



Beyond Hospital Walls: Mayo Clinic's Pediatric Paramedic Project

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BACKGROUND: In 2022 the country saw the occurrence of a double pandemic – the largest influx of Respiratory Syncytial Virus (RSV) and Influenza (Flu) in recent history – this made beds sparse for pediatric patients and had the institution thinking differently on how this problem is tackled. Community paramedicine is an evolving method of providing community-based health care where paramedics function outside their traditional emergency response roles to improve access to primary and preventive care¹. The Mayo Clinic Rochester Pediatric Hospital Medicine (PHM) team collaborated with local paramedics to establish the Community Paramedic-Pediatric project, aimed at expanding healthcare accessibility for at-risk pediatric patients within the community. Guided by a physician Medical Director, the project consists of experienced paramedics equipped with specialized training in non-emergency medicine, patient education, and a comprehensive understanding of social determinants of health. By defining a process that employs specific inclusion and exclusion criteria for pediatric patients, the project strategically focuses on those individuals recently discharged from PHM where families seek additional support and resources to assist in caring for their child. This innovative approach seeks to enhance post-hospitalization care for pediatric patients and provides a blueprint for community-based medical interventions. Given the complexities of the project a multi-phased approach was identified.

OBJECTIVES: The Mayo Clinic Community Pediatric Paramedics Project aims to reduce overall hospital length of stay for children and their families while maintaining patient outcomes. The project allows patients to be discharged from the hospital sooner with support and access to resources made available at their home. Phase I services such as oral/nasal/NP suctioning, oral/nebulized medication administration, medication teaching and reinforcement, and basic wound care would be available through trained paramedic personnel. Phase II services including IV fluid and medication administration, amongst other options yet to be determined, would be implemented after the successful launch of Phase I.

PLANNING & IMPLEMENTATION METHODS: To be considered a candidate for this project, certain criteria must be met. When the criteria are met and the family agrees that this option is acceptable, the patient is prepared to be discharged. Before being discharged from the hospital, the patient and family meet with a social worker, the paramedic, and an RN. This meeting is set to allow the parents a chance to meet with the paramedic team, in addition, it allows the paramedic team to understand from the care team what the expectations are. The paramedic team will monitor the patient, make documentation, and discharge the patient as appropriate. The paramedic team will contact a provider if the family raises questions or concerns.

RESULTS: Phase I of the project was launched at the end of October 2023 during a period when RSV rose to near a 70% positive rate (State of Minnesota).

- Observed 71 pediatric RSV cases during the course of Phase I.
- Enrolled 25 of 35 eligible pediatric patients for a 71.4% acceptance rate.
- Averaged 4 referrals per week to the paramedic team from Pediatric Hospital Medicine (PHM).
- Decreased Average Length of Stay (LOS) by 1.2 days for patients enrolled in the project.
- Readmission rate decreased by 80%.

LESSONS LEARNED: The Community Pediatric Paramedic Project represents a pioneering initiative that has redefined the scope of care for patients and their caretakers. The initial stages of the project have already demonstrated substantial benefits to the community, prompting a compelling interest in expanding both coverage and services in future phases. Noteworthy outcomes from phase I of the project include a marked reduction in the length of hospital stay and a reduction in readmissions. Phase II will increase the scope and create more adaptations to meet various and shifting community needs. Furthermore, the project has unveiled promising opportunities for the ongoing development of integrated care models. To expand community paramedicine, certain limiting factors will need to be addressed, including increasing the size of paramedic teams to serve more patients, expanding criteria to increase patient access, and educating families about the benefits of the opportunity. The Community Pediatric Paramedic Project has exceeded expectations, laying the foundation for a transformative and sustainable approach to pediatric healthcare delivery. Phase II looks to expand how the care is referred to the paramedic team – it could come from the hospital, ED, or a primary care setting. This project promises a future where integrated care becomes the standard, ensuring the well-being of surrounding communities.

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References:

1. Thurman WA, Moczygemba LR, Tormey K, Hudzik A, Welton-Arndt L, Okoh C. A scoping review of community paramedicine: evidence and implications for interprofessional practice. *J Interprof Care.* 2021 Mar-Apr;35(2):229-239. doi: 10.1080/13561820.2020.1732312. Epub 2020 Apr 1. PMID: 32233898.