

Improving Access to Pediatric Healthcare in Frontier Regions Through the Use of Innovative Technology Solutions



Cohort:
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Location:
Missoula, Montana

Focus Areas:
Early Childhood
Health Care Access
IT/Technology

Background

Access to pediatric healthcare in the rural state of Montana is a “wicked problem”. As a frontier region, the state of Montana confronts unique physical challenges to healthcare delivery and access to care. These challenges carry profound implications for the pediatric population for whom high quality healthcare is poorly distributed in time and space.

Wicked Problem Description

Ninety percent of the landmass is classified as frontier area - the most remote and sparsely populated places along the rural-urban continuum - and there are estimated to be ~121 pediatricians in the state, not all of whom provide direct patient care. Even for families living in larger communities in Montana who have access to pediatric care during the daytime, pediatric after-hours care is commonly routed through emergency departments where high costs are incurred and pediatric-specific staff is rarely available.

Our state's small workforce of pediatricians experience both burnout and isolation. Though many children receive care from family practitioners, nurse practitioners, or physician assistants, for infants and children with complex healthcare needs, or diagnostically challenging health problems, a pediatrician's expertise can be lifesaving. Pediatricians in rural areas face responsibilities and demands that can be both exhausting and professionally unsustainable. Those that continue to provide care often face professional isolation.

The healthcare market has seen a rapid expansion in the use of telehealth visits by standalone virtual providers linked to retail-based clinics, entrepreneurs or insurers using models that do not involve an established physician-patient relationship. Many of these models provide fragmented and inappropriate care outside of an existing medical home – i.e. prescribing antibiotics electronically contrary to evidence-based practice and without communication to the primary pediatrician. Telepractice in pediatrics can and has been used to enhance the medical home model, using remote care technology to improve healthcare delivery and access.

Strategies Undertaken

1. Built a community of providers representing nearly 1/3 of the state's pediatric providers.
2. Offered a full year of improved after-hours coverage for children in Montana, regardless of ability to pay or insurance status.
3. Community also began offering care 5 days per week to support the Ft. Peck Tribes school-based health centers.
4. Devised, wrote, administered and completed an MOC 4 project for participating doctors.
5. Engaged 80% of payer market (private and public) in evaluation project to analyze impact on utilization

Completed outcomes

Year Two

All outcomes originally intended in our project for Year Two were completed.

Additional details are below.

Providers

- Completed a needs assessment around acceptability and feasibility of technology to enhance pediatric healthcare co-management. Had 259 total provider respondents.

- Enacted the work of the state-wide collaborative of pediatricians covering most major metropolitan areas of Montana and spanning nearly 500 miles, including all legal, regulatory and logistical needs.
- Designed, hosted and submitted all requirements for MOC 4 for providers.

Payers

- Received \$400k investment from BCBS for technology
- Received \$50k for work on the care coordination tool
- Advanced through 2 phases of national care coordination challenge with monetary rewards from HRSA

Family/Community Engagement

- Offered nearly 2000 hours of access to all Montanans
- Created full-time telemedicine service for the Ft. Peck tribes, funded by RWJF and directed by tribal health leaders
- Additional financial commitment from Rural Institute for work to create inclusive community and focus on tribal health
- On-going patient input on technology, visits and care planning guiding iterative process of continuous improvement.

Anticipated and future outcomes

- Grow the after-hours work to encompass additional hours
- Grow the Ft. Peck Tribal work and evaluation with additional RWJF funding
- Increase use of the provider-created technology tools for additional populations
- Engaged in conversations for sustained health-system support of provider organization

Timeline

Year 3

- Refine model and continue human-centered design based on continuous input from providers and families.
- Establish both provider organization as well as technology as sustainable solutions to expand work and impact beyond the CS time

Partnerships

- Alice Laverdier, NP Director of Physician Collaboration
- University of Montana Rural Institute

- Shodair Children's Hospital (for integrated behavioral health model for Ft. Peck)
- Health Care Services of American
- MT Department of Health and Human Services

Evaluation Strategies

- Continued care plan creation with feedback on use and utility
- Developed and utilized telemedicine survey for proof of concept phase with 34% return
- Developed and utilized telemedicine survey for proof of implementation phase – ongoing
- MOC 4 webinars, readings and surveys
- Shift evaluations, family evaluations of all encounters

Contact person

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