



ALASKA MEDICAID
NURSE TRIAGE LINE

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Introduction

Alaska, a vast and geographically challenging state, faces unique healthcare access and delivery issues, particularly in pediatric care. To address these challenges, it is crucial to explore innovative approaches that improve healthcare delivery, reduce healthcare costs, and enhance patient outcomes. There is a compelling argument for the allocation of funds by Alaska Medicaid to establish a Pediatric Nurse Triage Line. This service will aim to reduce emergency room visits, provide better patient care, increase continuity of care, and facilitate better follow-up for pediatric patients. The implementation of such a service will not only be beneficial for patients and their families but will also lead to more efficient use of healthcare resources and cost savings.

Reducing Emergency Room Visits

The implementation of a Pediatric Nurse Triage Line in Alaska has the potential to significantly reduce emergency room visits. A study in 2022 reported “23.8% to 80.5% reductions in ED/UC rates for Medicaid-enrolled children” (Poole et al., 2022). A significant portion of emergency room visits in the United States is non-emergent and could be managed in less acute settings. In a state like Alaska, where access to healthcare services may be limited in remote regions, many parents and caregivers may choose the emergency room as the default option for seeking advice or care for their children due to the lack of alternative options. A Pediatric Nurse Triage Line staffed by experienced pediatric nurses can guide parents and caregivers in assessing the severity of their child's condition. This will lead to better-informed decisions, reduce unnecessary emergency room visits, and alleviate the strain on emergency departments (Howell et al., 2016).

Providing Better Patient Care

Alaska Medicaid's investment in a Pediatric Nurse Triage Line will enhance the quality of patient care. One of the primary advantages of such a service is providing immediate access to trained pediatric nurses. These nurses can offer expert assessments and provide guidance on first aid, symptom management, and when to seek immediate care. This not only empowers parents and caregivers but also ensures that children receive appropriate care promptly. Research has shown that access to medical advice over the phone or through a nurse triage line can lead to improved patient outcomes and satisfaction.

Increasing Continuity of Care

Continuity of care is a critical component of effective healthcare, particularly for pediatric patients. A Pediatric Nurse Triage Line can play a vital role in promoting continuity of care by ensuring that the healthcare needs of pediatric patients are met consistently. The triage nurses can help bridge the gap between hospital visits by providing advice and guidance during and after acute situations. This facilitates a seamless transition from initial assessment to follow-up care, improving the child's overall health outcomes.

Better Follow-Up

One of the significant benefits of a Pediatric Nurse Triage Line is its capacity to provide follow-up and monitoring services by the primary care provider (PCP). The Nurse Triage Line can notify the PCP for follow-up with parents or caregivers to ensure that children are progressing well, adhering to treatment plans, and addressing any further concerns. This proactive approach can prevent complications, improve adherence to care plans, and reduce the long-term healthcare costs associated with untreated or poorly managed conditions. Moreover, follow-up ensures that children receive timely post-emergency care when necessary or an option to be seen in the office. This follow-up care is essential for a full recovery and well-being.

Cost-Effective Care

Implementing a Pediatric Nurse Triage Line can result in significant cost savings for Alaska Medicaid. By preventing unnecessary emergency room visits, enhancing patient care, promoting continuity of care, and facilitating better follow-up, this service can lead to a more cost-effective and sustainable healthcare system. The financial benefits of reducing the strain on emergency departments and preventing costly hospital admissions make this initiative a sound investment. (Howell et al., 2016, Bogdan et al., 2004)

Conclusion

In conclusion, establishing a Pediatric Nurse Triage Line represents a promising opportunity for Alaska Medicaid to improve pediatric healthcare in the state. It is a cost-effective and patient-centered approach that aligns with the goals of improving access to care, reducing unnecessary emergency room visits, enhancing patient care, increasing continuity of care, and ensuring better follow-up. By funding this initiative, Alaska Medicaid can not only improve the health and well-being of pediatric patients but also achieve significant cost savings, making it a win-win solution for the healthcare system and the people of Alaska.

Return on Investment

Over the last five years (2019-2023), over 1.1 million Medicaid patient Emergency Room visits have occurred. The cost of these visits is more than \$1.4 billion and an average of \$1,274 per visit. In reviewing the top 5% (679) of the 14,704 different primary diagnosis codes used in these five years, we see a potential for a Nurse Triage line to have the capability to direct patients to a more appropriate ambulatory setting or home care. Of those that were reviewed, 88 codes were thought to be highly likely to be treatable in an ambulatory setting. The cost of these 241,527 visits alone was \$126 million. There were also another 80 codes that fell into a possible category where a Nurse Triage service could help determine where the patient should be seen. The cost of these 167,625 visits was \$162 million.

With proper use of the Nurse Triage line through Medicaid recipient education, the Nurse Triage service has the potential to pay for itself, reduce the number of Emergency Room visits, and provide better patient care through an increase in the continuity of care.

Workflow

- Nurse Triage IT Capabilities and Requirements
 - Medicaid will upload the Medicaid patient empanelment and their PCP to the Health Information Exchange (HIE) and the Nurse Triage Line provider. This will ensure that only qualified patients can use the service and that the PCP is notified of the calls for follow-up.
 - The triage service integrates with the state HIE (Healthconnect) to pull the patient's PCP from the practice and notify the PCP through this interface. This will ensure that if the information in the previous step is missing or doesn't match, the appropriate providers are notified.
 - Those practices not connected to Healthconnect can upload a CSV file with patient empanelment through an SFTP.
 - A web dashboard will be available for practices to retrieve Nurse Triage notes for their identified patient empanelment.
 - TriageLogic is a Nurse Triage company that most pediatric offices in Anchorage use. We encourage using them as the Medicaid Nurse Triage Line, but whoever the state decides to use will need similar capabilities.
 - I have verified with TriageLogic that they could do these items.
- Medicaid will advertise their Nurse Triage Line number and print it on the patient's Medicaid card. This service would be available 24/7 for all Medicaid patients.
 - Medicaid should train and encourage participants to use this service.
- Medicaid patients who are seeking medical advice from their PCP Nurse Triage line.
 - If the PCP has a phone tree option for Nurse Triage, they should implement an option for Medicaid patients that will transfer to Medicaid's Nurse Triage.

- The calls need not be redirected if the practice uses the same triage service. Based on the Medicaid patient empanelment upload, the charges will be separated from the practice charges on the triage service end.
 - Medicaid will not reimburse practices for Nurse Triage Services but will offer the service.
- Partner with the Emergency Departments to see if a sign can be hung in the waiting rooms, with a QR code to quickly call a Medicaid Nurse Triage if the patient chooses.
 - A Medicaid patient will never be turned away from the Emergency Room, but the option to call Nurse Triage while they wait could be offered.
 - The offering of this will be determined if the patient is presenting with a non-urgent condition.
- There should be an expectation that all PCPs follow up on all Nurse Triage notes.
 - If this is out of a practice's capability or a patient does not have a PCP identified, other practices should have the option to follow up on these patients.
 - A way to track this so multiple practices are not following up on the same patient without a PCP.
- There should be an expectation that all PCPs are following up on Emergency Room visits.
 - Practices should use the ENS system in the state HIE (Healthconnect) to accomplish this.

References

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Appendix A

Diagnosis Codes – Likely could be seen in an ambulatory setting	Sum	Visits
Acute upper respiratory infection, unspecified	\$10,719,110	22,639
Urinary tract infection, site not specified	\$6,604,054	9,946
Fever, unspecified	\$5,318,567	11,547
Flu due to oth ident influenza virus w oth resp manifest	\$5,314,219	7,481
Viral infection, unspecified	\$4,940,262	9,253
HEADACHE, UNSPECIFIED	\$4,628,495	7,181
Acute pharyngitis, unspecified	\$4,290,129	9,599
Streptococcal pharyngitis	\$3,157,718	6,321
Vomiting, unspecified	\$3,144,544	5,981
Constipation, unspecified	\$3,039,691	4,789
Low back pain	\$2,502,494	6,031
Laceration w/o foreign body of oth part of head, init encntr	\$2,502,152	4,406
DEPRESSION, UNSPECIFIED	\$2,409,908	1,055
Cough	\$2,203,180	5,469
LOW BACK PAIN, UNSPECIFIED	\$2,002,098	3,573
Contusion of other part of head, initial encounter	\$1,985,040	3,062
Essential (primary) hypertension	\$1,952,808	4,527
COUGH, UNSPECIFIED	\$1,819,044	3,403
Other chronic pain	\$1,798,911	3,087
Diarrhea, unspecified	\$1,733,318	3,500
Strain of muscle, fascia and tendon at neck level, init	\$1,598,376	3,104
Acute bronchitis, unspecified	\$1,521,000	3,117
Migraine, unsp, not intractable, without status migrainosus	\$1,489,431	2,010
Major depressive disorder, recurrent, unspecified	\$1,452,318	312
Strain of muscle, fascia and tendon of lower back, init	\$1,423,021	3,502
Otitis media, unspecified, right ear	\$1,353,139	3,349
Major depressv disord, single epsd, sev w/o psych features	\$1,329,694	100
Acute cystitis without hematuria	\$1,328,421	2,558
Flu due to unidentified influenza virus w oth resp manifest	\$1,327,060	2,945
Rash and other nonspecific skin eruption	\$1,287,471	4,331
Otitis media, unspecified, left ear	\$1,281,681	3,061
Epistaxis	\$1,271,347	2,485
Contusion of scalp, initial encounter	\$1,188,603	1,764
Dysuria	\$1,176,668	2,974
Pain in right knee	\$1,156,879	2,955
Viral intestinal infection, unspecified	\$1,117,189	1,070
Dorsalgia, unspecified	\$1,103,034	2,159
Cellulitis of right finger	\$1,086,659	1,401

Diagnosis Codes – Likely could be seen in an ambulatory setting	Sum	Visits
Sprain of unspecified ligament of right ankle, init encntr	\$1,059,392	2,577
Pain in left knee	\$1,047,643	2,539
Impetigo, unspecified	\$1,034,402	2,059
Unspecified asthma, uncomplicated	\$1,027,145	1,767
Sprain of unspecified ligament of left ankle, init encntr	\$1,003,541	2,601
Pain in left shoulder	\$996,770	2,176
Pain in right shoulder	\$973,465	2,314
Gastro-esophageal reflux disease without esophagitis	\$967,619	1,388
Allergy, unspecified, initial encounter	\$962,278	2,509
Bronchitis, not specified as acute or chronic	\$906,642	1,485
Cellulitis of left finger	\$888,354	1,147
Autistic disorder	\$840,552	204
Urticaria, unspecified	\$822,788	2,494
Nausea	\$815,723	1,893
Local infection of the skin and subcutaneous tissue, unsp	\$804,036	1,863
Otitis media, unspecified, bilateral	\$795,738	1,651
Acute gastritis without bleeding	\$729,671	882
Dermatitis, unspecified	\$728,961	2,099
Unspecified conjunctivitis	\$650,101	1,659
Abrasion of other part of head, initial encounter	\$615,645	1,035
Acute tonsillitis, unspecified	\$600,916	1,221
Gout, unspecified	\$564,578	771
Ingrowing nail	\$563,390	1,186
Pain in right foot	\$533,321	1,622
Dental caries, unspecified	\$529,020	1,504
Pain in left leg	\$491,322	1,213
Other hemorrhoids	\$478,947	390
Acute sinusitis, unspecified	\$477,962	1,236
Pain in left foot	\$474,161	1,400
Pain in throat	\$445,027	1,328
Pain in right leg	\$442,933	1,209
Cystitis, unspecified without hematuria	\$442,739	670
Iron deficiency anemia secondary to blood loss (chronic)	\$439,979	166
Encounter for removal of sutures	\$424,281	1,098
Chronic sinusitis, unspecified	\$408,506	846
Encounter for change or removal of nonsurg wound dressing	\$402,796	1,001
Muscle spasm of back	\$400,899	869
Nasal congestion	\$387,993	1,216
Strain of muscle and tendon of back wall of thorax, init	\$385,995	925
Acute pharyngitis due to other specified organisms	\$384,506	821

Diagnosis Codes – Likely could be seen in an ambulatory setting	Sum	Visits
Contusion of left lower leg, initial encounter	\$364,921	665
Pain in left wrist	\$359,474	882
Otalgia, left ear	\$355,971	1,162
Sprain of unspecified site of right knee, initial encounter	\$347,884	865
Otalgia, right ear	\$347,003	1,186
Acute bronchitis due to other specified organisms	\$345,624	435
Sprain of unspecified site of left knee, initial encounter	\$343,690	946
Contusion of right knee, initial encounter	\$343,423	849
Contusion of left knee, initial encounter	\$339,372	840
Localized enlarged lymph nodes	\$337,060	616
	\$125,991,891	241,527

Diagnosis Codes - Possibly could be seen in an ambulatory setting	Sum	Visits
COVID-19	\$28,962,126	18,738
Pneumonia, unspecified organism	\$9,951,825	7,732
Nausea with vomiting, unspecified	\$8,887,824	11,833
Major depressive disorder, single episode, unspecified	\$7,542,327	3,429
Bipolar disorder, unspecified	\$6,998,608	1,254
Cellulitis of left lower limb	\$5,662,158	4,202
Cellulitis of right lower limb	\$5,447,002	4,103
Epigastric pain	\$5,446,982	8,121
Unspecified injury of head, initial encounter	\$4,939,184	8,594
Unspecified asthma with (acute) exacerbation	\$4,829,051	4,751
Acute bronchiolitis due to respiratory syncytial virus	\$3,928,120	2,164
Anxiety disorder, unspecified	\$3,450,095	6,165
Headache	\$2,728,378	5,190
Cellulitis of left upper limb	\$2,625,463	1,876
Laceration without foreign body of scalp, initial encounter	\$2,607,358	3,833
Acute bronchiolitis, unspecified	\$2,271,060	2,289
Cellulitis of right upper limb	\$2,123,234	1,923
Major depressive disorder, recurrent, moderate	\$1,943,624	286
Cutaneous abscess of right upper limb	\$1,879,515	1,403
Cervicalgia	\$1,805,013	3,117
Concussion without loss of consciousness, initial encounter	\$1,780,158	2,765
Cutaneous abscess of buttock	\$1,664,724	1,937
Cutaneous abscess of left upper limb	\$1,640,456	1,416
Anemia, unspecified	\$1,617,287	1,648
Left upper quadrant pain	\$1,501,816	2,211
Acute obstructive laryngitis [croup]	\$1,429,262	2,756

Diagnosis Codes - Possibly could be seen in an ambulatory setting	Sum	Visits
Abnormal uterine and vaginal bleeding, unspecified	\$1,345,360	2,442
Lobar pneumonia, unspecified organism	\$1,237,278	928
OTHER SPECIFIED DISORDERS OF TEETH AND SUPPORTING STRUCTURES	\$1,229,820	3,626
Cutaneous abscess of right lower limb	\$1,170,887	1,287
Paresthesia of skin	\$1,156,237	1,946
Contact w and exposure to oth viral communicable diseases	\$1,141,345	3,507
Cellulitis of face	\$1,141,055	1,481
Laceration without foreign body of lip, initial encounter	\$1,076,382	2,035
Borderline personality disorder	\$1,049,862	194
Unspecified mood [affective] disorder	\$1,028,190	263
Pain in thoracic spine	\$957,026	1,886
Iron deficiency anemia, unspecified	\$951,194	471
Generalized anxiety disorder	\$917,733	898
OTHER SPECIFIED DEPRESSIVE EPISODES	\$912,088	115
Adjustment disorder with depressed mood	\$876,507	379
Cutaneous abscess of abdominal wall	\$835,233	804
Acute cystitis with hematuria	\$809,041	1,574
Cutaneous abscess of right hand	\$752,313	541
Cutaneous abscess of face	\$729,422	1,014
Upper abdominal pain, unspecified	\$720,348	1,308
Acute bronchiolitis due to other specified organisms	\$711,248	226
Infectious gastroenteritis and colitis, unspecified	\$705,319	446
Anesthesia of skin	\$691,829	823
Oppositional defiant disorder	\$647,015	373
Other fatigue	\$619,901	1,575
Laceration without foreign body of left hand, init encntr	\$617,761	1,397
Laceration without foreign body of right hand, init encntr	\$585,753	1,271
Pain in right hip	\$580,282	1,391
Other specified abnormal uterine and vaginal bleeding	\$574,652	830
Lumbago with sciatica, left side	\$572,070	1,291
Lumbago with sciatica, right side	\$557,771	1,289
Localized swelling, mass and lump, head	\$553,299	1,795
Pain in left hip	\$520,125	1,331
Laceration w/o fb of l idx fngr w/o damage to nail, init	\$519,530	1,306
Contusion of right hand, initial encounter	\$518,723	1,339
Human metapneumovirus pneumonia	\$508,715	47
Respiratory syncytial virus pneumonia	\$501,560	143
Intermittent explosive disorder	\$496,931	96
Contact w and exposure to infect w a sexl mode of transmiss	\$486,780	1,223
Pain in right ankle and joints of right foot	\$453,114	1,211

Diagnosis Codes - Possibly could be seen in an ambulatory setting	Sum	Visits
Pain in left ankle and joints of left foot	\$447,159	1,098
Cutaneous abscess of chest wall	\$424,338	294
Laceration w/o fb of r idx fngr w/o damage to nail, init	\$419,277	824
Orthostatic hypotension	\$402,417	249
Cutaneous abscess of left foot	\$390,912	127
Laceration w/o fb of left thumb w/o damage to nail, init	\$390,255	1,025
Radiculopathy, lumbar region	\$390,201	764
Other muscle spasm	\$389,957	890
Contusion of unspecified front wall of thorax, init encntr	\$385,938	588
Cutaneous abscess of back [any part, except buttock]	\$385,777	393
Cellulitis of right toe	\$355,705	675
Cellulitis of neck	\$350,459	219
Viral pneumonia, unspecified	\$332,755	180
Laceration without foreign body of left wrist, init encntr	\$330,682	461
	\$160,518,180	167,625