to improve population health; and to reduce per-capita Medicaid spending.

As of April 2018, 22 states and the District of Columbia have a total of 34 Medicaid health home models. The following identifies a few of the key challenges and lessons learned from various health home programs.

- Difficulties in calculating and selecting an appropriate amount for reimbursement for supplemental health home services for care coordination.
- Overlap with other care management programs, including managed care, targeted case management or primary care case management services.
- Integration with private insurance or Medicare programs needs to be maintained.
- Features of successful health homes include strong leadership and staff buy-in, well-developed infrastructure (including HIT), available technical and financial resources for practice changes, and previous experience with medical home-type care and care management.
- Implementation of separate programs for adults and children have created better success.
- Data collection and health information technology services are key to understanding and implementing success integrated health homes.

FINDINGS

To understand which populations may be targeted for a potential health home option, we used the Chronic Illness and Disability Payment System (CDPS) combination with Medicaid Rx (CDPS+MRx) to Alaska's Medicaid SFY 2017 claims and pharmacy data. The following chronic conditions were identified as contributing to high costs in the Medicaid program. These conditions are also consistent with other state's health home target populations.

1. Psychiatric (PSY)
2. Cardiovascular (CAR)
3. Gastro Intestinal (GI)
4. Pulmonary (PUL)
5. Central Nervous System (CNS)
6. Metabolic (MET)
7. Renal (REN)
8. Substance Abuse (SUB)
9. Diabetes (DIA)

As indicated in the table below, members with two or more CDPS chronic conditions represent 28.5% of total Medicaid membership but they contribute to 75.2% of total costs.

TABLE ES-1

State of Alaska Department of Health and Social Services
Health Home Considerations
SFY 2017 Total Costs and Cost by Number of CDPS Conditions - Statewide

	Average Monthly Members	% of Total Membership	Total Costs (Millions)	% of Total Costs	PMPM
Zero Conditions	92,038	50.9%	$ 158.4	8.4%	$ 143.44
One Condition	37,241	20.6%	306.2	16.3%	685.07
Two Conditions	20,314	11.2%	303.4	16.2%	1,244.56
Three Plus Conditions	31,267	17.3%	1,108.7	59.1%	2,954.98
Total/Composite	**180,860**	**100.0%**	**$1,876.7**	**100.0%**	**$864.70**

Further analyses for each of these nine targeted conditions and their interaction effect with other CDPS conditions shows that the average PMPM cost for members with three or more CDPS conditions is substantially higher (on average, more than twice) than members with two CDPS conditions (See Appendix A of the full report). Our analysis shows potential opportunities for targeting the nine CDPS categories listed above, especially if members have three or more CDPS conditions, and if the conditions are associated with high potentially avoidable costs. Further, members with psychiatric conditions are also associated with high potentially avoidable costs, meaning that applying evidence-based care management and care coordination activity can affect care outcomes and costs.

Besides selecting potential conditions to target, there are other important design and capacity considerations for Alaska. These include those related to target populations, regions, additional services which may be provided in addition to the required core service; providers who are eligible to participate in program; payment model; enrollment policy and methods; interaction with other initiatives.

II. Introduction and Scope

In response to SB 74, the Alaska Department of Health and Social Services (DHSS) is considering an array of options that would affect how providers who serve Medicaid beneficiaries in the state would be paid. Specifically, SB 74 requires DHSS to consider and implement Medicaid payment redesign that includes some form of alternative payment model such as "global payments for contracted payers, primary care managers, and case managers for recipient or for care related to specific diagnosis."

As part of this effort DHSS is considering establishing Health Homes, a specific option added by Section 2703 of the Patient Protection and Affordable Care Act of 2010 (ACA), entitled, "State Option to Provide Health Homes for Enrollees with Chronic Conditions."

DHSS requested Milliman to review the Health Home option, laying out considerations for design and implementation with a particular focus on feasibility. DHSS also asked Milliman to convey any best practices or lessons learned from other states that have considered or implemented the Health Home option. This report provides:

- Background on the Health Home Option as outlined by the ACA;
- Best practices drawing on states' experiences, and lessons learned;
- Analysis of prevalent chronic conditions for three regions:
  - Region 1: Anchorage Municipality; Fairbanks North Star Borough; Mat - Su Borough (including Wasilla),
  - Region 2: Northern Southeast Region (including Juneau); Kenai Peninsula Borough (including Soldotna), and
  - Region 3: Southern Southeast Region (including Ketchikan);
- Considerations for Design and Implementation.

III. Health Home Features and Requirements

A health home is a Medicaid State Plan Option that provides comprehensive care coordination for Medicaid enrollees with chronic conditions. Health home providers integrate and coordinate all primary, acute, and behavioral healthcare, as well as long-term services and supports (LTSS).[1] The goals of the health home option are fourfold: to provide timely, accessible, comprehensive, systematic, "whole-person" care across the lifespan for Medicaid enrollees with chronic conditions; to improve the experience of care; to improve population health; and to reduce per-capita Medicaid spending.[2] [3] Specifically, health homes must meet criteria with regard to target populations, services, coordination, providers and provider infrastructure, payment methodologies, monitoring and reporting, and stakeholder engagement (criteria which are further defined by the state), in order to meet these goals.

[1] Centers for Medicare & Medicaid Services. (May 2012). Health Homes (Section 2703) Frequently Asked Questions. Retrieved September 13, 2018 from: https://www.medicaid.gov/state-resource-center/medicaid-state-technical-assistance/health-home-information-resource-center/downloads/health-homes-faq-5-3-12_2.pdf.

[2] Department of Health and Human Services, Office of the Secretary. (n.d.). Interim Report to Congress on the Medicaid Health Home State Plan Option. Retrieved September 13, 2018 from: https://www.medicaid.gov/medicaid/ltss/downloads/health-homes/medicaid-health-home-state-plan-option.pdf.

[3] Department of Health & Human Services. (November, 2010). Re: Health Homes for Enrollees with Chronic Conditions. Retrieved September 13, 2018 from Centers for Medicare & Medicaid Services: https://downloads.cms.gov/cmsgov/archived-downloads/smdl/downloads/smd10024.pdf.

States receive a 90% enhanced Federal Medical Assistance Percentage (FMAP) for health home services for the first eight fiscal quarters the program is effective. After which states receive their usual match rate.

HEALTH HOME REQUIREMENTS

1. Target Populations

Medicaid enrollees with at least two chronic conditions, one chronic condition and are at risk for another, or a serious and persistent mental health condition (SPMI). Conditions include: mental health conditions, substance use disorders, asthma, diabetes, heart disease, overweight (BMI >25), and other conditions as approved by CMS.
States can provide services to all enrollees meeting the qualifying criteria, or can choose conditions or disease states (such as severity of condition) to focus services on.
Categorically needy enrollees must be provided health home services, and states can include the medically needy or Section 1115 waiver demonstration populations if they so choose. States may not exclude dual-eligible enrollees from receiving health home services.

2. Services

Health homes must provide primary, acute, behavioral health, and long term services and supports, including: comprehensive care management; care coordination and health promotion; comprehensive transitional care from inpatient to other settings (including appropriate follow up); referral to community and social support services; and use of HIT to connect services.
States receive a 90% enhanced Federal Medical Assistance Percentage (FMAP) for health home services for the first eight fiscal quarters the program is effective. After which states receive their usual match rate.

3. Coordination

States must work in coordination with the Substance Abuse and Mental Health Services Administration (SAMHSA)—*before* submitting their State Plan Amendments (SPAs)—in the prevention and treatment of mental illness and substance use disorders among low-income enrollees, enrollees with one or more chronic health conditions who are at risk for developing mental health and substance use disorders, and particularly among enrollees with serious mental illness (SMI).
States are also encouraged to coordinate with State behavioral health authorities with regard to primary care and behavioral health integration.

4. Providers and Provider Infrastructure

There are three distinct types of possible health home providers: individual providers (designated providers), healthcare teams comprised of professionals (teams of health professionals), or healthcare teams that meets established standards and system infrastructure requirements (health teams).

- Designated providers: *may be* physicians, clinical/group practices, rural health clinics, community health centers, community mental health centers, home health agencies, pediatricians, Obstetricians/Gynecologists, or other.
- Teams of health professionals: *may include* physicians, nurse care coordinators, nutritionists, social workers, behavioral health professionals, and can be free standing, virtual, hospital-based, community health centers, etc.
- Health teams: *must include* medical specialists, nurses, pharmacists, nutritionists, dieticians, social workers, behavioral health providers (including mental health providers and substance use disorder prevention and treatment providers), chiropractics, licensed complementary and alternative medicine practitioners, and physicians' assistants.

Providers must meet standards, and should utilize a model of service delivery that has a "whole-person" approach and a culture of continuous quality improvement. (For a full list of the functions health home providers are expected to perform, see "Re: Health Homes for Enrollees with Chronic Conditions," pg. 9.)

5. Payment Arrangements

States have flexibility to design their payment arrangements, and may use a tiered payment methodology that takes into account severity of enrollees' chronic conditions and capabilities of providers furnishing services. States may also propose alternative payment models (APMs) not limited to per member per month (PMPM) arrangements.

6. Monitoring and Reporting

Providers must report to the State on all applicable quality measures. When appropriate and feasible, providers should use HIT in reporting quality measures information.

States must collect and report the information required including the nature, extent, and use of the health home model, particularly as it pertains to: hospital readmission rates; chronic disease management; coordination of care for individuals with chronic conditions; assessment of program implementation; processes and lessons learned; assessment of quality improvements and clinical outcomes; and estimates of cost savings, utilization, and expenditures for an interim survey and an independent evaluation.

States must also calculate cost savings that result from improved coordination of care and chronic disease management achieved through the health homes program.

7. Stakeholder Engagement

Successful health home design and implementation processes often rely on existing relationships among state Medicaid programs and other state agencies. States must provide public notice to affected stakeholders (enrollees, providers, and others) of changes in SPAs prior to effective date, consistent with public notice requirements. Further, states must engage in tribal consultation regarding changes to SPAs.

Sources:

Social Security Act, Sections 1945 and Section 1902.

Department of Health & Human Services. (November, 2010). Re: Health Homes for Enrollees with Chronic Conditions. Retrieved September 13, 2018 from Centers for Medicare & Medicaid Services: https://downloads.cms.gov/cmsgov/archived-downloads/smdl/downloads/smd10024.pdf.

Center for Health Care Strategies and Mathematica Policy Research. (April 2018). Medicaid Health Homes: An Overview. Retrieved September 13, 2018 from the Centers for Medicare & Medicaid Services: https://www.medicaid.gov/state-resource-center/medicaid-state-technical-assistance/health-home-information-resource-center/downloads/hh-overview-fact-sheet.pdf.

Centers for Medicare & Medicaid Services. (May 2012). Health Homes (Section 2703) Frequently Asked Questions. Retrieved September 13, 2018 from: https://www.medicaid.gov/state-resource-center/medicaid-state-technical-assistance/health-home-information-resource-center/downloads/health-homes-faq-5-3-12_2.pdf.

Department of Health and Human Services, Office of the Secretary. (n.d.). Interim Report to Congress on the Medicaid Health Home State Plan Option. Retrieved September 13, 2018 from: https://www.medicaid.gov/medicaid/ltss/downloads/health-homes/medicaid-health-home-state-plan-option.pdf.

PROGRAM DESIGN

States are provided flexibility in working with stakeholders to design health home programs that best address the needs of the population(s) they intend to serve. As a result of this flexibility, states are faced with options in choosing the key features of health homes, such as the target populations and geographies, provider arrangements, and payment methodologies.

Implementing the health home option waives the Medicaid state plan requirements for statewide-ness and comparability of services.[4] [5] Due to waiver of these requirements, states may target specific geographic regions (city, county, group of counties) for health home services, and may offer different amounts, duration, and scope of health home services to enrollees in health homes compared with those

[4] Center for Health Care Strategies and Mathematica Policy Research. (April 2018). Medicaid Health Homes: An Overview. Retrieved September 13, 2018 from the Centers for Medicare & Medicaid Services: https://www.medicaid.gov/state-resource-center/medicaid-state-technical-assistance/health-home-information-resource-center/downloads/hh-overview-fact-sheet.pdf.

[5] The Centers for Medicare & Medicaid Services (CMS) encourage states with planned or existing medical home initiatives to compare those programs with the health home program requirements, including purpose, population focus, delivery and payment models, services, providers, and monitoring and reporting, and to coordinate their health home initiative in such a way that it aligns with or complements planned or existing medical home initiatives.

not enrolled in health homes.[6] To further customize delivery models, states can target health home services to individuals with qualifying conditions such as serious mental illness (SMI), and can prioritize enrollment or tier payments based on patient severity/risk. However, states may not target health home services by criteria such as age, dual-eligibility, or delivery system.[7] This means, for example, states cannot target just children with SMI; but must instead target all ages with SMI and design the program accordingly.[8]

The Centers for Medicare & Medicaid Services (CMS) encourages states with planned or existing medical home initiatives to compare those programs with the health home program requirements, including purpose, population focus, delivery and payment models, services, providers, and monitoring and reporting, and to coordinate their health home initiative in such a way that it aligns with or complements planned or existing medical home initiatives.

Health homes can include "patient centered medical home" type models which typically are physician-led and focus on primary care. Health homes build on this framework and go further to emphasize team-based care with focus on integration of primary and behavioral health along with use of social supports and services to provide "whole person" care.

IV. States' Experiences and Lessons Learned

As of April 2018, 22 states and the District of Columbia have a total of 34 Medicaid health home models.[9] Preliminary results from various evaluations of early-adopter and second-waive health home initiatives appear promising and suggest health homes can improve health outcomes and reduce Medicaid spending. However, states still face significant challenges in maintaining sustainable health home programs.

MARYLAND, RHODE ISLAND, AND VERMONT

In Maryland, Rhode Island, and Vermont, health home programs were targeted toward Medicaid enrollees with opioid use disorders in the Opioid Health Home (OHH) program.[10] In these states, opioid use disorder treatment (chiefly opioid agonist therapy) was coordinated with medical and behavioral healthcare and other services that addressed social determinants of health (SDOH). Important factors associated with these states' decisions to adopt the OHH model included working relationships between state agencies overseeing substance abuse services and Medicaid benefits, and enhanced matching funds to support provision of the required services. Among opioid treatment providers, the main impetus for participating in the OHH model was reimbursement for care management services. For example, in Maryland health home providers were paid $100.85 per member per month (PMPM) for each health home enrollee for care management services, and were also given a one-time $100.85 payment per

[6] Social Security Act, Section 1902(a)(10)(B).

[7] Center for Health Care Strategies and Mathematica Policy Research. (April 2018). Medicaid Health Homes: An Overview. Retrieved September 13, 2018 from the Centers for Medicare & Medicaid Services: https://www.medicaid.gov/state-resource-center/medicaid-state-technical-assistance/health-home-information-resource-center/downloads/hh-overview-fact-sheet.pdf.

[8] Moses, K., Klebonis, J., & Simons, D. (February 2014). Developing Health Homes for Children with Serious Emotional Disturbance: Considerations and Opportunities. Retrieved September 14, 2018 from Health Home Information Resource Center: http://www.chcs.org/usr_doc/Developing_Health_Homes_for_SED_02_24_14.pdf.

[9] Centers for Medicare & Medicaid Services. (April 2018). State-by-State Health Home State Plan Amendment Matrix. Retrieved September 16, 2018 from Medicaid.gov.

[10] Clemans-Cope, L., Wishner, J., Allen, E., Lallemand, N., Epstein, M., & Spillman, B. (2017). Experiences of three states implementing the Medicaid health home model to address opioid use disorder—Case studies in Maryland, Rhode Island, and Vermont. Journal of Substance Abuse Treatment. 27-35.

enrollee for initial intake.[11] In Rhode Island, health home providers were paid $214 PMPM (paid as a weekly bundled rate of $53.50) for health home enrollees for care management,[12] and in Vermont (a state that implemented a "hub and spoke" health home program), master's level licensed clinician case managers were payed $100.85 PMPM for care management and an additional one-time intake payment of $100.85, whereas "spokes" were paid $163.75 PMPM per health home enrollee.[13] [14] Interestingly, after implementation of the health home program, providers in all three states reported reimbursement rates were sufficient to cover the provision of health home services, but were not sufficient to cover start-up and ongoing costs associated with the program. In addition, in Maryland providers report difficulties with denied payments related to administrative issues.[15]

During the implementation phase, the states reported facilitators of successful implementation included a large degree of collaboration between Medicaid state agencies and substance use disorder programs, and consultation with CMS, technical assistance contractors, and other states with health home initiatives. Implementation at the provider level in each state was led by a few provider champions of the OHH model that advocated for the model among provider communities. In general, providers reported that facilitators of successful implementation included having goals and workplace culture that aligned with the OHH model, having technical support from the state and/or non-governmental organizations, and having prior experience with health home-style care delivery.

Some of the main barriers to implementation experienced by providers included primary care providers (PCP), dentist, and other provider unwillingness to accept referrals for patients with opioid use disorder, insufficient community resources to address SDOH, and issues related to state-specific program design, including staffing requirements; reimbursement methodology; confidentiality restrictions limiting care coordination; technological barriers; and internal capacity of providers to adopt the new OHH model of care.

At the state level, contextual factors such as legislation, funding, state leadership, and program design both facilitated and posed challenges to adopting new models of care. For example, confidentiality law regarding data sharing limits sharing of substance abuse records between providers (42 CFR Part 2), which stymied some care coordination activities. With regard to program design, Rhode Island and Vermont automatically enrolled eligible Medicaid enrollees into the OHH program, whereas Maryland had an opt-in system. The opt-in system in Maryland led to less-than-expected enrollment in the OHH program.

Despite challenges, stakeholders in these states reported that overall, the model was implemented successfully and led to significant improvements in patient care. Maryland, Rhode Island, and Vermont reported learning several lessons around developing, implementing, and sustaining their health home programs:

- Private insurance and Medicare participation are critical to long-term sustainability.

[11] Maryland Department of Health and Mental Hygiene. (2016). Health Home Fee Schedules. Retrieved from: https://mmcp.dhmh.maryland.gov/Documents/Health%20Homes%20Fee%20Schedule-%207-1-16.pdf.

[12] State Of Rhode Island Executive Office Of Health And Human Services. (2016). 6/29/2016 Public Notice of Proposed Amendment to Rhode Island Medicaid State Plan. Retrieved from: http://www.eohhs.ri.gov/Portals/0/Uploads/Documents/SPA/16-003OTPHHPublicNotice.pdf.

[13] Department of Vermont Health Access (DVHA). (2014). Hub and Spoke Health Home Rates. Retrieved from: http://dvha.vermont.gov/for-providers/1hub-spoke-rates.pdf;

[14] Vermont Health Homes for Opioid Addiction Hub and Spoke: Program Overview, (2013). Retrieved from: http://www.achp.org/wp-content/uploads/Vermont-Health-Homes-for-Opiate-Addiction-September-2013.pdf.

[15] Clemans-Cope, L., Wishner, J., Allen, E., Lallemand, N., Epstein, M., & Spillman, B. (2017). Experiences of three states implementing the Medicaid health home model to address opioid use disorder—Case studies in Maryland, Rhode Island, and Vermont. Journal of Substance Abuse Treatment. 27-35.

- The timing of health home program implementation should be considered against other health system reforms to ensure providers are not over-burdened.
- A wide range of stakeholders should be included in program development.
- Mandating provider participation, providing adequate implementation support, and an opt-out (auto-enrollment) policy appear to elicit greater participation among both providers and eligible Medicaid enrollees.
- Program evaluation is necessary for providing evidence to support continued investment in health home models. However, this is sometimes difficult given many of the Health Homes have a small number of enrollees. As a result, general claims fluctuation can cause a program to look better or worse than it is doing.

KANSAS

Kansas provided a Health Home program for KanCare (Kansas Medicaid) enrollees from August 2014 through June 30, 2016, when the program ended. In order to choose the Medicaid population segment to target for health home services, Kansas looked at healthcare costs among enrollees with eligible chronic and mental health conditions.[16] In particular, Kansas took into account the most costly conditions among enrollees who also had persistently poor health outcomes. Using these data points, Kansas decided to target enrollees with SMI including schizophrenia, personality disorders, bipolar and major depressive disorder, obsessive-compulsive disorder, post-traumatic stress disorder, psychosis not otherwise specified, and delusional disorders. To begin providing services, Kansas implemented the "team of health professionals" model for delivering health home services, and developed partnerships between managed care organizations (MCOs) and Health Home Partners (HHPs). Some enrollees were provided health home services exclusively by MCOs, and some by HHPs. In other areas, services were provided jointly by MCOs and HHPs. Where services were provided jointly, division of services and payments was included in MCO and HHP contracts. Like Alaska, Kansas is largely rural, and so the flexibility provided by this model was ideal for the state. This model allowed Kansas to offer flexible health home services within a capitated, fully risk-based managed care delivery system, and allowed most Medicaid enrollees targeted for health home services to maintain their usual sources of care.

Kansas did not have an established PCMH program or framework for providing health home-type services prior to implementing the health home option.[17] Other states that did not have prior PCMH related experience but had success in their health home option had focused attention on developing stakeholder input and buy-in. Kansas drew on this lesson learned and focused energies on developing stakeholder input over the two year period. At the end of the two year period in which the program was eligible for the 90% FMAP, Kansas decided roll up it health home services into the Care Coordination and Targeted Case Management services available through its MCOs and community mental health clinics. The Budget Director recommended that the state end the pilot program due to lack of significant results and large budget savings from ending the program that could be allocated to other initiatives.[18]

NORTH CAROLINA

Unlike Kansas, North Carolina (NC) has a strong history of delivering medical home models of care. NC started its first single-county medical home pilot in 1985 and subsequently expanded the pilot to 12

[16] Randol, M. (June 2015). Health Homes in Kansas. Presentation at the Society of Actuaries Health Meeting, Atlanta, GA..

[17] Randol, M. (June 2015). Health Homes in Kansas. Presentation at the Society of Actuaries Health Meeting, Atlanta, GA.

18 Wingerter, M. (February 2016). Advocates wonder whether health homes had enough time, Program launched in 2014 to coordinate care for Medicaid mental health patients. Retrieved from Kansas Health Institute: https://www.khi.org/news/article/advocates-wonder-whether-health-homes-had-enough-time.

counties in 1989; in 1992 the medical home model of care was operating across the entire state.[19] Between 1998 and 2007, NC implemented programs that targeted medical home services by enrollee chronic condition including asthma, diabetes, chronic heart failure, hypertension, COPD, and behavioral health, and in 2008 the medical home model was rolled out statewide for care of chronic conditions. For the health home option, and to identify the most "impact-able" enrollees and conditions, NC utilized an analytics team that stratified their Medicaid population by clinical risk groups and then into disease severity/control populations. They looked specifically at care triage readmission risk, having above expected hospital costs, and high emergency department utilization, and prioritized dual-eligibles and enrollees with behavioral health conditions. Based on this information, NC targets health home services to enrollees with two or more chronic medical conditions or one chronic condition and risk of developing another; qualifying chronic conditions include asthma, diabetes, heart disease, BMI >25, blindness, chronic cardiovascular disease, COPD, congenital anomalies, chronic disease of the alimentary system, schizophrenia, cerebrovascular disease, congestive heart failure, hypertension, peripheral vascular disease, HIV, and chronic renal failure.

To provide health home services, NC used 600 complex care managers (RNs, BSWs, MSWs), 300 OB care managers, 300 high-risk pediatric care managers, and 60 pharmacists. NC uses a tiered PMPM payment arrangement for health home providers based on eligibility category and provider type: for the Aged, Blind, Disabled (ABD) population, networks are paid $12.85 PMPM, and primary care providers (PCPs) are paid $5 PMPM; for pregnant enrollees, networks are paid $5.22 PMPM and PCPs are paid $2.50 PMPM; for all other enrollee types networks are paid $4.33 PMPM and PCPs are paid $2.50 PMPM.[20] [21]

Although NC had a well-established medical home mode of care delivery prior to implementing the health home option, they found that practices still needed help with quality improvement, data, evidence-based guidelines, and functioning as health homes. To work through these challenges, the state met practices and physicians where they were through flexible offerings and providing assistance with payer issues and challenging patients.

Overall, NC was able to reduce hospital readmissions by 20 percent among patients with multiple chronic conditions (in their transitional care program), and for every six interventions one hospital readmission was avoided. Enrollees in the health home program experienced a reduction of $73 PMPM in total spending relative to the control group, and over five years NC saved approximately $184 million. Savings were highest among enrollees with multiple chronic conditions and the non-elderly disabled. In addition, NC's Medicaid managed care outperforms commercial managed care quality scores and National Medicaid HMO mean quality scores on chronic disease care metrics such as blood pressure control, cholesterol control, A1C control, and nephropathy screening.[22]

IOWA

In Iowa in 2014, Medicaid enrollees with two chronic conditions or one chronic condition and at risk for developing another (including mental health conditions, substance abuse disorders, asthma, diabetes,

[19] Cline, J. (June 2015). RIO for Health Homes at CCNC. Presentation at the Society of Actuaries Health Meeting, Atlanta, GA.

[20] Centers for Medicare & Medicaid Services. (April 2018). State-by-State Health Home State Plan Amendment Matrix. Retrieved September 16, 2018 from Medicaid.gov.

[21] Spillman, B., Richardson, E., & Spencer, A. (April 2013). Medicaid Health Homes in North Carolina: Review of Pre-Existing Initiatives and State Plan Amendment for the State's First Health Homes Under Section 2703 of the Affordable Care Act. Retrieved September 18, 2018 from U.S. Department of Health and Human Services Assistant Secretary for Planning and Evaluation Office of Disability, Aging and Long-Term Care Policy: https://aspe.hhs.gov/system/files/pdf/137856/HHOption2-NC.pdf.

22 Fillmore, H., et al., (2014) Health Care Savings with the Patient-Centered Medical Home: Community Care of North Carolina's Experience. Population Health Management. Volume 17. No 3.

heart disease, hypertension, BMI >25, and BMI >85th percentile for pediatric populations) were enrolled in the statewide health home program via an opt-out enrollment system.[23] The payment arrangement for Iowa health home providers is a tiered PMPM payment based on enrollee eligibility category and patient severity / risk: Tier 5 (Adult) $80.39 PMPM; Tier 6 (Child) $103.39 PMPM: Tier 7 (Adult Integrated Case Management (ICM)) $280.39 PMPM; and Tier 8 (Child ICM) $303.39 PMPM.

Research analyzing Medicaid costs and utilization data found Iowa's health home program had a positive effect on Medicaid expenditures and emergency department visits: enrollees had average monthly healthcare costs that were $132 less than non-health home enrollees.[24] Every additional month in the health home program was associated with an almost $11 reduction in PMPM costs, and even greater incremental savings among individuals enrolled for greater than one year. Finally, emergency department utilization that did not result in a hospital stay was significantly less among health home enrollees when compared with non-health home enrollees, and average emergency department costs were nearly $12 less PMPM.

WASHINGTON

Washington health home program targets individuals with qualifying "chronic conditions," such as cancer, renal failure, HIV/AIDS, and neurological diseases; and are at risk for developing a second condition. High risk individuals—or those flagged with a risk score of 1.5 or greater, as determined by PRISM (Predictive Risk Intelligence SysteM (PRISM) are considered eligible [25]

Washington's Health Care Authority (HCA) contracts directly with "lead entities" which are managed care organizations or qualifying community-based organizations. Lead entities in turn contracts with care coordination organizations (CCO), which includes entities such as, Area Agencies on Aging (AAA),primary care practices, child social service agencies, community health centers, HIV/AIDs networks, mental health clinics, and substance use disorder (SUD) specialists. [26]

Washington pays health home providers for initial outreach, health screening, assessments, and care planning in the form of a one-time payment of $252.93, and then monthly on a tiered PMPM basis (only for months that an encounter is submitted by the provider): $172.61 PMPM for intensive care coordination, and $67.50 PMPM for low-level care coordination.[27]

An important feature of Washington's health home program is the Health Action Plan, which provides documentation of an initial screening and the care plan developed by the Care Coordinator, the client, the family, the parent and/or their caregiver. These are especially useful to obtain critical information that may not be captured elsewhere and to support patient engagement in their own care plan.

23 Centers for Medicare & Medicaid Services. (April 2018). State-by-State Health Home State Plan Amendment Matrix. Retrieved September 16, 2018 from Medicaid.gov.

[24] Shane, D., Nguyen-Hoang, P., Bentler, S., et al. (2016). Medicaid health home reducing costs and reliance on emergency department; evidence from Iowa. Medical Care. 752-757.

[25] Washington State Department of Social & Health Services, Aging and Long-Term Support Administration. (2018). Fact Sheet: Programs and Initiatives Health Homes.

[26] Patient-Centered Primary Care Collaborative. (February 2016). Health Homes for Washington State. Retrieved September 18, 2018 from: https://www.pcpcc.org/initiative/health-homes-washington-state.

[27] Patient-Centered Primary Care Collaborative. (February 2016). Health Homes for Washington State. Retrieved September 18, 2018 from: https://www.pcpcc.org/initiative/health-homes-washington-state.

During the first two years of Washington's health home program, over $67 million in Medicare savings was realized, and the state received more than $20 million in Medicare savings dollars.[28] [29] In addition, rates of inpatient hospital admissions that were either flat or increasing during the pre-health home period appear to be decreasing during the post-health home implementation period, and more than 50 percent of health home enrollees reported that they had experienced significant improvements in their quality of life resulting from the health home program.[30]

CHALLENGES, LESSONS LEARNED, AND OUTCOMES ACROSS STATES AND HEALTH HOME PROGRAMS

Challenges

- Many states have little experience reimbursing providers for care coordination, and variation between and within states with regard to healthcare costs, delivery system models, and provider infrastructure for care coordination makes determining an appropriate payment amount difficult;[31]
- There is considerable variation among health home states in availability / functionality of HIT infrastructure and technical / financial assistance, as well as the extent to which individual providers use HIT and data analytics to coordinate and manage care. Barriers to greater adoption and use of HIT include:[32] [33]
  - cost and limits of technology needed;
  - use of different HIT products and various stages of adoption and implementation of HIT among providers in a healthcare community;
  - misconceptions about federal and state HIT privacy laws and regulations;
  - lack of technical assistance to providers;
  - patient resistance to using electronic portals; and
  - workflow issues.
- Challenges to engaging providers in data analytics include:[34]
  - difficulty using the technology;
  - low adoption of available reports and tools; and
  - lack of baseline data for examining changes over time.

[28] RTI & Walsh, E., Anderson, W., Greene, A., et al. (January 2016). Measurement, Monitoring, and Evaluation of the Financial Alignment Initiative for Medicare-Medicaid Enrollees, Preliminary Findings from the Washington MFFS Demonstration. Retrieved September 18, 2018 from: https://innovation.cms.gov/Files/reports/fai-wa-prelimppone.pdf.

[29] The approach to the savings calculation is to compare the trend (as opposed to the level) of PMPM expenditures of enrollees in the program to the trend of the PMPM of enrollees in a comparison group.

[30] RTI & Walsh, E., Anderson, W., Greene, A., et al. (January 2016). Measurement, Monitoring, and Evaluation of the Financial Alignment Initiative for Medicare-Medicaid Enrollees, Preliminary Findings from the Washington MFFS Demonstration. Retrieved September 18, 2018 from: https://innovation.cms.gov/Files/reports/fai-wa-prelimppone.pdf.

[31] Families USA. (February 2013). Holding Health Homes Accountable for High-Quality Care: Payment and Quality Measures. Retrieved September 18, 2018 from: https://familiesusa.org/sites/default/files/product_documents/Health-Homes-Payment-and-Quality-Measures.pdf.

[32] Auxier, A., Hopkins, B., & Reins, A. (2015). Under construction: one State's approach to creating health homes for individuals with serious mental illness. AIMS Public Health. 163-182.

[33] Spillman, B., Allen, E., & Hayes, E. (April 2016). Evaluation of the Medicaid Health Home Option for Beneficiaries with Chronic Conditions: Progress and Lessons Learned from the First States Implementing Health Home Programs, Annual Report, Year 4. Washington, D.C.: Office of Disability, Aging and Long-Term Care Policy, Office of the Assistant Secretary for Planning and Evaluation.

[34] Spillman, B., Allen, E., & Hayes, E. (April 2016). Evaluation of the Medicaid Health Home Option for Beneficiaries with Chronic Conditions: Progress and Lessons Learned from the First States Implementing Health Home Programs, Annual Report, Year 4. Washington, D.C.: Office of Disability, Aging and Long-Term Care Policy, Office of the Assistant Secretary for Planning and Evaluation.

- States have found it difficult to integrate existing state requirements for targeted case management within the health home program without duplicating services.[35]

Lessons Learned

- Features of successful health homes include strong leadership and staff buy-in, well-developed infrastructure (including HIT), available technical and financial resources for practice changes, and previous experience with medical home-type care and care management.[36]
- States have reported that serving both children and adults in one health home program is challenging, and have responded by using providers that serve a specific population,[37] such as pediatric providers for children, and OB providers for pregnant women;
- Depending on the enrollee populations being served, different payment arrangements may best facilitate program sustainability while also incentivizing high-quality care and provider transitions; among stable populations, a flat PMPM rate may suffice, whereas more complex patients may best be served through fee-for-service (FFS) or tiered payment arrangements; there is no one-size-fits-all payment arrangement that works for every state and every health home enrollee population.[38]
- Most states found their infrastructure for collecting and analyzing data from providers to be insufficient to conduct self-evaluation of their health home programs;[39]
- Identifying and enrolling individuals is an issue; states have responded by using technology to assign a risk score to identify and prioritize enrollees for health home programs;[40] and
- Coordinating between health homes and MCOs has required states to define roles and responsibilities for each organization, which are then often explicitly included in contracts.[41] [42]

Outcomes

- In most states, early results suggest the health home program improves care for patients and sometimes has desired effects on utilization and costs.[43] [44]

[35] Auxier, A., Hopkins, B., & Reins, A. (2015). Under construction: one State's approach to creating health homes for individuals with serious mental illness. AIMS Public Health. 163-182.

[36] Spillman, B., Allen, E., & Hayes, E. (April 2016). Evaluation of the Medicaid Health Home Option for Beneficiaries with Chronic Conditions: Progress and Lessons Learned from the First States Implementing Health Home Programs, Annual Report, Year 4. Washington, D.C.: Office of Disability, Aging and Long-Term Care Policy, Office of the Assistant Secretary for Planning and Evaluation.

[37] Auxier, A., Hopkins, B., & Reins, A. (2015). Under construction: one State's approach to creating health homes for individuals with serious mental illness. AIMS Public Health. 163-182.

[38] Families USA. (February 2013). Holding Health Homes Accountable for High-Quality Care: Payment and Quality Measures. Retrieved September 18, 2018 from: https://familiesusa.org/sites/default/files/product_documents/Health-Homes-Payment-and-Quality-Measures.pdf.

[39] Spillman, B., Allen, E., & Hayes, E. (April 2016). Evaluation of the Medicaid Health Home Option for Beneficiaries with Chronic Conditions: Progress and Lessons Learned from the First States Implementing Health Home Programs, Annual Report, Year 4. Washington, D.C.: Office of Disability, Aging and Long-Term Care Policy, Office of the Assistant Secretary for Planning and Evaluation.

[40] Auxier, A., Hopkins, B., & Reins, A. (2015). Under construction: one State's approach to creating health homes for individuals with serious mental illness. AIMS Public Health. 163-182.

[41] Spillman, B., Allen, E., & Hayes, E. (April 2016). Evaluation of the Medicaid Health Home Option for Beneficiaries with Chronic Conditions: Progress and Lessons Learned from the First States Implementing Health Home Programs, Annual Report, Year 4. Washington, D.C.: Office of Disability, Aging and Long-Term Care Policy, Office of the Assistant Secretary for Planning and Evaluation.

[42] Auxier, A., Hopkins, B., & Reins, A. (2015). Under construction: one State's approach to creating health homes for individuals with serious mental illness. AIMS Public Health. 163-182.

[43] Spillman, B., Allen, E., & Hayes, E. (April 2016). Evaluation of the Medicaid Health Home Option for Beneficiaries with Chronic Conditions: Progress and Lessons Learned from the First States Implementing Health Home Programs, Annual Report, Year 4. Washington, D.C.: Office of Disability, Aging and Long-Term Care Policy, Office of the Assistant Secretary for Planning and Evaluation.

[44] Auxier, A., Hopkins, B., & Reins, A. (2015). Under construction: one State's approach to creating health homes for individuals with serious mental illness. AIMS Public Health. 163-182.

V. Analyses to identify possible health home target populations

To understand which populations may be targeted for a potential health home option, Milliman applied the Chronic Illness and Disability Payment System (CDPS) combination with Medicaid Rx (CDPS+MRx) to Alaska's Medicaid SFY 2017 claims and pharmacy data to identify patients with chronic conditions. Milliman also identified claim costs that were potentially avoidable and attached those to members with chronic conditions. This allowed us to flag prevalent chronic conditions that are associated with high costs and have the most opportunity for savings if appropriate care management and coordination activities are applied.

The methods used are detailed in the *Data Sources, Methods, and Assumptions* section. However two caveats are worth highlighting:

- While generally, "potentially avoidable costs" represents claims costs that may be avoidable with appropriate evidence-based care and care coordination, it is important to note that these claims would need further clinical investigation to determine whether they are all truly avoidable.
- Each member may have multiple CDPS conditions. There are a significant number of potential combinations of CDPS conditions and creating a mutually exclusive listing of these permutations is cumbersome and not particularly meaningful to support review and decision-making. Given this complexity, Milliman analyzed the data viewing each CDPS condition on its own. For example, a member may be identified to have both Cardiovascular and Pulmonary CDPS conditions. This member's expenses were included in the data for *both* Cardiovascular and Pulmonary categories. This inflates the estimates for each category but provides an estimate that can be initially reviewed and flagged for further investigation.

The results of the CDPS and potentially avoidable costs analysis are presented in Table 1. Key findings include:

- The Psychiatric CDPS is the most prevalent CDPS condition category and also has the greatest total cost.
- The Cardiovascular CDPS condition has the most potentially avoidable costs as well as the second highest total cost and prevalence.
- Of the top ten CDPS categories, members identified as having a Pulmonary or Metabolic condition are associated with the most avoidable costs in relation to their total costs.
- Members identified as having a Developmental Disability condition, were shown to have minimal avoidable cost in relation to their total costs.

TABLE 1 State of Alaska Department of Health and Social Services Health Homes Considerations SFY 2017 Total Costs and Avoidable Cost by CDPS Category-- Statewide			
Condition	**Prevalence (Members)**	**Avoidable Cost (Millions)**	**Total Cost (Millions)**
Psychiatric (PSY)	34,349	$ 104.2	$ 898.0
Cardiovascular (CAR)	30,141	138.7	780.5
Gastro Intestinal (GI)	15,340	89.8	525.2
Skeletal (SKC)	20,602	76.7	523.9
Pulmonary (PUL)	18,922	102.0	522.8
Central Nervous System (CNS)	10,459	81.6	497.7
Metabolic (MET)	10,016	77.9	390.6
Newborn (BABY)	17,135	59.8	379.6
Renal (REN)	7,797	56.6	369.2
Substance Abuse (SUB)	14,903	61.4	365.9
Skin (SKN)	11,629	65.4	307.8
Infectious (INF)	6,155	63.3	270.4
Diabetes (DIA)	10,140	49.5	263.5
Developmental Disability (DD)	2,199	4.2	179.8
Eye (EYE)	6,447	23.0	145.9
Cerebrovascular (CER)	2,200	24.6	131.7
Hematological (HEM)	2,215	25.5	131.1
Pregnancy (PREG)	7,390	12.8	115.8
Cancer (CAN)	2,935	10.2	110.4
Genital (GEN)	4,026	18.8	102.3
HIV/AIDS (AIDS)	471	3.0	19.9

Table 2 shows the total costs associated with members with comorbid conditions, by the number of comorbid conditions. Key findings include:

- Not surprisingly, total costs increases with the number of CDPS conditions that the member has.
- Members with two or more CDPS chronic conditions make up 28.5% of total membership but they contribute to 75.2% of total costs.

TABLE 2 State of Alaska Department of Health and Social Services Health Home Considerations SFY 2017 Total Costs and Cost by Number of CDPS Conditions - Statewide					
	Average Monthly Members	**% of Total Membership**	**Total Costs (Millions)**	**% of Total Costs**	**PMPM**
Zero Conditions	92,038	50.9%	$ 158.4	8.4%	$ 143.44
One Condition	37,241	20.6%	306.2	16.3%	685.07
Two Conditions	20,314	11.2%	303.4	16.2%	1,244.56
Three Plus Conditions	31,267	17.3%	1,108.7	59.1%	2,954.98
Total/Composite	**180,860**	**100.0%**	**$1,876.7**	**100.0%**	**$864.70**

Taking these initial analyses together, and considering chronic conditions and populations targeted by other states for their health home option, the following nine CDPS condition categories are worth further consideration for the health home option:

1. Psychiatric (PSY)
2. Cardiovascular (CAR)
3. Gastro Intestinal (GI)
4. Pulmonary (PUL)
5. Central Nervous System (CNS)
6. Metabolic (MET)
7. Renal (REN)
8. Substance Abuse (SUB)
9. Diabetes (DIA)

Further analyses for each of the nine targeted conditions and their interaction effect with other CDPS conditions are shown in Appendix A for each of the three target regions. The prevalence and PMPM cost by CDPS condition and region are shown in Appendix B. Appendix A shows that the average PMPM cost for members with three or more CDPS conditions is substantially higher (on average, more than twice) than members with two CDPS conditions.

Other states that have focused on medically complex members and individuals with multiple chronic conditions find that the target population includes a large share of the dually eligible population. This is not a surprise since the dual population include the frail elderly and older individuals with multiple chronic conditions that need higher intensity services and long term services and support (LTSS). It is important to note, that any cost savings resulting from a health home program related to the dual population would also accrue to Medicare. While health home programs are not to target population by eligibility categories, such as the dual population directly, Appendix C shows statewide estimates of the costs associated for each eligibility category with two or more CDPS. Tribal cuts are also included for comparison. We see that non-institutional population segments that are the highest cost are the SSI/Disabled-Tribal ($2,907 PMPM); Dual-Tribal ($2,478 PMPM) and the Medicaid Expansion-Tribal ($2,345 PMPM). This implies that any potential cost savings resulting from a health home program that targets populations with two or more chronic conditions would likely result in some cost savings to the Medicare program as well.

The rationale for establishing the health homes option under the ACA was to give states the flexibility to design programs that can better manage and achieve savings for members that are at risk or have multiple chronic conditions or comorbid conditions. It is believed that better management and care coordination of members having these comorbid conditions would lead to savings for the Medicaid program. **Our analysis shows potential opportunities for targeting the nine CDPS categories listed above, especially if members have three or more CDPS conditions, and if the conditions are associated with high potentially avoidable costs.** Thus selection of the target conditions should consider potential savings associated with better managing multiple chronic conditions. For example, individuals with psychiatric disorders and two or more CDPS conditions in Region 2 are associated with an average $3,509 PMPM. Members with psychiatric conditions are also associated with high potentially avoidable costs, meaning that applying evidence-based care management and care coordination activity can affect care outcomes and costs.

VI. Other Considerations for Alaska

Besides selecting potential conditions to target, there are other important design and capacity considerations for Alaska.

Experience with patient-centered care models: As discussed earlier in the report, states that had prior experience with the medical home model had a better chance at successful implementation of the health home options. Alaska has had some experience in PCMH. Providence Family Medical Center, a clinic providing primary care and behavioral health care services has NCQA PCMH recognition. Under the Coordinated Care Demonstration Project (CCDP) Request for Proposals, DHSS had received a proposal from Providence Family Medical Center (Providence) to build on their current experience in providing care to a specific geographic region and target population. Providence is a level 3 patient centered medical home (PCMH) serving patients in the entire Anchorage Bowl and some patients in Mat-Su Valley and the Kenai Peninsula—which includes parts of the designated health home Region 1 and Region 2 included in this analysis. They proposed to leverage the use of integrated direct care teams to work with the PCPs to increase access, decrease inappropriate utilization and improve patient outcomes for Medicaid patients in their region. Providence proposed to be reimbursed on a FFS level in addition to receiving a PMPM fee to support care coordination and management functions.[45] As of June 2018, DHSS stated they intended to award Providence to support their demonstration of a patient-centered medical home model in the Anchorage area. DHSS may wish to consider whether Providence or other providers with experience the medical home model, would expand to other regions outside the Anchorage area, especially if the CCDP demonstration proves successful.

Fundamental Design Decisions. As discussed, states have had to make several design decisions to implement health homes including those related to target populations, regions, additional services which may be provided in addition to the required core service; providers who are eligible to participate in program; payment model; enrollment policy and methods; interaction with other initiatives. For example, a few of these design considerations are discussed below:

- **Designated providers:** As discussed there are three types of possible health home providers: individual providers (designated providers), healthcare teams comprised of professionals (teams of health professionals), or healthcare teams that meets established standards and system infrastructure requirements (health teams). The type of eligible provider that Alaska permits for participation should be driven by
    - Goals for the program: for example, is the state using the health home option a vehicle to help encourage behavioral health integration or care coordination among various provider specialties?
    - Availability and access considerations: Lack of a specialists in a particular region may hamper the ability to drive savings. Allowing teams of professionals across practices may increase the health home capacity.

  In addition, the state should consider how arrangements among providers be formalized, for example, to share appropriate health information of members in the health home, conduct warm hand offs, and reduce duplicative unnecessary care.
- **Payment models:** States have implemented a variety of payment models for the health home option. Options include:
    - Enhanced fee-for-service rates for certain eligible health home services

[45] Milliman. February 2018. Financial Analysis of Coordinated Care Demonstration Project Proposal: Providence Family Medicine Center

  - PMPM rate for core health home services
  - Tiered PMPM rates which may include tier 1 PMPM for 1-3 chronic conditions; Tier 2 for 4-6 chronic conditions); Tier 3 for 7-9 chronic conditions; etc.
  - Case rate, bundled or episodic based payments for all services related to an episode of care
  - Risk-adjusted capitated payments through a managed care program

  Payment model selection should be driven by what outcomes the health home program seeks to encourage and which models are best aligned. At the same time, system feasibility is also a consideration since some payment models are more complex to implement and operationalize than others. For example, risk adjusted payment would require collecting and calculating risk scores to adjust base payment rates.

- **Enrollment policy and methods**: DHSS would have to determine how to identify potential members for health home participation. As discussed, other states made a concerted effort to conduct health assessments to determine eligibility and to enroll members accordingly. Once members are identified as potential candidates key questions to address include: Would enrollment in be automatic with an opt-out or would members have to actively opt-in? If members wish to drop out, is there an option to do so or are they locked in for a duration? Will policies differ for the tribal population? What communications will be required of DHSS and / or the participating health home provider?
- **Interactions with other initiatives:** Finally, as noted earlier in this report, Alaska has undertaken several initiatives that can work in tangent with a health home option. For example, if the health home option were to select serious mental health disorders as one of the chronic conditions to target, interaction with the 1115 Waiver application must be considered. Would the behavioral health ASO be responsible for paying the health home, and if so, how would payment arrangements be designed? How would the mechanics of enrollment work, for example if a health home provider were to identify a candidate for the health home program, would the ASO or DHSS be responsible for health home program outreach and enrollment? There are similar considerations for the MCO contract underway, however, the MCO contract is for the Anchorage and Mat-Su (Region 1); therefore interactions with the MCO would not be applicable in the designated health home Region 2 and 3.

VII. Data Sources, Methods, and Assumptions

DATA SOURCES

DHSS provided Milliman with the quarterly legislative audit data that included eligibility, medical, and retail pharmacy Medicaid claims incurred from July 2011 to June 2017 and paid through March 2018. Enrollment, medical claims, and pharmaceutical claims data for state fiscal year (SFY) 2017 (July 1, 2016 through June 30, 2017) were used for the data analyses included in this report.

METHODS

In order to evaluate potential populations with chronic conditions to target for a health home option, Milliman processed Alaska's Medicaid SFY 2017 claims data using the Chronic Illness and Disability Payment System (CDPS) version 6.3 in combination with Medicaid Rx (CDPS+MRx). The CDPS is a classification system, developed by University of California at San Diego for Medicaid programs to use to make health-based capitated payments for Medicaid beneficiaries.[46] We limited this analysis to members eligible in June 2017 and flagged them for each chronic condition based on their diagnosis and prescription drug history during the SFY 2017 experience period. We limited the chronic conditions in this analysis to those identified using CDPS+MRx. As a result, the prevalence and cost for asthma is not specifically identified because it is included in the pulmonary chronic condition.

PRM Analytics® Potentially Avoidable Cost Logic

Milliman PRM Analytics (PRM) is a proprietary algorithm to retrospectively identify potentially avoidable healthcare expenses. PRM defines potentially avoidable healthcare expenses as acute care healthcare expenses that could potentially be avoided through best practice management of ambulatory sensitive conditions (in the ambulatory setting). PRM also has a proprietary predictive analytic to determine which patients have high likelihood for potentially avoidable healthcare expenses in the next 6 months. PRM's retrospective potentially avoidable healthcare expense algorithm groups all services associated with the potentially avoidable episode together and evaluates the entire episode against the potentially avoidable healthcare expense logic. The potentially avoidable episode may include services related to: transportation, facility charges, and physician charges. Milliman developed the criteria for services that are considered potentially avoidable by relying on evidence-based practice literature.

Milliman also identified claim costs that were potentially avoidable and attached those to members with chronic conditions. We did this using the PRM Analytics® Potentially Avoidable Cost Logic (see box). While generally, these represents claims costs that are potentially avoidable with appropriate evidence-based care and care coordination, it is important to note that these claims would need further clinical investigation to determine whether they are all truly avoidable.

ASSUMPTIONS

Since each member can be identified as having multiple CDPS conditions, analysis of analyzing each individual condition represents a challenge. There is a significant number of potential combinations of CDPS conditions and creating a mutually exclusive listing of these conditions is cumbersome and not particularly meaningful to support review and decision-making. Given this complexity, Milliman analyzed the data viewing each CDPS condition on its own. For example, a member may be identified to have both Cardiovascular and Pulmonary CDPS conditions. This member's expenses were included in the data for the Cardiovascular and Pulmonary categories. This inflates the estimates when summing up totals from all condition categories, but provides an estimate that can be initially reviewed at the condition level and flagged for further investigations.

[46] For more information on the CDPS, see http://cdps.ucsd.edu/

VIII. Caveats and Limitations

The services provided for this correspondence were performed under the signed contract between Milliman and the State of Alaska Department of Health and Social Services approved October 27, 2016.

This report has been prepared solely for the internal business use of and is only to be relied upon by the State of Alaska Department of Health and Social Services, related Divisions, and their advisors. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work. Any distribution of the information should be in its entirety. Any user of the data must possess a certain level of expertise in actuarial science and healthcare modeling so as not to misinterpret the information presented.

In performing this analysis, we relied on data and other information provided by the State of Alaska Department of Health and Social Services, related Divisions, and their advisors. We have not audited or verified this data and other information. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete.

We performed a limited review of the data used directly in our analysis for reasonableness and consistency and have not found material defects in the data. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or for relationships that are materially inconsistent. Such a review was beyond the scope of our assignment.

Differences between our projections and actual amounts depend on the extent to which future experience conforms to the assumptions made for this analysis. It is certain that actual experience will not conform exactly to the assumptions used in this analysis. Actual amounts will differ from projected amounts to the extent that actual experience deviates from expected experience.

Qualifications:

Guidelines issued by the American Academy of Actuaries require actuaries to include their professional qualifications in all actuarial communications. Susan Pantely and Jeremy Cunningham are members of the American Academy of Actuaries, and they meet the qualification standards for performing the analyses in this report.

Appendix A: Chronic Condition Prevalence and Costs by Number of Chronic Condition

Appendix A State of Alaska Department of Health and Social Services Health Home Considerations SFY 2017 Exposure and Cost by Region and Number of Chronic Condition for Targeted Chronic Conditions							
	Number of	Average Monthly Members			PMPM		
CDPS Category	CDPS Conditions	Region 1	Region 2	Region 3	Region 1	Region 2	Region 3
Cardiovascular (CAR)	1	1,759	480	129	$ 325	$ 367	$ 406
	2	3,113	837	226	842	919	998
	3+	12,637	3,131	741	2,932	3,444	3,055
Central Nervous System (CNS)	1	402	136	30	884	1,824	2,101
	2	826	213	43	1,805	2,509	2,372
	3+	5,287	1,423	255	4,553	5,371	4,691
Diabetes (DIA)	1	360	63	14	486	438	302
	2	942	214	66	900	839	528
	3+	5,217	1,156	272	2,660	3,280	2,497
Gastro Intestinal (GI)	1	786	179	50	415	497	576
	2	1,207	300	71	1,012	1,340	893
	3+	6,929	1,741	427	3,743	4,059	3,105
Metabolic (MET)	1	814	217	34	355	677	533
	2	876	226	52	1,003	1,183	1,047
	3+	4,411	1,055	256	4,437	4,972	3,700
Psychiatric (PSY)	1	5,134	1,516	372	1,013	1,089	1,573
	2	4,939	1,365	375	1,501	1,360	1,691
	3+	11,245	3,008	705	3,089	3,509	3,123
Pulmonary (PUL)	1	2,262	391	91	290	334	410
	2	2,022	468	113	783	1,034	959
	3+	7,125	1,798	405	3,407	3,876	3,532
Renal (REN)	1	229	42	10	1,174	1,284	357
	2	463	115	18	2,065	2,292	1,447
	3+	4,471	1,021	211	4,350	5,120	3,800
Substance Abuse (SUB)	1	948	266	81	591	580	707
	2	1,676	485	102	1,176	1,063	1,209
	3+	5,450	1,489	347	2,884	2,961	3,131
Composite (Mutually Exclusive)	0	53,089	12,863	2,697	119	124	160
	1	21,577	5,523	1,267	626	765	905
	2	12,192	3,141	782	1,183	1,322	1,335
	3+	20,082	5,058	1,162	2,840	3,254	2,788
	All	**106,940**	**26,584**	**5,909**	**$ 853**	**$ 994**	**$ 992**

Notes:

Region 1: Anchorage Municipality; Fairbanks North Star Borough; Mat - Su Borough (including Wasilla),
Region 2: Northern Southeast Region (including Juneau); Kenai Peninsula Borough (including Soldotna), and
Region 3: Southern Southeast Region (including Ketchikan);

The above table should be interpreted as follows. For the CDPS category of Diabetes and two CDPS conditions, there are 942 average monthly members in Region 1 with diabetes and one other CDPS condition, with an average PMPM expense of $900. For the CDPS category of Diabetes and one CDPS condition, there are 360 average monthly members in Region 1 with diabetes and no other CPDS condition, with an average PMPM expense of $486. The "Composite" rows groups all members into one of four CDPS condition buckets and eliminates double counting of members. For example, a member having CDPS conditions of renal and diabetes would be counted once in the two CDPS groups under the Composite rows. For all the other rows, a member could be counted in multiple lines. So a member with diabetes and renal conditions would be counted in both the renal and diabetes CDSP categories above.

Appendix B: Prevalence and Costs by Chronic Conditions

Appendix B State of Alaska Department of Health and Social Services Health Home Considerations SFY 2017 Prevalence and PMPM Cost by Region for CDPS Categories						
	Prevalence			PMPM Cost		
CDPS Category	Region1	Region2	Region3	Region1	Region2	Region3
HIV/AIDS (AIDS)	0.3%	0.2%	0.4%	$ 3,931	$ 3,675	$ 3,000
Newborn (BABY)	8.1%	7.4%	8.1%	2,221	2,298	2,639
Cancer (CAN)	1.5%	1.8%	1.9%	3,456	3,900	3,118
Cardiovascular (CAR)	16.4%	16.7%	18.6%	2,299	2,637	2,318
Cerebrovascular (CER)	1.3%	1.2%	1.2%	5,073	6,503	4,811
Central Nervous System (CNS)	6.1%	5.4%	6.0%	3,979	4,754	4,152
Developmental Disability (DD)	1.4%	1.2%	1.2%	6,907	7,868	4,357
Diabetes (DIA)	6.1%	5.4%	6.0%	2,285	2,790	2,038
Eye (EYE)	3.6%	3.4%	2.5%	1,918	2,474	2,176
Genital (GEN)	2.1%	2.5%	2.1%	2,127	2,481	2,503
Gastro Intestinal (GI)	8.3%	8.4%	9.3%	3,080	3,404	2,589
Hematological (HEM)	1.3%	1.2%	1.2%	5,141	5,309	4,727
Infectious (INF)	3.4%	3.3%	3.0%	4,040	4,283	4,165
Metabolic (MET)	5.7%	5.6%	5.8%	3,399	3,779	2,980
Pregnancy (PREG)	3.6%	3.1%	2.7%	1,217	1,509	1,679
Psychiatric (PSY)	19.9%	22.1%	24.6%	2,221	2,388	2,356
Pulmonary (PUL)	10.7%	10.0%	10.3%	2,324	2,854	2,590
Renal (REN)	4.8%	4.4%	4.0%	4,005	4,707	3,482
Skeletal (SKC)	11.2%	12.6%	12.7%	2,203	2,489	2,208
Skin (SKN)	5.9%	5.8%	6.3%	2,525	2,754	2,170
Substance Abuse (SUB)	7.5%	8.4%	9.0%	2,260	2,267	2,391

Notes:

Region 1: Anchorage Municipality; Fairbanks North Star Borough; Mat - Su Borough (including Wasilla),

Region 2: Northern Southeast Region (including Juneau); Kenai Peninsula Borough (including Soldotna), and

Region 3: Southern Southeast Region (including Ketchikan);

Appendix C: Cost for Members with Two or More Chronic Conditions, by Eligibility Category

Appendix C State of Alaska Department of Health and Social Services Health Home Considerations SFY 2017 Exposure and Cost for Members with Two or More CDPS Conditions by Population and Region									
		Average Monthly Members				PMPM			
Eligibility	**Tribal**	**Region1**	**Region2**	**Region3**	**Statewide**	**Region1**	**Region2**	**Region3**	**Statewide**
Dual	Non-Tribal	4,370	1,032	159	5,899	$ 1,883	$ 2,398	$ 1,754	$1,979
Dual	Tribal	988	399	116	2,512	2,727	3,216	1,350	2,478
Low-Income Family	Non-Tribal	8,235	1,690	318	10,817	1,437	1,452	1,424	1,444
Low-Income Family	Tribal	3,503	1,132	480	9,185	2,034	1,835	2,159	2,067
Medicaid Expansion	Non-Tribal	5,103	1,451	255	7,187	1,691	2,040	1,970	1,782
Medicaid Expansion	Tribal	2,427	671	238	4,790	2,369	2,237	2,467	2,345
Pregnant Women	Non-Tribal	500	84	15	628	1,282	1,670	1,670	1,343
Pregnant Women	Tribal	235	58	20	544	2,238	2,238	1,880	2,258
SSI/Disabled	Non-Tribal	3,984	893	174	5,364	1,905	2,412	2,405	2,001
SSI/Disabled	Tribal	1,207	332	111	2,260	3,086	2,606	1,874	2,907
Waiver/Institutional	Non-Tribal	1,282	361	33	1,740	8,126	9,675	10,147	8,695
Waiver/Institutional	Tribal	434	94	26	645	9,886	1,475	9,451	10,219
Total/Avg		**32,274**	**8,198**	**1,944**	**51,581**	**$ 2,214**	**$ 2,514**	**$ 2,204**	**$ 2,281**

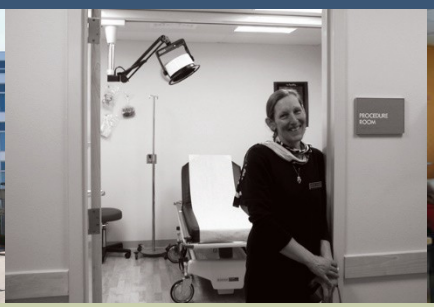
This Page Intentionally Blank

Alaska Medicaid Redesign Quality and Cost Effectiveness Targets Report

September 2018

Submitted to Valerie Davidson, Commissioner, Alaska Department of Health and Social Services

Prepared by Donna Steward, DHSS Project Lead
Alaska Medicaid Redesign Quality and Cost Effectiveness Targets Stakeholder Workgroup



GOALS FOR MEDICAID REDESIGN + EXPANSION

IMPROVE HEALTH

OPTIMIZE ACCESS

INCREASE VALUE

CONTAIN COSTS

[Page left intentionally blank]

TABLE OF CONTENTS

[Page left intentionally blank]

FOREWORD

This report is submitted to Valerie Nurr'araaluk Davidson, Commissioner, Alaska Department of Health and Social Services, from the Alaska Medicaid Redesign Quality and Cost Effectiveness Targets Stakeholder Workgroup.

ALASKA MEDICAID REDESIGN QUALITY AND COST EFFECTIVENESS TARGETS STAKEHOLDER WORKGROUP

2018 WORKGROUP MEMBERS

Samantha Ali	Occupational Therapist, Southcentral Foundation	Anchorage
David Branding	Chief Executive Officer, Juneau Alliance for Mental Health, Inc.	Juneau
Shelley Deering	Regional Manager, Airlift Northwest	Anchorage
Jerry Jenkins	Chief Executive Officer, Anchorage Community Mental Health Services	Anchorage
Keren Kelley	Executive Director, Homer Senior Citizens, Inc	Homer
Jeanette Lacey-Dunn	Director of Case Management, Bartlett Hospital	Juneau
Jacqueline Marcus-Ledford	Director of Performance Improvement, Yukon-Kuskokwim Health Corporation	Bethel
Jeannie Monk	Vice President, Alaska State Hospital and Nursing Home Association	Juneau
Nick Papacostas, MD	U.S. Army, Joint Base Elmendorf-Richardson	Anchorage
Jim Roberts	Liaison, Intergovernmental Affairs, Alaska Native Tribal Health Consortium	Anchorage
Michelle Rothoff, MD	Physician, Anchorage Neighborhood Health Center	Anchorage

ALASKA DEPARTMENT OF HEALTH AND SOCIAL SERVICES STAFF

Donna Steward	Project Leader, DHSS Office of Rate Review	Anchorage
Heidi Barnes	MAA, DHSS Office of Rate Review	Anchorage

EXECUTIVE SUMMARY

In October 2016, the Department of Health and Social Services (Department) convened the Medicaid Redesign Quality and Cost Effectiveness Targets Stakeholder Workgroup (QCE) and tasked the group with identifying Medicaid performance measures the Department could use to evaluate and monitor the overall quality of the Medicaid program during implementation of Medicaid redesign efforts. In 2017, the QCE recommended 18 Medicaid performance measures and corresponding annual and five-year performance targets for the recommended measures. The Department adopted each of the workgroup's recommendations.

The following report provides an overview of the QCE's second year activities which included affirming the process the Department will use to calculate and verify program performance against the approved measures, and affirming baseline performance calculations for those measures calculated from Alaska Medicaid claims data. During the course of the QCE workgroup's discussions, one measure was removed from the recommended list of measures and placed on the *Potential Future Measures* list. This action was necessary due to the absence of a reliable data source for performance measurement. This reduced the final list of performance measures to 17. In addition, after extensive review by the Department and its consultant Milliman, Inc., results on a second measure were placed on hold until additional assurances are received on the methodology used to calculate performance.

The report also transmits the results of the first-year of performance measured against the performance baseline for services delivered during state fiscal year 2017. Results of first-year performance demonstrate that the program met or exceeded annual performance targets for 10 measures, partially met performance targets for three measures, and failed to meet performance targets for the remaining three measures.

PROJECT BACKGROUND

Over the past two years the Department of Health and Social Services (Department) has actively pursued Medicaid program redesign opportunities outlined in Alaska Senate Bill 74 (SB74), which passed the Alaska Legislature in 2016. To support redesign efforts, the legislation also requires the Department to identify program quality and cost effectiveness measures and develop annual performance targets for those measures to monitor the Medicaid program as redesign activities unfold. The Department convened an external stakeholder workgroup to identify and recommend measures and performance targets to address this requirement. The 18-member Medicaid Redesign Quality and Cost Effectiveness Targets Stakeholder Workgroup (QCE) included representatives from hospitals, physician groups, federally qualified health centers, enrollee advocates, tribal health organizations and other health professionals. The workgroup met monthly from October 2016 through July 2017 to develop its recommendations.

At the conclusion of its work in 2017, the QCE submitted a list of 18 quality and cost effectiveness measures and corresponding annual and five-year performance targets it believed would help the Department monitor program quality as Medicaid redesign efforts evolve. The workgroup established a 10 percent performance improvement goal that each measure should either meet or exceed by the end of the five-year performance period. Corresponding annual performance targets represent the program performance necessary to achieve the 10 percent improvement goals within the five-year timeframe. Appendix A includes a description of each measure and corresponding performance goals.

The Department accepted each of the workgroup's recommended measures and performance targets. The process the QCE used to identify the recommended measures and develop the performance targets is discussed in detail in the workgroup's *Alaska Medicaid Redesign Quality and Cost Effectiveness Targets Report, September 2017* report. The report also identified varied issues with available Medicaid claims data used to inform the development of the recommended performance targets, and the lack of staff resources necessary to support the performance monitoring required under the legislation.

To inform the workgroup's development of the performance targets in 2017, the Department worked with Milliman Inc. (Milliman), which was under contract with the Department to provide actuarial support for a variety of SB74 projects. Using a subset of Alaska Medicaid claims from state fiscal years 2015 and 2016, Milliman calculated initial results for each measure requiring calculation from Medicaid claims data. The QCE used the initial results from Milliman to benchmark the annual and five-year performance targets, with the understanding that the final performance measure baselines and corresponding targets would be calculated by the Department the following year using a complete Medicaid claims data set.

The final steps necessary to operationalize the measures and performance targets were completed by the workgroup in 2018. These steps focused on affirming the Department's process for calculating measure results and affirming the measure baseline calculations. Completion of these items supports public reporting on the measures for the first time in January 2019. First-year results measure program performance during state fiscal year 2017.

The remainder of this report outlines the process the Department used to calculate and verify the algorithms used to develop baseline rates and measure performance, and transmits the results of first-year performance against the baseline rates.

METHODOLOGY

A subset of the original QCE workgroup continued its work in 2018. Participants included 11 external stakeholders representing physicians, federally qualified health centers, hospitals, tribal health organizations, provider organizations, and specialty providers. The workgroup met four times during the year and focused on two primary tasks: affirming the methodology developed by the Department to calculate performance on identified measures and affirming the baseline from which annual performance will be measured.

Each of the measures recommended by the QCE workgroup fall into one of three categories: 1) the measure (and corresponding algorithm) was developed by either the Centers for Medicare and Medicaid Services (CMS) or the National Committee for Quality Assurance (NCQA), and is a recommended national measure; 2) the measure is based on a nationally recommended measure but both the measure and the algorithm were modified to provide more specific information on Alaska Medicaid performance; or 3) the measure evaluates a unique aspect of the Alaska Medicaid program such as beneficiary satisfaction with care received or per enrollee program costs. Measures that fall into categories 1 and 2 are calculated using Medicaid claims data. A variety of sources are used to identify performance on measures included in category 3, including beneficiary surveys and program financial reports. Appendix B includes details on each measure including the data source used to identify performance.

Department staff finalized the methodology for calculating each measure in category 1 by adopting the appropriate algorithms created by either CMS or NCQA. Each measure in category 2 originated from a national measure but was modified to reflect the more specific information requested by the QCE workgroup. The algorithms for measures in category 2 were modified accordingly to align with the requested information. Each algorithm was tested using varied claim scenarios throughout the refinement process to verify the algorithm's accuracy, consistency and reliability. Milliman provided technical assistance as needed during the refinement process and helped test some of the final algorithms to validate measure results.

Once the algorithms were in final form, performance on each measure was calculated by the Department and compared to the initial results produced by Milliman in 2017. Variation between the two sets of calculations was expected given the incomplete data set available to Milliman and the refined algorithms developed by the Department. Measure results with more than a minimal difference between the Milliman initial calculations and the Department's calculations were closely scrutinized to identify the cause for the more substantive variation.

Once the internal testing and validation processes were complete, baseline performance calculations were developed using Medicaid claims information from state fiscal year 2016 and the department's refined algorithms. The baseline results and noted anomalies were presented to the QCE workgroup for review and discussion in April 2018. (Appendix B includes the complete list of measures and measure details). During this meeting, the Department identified three measures for which there remained broader than expected variation between the Department's baseline calculations and Milliman's initial calculations. These measures included:

- B.1 Follow-up After Hospitalization for Mental Illness

- B.3 Initiation and Engagement of Alcohol and Other Drug Dependence Treatment
- CH.3 Hospital Readmission Within 30 Days of Discharge

Given that all known variants between the data sets had been identified and accounted for at the time, the QCE workgroup recommended that the algorithms developed by the Department be further reviewed by Milliman to identify the cause of and resolve the remaining discrepancies. Two additional measures (CH.2 Comprehensive Diabetes Care A1C Testing and C.2 Number of Hospitalizations for Chronic Obstructive Pulmonary Disease) were also submitted to Milliman for testing to further verify and support the reliability of the Department's algorithms that produced results consistent with Milliman's initial rates.

"Based on our review of DHSS methodology and comparison of DHSS results relative to our independent analysis, we believe that DHSS has established a reasonable methodology to both establish the baseline levels for each of the quality measures and track progress towards DHSS goals over time."

Milliman Inc., Alaska Medicaid Quality Measures: Documentation of Peer Review. September 4, 2018

The results of this process were instructive and exposed additional deficiencies in the data available to Milliman when calculating initial rates. Discrepancies with the calculation of measure CH.3 Hospital Readmission within 30 Days of Discharge persisted throughout this review. It was decided that in order to ensure the reliability of the algorithm and calculation methodology for this measure, assistance would be requested from the National Committee for Quality Assurance before performance on this measure is reported. The Department placed this measure on hold.

After working through the final data discrepancies on the remaining measures, Milliman affirmed the reasonableness of the methodology and algorithms developed by the Department and the use of the algorithm methodology to help track progress toward meeting program performance goals. Appendix C includes the summary of Milliman's report on the final analysis (full report is available upon request).

Measure B.2 - Medical Assistance with Smoking and Tobacco Use

Prior to affirming the baseline, it was also necessary for the QCE workgroup to determine the disposition of measure B.2 Medical Assistance with Smoking and Tobacco Use Cessation. During the workgroup's initial discussions on the recommended measures, members felt strongly that a measure evaluating program efforts to reduce smoking and tobacco use must be included due to the high costs inherent in providing health care services to an individual with a smoking related illness. Unfortunately, due to limitations of the Medicaid claims data and the Department's commitment to not require additional provider reporting, the QCE workgroup was unable to find a measure that could reliably and consistently identify the number of Medicaid beneficiaries who either smoked or used a tobacco product.

Rather than abandon the issue, the QCE workgroup included a proxy measure on the list of measures submitted to the Department in 2017, with a directive that the Department further explore options for identifying a quantifiable measure that could be brought to the QCE workgroup for consideration in 2018.

To further explore this issue and address the QCE workgroup's goal, in 2018 the workgroup met with staff members from the Department's Division of Public Health to learn more about population health surveys and how information gathered through such could potentially be used to help measure Medicaid program performance on smoking and tobacco use cessation. After an extensive discussion on the applicability of population health surveys to specific Medicaid program performance, the QCE workgroup rejected the use of information gathered through a population survey as an effective means to measure activities within the Medicaid program.

Margaret Brodie, Director of the Department's Division of Health Care Services, shared with the QCE workgroup that the Department was exploring a Care Coordination Demonstration Project that involves a managed care option for Medicaid enrollees in the Municipality of Anchorage and Matanuska-Susitna Borough. The project is expected to begin in April 2019, and may provide new opportunities for gathering the information necessary to support a measure on smoking and tobacco use through the managed care contractor. With this opportunity on the horizon, the QCE workgroup voted to move the proxy measure B.2 from the active measure list to the "*Potential Future Measures*" list (Appendix D). The *Potential Future Measures* list was developed by the workgroup in 2017 and includes those measures identified by the QCE workgroup that could not be implemented without either adoption of preventive services regulations or identification of a reliable data source. Measure B.2 will remain on the *Potential Future Measures* list until a reliable data source is identified.

DEMONSTRATING PERFORMANCE

As noted above, the QCE workgroup used the initial measure calculations developed by Milliman to inform development of annual performance targets. As the first step to benchmarking performance, the QCE workgroup set a basic goal to improve performance on each measure by 10% within five years. Annual performance targets were then established based on the final five-year performance goals.

While the QCE workgroup was able to establish the performance targets in 2017 using the initial results prepared by Milliman, these calculations served as proxy rates until the final baseline could be calculated. The Department calculated the final baseline performance results in 2018 after all applicable algorithms had been finalized. The baseline results represent Medicaid services delivered in state fiscal year 2016 and serve as the anchor for determining performance improvement over the next five years.

*Performance improvement of **10%** is expected for each measure by 2021*

In June 2018, the QCE workgroup affirmed the baseline results for all measures except measures B.1, B.3 and CH.3, which as previously noted were under further review by Milliman. The QCE workgroup's established performance targets were applied to the baseline rates, establishing the final performance

goals. The complete list of measures and corresponding final annual and five-year performance goals can be found in Appendix A.

With the baseline affirmed and the targets for final performance goals established, the Department calculated the first year of performance against the baseline. Using Medicaid claims from services delivered during state fiscal year 2017, first year results indicate the program met or exceeded annual performance targets for 10 measures, partially met performance targets for three measures, and failed to meet performance targets for the remaining three measures. Table 1 includes results of program performance in 2017. Several of the measures require separate calculations of performance by age or category cohort. A value of Y or N in the table below notes that the performance target was either met or not met for the cohorts reported under the measure. A value of P identifies performance was met on at least one of the cohorts reported (Appendix A includes all results by applicable age or category cohort).

Table 1. Results of 2017 First-Year Performance on QCE Measures

Measure	Met 2017 Performance Target
A.1 Child and Adolescents' Access to Primary Care	N
A.2 Ability to Get Appointment With Provider As Needed	Y
B.1 Follow-up After Hospitalization for Mental Illness	Y
B.3[1] Alcohol and Other Drug Dependence Treatment	Y
CH.1 Emergency Department Utilization	N
CH.2 Diabetic A1C Testing	Y
CH.3 Hospital Readmission Within 30 days - All Diagnoses	On Hold
C.1 Medicaid Spending Per Enrollee	N
C.2 Hospitalization Chronic Obstructive Pulmonary Disease	Y
C.3 Hospitalizations Attributed to Diabetic Condition	Y
C.4 Hospitalizations Attributed Congestive Heart Failure	P
M.1 Live Births Weighing Less Than 2,500 Grams	Y
M.2 Follow-up After Delivery	Y
M.3 Prenatal Care During First Trimester	Y
P.1 Childhood Immunization Status	Y
P.2 Well-Child Visits for Children 0-6 by Age	P
P.3 Developmental Screening in the First Three Years of Life	P

Y = Met Performance Goal; N = Did Not Meet Performance Goal; P = Partially Met Performance Goal

A NATIONAL PERSPECTIVE

For additional verification on the reliability of the final algorithms, Department staff worked informally with quality management staff from Mathematica Policy Research (Mathematica) to gather additional feedback on the measures and corresponding algorithms. Although Mathematica was unable to test Alaska's algorithms with relevant Medicaid claims, they were able to provide comment on how closely the algorithms and corresponding calculated results compared with national norms. Mathematica reviewed the 11 of 17 measures aligned with the CMS Medicaid Program Core Set Standards. They identified that

[1] Measure B.2 Medical Assistance with Smoking and Tobacco Cessation, was moved to the *Potential Future Measures List* by the QCE workgroup in 2018

for seven of the 11 measures, calculated performance on those measures aligned closely with federal fiscal year 2016 CMS Core Set medians calculated nationally for state Medicaid programs. Two of the four measures where performance did not align were the focus of the additional Milliman review noted above. Mathematica did a cursory review and provided nominal comment on the QCE workgroup's measures that were not derived from a national source.

While the majority of the QCE measures are based on the CMS Core Set, three of the CMS Core Set measures (C.4 Number of Hospitalizations due to Congestive Heart Failure, P.2 Average Number of Well-Child Visits for Children and P.3 Developmental Screening in the First Three Years of Life) were selected by the QCE workgroup and then modified to represent the specific interests of the group. For these measures, algorithms were based on the corresponding CMS Core Set algorithms and were modified to capture the specific information of interest. As an example for measure P.3, the CMS Core Set algorithm specifies which developmental screens should be included when calculating measure results. The result reflects a subset of all developmental screens a provider can administer to infants and toddlers. For several years Alaska Medicaid has reported on the more narrow CMS Core Set measure identifying the subset of developmental screens. The QCE workgroup felt it was important to also know the percentage of infants and toddlers that received any type of developmental screen. The measure and corresponding algorithm were thereby modified to capture this information.

In support of Mathematica's mission for national measures that can be used to measure performance in all states and across all state Medicaid programs, the group cautions against the use of too many measures that cannot be compared to other health or state Medicaid programs. Although Mathematica's review was limited, it did identify that results from the algorithms developed by the Department aligned with federal fiscal year 2016 CMS Core Set measure results.

COORDINATION WITH REDESIGN EFFORTS

The Department has engaged in a number of initiatives aimed at improving the effectiveness of the Alaska Medicaid program and the overall health of Medicaid enrollees. The Department's initiatives to develop Care Coordination Demonstration Projects (CCDP) and pursue an 1115 demonstration waiver to realign behavioral health services were also authorized under SB74. Once fully implemented, these initiatives should have positive impacts on Medicaid enrollee health.

One of the CCDP initiatives will bring focused managed care strategies to the State of Alaska for the very first time. The managed care demonstration will place Medicaid enrollees within the Municipality of Anchorage and Matanuska-Susitna Borough in a managed care health plan beginning April 2019.

Once implemented, claims for services provided to enrollees in the managed care plan will be processed directly by the managed care contractor. A coordinated approach that requires the managed care contractor to timely provide claim information relative to each of the QCE measures to the MMIS system will be necessary to ensure annual results reflect a complete picture of Medicaid program performance.

In addition, an Administrative Services Organization (ASO) will be used to support behavioral health reform. It is possible the ASO will have responsibility for processing claims for the delivery of behavioral health services covered under the waiver beginning in state fiscal year 2020. Three of the QCE measures will rely on data from claims that are potentially processed by the ASO contractor (measures B.1, B.3 and CH.3). If the ASO is assigned this responsibility, it will also be necessary to coordinate with this contractor to ensure they too are providing the information necessary for the Department to calculate performance on these measures.

Claims information and supporting documentation will be needed from each potential contractor in order to develop a complete picture of program performance. Performance results for state fiscal years 2017 and 2018 will be calculated solely from the Department's MMIS system. However, beginning with state fiscal year 2019 when the first of the new contractors is introduced, these program contractors will become part of the Department's efforts to track and monitor performance based on the measures developed by the QCE workgroup.

APPENDIX A

Alaska Medicaid Quality and Cost Effectiveness Measures and Performance Targets State Fiscal Years 2016-2021

Category	Measure	Program Cohort	Baseline SFY 2016	Target SFY 2017	Actual 2017	Target SFY 2018	Target SFY 2019	Target SFY 2020	5-YR Target SFY2021
Access	A.1: Child and Adolescents' Access to Primary Care Practitioners	Age: 12 to 24 mos	87.0%	88.7%	87.8%	90.5%	92.2%	94.0%	95.7%
		Age: 25 mos to 6 yrs	77.6%	79.2%	78.7%	80.7%	82.3%	83.8%	85.4%
		Age: 7 yrs to 11 yrs	82.6%	84.3%	82.5%	85.9%	87.6%	89.2%	90.9%
		Age: 12 yrs to 19 yrs	83.7%	85.4%	83.7%	87.1%	88.8%	90.4%	92.1%
	A.2: Ability To Get An Appointment w/Provider as Needed	Age: 0-21 yrs	67.2%	68.5%	71.0%	69.9%	71.2%	72.6%	73.9%
		Age: 21+ yrs	60.6%	61.8%	68.7%	63.0%	64.2%	65.4%	66.7%
Behavioral Health*	B.1: Follow-Up After Hospitalization for Mental Illness	Child - Acute	34.3%	35.0%	43.1%	35.7%	36.4%	37.1%	37.7%
		Child - Psych	36.3%	37.0%	39.7%	37.7%	38.4%	39.2%	39.9%
		Adult - Acute	40.1%	40.9%	43.4%	41.7%	42.5%	43.3%	44.1%
		Adult - Psych	41.6%	42.4%	56.3%	43.2%	44.1%	44.9%	45.8%
	B.3: Initiation and Engagement of Alcohol and Other Drug Dependence Treatment	Initiation	31.1%	31.7%	38.1%	32.3%	32.9%	33.6%	34.2%
		Engagement	15.0%	15.3%	18.3%	15.6%	15.9%	16.2%	16.5%
Chronic Illness	CH.1: Emergency Department Utilization (visits/1,000)	All program participants	637.2	624.5	727.3	611.8	599.1	586.4	573.5
	CH.2: Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Testing	Age: 18-64 yrs	63.1%	64.4%	68.1%	65.7%	66.9%	68.2%	69.4%
		Age: 65-75 yrs	34.6%	35.3%	38.2%	36.0%	36.7%	37.4%	38.1%
	CH.3: Hospital readmission w/in 30 days - all diagnoses	Age 18+ yrs: Mental illness admits	MEASURE CURRENTLY ON HOLD						
		Age 18+ yrs: All other admits							
Cost	C.1: Medicaid spending per enrollee	Age: 0-21yrs	$ 5,828	$ 5,711	$ 6,761	$ 5,595	$ 5,478	$ 5,362	$5,245
		Age: 21+ yrs	$ 10,436	$ 10,319	$ 12,283	$ 10,203	$ 10,086	$ 9,970	$9,392
	C.2: Number of hospitalizations for Chronic Obstructive Pulmonary Disease	Age: 40-64 yrs	43.8	42.9	35.9	42.0	41.1	40.2	39.4
		Age: 65+ yrs	69.8	68.4	57.9	67.0	65.6	64.2	62.8
	C.3: Number of hospitalizations for a diabetic condition	Age: 18-64 yrs	22.1	21.7	20.2	21.3	20.9	20.5	19.9
		Age: 65+ yrs	21.9	21.5	13.7	21.1	20.7	20.3	19.7
	C.4: Number of hospitalizations for Congestive Heart Failure	Age: 18-64 yrs	14.4	14.1	15.2	13.8	13.5	13.2	13.0
		Age: 65+ yrs	58.9	58.0	54.8	57.1	56.2	55.3	53.0
Maternal	M.1: Live Births Weighing Less Than 2,500 Grams	All program participants	6.8%	6.7%	6.3%	6.6%	6.4%	6.3%	6.1%
	M.2: Postpartum Care Rate	All program participants	38.8%	39.6%	40.5%	40.4%	41.2%	41.9%	42.7%
	M.3: Percent of newborns whose mothers had prenatal visit during first trimester	All program participants	77.9%	79.5%	80.6%	81.0%	82.6%	84.1%	85.7%
Preventive	P.1: Childhood Immunization Status	Age: 19-35 mos	59.5%	60.7%	62.7%	61.9%	63.1%	64.3%	65.5%
	P.2: AverAge Number of Well-Child Visits	Second yr of life	1.53	1.56	2.04	1.59	1.62	1.65	1.68
		Third yr of life	0.61	0.62	0.89	0.63	0.65	0.66	0.67
		Fourth yr of life	0.55	0.56	0.55	0.57	0.58	0.59	0.61
		Fifth yr of life	0.60	0.61	0.57	0.62	0.64	0.65	0.66
		Sixth yr of life	0.16	0.16	0.54	0.17	0.17	0.17	0.18
	P.3: Developmental Screenings First Three Years of Life	First yr of life	12.9%	13.2%	13.1%	13.4%	13.7%	13.9%	14.2%
		Second yr of life	10.6%	10.8%	9.3%	11.0%	11.2%	11.4%	11.7%
		Third yr of life	5.9%	6.0%	6.3%	6.1%	6.2%	6.3%	6.5%
		Ages 0-3 combined	10.0%	10.2%	9.8%	10.4%	10.6%	10.8%	11.0%

Results denoted in red font indicate performance was not met on the established target

Performance calculations completed August 2018

* Measure B.2 Medical Assistance with Smoking and Tobacco Use Cessation has been deferred until a data source is found

APPENDIX B

Alaska Medicaid Program
Quality and Cost Effectiveness Measure
ACCESS | A.1 Children and Adolescents' Access to Primary Care

NUMBER	MEASURE	COHORT	2016 BASELINE	2017 PERFORMANCE	2021 FIVE YEAR GOAL
A.1	Child and Adolescents' Access to Primary Care Practitioners	Age 12-24 mos	87.0%	87.8%	95.7%
		Age 25 mos-6 yrs	77.6%	78.7%	85.4%
		Age 7-11 yrs	82.6%	82.5%	90.9%
		Age 12-19 yrs	83.7%	83.7%	92.1%

Description: Percentage of children 12 months to 19 years who had a visit with a primary care practitioner during the reporting year.
Measure Origin: Centers for Medicare and Medicaid Services (CMS): Core Set of Children's Health Care Quality Measures for Medicaid and CHIP.
Data Source: Medicaid claims data.
Comparable HEDIS Measure: Yes. https://www.ncqa.org/hedis/measures/
Note: This measure is annually reported to CMS and in accordance with CMS reporting requirements, calculations are performed using calendar year data rather than state fiscal year data. All other calculated measures use state fiscal year data.

Alaska Medicaid Program
Quality and Cost Effectiveness Measure
ACCESS | A.2 Ability to Get Appointment With Provider As Needed

NUMBER	MEASURE	COHORT	2016 BASELINE	2017 PERFORMANCE	2021 FIVE YEAR GOAL
A.2	Ability to Get an Appointment for Care As Needed	Age 0-21 yrs	67.2%	71.0%	73.9%
		Age 21+ yrs	60.6%	68.7%	66.7%

Description: Adult's perception of whether they were able to get an appointment as quickly as the adult felt was necessary. Parent's perception of whether they were able to get an appointment for their child as quickly as the parent felt was necessary.
Measure Origin: National Consumer Assessment of Healthcare Providers and Systems (CAHPS) Survey.
Data Source: Annual CAHPS Survey.
Comparable HEDIS Measure: No

Alaska Medicaid Program
Quality and Cost Effectiveness Measure
BEHAVIORAL HEALTH | B.1 Follow-up After Hospitalization for Mental Illness

NUMBER	MEASURE	COHORT	2016 BASELINE	2017 PERFORMANCE	2021 FIVE YEAR GOAL
B.1	Follow-up After Hospitalization for Mental Illness	Child - Acute	34.3%	43.1%	37.7%
		Child - Psych	36.3%	39.7%	39.9%
		Adult - Acute	40.1%	43.4%	44.1%
		Adult - Psych	41.6%	56.3%	45.8%

Description: Percent of discharges for children ages 6-20 and adults age 21+ years hospitalized for treatment of a mental health diagnosis who had an outpatient visit, intensive outpatient encounter, or partial hospitalization with a mental health practitioner w/in 30 days of discharge.
Measure Origin: CMS: Core Set of Children's Health Care Quality Measures for Medicaid and CHIP; Core Set of Adult Health Care Quality Measures for Medicaid.
Data Source: Medicaid claims data.
Comparable HEDIS Measure: Yes. https://www.ncqa.org/hedis/measures/
Note: ***Acute*** *r*efers to services provided in a non-specialty hospital; ***Psych*** refers to services provided in a psychiatric hospital

Alaska Medicaid Program
Quality and Cost Effectiveness Measure
BEHAVIORAL HEALTH | B.3[2] Alcohol and Other Drug Dependence Treatment

NUMBER	MEASURE	COHORT	2016 BASELINE	2017 PERFORMANCE	2021 FIVE YEAR GOAL
B.3	Initiation and Engagement of Alcohol and Other Drug Dependent Treatment	Age 18+ yrs			
		Initiation	31.1%	38.1%	34.2%
		Engagement	15.0%	18.3%	16.5%

Description: Percentage of Medicaid enrollees age 18 and older with a new episode of alcohol or other drug (AOD) dependence who received the following: treatment through an inpatient AOD admission, outpatient visit, intensive outpatient encounter, or partial hospitalization within 14 days of diagnosis; or initiated treatment and had two or more additional services with a diagnosis of AOD within 30 days of initiating visit.
Measure Origin: CMS: Core Set of Adult Health Care Quality Measures for Medicaid.
Data Source: Medicaid claims data.
Comparable HEDIS Measure: Yes https://www.ncqa.org/hedis/measures/
Note: ***Initiation*** identifies individuals with a new episode of alcohol or other drug dependence who initiated treatment within 14 days of diagnosis. ***Engagement*** identifies individuals who both initiated treatment and engaged in two or more additional services within 30 days of the initial diagnosis.

[2] Measure B.2 Medical Assistance with Smoking and Tobacco Use Cessation was moved to the Potential Futures Measures list

Alaska Medicaid Program
Quality and Cost Effectiveness Measure
CHRONIC HEALTH | CH.1 Emergency Department Utilization

NUMBER	MEASURE	COHORT	2016 BASELINE	2017 PERFORMANCE	2021 FIVE YEAR GOAL
CH.1	Emergency Department Utilization (visits per 1,000)	All program enrollees	637.2	727.3	573.5

Description: The number of emergency Department visits per 1,000 Medicaid enrollees.
Measure Origin: Quality and Cost Effectiveness Targets Stakeholder Workgroup.
Data Source: Medicaid claims data.
Comparable HEDIS Measure: No

Alaska Medicaid Program
Quality and Cost Effectiveness Measure
CHRONIC HEALTH | CH.2 Diabetic A1C Testing

NUMBER	MEASURE	COHORT	2016 BASELINE	2017 PERFORMANCE	2021 FIVE YEAR GOAL
CH.2	Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Testing	Age 18-64 yrs	63.1%	68.1%	69.4%
		Age 65-75	34.6%	38.2%	38.1%

Description: Percentage of Medicaid enrollees ages 18 to 75 with diabetes (type 1 and type 2) who had a hemoglobin A1c (HbA1c) test during the reporting year.
Measure Origin: CMS: Core Set of Adult Health Care Quality Measures for Medicaid.
Data Source: Medicaid claims data.
Comparable HEDIS Measure: Yes. https://www.ncqa.org/hedis/measures/

Alaska Medicaid Program
Quality and Cost Effectiveness Measure
CHRONIC HEALTH | CH.3 Hospital Readmission Within 30 days - All Diagnoses

NUMBER	MEASURE	COHORT	2016 BASELINE	2017 PERFORMANCE	2021 FIVE YEAR GOAL
CH.3	Hospital readmission within 30 days - all diagnoses	Age 18+ yrs			
		Mental illness admits	*On Hold*	*On Hold*	*On Hold*
		All other admits	*On Hold*	*On Hold*	*On Hold*

Description: For Medicaid enrollees age 18 and older, the number of acute inpatient stays during the reporting year that were followed by an unplanned acute readmission for any diagnosis within 30 days.
Measure Origin: CMS: Core Set of Adult Health Care Quality Measures for Medicaid.
Data Source: Medicaid claims data.
Comparable HEDIS Measure: Yes. https://www.ncqa.org/hedis/measures/
Note: Due to persistent anomalies in results calculated for this measure, final performance calculations are on hold until all issues are identified and resolved.

Alaska Medicaid Program
Quality and Cost Effectiveness Measure
COST | C.1 Medicaid Spending Per Enrollee

NUMBER	MEASURE	COHORT	2016 BASELINE	2017 PERFORMANCE	2021 FIVE YEAR GOAL
C.1	Medicaid spending per enrollee	Age 0-21 yrs	$5,828	$6,761	$5,245
		Age 21+ yrs	$10,436	$12,283	$9,392

Description: Consistent with information currently provided, the Department will produce per member and aggregate costs for non-waiver services by service category. Aggregate annual spending per enrollee will be used to measure performance.
Measure Origin: Quality and Cost Effectiveness Targets Stakeholder Workgroup.
Data Source: DHSS Annual Report: MMIS Medicaid Claim Activity, January 24, 2018
Comparable HEDIS Measure: No

Alaska Medicaid Program
Quality and Cost Effectiveness Measure
COST | C.2 Number of Hospitalizations for Chronic Obstructive Pulmonary Disease (COPD)

NUMBER	MEASURE	COHORT	2016 BASELINE	2017 PERFORMANCE	2021 FIVE YEAR GOAL
C.2	Number of hospitalizations for Chronic Obstructive Pulmonary Disease	Age 40-64 yrs	43.8	35.9	39.4
		Age 65+ yrs	69.8	57.9	62.8

Description: Per 100,000 enrollee months, number of hospitalizations due to COPD during the reporting period
Measure Origin: CMS: Core Set of Adult Health Care Quality Measures for Medicaid.
Data Source: Medicaid claims data.
Comparable HEDIS Measure: No
Note: Hospitalizations attributed to COPD as a first, second or third diagnoses are included in the measure.

Alaska Medicaid Program
Quality and Cost Effectiveness Measure
COST | C.3 Number of Hospitalizations Attributed to a Diabetic Condition

NUMBER	MEASURE	COHORT	2016 BASELINE	2017 PERFORMANCE	2021 FIVE YEAR GOAL
C.3	Number of hospitalizations attributed to a diabetic condition	Age 18-64 yrs	22.1	20.2	19.9
		Age 65+ yrs	21.9	13.7	19.7

Description: Per 100,000 enrollee months, number of hospitalizations due to a diabetic condition during reporting period.
Measure Origin: Quality and Cost Effectiveness Targets Stakeholder Workgroup.
Data Source: Medicaid claims data.
Comparable HEDIS Measure: No
Note: Hospitalizations attributed to diabetes as a first, second or third diagnoses are included in the measure.

Alaska Medicaid Program
Quality and Cost Effectiveness Measure

COST | C.4 Number of Hospitalizations Attributed to Congestive Heart Failure

NUMBER	MEASURE	COHORT	2016 BASELINE	2017 PERFORMANCE	2021 FIVE YEAR GOAL
C.4	Number of hospitalizations due to Congestive Heart Failure	Age 18-64 yrs	14.4	15.2	13.0
		Age 65+ yrs	58.9	54.8	53.0

Description: Per 100,000 enrollee months, number of hospitalizations due to Congestive Heart Failure during reporting period.
Measure Origin: Modified CMS: Core Set of Adult Health Care Quality Measures for Medicaid.
Data Source: Medicaid claims data.
Comparable HEDIS Measure: No
Note: Hospitalizations attributed to congestive heart failure as a first, second or third diagnoses are included in the measure.

Alaska Medicaid Program
Quality and Cost Effectiveness Measure

MATERNAL HEALTH | M.1 Live Births Weighing Less Than 2,500 Grams

NUMBER	MEASURE	COHORT	2016 BASELINE	2017 PERFORMANCE	2021 FIVE YEAR GOAL
M.1	Live Births Weighing Less Than 2,500 Grams	All live births within program	6.8%	6.7%	6.1%

Description: Percentage of live births weighing less than 2,500 grams delivered to Medicaid recipients in the state during the reporting period.
Measure Origin: CMS: Core Set of Children's Health Care Quality Measures for Medicaid/CHIP
Data Source: Alaska's Indicator-Based Information System for Public Health Data (IBIS).
Comparable HEDIS Measure: Yes. https://www.ncqa.org/hedis/measures/

Alaska Medicaid Program
Quality and Cost Effectiveness Measure

MATERNAL HEALTH | M.2 Postpartum Care

NUMBER	MEASURE	COHORT	2016 BASELINE	2017 PERFORMANCE	2021 FIVE YEAR GOAL
M.2	Follow-up after delivery	All live births within program	38.8%	40.5%	42.7%

Description: Percentage of women who had live births during the reporting year that also had a postpartum visit on or between 21 and 56 days after delivery.
Measure Origin: CMS: Core Set of Adult Health Care Quality Measures for Medicaid.
Data Source: Medicaid claims data.
Comparable HEDIS Measure: Yes. https://www.ncqa.org/hedis/measures/
Note: Calculated results may be lower than actuals due to differences in the codes providers use to identify these services.

Alaska Medicaid Program
Quality and Cost Effectiveness Measure
MATERNAL HEALTH | M.3 Prenatal Care During First Trimester

NUMBER	MEASURE	COHORT	2016 BASELINE	2017 PERFORMANCE	2021 FIVE YEAR GOAL
M.3	Prenatal Care During First Trimester	All live births within program	77.9%	80.6%	85.7%

Description: Percentage of newborns whose mothers had a prenatal visit during first trimester.
Measure Origin: CMS: Core Set of Children's Health Care Quality Measures for Medicaid/CHIP
Data Source: Medicaid claims data.
Comparable HEDIS Measure: Yes. https://www.ncqa.org/hedis/measures/
Note: Calculated results may be lower than actuals due to differences in the codes providers use to identify these services.

Alaska Medicaid Program
Quality and Cost Effectiveness Measure
PREVENTIVE HEALTH | P.1 Childhood Immunization Status

NUMBER	MEASURE	COHORT	2016 BASELINE	2017 PERFORMANCE	2021 FIVE YEAR GOAL
P.1	Childhood Immunization Status	Age 0-24 mos	59.5%	62.7%	65.5%

Description: Percentage of children in the Alaska Medicaid program age 0-24 months receiving recommended immunizations for age.
Measure Origin: Quality and Cost Effectiveness Targets Stakeholder Workgroup.
Data Source: VacTrAK Immunization Registry of Alaska.
Comparable HEDIS Measure: No

Alaska Medicaid Program
Quality and Cost Effectiveness Measure
PREVENTIVE HEALTH | P.2 Well-Child Visits for Children 0-6 by Age

NUMBER	MEASURE	COHORT	2016 BASELINE	2017 PERFORMANCE	2021 FIVE YEAR GOAL
P.2	Average Number of Well Child Visits by Age	Second yr of life	1.53	2.04	1.68
		Third yr of life	0.61	0.89	0.67
		Fourth yr of life	0.55	0.55	0.61
		Fifth yr of life	0.60	0.57	0.66
		Sixth yr of life	0.16	0.54	0.18

Description: Average number of well child visits during the reporting period, reported by age for children ages 0 to 6.
Measure Origin: Modified CMS: Core Set of Child Health Care Quality Measures for Medicaid.
Data Source: Medicaid claims data.
Comparable HEDIS Measure: No
Notes: The workgroup acknowledges that children may be seen more frequently by a provider but that the Medicaid claim submitted by the provider could reflect a purpose separate from a well-child visit. The workgroup's recommendation is to specifically monitor those visits focused on wellness of the child as a means to evaluate opportunities for early detection of adverse health conditions.

Alaska Medicaid Program
Quality and Cost Effectiveness Measure
PREVENTIVE HEALTH | P.3 Developmental Screening in the First Three Years of Life

NUMBER	MEASURE	COHORT	2016 BASELINE	2017 PERFORMANCE	2021 FIVE YEAR GOAL
P.3	Developmental Screening in First Three Years of Life	First yr of life	12.9%	13.1%	14.2%
		Second yr of life	10.6%	9.3%	11.7%
		Third yr of life	5.9%	6.3%	6.5%
		Ages 0-3 combined	10.0%	9.8%	11.0%

Description: Percentage of children screened for risk of developmental, behavioral, and social delays using a standardized screening tool in the 12 months preceding their first, second, or third birthday.
Measure Origin: Modified CMS: Core Set of Children's Health Care Quality Measures for Medicaid and CHIP.
Data Source: Medicaid claims data.
Comparable HEDIS Measure: No
Notes: The workgroup's desire is to assess the frequency of any developmental screen performed on the child and acknowledges that CMS Core reporting will report on the subset of CMS identified screens as a more narrow focus that reflects national interests.

APPENDIX C

Milliman Client Report

Milliman

Alaska Medicaid Quality Measures

Documentation of Peer Review

State of Alaska

Department of Health and Social Services

Date: September 27, 2018

Prepared for:
State of Alaska Department of Health and Social Services

Prepared by:
Jeremy A. Cunningham
FSA, MAAA
Actuary

Susan Philip
MPP
Senior Healthcare Management Consultant

650 California Street
Suite 1700
San Francisco, CA 94108 USA

Tel +1 415 403 1333
Fax +1 415 403 1334

milliman.com

I. BACKGROUND

Milliman, Inc. (Milliman) has been retained by the State of Alaska Department of Health and Social Services (DHSS) to provide actuarial and consulting services related to the State of Alaska's Medicaid Payment Reform, including the Innovative Payment Reform Models. DHSS has been working to select Quality and Cost Effectiveness indicators intended to monitor effectiveness of the state Medicaid program. The intent of these measures is to provide an annual snapshot of program performance across several domains including quality, access, and cost. Since October 2016, DHSS has convened the Medicaid Redesign Quality and Cost Effectiveness Targets Stakeholder Workgroup (Workgroup) to select and prioritize measures, and to establish annual targets for the next state fiscal year (SFY). Once the measures are established, annual targets will be set to promote growth toward higher levels of program quality, performance and cost effectiveness.

Milliman provided a report delivered on June 9, 2017 to DHSS documenting the calculation of several quality measures selected by the Workgroup for the SFY 2015 and SFY 2016 experience period. The report was updated on June 30, 2017 in response to input from the Workgroup. Over the past several months, DHSS has been working on internal calculations for a subset of the initial measures to establish baseline levels for the SFY 2017 experience period. Milliman was requested to review DHSS methodology and compare DHSS and Milliman results of the five quality measures for reasonableness. The remainder of this report documents our review of DHSS developed quality measure calculations.

II. EXECUTIVE SUMMARY

Exhibit 1 documents a list of five quality measures that DHSS has chosen for which baseline levels will be established. Annual targets for each measure will be determined with the intent to promote growth toward higher levels of program quality, performance and cost effectiveness. DHSS has calculated and shared SFY 2016 and SFY 2017 results for the selected five quality measures. Additionally, DHSS has provided their detailed methodology used to calculate each of the quality measures.

Exhibit 1: List of Calculated Measures

No.	Category	Measure	Source
B.1	Behavioral	Follow-Up After Hospitalization for Mental Illness	CMS Child & Adult Core Measure Set
B.3	Behavioral	Initiation and Engagement of Alcohol and Other Drug Dependence Treatment	CMS Adult Core Measure Set
CH.2	Chronic	Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Testing	CMS Adult Core Measure Set
CH.3	Chronic	Hospital readmission w/in 30 days - all diagnoses - exclude or create separate measure for mental illness	CMS Adult Core Measure Set
C.2	Cost	Number of hospitalizations for Chronic Obstructive Pulmonary Disease	CMS Adult Core Measure Set MEASURE PQI05-AD: PQI 05

Appendix A provides the technical specifications from the Core Measure Set for each of the five measures included in this analysis. We have reviewed DHSS' detailed methodology in relation to the technical specifications included in the Centers for Medicare and Medicaid Services (CMS) published Medicaid and CHIP Core Set of Health Care Quality Measures (Core Measure Set) for Children and Adults[1]. We have also independently calculated the SFY 2016 and SFY 2017 results for each of the quality measures following the technical specifications from the Core Measure Set. DHSS results were compared to our independent findings and reviewed for reasonability. We have noted some differences between DHSS and Milliman results. However, these differences may be attributable to the varying levels of claims availability and application of exclusion logic between the two calculations. DHSS utilized claims paid through the end of August 2018 for all claims transactions (e.g. paid and denied) whereas we have only received paid data through March 2018. DHSS was also able to incorporate additional exclusion logic to better follow the Core Measure Set technical specifications utilizing fields that were unavailable in the dataset provided to Milliman.

Based on our review of DHSS methodology and the comparison of DHSS results relative to our independent analysis, we believe that DHSS has established a reasonable methodology to both establish baseline levels for each of the quality measures and track progress towards DHSS goals over time.

Please note that it is critical to maintain consistency in coding methodology when calculating quality measures over time. If discrepancies occur between DHSS methodology and the technical specifications, it still may be appropriate to track results over time on the condition that the methodology remains consistent from year to year. Due to the small sample size that some of the quality measures represent, it may be difficult to associate a change with program quality versus general fluctuation from one year to the next.

[1] https://www.medicaid.gov/medicaid/quality-of-care/downloads/medicaid-and-chip-child-core-set-manual.pdf
https://www.medicaid.gov/medicaid/quality-of-care/downloads/medicaid-adult-core-set-manual.pdf

III. METHODOLOGY

We have reviewed DHSS' detailed methodology in relation to the technical specifications documented in Appendix A. Additionally, we compared DHSS' quality measure calculation results relative to our independent analysis. In particular, we reviewed DHSS' methodology used and results separately for the numerator, denominator, and rate for each of the quality measures calculated for SFY 2016 and SFY 2017. The following describes the definitions for the metrics reviewed:

- **Numerator –** The number of unique beneficiaries who are both eligible for the measure and receive the appropriate procedure as described in the technical specifications.
- **Denominator –** The number of unique beneficiaries eligible for the measure. The measures may limit the eligible population by age or other criteria such as a maternity delivery. For many of the measures, the technical specifications outline continuous enrollment requirements to be eligible for the measure.
- **Rate –** The numerator divided by the denominator. The rate can represent many different things, including percentages, ratios, means, medians, and counts. We have provided the measure description, which defines the rate being illustrated, for each of the quality measures listed in Appendix A.

We used SFY 2016 (July 1, 2015 through June 30, 2016) and SFY 2017 (July 1, 2016 through June 30, 2017) eligibility data and incurred claims data paid through March 31, 2018 to calculate each quality measure. As a result, the rates illustrated for SFY 2017 may be impacted because of the use of incomplete claims data.

The data received from DHSS did not include populated information for the admit source or the patient status code. Both of these fields are utilized to exclude certain claims from the quality measure numerator and/or denominator based on the technical specifications in Appendix A.

State-Specific Methodology

The following describes the state-specific methodology that was used in conjunction with the Core Measure Set technical specifications to calculate the requested quality measures. Please note that we adjusted the measurement period prescribed for each quality measure by the Core Measure Set to line up with Alaska's state fiscal year.

- **B.1: Follow-Up After Hospitalization for Mental Illness:** We have illustrated this measure for 30-day follow-up visits separately for both acute and psychiatric inpatient hospitals. For purposes of this analysis, we defined inpatient hospital claims as those with billing provider type code = '001', '002' (psychiatric), or '005' and place of service codes '21', '23', '51', or '56'. For the mental health follow-up visits, we defined a qualifying mental health practitioner as provider type '008','020','042','105','107', or '108' and place of service '51','52','53','55','56', or '57'.

- **B.3 Initiation and Engagement of Alcohol and Other Drug Dependence Treatment:** We have solely relied upon the CMS technical specifications and the corresponding value sets for purposes of this analysis.

- **CH.2 Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Testing:** We have solely relied upon the CMS technical specifications and the corresponding value sets for purposes of this analysis.

- **CH.3 Hospital Readmission w/in 30 Days - All Diagnoses:** We have illustrated this measure separately for mental illness readmissions and all other readmissions. We have defined a mental illness readmission as a readmission where the anchor discharge occurred at a psychiatric inpatient hospital (identified as billing provider type code = '002' for this analysis).

- **C.2 Number of hospitalizations for Chronic Obstructive Pulmonary Disease:** For purposes of this analysis, we defined inpatient hospital claims as those with billing provider type code = '001', '002', or '005'. Additionally, we excluded maternity delivery claims (MS-DRG = '765','766 ','767 ','768 ','774 ', or '775') from this analysis.

IV. LIMITATIONS

The services provided for this correspondence were performed under the signed contract between Milliman and the State of Alaska, Department of Health and Social Services approved October 27, 2016 and amended effective July 1, 2018.

This report has been prepared solely for the internal business use of and is only to be relied upon by the Alaska, Department of Health and Social Services, related Divisions, and their advisors. No portion of this report may be provided to any other party without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work.

In performing this analysis, we relied on data and other information provided by Alaska, Department of Health and Social Services, related Divisions, and their advisors. We have not audited or verified this data and other information. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete.

We performed a limited review of the data used directly in our analysis for reasonableness and consistency and have not found material defects in the data. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or for relationships that are materially inconsistent. Such a review was beyond the scope of our assignment.

Differences between our projections and actual amounts depend on the extent to which future experience conforms to the assumptions made for this analysis. It is certain that actual experience will not conform exactly to the assumptions used in this analysis. Actual amounts will differ from projected amounts to the extent that actual experience deviates from expected experience.

Qualifications:
Guidelines issued by the American Academy of Actuaries require actuaries to include their professional qualifications in all actuarial communications. Jeremy Cunningham is a member of the American Academy of Actuaries, and he meets the qualification standards for performing the analyses in this report.

APPENDIX D

POTENTIAL FUTURE MEASURES RECOMMENDED BY MEDICAID REDESIGN QUALITY AND COST EFFECTIVENESS TARGETS STAKEHOLDER WORKGROUP

The Medicaid Redesign Quality and Cost Effectiveness Targets Stakeholder Workgroup requests that the Department of Health and Social Services adopt the following Medicaid program performance measures as soon as possible following elimination of program impediments:

AFTER PASSAGE OF PREVENTIVE SERVICES REGULATIONS

- Child /Adolescent Major Depressive Disorder: Suicide Risk Assessment
- Chlamydia Screening in Women
- HIV Screening - All Ages
- Breast Cancer Screening (BCS)
- Cervical Cancer Screening (CCS)
- Mammogram Screening
- Colorectal Cancer Screening
- LDL-C Screening
- Flu Vaccinations for Adults Age 18 and Older (FVA)
- Flu Vaccinations for Children Age 18 and Under
- HPV Vaccinations for Children Age 18 and Under
- Pneumonia Vaccine for Older Adults
- Alcohol Screening in Pregnant Women
- HIV Screening - Pregnant Women
- Diabetes Care - Eye Exam
- Diabetes Care - LDL Assessment
- Diabetes Care - Screening for Nephropathy
- Hypertension - Screening for Nephropathy
- Nephropathy - Screening for Nephropathy
- Heart Failure - Screening for Nephropathy

AFTER CONSISTENT DATA SOURCE IS IDENTIFIED

- Child /Adolescent Major Depressive Disorder: Suicide Risk Assessment
- Screening for Clinical Depression and Follow-Up Plan (CDF)
- Body Mass Index Assessment (ABA) for Adults
- Body Mass Index Assessment (ABA) for Children/Adolescents
- Behavioral Health Risk Assessment for Pregnant Women (BHRA)
- Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents
- Controlling High Blood Pressure
- Percent of Adult Medicaid Recipients that Smoke
- Medication Management for People with Asthma
- Annual cost of Medicaid per member vs annual cost of Private/Exchange premium
- Adherence to HIV Viral Load Suppression Therapy
- B.2 - Medical Assistance with Tobacco Use and Cessation Assistance

This Page Intentionally Blank

HEALTH INFORMATION INFRASTRUCTURE PLAN

FINAL REPORT

Submitted August 2018

to the Alaska Department of Health and Social Services

Prepared by:

HealthTech Solutions, LLC

HealthTech SOLUTIONS

TABLE OF CONTENTS

LIST OF FIGURES

A. EXECUTIVE SUMMARY

Beginning in early 2017, efforts began to review and analyze the "As-Is" state of many health information technology related topics throughout the State of Alaska. This effort was largely driven and informed by Section 56 of the Medicaid Redesign Senate Bill 74 (2016) which requires the Department of Health and Social Services (DHSS) to develop a plan to strengthen the health information infrastructure, including health data analytics capability. DHSS contracted with HealthTech Solutions, LLC via an open procurement process to provide technical assistance in the creation of the Alaska Health Information Infrastructure Plan as defined in SB 74. The purpose of the Health Information Infrastructure Plan is to support the movement of the health information infrastructure within the State of Alaska from the current "As-Is" state to the desired "To-Be" state by providing a thorough understanding of the current state, needs, and gaps, resulting in the creation of a roadmap to serve as a guide to move forward.

To ensure the Health Information Infrastructure Plan was truly reflective of the needs of the stakeholders, a series of six workgroup sessions were held to allow stakeholders the opportunity to provide background, input, and suggestions. Information shared during these sessions was an integral part of the development of this plan. The workgroup sessions were held between the Spring of 2017 and Summer of 2018 and included a broad range of stakeholders from the Alaskan healthcare landscape including representatives from healthcare facilities, provider practices, medical associations, tribal entities, mental health practices, the statewide Health Information Exchange (HIE), and DHSS. The workgroups were open forum discussions guided by defined topics and facilitated by the HealthTech Solutions' project team. They resulted in an enhanced understanding of the current state of the infrastructure and future needs as expressed by the stakeholders.

Throughout the course of the workgroup discussions, several common themes arose and were used to inform the creation of this Health Information Infrastructure Plan. These common themes included:

- Inconsistent rate of adoption and lack of interoperability of Electronic Health Record systems;
- Limitations in functionality and capabilities of Healtheconnect, the statewide HIE;
- Limited use of telehealth throughout the state and ways to increase telehealth use;
- Lack of data governance policies and standards;
- A high degree of redundancy in reporting requirements within the State;
- Limitation of data analytics capabilities;
- Lack of a comprehensive statewide provider directory/registry; and
- Limitations of public health systems

A gap analysis of the "As-Is" and "To-Be" state was completed following the workgroup sessions. The gap analysis formed the basis for recommendations that will support the movement from the current "As-Is" state to the desired "To-Be" state. The following table provides a high-level overview of the proposed recommendations.

Recommendation Summary	
Topic	**High-Level Recommendations**
Health Information Exchange Platform Modernization	Focus on improvement of core services, including connection to the broad range of electronic health records in use across Alaska. Institute data validation to ensure accuracy of available data. Continue onboarding efforts across all provider types and consider including additional data sources such as social determinates of health. Add support for high value use cases.
Medicaid Information Technology Architecture Related Projects	Complete a full Medicaid Information Technology Architecture 3.0 State Self-Assessment
Master Client Index	Establish a single enterprise wide master index for use across the organization to ensure consistent and accurate data. Establish data governance processes.
Fraud, Waste, and Abuse	Obtain a high functioning fraud waste and abuse detection solution to improve discovery of fraud waste and abuse. Obtain a case tracking solution with automated workflows in order to increase the efficiency of DHSS work force,
Secure Identity and Access Management	Conduct a gap analysis of the myAlaska solution to identify gaps in the system's functionality and explore the feasibility to utilize the system across the Medicaid Enterprise. Consider including a complete security and risk assessment of the myAlaska portal.
Eligibility and Enrollment Related Projects	Include eligibility and enrollment components in the Medicaid Information Technology Architecture 3.0 State Self-Assessment to ensure identification of all needs and inclusion in roadmap and planning documents. Prioritize solutions to allow providers to utilize Presumptive Eligibility opportunities and automate eligibility for deemed newborns. Develop a State data hub to make state owned data readily available as needed across the enterprise. Obtain an Asset Verification System.
Referral Management Module	Obtain a referral management module to close referral loops and greater transparency of referral patterns.
Care Management	Obtain a Care Management Module to improve and support care coordinate efforts
Provider Directory	Obtain a robust Provider Directory Module to support care management and telehealth

Document Management System	Obtain an electronic Document Management System and workflow management system to improve efficiencies across DHSS
Telehealth	Establish and communicate clear Telehealth policies and enterprise wide tools. Provide technical support and assistance to increase adoption of Telehealth. Develop a Provider Directory that highlights practices utilizing Telehealth. Increase funding available for providers to offset the cost of technologies to support telehealth
Provider Enrollment and Management	Evaluate the feasibility of implementing a statewide common credentialing program. Complete a comprehensive review of all provider enrollment and management business process in conjunction with the Medicaid Information Technology Architecture 3.0 State Self-Assessment.
Electronic Health Records Adoption	Continue outreach and education to support and encourage electronic health records adoption
Public Health Modernization	Modernize Public Health registries
DHSS Recommendations for Successful Transition to Modularity	
Data Governance	Implement data governance activities across DHSS to promote interoperability and data sharing capabilities across the Department
Enterprise Architecture	Convene an Enterprise Architecture group to steer the technical architecture of the DHSS Enterprise
Enterprise Project Management Office	Establish an Enterprise Project Management Office
Independent Verification and Validation	Procure an Independent Verification and Validation vendor for utilization across all Medicaid Enterprise implementations
Testing and Quality Assurance Services	Identify dedicated State testing staff to lead all testing efforts as modules are obtained, contract with a dedicated testing vendor, and utilize automated testing tools.
Systems Integrator	Obtain a System Integrator and work closely with that entity

In addition to recommendations established within this Health Information Infrastructure Plan, a business value analysis of the recommendations was completed. Projects related to the following areas were found to provide a high degree of business value to the enterprise and identified a need for greater urgency:

- Medicaid Information Technology Architecture

- HIE Platform Modernization
- Data Governance
- Enterprise Architecture
- Enterprise Project Management Office
- Independent Verification and Validation
- System Integration
- Telehealth
- EHR adoption
- Public Health Reporting

Additional details related to the business value analysis is in **Section F. Business Case Value**.

Budget estimates for the recommendations have been derived based upon industry trends and procurements of similar solutions in other states and are detailed in **Section G. Budget**. The estimated price ranges are reflective of Design, Development, and Implementation (DDI) efforts for the recommendations. While some of the recommended solutions such as the Eligibility and Enrollment Presumptive Eligibility functionality is estimated to cost less than one million dollars, a few of the recommendations are more costly items such as Health Information Exchange Platform and are estimated to cost in the six to ten-million-dollar range. However, most of the estimated price ranges are somewhere between one to six million dollars each.

Contingency plans have been addressed for each of the major recommendations within the plan to provide an alternative consideration in the event it is needed. Some items, such as the Medicaid Information Technology Architecture Assessment and the Independent Verification and Validation Vendor do not have a contingency as they are required by federal guidance. Other items such as the Care Management solution, Fraud Waste and Abuse System, and the Eligibility and Enrollment Asset Verification System could be obtained from other states while the contingency plan for other recommendations would be to continue business as usual.

As Alaska evolves from their existing legacy Medicaid solution to a modular approach including reuse, shared services, and Software-as-a-Service, the State must consider strategies for security controls. In **Section I. Determining Security Controls**, an overview of a security program framework has been provided. DHSS will be able to reference this section to develop their Security Plan in alignment with the industry standards.

Ultimately, these efforts have culminated in the Health Information Infrastructure Roadmap which is detailed in **Section J. Health Information Infrastructure Plan**. The roadmap identifies the impact and timing dependency of the recommendations. Some projects have been identified as projects that can begin immediately, while others have a dependency on another initiative. In general, most projects are contingent upon the completion of the Medicaid Information Technology Architecture State Self-Assessment by DHSS.

B. BACKGROUND

As directed by Alaska's Medicaid Redesign Senate Bill 74, the Alaska Department of Health and Social Services in conjunction with HealthTech Solutions created this Health Information Infrastructure Plan. As documented above in **Section A. Executive Summary**, the purpose of this Plan is to meet the requirements of the Medicaid Redesign Senate Bill 74 to develop an infrastructure plan to help support the health transformation activities in Alaska.

DHSS defines health information infrastructure at a high level as the array of interoperable health information technology products and services that support continuous learning and improved health. The creation of the Health Information Infrastructure Plan required reviewing the health information infrastructure within the State and the interaction with, and impact upon, various stakeholder groups in addition to ensuring alignment with other State and national initiatives. The high-level considerations in creation of the Plan included:

- Use of existing statewide and DHSS technology to include, but not limited to, the statewide Health Information Exchange
- Identification of opportunities for integrating and streamlining health data systems administered by State government
- Creation of a document that provides:
    - "As-Is" view of the existing systems
    - Gap analysis of what is missing
    - "To-Be" or desired view of the future state
    - Roadmap of recommendations
- Implementation Plan to achieve "To-Be" state
- Alignment with other Medicaid Redesign Senate Bill 74 initiatives
- Alignment with, and the ability to contribute to, the DHSS Enterprise Information Technology Strategic Framework and Information Technology Roadmap

With the above listed considerations in mind, HealthTech Solutions has created the Health Information Infrastructure Plan to be inclusive of the following:

- Identification of critical areas where standards are needed
- Measurable health infrastructure outcomes based on Medicaid Redesign Senate Bill 74
- Opportunities to leverage existing and emerging technology
- Opportunity for resource allocation improvement
- Alignment to State government technology standards, where applicable
- Assurance of a phased and scalable approach for implementation
- Streamlined approach to a complex technology environment
- Methods to ensure compliance to the plan
- Framework that is Health Insurance Portability and Accountability Act compliant

To ensure the development of a relevant Health Information Infrastructure Plan that provides optimal opportunities for improvement, six stakeholder workgroup sessions were held. These workgroup sessions were used to determine areas of necessary infrastructure improvement and to capture use cases for infrastructure implementation. The workgroup sessions included

stakeholders selected by DHSS and were held on March 6, 2017; May 12, 2017; September 19, 2017; November 14, 2017; February 13, 2018; and May 10, 2018. In these meetings, stakeholders took an active role in the identification of recommendations and how to achieve the "To-Be" environment.

Stakeholder workgroup meetings, in addition to sub-group meetings, provided the basis for a Gap Analysis of the "As-Is" and "To-Be" assessments of both internal and external DHSS environments. The Gap Analysis includes details provided by the stakeholders about the infrastructure, interoperability, and resource support. The analysis also includes details about the alignment of the DHSS information infrastructure with Medicaid Information Technology Architecture 3.0 and the National Human Services Interoperability Architecture business processes. The Gap Analysis identifies areas of improvement and resources for leveraging across the Enterprise. For more information, see **Section D. Gap Analysis**.

A Business Case Value assessment was developed using the Gap Analysis and Stakeholder Engagement Report. **Section F. Business Case Value** includes information about the assessment as well as the prioritization for recommended infrastructure implementation.

HealthTech Solutions also identified and developed a Contingency Plan for the recommended infrastructure as well as associated risks for each recommended product and/or service. For more information, see **Section H. Contingency Plan**.

A high-level plan was identified and developed for the Health Insurance Portability and Accountability Act and Health Information Technology for Economic and Clinical Health security controls for utilization. The Implementation Plan includes recommended security controls and other procedure and policy levers for the recommended infrastructure. Each recommendation aligns with Minimum Acceptable Risk Standards for Exchanges requirements. The Implementation Plan can be found in **Section I. Determining Security Controls.**

A Health Information Infrastructure Roadmap has been developed based upon recommendations identified from workgroup discoveries and the Gap Analysis. The Roadmap contains the strategic framework for recommended infrastructure products and/or services and includes business process transformation, policy changes, and other procedure changes that will be required of DHSS and external stakeholders. The Roadmap can be found in **Section J. Health Information Infrastructure Roadmap**.

Lastly, this Plan includes a high-level budget estimate for recommended infrastructure products and/or services including costs for implementation. The budget can be found in **Section G. Budget**.

DHSS' vision for the future of health information technology is a multi-year vision that consists of existing and planned projects and initiatives that will significantly contribute to Alaska's healthcare transformation. HealthTech Solutions is aware that Medicaid Redesign Senate Bill 74 required a demonstration project for Medicaid reform as well as a coordinated care demonstration project. As both efforts were in the planning stage during our time of information gathering, recommendations specific to these initiatives have not been included in this Health Information Infrastructure Plan; however, many of the recommendations included would ultimately support these projects.

By leveraging the information in this Plan, Alaska will be in a more favorable position to transform healthcare by providing data required by healthcare providers for care coordination and quality improvement and information support required by DHSS and healthcare providers to enable development and implementation of Medicaid Redesign Senate Bill 74 initiatives.

C. STAKEHOLDER ENGAGEMENT

Stakeholder engagement was necessary to create a fully informed plan that would add value to all Alaskan stakeholders. As such, a series of six workgroup sessions and several sub-group meetings were held to allow stakeholders to provide background, input, and suggestions that would shape the creation of the Plan.

There were many common themes identified throughout the stakeholder engagement sessions which helped derive the recommendations in the Health Information Infrastructure Plan. These common themes are included in the table below:

Workgroup Discussion Common Themes	
Theme	**Details**
Electronic Health Record Adoption	• Adoption rate is inconsistent across provider types and is especially low with certain provider types • There is a high degree of variation in the electronic health record systems throughout the State with an estimate of 52 vendors in use • When electronic health record systems are adopted they are not always connected or interoperable with other systems
Health Information Exchange	• Current functionality is limited, and some offerings are under-utilized • Current Orion technology platform requires upgrades to meet stakeholder needs • Struggles to interface with the large number of electronic health record vendors currently in use within the State • Lack of bi-directional capabilities with the Immunization Registry and other registries • Could potentially support additional use cases within the State, but current capabilities will need to be enhanced for this to occur • Lack of single sign-on capability
Telehealth/Telemonitoring	• Not widely used throughout the State • Need for policies, best practices, and identified procedures appropriate to telehealth • The provider community has a desire to be able to select the information that becomes included in the Personal Health Record • Need for full Health Insurance Portability and Accountability Act compliant telehealth infrastructure • Need for outreach, education, and technical support to increase usage

Workgroup Discussion Common Themes	
Theme	**Details**
Data Governance	• Consistent lack of data governance policies and data standards in all areas throughout DHSS • Desire for centralized data repository/warehouse for use in data analytics, reporting, care and referral management, and patient care • Stakeholder engagement in data governance activities has declined over the course of time as representatives have moved on or out of State
Reporting Redundancy	• There is currently a high degree of redundancy in the reporting requirements for providers within the State and there is a desire to streamline this process by leveraging the Health Information Exchange for reporting purposes. This would allow providers to report data once to Health Information Exchange and the Exchange would then disseminate as appropriate.
Enhancing Data Analytics Capability	• Analytics capabilities within DHSS are limited and often manual • There is a desire for greater access to data analytic tools in the provider community
Statewide Provider Directory/Registry	• Current lack of a comprehensive provider directory/registry to include both clinical medical providers in addition to community and support service providers is limiting the ability to effectively exchange data and provide patient care
Public Health Systems	• Public health systems are outdated and will not support bi-directional exchange with the Health Information Exchange • Updating of these systems would be key to support the goal of utilizing the Health Information Exchange to support streamlining of reporting

The sub-group meetings, which were held in addition to the six main workgroup sessions, are listed below:

1. Eligibility and Enrollment, which included staff from both Medicaid Management Information System and Alaska's Resource for Integrated Eligibility Service
2. Department of Corrections
3. Children Services
4. Program Integrity
5. Behavioral Health
6. Health Information Exchange users, Providence Hospital, and the Alaska Native Tribal Health Consortium
7. DHSS staff regarding Data Governance
8. Telehealth Workgroup
9. Department of Administration
10. Southcentral Foundation Representative

The goal of these workgroup sessions and sub-group meetings was to develop an understanding of the "As-Is" and desired "To-Be" environment as identified by the stakeholders, thus allowing for the creation of a Health Information Infrastructure Plan that was well-informed and driven by the needs of the stakeholders.

C.1 Artifact Review

In addition to the stakeholder engagement sessions, HealthTech Solutions also reviewed multiple DHSS artifacts, publicly available documents, and the written reports from other Medicaid Redesign Senate Bill 74 workgroups. Information Technology infrastructure needs identified by the various workgroups and within the artifacts were considered in the Gap Analysis. Although not an all-inclusive list, the following notable artifacts were reviewed and analyzed as part of the Gap Analysis process:

- State Medicaid Health Information Technology Plan
- Health Information Technology for Economic and Clinical Health Implementation Advance Planning Document
- 2016 Annual Medicaid Reform Report
- 2017 Annual Medicaid Reform Report
- Alaska Medicaid Redesign Telehealth Stakeholder Workgroup Report
- Alaska Medicaid Redesign Quality and Cost Effectiveness Targets Report
- Medicaid Technical Assistance Healthcare Authority Feasibility Study Final Report
- Medicaid Redesign Senate Bill 74

D. GAP ANALYSIS

The Gap Analysis is based on the output from the various stakeholder engagement and sub-group sessions and outlines the "As-Is" and "To-Be" state along with recommendations on how to achieve the "To-Be." For better document flow and readability, this section is divided into topics. Some topics may have multiple identified gaps and/or recommendations. Section topics are as follows:

- Health Information Exchange Platform Modernization and Related Projects
- Medicaid Information Technology Architecture Related Projects
- Master Client Index
- Fraud, Waste, and Abuse
- Secure Identity and Access Management
- Eligibility and Enrollment
- Referral Management
- Care Management
- Provider Directory
- Document Management System
- Telehealth
- Provider Enrollment and Management
- Electronic Health Record Adoption

- Public Health Modernization
- Project Delivery
    - Data Governance
    - Enterprise Architecture
    - Enterprise Project Management Office
    - Independent Verification and Validation
    - Testing and Quality Assurance Services
    - Systems Integrator

D.1 Health Information Exchange Platform Modernization and Related Projects

Health Information Exchange Core Services

Goal: A highly functioning health information exchange to facilitate widespread clinical data sharing amongst providers. The Health Information Exchange must also support and facilitate the endeavors of the State of Alaska and the Medicaid Enterprise to improve the quality and safety of care for all Alaskans.

Health Information Exchange "As-Is"

Background

In 2009, Alaska DHSS contracted with HealtheConnect Alaska (previously known as AeHN) to assist the State in establishing a Health Information Exchange capability among healthcare providers and hospitals in Alaska. HealtheConnect Alaska coordinated an effort to develop Health Information Exchange product requirements and select a Health Information Exchange technology vendor. Orion Health was selected as that vendor. Orion Health currently provides Health Information Exchange functionality including a clinical portal and patient portal services. HealtheConnect Alaska uses the NextGate solution for the Master Patient Index.

HealtheConnect Alaska deployed the health information exchange and direct secure messaging technologies using a hosted, Software-as-a-Service model and launched a pilot program in February 2011 with one hospital and two clinics participating in the exchange of authorized medical information. The pilot project and associated user acceptance testing was completed in early September 2011 and HealtheConnect Alaska began connecting additional Alaska providers in December 2011. Today, HealtheConnect Alaska provides clinical communication pathways for 470 provider organizations and approximately 3,000 healthcare providers throughout the State, with over 40 Electronic Health Records providing patient data into the Health Information Exchange.

In addition, HealtheConnect Alaska acts as the conduit for public health reporting, sending immunization, syndromic surveillance, and reportable laboratory data to DHSS from connected organizations. Ten participating provider organizations are submitting immunization data via the Health Information Exchange to Alaska's Immunization Registry, VacTrAK. Sixteen organizations are submitting syndromic surveillance data via the Health Information Exchange to BioSense, and nine hospitals are submitting lab data via the Health Information Exchange to Alaska's Electronic Laboratory Reportable database, AKSTARS. Despite this success, there are many provider types

that are not connected or have not adopted Certified Electronic Health Record Technology that would allow for successful implementation of the full vision of the Health Information Exchange.

Providers are required to report to many State government systems. Some systems are electronic and automated, and some are fed by paper reports manually entered into spreadsheets or Access databases where they are inaccessible to all but State government users. Much of this data is duplicative and could be greatly simplified from the provider's point of view. The diagram below illustrates a high-level depiction of the current state of provider reporting.

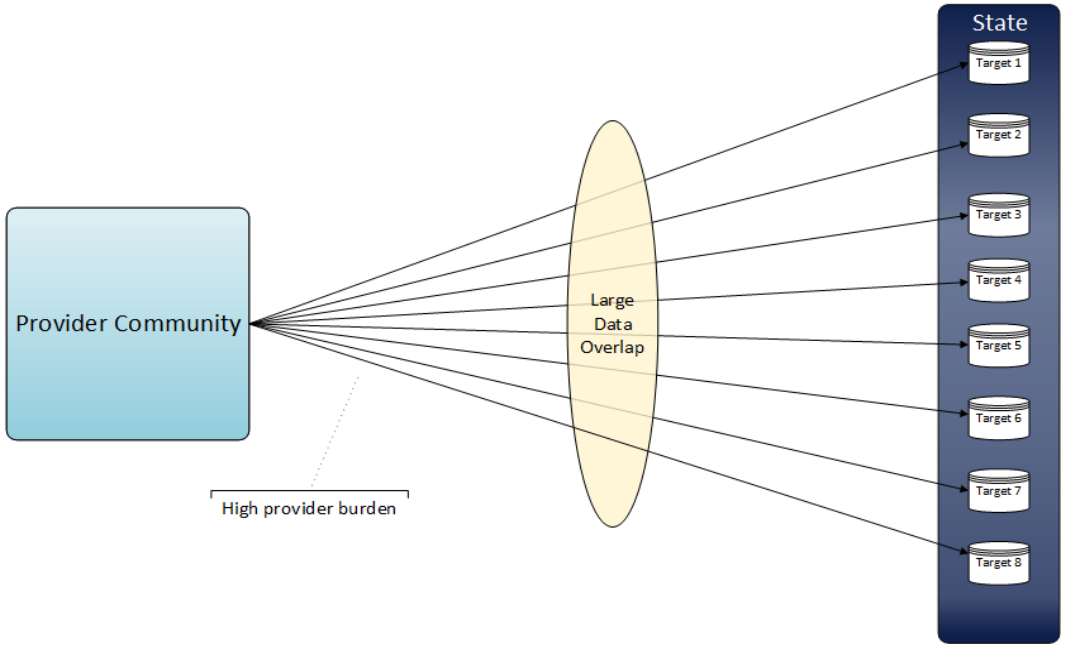


Figure 1: Reporting – Current State

Provider Participation and Utility of the Health Information Exchange

An Environmental Scan was completed in January 2018 indicating that participation in the Health Information Exchange was limited, and those who reported participation indicated use was rare to never. Many providers indicated they had selected alternative options to meet their needs. The November 13, 2017 workgroup meeting revealed that stakeholders had a lack of confidence in the Health Information Exchange and felt the cost was not worth the value. The workgroup sessions also revealed that providers felt the Health Information Exchange was cumbersome for use.

An additional complicating factor based upon feedback obtained during the stakeholder workgroups is that, at times, it is viewed as a competitive advantage by large provider organizations to have data siloed within the systems of their own organizations. Consequently, providers indicated that some State providers' networks are reluctant to exchange patient data with their competitors. HealtheConnect Alaska shared plans to provide new services, yet, based on stakeholder feedback, HealtheConnect Alaska has not met their foundational core service obligation.

The Health Information Exchange was unable to provide usable admit, discharge, and transfer alerts, and therefore the hospital association brought the Collective Medical Technologies

Emergency Department Information Exchange into the State to provide that functionality. That implementation has gone very well, and providers speak highly of their participation in the Emergency Department Information Exchange.

Direct Secure Messaging capability is available but is not well integrated into business workflows. As reported by the workgroup, the barrier to adoption seems to be that Direct Secure Messaging is a separate email system for them. If they could use this from their own email system or from within the electronic health record, it would see much greater adoption. The possibility of integrating with TigerConnect, a secure messaging tool, was also mentioned in the workgroup session.

HealtheConnect Alaska is committed to modernizing and maintaining the Health Information Exchange's relevance as the secure messaging provider for Alaska. They have selected two new vendor partners to support secure communications and improve usability and widespread adoption. TigerConnect, for Direct-certified text messaging, and Inpriva, for Direct Secure Messaging, are leaders in their respective areas and significantly expand the Health information Exchange's offerings as one of the largest Direct Secure Messaging providers in the country.

Implementation of new or enhanced Health Information Exchange functionality is often slow moving. Progress and timelines are not well known by stakeholders, and the provider community is not well-versed on the capabilities and value proposition of the Health Information Exchange. For example, within the workgroup meeting, the provider community expressed concerns regarding privacy and security. This could relate to a concern among the provider community presenting a barrier to consistent adoption and usage of the Health Information Exchange.

The Health Information Exchange is currently in transition. HealtheConnect Alaska is about to implement changes that may be a turning point in the capabilities offered, thus increasing the value of the Health Information Exchange. The planned changes are listed below as a summary of the "To-Be" and recommendations to achieve the "To-Be."

Health Information Exchange "To-Be"

The Health Information Exchange should focus on use cases that bring value proposition to the providers. The Health Information Exchange's primary value proposition is to provide clinical information on the right person at the right time to improve care coordination. The Exchange should demonstrate interoperability to integrate with provider electronic health records and have the ability for single sign-on with electronic health records incapable of integration.

The Health Information Exchange must demonstrate interoperability with the Medicaid Management Information System and other key systems within DHSS for the sharing of clinical data to support care coordination, data analytics, population health, and determination of costs of care.

The Health Information Exchange must support providers in meeting meaningful use requirements and exchanging clinical data such as lab results and immunizations. The Health Information Exchange should utilize a robust Master Patient Index with a low percentage of mismatches and ensure the interfaces are receiving "clean" data from providers.

HealtheConnect Alaska is implementing two applications to modernize their secure messaging platform by supporting mobile devices, digital verification, and overhauling the process for

onboarding new secure messaging participants. HealtheConnect Alaska has indicated they will be able to issue new accounts within 72 hours of receiving the notarized identification form which is a significant decrease from the current two to four weeks with Orion Health. Additionally, Inpriva, the improved Direct Secure Messaging platform, regularly uploads accounts to the national direct registry to facilitate secure directory access for all participants.

TigerConnect, the Health Information Exchange's new secure texting, will seamlessly integrate into the unified landing page and will be integral in the Health Information Exchange 2.0 initiative. TigerConnect will provide admit, discharge, and transfer triggered text messaging to participating providers of record for their patients and will support new Direct Secure Messaging alert notifications. As discovered during the stakeholder interviews, TigerConnect is already being used in Alaska with the Alaska Native Tribal Health Consortium, Imaging Associates, and many other provider organizations. By HealtheConnect Alaska's new partnership, they will be able to expand the secure texting directory for all participants.

Recommendations to Achieve "To-Be"

It is recommended that efforts be centralized around improving the core services provided by the Health Information Exchange to present a value proposition to the provider. When the core services are enhanced, the utility of use cases at the provider and State level will be increased. Several of the "To-Be" capabilities are already being planned or being implemented. The recommendations for reaching the goal of modernizing the Health Information Exchange platform include:

Expand Health Information Exchange Core Services

- Onboarding additional provider locations to add data and critical mass to the Health Information Exchange
    - Integrate Alaska Psychiatric Institute's data into the Health Information Exchange (an on-boarding activity):
    - Using a DHSS Information Technology Framework approved methodology, the Health Information Exchange will access the State's only inpatient psychiatric hospital's data on a nightly basis and store the raw Continuity of Care Document in a repository. When subscribing organizations make queries for their patients, those queries will be matched against the Continuity of Care Document repository and, in compliance with the implemented consent policy, information will be shared using the Health Information Exchange's Unified Landing Page or through Application Programming Interface connections to electronic health records
    - Implement Ambra Image Exchange:
        - Connect the Health Information Exchange with Ambra Image Gateway to allow for subscribing organizations to see images completed at other facilities
    - Health Information Exchange Onboarding Support will continue for behavioral health providers, tribal providers, and partner tribal providers
- Continue efforts to engage third-party payers
- Onboard additional provider locations for public health reporting

- Increase utilization of the query-based portal until such time that electronic health records integration is widespread
- Enhance and streamline capability to connect to the broad range of electronic health records systems currently in use within Alaska
- Add capability to parse and store consolidated clinical document architecture data
- Institute ongoing data validation to ensure completeness and accuracy

Add Support for High Value Use Cases

- Add capabilities to support high value use cases such as integration with the prescription drug monitoring program, data analytics, simplified reporting, referrals, and incorporation of behavioral health and correctional patient data

Enhance Alert/Notification Capabilities

- Improve and increase capabilities for alerts and notifications, including admit, discharge, and transfers, allowing for near real-time notification via electronic health records systems

Enhance Registry Capabilities

- Implement bi-directional data flow with the public health registries. The statewide immunization registry, VacTrAK, is available for submission of update transactions only and data is not shared with the Health Information Exchange. Having this data available for direct query and inclusion in clinical documents would enhance the value of both registries.
- It is also recommended that this strategy be expanded, over time, to all other registries that can be legally shared with the provider community.

Improve Accessibility of the Health Information Exchange Data

- The Health Information Exchange must develop the capability for integration with capable electronic health records so that access to the Health Information Exchange data is incorporated into the provider's workflow. This functionality has already been proven to greatly increase utilization of the health information exchange.
- Single sign-on should be an option for electronic health records that are not capable of integration with the Health Information Exchange. This functionality also supports an easier workflow for the provider.

Improve Utilization of Direct Secure Messaging

- Leverage the upgraded platform, including TigerConnect for secure texting

Improve Communication, Outreach, and Education

- Develop a communication plan to address the following aspects:
    - Increase efficiency and transparency when implementing new functionality to the Health Information Exchange
    - Clearly define and educate providers of current Health Information Exchange capabilities

- Ensure that privacy and security concerns are addressed, and the provider community is educated and develops the level of comfort necessary to increase adoption
- Develop a comprehensive communication plan and execute with appropriate resources and oversight

Explore Options for Interoperability with the Emergency Department Information Exchange

- The Emergency Department Information Exchange provides information about patients across points of care for Alaska's Emergency Departments. Since it provides visit and care history and has been well received by the community, the Health Information Exchange should explore options for connecting with the Emergency Department Information Exchange.

Improve State to Provider Information Sharing

- Incorporate Medicaid claims data into the Health Information Exchange
  - Sharing this information would provide data to populate the Health Information Exchange's shared medical record

Expand the Data Set

- Information available and housed within the Health Information Exchange is limited specifically to clinical information. Explore the possibility of including additional data such as social determinants of health data.

Quality Reporting

Goal: Improve the efficiency of quality reporting and reduce provider burden

Quality Reporting "As-Is"

Providers are inundated with, and over-burdened by, the multiple reporting requirements from State and Federal programs as well as various commercial payers. Subsequently, one of the high priorities for many States is the strategy to improve quality reporting but also reduce provider burden. The initiative should provide tools that streamline the processes used to report on quality measures. Common initiatives provide technology support to ease the capture, aggregation, and reporting of agreed upon quality reporting measures. The desired outcome is reduced reporting workload for providers and simplified processes for reporting required measures. Affordable tools should be readily available to assist providers with the capture and reporting of their quality data.

There are multiple States that have a variation of healthcare consortiums that include providers, healthcare associations, or hospitals that focus on the population of health via clinical quality measures/improvement. In some cases, the States are linked to the State Health Information Exchange or various Health Information Exchanges to share and compare data. In Alaska, the Health Information Exchange communicates with and engages the primary care community which includes the Alaska Primary Care Association, Federally Qualified Health Centers, and Patient Centered Medical Homes. The potential data captured could support Accountable Care Organizations and other alternative payment models.

Currently, the eligible hospitals and eligible professionals attesting to the Alaska Medicaid EHR Incentive Payment Program have the capability to upload an XML file of aggregate Clinical Quality Measure data with their attestation. This does not meet the Centers for Medicare and Medicaid Services guidelines for electronic submission of Clinical Quality Measure data.

Quality Reporting "To-Be"

In the future, providers will have the capability to electronically report Clinical Quality Measures from their electronic health records, as Stage 3 of the Promoting Interoperability Program is implemented. Clinical Quality Measure reporting via the Health Information Exchange will allow providers to submit data to Alaska in one location and will also support DHSS efforts for quality data analytics and population health.

Recommendations to Achieve the "To-Be"

DHSS should continue the design and development of a Clinical Quality Measure reporting feature that supports their long-term vision for improved care for all Alaskans. Quality data reporting via the Health Information Exchange is efficient for providers and Medicaid and facilitates strategy for a data-driven organization. This workflow also enables the process for providers and hospitals to directly report and submit Clinical Quality Measures as data is received by the Health Information Exchange. During the process, the data should be passed through the DHSS Enterprise Service Bus and consumed by other Medicaid Enterprise systems to improve the overall quality reporting.

It is also recommended that a clinical advisory board be established to help guide the selection and governance of the Clinical Quality Measure reporting. A clinical advisory board can be advantageous in a Clinical Quality Measure project to provide subject matter expertise on clinical documentation and how workflow can impact the success of the Clinical Quality Measure reporting project. Suggested responsibilities of the clinical advisory board include:

- Advise the State on strategies for implementing quality activities to allow for the collection and sharing of quality management data and monitoring of outcomes of chronic diseases affecting Alaska Medicaid recipients such as diabetes, hypertension, and obesity
- Provide input on the clinical quality measures to be tracked by the State
- Assess and identify opportunities for improvement of quality management and performance improvement activities
- Identify opportunities to improve patient and clinical safety across the delivery of care and within the network
- Identify quality indicators and thresholds for evaluation; reviewing potential quality of care cases and recommending actions as indicated
- Make recommendations, as needed, on: reports pertinent to the States' quality program

D.2 Medicaid Information Technology Architecture Related Projects

Medicaid Information Technology Architecture Alignment

Goal: Align the Medicaid Enterprise to Medicaid Information Technology Architecture business processes and improve the maturity of the technology infrastructure

Medicaid Information Technology Architecture Alignment "As-Is"

Stakeholders have indicated the Medicaid Enterprise infrastructure is not in alignment with Medicaid Information Technology Architecture business processes. Systems within the Department are often siloed and structured in a way that limits interoperability and the effective use of shared information and resources. This is due to the historical "program oriented" approach to systems development. Under this approach, a funded program needs a system and a system is obtained. After the initial "go-live" of these systems, the requirements change, especially with workflow, making the system no longer appropriate or requiring users to use multiple systems for many tasks.

The Department also has an Enterprise Service Bus in the form of a BizTalk implementation that is capable of securely integrating internal applications with each other and providing a controlled, secure broker for external integration. This system is currently used to integrate the Eligibility and Enrollment, Medicaid, and Public Health systems. It provides a secure integration point with HealtheConnect Alaska. State-to-State data flows are brokered through BizTalk for newer systems or simply involve the transference of files between systems. For the most part, the systems are siloed or not accessible at all other than by the State government staff who maintain them.

Medicaid Information Technology Architecture Alignment "To-Be"

In the "To-Be" state, the Medicaid Enterprise would be fully aligned with Medicaid Information Technology Architecture business processes. These standards would also be applied across all systems and functions within DHSS including Health Information Technology for Economic and Clinical Health funded Health Information Technology projects. In this "To-Be" vision, a service-oriented architecture is established, and the BizTalk application is leveraged to integrate Information Technology solutions across the Medicaid Enterprise. Lastly, shared services and a shared data approach in all planned Information Technology projects have been considered and is a component of the Information Technology maturity roadmap.

Recommendations to Achieve the "To-Be"

Based on the guidance from the Centers of Medicare and Medicaid Services and the feedback of the stakeholders, it is recommended that the DHSS complete a full Medicaid Information Technology Architecture 3.0 State Self-Assessment to assess all elements of the Medicaid Enterprise including eligibility and enrollment systems. This would include a full current state/future state assessment of all business processes, information architecture, and technical system implementations comprising the Medicaid Enterprise in Alaska. The results would be used to make executable decisions on current systems, contracts, and other potential barriers to the modernization of the Medicaid systems landscape. The recommended Medicaid Information

Technology Architecture concept of operations, an output of the Medicaid Information Technology Architecture 3.0 State Self-Assessment is illustrated below.

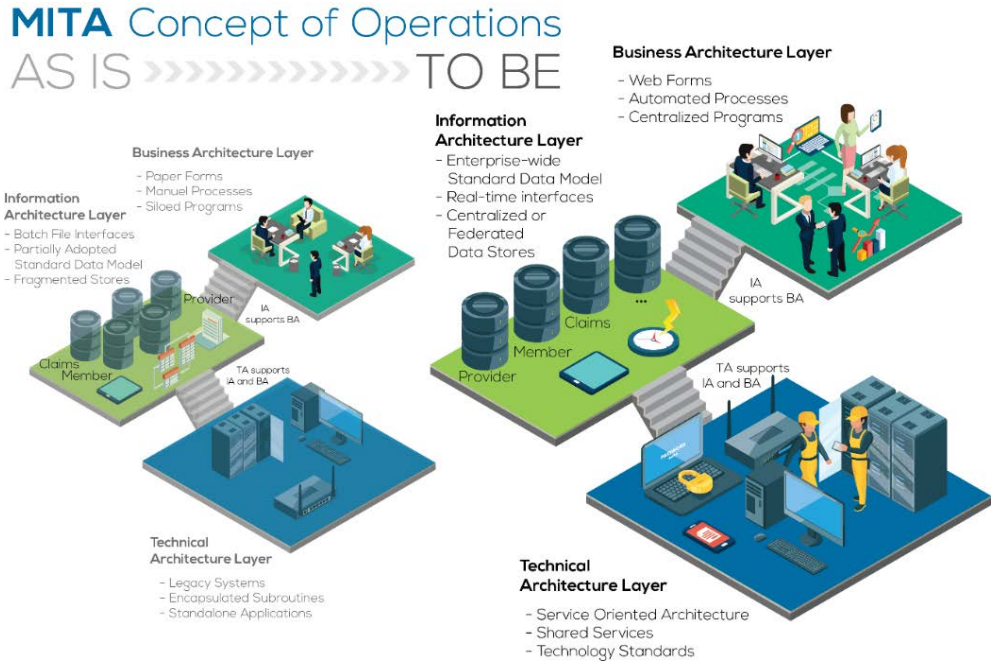


Figure 2: Example Medicaid Information Technology Architecture Concept of Operations

As indicated previously, the DHSS utilizes a BizTalk environment for integrating internal systems. This environment could be used to provide integration with the Health Information Exchange for the publishing of State data to providers including integration of the Health Information Exchange with State sources using Alaska's BizTalk platform.

Medicaid Management Information System Modernization

Goal: Use the completed Medicaid Information Technology Architecture 3.0 State Self-Assessment to identify a procurement roadmap for modernization

Medicaid Management Information System Modernization "As-Is"

The current Medicaid Management Information System was released to production and went live in October 2013. As of the date of the Health Information Infrastructure Plan report, the Medicaid Management Information System has not been certified by the Centers of Medicare and Medicaid Services. Stakeholders expressed concerns with the quality of the Medicaid Management Information System data. Due to these concerns, Medicaid claims data has not been included in the Health Information Exchange. This has greatly reduced the utility of the Health Information Exchange, given that Medicaid claims data could provide both clinical and prescription information on a large percentage of Alaskans, many of who are the most vulnerable patient population and require the most resources to manage.

The current Medicaid Management Information System was obtained using a big bang approach with a single vendor, Conduent, as the primary source of system functionality. This has proven to hinder system improvements due to the cost of modifications and the limited changes that can occur because of the solution architecture. The functional state of the Medicaid Management

Information System has also contributed to inefficient claims billing and reconciliation, department operations, and limited analytics capabilities and decision support.

Medicaid Management Information System Modernization "To-Be"

Consistent with current trends of the Medicaid industry, the "To-Be" vision would be a Medicaid Management Information System that has been designed based on a modular approach and in alignment with Medicaid Information Technology Architecture 3.0 business processes and standards. One potential outcome of the Medicaid Information Technology Architecture 3.0 State Self-Assessment could be a claims system capable of supporting future State initiatives.

Recommendations to Achieve the "To-Be"

As mentioned above, it is recommended to rely on the outcome of the Medicaid Information Technology Architecture 3.0 State Self-Assessment to determine the approach that is practical, feasible, and appropriate. It is also recommended for DHSS to modernize the Medicaid Enterprise by procuring multiple modules that will be dictated through the procurement roadmap to be developed during the Medicaid Information Technology Architecture 3.0 State Self-Assessment project. Examples of modules include but are not limited to:

- Systems Integrator
- Independent Verification and Validation
- Enterprise Data Warehouse
- Provider Management
- Pharmacy Benefit Management
- Fraud, Waste, and Abuse
- Fiscal Agent
- Third Party Liability
- Customer Relationship Management
- Care Management
- Eligibility and Enrollment

D.3 Master Client Index

Goal: Enhance the DHSS Master Client Index

Master Client Index "As-Is"

DHSS has implemented a statewide Master Client Index to reduce or alleviate duplication of client demographic data. The Master Client Index is not currently synchronized with the Health Information Exchange Master Patient Index, and it is unclear the extent of use of the Master Client Index in DHSS.

Master Client Index "To-Be"

To improve the data quality, demographic information available, and to increase the utility of the Master Client Index across the Enterprise, the Master Client Index will be synchronized with the Health Information Exchange Master Patient Index. This will not only enhance the Master Client Index but will also support the creation of a unique client identifier. The Master Client Index's unique identifier will provide the base architecture needed to create a single client view across

the Enterprise including all services and programs. While using two eligibility systems to determine Medicaid Eligibility, this unique identifier should be leveraged to avoid duplicate applications across the two systems. The Master Client Index data will include recipient demographic data and information from all programs including Medicaid waivers, care management programs, Community First Choices, public assistance programs, and public health programs. The data set can also contain current and previous enrollment history, current diagnosis, and hospital admission and discharge data.

Matching will be done to determine if applicants are already receiving benefits in another program. A data governance process will guide the matching process which can be done using demographic data, giving weights and thresholds to different attributes to determine if it is the same person. The consolidation of this data enables better care delivery in critical programs such as care coordination. Further, the enhanced Master Client Index will enable more advanced analytics and better program evaluation due to the richer and more stable data environment. These advantages will play a key role in advancing healthcare delivery in Alaska.

Recommendations to Achieve the "To-Be"

Establish a data governance process for client indexing, developing patient matching rules, and data stewardship. To enhance the eligibility process, it is recommended to incorporate the Master Client Index into the application process to flag duplicate applications and/or individual family members who are already recipients in existing or pending applications. It is also recommended that the DHSS Master Client Index be integrated with the Health Information Exchange Master Patient Index to improve coordination of care. This integration would be created through a bi-directional connection to support updates to data whether they occur within the Master Client Index or within the Health Information Exchange Master Patient Index.

D.4 Fraud, Waste, and Abuse

Goal: Improve the ability for the DHSS to detect and track potential cases of fraud, waste, and abuse

Fraud, Waste, and Abuse "As-Is"

Medicaid Redesign Senate Bill 74 identified the reduction of fraud, waste, and abuse as a core goal. Based on an interview with the Medicaid Program Integrity staff, it was noted DHSS has implemented a Surveillance and Utilization Review Subsystem, J-SURS, a Truven Health Analytics product, to produce the required Surveillance and Utilization Reports. However, at the time of this report, it was unclear if, and how, the Program Integrity Unit would utilize the J-SURS tool. The Program Integrity Unit is currently using a manual process to identify potential cases of fraud, waste, and abuse and to open cases. All case tracking and resolution is completed by staff.

Fraud, Waste, and Abuse "To-Be"

With a Medicaid Redesign Senate Bill 74 directive to focus on the reduction of fraud, waste, and abuse, the Program Integrity Unit should have Information Technology solutions to streamline and focus their effort in high probability cases and track workflows and case action to ensure the maximum impact can be achieved with limited staffing. Information Technology solutions that support workflows in this area will drive efficiencies.

Recommendations to Achieve the "To-Be"

In support of the Medicaid Redesign Senate Bill 74, it is recommended for the Program Integrity Unit to complete a gap analysis of the J-SURS product to determine if this product meets all required needs of the unit. It is further recommended that to support this initiative, DHSS should consider implementing an advanced fraud and abuse detection solution that is scalable and offers a solution for advanced analytics and fraud detection. The Program Integrity Unit also expressed a desire for a case tracking solution. It is recommended that the DHSS obtain a case tracking solution that easily integrates with multiple data sources, offers automated workflows, and allows for the workflows and case attributes to be easily configured.

D.5 Secure Identity and Access Management

Goal: Leverage myAlaska for Single Sign-On

Secure Identity and Access Management "As-Is"

Currently, there is not an enterprise-wide identity and access management system leveraged by the State across the Health and Human Services program. However, the myAlaska platform is used as a solution to provide a multifunctional universe for statewide activities including, but not limited to, issuance of benefits, retirement, and identity verification of State employees. myAlaska Authentication aligns with the State of Alaska's Health Information Exchange approach and Medicaid reform initiatives by leveraging myAlaska as the user authentication and identity management tool for the Health Information Exchange. Alaska has identified the need for a shared or enterprise solution for identity verification/validation. The 2017 Medicaid Redesign Report noted the myAlaska portal did not meet the requirements of the Health Insurance Portability and Accountability Act. SafeNet, an identity and data protection application, has been identified by DHSS as a potential solution to improve the compliancy of myAlaska.

Secure Identity and Access Management "To-Be"

Implementation of a tool such as SafeNet would allow myAlaska to be leveraged across DHSS as a single sign-on solution to support the Enterprise. To provide a cost savings, DHSS intends to leverage myAlaska as the primary means for user authentication and electronic submission of Meaningful Use data by providers. Another use case for the myAlaska portal would be to integrate with the DHSS Master Client Index and support authentication of users within the Health Information Exchange. This could simplify user authentication for all of DHSS using a single authoritative source of information and reduce overhead costs.

Recommendations to Achieve the "To-Be"

To document the feasibility of using myAlaska across the Medicaid Enterprise, a gap analysis of the solution should be completed to identify gaps in the system's functionality. As a component of the gap analysis, it is recommended that a complete security and risk assessment of the myAlaska portal is considered.

D.6 Eligibility and Enrollment Related Projects

Eligibility and Enrollment

Goal: To implement an efficient and accurate single eligibility determination system

Eligibility and Enrollment "As-Is"

With the implementation of the Affordable Care Act, Alaska followed the national trend to replace their current legacy Eligibility Information System (which followed historic eligibility processes regarding income, income disregards, and household composition; and generally included many manual processes for the more complex determinations), with a new system intended to be more automated, flexible, and maintainable over time. The plan was to initially process eligibility groups subject to the Modified Adjusted Gross Income methodology introduced by the Affordable Care Act and, in time, migrate the processing of those eligibility groups exempt from Modified Adjusted Gross Income as well as other benefit determinations such as Supplemental Nutrition Assistance Program.

Medicaid eligibility groups who fell under the Modified Adjusted Gross Income methodology were to convert from the historic method January 1, 2014.

The new eligibility system, Alaska's Resource for Integrated Eligibility Service, launched in 2013 with numerous issues. The Alaska's Resource for Integrated Eligibility Service sub-group meeting revealed that backlog of pending applications grew to an unmanageable number, and they were unable to identify duplicate applications in the pending backlog. The DHSS website posted information for pending applicants regarding efforts to address applicants' needs which included community resources, division new overtime policy, and help numbers for questions.

According to available records, in late 2015, Alaska changed from an "assessment" State to a "determination" State allowing the Federal Marketplace to determine eligibility rather than assessing the possibility of eligibility. DHSS has partnered with 18F to assist with the planning and execution of the Eligibility Modernization project. 18F is an office within the General Services Administration of the Federal government that collaborates with other agencies to assist with technical issues and develop products to improve how government serves the public through technology solutions. According to documentation obtained on the 18F GitHub, work on Alaska's Resource for Integrated Eligibility Service stopped in the summer of 2016 leaving Alaska with a partially implemented eligibility system and a backlog of approximately 14,000 applications. Staff are currently working in two different eligibility systems resulting in duplicate efforts, decreased worker productivity, and frustrated beneficiaries. This frustration carried over to the provider community as was evident in the May 12, 2017 stakeholder workgroup meeting.

Members of the provider community presented lists of concerns and specific examples which contained individuals with continued care needs without a billing source due in part to the backlog in eligibility determinations and re-determination. Records indicate that Alaska partnered with 18F to resolve the issues in the eligibility system and continue the migration plan. The current roadmap available on GitHub indicates work started in early 2017 with the identification of product owners and teams, a vision was produced in May 2017, and the first Request for Proposal was released in November 2017 and awarded in December 2017. The first Statement of Work was to develop a search functionality. 18F's approach is to use Agile product development to take a transparent

and modular approach. This approach will use multiple vendors (moving away from a single eligibility vendor) incrementally improving the system and empowering the system operation workers to feel confident about maintaining the system. 18F stated success will be achieved when worker productivity and morale is tangible, and benefits are being provided in a timely manner.

In addition, providers voiced concerns that presumptive eligibility capabilities were reduced rather than expanded after the Affordable Care Act go-live. Hospital representatives expressed concerns regarding the ability to submit claims in a timely fashion for newborns deemed eligible based on the mother's eligibility status at the time of birth. This delay may be caused by inefficient processing of the eligibility status.

Eligibility and Enrollment "To-Be"

Alaska needs an efficient and accurate single eligibility determination system. The legacy Eligibility Information System needs to be retired as it is old technology (common business-oriented language (COBOL) on a mainframe, which is batch and transaction driven), is difficult to implement changes within, expensive to host, and operating two systems creates rework for staff. The eligibility determination system will play a key role in the initiatives planned in Alaska. As Alaska transitions into a fully modular Medicaid Management Information System environment, it is essential the eligibility and enrollment components are making near real-time determinations and real-time interface/integration capabilities. This integration capability should include any vendors who are providing coordinated care to Medicaid recipients. The eligibility module of the Medicaid Management Information System Enterprise is often used to enroll and/or flag individuals enrolled in special programs, adding in the elimination of duplicative or overlapping services. In a truly modular enterprise, the eligibility system assumes the role of the member subsystem in the previous single monolithic Medicaid Management Information System. In that capacity, it will hold information vital to accurate claims processing. The timeline for movement to the Enterprise Medicaid Management Information System environment should include a single eligibility and enrollment system.

Taking full advantage of Affordable Care Act guidelines regarding presumptive eligibility, implementing the eligibility and enrollment module will allow all qualified entities to make presumptive determinations for both children and pregnant women. Eligibility for deemed eligible newborns can be automated, ensuring a timely billing source for providers.

In addition, Section 1940 of the Social Security Act created by the Supplemental Appropriation Act, 2008, Pub. L. No. 110-252, requires States to have a mechanism in place to verify assets for determining or re-determining Medicaid eligibility for aged, blind, and disabled Medicaid applicants or recipients. The Affordable Care Act required these systems to be electronic. The future state of the Alaska single eligibility system needs to seamlessly trigger an electronic Asset Verification System to explore and verify the assets at each application and re-determination of eligibility under the aged, blind, and disabled categories of Medicaid.

Recommendations to Achieve the "To-Be"

It is recommended to include the eligibility components in the Medicaid Information Technology Architecture 3.0 State Self-Assessment. This will highlight any weakness, beyond those already identified, which could impact the Enterprise and ensure this component is included in the outputs

of the Medicaid Information Technology Architecture assessment, including roadmaps and strategies. It is also recommended to evaluate the Medicaid Information Technology Architecture timeline and State government initiatives timelines to ensure the eligibility and enrollment system implementation is on track to support the Enterprise and the initiatives of Medicaid reform. In the event of a misalignment in timelines, DHSS should evaluate the options and ensure the current approach is on track to meet the enterprise needs. There are several single vendor Eligibility and Enrollment systems in use across States. Procurement or a technology transfer from another State may be an option as well as adding resources to the current approach to accelerate its outcome.

It is recommended to prioritize Presumptive Eligibility in the Eligibility Modernization Project and/or explore alternate methods to support Presumptive Eligibility, as well as explore options for automating the eligibility segment for deemed eligible newborns.

It is recommended to obtain an Asset Verification System to electronically verify the assets of applicants and recipients receiving Medicaid under the aged, blind, and disabled categories. Based on the language in the 2016 Annual Medicaid Reform Report, this electronic system may also be utilized for income and identity verification.

State Data Hub

Goal: To streamline access to available eligibility-related State data, improving quality of outcomes, and reducing worker and applicant burden across the Enterprise

State Data Hub "As-Is"

In meeting with the sub-groups, it was learned that program integrity staff must manually search wage records and other State data sources, and eligibility staff must complete various online searches to make an eligibility determination.

Many States are moving towards a more inclusive State data hub or State integration hub for ensuring accurate eligibility, viewing it as a better method for gathering data to verify the eligibility of their clients across multiple programs. States can create a data hub to gather information across multiple State data sources and make that information available at time of application.

State Data Hub "To-Be"

A State-level data hub or State integration hub acts as a centralized State data repository, containing data from sources such as vital statistic birth and death records, unemployment insurance payments, and State wage records. The data hub is utilized at application and re-applications for all applicants and a dashboard or inquiry tool would be available for authorized personnel. The State data hub would include sources such as child support, unemployment insurance, and vital records. Depending on State policies for the issuance of driver's licenses, including that information in the data hub may also provide proof of identity.

Recommendations to Achieve the "To-Be"

To enable better sharing of information, the development of a State data hub (or State integration hub) is suggested. The hub will act as a centralized integrated hub for sharing data across various entities and systems in the Enterprise, including identified related systems. This data hub will be part of the larger Medicaid Enterprise data hub. It is anticipated that the Medicaid Enterprise data

hub will expand to include storage of nontraditional data as new areas of business and information is identified as relevant to improving coordination of care and the overall health and well-being of the Medicaid population.

One data source that other States have used that Alaska may consider including would be "The Work Number," a user-paid verification database created by TALX Corporation, which is one of the largest repositories of employer-reported employment and income data. If the State elects to use their own State data hub to meet the requirements of the federally mandated asset verification system, inclusion of the Automated Clearing House Bank Routing file system will be needed in addition to property records.

It is recommended for DHSS to obtain a vendor or include the scope of work in a Systems Integrator procurement to work with DHSS to develop a State data hub. As part of the data governance, Alaska will be providing the framework criteria for individual matching that feeds into the State's Master Client Index to ensure consistency across the Enterprise. The State data hub can be leveraged by other benefit programs to retrieve and store information such as the Electronic Benefits Transfer card usage, foster care cases (as identified by Title IV-E of the Social Security Act) can use the data hub to automatically trigger a Medicaid case file and initiate a Primary Care Physician appointment via interaction with the referral or care management module. This data hub can be used to transmit newborn records from vital and public health records to expedite newborn eligibility as well as date of death to terminate various assistance programs. The data hub can pull data from Public Assistance Reporting Information System, lifeline, and Low-Income Subsidy referrals and trigger appropriate action. The hub can support referrals to the Women, Infants, and Children program as appropriate, and data from local jails and prisons to trigger appropriate actions on Medicaid eligibility files.

The data hub would interface with the State's eligibility system, providing electronic triggers, verification, and uploaded data for many components of the public assistance applications. In addition, the hub will support the ability to query historic data for identified areas of DHSS that have a business need to access historical data, such as program integrity.

D.7 Referral Management Module

Goal: To improve the referral process to include non-medical community organizations and ensure the referring entity is alerted of the outcomes and receives relevant information for ongoing care

Referral Management Module "As-Is"

Providers voiced concerns in the workgroup meetings that when referring patients to other providers they generally do not receive appropriate patient data back to ensure their member records are complete, also known as "closing the referral loop." As the conversation evolved, it was expanded to include the inability of providers to refer to community resources that may be equipped to meet their patient's social needs. Based on conversations across all stakeholder meetings, the need for a global enterprise referral system was noted.

Referral Management Module "To-Be"

A robust referral system is needed that has many capabilities including the inclusion of community resources as well as clinical providers. The system would distribute referrals evenly among comparable resources in each geographic area through load-balancing algorithms. This is particularly helpful with community resources to ensure no one single organization is being overloaded. Referral systems can be leveraged to make referrals within DHSS and to outside agencies.

The system would have a dashboard view and receiving providers can receive an alert to both the provider and office schedulers. The information transmits in real-time and includes the desired appointment date and time, patient demographic information for contact, and any additional records that need to be shared. The referral system enables end-to-end patient referral tracking by encouraging specialist staff to report appointment attendance or noncompliance (information beneficial to waiver case management for care plan adherence and needed intervention) as well as return clinical notes to primary care offices for better patient care and outcomes.

In addition, because referrals typically occur when there is a change of diagnosis or an escalation in care needs, the system can send real-time alerts to appropriate individuals when the diagnosis indicates a need for care management or other supportive services offered by specific Medicaid programs. Promoting swift introduction of care management or other needed supports ensures the patient is guided to an appropriate high-quality, low-cost setting and needed supports are in place to avoid further deterioration of the patient's health. The system can pull patient demographics and provider information from multiple sources identified by the agency.

The system can include an end user administration tool that allows each connected entity to update and manage their office as appropriate. Other features of the system may include the ability to see, via a heat map referral, patterns, and distance tracking from the referring provider or patient address to the specialist to ensure referrals are in alignment with policy rules regarding distance traveled.

Recommendations to Achieve the "To-Be"

It is recommended to obtain a referral system or module that is based on Service Oriented Architecture with open Application Programing Interface allowing for easy connection via the secure framework to both the Health Information Exchange and the DHSS Enterprise Service Bus. This system would be contingent on the establishment of a comprehensive provider directory that includes both medical and non-medical entities. The system can obtain provider data from the provider directory and member data from the Master Client Index, as should all other modules across the Medicaid Enterprise, including the Health Information Exchange.

The system must provide a user interface that allows community resources to connect as well as providers not utilizing the Health Information Exchange. The system can be leveraged to support waiver programs and Community First Choice as well as any care management services that may be in place within the enterprise.

D.8 CARE MANAGEMENT

Goal: Improve care management across the State

Care Management "As-Is"

Providers discussed that the lack of data standardization and interoperability are creating barriers to care management. Providers do not have access to needed data or methods to support their patients' clinical or social determinants of health. Currently, Alaska Medicaid has limited care management programs; Care Management Services and Alaska Medicaid Coordinated Care Initiative. Care Management Services is a voluntary program and is operated by a contractor, Qualis Health that has nurse case managers to assist recipients and their families to obtain needed health and community services. Alaska Medicaid Coordinated Care Initiative, also a voluntary program, provides one-on-one case management services including scheduling appointments, addressing barriers, and referrals to specialist and social supports.

Alaska has four 1915 (c) waivers: Intellectual & Developmental Disabilities, Adults Living Independently, Adults with Physical and Developmental Disabilities, and Children with Complex Medical Conditions, and a State plan program providing Personal Care Services for approximately 4,000 individuals who do not meet institutional level of care.

Alaska recently received approval of two State Plan Amendments:

1) Providers targeted case management services for individuals transitioning to a community setting and is available for up to 60 consecutive days of a covered stay in a medical institution. Services include a comprehensive assessment to determine the need for medical, educational, social, or other services.
2) Community First Choice 1915(k) State plan option provides choices for recipients, and, if elected, recipients can receive Personal Care Services and care coordination

Medicaid Redesign Senate Bill 74 has several provisions to enhance care management including a directive for DHSS to evaluate and/or deploy an expanded care case management system or managed care and a demonstration project for behavioral health. In addition, the State has a Chronic and Acute Medical Assistance program for those not eligible for Medicaid.

Care Management "To-Be"

Providers must have the tools necessary to provide patient-centered care. Patient information is readily available including any past screenings, assessment, and care plans. DHSS has a clear view into the activities of case management across all areas of Medicaid. This view will provide many advantages from oversight to avoiding duplication of services. Consolidated data will allow DHSS to evaluate success rates of various approaches to care management across the Enterprise. This will support efforts to improve outcomes, reduce cost, and ensure recipients are receiving the right care, in the right setting, for the right cost. Waiver case managers can determine if care plans are being followed and utilize work flow components. Waiver management can track enrollments and budget neutrality of each waiver at any given point in time.

Recommendations to Achieve the "To-Be"

It is recommended that DHSS obtain a Care Management Module that will be loosely coupled for easy integration with both the Health Information Exchange and the Enterprise Service Bus to support interoperability. The Care Management Module will support all areas of care management across DHSS using role-based access to ensure only appropriate information is presented. The module should include a case management tool to support various activities across the Enterprise in need of a consolidated case file with workflow prompts and alerts. The care management system will support any future managed care programs, home and community-based services programs, and the Community First Choice State plan, as well as provide a shared platform for any future Administrative Service Organizations.

In addition, the module should be able to support (i.e. process, store, and display) data from an Electronic Visit Verification System [1]. Use of an Electronic Visit Verification system was mandated by law (21st Century Cures Act, Section 12006) for all personal care services (in place by 2019) and home health services (in place by 2023) under Medicaid.

The Care Management Module will support grievance and appeals relating to care management and will link to the Referral Management module identified above and the provider directory identified below as they are developed.

As the Medicaid Enterprise matures, the module will couple with the data warehouse and decision support to allow for the development of dashboards, data analytics, and predictive modeling for potentially at-risk recipients.

The Care Management Module would primarily support the Medicaid Enterprise but could be leveraged in the future to meet other needs across the State, such as coordination of care with private entities including Corrections and private carriers. The procurement should include the flexibility for additional functionality and use cases to be included in the solution.

D.9 Provider Directory

Goal: A provider directory capable of meeting the care coordination needs of Alaska

Provider Directory "As-Is"

There is not a statewide authoritative source of provider information in Alaska. There is the Medicaid Management Information System provider file that is used for payment purposes, but this information falls short of meeting the needs of the community. Care coordination and referral systems are dependent on a Provider Directory.

Provider Directory "To-Be"

The DHSS needs to obtain a Provider Directory that can be leveraged by individuals, plans (including Medicaid), Health Information Exchanges, and any other qualified users. The Provider Directory features an extended data set that includes community supports, other governmental programs, and non-governmental organizations, in addition to traditional medical providers. This Directory is used by all State programs including any future MCOs or Administrative Service

[1] https://www.congress.gov/bill/115th-congress/house-bill/6042

Organizations and identifies your Telehealth providers. It currently supports the Referral Management module and Direct Secure Messaging. This provider directory will be a valuable tool in helping to position the Medicaid Enterprise as it moves toward value-based payment models by making a comprehensive set of information about providers accessible to stakeholders.

Recommendations to Achieve the "To-Be"

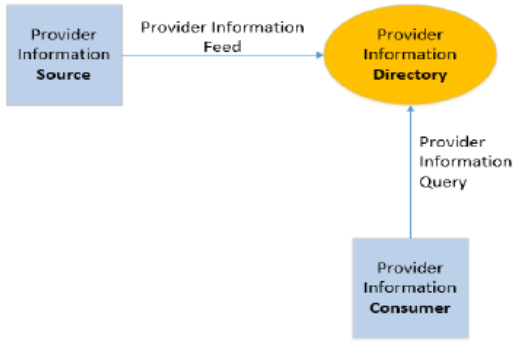
It is recommended the DHSS obtain a robust Provider Directory module that can receive data feeds from multiple sources and harmonize the information into an authoritative statewide Directory. The specifics regarding this statewide Provider Directory will largely depend upon the use cases that exist as well as the available resources that can be leveraged. However, there is a growing recognition throughout the industry that to utilize Provider Directories to support the transition to value-based care models, Provider Directories will need to include:

- Additional types of providers, including non-clinical types (i.e. nutrition, transportation, housing)
- Affiliations between providers and affiliations with care teams, including individuals with organizations
- Ability to link to additional data sources
- Support for patient-to-provider attribution models

In its State Health IT Modular Functions for Value Based Payment Strategic Implementation Guide, the Office of the National Coordinator for Health IT describes three Provider Directory models: (1) basic centralized, (2) simple federated, and (3) complex federated. Medicaid HITECH consolidated the information in their report, "eCQM and Provider Directory Toolkit: An Introductory Conceptual Guide for State Medicaid Agencies"[2]. These models are presented to illustrate the general flow of information and can be used to evaluate the models' relevance to DHSS needs and environment.

[2] https://qppsurs.files.wordpress.com/2018/07/ecqm-prov-dir-toolkit-508.pdf

Centralized Model—may be more representative of the current state of provider directories



Provider information sources feed new and updated provider information into a Provider Directory, and consumers of information can query the directory.

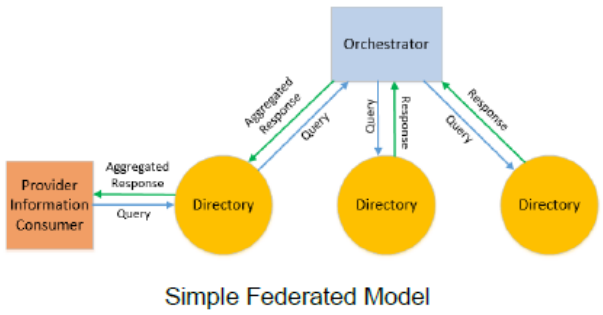
Authorized Information Sources include:

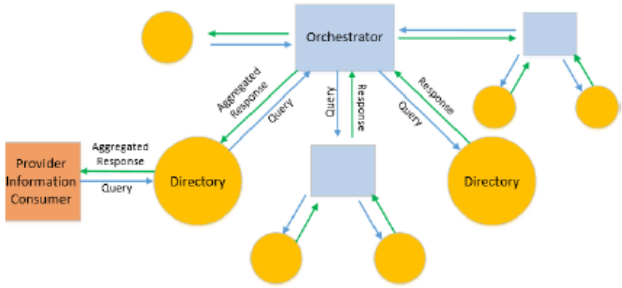
- National Plan and Provider Enumeration System (NPPES)
- State licensing bureaus
- National associations
- Commercial registries
- Delivery networks
- Health Information Exchanges

Source: Recreated from State Health IT Modular Functions for VBP: Strategic Implementation Guide

Figure 3: Centralized Provider Directory Model

Federated Models—Could be basis for the future state of Provider Directories





Structure: Multiple directories that communicate with a higher-level orchestrator

Information flow:

- A query can be made with any one of the provider directories;
- Query is relayed from the directory to the higher-level orchestrator node;
- Orchestrator then relays the query to the other subordinated directories;
- The directories send their responses to the orchestrator, which aggregates the information;
- Orchestrator then sends a response to the initial directory that the consumer queried;
- Aggregated response is then provided to the consumer.

Source: Recreated from State Health IT Modular Functions for VBP: Strategic Implementation Guide

Figure 4: Federated Provider Directory Model

There is not a single model of Provider Directory that works best for all States, however, the trend is toward a single authoritative source of data to obtain efficiencies and eliminate redundant effort. Many States are in the process of researching and planning efforts to implement a statewide provider directory and are at various phases of that process. As provider directories is a topic in which there has historically been limited standardization and many are still working through the process of planning efforts, there are few States who have seen a provider directory solution through to completion. However, of those who have successfully implemented a provider directory solution or are actively working on implementing a solution there are some commonalities. All have enlisted the services of a vendor to assist in the provider directory efforts. Some are using non-profit entities that are also operating the Health Information Exchange for the state, some are using off the shelf products and are working with the vendor to implement, and others have opted to procure from a vendor that is performing the work for another state. In all cases, state government entities work closely with the vendors and maintain an active role in establishment of requirements and governance activities associated with the directories. Some are have opted to leverage state government IT resources for hosting while others are hosted by the vendor.

To create a provider directory that will meet the needs of the stakeholders of the Alaskan healthcare ecosystem, it will be necessary to identify the needs and use cases to be met, any emerging care coordination models to be supported, and if any relevant state or federal regulations exist. This will likely involve a high level of stakeholder engagement and extensive strategic planning efforts including researching publicly available information regarding the considerations of implementing a provider directory solution and any lessons learned information that may be available through other States efforts. This information will drive the development of a provider directory that will best support the needs of DHSS and all relevant stakeholders.

D.10 Document Management System

Goal: Implement a Document Management System

Document Management System "As-Is"

The workgroup discussed that as the agency moves toward alternate payment systems and new delivery methods, the need for oversight and coordination will increase the workload of DHSS staff. This would come in the form of increased document traffic.

Document Management System "To-Be"

Efficiencies gained through automation will help reduce this burden on staff. Much could be accomplished with the addition of a Document Management System with an automated workflow.

Recommendations to Achieve the "To-Be"

Implementation of an enterprise electronic Document Management System and workflow management system can support DHSS staff as the agency moves toward alternate payment systems and delivery methods. It is recommended that Alaska obtain such a system as part of its strategy of modularizing the Medicaid enterprise.

D.11 TELEHEALTH

Goal: Reduce barriers for telehealth services

Telehealth "As-Is"

Funding from the USAC Rural Health Care Fund has increased the accessibility to broadband in rural parts of Alaska. Although access has improved, workgroup discussions indicated that Telehealth is not widely or consistently used throughout the State.

The Medicaid Redesign Telehealth Workgroup Report described multiple barriers to the adoption of Telehealth across the State including the lack of ability to reimburse for various Telehealth services and the expense of technology required for Telehealth services. The report also noted that access to adequate broadband services can be costly, and without continued funding and support, this cost could become a barrier. These findings were consistent with the discussion by provider participants of the Health Information Infrastructure Plan workgroup.

Telehealth "To-Be"

The "To-Be" vision for telehealth improves the ability for healthcare providers to provide care to patients from a remote location by reducing barriers and increasing adoption and support of Telehealth services. The main goal of the "To-Be" would be to increase the reimbursement available for a larger set of telehealth services, have streamlined coordination of care through technology including a Provider Directory as mentioned earlier.

Recommendations to Achieve the "To-Be"

Recommendations can be implemented by DHSS alone for Medicaid-enrolled providers or can include a partnership with private carriers across the State. Recommendations include:

- Establish and communicate with the provider community clear Telehealth policies, acceptable procedures, best practices, and enterprise wide tools
- Provide technical support and assistance to increase adoption of Telehealth
- Develop a Provider Directory that highlights practices utilizing Telehealth
- Use lessons learned from Indian Health Services including the practice of placing individuals at specific geographic locations to assist people with Telehealth
- Advocate for continued funding support for rural broadband connections
- Increase funding available for providers to offset the cost of technologies to support telehealth

D.12 PROVIDER ENROLLMENT AND MANAGEMENT

Goal: To streamline and improve provider enrollment across all payers

Provider Enrollment and Management "As-Is"

The most prevalent complaints among workgroup participants regarding provider enrollment and management were:

- Significant lag-time required to credential with private payers within the State
- Need for increased automation and streamlining of the enrollment process across all payers

Workgroup participants pointed out that current opportunities to decrease the administrative burden of enrollment on the provider are not consistently utilized by all carriers. For example, it was noted that Medicaid does not utilize Council for Affordable Quality Healthcare for the application process. More than 1.4 million physicians and other providers enter and maintain a wide range of information within the Council for Affordable Quality Healthcare ProView, each creating a comprehensive provider profile to share with the healthcare organizations they choose. Nearly 900 health plans, hospitals, and provider groups utilize the Council for Affordable Quality Healthcare ProView[3]. Utilization of the Council for Affordable Quality Healthcare would potentially offer an opportunity for Medicaid to streamline and reduce duplication of paperwork for providers who wish to apply for participation.

Provider Enrollment and Management "To-Be"

Provider enrollment and management that is streamlined and automated wherever possible, and the opportunity for payers to leverage a shared common credentialing function, creates efficiencies and cost savings within the provider enrollment process across payers.

Recommendations to Achieve the "To-Be"

It is recommended DHSS evaluate the feasibility of implementing a statewide common credentialing program. Such a program would support streamlining of the credentialing process which is a necessary precursor step to the provider enrollment process for all payers. The ability for all payers to leverage a shared resource could reduce duplication of work across payers and in turn increase cost efficiencies and support the goal of providing provider information that has been fully and consistently vetted allowing for quicker enrollment at the payer level. The State of Oregon could potentially serve as a resource to obtain lessons learned and information regarding the potential pitfalls of implementing such a program as they are currently implementing a statewide common credentialing program.

In addition, in conjunction with the Medicaid Information Technology Architecture 3.0 State Self-Assessment, it is recommended that all provider enrollment and management business processes be fully reviewed and evaluated to determine areas in which the process can be streamlined and automated within the Medicaid Enterprise. Such options as the adoption of the Council for Affordable Quality Healthcare as an application mechanism could be considered in this review and evaluation.

[3] https://www.caqh.org/sites/default/files/solutions/proview/CAQH_ProView_FINAL_4.7.15_final.pdf?token=4-8cNh4E

D.13 Electronic Health Records Adoption

Goal: Increase EHR Adoption

Electronic Health Records Adoption "As-Is"

The following list reflects the current electronic health records adoption as reflected in the environmental scan:

- Hospitals, Federally Qualified Health Centers affiliated providers, and Tribal affiliated providers have adoption rates of nearly 90 percent or better
- Electronic health records adoption rates are significantly lower among certain provider types such as dental and behavioral health providers
- Usage of electronic health records systems is often siloed within the walls of the practice/location with limited sharing of data with other healthcare entities
- Health Information Exchange adoption is low throughout the State with an overall adoption rate of 28 percent
- Telehealth adoption is limited with an adoption rate of only 29 percent. Tribal affiliated provider groups are the exception with an adoption rate of nearly 100 percent.
- Electronic exchange of data, including referral data, is limited across provider groups

Electronic Health Records Adoption "To-Be"

Electronic Health Records and other digital technologies are the future of healthcare. The Electronic Health Record industry predicts more competition and emerging cloud technology will make Electronic Health Records more affordable for smaller practices in the coming years[4]. MACRA will significantly impact how practices think and use electronic health records in the future. The ideal "To-Be" landscape would reflect increased adoption of electronic health records technology that meets emerging needs of practices, and technology that supports bi-directional communication between both providers and patients.

Recommendations to Achieve the "To-Be"

It is recommended DHSS continues to support and encourage Electronic Health Records adoption across the State through outreach and education, which may include, but not be limited to, webinars and educational materials, to ensure the provider community is informed and understand emerging trends and technologies.

[4] Electronic Health Records (EHR) Market Analysis By Product (Client Server-based, Web-based), By Type (Acute, Ambulatory, Post-Acute) By End-use (Hospitals, Ambulatory Care), And Segment Forecasts, 2018 – 2025; 125 pages; April 2017; PDF

D.14 Public Health Modernization

Goal: Improve the efficiency of public health reporting

Public Health Modernization "As-Is"

There are numerous healthcare-related registries used by the State. Public Health registries include, but are not limited to, the following:

- AK Facility Data Reporting – hospital inpatient and outpatient discharges (hospitals only)
- Lead Electronic Lab Reporting – currently reported by hospitals; this will be expanded for Eligible Hospital and Eligible Professional electronic submission
- OZ System – newborn screening and hearing detection
- AK Birth Defects Registry – infants and young children with birth defects
- Death and Injury Reporting – including multiple registries:
    - AK Firearm Injury Reporting Surveillance System – firearm related injuries
    - AK Fatality Assessment and Control Evaluation Registry – occupational injury data collection
    - AK Violent Death Reporting – injuries resulting in death
    - AK Drowning Surveillance System – drowning related fatalities
- Lead ELR
- Cancer Registry
- AKSTARS – reportable disease registry
- BioSense – syndromic surveillance reporting
- Electronic Lab Results reporting
- Trauma Registry
- VacTrAK-Immunization Registry

In March 2016, an analysis of the Public Health registries was completed by HealthTech Solutions. The report identified significant gaps in the utility of registry reporting and provided a recommended solution for integration. Most registries are Microsoft Access databases and do not have the capability to integrate with other systems. This has caused a barrier to have a streamlined method for data collection and limited utility for the registry data. Stakeholders did discuss that the VacTrAK immunization registry meets the needs of the provider community. Stakeholders also explained the frustrations and inefficiencies of the variations of the data sets and reporting methods required by the registry owner.

Public Health Modernization "To-Be"

Electronic public health reporting for all providers to all Alaska public health registries implemented as a 'Report Once' structure/process would accomplish a number of goals for the State. Electronic reporting will produce data for multi-purpose use in the State – Public Health, data analytics, and population health. A 'Report Once' structure will be much more efficient for providers and promote increased participation, as well as promote the utilization and value proposition of the Health Information Exchange.

In the "To-Be" state, the registries recognized as specialized registries by the State should be expanded. This will provide increased federal funding opportunities and can support the ability for

providers to attest to Meaningful Use. The system that collects required STD/HIV data, called PRISM, should be recognized as a specialized registry. As part of the PRISM project, results data from the State lab can be integrated in the Health Information Exchange by connecting the Laboratory Management Information System to the Health Information Exchange for query by subscribing organizations.

Recommendations to Achieve the "To-Be"

The first recommendation is for DHSS to revisit the 2016 assessment of the Public Health registries and determine the applicability of the data and recommendations. In the instance that the report is still relevant to the environment, it is recommended for DHSS, in collaboration with Public Health, to strategize on the execution of the modernization plan. Electronic public health reporting should be implemented for as many Alaska public health registries as is technically possible. Electronic reporting should be done via Health Level-7 standards reporting that meets the Center for Disease Control specifications as well as Meaningful Use/Promoting Interoperability as appropriate. Additionally, it is recommended that the State expand the registries that are recognized as specialized registries. The Alaska Department for Public Health should work with HealtheConnect Alaska Health Information Exchange to develop interfaces and Health Level-7 reporting functionality. In this model, reporting would be centralized through the Health Information Exchange as illustrated below.

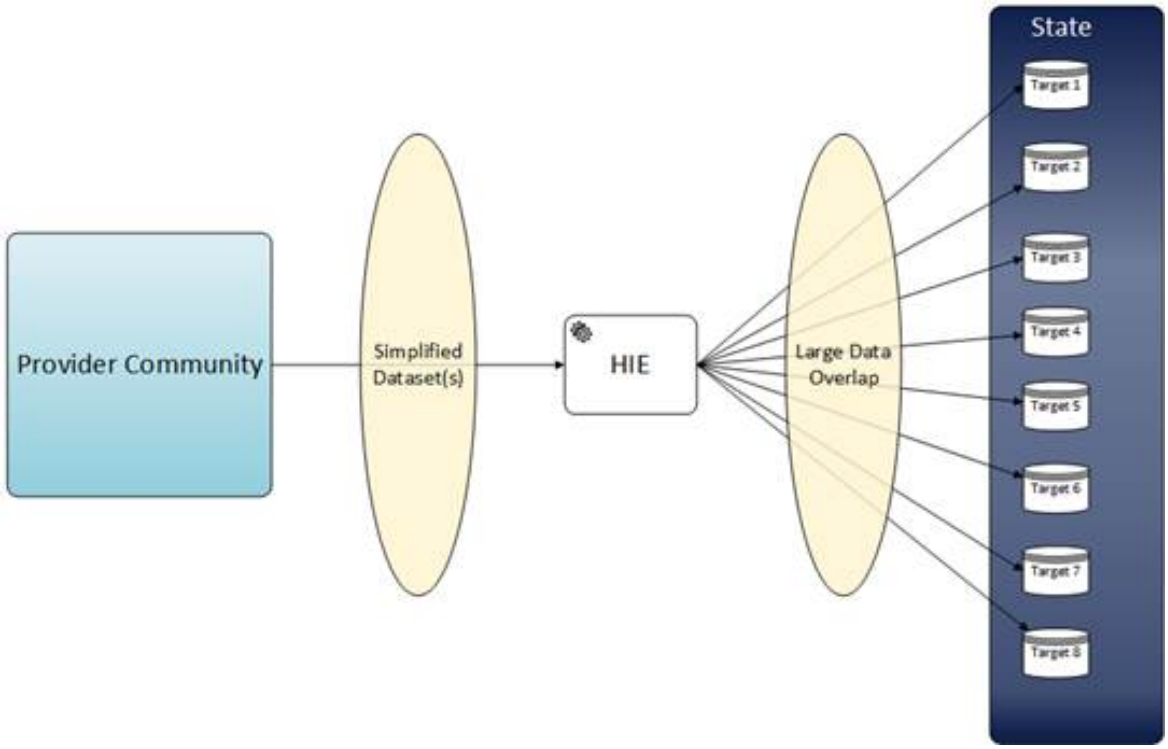


Figure 5: Provider Reporting, Desired State

E. PROJECT DELIVERY

This section contains areas that can have a positive impact on the success of future Information Technology solutions within DHSS. It was observed that the Department is in varying levels of maturity in these areas. This section has omitted the "As-Is" and moved to a format of describing the topic, and then summarizing the recommendations that DHSS should consider as they move forward. This section includes information on the following:

- Data Governance
- Enterprise Architecture
- Enterprise Project Management Office
- Independent Verification and Validation
- Testing and Quality Assurance Services
- Systems Integration

E.1 DATA GOVERNANCE

Lack of data governance policies and standards is creating a barrier to interoperability. Establishing a data governance committee helps to build the framework for establishing statewide data governance policies and standards and promote interoperability. Unfortunately, stakeholder engagement in data governance activities wanes over time. The workgroup recommended better recruitment, management, and coordination of data governance activities to ensure representation from key stakeholder groups.

Data governance is the discussion of how data is collected, processed, and disseminated across the Enterprise. What is collected, who can access, what are the usage limitations, and what are the retention requirements are all pertinent questions to be addressed by data governance. The function is multi-disciplinary and requires skillsets including technical, business, and legal experience. Much was discussed in the Health Information Infrastructure Plan workgroup sessions about the need for data governance with considerable focus on harmonization of data being received from various sources.

Recommendations

It is recommended that the DHSS create a data governance board and additional governance workgroups to develop data governance processes and address quality and consistency of all data within its purview or influence, including Health Information Exchange and internal state systems. The illustration below is a sample data governance organization based on a top down approach and hierarchy that can be considered by the DHSS.

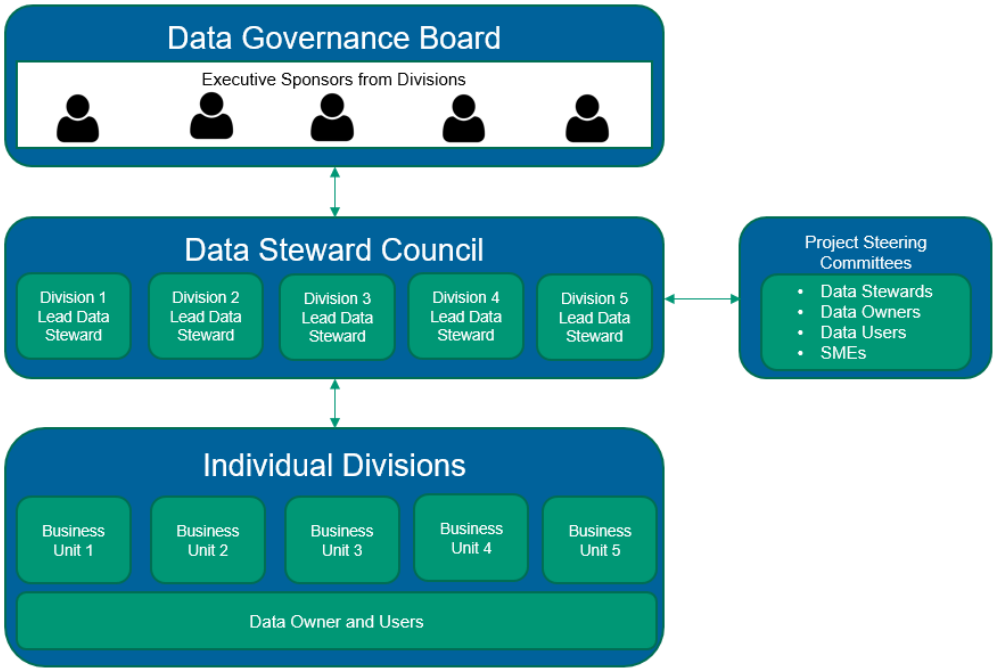


Figure 6: Data Governance Organization

E.2 Enterprise Architecture

Enterprise Architecture is primarily about setting standards, selecting specific technologies, and making sure all selected technologies are interoperable, support the business, and are cost effective. It is important to have an Enterprise Architecture group in place to connect the business, technical, informational, and cost topics to ensure a consistently appropriate environment even as that environment undergoes steady evolution. Enterprise Architecture consists of models, diagrams, tables, and narratives, which together translate the complexities of the agency into simplified yet meaningful representations of how the agency operates and intends to operate. This includes business processes, rules, information needs and flows, users, and location as well as hardware, software, data, communication, and security standards. Enterprise Architecture analysis provides Agency leadership with clear views into the operational reality. The Enterprise Architecture development, implementation, and maintenance is a basic principle of effective Information Technology management. The Enterprise Architecture group will provide consistent architectural guidance and will establish enterprise architecture and standards for future Information Technology solutions.

For Medicaid modernization, States are now utilizing the services of a Systems Integrator to manage the integration of separately procured modules. The Enterprise Architecture group works alongside the Systems Integrator in these cases and helps codify standards, support the inclusion of standards in the Request for Proposals, and help with the vendor selection process as experts.

Recommendations

It is recommended that DHSS convene a permanent Enterprise Architecture group and empower them to make meaningful decisions regarding the information and technical architecture of the Alaska DHSS Enterprise. One of the first orders of business for the Enterprise Architecture group will be to establish a charter for the group's authority, objectives, roles and responsibilities, membership, decision making (voting authority), escalation, and alignment with State policy. The group can be staffed with State government staff or staff augmentation contractors and membership should include:

- Senior Technical Architect with focus on Alaska DHSS Enterprise projects supporting Medicaid
- Senior Technical Architect with focus on Enterprise Architecture Standards
- Data Architect with knowledge of Medicaid and national frameworks such as Medicaid Information Technology Architecture and National Human Services Interoperability Architecture
- Interface and Interoperability Subject Matter Expert
- Security Analyst to develop security compliance plans in accordance with applicable laws and regulations
- Privacy Subject Matter Expert

Staffing options should be full-time during the Medicaid Enterprise modernization project. This will provide more responsiveness to the project and help reduce schedule, cost, and functionality gap risks. Funding can be obtained through an Advance Planning Document with the Centers for Medicare and Medicaid Services to offset the cost of additional staffing. It is expected that Enterprise Architecture staffing will evolve beyond the Medicaid Enterprise modernization and be key as the Department expands and evolves.

The Enterprise Architecture group will host regular meetings to discuss topics of interest, set policy, and approve technical plans and deigns. These meetings will include other personnel from DHSS, the Systems Integrator, modular vendors, and the Independent Verification and Validation as needed. The Enterprise Architecture group will guide development plans, assist with procurement requirements and specifications, and ensure the agreed upon architectural direction is followed.

E.3 Enterprise Project Management Office

Discussion within the workgroup sessions reflected the past difficulties within the DHSS when launching large Information Technology solutions. Major system development and enhancements are difficult to manage, in part due to the large number of stakeholders and the time-consuming process of vendor management. Each vendor is unique with varying approaches and timelines.

An established Enterprise Project Management Office staffed with skilled project managers who dedicate the time and attention to vendor management while working together with DHSS's own project managers and policy staff is needed when launching large Information Technology solutions. The Enterprise Project Management Office absorbs the daily oversight of new system development and facilitates coordination between various stakeholders. In addition, an Enterprise

Project Management Office could support DHSS in coordinating documentation between future vendors, including Independent Verification and Validation vendors.

Recommendations

An organization can benefit from the vision of efficient, timely, and functional Information Technology projects by utilizing an Enterprise Project Management Office. An Enterprise Project Management Office assists the organization's executive by bringing a project management and software expertise framework to tracking and evaluating project progress. This is especially critical in organizations where there are dependencies on, or implications for, other organizations and sub-units. Most ideally, an Enterprise Project Management Office allows for a team of experts to execute Information Technology projects that fulfill an executive's mission, vision, and goals. This team of experts should represent the organization's policy disciplines (e.g., healthcare, transportation, child support), project management, and technologists. This multi-disciplinary approach allows the team, on the executive's behalf, to properly govern projects without falling into silos.

When properly executed, an Enterprise Project Management Office will reduce project inefficiencies, schedule delays, and increase end user satisfaction. Every organization has opportunities to benefit by ensuring that Information Technology developers and stakeholders are cooperative, informed, and transparent. Since Information Technology projects usually involve numerous teams, products, and integrations, coordinating these teams can be a heavy lift. In large private or government bureaucracies, competing priorities may develop, making it difficult to meet schedule and budget obligations. Furthermore, Enterprise Project Management Office vendors allow the client to contract for specific subject matter expertise; particularly project management, technical architecture, software development, program and policy, and operations management which may alleviate resource strain experienced by DHSS.

Moving to a modular enterprise often means working with multiple vendors simultaneously and without a dedicated Enterprise Project Management Office, State government resources are stretched. It is recommended that DHSS obtain the services of an Enterprise Project Management Office to assist through this transitional process.

E.4 Independent Verification and Validation

State Medicaid Director Letter 16-010[5] was released August 16, 2016. This letter provided guidance to State health and human services departments with strategies for modularity of Medicaid Enterprise systems. As part of the guidance, Independent Verification and Validation was discussed. Under Code of Federal Regulations, title 45 section 95.626, an Independent Verification and Validation vendor may be required for large Medicaid Information Technology projects. Based on the regulation and guidance of the State Medicaid Director letter, it is a requirement for State agencies to obtain an Independent Verification and Validation vendor for Medicaid Enterprise modernization and modular projects, including eligibility and enrollment procurements.

[5] https://www.medicaid.gov/federal-policy-guidance/downloads/smd16010.pdf

The scope of the Independent Verification and Validation is detailed in the Medicaid Enterprise Certification Toolkit and includes the evaluation of project management, evaluation of project performance, evaluation and management of testing processes, and technical reviews of all modules. The main role of the Independent Verification and Validation is to provide an impartial assessment of the progress of large scale projects.

Recommendations

Alaska shall comply with the regulations related to all Independent Verification and Validation requirements. As such, it is recommended for DHSS to include an Independent Verification and Validation vendor as a component of any major solution redesign or procurement effort. Additionally, to control efficiencies and cost, it is recommended the same Independent Verification and Validation vendor be leveraged across all Medicaid Enterprise implementations. To ensure true independent status, the Independent Verification and Validation vendor should not be allowed to bid on any functional modules or serve as the Systems Integrator for the Enterprise.

E.5 Testing and Quality Assurance Services

In a modular world, it can become complicated to test a process that involves solutions from multiple vendors. All vendors test their own technologies, but a complicated environment could lead to questions when testing the overall processes when workflow or orchestration is hiding underlying details. Also, in a complicated environment, someone will need to manage all the test cases, their status, defect resolution processes, and other testing related topics.

Quality Assurance services go beyond testing and provide statistical analysis of the state of the testing effort, defect analysis, and other quality topics. This activity can be provided by the testing vendor or can be outsourced separately. Alaska may wish to separate these activities to improve the chance of an Alaska vendor winning the bid as the Quality Assurance services require a higher level of skill that some small companies may lack.

Automated testing tools are important to achieve deep testing because they can run many tests without human interaction leaving human testing staff available for more challenging tasks.

Recommendations

It is recommended that DHSS hire a dedicated testing vendor to manage all aspects of the testing process and perform testing services that are not performed by the module or Systems Integrator vendors. The timing of this should correspond with the deliverable schedule of the module or Systems Integrator vendors, whichever comes first. Also, review and evaluate a standard suite of automated test tools to be established with the assistance of the Enterprise Architecture group. An additional recommendation is to assign dedicated test coordination staff to lead the testing effort from the DHSS side.

E.6 SYSTEMS INTEGRATOR

The Centers of Medicare and Medicaid Services has provided guidance to States regarding the modular approach to the Medicaid Enterprise through both the State Medicaid Director[6] letter #16-010 and the Medicaid Enterprise Certification Toolkit volume 2[7], which superseded the prior Medicaid Management Information System Certification Toolkit. Both toolkits promote the utilization of Systems Integrator for supporting the design, development, implementation, and operation of Medicaid Enterprise systems. The Centers of Medicare and Medicaid Services has defined the role of the Systems Integrator as having a specific focus on ensuring the integrity and interoperability of the Medicaid Information Technology Architecture and cohesiveness Medicaid Enterprise modules and systems. The Centers of Medicare and Medicaid Services envisions a modular Service Oriented Architecture for Medicaid Enterprise with the Systems Integrator responsible for successful integration of the infrastructure.

The Centers of Medicare and Medicaid Services defines the role of the Systems Integrator as follows:

- At a detailed technical level, helps establish standards and ensures that all modules work together seamlessly and securely with external systems
- Ensures that overall security and privacy remain intact when various modules and components are integrated
- Manages, coordinates, and supports the work of multiple Medicaid Enterprise module vendors and negotiates solutions to disagreements that may arise between different development contractors
- Ensures modules are being built using appropriate interoperability standards
- Manages risks that may arise when scheduled or technical slippage in one module affects other modules
- Cooperates with a State's Project Management Office and the Independent Verification and Validation contractor to give an accurate, honest reporting of project status

States are encouraged to use an acquisition approach that limits the potential conflict of interest a Systems Integrator may have in choosing the modular solutions to be incorporated into the Medicaid Enterprise. The Systems Integrator may be precluded from bidding on procurements of the Medicaid Enterprise module application software, though the Systems Integrator may provide elements of the technical infrastructure such as the DHSS Enterprise Service Bus, master data management tools, and identity and access management tools. The goal of the Centers of Medicare and Medicaid Services is to avoid being locked in to a single vendor or an otherwise closed set of solutions. Instead, the Centers of Medicare and Medicaid Services is encouraging States to obtain modules from multiple vendors.

Recommendations

It is recommended to obtain a Systems Integrator and work closely with this vendor as they will be tasked with working in conjunction with each module vendor, connecting disparate technology,

[6] https://www.medicaid.gov/federal-policy-guidance/downloads/smd16010.pdf
[7] https://www.medicaid.gov/medicaid/data-and-systems/mect/index.html

and ultimately keeping the project on track. The Systems Integrator is to create an environment in which different vendors can work collaboratively. The Systems Integrator contract should clearly outline the Systems Integrator's responsibilities and authority. For example, DHSS may choose to empower the Systems Integrator to make or impact change to the original plan as issues arise. These responsibilities would be outlined in the contract. States can retain this authority and include language in the contract that clearly outlines the expectations for resolution of issues and decision making.

In researching other States' approach to systems integration, five options were found to be most commonly utilized by States. Below is an outline of those options. Based solely on the recommendations within this this roadmap, Option 5 would be the desired approach for DHSS. All options have been provided for reference should DHSS choose to incorporate any of these recommendations with the Medicaid Enterprise modernization following the Medicaid Information Technology Architecture State Self-Assessment.

Systems Integrator Options

Option 1: Full Fledged Systems Integrator

The Systems Integrator provides the integration layer as well as the hosting of all modules. The Systems Integrator provides:

- Servers, hardware, and System software (not the modules)
- Hosts modules from other vendors
- Disaster recovery
- The Integration functionality for the modules to talk to each other
- Key governance stakeholder

This option offers true modularity but has the disadvantage that some vendors are not open to hosting their solution on other vendors' hardware. Also, economies of scale that a module vendor might have in their own data center are not realized. In this option, the Systems Integrator is generally prohibited from bidding on other modules.

Option 2: Architectural Systems Integrator

The Systems Integrator does not provide any hardware or software but serves in an advisory capacity. The Systems Integrator is responsible for ensuring that the other vendor hosted modules integrate and deliver an integrated solution. The Systems Integrator is held accountable for all integration work and provides:

- Architectural design
- Interface data definitions
- Integration governance
- Modular vendors host their own solution

This option offers modularity as well as third-party oversight on two modules connecting with each other. The accountability component of such an Systems Integrator scope of work needs to be well defined within the contract.

Option 3: Systems Integrator with "Pass-Thru"

This option is very similar to Option 1, except the Systems Integrator also issues Request for Proposals, contracts with the module vendors, and is responsible for integration. They however do not host the solution. The State participates in all these activities and the module costs are passed through from the State to the Systems Integrator and on to the module vendor. This option allows for a faster procurement timeline for modules but may not be allowed in some States due to procurement regulations.

Option 4: Advisory Systems Integrator

This option is similar to Option 2, except the Systems Integrator is not directly accountable. The Systems Integrator provides subject matter expertise, as well as project management resources, who advise the State staff and module vendors on integration. In such a scenario, it is important that the State implements oversight on the quality of work the Systems Integrator does as the Systems Integrator is not directly responsible nor accountable for the delivery of an integrated product.

Option 5: Combo Systems Integrator

This option is a combination of Option 2 and Option 4 with an add-on for Quality Assurance /testing efforts. The Systems Integrator does not provide any hardware/software but is responsible and accountable for:

- Architectural design
- Interface data definitions
- Integration governance
- Quality Assurance and Integration testing

The Systems Integrator plays an advisory role in:

- Project Management
- Module Functionality
- Project Governance

Systems Integrator Functionality	Option 1: Full Fledged Systems Integrator	Option 2: Architectural Systems Integrator	Option 3: Systems Integrator with "Pass-Thru"	Option 4: Advisory Systems Integrator	Option 5: Combo Systems Integrator
Provides hardware and systems necessary for integration	✓		✓		
Hosts all solution	✓		✓		
Accountable/Responsible for system integration	✓	✓	✓		✓
Manages module vendors, including their procurements			✓		
Provides Systems Integrator related subject matter expertise	✓	✓	✓	✓	✓
Quality Assurance & Integration Testing	✓		✓		✓
Total Cost	Very High	Medium	Highest	Low	Medium

F. BUSINESS CASE VALUE

Recommendations developed from the Gap Analysis process have been prioritized based on the perceived value to the Enterprise. Recommended projects have been listed in the grid below based on a combination of the perceived business value for the Enterprise and the urgency of the project or recommendation. In general, items that are considered high business value and urgent are projects that have a critical impact on the operations of State government. Those items considered less urgent are projects and recommendations that may be dependent on the completion of other projects or are items that, if not completed, would not interrupt the functions of State government. Many of these recommendations are to enhance functionality or obtain new technologies to improve services provided to clients, streamline processes, and increase interoperability amongst enterprise systems.

	Urgent	Less Urgent
High Business Value	• Medicaid Information Technology Architecture Related Projects • Health Information Exchange Platform Modernization and Related Projects • Data Governance • Enterprise Architecture • Enterprise Project Management Office • Independent Verification and Validation • Systems Integration • Telehealth • Electronic Health Records Adoption • Public Health Reporting	• Fraud, Waste, and Abuse • Referral System • Provider Enrollment and Management • Secure Identity and Access Management • Eligibility and Enrollment • Care Management • Testing and Quality Assurance Services • Provider Directory
Minimal Business Value	• Document Management Systems	

The feasibility of recommendations is dependent on a variety of external factors including resource availability, funding availability, and policy changes and levers. The future direction including the outcome of the coordinated care demonstration project and behavioral health accountable service organization should be considered when prioritizing recommendations.

G. BUDGET

The table below presents the estimated price range for each major recommendation of the Health Information Infrastructure Plan. The budget figures are presented as a range of price estimates that have been derived based on industry trends and procurements of similar solutions in other States. The price estimate is greatly dependent on the following items:

- Procurement methodology
  - To execute the project:
    - Will a competitive procurement be required?
    - Will this be sole sourced?
    - Will it be obtained from a State to State transfer?
    - Might it be done in house?
- Desired functionality
  - Will customization be requested?
  - Expanded scope?
- Implementation timeline
- Number of users
  - If the project requires a solution to implemented, how many users will the system be supporting?
  - Is it cost prohibitive based on the number of users that will be using the tool?
  - Are there multiple user roles?
- Availability of funds

The below price estimates are reflective of the Design, Development and Implementation phase and do not include ongoing maintenance and operations.

Estimated Price Range for Health Information Infrastructure Plan Recommendations	
Health Information Infrastructure Plan Recommendation	**Estimated Price Range**
Health Information Exchange Platform	$6-$10 million
Medicaid Information Technology Architecture Assessment (Vendor supported)	$1-$3 million
Master Client Index	$3-$6 million
Fraud, Waste, and Abuse System	$1-$3 million
Secure Identity and Access Management	$3-$6 million
Eligibility and Enrollment/Asset Verification System	$1-$3 million
Eligibility and Enrollment Presumptive Eligibility functionality	less than $1 million
Eligibility and Enrollment Automation of Deemed Eligibility	less than $1 million
Eligibility and Enrollment State Data Hub	$3-$6 million
Referral Management Module	$1-$3 million

Estimated Price Range for Health Information Infrastructure Plan Recommendations	
Care Management	$6-$10 million
Provider Directory	$3-$6 million
Document Management System	$1-$3 million
Telehealth	less than $1 million
Common Credentialing to support Provider Enrollment	$6-$10 million
Electronic Health Records Adoption	$1-$3 million
Public Health Modernization	$6-$10 million
Data Governance	$1-$3 million
EPMO	$3-$6 million
Enterprise Architecture	$1-$3 million
Independent Verification and Validation Vendor	$1-$3 million
Systems Integrator	$6-$10 million
Testing and Quality Assurance	$1-$3 million

A price estimate was established for the project delivery recommendations, however, as a general rule of thumb, the price range for those projects will typically be based on a percentage of the overall project cost as detailed in the chart below.

Recommendation to Support Project Delivery	Pricing Estimate Industry Trends
Data Governance	Generally estimated to be approximately 5% of the overall project cost
Enterprise Project Management Office	Generally estimated to be approximately 10% of the overall project cost
Enterprise Architecture	Generally estimated to be approximately 5% of the overall project cost
Independent Verification and Validation Vendor	Generally estimated to be approximately 5% of the overall project cost
Systems Integrator	Generally estimated to be approximately 15% of the overall project cost

Recommendation to Support Project Delivery	Pricing Estimate Industry Trends
Testing and Quality Assurance	This price estimate will be dependent on the Systems Integrator model selected. Some Systems Integrator models will include testing and Quality Assurance services and others will not. In the instance the Systems Integrator is not responsible for testing and Quality Assurance, the cost is generally estimated to be approximately 5% of the overall project cost

H. CONTINGENCY PLAN

The Health Information Infrastructure Plan Contingency Plan establishes alternative plans DHSS could consider for the projects. A recommended contingency has been established for each major project identified in the Gap Analysis section of this report. The recommended contingency is intended to serve as an alternative consideration in the event a recommendation was cost-prohibitive, or funding was unable to be secured, deemed to not be in alignment with the Department goals and vision, or unattainable for any other reason. These recommendations are intended to support the decision-making process and clearly identify the risk of the project not being attainable or feasible. The contingency plan should be revisited as each project progresses to allow for new contingencies to be identified or risks to be adjusted. The chart below outlines the recommended contingency for each major project established by the Health Information Infrastructure Plan.

Alaska Health Information Infrastructure Plan Recommended Contingencies		
Health Information Infrastructure Plan Recommendation	**Risk**	**Recommended Contingency**
Health Information Exchange Platform	Medium	Business as usual
Medicaid Information Technology Architecture Assessment (Vendor supported)	Low	No contingency, required by federal guidance
Master Client Index	Medium	Business as usual
Fraud, Waste, and Abuse System	Medium	Obtain from another State
Secure Identity and Access Management	Medium	Business as usual
Eligibility and Enrollment/Asset Verification System	Medium	Obtain from another State
Eligibility and Enrollment Presumptive Eligibility Functionality	Low	Business as usual
Eligibility and Enrollment Automation of Deemed Eligibility	Low	Business as usual
Eligibility and Enrollment State Data Hub	High	Business as usual
Referral Management Module	High	Business as usual

Alaska Health Information Infrastructure Plan Recommended Contingencies		
Care Management	Medium	Obtain from another State
Provider Directory	Medium	Business as usual
Document Management System	Low	Business as usual
Telehealth	Medium	Business as usual
Common Credentialing to support Provider Enrollment	Medium	Business as usual
Electronic Health Records Adoption	Low	Business as usual
Public Health Modernization	Medium	Business as usual
Data Governance	Low	Business as usual
Enterprise Project Management Office	Low	Business as usual
Enterprise Architecture	Low	Business as usual
Independent Verification and Validation Vendor	Low	No contingency, required by federal guidance
Systems Integrator	Low	Business as usual
Testing and Quality Assurance	Low	Business as usual

I. DETERMINING SECURITY CONTROLS

This Volume IV of the Minimum Acceptable Risk Standards for Exchanges (MARS-E) document suite, Version 2.0 provides the System Security Plan for each Administering Entity responsible for implementing comprehensive security and privacy controls specified in the Patient Protection and Affordable Care Act of 2010 (hereafter simply the Act or ACA). Administering Entities are required to complete the System Security Plan and document their compliance with mandates of the Act and Department of Health and Human Services Regulations. The System Security Plan is the key tool for describing an Administering Entities information technology security and privacy environment for information technology systems and for documenting the implementation of security and privacy controls for the protection of all data received, stored, processed, and transmitted by the technology systems and supporting applications. The System Security Plan must be initiated during the initial stages of the life cycle process for information technology systems.

The baseline security and privacy requirements for the health insurance exchanges are documented in Volume III: Catalog of Minimum Acceptable Risk Security and Privacy Controls of the MARS-E document suite. Volume II of the document suite fully describes the goals and content of the catalog.

The System Security Plan should be reviewed and updated on an “as needed” basis, including annually, and when there are major system modifications that could potentially impact the security

and privacy of the administering entities information system. The Volume IV includes detailed instructions for supplying the contents of a System Security Plan, which includes:

- Part A, Executive Summary and System Identification
- Part B, the System Security Controls Implementation Plan
- Part C, the system Privacy Controls Implementation Plan
- Part D, System Security Plan Attachments
- Appendix A – IRS Requirements for Safeguarding Federal Tax Information (FTI)
- Appendix B – Security and Privacy Agreements and Compliance Artifacts

The complete Volume IV: ACA Administering Entity System Security Plan can be accessed on the CMS website:

https://www.cms.gov/CCIIO/Resources/Regulations-and-Guidance/Downloads/4-MARS-E-v2-0-AE-ACA-SSP-11102015.pdf

Security Control Class Areas

The security program framework, derived from the National Institute of Standards and Technology Special Publication 800-53, Revision 4 and Appendix J document, is divided into four program class areas: Management, Operational, Technical, and Privacy. Each program class area is further divided into a set of security families. There is a total of 26 control families, each producing a high-level security policy. Each family has a two-letter identifier that is the prefix of the Control ID.

Management Control Class Area

This program area focuses on policies that relate to the management of risk and the management of the security program. This class consists of five security policies: Security Assessment and Authorization, Planning, Program Management, Risk Assessment, and System Services and Acquisition.

Operational Control Class Area

This program area focuses on policies that are primarily implemented and executed by people, rather than the information system. This class consists of nine security policies: Awareness and Training, Configuration Management, Contingency Planning, Incident Response, Maintenance, Media Protection, Physical and Environmental Protection, Personnel Security, and System and Information Integrity.

Technical Control Class Area

The focuses of this program area are on policies that are primarily implemented and executed by the information system through mechanisms contained in the hardware, software, or firmware components of the system. This class consists of four security policies: Access Control, Audit and Accountability, Identification and Authentication, and System and Communications Protection.

Privacy Control Class Area

The program area focuses on policies that define the administrative, technical, and physical safeguards employed to protect Restricted and Confidential Information.

ORGANIZATION OF POLICIES AND CONTROLS

Each one of the security policies has a number of supporting security controls that, when implemented and enforced, will satisfy the requirements of the security policy. There is a total of 197 Controls including the Security and Privacy Controls.

Sample Table: Organization of Policies and Controls

Control Class Area	Item Number	Family ID	Policy Family Name	Number of Security Controls
Management	1.	CA	Security Assessment and Authorization (formerly Certification, Accreditation, and Security Assessment)	6
	2.	PL	Planning	5
	3.	PM	Program Management	11
	4.	RA	Risk Assessment	4
	5.	SA	System Services and Acquisitions	11
Operational	6.	AT	Awareness and Training	4
	7.	CM	Configuration Management	9
	8.	CP	Contingency Planning	9
	9.	IR	Incident Response	8
	10.	MA	Maintenance	6
	11.	MP	Media Protection	6
	12.	PE	Physical and Environmental Protection	18
	13.	PS	Personnel Security	8
	14.	SI	System and information Integrity	11
Technical	15.	AC	Access Control	16
	16.	AU	Audit and Accountability	13
	17.	IA	Identification and Authentication	8
	18.	SC	System and Communications Protection	21
Privacy	19.	AP	Authority and Purpose	2
	20.	AR	Accountability, Audit, and Risk Management	6
	21.	DI	Data Quality and Integrity	2
	22.	DM	Data Minimization and Retention	2
	23.	IP	Individual Participation and Redress	4
	24.	SE	Security	2
	25.	TR	Transparency	2
	26.	UL	Use Limitation	3
TOTAL				**197**

As part of the System Security Plan, each control is reviewed and applied according to the National Institute of Standards and Technology special publication 800-53, Revision 4. The ACA Administering Entity System Security Plan provides a worksheet listing all controls that must be completed. The table below presents a sample control derived from the Access Control family. It demonstrates the process for properly completing and submitting a compliant System Security Plan.

AC-1: Access Control Policy and Procedures	
Control	
The organization develops, documents, disseminates to applicable personnel, and reviews and updates (as necessary) within every three hundred sixty-five (365) days: a. An access control policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among organizational entities, and compliance; and b. Procedures to facilitate the implementation of the access control policy and associated access controls.	
Guidance	
This control addresses the establishment of policy and procedures for the effective implementation of selected security controls and control enhancements in the AC family. Policy and procedures reflect applicable federal laws, Executive Orders, directives, regulations, policies, standards, and guidance. Security program policies and procedures at the organization level may make the need for system-specific policies and procedures unnecessary. The policy can be included as part of the general information security policy for the organization or, conversely, can be established for the security program in general and for particular information systems, if needed. The organizational risk management strategy is a key factor in establishing policy and procedures. This control supports and aligns with the provisions of the ACA and the requirements of 45 CFR §155.260, Privacy and security of personally identifiable information.	
Related Control Requirement(s):	PM-9
Control Implementation Description: «Click here and type text.]»	
Assessment Procedure:	
Assessment Objective Determine if the organization has implemented all elements of the AC-1 control as described in the control requirements.	
Assessment Methods and Objects **Examine:** Access control policy and procedures, other relevant documents or records. **Interview:** Organizational personnel with access control responsibilities; organizational personnel with information security responsibilities.	

Figure 7: Sample Access Control Policy and Procedure Table

SYSTEM INFORMATION/COMPONENTS

As part of the System Security Plan, a high-level asset inventory for each component of the system is conducted. The sample table below is an example of the information that must be completed

Sample Table: System Information/Components

Server Name	Application Description	OS	DB	Function

User Community Organizations and Access

System users must be identified and their access to data cataloged. The table below is an example of identifying the level of access for the System users.

Sample Table: User Community Level of Access

User Group	Organization	Component	Data Access	IT Resource Access

System Interconnection / Information Sharing

Included in this section is the following information concerning the authorization for the connection to other systems or the sharing of information:

- List/Name of interconnected system
- Type of interconnection (TCP/IP)
- Discussion of how the systems will interact, and security concerns and Rules of Behavior of the other systems that need to be considered in the protection of this system

Sample Table: System Interconnection /Information Sharing

Name/Unique Identifier	Type of Interconnection (e.g., SFTP, HTTPS, Web Services)	Interaction Details and Security Considerations

Sample Applicable Laws or Regulations Checklist

A list of federal and State laws should be identified and documented in the System Security Plan. This will enable the system owner to implement security controls the applicable laws and regulations.

Law/Regulation/Policy	Applicable
Minimum Security Requirements for Federal Information and Information Systems (FIPS)	☐
Health Insurance Portability and Accountability Act (HIPAA)	☐
Internal Revenue Service (IRS) Publication 1075 Guidelines	☐
Social Security Administration (SSA) Guidelines	☐
Centers for Medicare and Medicaid Services (CMS)	☐
Identity Theft Enforcement and Protection act	☐
Federal Information Security Management Act (FISMA)	☐
Other (specify below):	☐

DATA CLASSIFICATION

The Data Classification Standard applies equally to all individuals who use or handle Information resources. Users of the system share in the responsibility to secure and protect the data they access. Users can view/use their own data and not be allowed to view any other data unless the data has been sufficiently de-identified or aggregated in such a way as to prevent identification of other providers' data.

Data created, sent, printed, received, or stored on systems owned, leased, administered, or authorized by the agency are the property of the agency and its protection is the responsibility of the owners, designated custodians, and users.

Data shall be classified as follows from highest level sensitivity to the lowest:

- Restricted – data that is subject to specific federal or State regulatory requirements and must a.) remain encrypted at all times while at rest, in use, or during transmission; b.) be comprehensively monitored for access/distribution; and c.) provide for comprehensive access, distribution and audit controls
- Confidential – which includes Personally Identifiable Information and Protected Health Information – data that is subject to specific federal or State regulatory requirements and must a.) be encrypted during transmission to an outside agent or when stored on a mobile device, b.) be monitored, and c.) provide strong access, distribution, and audit controls
- Agency Internal – data that is not subject to specific regulatory or other external requirements but is considered sensitive
- Public – information intended or required for public release as described in applicable Alaska State Law

Specify the classification of data relative to this security plan.

Data Classification Standard Sample

Restricted Data/Information	☐
Confidential Data/Information	☐
Agency Internal	☐
Public Information	☐

System Categorization (Potential Impact of Security Breach) Sample

To successfully implement the proper security controls, determine the impact of a breach of that data. The impact assessment will determine the level of controls.

Description of Information/System Component	Security Categorization of Information									Overall Impact
	Confidentiality Impact			Integrity Impact			Availability Impact			
	Potential Impact of Security Breach									
	L	M	H	L	M	H	L	M	H	
	☐	☐	☐	☐	☐	☐	☐	☐	☐	
	☐	☐	☐	☐	☐	☐	☐	☐	☐	

J. HEALTH INFORMATION INFRASTRUCTURE ROADMAP

The Roadmap serves as a basic guide to move DHSS from the current "As-Is" toward the desired "To-Be" state as informed by the workgroup sessions, stakeholder feedback, and documentation reviews. The following depicts and summarizes the trajectory of the Alaska Medicaid Enterprise over the last several years. The Health Information Infrastructure Plan recommendations will support increased interoperability, the advancement of Medicaid Information Technology Architecture maturity, and a modular enterprise design which will be critical in the success of the Medicaid transformation initiatives.

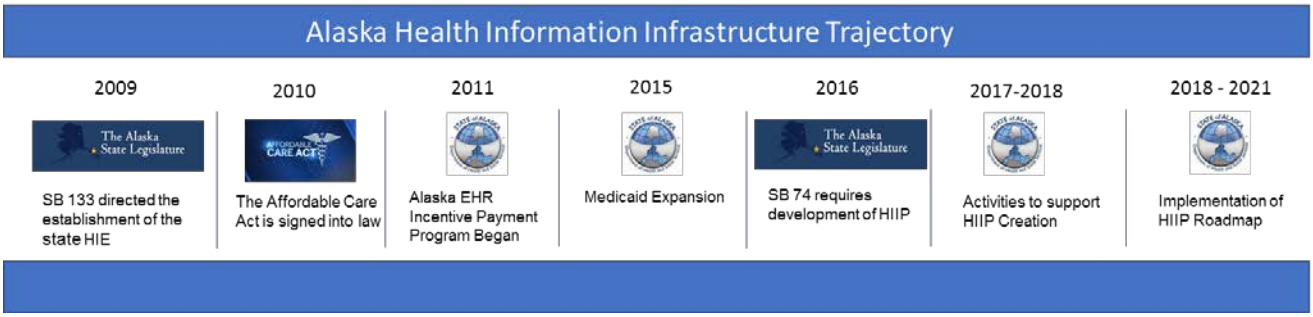


Figure 8: Alaska Health Information Infrastructure Trajectory

The Roadmap has been developed with the assumption that all recommendations will be implemented and that funding requests will be submitted and approved without delay. The Roadmap identifies the impact of the recommended project on the Enterprise and any timing dependency to the project. It is suggested that recommendations identified without any timing dependency and high impact should move forward immediately as they are critical to the progression of the Enterprise.

As noted, it is recommended that some projects move forward following the conclusion of the Medicaid Information Technology Architecture 3.0 State Self-Assessment. The Medicaid Information Technology Architecture 3.0 State Self-Assessment will provide the State with the level of detail sufficient to fully assess current system capabilities and needs and develop a more

comprehensive Roadmap. It is envisioned this Roadmap will be augmented based upon the findings of the Medicaid Information Technology Architecture 3.0 State Self-Assessment.

Health Information Infrastructure Plan Roadmap		
Health Information Infrastructure Plan Recommendations	**Impact**	**Timing Dependency**
Health Information Exchange Platform	High	Can initiate immediately
Medicaid Information Technology Architecture Assessment (Vendor supported)	High	Can initiate immediately
Master Client Index	High	Post Medicaid Information Technology Architecture Assessment
Fraud, Waste, and Abuse System	Medium	Post Medicaid Information Technology Architecture Assessment
Secure Identity and Access Management	Medium	Post Medicaid Information Technology Architecture Assessment
Eligibility and Enrollment/Asset Verification System	Medium	Can initiate immediately
Eligibility and Enrollment Presumptive Eligibility functionality	Medium	Can initiate immediately
Eligibility and Enrollment Automation of Deemed Eligibility	Medium	Can initiate immediately
Eligibility and Enrollment State Data Hub	Medium	Post Medicaid Information Technology Architecture Assessment
Referral Management Module	Medium	Can initiate immediately
Care Management	Medium	Post Medicaid Information Technology Architecture Assessment
Provider Directory	Medium	Post Medicaid Information Technology Architecture Assessment
Document Management System	Low	Can initiate immediately
Telehealth	High	Can initiate immediately
Common Credentialing to support Provider Enrollment	Medium	Can initiate immediately
Electronic Health Records Adoption	High	Can initiate immediately
Public Health Modernization	High	Can initiate immediately
Data Governance	Medium	Post Medicaid Information Technology Architecture Assessment
Enterprise Project Management Office	Medium	Post Medicaid Information Technology Architecture Assessment

Health Information Infrastructure Plan Roadmap		
Enterprise Architecture	Medium	Post Medicaid Information Technology Architecture Assessment
Independent Verification and Validation Vendor	Medium	Post Medicaid Information Technology Architecture Assessment
Systems Integrator	Medium	Post Medicaid Information Technology Architecture Assessment
Testing and Quality Assurance	Medium	Post Medicaid Information Technology Architecture Assessment

This Page Intentionally Blank

2018

Department of Health and Social Services Response to Health Information Infrastructure Plan Recommendations

Prepared by the

State Health Information Technology Coordinator

Alaska Department of Health and Social Services

Table of Contents

Executive Summary

Beginning in early 2017, efforts began to review and analyze the "As-Is" state of many health information technology related topics throughout the State of Alaska. This effort was largely driven and informed by Section 56 of the Medicaid Redesign Senate Bill 74 (2016) which requires the Department of Health and Social Services (DHSS) to develop a plan to strengthen the health information infrastructure, including health data analytics capability. DHSS contracted with HealthTech Solutions, LLC via a competitive solicitation process to provide technical assistance in the creation of the Alaska Health Information Infrastructure Plan as defined in SB 74. The purpose of the Health Information Infrastructure Plan is to support the movement of the health information infrastructure within the State of Alaska from the current "As-Is" state to the desired "To-Be" state by providing a thorough understanding of the current state, needs, and gaps, resulting in the creation of a roadmap to serve as a guide to move forward.

To ensure the Health Information Infrastructure Plan was truly reflective of the needs of the stakeholders, a series of six workgroup sessions were held to allow stakeholders the opportunity to provide background, input, and suggestions. Information shared during these sessions was an integral part of the development of this plan. The workgroup sessions were held between the spring of 2017 and summer of 2018 and included a broad range of stakeholders from the Alaskan healthcare landscape including representatives from healthcare facilities, provider practices, medical associations, tribal entities, mental health practices, the statewide Health Information Exchange (HIE), and DHSS. The workgroups were open forum discussions guided by defined topics and facilitated by the HealthTech Solutions' project team. They resulted in an enhanced understanding of the current state of the infrastructure and future needs as expressed by the stakeholders.

Throughout the course of the workgroup discussions, several common themes arose and were used to inform the creation of this Health Information Infrastructure Plan. These common themes included:

- Inconsistent rate of adoption and lack of interoperability of Electronic Health Record systems;
- Limitations in functionality and capabilities of healtheconnect Alaska, the statewide HIE;
- Limited use of telehealth throughout the state and ways to increase telehealth use;
- Lack of data governance policies and standards;
- A high degree of redundancy in reporting requirements within the State;
- Limitation of data analytics capabilities;
- Lack of a comprehensive statewide provider directory/registry; and
- Limitations of public health systems

A gap analysis of the "As-Is" and "To-Be" state was completed following the workgroup sessions. The gap analysis formed the basis for recommendations that will support the movement from the current "As-Is" state to the desired "To-Be" state. The following table provides a high-level plan for DHSS to implement the proposed recommendations in the Health Information Infrastructure Plan.

DHSS Assumptions and Constraints regarding the Health Information Infrastructure Plan

DHSS has made some assumptions and identified constraints regarding the Health Information Infrastructure Plan in Appendix A:

- DHSS evaluated all recommendations for system design, development and implementation based on the concept of purpose driven data exchange.
- DHSS is already moving forward with a number of these recommendations with federal funding support approved by the Centers for Medicare and Medicaid Services (CMS) through the department's HITECH Implementation Advanced Planning Document (IAPD) and the State Medicaid Health IT Plan.
- Many of the plan recommendations would require significant investment, responsibility, and authority across healthcare stakeholders, non-healthcare stakeholders, DHSS, and other state agencies.
- Most of the recommendations will required a long term commitment, including maintenance and operations of any implemented technology.
- Most of the recommendations require manual or human components, and cannot be fully automated through technology implementation.
- Some of the recommendations will require legislative support.
- 90 percent federal funding would potentially be available for system design, development and implementation of projects that support the Medicaid Program. Items in this document for which costs are estimated are likely eligible for 90/10 federal funding participation.
- The word Enterprise is used throughout the Health Information Infrastructure Plan. The use of this word is most commonly referring to the entire DHSS Medicaid Program that spans multiple divisions within the department and not just the Enterprise Medicaid Management Information System (MMIS).
- DHSS views Medicaid Information Technology Architecture as a business process framework that is evolutionary. This is a framework that allows DHSS to evaluate our maturity as we implement new technology.
- DHSS assumes Data Governance is the discussion of how data is collected, processed, and disseminated across the department. A Data Governance board should discuss what data is collected, who can access data, usage limitations, retention requirements, and other similar topics. The main focus for DHSS in Data Governance is to develop processes department wide, and address quality and consistency of all data within the department's purview or influence.

DHSS Responses and Implementation Plan for Recommendations

1. Health Information Exchange Platform Modernization

Recommendation summary from plan: Focus on improvement of core services, including connection to the broad range of electronic health records in use across Alaska. Institute data validation to ensure accuracy of available data. Continue onboarding efforts across all provider types and consider including additional data sources such as social determinates of health. Add support for high value use cases.

DHSS Plan	This recommendation falls under the purview healtheConnect Alaska, the organization contracted to manage Alaska's statewide Health Information Exchange (HIE). • DHSS is responsible for the statewide HIE under AS 18.23.300, and contracts the function to healtheConnect Alaska, a non-profit created to develop and administer the statewide HIE. • The HIE is expected to develop financially viable and sustainable solutions that meet the business use cases of the Alaska health care system. • DHSS supports this recommendation in concept, with the caveat that the health care community must also support it through participation in the HIE in order for it to be successful.

2. Medicaid Information Technology Architecture Related Projects

Recommendation summary from plan: complete a Medicaid Information Technology Architecture State Self-Assessment.

DHSS Plan	Complete a Medicaid Information Technology Architecture 3.0 State Self-Assessment for: Medicaid Management Information System Alaska's Resource for Integrated Eligibility Services Senior and Disabilities Services Harmony Health Information Technology for Economic and Clinical Health (HITECH) technology Identify and add DHSS systems to an ongoing state self-assessment
Responsible Party	• DHSS Division of Health Care Services • DHSS Division of Public Assistance • DHSS Division of Senior & Disabilities Services • DHSS Health Information Technology Office • Other DHSS Divisions identified at future dates
Timeframe	September 2018 – December 2018 • Issue RFP to solicit professional services and technology to support

	state self-assessment • Contract awarded • Requirements and documentation gathering for business processes impacted by Medicaid Management Information System and Alaska's Resource for Integrated Eligibility Services technology December 2018 – April 2018 • Complete state self-assessment for the Medicaid Management Information System and Alaska's Resource for Integrated Eligibility Services systems April 2018 – August 2018 • Requirements and documentation gathering for business processes impacted by Harmony and Health Information Technology for Economic and Clinical Health technology • Updated state self-assessment for Harmony and Health Information Technology for Economic and Clinical Health (HITECH) technology August 2018 – forward • Identify other DHSS systems to evaluate for Medicaid Information Technology Architecture business process impacts and maturity to add to the state self-assessment
Estimated Costs	Total $1,500,000 for 4 systems impacting Medicaid Information Technology Architecture business processes: • Medicaid Management Information System: $883,000 • Alaska's Resource for Integrated Eligibility Services: $272,000 • Harmony: $225,000 • Health Information Technology for Economical and Clinical Health: $121,000 • As additional systems are identified, DHSS will negotiate a new budget and scope to be based on the rates set forth in the original contract

3. Master Client Index (MCI)

Recommendation summary from plan: Establish a single enterprise wide master index for use across the organization to ensure consistent and accurate data. Establish data governance processes.

DHSS Plan	Upgrade current technology to latest version Define and document when and how the Master Client Index will be used across DHSS systems
Responsible Party	• DHSS Health Information Technology Office • DHSS Financial & Management Services - Information Technology • Office of Information Technology
Timeframe	September 2018 – December 2018 • Complete Master Client Index system upgrade • Define and document in DHSS Enterprise Strategic Information

	Technology Framework and DHSS Enterprise Information Technology Roadmap usage for Master Client Index
Estimated Costs	Contract value for Master Client Index upgrade is approximately $118,000

4. Fraud, Waste, and Abuse

Recommendation summary from plan: Obtain a high functioning fraud waste and abuse detection solution to improve discovery of fraud waste and abuse. Obtain a case tracking solution with automated workflows in order to increase the efficiency of DHSS work force.

DHSS Plan	DHSS has implemented a Surveillance and Utilization Review Subsystem, J-SURS, to support the Medicaid Program. The solution that has been implemented is a Truven Health Analytics product that produces the required surveillance and utilization reports. DHSS is evaluating implanting additional technology to support the DHSS/Medicaid Program Integrity office. DHSS is implementing a fraud case management solution as a case tracking tool for investigations and is a source for state and federal reports. The solution that is being implemented is by the vendor Customer Expressions Corporation dba i-Sight. DHSS will be implementing an Eligibility Verification System under AS 47.05.105 pending release of a Request for Proposals and a competitive solicitation process.
Responsible Party	• DHSS Division of Health Care Services • DHSS Program Integrity • DHSS Division of Public Assistance
Timeframe	• DHSS HCS JSURS: already implemented as module within the Medicaid Management Information System (MMIS) • DHSS/Medicaid Program Integrity Case Management System: solutions are being evaluated • DHSS Division of Public Assistance Fraud Case Management System: Go-live date for investigative functions is scheduled for 11/15/2018, post go-live completion of potential integration with Master Client Index and claims functionality is scheduled for 12/31/2018
Estimated Costs	• DHSS Division of Health Care Services JSURS: $2,800,000 • DHSS Program Integrity Case Management System: $1,500,000 • DHSS Division of Public Assistance Fraud Case Management System: $1,144,000 • Eligibility Verification System: estimates for solution will be identified during solicitation process

5. Secure Identity and Access Management

Recommendation summary from plan: Conduct a gap analysis of the myAlaska solution to identify gaps in the system's functionality and explore the feasibility to utilize the system across the Medicaid Enterprise. Consider including a complete security and risk assessment of the myAlaska portal.

DHSS Response	This recommendation falls under the purview of the legislature, Department of Administration, and Office of Information Technology.

6. Eligibility and Enrollment Related Projects

Recommendation summary from plan: Include eligibility and enrollment components in the Medicaid Information Technology Architecture 3.0 State Self-Assessment to ensure identification of all needs and inclusion in roadmap and planning documents. Prioritize solutions to allow providers to utilize Presumptive Eligibility opportunities and automate eligibility for deemed newborns. Obtain an Eligibility/Asset Verification System.

DHSS Plan	Medicaid Information Technology Architecture State Self-Assessment for eligibility and enrollment business processes: See recommendation #2 above Eligibility/Asset Verification System: DHSS has plans to implement an Eligibility/Asset Verification System under AS 47.05.105. Request for Information has been publically shared to seek out potential options for system implementation.
Responsible Party	• DHSS Division of Public Assistance
Timeframe	SFY 2020 – SFY 2021 for more defined requirements and project plans
Estimated Costs	• Medicaid Information Technology Architecture State Self-Assessment: see recommendation #2 for details • Eligibility Verification System: estimates for solution will be identified during Request for Information process

7. Referral Management Module

Recommendation summary from plan: Obtain a referral management module to close referral loops and greater transparency of referral patterns.

DHSS Response	This recommendation falls under the purview healtheConnect Alaska, the organization contracted to manage Alaska's statewide Health Information

	Exchange (HIE). • DHSS is responsible for the statewide HIE under AS 18.23.300, and contracts the function to healtheConnect Alaska, a non-profit created to develop and administer the statewide HIE. • The HIE is expected to develop financially viable and sustainable solutions that meet the business use cases of the Alaska health care system. • DHSS supports this recommendation in concept, with the caveat that the health care community must also support it through participation in the HIE in order for it to be successful.

8. Care Management

Recommendation summary from plan: Obtain a Care Management Module to improve and support care coordinate efforts.

DHSS Response	This recommendation falls under the purview healtheConnect Alaska, the organization contracted to manage Alaska's statewide Health Information Exchange (HIE). • DHSS is responsible for the statewide HIE under AS 18.23.300, and contracts the function to healtheConnect Alaska, a non-profit created to develop and administer the statewide HIE. • The HIE is expected to develop financially viable and sustainable solutions that meet the business use cases of the Alaska health care system. • DHSS supports this recommendation in concept, with the caveat that the health care community must also support it through participation in the HIE in order for it to be successful.

9. Provider Directory

Recommendation summary from plan: Obtain a robust Provider Directory Module to support care management and telehealth.

DHSS Response	This recommendation falls under the purview healtheConnect Alaska, the organization contracted to manage Alaska's statewide Health Information Exchange (HIE). • DHSS is responsible for the statewide HIE under AS 18.23.300, and contracts the function to healtheConnect Alaska, a non-profit created to develop and administer the statewide HIE. • The HIE is expected to develop financially viable and sustainable

	solutions that meet the business use cases of the Alaska health care system. • DHSS supports this recommendation in concept, with the caveat that the health care community must also support it through participation in the HIE in order for it to be successful. .

10. Document Management System

Recommendation summary from plan: Obtain an electronic Document Management System and workflow management system to improve efficiencies across DHSS.

DHSS Response	New funding would be required to implement this solution, and it is not a top budget priority at this time given the department's current fiscal constraints.

11. Telehealth

Recommendation summary from plan: Establish and communicate clear Telehealth policies and enterprise wide tools. Provide technical support and assistance to increase adoption of Telehealth. Increase funding available for providers to offset the cost of technologies to support telehealth.

DHSS Response	DHSS does reimburse for services delivered via telehealth modes through the Alaska Medicaid Program. DHSS convened a stakeholder workgroup who proposed recommendations to reduce barriers to telehealth in an FY 2018 report to the department. That report and DHSS's response to the telehealth recommendations can be found on the Medicaid Redesign, telehealth workgroup webpage at: http://dhss.alaska.gov/HealthyAlaska/Pages/Initiatives/Initiative-12.aspx

12. Provider Enrollment and Management

Recommendation summary from plan: Evaluate the feasibility of implementing a statewide common credentialing program for professional licensure to increase automation and streamline the enrollment process for providers across all payers.

DHSS Response	This recommendation falls under the purview Department of Commerce, Community, and Economic Development.

13. Electronic Health Records Adoption

Recommendation summary from plan: Continue outreach and education to support and encourage electronic health records adoption.

DHSS Response	DHSS conducts outreach and education as part of the Alaska Medicaid Electronic Health Record Incentive Payment Program to encourage healthcare organizations to adopt EHR technology. DHSS also collaborates with healtheConnect Alaska to support and encourage the adoption of electronic health record technology and connection to the statewide Health Information Exchange.

14. Public Health Modernization

Recommendation summary from plan: Modernize Public Health registries.

DHSS Plan	DHSS is conducting requirements gathering and project planning for initiatives to connect Public Health databases and systems to the statewide Health Information Exchange. These initiatives include: • Connecting the Trauma Registry • Connecting the AURORA system • Connecting the Health Facilities Data Reporting system DHSS is also conducting discovery meetings to evaluate the ability for the statewide Health Information Exchange to provide ad-hoc reporting for Public Health sections.
Responsible Party	• DHSS Health Information Technology Office • DHSS Division of Public Health • healtheConnect Alaska
Timeframe	SFY 19 – SFY 20
Estimated Costs	• Trauma Registry connection: $195,000 • AURORA system connection: $630,000 • Health Facilities Data Reporting system connection: $200,000 - $500,000 depending on vendor costs

15. Data Governance

Recommendation summary from plan: Implement data governance activities across DHSS to promote interoperability and data sharing capabilities across the Department.

DHSS Plan	DHSS has implemented an Information Technology Governance Committee that is considered a data governance board of executive sponsors from each Division and overall executive leadership.

	DHSS has implemented an Information Technology Governance Sub-Review Committee that is considered a data steward council along with identified data stewards from each division. DHSS has implemented a Project and Portfolio Management Review team to be technical advisors for all Information Technology Governance processes. Additionally, DHSS has active involvement from Division staff and subject matter experts to identify business needs and requirements for technology and data within a division. DHSS will continue to evaluate data and Information Technology governance processes and make improvements to processes. DHSS will update and finalize the project charter for all Information Technology Governance processes and committee roles and responsibilities.
Responsible Party	• DHSS Information Technology Governance Committee • DHSS Information Technology Governance Sub-Review Committee • DHSS Project & Portfolio Management Review Team • DHSS Divisions • DHSS Health Information Technology Office • DHSS FMS – Information Technology Leadership team • Office of Information Technology
Timeframe	Ongoing

16. Enterprise Architecture

Recommendation summary from plan: Convene an Enterprise Architecture group to steer the technical architecture of the DHSS Enterprise.

DHSS Plan	DHSS will utilize the existing Project & Portfolio Management Review team to make meaningful decisions regarding information and technical architecture of DHSS's technology structure.
Responsible Party	DHSS Project & Portfolio Management Review Team
Timeframe	Ongoing

17. Enterprise Project Management Office

Recommendation summary from plan: Establish an Enterprise Project Management Office.

DHSS Plan	DHSS has implemented a Project Management Office that supports all information technology initiatives for the department. The DHSS Information Technology Project Management Office has been created to serve the Department with the specific purposes of: • Delivering information technology project support to the department and its clients through guidance in project management processes and

	methodologies in a manner that is efficient, consistent, and standardized using the DHSS Information Technology Governance processes in line with the DHSS Enterprise Information Technology Strategic Framework and DHSS Enterprise Information Technology Roadmap. • Providing mentoring and coaching in an effort to improve project management practices of the department which in turn improve outcomes and results for information technology initiatives. Due to the current state fiscal climate the department has had to make reductions in staffing and funding and does not currently have the resources to support a broader Project Management Office that would include skilled projects managers who are dedicated to approved initiatives and daily oversight of all new system development.
Responsible Party	• DHSS Health Information Technology Office • DHSS FMS Information Technology Project Management Office • Office of Information Technology
Timeframe	Ongoing

18. Independent Verification and Validation

Recommendation summary from plan: Procure an Independent Verification and Validation vendor for utilization across all Medicaid Enterprise implementations.

DHSS Plan	DHSS is planning to implement Independent Verification & Validation through a robust contract to support multiple initiatives across the entire department.
Responsible Party	• DHSS Grants and Contracts • DHSS Division of Public Assistance • DHSS Division of Health Care Services • DHSS Office of Children's Services • Other DHSS Divisions identified at future dates
Timeframe	Contract award in early calendar year 2019
Estimated Costs	• Initial contract costs to support DHSS Division of Public Assistance Alaska's Resource for Integrated Eligibility Services are: $275,000 for two years • As additional DHSS Independent Verification and Validation needs are identified, DHSS will negotiate a new budget and scope to be based on the rates set forth in the original contract.

19. Testing and Quality Assurance Services

Recommendation summary from plan: Identify dedicated State testing staff to lead all testing efforts as modules are obtained, contract with a dedicated testing vendor, and utilize automated testing tools.

DHSS Response	Due to the current fiscal climate in the state DHSS has had to make reductions in staffing and funding and does not currently have the resources to support department wide Testing and Quality Assurance services. Testing and Quality Assurance will be evaluated and implemented by individual project or initiative as needed.

20. Systems Integrator

Recommendation summary from plan: Obtain a System Integrator.

DHSS Plan	DHSS is planning to implement Systems Integrator through a robust contract to support multiple initiatives across the entire department.
Responsible Party	• DHSS Grants and Contracts • DHSS Division of Health Care Services • DHSS Division of Public Assistance • DHSS Health Information Technology • DHSS Financial & Management Services – Information Technology • Office of Information Technology
Timeframe	Contract award in calendar year 2019
Estimated Costs	Depending on the number of DHSS systems to be included in contract, costs are estimated to vary: $1,500,000 - $10,000,000.

Appendix A – Health Information Infrastructure Plan

AK HIIP_HealthTech
Solutions_Final for I

This Page Intentionally Blank

MEDICAID REDESIGN TELEHEALTH STAKEHOLDER WORKGROUP

FINAL REPORT

Submitted August 2017
to the Alaska Department of Health and Social Services

Prepared by
Agnew::Beck Consulting, Inc.

GOALS FOR MEDICAID REDESIGN + EXPANSION

IMPROVE HEALTH

OPTIMIZE ACCESS

INCREASE VALUE

CONTAIN COSTS

[this page intentionally left blank]

Table of Contents

Foreword

This report is submitted to Valerie Davidson, Commissioner, Alaska Department of Health and Social Services, from the Alaska Medicaid Redesign Telehealth Stakeholder Workgroup.

1. Introduction

Medicaid Redesign Telehealth Workgroup

Senate Bill (SB) 74, passed by the Alaska Legislature in 2016, enacts comprehensive reform of Alaska's Medicaid program. The Department of Health & Social Services is implementing SB 74 through a series of 16 different initiatives. The Telehealth initiative includes the Telehealth Workgroup, convened to provide advice to the department on improving access to health care through the expanded use of telehealth in Alaska. SB 74 directs the department to identify ways to expand the use of telehealth to improve access to primary care, behavioral health and urgent care services. The legislation further directs the department to consider areas of the state where improvements in telehealth capabilities would be most effective in reducing Medicaid costs and improving access to health care services. In recognition of the challenges the department may face in moving forward with this directive, the bill also requires the department to identify legal and technological barriers to the expanded use of telehealth and recommendations for changes or investments that would allow cost-effective expansion of telehealth services.[1] SB 74 funded the department to convene the workgroup for one year, fiscal year 2017. This report provides an overview of the issues discussed and associated recommendations identified by the Telehealth Workgroup.

Membership

The Medicaid Redesign Telehealth Workgroup is an active group of 15 members representing health care providers, tribal health organizations and Medicaid recipients.

Please see membership list in Appendix A for further information on members.

Method

The workgroup met officially four times and held one ad hoc meeting during fiscal year 2017. Discussions focused on identifying barriers to expanding the use of telehealth options, and developing recommendations to address those issues. DHSS staff members Christiann Stapf and Donna Steward provided leadership for the workgroup and conducted research on Medicaid regulations, data, and other items. Contractor Agnew::Beck provided facilitation and meeting support, and drafted and finalized this report. Below is the project timeline:

- September and October 2016: DHSS invites workgroup participants to apply and selects members.
- November 2016: first workgroup meeting to review SB 74, agree to the charge of workgroup, review and revise workplan.
- February 2017: second workgroup meeting to identify and categorize issues and barriers related to expanding telehealth.
- March 2017: third workgroup meeting to refine list of issues and barriers to focus on those related specifically to telehealth, and to identify possible solutions.
- May 2017: workgroup held an ad hoc meeting to identify possible cost reductions from use of telehealth.
- June 2017:
    - Fourth workgroup meeting to review draft report and finalize recommendations.

[1] SB 74, Section 43

- Revise report and submit draft to DHSS for review.
- Finalize draft and submit to DHSS.

Definition and Usage of Terms: Telehealth and Telemedicine

The definitions of 'telehealth' and 'telemedicine' continue to evolve. The American Medical Association reports that "there is no consensus on the definition of either of the two terms".[2] The American Telemedicine Association reports that model legislation developed by the National Association of Insurance Commissioners[3] adopts a definition that is "concise and modality-neutral: "Telemedicine" or "Telehealth" means health care services provided through telecommunications technology by a health care professional who is at a location other than where the covered person is located."[4]

Alaska Senate Bill 74 passed in 2016, used the term 'telehealth' in its final version, rather than 'telemedicine' and defines the term broadly as "the practice of health care delivery, evaluation, diagnosis, consultation, or treatment, using the transfer of health care data through audio, visual, or data communications, performed over two or more locations between providers who are physically separated from the recipient or from each other or between a provider and a recipient who are physically separated from each other."[5] This definition is essentially similar to the definition used by the National Association of Insurance Commissioners described above, but includes more specificity for the terms 'health care services', 'telecommunications technology' and the relationship between the health care professional and the person receiving care. The definition used in SB 74 also specifically identifies telehealth services as those that occur between providers who are physically separated from each other.

Alaska Medicaid uses the term 'telemedicine' rather than 'telehealth'. The program "will pay for medical services furnished through telemedicine applications as an alternative to traditional methods of delivering services to Medicaid recipients." [6]

---

[2] https://www.ama-assn.org/delivering-care/telemedicine-mobile-apps#Telemedicine accessed June 22, 2017.

[3] http://www.naic.org/store/free/MDL-74.pdf accessed June 22, 2017.

[4] https://thesource.americantelemed.org/blogs/jessica-washington/2017/04/20/hhs-market-stabilization-rule-defers-network-adequacy-assessment-to-states accessed June 22, 2017.

[5] http://www.legis.state.ak.us/PDF/29/Bills/SB0074Z.PDF accessed May 5, 2017.

[6] 7 AAC 145.270. Telemedicine payment rates: (a) The department will pay for a service rendered by a consulting or referring provider by a telemedicine application in accordance with 7 AAC 145.020. (b) Payment to the presenting provider is limited to the rate established for brief evaluation and management of an established patient. (c) The department will pay the receiving provider in the same manner as payment is made for the same service provided through traditional mode of delivery, not to exceed 100 percent of the rate established under 7 AAC 145.050. (d) In this section, "consulting provider," "presenting provider," "referring provider," and "telemedicine" have the meanings given in 7 AAC 110.639.

2. Workgroup Recommendations

Legal + Policy

Issue 1: Reimbursement for care management and use of remote monitoring strategies in home settings

Medicaid does not allow reimbursement for care management outside of a Targeted Case Management program. Care management activities that reimburse a provider for coordinating patient care among providers, monitoring adherence to medication schedules and contacting at-risk patients to check status are typical services found in managed care programs, innovative provider payment models and primary care medical home models, none of which are yet implemented in Alaska.

Also absent is the broad ability to use remote-monitoring strategies in the home setting, such as those authorized by a 1915(c) home and community-based services waiver. Remote patient monitoring, including blood pressure, glucose levels, and weight, allows providers to monitor changes and work with patients to improve health outcomes. This allows the provider to regularly review data and check in with the patient frequently using evidence based models and technologies.

Alaska's Senior and Disabilities Services (SDS) has convened a technology committee to identify ways to reimburse for in-home remote monitoring and assistive technology as part of Alaska Medicaid's 1915(c) waiver programs. Possible telehealth programs could target high cost enrollees engaging them with remote health monitoring strategies to improve chronic disease management and reduce related health care costs. These strategies could include video monitoring in the home, supervision and cueing to reduce in-person personal care hours for prompting and medication management. Rendering case management, medication management and other services through telehealth in the patient's home may help identify and address chronic conditions by, for example, a nurse case manager interacting with a patient using their iPad to ask how their medications are working; all of this can help reduce the potential for emergencies, which may reduce costs.

For in-home remote monitoring applications to be successful, patients and their families must be trained to use the technology. Patients may refuse to use the technology, especially if they are not comfortable with the application.

Similarly, Mobile Health services are also not reimbursed by Alaska's Medicaid program but may improve health outcomes by sending appointment or medication reminders, distributing education materials on chronic or other illnesses, and tracking patient activities.

Recommendation 1:

a. Monitor the implementation of the Alaska Coordinated Care Demonstration Projects that will implement care management for specific Medicaid populations and the use of innovative payment models to reward value and improved patient outcomes. Specifically evaluate the return on investment for telehealth strategies within these pilot projects, which will test innovative payment models.
b. Monitor the results of the SDS technology committee and any pilot projects that result for participants in the 1915(c) waivers. Evaluate if these strategies could be employed for other Medicaid-eligible groups.

c. Monitor the implementation of the proposed 1115 behavioral health waiver that will potentially offer home-based services to other high-cost Medicaid populations to evaluate if increased care management and in-home services, provided via telehealth, would improve outcomes.
d. Evaluate the cost-benefit for establishing a bundled rate to reimburse providers for time to travel to the home, set up equipment and to instruct the patient and family on how to use equipment for specific populations

Issue 2: Prescriptions for controlled substances

Federal law prohibits the issuance or renewal of a prescription for a controlled substance without a face-to-face examination of a patient, which limits a patient's ability to receive services via telehealth if there is a high likelihood that a prescription for a controlled substance will be necessary to treat the patient's condition. The language adopted in Alaska law incorporates the federal allowance for a physician to write a prescription for a controlled substance based on a telemedicine encounter if a "licensed health care provider" is physically present with the patient to assist with the examination conducted by the provider delivering the telehealth service. Federal law allows the practice of telemedicine "while the patient is being treated by, and in the physical presence of, a practitioner." It defines a 'practitioner' as "a physician, dentist, veterinarian, scientific investigator, pharmacy, hospital, or other person licensed, registered, or otherwise permitted, by the United States or the jurisdiction in which he practices or does research, to distribute, dispense, conduct research with respect to, administer, or use in teaching or chemical analysis, a controlled substance in the course of professional practice or research."[7] The federal definition is broader and provides greater flexibility as to who may be present during a telehealth examination that could lead to prescription of a controlled substance.

If Alaska were to amend state law to adopt the federal definition for 'practitioner', rather than the more narrowly defined "licensed health care provider", it would allow Community Health Aides and Practitioners, who work within the tribal health system under the supervision of a physician and are certified in their positions by the Indian Health Service, to be present with a patient while an exam is conducted by a physician via telehealth. The exam could then result in the prescription of a controlled substance while complying with federal law intended to stop the diversion of controlled substances from appropriate medical uses.

Alaska's SB 74 includes the language below with the intention of allowing prescriptions via telehealth, however, the inclusion of the term "licensed health care provider" does not allow a Community Health Aide or Practitioner to meet the requirement of being present with the patient during the exam.

> The board may not impose disciplinary sanctions on a physician for prescribing, dispensing, or administering a prescription drug that is a controlled substance or botulinum toxin if the requirements under (a) of this section are met and the physician prescribes, dispenses, or administers the controlled substance or botulinum toxin when an appropriate licensed health care provider is present with the patient to assist the physician with examination, diagnosis, and treatment.[8]

Recommendation 2:

Amend Alaska State law to change AS 08.64.364(c) reference from "appropriate licensed health provider" to "practitioner" as defined by federal law cited above.

[7] https://www.deadiversion.usdoj.gov/21cfr/21usc/802.htm accessed June 22, 2017.

[8] http://www.legis.state.ak.us/PDF/29/Bills/SB0074Z.PDF and AS 08.64.364(c) accessed June 22, 2017.

Issue 3: Board regulation

Although telehealth strategies have been used throughout the state for some time, to eliminate any potential concerns about professional board sanctions for delivering services using a telehealth strategy, SB 74 expressly prohibits professional boards from sanctioning providers for delivering services via telehealth. The measure also requires the boards to update their policies to clarify a provider's ability to use telehealth as a delivery strategy.

Recommendation 3:

Ensure state medical and licensing boards update their regulations to allow professionals to provide telehealth services consistent with SB 74 and with the definition of telehealth included in SB74.

Issue 4: Require all payers to reimburse for telehealth at parity

As with many proposed reforms, for providers to make investments in practice improvements there must be a reasonable assurance of sufficient billable revenue to offset those investments. Perhaps because of conflicting information regarding the efficacy of telehealth services versus in-person visits, or for other reasons, some private payers currently do not reimburse for telehealth services. It may be that with correct coding, these services would be reimbursed.

In 2008, the Mental Health Parity and Addiction Equity Act passed at the federal level, which prevents group health plans and health insurance issuers that provide mental health or substance use disorder benefits from imposing less favorable benefit limitations on those benefits than on medical/surgical benefits. This law was strengthened by the passage of the Affordable Care Act in 2010 to also apply to individual health coverage.[9] No similar federal law exists for coverage of telehealth services.

Thirty-two states and the District of Columbia have parity laws that cover private insurers and reimbursement for telehealth services. These laws require commercial health insurance companies to cover services provided through telehealth to the same extent as those services are covered in person. Many variations exist in how public programs and private insurers pay for these services and which services they cover. While many states mandate reimbursement, not all require reimbursement to be equivalent to or at the same rate as in-person services. Colorado, Missouri, and Virginia require payment on the same basis as in-person services, which allows them to take into consideration the cost differences of telehealth versus in-person services. Twenty-three states and the District of Columbia have full parity, meaning coverage and reimbursement is comparable from in-person to telehealth services. Arizona is the only state that limits parity to geographic regions and specific services. Michigan, Oregon, and Vermont only authorize reimbursement for telehealth that uses interactive, audio-visual systems, and Arkansas places limits on patient locations and provider types, as well as requiring an in person visit to establish a patient-provider relationship. Nevada is the only state to extend parity to workers' compensation programs.[10]

[9] Center for Consumer Information & Insurance Oversight, CMS, https://www.cms.gov/cciio/programs-and-initiatives/other-insurance-protections/mhpaea_factsheet.html accessed June 23, 2017.

[10] Ibid.

Recommendation 4:

Pass a law in Alaska to require parity among all payers for telehealth services.

Work with the Alaska Division of Insurance to conduct work sessions with health care payers in Alaska to develop acceptable language to include in legislation.

Issue 5: Improve coordination between schools and providers to expand the use of telehealth for assessments and consultations during the Individualized Education Program (IEP) process.[11]

Individualized Education Plans govern special education and other supportive services eligible children receive in schools, some of which are reimbursed by Alaska Medicaid. The assessment and consultations that develop the IEP require coordination between physicians, school staff, and other professionals. Telehealth services can be used to increase access to specialist services especially to rural students who may not otherwise have access to them. Improved coordination between the medical providers and school-based staff is needed to improve the efficiency and effectiveness of these services.

Recommendation 5:

Work with the Alaska Department of Education and Early Development to develop a centralized data repository to track client/patient history and IEPs.

Identify services, such as speech therapy, that could be delivered via telehealth.

Analyze the utilization of school-based services to avoid duplication and ensure coordination between schools and providers.

Technology

Issue 6: Internet access at village clinics is typically sufficient to support video-based telehealth if adequate funding continues to support these high-speed connections.

Rural Alaska greatly benefits from the extensive hub and spoke network of clinics, hospitals, and providers managed by the Alaska Tribal Health System. As described above, this system has been developed over recent decades and provides a robust telehealth network that increases access to care in rural Alaska. Continued funding will be necessary to continue this system and ensure access to health services for all Alaskans.

Recommendation 6:

Alaska currently receives $82m from the USAC Rural Health Care Fund, which accounts for 25% of the nation's funding.[12] Support the collaborative efforts of ASHNHA, GCI Health Care and other partners to advocate federally to increase the cap on these funds to secure $600 million to address

[11] Individualized Education Program, is a written document that's developed for each public school child who is eligible for special education.

[12] Communication from Connie Beemer; additional information provided here http://www.usac.org/rhc/ accessed May 5, 2017

Internet coverage in rural areas.[13] Continue to advocate for support of the telehealth network serving rural Alaska.

Issue 7: Lack of a central telehealth network

Alaska lacks a centralized system to identify providers who provide telehealth services, which services are provided using telehealth, how to access telehealth-enabling technology, and how to schedule with a provider that delivers services using telehealth. While SB 74 provides for a directory of telehealth providers, it lacks important details. Creating a centralized system that assists providers, patients and families with connections to telehealth services will help identify available providers and eliminate barriers to services.

Recommendation 7:

Work with Alaska Health Information Exchange and the Department of Commerce, Community, and Economic Development to identify the most feasible information technology to support a central network for Alaska's telehealth providers.

Issue 8: Help providers invest in equipment and connectivity to support telehealth strategies

It is expensive for providers to access the connectivity and equipment necessary for telehealth. There are subsidized programs but they are complicated and difficult to access. The most sustainable approach to helping providers invest in telehealth equipment and connectivity is to create reimbursement incentives for utilizing telehealth delivery methods.

DHSS is supporting the development and connection to the Health Information Exchange (HIE). This will increase connectivity among providers and allow for the appropriate exchange of health information. The HIE may be a critical piece of infrastructure to increase provider use of telehealth and to facilitate access to telehealth services, as well as allowing providers to view and submit information to a patients' electronic health record.

Recommendation 8:

As indicated above, passing a parity law in Alaska to ensure all payers reimburse for telehealth services, will also increase the incentive for providers to invest in the necessary equipment and connectivity.

Continue to support the development of Alaska's HIE and to increase connections to it among Alaska providers.

Data

Issue 9: Lack of Data to Identify High Need and/or Shortage Areas

A complete review of current Alaska Medicaid program expenditures on telehealth services, including services delivered, diagnosis codes supported through telehealth, location of recipients, and provider types, will be necessary for the program to identify high need and provider shortage areas that may be served through expansion of telehealth capabilities.

[13] See House Joint Resolution 14 (add a link to this here)

Recommendation 9:

Identify baseline data for cost and utilization of telemedicine services for Alaska Medicaid.

Develop and routinely prepare data reports on telehealth utilization among Alaska Medicaid enrollees to analyze telehealth utilization by location, provider type, diagnosis code, and service category. Use reports to determine priorities for targeted telehealth expansion.

Stakeholder Engagement

Issue 10: Lack of venue to convene stakeholders across the health system for ongoing analysis of telehealth utilization and potential cost savings.

The workgroup would like to continue to meet on a regular basis for one-hour webinars on topics related to telehealth expansion in Alaska. Ideally, the workgroup would meet in person on a quarterly basis to review data analyses, pursue strategies related to telehealth expansion, and to provide educational opportunities related to telehealth policy. The workgroup identified the following potential topics: Drug Enforcement Administration representatives to discuss policies related to prescribing controlled substances and telehealth; representatives from Department of Commerce, Community and Economic Development related to the telehealth business registry and the development of a provider network; and, representatives from the Department of Education and Early Development and the Governor's Council for Disabilities and Special Education related to the coordination of school and medical professionals for Medicaid services delivered in school settings.

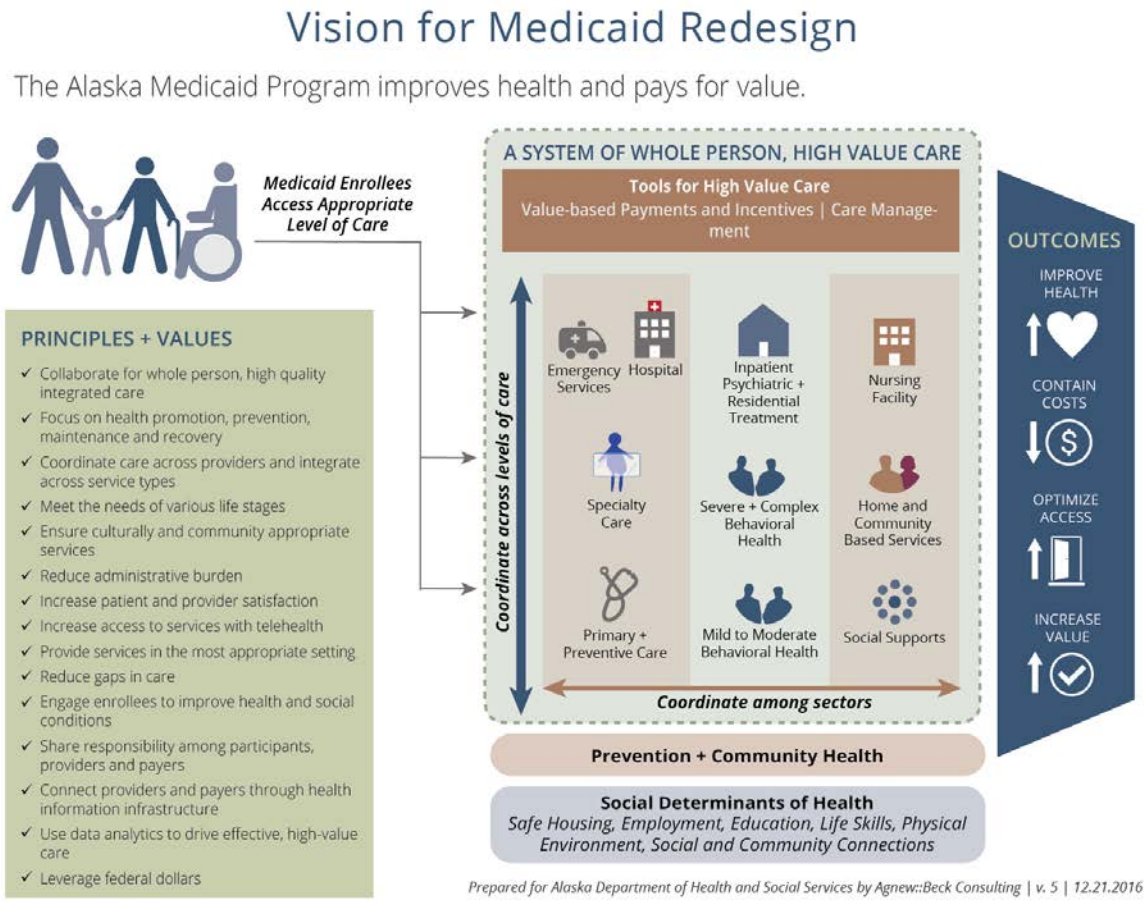
Recommendation 10:

Provide DHSS staff support to offer ongoing coordination of the telehealth workgroup for regular webinars and half-day quarterly in-person meetings.

3. Background

Alaska Medicaid Redesign Process

During fiscal years 2016 and 2017, a range of stakeholders worked with the Department of Health and Social Services to provide input to the Alaska Medicaid Redesign process. As part of this process, stakeholders provided input to design, refine, and prioritize the vision and goals for the redesign of Alaska's Medicaid program, which is depicted in the diagram below. The Telehealth Workgroup referred to this vision diagram during their discussions.



Redesign efforts are essential to improving health outcomes for Alaska Medicaid recipients while ensuring the financial stability of the program. Vulnerable Alaskans often access care at a higher than necessary level of service intensity and at increased expense to the program, because lower-level services that could address the underlying health issues are not accessible. Addressing the social determinants of health is necessary to improve population health, and while many of the programs and divisions within the Department of Health and Social Services address these, this is largely beyond the scope of the Alaska Medicaid program. Alaska Medicaid can and is working to change utilization patterns by improving enrollee access to primary and preventive care to reduce costs for Medicaid while also improving care and enrollee health. Addressing provider shortages is also essential to reform efforts. In many areas, some services, such as psychiatry, are not

accessible or available to those who need them. To address this issue, it will be essential for Alaska Medicaid to develop strategies that build provider capacity in non-traditional ways, such as expanding the use of telehealth services.

Coordinating and managing care to improve the ability of Medicaid recipients to receive the right care at the right time will also help support improved health outcomes, and is an important component of redesign efforts; however, incorporating care coordination and management into Alaska's existing fee-for-service model is a challenge. Currently, Alaska is one of only two states whose Medicaid program relies exclusively on a fee-for-service (FFS) provider payment model. During the development of recommendations to redesign Alaska's Medicaid program in late 2015, stakeholders concluded that the current payment model does not encourage providers to coordinate and manage care or reward providers for providing care earlier and in lower care settings. In response, several Medicaid Redesign projects are tasked with focusing specifically on development of care coordination and management, accompanied by innovative provider payment models, to encourage expansion of care coordination and management activities. The Medicaid Redesign Coordinated Care Demonstration Project (CCDP) is one example, and SB 74 specifically requires CCDP projects to include a telehealth component.

Role of Telehealth in Achieving Goals of Redesign

One of the most promising aspects of telehealth is the ability to increase provider and enrollee access to primary and specialty care services. The ability for a patient to receive consultation services from a specialist without leaving his or her home community can reduce the time necessary for the patient to begin the best course of treatment and reduce utilization of services that will not improve the patient's health. Telehealth has been especially successful at increasing access to behavioral health services in a confidential and stigma-free setting.

Other states have also found that the use of telehealth strategies that do not involve direct patient care have been helpful. Such strategies include options for providers to consult with specialists on difficult cases, receive expert clinical support when the provider is isolated and would otherwise need to send their patients out of the community for services, and participate in general clinical education opportunities. In addition to improving access for Medicaid recipients, increasing the use of telehealth for primary care, behavioral health, and specialty services may also reduce the need for non-emergency travel and reduce emergency travel necessitated by the escalation of conditions left untreated. Actuarial analysis completed by Milliman, Inc. for DHSS in 2015 estimated a potential savings to the Medicaid program of $2.6 million in the first year, increasing to $13 million in year four, in response to expanded use of telemedicine capabilities.[14] These projections were based in part on assumptions that increased use of telemedicine would result in decreased utilization of emergency department and other medical services.

Through discussions of the Telehealth Workgroup, cursory analysis of recent data from Alaska Medicaid, and a review of other states' use of telehealth, the group has concluded that these options are usually built into provider payment structures that support managed care such as primary care medical homes, accountable care organizations, and other non-FFS payment models. These options could not be adapted into Alaska's current fee-for-service model, because federal Medicaid regulations prohibit FFS reimbursement for consultation between providers. In fact, because Alaska Medicaid currently pays the same rate for a telemedicine service as it does for an in-person service without control measures in place related to the health outcome from the

[14] cite A::B Medicaid Redesign Report

service, there is some financial incentive to increase the use of telemedicine services without a reduction in in-person services, which may increase costs for Alaska Medicaid while not resulting in an improvement in enrollee health outcomes.

The Telehealth Workgroup has voiced strong support for expanding access to telehealth services, but also caution to ensure that each provider delivering telehealth services is enrolled as a Medicaid provider in the state of Alaska. Anecdotally, providers report using Mobile Health (eHealth) services to provide patient support through mobile communication such as texting and phone calls. Providers report that many patients prefer these methods of consulting physicians rather than coming in for an office visit and can be more efficient and cost-effective for the provider and payer. These services are not currently reimbursed by Alaska Medicaid, in part because these and other forms of routine care management are not reimbursable services outside of a Targeted Case Management program. These approaches are also not covered by other payers in the state of Alaska but as the department implements care management approaches, as part of ongoing Medicaid Redesign efforts, these approaches will be further explored.

Brief History of Telehealth in Alaska

Alaska has a strong history with telehealth, particularly in the tribal health system, where it is routinely used to evaluate conditions and provide behavioral health treatment services. The expansion of telehealth services was greatly aided by the development of the Alaska Federal Health Care Access Network; 99 percent of telehealth events on this system originated within the Indian Health Service-funded healthcare delivery system.[15]

The non-tribal health system in Alaska has also collaborated to increase adoption of telehealth in Alaska, including efforts by individual providers and support from the Alaska State Hospital and Nursing Home Association (ASHNHA). For example, in 2009, Providence became Alaska's base hospital offering telehealth-based stroke care assessments statewide. Providence's Telestroke program allows neurologists to remotely diagnose and recommend treatment for stroke patients in rural, local, and remote areas using Providence's secure Telehealth infrastructure. This web-based telehealth system, called Remote Evaluation of Acute isCHemic stroke (REACH), allows the consulting neurologist to evaluate stroke patients in multiple locations around Alaska within ten minutes.[16]

Providers are increasing their use of telehealth strategies but efforts are often limited to a specific health system. Barriers to increased use of telemedicine options in the non-tribal health system include issues related to technology and coordination, reimbursement from varied payer sources, regulatory issues, and the lack of a single organization with a focus on statewide telehealth development.[17] Some providers are reluctant to invest in the technology necessary to engage in telemedicine because not all payers provide reimbursement for telehealth services. While Alaska's Medicaid program is one of forty-six state programs that reimburses for telemedicine services, other payers such as some private insurers, are reluctant to pay for services delivered through telehealth. Providers serving more private pay patients are thus reluctant to invest in technologies that may only be used with a subset of patients.

---

[15] Evolution & Summative Evaluation of the Alaska Federal Health Care Access Network Telemedicine Project, University of Alaska Statewide Health Programs, November 2004.

[16] http://alaska.providence.org/locations/pamc/services/stroke/Pages/emergencystroke.aspx, accessed May 5, 2017

[17] Telehealth in Alaska's Hospitals- Identified Issues, Needs and Opportunities, October 2014. A collaborative effort between the Alaska State Hospital and Nursing Home Association, DHSS and the Denali Commission.

Currently, the Alaska Medicaid program supports telemedicine as a method to deliver a specific health care service. Telemedicine itself is not a distinct and separately billable service. Providers engaging in telemedicine receive the same payment for the service delivered as if the patient met with the provider in the provider's office. Alaska Medicaid only covers telemedicine services provided through one of these three methods:

- *Interactive method:* Provider and patient interact in "real time" using video/camera and/or dedicated audio conference equipment.
- *Store-and-forward method:* The provider sends digital images, sounds, or previously recorded video to a consulting provider at a different location. The consulting provider reviews the information and reports back his or her analysis.
- *Self-monitoring method:* The patient is monitored in his or her home via a telemedicine application, with the provider indirectly involved from another location.[18]

Alaska is one of only three states that cover all three of these methods.[19] A provider may fulfill one of the following three roles in the telemedicine process to be eligible for reimbursement by Alaska Medicaid:

- *Referring provider* is a provider who evaluates a member, determines the need for a telemedicine consultation, and arranges the services of a telemedicine consulting provider for diagnosis or treatment.
- *Presenting provider* is a provider who introduces a member to a telemedicine consulting provider for examination, observation, or consideration of medical information; they may also assist in the telemedicine consultation.
- *Consulting provider* is a provider who evaluates the member and appropriate medical data or images through an approved telemedicine delivery method upon recommendation of the referring provider. The consulting provider may or may not be providing "consultation" services.[20]

Table 1 outlines telemedicine allowances under Alaska's current Medicaid program.

Table 1. Status of Telemedicine in Alaska's Medicaid Program[21]

CRITERIA FOR COVERAGE	TELEMEDICINE SERVICES COVERED BY ALASKA MEDICAID
• Covered by Alaska Medicaid • Provided by an Alaska Medicaid enrolled provider within the scope of their license or certification • Rendered to a member eligible to receive those services • Appropriate for telemedicine delivery	• An initial visit • A follow-up visit • A consultation made to confirm a diagnosis • A diagnostic, therapeutic, or interpretive service • A psychiatric or substance abuse assessment • Psychotherapy • Pharmacological management services on an individual member basis

[18] http://manuals.medicaidalaska.com/physician/physician.htm#prof_ii/Section_ii_professional_claims_management.htm

[19] State Telehealth Policies and Reimbursement Schedules: A Comprehensive Plan of the 50 States and District of Columbia. Center for Connected Health Policy. September 2014.

[20] Ibid.

[21] Ibid.

• Performed using a specified delivery method	Consistent with provider recordkeeping requirements, a member's record must include the medical need for the telemedicine service.

COSTS + SERVICES NOT COVERED

- Use of telemedicine equipment and systems
- Services delivered by telephone when not part of a dedicated audio conference system
- Services delivered by facsimile
- The following services provided by telemedicine application:
  - Direct entry midwife
  - Durable medical equipment (DME)
  - End-stage renal disease
  - Home and community-based waiver
  - Personal care assistant
  - Pharmacy
  - Private duty nursing
  - Transportation and accommodation
  - Vision (includes visual care, dispensing, or optician services)

Telehealth in SB74

SB 74 includes telehealth as an important strategy for redesign of the Alaska Medicaid program and anticipates the opportunities for expansion of telehealth to be complementary to redesign efforts. The following provisions in the legislation refer to telehealth:

- Prohibits professional clinician licensure boards from imposing disciplinary sanctions on licensees for practice via audio, video, or data communications when physically separated from the patient within certain criteria. The boards for the following practitioners are addressed in the Act:
  - Audiologists (Section 1)
  - Speech-language pathologist assistants (Section 2)
  - Speech-language pathologists (Section 3)
  - Professional Counselors (Section 4)
  - Marital and Family Therapists (Section 6)
  - Physicians (Sections 7, 8, and 9)
  - Physical and Occupational Therapists (Section 13)
  - Psychologists and Psychological Associates (Section 14)
  - Social Workers (Section 15)
- Requires the Department of Commerce, Community & Economic Development to establish and maintain a Telemedicine Business Registry of businesses performing telemedicine services in the state. (Section 38)
- Requires the Medicaid program to expand the use of telehealth for primary care, behavioral health, and urgent care. (Section 43)
- Requires the Department of Health & Social Services (DHSS) to:

  - identify areas of the state where improvements in access to telehealth would be most effective in reducing Medicaid costs and improving access to care for Medicaid recipients;
  - improve access to telehealth for recipients in those locations; and,
  - enter into agreements with Indian Health Service providers, if necessary, to improve access by medical assistance recipients to telehealth facilities and equipment. (Sec. 43)

- Requires DHSS to include in an annual report on Medicaid reform to the legislature information on the legal and technological barriers to expanded use of telehealth, improvements in the use of telehealth in the state, and recommendations for changes or investments that would allow cost-effective expansion of telehealth. (Section 43)
- Allows DHSS to increase the capability for and reimbursement of telehealth for Medicaid recipients. (Section 45)
- Requires that proposals for Coordinated Care Demonstration Projects include information demonstrating how the project will implement cost-saving measures, including innovations to reduce the cost of care for Medicaid recipients through the expanded use of telehealth for primary care, urgent care, and behavioral health services. (Section 46)
- Requires the Department of Health & Social Services to identify legal or cost barriers preventing the expanded use of telehealth and recommend remedies for identified barriers. (Section 46) [22]

Within the existing Medicaid program, the workgroup focused its efforts on the barriers to expanding the use of telehealth and potential solutions to eliminating these barriers. The workgroup had two robust discussions regarding barriers and from these discussions, developed the recommendations included in Section 2.

One element that inhibited the workgroup's ability to evaluate areas in the state where telehealth may be of most benefit was the lack of Alaska Medicaid data identifying the services currently billed as telehealth, the scope of providers using telehealth, and the location of recipients receiving services through telehealth. Without a clear understanding of current utilization of telehealth services paid for by Alaska Medicaid, the workgroup was unable to develop informed strategies to expand telehealth in provider shortage areas, and to contain costs for Alaska Medicaid.

One of the primary issues discussed by the workgroup was the use of new technologies to monitor patient health and manage care needs. The workgroup discussed strategies for providers to enhance care management through routine phone calls to patients to check status, use of texting and cell phone alerts to send reminders, and to provide education on chronic and other illnesses. There was agreement among workgroup members that additional reimbursement from the Medicaid program would be necessary for providers to exercise these options to serve Medicaid populations. While such care management activities are not currently supported by the Alaska Medicaid program as either a general reimbursable service or a telehealth strategy, other SB 74 redesign efforts focusing on care coordination, innovative provider payments, and primary care medical homes could incorporate one or more of these strategies as they move forward.

Outcomes from Telehealth

Most state Medicaid programs allow the use of some form of telehealth option to deliver care to beneficiaries. As discussed above, Alaska is one of only two states that operates its Medicaid program solely with a fee-for-service payment model. Because of this, other states' experiences are not necessarily analogous to Alaska. In

[22] http://www.legis.state.ak.us/PDF/29/Bills/SB0074Z.PDF Accessed May 5, 2017

other states, cost savings created by telehealth are part of broader managed care efforts that utilize care management strategies, rather than a fee-for-service program structure.

For example, a recent study evaluated the impacts of a telemonitoring program that specifically targets Medicare managed care members enrolled in the Geisinger Health Plan (GHP) who lived in rural Central Pennsylvania and had experienced heart failure. The program provided participants with in-home technology specifically designed to detect changes in physical condition indicating exacerbation, such as shortness of breath, swelling, appetite, and prescription management. The study found that the telemonitoring program was associated with significant reductions in hospital admission and readmission rates, which translated into approximately 11% cost savings and a return on investment of approximately 3.3.[23] However, the study specifically notes that "GHP's telemonitoring program was implemented as an additional tool and resource to augment the existing case management infrastructure and not as an independent, stand-alone program carved out specifically for members with heart failure. Embedding this tool within the daily workflow of case managers has allowed them to track each member's clinical progress in near real time, increasing the opportunities for proactive intervention based on biometric and symptom information."[24] Because the use of the in-home technology was embedded into the managed care rate paid to the participating providers, no additional reimbursement was provided for use of the technology.

A similar approach was piloted in Mississippi to provide remote monitoring for patients with diabetes. The Center for Telehealth, created in 2003, developed the Diabetes Telehealth Network in early 2014. The program allowed health practitioners to treat patients remotely, in real time and at home, using online streaming video technology and other tools for two-way live communication. Participants were trained on tablet computers loaned at no cost and requiring a cellular broadband connection. Preliminary data from the diabetes patients showed 96 percent took their medications as directed and 83 percent kept their scheduled telehealth appointments. The data also showed that the patients' average hemoglobin A1c level dropped, bringing them closer to the normal range for those without diabetes. No patients in the study were hospitalized or visited an emergency room because of complications from diabetes. In addition, providers identified nine cases of diabetic retinopathy that might otherwise have gone undiagnosed. The same model is now being deployed for patients coping with chronic obstructive pulmonary disease, hypertension, kidney disease and several other conditions that require chronic disease management. This project was partly enabled by the passage of a law by the 2014 Mississippi Legislature that requires insurance companies and Medicaid to reimburse for both remote patient monitoring and store-and-forward telemedicine.[25]

---

[23] The estimated return on investment associated with the telemonitoring program was approximately 3.3. That is, for every $1 spent to implement the program, there was approximately $3.30 return on this investment in terms of the cost savings accrued to the Geisinger Health Plan (GHP). The investment cost was calculated as the sum of the cost of purchasing the Bluetooth scale as well as the cost of the automated calls to the members. The cost was determined on a per member per month (PMPM) basis for each member for the number of the months during which the member was enrolled in the program. The cost associated with case management activities for the members participating in this program was not separately identified and included in this calculation because any case management activity related to the telemonitoring program was considered to be a part of the routine case management efforts performed by the case managers. (Source: same as footnote 17)

[24] Daniel D. Maeng, PhD, Alison E. Starr, DBA, Janet F. Tomcavage, RN, MSN, Joann Sciandra, RN, BSN, CCM, Doreen Salek, BS RN, and David Griffith, BS. Can Telemonitoring Reduce Hospitalization and Cost of Care? A Health Plan's Experience in Managing Patients with Heart Failure. Population Health Management Volume 0, Number 0, 2014. http://www.amchealth.com/_files/published-outcomes/PopulationHealthManagement-GeisingerHFStudy-May2014.pdf accessed June 22, 2017.

[25] https://www.umc.edu/News_and_Publications/Press_Release/2016-10-03-00_UMMC_telehealth_enters_next_chapter_of_remote_patient_monitoring(1).aspx accessed June 22, 2017.

A recent technical brief from the Agency for Healthcare Research and Quality, U.S. Department of Health and Human Services, shares the results from an extensive literature review of the evidence for patient outcomes resulting from telehealth. The main conclusions of this brief include:

- The research literature on telehealth is vast and varied, consisting of hundreds of systematic reviews and thousands of studies of use across various clinical conditions and health care functions.
- There is sufficient evidence to support the effectiveness of telehealth for specific uses with some types of patients, including:
    - Remote patient monitoring for patients with chronic conditions;
    - Communication and counseling for patients with chronic conditions;
    - Psychotherapy as part of behavioral health.

  For these telehealth applications, the research focus should shift to how to promote broader implementation and address barriers.
- Additional systematic reviews may be helpful for some topics, such as consultation and maternal and child health, where primary studies are available but these have not been synthesized.
- For other uses, such as triage for urgent care, telehealth is cited as offering value but limited primary evidence was identified, suggesting more studies are needed.
- Future research also should assess the use and impact of telehealth in new health care organizational and payment models[26]

A promising model developed by the University of New Mexico is currently being piloted in Alaska. Project ECHO (Extension for Community Health Outcomes) uses phone and video to connect primary care providers in rural and underserved communities with specialists to co-manage patients with common chronic conditions such as diabetes, hepatitis C and lupus. Evaluations on Project ECHO's use in Colorado found health outcomes in community locations were equal to those of patients at the University hospital campus.[27] This model breaks down the walls between specialty and primary care by linking expert specialist teams at an academic 'hub' with primary care clinicians in local communities. These teams participate in weekly teleECHO™ clinics, like virtual grand rounds, combined with mentoring and patient case presentations. The clinics are supported by basic, widely available teleconferencing technology. During teleECHO clinics, primary care clinicians from multiple sites present patient cases to the specialist teams and to each other, discuss new developments relating to their patients, and determine treatment. Specialists serve as mentors and colleagues, sharing their medical knowledge and expertise with primary care clinicians.[28]

[26] Totten AM, Womack DM, Eden KB, McDonagh MS, Griffin JC, Grusing S, Hersh WR. Telehealth: Mapping the Evidence for Patient Outcomes from Systematic Reviews. Technical Brief No. 26. (Prepared by the Pacific Northwest Evidence-based Practice Center under Contract No. 290-2015-00009-I.) AHRQ Publication No.16-EHC034-EF. Rockville, MD: Agency for Healthcare Research and Quality; June 2016. www.effectivehealthcare.ahrq.gov/reports/final.cfm. accessed June22, 2017.

[27] Health Care for a High-Tech World: The Potential for Telehealth in Colorado, Colorado Health Institute, October 2014. http://www.coloradohealthinstitute.org/sites/default/files/migrated/postfiles/Telehealth_Report_10_15_2014.pdf

[28] http://echo.unm.edu/about-echo/model/ accessed June 22, 2017.

4. Evaluation + Monitoring

The program will need to monitor utilization of telehealth services to ensure the increased use of telehealth improves outcomes for enrollees and contains costs for the Medicaid program. An example of one such expectation is that as telehealth expands, non-emergency and emergency transportation services attributed to lack of routine care and/or monitoring of chronic conditions will go down. Also of interest to the program will be the extent to which expansion of telehealth improves enrollees' access to primary care, behavioral health care, or minor acute care services that would otherwise not be available.

Possible Measures

SB 74 SECTION	EVALUATION MEASURES

Sections 1-4, 6-9, 13-15, 38, 43
 	
Telehealth + Telemedicine
	• Total number of (and change in) telehealth providers (pre/post, over time)
	  o Rate of telehealth by region, service type
	  o In areas where telehealth visits have increased, change in other utilization, total costs
	• Total number of (and change in) telehealth visits
	  o Overall
	  o For specific uses (primary care, urgent care, behavioral health)
	• Percentage of telehealth vs in person visits for same type of condition/issue (total and change over time)
	• Total use of and change in non-emergency medical transportation (NEMT) – number of trips
	• Change in spending on NEMT
	• General access to care measure

Appendix A

Workgroup Members

Brooke	Allen	Certified Behavior Analyst
Connie	Beemer	Alaska State Hospital and Nursing Home Association
Denise	Daniello	Alaska Commission on Aging
Mark	Erickson, MD	Alaska Psychiatric Institute
Brent	Fisher	Alaska Sleep Clinic
Matthew	Hirschfeld, MD	Alaska Native Medical Center
Philip	Hofstetter, MD	Norton Sound Health Corporation
Laura	Hudson	Alaska Regional Hospital
Laura	Johnston	Southcentral Foundation
Richard	Kiefer-O'Donnell	University of Alaska, Anchorage
Ken	McCarty	Discovery Cove Recovery Center
Trina	McCandless	Haines Borough Fire Department EMS
Robert	Onders, MD	Alaska Native Tribal Health Consortium
Georgiana	Page	Alaska eHealth Network
Christopher	Simon	Tanana Chiefs Conference
Mark	Williams	Providence Health + Services
Thad	Woodard, MD	Private Practice Pediatrician

Alaska Department of Health and Social Services Staff

Donna Steward, Project Leader, Office of the Commissioner

Christiann Stapf, Project Leader, Health Care Services

Support Contract Staff

Thea Agnew Bemben, Agnew::Beck Consulting

Shanna Zuspan, Agnew::Beck Consulting

THE STATE of ALASKA
GOVERNOR BILL WALKER

Department of Health and Social Services

Office of the Commissioner

Anchorage
3601 C Street, Suite 902
Anchorage, Alaska 99503-5924
Main: 907.269.7800
Fax: 907.269.0060

Juneau
350 Main Street, Suite 404
Juneau, Alaska 99801-1149
Main: 907.465.3030
Fax: 907.465.3068

April 27, 2018

Dear Medicaid Redesign Telehealth Stakeholder Workgroup Members:

I write to express the appreciation of the Department of Health & Social Services for sharing your experience and expertise and for developing recommendations regarding the use of telehealth applications to improve access to care for Alaska's Medicaid recipients.

The department provided a copy of the workgroup's report and recommendations to the legislature as an attachment to our annual Medicaid reform report to the legislature on November 15 (see link below). The department also reviewed the workgroup's recommendations and has documented a summary of our responses in the enclosed table.

Unrelated to the workgroup's recommendations, the department will be releasing draft telehealth regulations to clarify rules related to Medicaid reimbursement for current telehealth activities. The draft regulations will be available for public comment sometime in the coming months through the public notice process. You may subscribe to the State of Alaska public notice system to receive newly released notices at the additional link provided below.

Thank you again for your assistance with this important effort, and for your dedication to improving health and health care in Alaska generally and through our Medicaid program.

Sincerely,

Jon Sherwood
Deputy Commissioner

Enclosure

CC: The Honorable Pete Kelly, President, Alaska Senate
The Honorable Bryce Edgmon, Speaker of the House, Alaska House of Representatives
Fred Parady, Deputy Commissioner, Department of Commerce, Community & Economic Development
Sana Efird, Deputy Commissioner, Department of Education and Early Development

Link to DHSS FY 2017 Annual Medicaid Reform Report:
http://dhss.alaska.gov/HealthyAlaska/Documents/redesign/FY-2017_Annual_Medicaid_Reform_Report_1-23-18.pdf

Link to State of Alaska Public Notice web site: https://aws.state.ak.us/OnlinePublicNotices/default.aspx

Telehealth Stakeholder Workgroup Recommendations and DHSS Responses

General Recommendation Category	Specific Recommended Actions	DHSS Response
Recommendation 1: Reimburse Care Management and Use of Remote Monitoring Strategies in Home Settings	a. Monitor the implementation of the Alaska Coordinated Care Demonstration Projects that will implement care management for specific Medicaid populations and the use of innovative payment models to reward value and improved patient outcomes. Specifically evaluate the return on investment for telehealth strategies within these pilot projects, which will test innovative payment models.	a. The award of the Alaska Coordinated Care Demonstration Projects will be announced imminently. The department will evaluate the return on investment from these demonstration projects, which will include telehealth strategies.
	b. Monitor the results of the SDS technology committee and any pilot projects that result for participants in the 1915(c) waivers. Evaluate if these strategies could be employed for other Medicaid-eligible groups.	b. The Division of Senior and Disabilities Services (SDS) supported the Statewide Independent Living Council of Alaska (SILC) in their successful application to the Alaska Mental Health Trust Authority for funding for an Innovation to Independence through Enabling Technology pilot project, and is collaborating with SILC on the implementation plan. The pilot project will help SDS understand how technology can enhance an individual's quality of life and reduce service utilization using assistive technology, home telehealth monitoring, and medication management devices. The pilot is expected to launch by early SFY 2019, and additional funding is being sought to expand the reach.
	c. Monitor the implementation of the proposed 1115 behavioral health waiver that will potentially offer home-based services to other high-cost Medicaid populations to evaluate if increased care management and in-home services, provided via telehealth, would improve outcomes.	c. The department submitted the 1115 Medicaid waiver to support behavioral health reform in January 2018, and is currently in negotiations with the Centers for Medicare and Medicaid Services. Once implemented the waiver will be a demonstration project that will require an evaluation component.

	d. Evaluate the cost-benefit for establishing a bundled rate to reimburse providers for time to travel to the home, set up equipment and to instruct the patient and family on how to use equipment for specific populations.	d. Limited evidence exists that demonstrates the effectiveness of remote patient monitoring for improving clinical outcomes. In addition, the department does not currently reimburse providers for travel time related to equipment. Additional resources would be required to conduct an analysis to determine whether remote monitoring would improve patient outcomes and be cost-effective, and also to determine whether reimbursement for vendor travel time is essential to delivery of the service.
Recommendation 2: Revise state law regarding prescriptions for controlled substances	a. Amend Alaska state law to change AS 08.64.364(c) reference from "appropriate licensed health provider" to "practitioner" as defined by federal law cited above. *(note that the last two words of this recommendation is referencing source document, not this document)*	a. This recommendation falls under the purview of the legislature and the Department of Commerce, Community and Economic Development. The department recommends any changes to state laws related to prescribing practices be carefully considered to ensure compliance with federal laws and regulations, particularly those of the U.S. Department of Justice, Drug Enforcement Agency.
Recommendation 3: Monitor Medical Board Licensing Regulations Regarding Delivery of Telehealth Services	a. Ensure state medical and licensing boards update their regulations to allow professionals to provide telehealth services consistent with SB 74 and with the definition of telehealth included in SB74.	a. This recommendation falls under the purview of the legislature and the Department of Commerce, Community & Economic Development.
Recommendation 4: Require All Payers to Reimburse Telehealth at Parity	a. Pass a law in Alaska to require parity among all payers for telehealth services. b. Work with the Alaska Division of Insurance to conduct work sessions with health care payers in Alaska to develop acceptable language to include in legislation.	These recommendations fall under the purview of the legislature and Division of Insurance.

Recommendation 5: Improve Coordination Between Schools and Providers to Expand the Use of Telehealth	a. Work with the Alaska Department of Education and Early Development to develop a centralized data repository to track client/patient history and IEPs. b. Identify services, such as speech therapy, that could be delivered via telehealth. c. Analyze the utilization of school-based services to avoid duplication and ensure coordination between schools and providers.	These recommendations fall under the purview of the Department of Education & Early Development, and may require additional resources to implement.
Recommendation 6: Support Collaborative Efforts to Leverage Federal Funding for Internet Coverage in Rural Areas	a. Alaska currently receives $82m from the USAC Rural Health Care Fund, which accounts for 25% of the nation's funding. Support the collaborative efforts of ASHNHA, GCI Health Care and other partners to advocate federally to increase the cap on these funds to secure $600 million to address Internet coverage in rural areas. Continue to advocate for support of the telehealth network serving rural Alaska.	a. The DHSS Division of Public Health collaborates with the Alaska Primary Care Association, ASHNHA, and other partners to address issues related to rural health access, including the USAC Rural Health Care Fund.
Recommendation 7: Work with the Health Information Exchange and Department of Commerce to Develop Telehealth Central Network	a. Work with Alaska Health Information Exchange and the Department of Commerce, Community, and Economic Development to identify the most feasible information technology to support a central network for Alaska's telehealth providers.	a. The Department of Commerce, Community, and Economic Development has established the telehealth registry required by Senate Bill 74. The Alaska Health Information Exchange has established a network for exchange of health information and is investigating business development opportunities to meet the needs of Alaskan providers.

Recommendation 8: Help Providers Invest in Equipment and Connectivity to Support Telehealth Strategies	a. As indicated above, passing a parity law in Alaska to ensure all payers reimburse for telehealth services, will also increase the incentive for providers to invest in the necessary equipment and connectivity. b. Continue to support the development of Alaska's HIE (Health Information Exchange) and to increase connections to it among Alaska providers.	a. This recommendation would require a statutory change and falls under the purview of the legislature and the Division of Insurance. b. The department actively participates in funding, providing technical assistance to, and otherwise supporting Alaska's HIE.
Recommendation 9: Develop Baseline Data of Telehealth Utilization and Analyze Use and Need Patterns	a. Identify baseline data for cost and utilization of telemedicine services for Alaska Medicaid. b. Develop and routinely prepare data reports on telehealth utilization among Alaska Medicaid enrollees to analyze telehealth utilization by location, provider type, diagnosis code, and service category. Use reports to determine priorities for targeted telehealth expansion.	a. The Alaska Medicaid Program, in compliance with federal Medicaid rules, considers telemedicine a mode of service delivery, not a service in and of itself, and will pay for appropriate services delivered with approved telemedicine technologies. The goal of the department related to telemedicine is to improve access to care for those regions and services for which access barriers can be overcome with telemedicine modalities that are cost effective and improve clinical outcomes. Data development related to Medicaid services delivered via telemedicine would need to go beyond simple cost and utilization to ensure that goal is met. b. Data development and reporting in and of itself is not sufficient without an evaluation plan to ensure appropriate analysis of specific provider types and service referrals, as well as an understanding of Medicaid costs, utilization and outcomes of services delivered via telemedicine technologies. If the department is able to identify resources to support data development related to telehealth utilization,

		the effort will focus on identification of areas of the state that experience barriers to access to services that would be amenable to delivery via telemedicine technologies, and the development of data reports that provide an analysis of cost effectiveness and health outcomes.
Recommendation 10: Continue Medicaid Redesign Telehealth Stakeholder Workgroup	a. Provide DHSS staff support to offer ongoing coordination of the telehealth workgroup for regular webinars and half-day quarterly in-person meetings.	a. Due to the current fiscal climate in the state the department has had to make reductions in staffing and funding and does not currently have the resources to support the work of an ongoing telehealth stakeholders' workgroup.

Alaska Medicaid Optional Services

State Fiscal Year 2018

Federal law entitles Medicaid enrollees to a basic set of services state Medicaid programs are required to cover. AS 47.07.030(a) authorizes the Alaska Medicaid program to cover the federally mandated services. Mandatory services include hospital, nursing home, and physician services.

Federal law also includes a list of certain additional optional services state Medicaid programs are permitted but not required to cover. The legislature has authorized coverage of a number of the optional services by the Alaska Medicaid program under AS 47.07.030(b). Medicaid optional services covered in Alaska include personal care services, prescription medications, and substance abuse treatment.

Optional services are offered as covered services because they generally are cost-effective alternatives to otherwise mandatory services. For example, optional dental services help prevent more acute health problems from developing that could result in much more costly medical interventions, including the possibility of hospitalization. Hospital care is a mandatory service. Another example is home and community-based services, which are offered through waivers in lieu of much more costly nursing home services. Nursing home services are mandatory services.

Outside of the waivers, all medically necessary services are considered mandatory for children. All Medicaid enrolled children receive the Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) benefit as a mandatory service. Under EPSDT, all medically necessary services for a child requiring treatment are considered mandatory and must be covered if they are within the scope of mandatory or optional services under federal law, regardless of whether the services are included in the State Medicaid Plan.

In addition, certain optional services are mandatory for Medicare cost-sharing for "dual eligibles." Dual eligibles are people who qualify for both Medicaid and Medicare. Some optional services also have coverage limitations. Following are links to information about optional services that are only available for dual eligibles, as well as information on optional services for which there are coverage limitations.

- **Chiropractic Care:** From page 9 of the Medicaid Recipient Handbook at http://dhss.alaska.gov/dhcs/Documents/PDF/Recipient-Handbook.pdf
  - Only offered to dual eligibles and children.
- **Dental Services:** See pages 9 & 10 for information on coverage limitations http://dhss.alaska.gov/dhcs/Documents/PDF/Recipient-Handbook.pdf
- **Hearing Services:** See pages 12 for additional information on coverage limitations http://dhss.alaska.gov/dhcs/Documents/PDF/Recipient-Handbook.pdf
- **Podiatry:** From page 17 of the Medicaid Recipient Handbook at http://dhss.alaska.gov/dhcs/Documents/PDF/Recipient-Handbook.pdf
  - Only offered to children and dual eligibles.
- **Vision Services:** From page 23 of the Medicaid Recipient Handbook at http://dhss.alaska.gov/dhcs/Documents/PDF/Recipient-Handbook.pdf
  - One vision exam per calendar year to determine if glasses are required and for treatment of diseases of the eye. One pair of Medicaid-approved glasses per calendar year.
  - Additional vision coverage may be authorized if medically necessary.

Please see the tables on the following pages for state fiscal year (FY) 2018 expenditures for optional services.

FY2018 MMIS Medicaid Claim Activity

Medicaid Waiver Services

	Medicaid Waiver Services Only							
	Adults (21 or older)				Children (under age 21)			
MMIS Category of Service	Mandatory / Optional	Claim Payments	Recipients (1)	Cost per Client	Mandatory / Optional	Claim Payments	Recipients (1)	Cost per Client
ADULT DAY CARE	O	$ 4,912,941	485	$ 10,130	O	$ -	-	$ -
CARE COORDINATION	O	$ 10,310,646	3551	$ 2,904	O	$ 2,756,139	1,399	$ 1,970
CHORE SERVICES	O	$ 1,696,715	265	$ 6,403	O	$ 11,202	1	$ 11,202
DAY HABILITATION	O	$ 35,530,499	1434	$ 24,777	O	$ 10,771,350	624	$ 17,262
ENVIRONMENTAL MODIFICATIONS	O	$ 329,472	47	$ 7,010	O	$ 66,150	9	$ 7,350
INTENSIVE ACTIVE TREATMENT/THERAPY	O	$ 554,302	116	$ 4,778	O	$ 1,178,046	257	$ 4,584
MEALS	O	$ 2,237,516	503	$ 4,448	O	$ -	-	$ -
RESIDENTIAL HABILITATION	O	$ 111,504,134	1374	$ 81,153	O	$ 16,562,408	546	$ 30,334
RESIDENTIAL SUPPORTED LIVING	O	$ 45,702,319	1176	$ 38,863	O	$ 32,795	1	$ 32,795
RESPITE CARE	O	$ 9,231,586	1103	$ 8,370	O	$ 3,348,702	523	$ 6,403
SPECIALIZED EQUIPMENT AND SUPPLIES	O	$ 142,020	461	$ 308	O	$ 38,068	21	$ 1,813
SPECIALIZED PRIVATE DUTY NURSING	O	$ 142,679	6	$ 23,780	O	$ -	-	$ -
SUPPORTED EMPLOYMENT	O	$ 7,876,582	452	$ 17,426	O	$ 169,639	13	$ 13,049
TRANSPORTATION	O	$ 2,308,313	908	$ 2,542	O	$ 10,738	4	$ 2,685
All Waiver Services		**$ 232,479,723**	**3,859 (2)**	**$ 60,244 (3)**		**$ 34,945,236**	**1,442 (2)**	**$ 24,234 (3)**

Source: DHSS, FMS, Budget Section, Medicaid Budget Group using MMIS/COGNOS data for FY2018.

This data is based on the date a claim was paid. Please keep in mind that Medicaid providers can submit claims up to one year after the date of service.

1) *Recipient figures are unduplicated within each Category of Service. Many Medicaid recipients use one or more categories of service.*
2) *Recipient totals for the categories Mandatory Services, Optional Services, and All Waivers are unduplicated.*
3) *The average annual cost per client is the total payments divided by the unduplicated total for annual recipients.*
4) *The Centers for Medicare and Medicaid Services (CMS) considers non-emergency Medicaid transportation, including accommodations, to be optional services. However, in order to provide access to medically necessary health care, these services are mandatory for Alaska.*
5) *For dual-enrolled Medicare/Medicaid recipients, Medicaid is required to pay the co-pay amount, even if the service is optional.*
6) *In the table on the following page, Mandatory Services are highlighted in green and the Optional Services are in white.*

These notes also apply to the table on the following page

FY2018 MMIS Medicaid Claim Activity

Medicaid Mandatory and Optional Services

MMIS Category of Service	Medicaid Services, excluding Waivers and CAMA							
	Adults (21 or older)				Children (under age 21)			
	Mandatory / Optional	Claim Payments	Recipients (1)	Cost per Client	Mandatory / Optional	Claim Payments	Recipients (1)	Cost per Client
ACCOMMODATION SERVICES (4)	M	$ 11,222,089	10,850	$ 1,034	M	$ 5,023,484	7,558	$ 665
ADVANCED NURSE PRACTITIONER	M	$ 14,115,070	30,091	$ 469	M	$ 5,747,948	20,628	$ 279
EARLY PERIODIC SCREENING DIAGNOSIS TREATMENT SCREENING	M	$ 9,807	124	$ 79	M	$ 16,235,685	36,980	$ 439
FAMILY PLANNING SERVICES	M	$ 3,173,313	6,643	$ 478	M	$ 1,068,560	2,566	$ 416
FEDERALLY QUALIFIED HEALTH CLINIC	M	$ 10,771,737	11,286	$ 954	M	$ 2,405,800	3,130	$ 769
FREE STANDING BIRTH CENTER	M	$ 439,836	207	$ 2,125	M	$ 33,171	15	$ 2,211
HOME HEALTH SERVICES	M	$ 1,357,935	348	$ 3,902	M	$ 8,138	7	$ 1,163
INTENSIVE CARE FACILITY NURSING HOME	M	$ 107,286,991	726	$ 147,778	M	$ 2,258	1	$ 2,258
INPATIENT HOSPITAL SERVICES	M	$ 199,220,792	11,915	$ 16,720	M	$ 120,467,673	6,861	$ 17,558
LABORATORY SERVICES	M	$ 6,897,344	23,874	$ 289	M	$ 553,679	4,753	$ 116
MIDWIFERY SERVICES	M	$ 2,639,014	3,870	$ 682	M	$ 568,954	1,217	$ 468
OUTPATIENT HOSPITAL SERVICES	M	$ 169,173,797	65,026	$ 2,602	M	$ 64,740,442	43,185	$ 1,499
OUTPATIENT SURGERY SERVICE	M	$ 5,048,452	3,981	$ 1,268	M	$ 1,961,464	1,628	$ 1,205
PHYSICIAN IHS CLINIC	M	$ 63,217,756	24,338	$ 2,597	M	$ 36,941,622	22,744	$ 1,624
PHYSICIAN SERVICES	M	$ 136,218,318	77,999	$ 1,746	M	$ 48,641,018	59,686	$ 815
RURAL HEALTH SERVICES	M	$ -	-	$ -	M	$ -	-	$ -
SHORT TERM/LONG TERM CARE SERVICES	M	$ 5,861,585	165	$ 35,525	M	$ 106,418	2	$ 53,209
SKILLED NURSING FACILITY NURSING HOME	M	$ 13,189,686	349	$ 37,793	M	$ 538,852	4	$ 134,713
TRANSPORTATION SERVICES (4)	M	$ 46,759,602	26,119	$ 1,790	M	$ 29,670,201	14,733	$ 2,014
X-RAY SERVICES	M	$ 41,899	194	$ 216	M	$ -	-	$ -
CARE COORDINATION	O	$ -	-	$ -	M	$ -	-	$ -
CASE MANAGEMENT SERVICES	O	$ 1,425	2	$ 713	M	$ 2,023,631	1,355	$ 1,493
CHIROPRACTIC SERVICES	O	$ 54,825	474	$ 116	M	$ 313,630	1,163	$ 270
DENTAL SERVICES	O	$ 42,354,409	39,899	$ 1,062	M	$ 58,161,623	53,665	$ 1,084
DURABLE MEDICAL EQUIPMENT/MEDICAL SUPPLIES	O	$ 7,202,673	9,130	$ 789	M	$ 1,915,705	1,629	$ 1,176
DRUG ABUSE CENTER	O	$ 20,156,454	3,367	$ 5,986	M	$ 3,612,519	303	$ 11,923
END STAGE RENAL DISEASE SERVICES	O	$ 5,937,636	388	$ 15,303	M	$ 266,977	8	$ 33,372
HEARING SERVICES	O	$ 2,932,843	2,446	$ 1,199	M	$ 485,462	1,342	$ 362
HOSPICE CARE	O	$ 526,016	71	$ 7,409	M	$ -	-	$ -
INTENSIVE CARE FACILITY/INTELLECTUALLY DISABLED SERVICE	O	$ 1,990,834	11	$ 180,985	M	$ 626,013	3	$ 208,671
INPATIENT PSYCHIATRIC SERVICES	O	$ 306,737	80	$ 3,834	M	$ 48,892,011	954	$ 51,249
MEDICAL SUPPLIES SERVICES	O	$ 6,436,639	9,539	$ 675	M	$ 3,952,283	3,861	$ 1,024
MENTAL HEALTH SERVICES	O	$ 67,526,469	13,752	$ 4,910	M	$ 88,288,342	7,248	$ 12,181
NUTRITION SERVICES	O	$ 21,954	399	$ 55	M	$ -	-	$ -
NUTRITION SERVICES UNDER 21	O	$ -	-	$ -	M	$ 53,568	1,978	$ 27
OCCUPATIONAL THERAPY	O	$ 660,656	614	$ 1,076	M	$ 8,155,653	1,988	$ 4,102
PERSONAL CARE SERVICES	O	$ 60,259,301	3,962	$ 15,209	M	$ 1,950,928	86	$ 22,685
PODIATRY	O	$ 88,811	1,094	$ 81	M	$ 170,064	345	$ 493
PRESCRIBED DRUGS	O	$ 110,420,403	61,496	$ 1,796	M	$ 25,901,922	44,479	$ 582
PRIVATE DUTY NURSING	O	$ -	-	$ -	M	$ 9,550,247	53	$ 180,193
PROSTHETICS AND ORTHOTICS	O	$ 954,284	671	$ 1,422	M	$ 530,968	393	$ 1,351
PSYCHOLOGY SERVICES	O	$ 1,074,592	768	$ 1,399	M	$ 2,775,998	1,577	$ 1,760
REHABILITATIVE SERVICES	O	$ 7,608,855	6,104	$ 1,247	M	$ 19,474,329	6,592	$ 2,954
VISION SERVICES	O	$ 6,320,578	27,780	$ 228	M	$ 4,529,746	19,642	$ 231
Mandatory Services	**M**	$ 796,645,024	96,017	$ 8,297	**M**	$ 616,346,987	96,278	$ 6,402
Optional Services (excluding waivers)	**O**	$ 342,836,393	86,951	$ 3,943	**O**	$ -	-	$ -
All Non-Waivers Services	**M + O**	$ 1,139,481,417	105,328 (2)	$ 10,818 (3)	**M + O**	$ 616,346,987	96,278 (2)	$ 6,402 (3)

SFY 2018 Medicaid Expenditures for Optional Services by Fund Source

	STATE	FEDERAL	TOTAL SPENDING
ADULT DAY CARE	$2,456,471	$2,456,471	$4,912,941
CARE COORDINATION	$6,253,145	$6,813,641	$13,066,785
CHORE SERVICES	$852,059	$855,859	$1,707,918
DAY HABILITATION	$22,701,453	$23,600,396	$46,301,848
ENVIRONMENTAL MODIFICATIONS	$197,811	$197,811	$395,621
INTENSIVE ACTIVE TREATMENT/THERAPY	$859,128	$873,220	$1,732,348
MEALS	$1,118,461	$1,119,054	$2,237,516
RESIDENTIAL HABILITATION	$62,388,443	$65,678,099	$128,066,542
RESIDENTIAL SUPPORTED LIVING	$22,675,776	$23,059,337	$45,735,113
RESPITE CARE	$6,109,218	$6,471,069	$12,580,287
SPECIALIZED EQUIPMENT AND SUPPLIES	$90,044	$90,044	$180,088
SPECIALIZED PRIVATE DUTY NURSING	$71,340	$71,340	$142,679
SUPPORTED EMPLOYMENT	$4,023,110	$4,023,110	$8,046,221
TRANSPORTATION	$1,159,502	$1,159,550	$2,319,051
TOTAL WAIVER EXPENDITURES	**$130,955,959**	**$136,469,000**	**$267,424,959**
CASE MANAGEMENT SERVICES	$0	$1,425	$1,425
CHIROPRACTIC SERVICES	$27,473	$27,352	$54,825
DENTAL SERVICES.	$10,300,622	$32,053,787	$42,354,409
DRUG ABUSE CENTER	$1,895,108	$18,261,346	$20,156,454
DURABLE MEDICAL EQUIPMENT/MEDICAL SUPPLIES	$2,736,865	$4,465,808	$7,202,673
END STAGE RENAL DISEASE SERVICES	$2,661,159	$3,276,476	$5,937,636
HEARING SERVICES	$1,016,960	$1,915,883	$2,932,843
HOSPICE CARE	$197,925	$328,091	$526,016
INPATIENT PSYCH SERVICE	$153,368	$153,368	$306,737
INTENSIVE CARE FACILITY/INTELLECTUALLY DISABLED SERVICE	$911,097	$1,079,736	$1,990,834
MEDICAL SUPPLIES SERVICE	$2,983,272	$3,453,367	$6,436,639
MENTAL HEALTH SERVICE	$14,620,935	$52,905,534	67,526,469
NUTRITION SERVICES	$7,951	$14,003	$21,954
OCCUPATIONAL THERAPY	$198,563	$462,093	$660,656
PERSONAL CARE SERVICES	$29,886,477	$30,372,824	$60,259,301
PODIATRY	$41,716	$47,096	$88,811
PRESCRIBED DRUGS	$26,086,317	$84,334,087	$110,420,403
PROSTHETICS & ORTHOTICS	$316,794	$637,490	$954,284
PSYCHOLOGY SERVICES	$277,877	$796,715	$1,074,592
REHABILITATIVE SERVICES	$2,326,947	$5,281,908	$7,608,855
VISION SERVICES	$2,159,161	$4,161,416	$6,320,578
TOTAL OPTIONAL SERVICE EXPENDITURES	**$98,806,586**	**$244,029,807**	**$342,836,393**
GRAND TOTAL	**$229,762,545**	**$380,498,806**	**$610,261,352**