

## Pediatric TeleHealth Acute Care Consults

### Problem

A gap persists between pediatric patients requiring specialized acute care services and the availability of expert medical professionals in these fields. This disparity is particularly pronounced in rural and underserved areas<sup>1,2</sup>, where healthcare resources are limited and access to specialized medical services is often fraught with logistical and financial challenges. The limited availability of experts in these specialized fields can lead to delays in diagnosis and treatment, resulting in suboptimal patient outcomes and increased healthcare costs.

### Solution

The landscape of pediatric healthcare has been continuously evolving, aiming to meet the dynamic needs of children and ensure the provision of timely, cost-effective, and expert medical care. Intermountain Health's Pediatric TeleHealth Acute Care Consult Program stands as a testament to this transformation, ushering in a new era of medical consultancy in the Intermountain West.

Launched in September 2021, this pioneering initiative serves 24 hospitals. It was instituted to bridge the gap between patients in need of specialized pediatric care and experts in Trauma, Critical Care, and Emergency Services. The service has remarkably served over 500 patients in the first two years, growing from an average of 21 patients per month in 2022 to about 27 patients a month in 2023, nearly half of which are evaluated using two-way video.

### Distinct Service Modalities

- **Critical Care:** Specialized pediatricians handle about 50% of video cases, focusing on timely interventions and resource optimization for critically ill children.
- **Emergency Services:** From acute respiratory distress to unusual pediatric emergencies, specialists guide on-site medical teams, making up 30% of video consultations.
- **Trauma:** Experts provide immediate guidance in stable trauma cases, constituting 17% of video interactions, to quickly create a treatment plan.

### Types of Consultations

- **Video Consultations:** Offering real-time visual evaluation, this method has been used in 45% of cases in 2023, allowing specialists to make accurate judgments based on visual cues.
- **Phone Consultations:** Facilitates immediate verbal communication between the healthcare providers and specialists.

### Results

In our analysis of the Pediatric TeleHealth Acute Care Consult program's effectiveness, the following patient disposition outcomes were observed:

- **Discharge to Home:** 47% of patients who received consultations were successfully discharged to their homes without requiring further immediate specialized care.
- **Transfer to Specialized Hospitals:** Among the patients who required transfer for further care:

- 78% were transferred to a pediatric specialized hospital.
- 18% were transferred to a higher level of care closer to their homes.
- 4% were transferred to hospitals outside of the system.

These results underscore the program's efficacy in not only providing specialized consultations but also in guiding appropriate patient disposition, thereby potentially reducing unnecessary transfers and associated healthcare costs.

## TeleHealth Program Benefits

The use of synchronous telemedicine can improve quality of care, decrease transfer rates, shorten length of stay, and reduce complications and illness severity in pediatric acute care settings.<sup>3,4</sup>

- **Reducing Unnecessary Transfers:** By offering expertise via TeleHealth there is a reduction in the need to transfer pediatric patients across facilities for specialized care. TeleHealth can make it easier for children in remote or underserved areas to access medical care.
- **Cost Efficiency:** Reducing physical transfers not only saves logistical resources but also significantly reduces costs associated with patient care and movement. TeleHealth can also reduce healthcare costs by avoiding unnecessary hospitalizations, preventing complications, and improving overall health outcomes. TeleHealth can help reduce hospitalizations by enabling healthcare providers to monitor and manage children's conditions remotely, preventing complications before they become severe.
- **Quality & Timeliness:** TeleHealth can lead to better health outcomes for children by providing patients with the right care at the right time, which can lead to earlier diagnosis and treatment. The utilization of acute pediatric telehealth services also fosters an enriching learning environment, enabling local providers to enhance their clinical skills, deepen their medical knowledge, and improve the quality of healthcare services they offer to young patients, by granting them access to specialized pediatric expertise and real-time guidance from seasoned professionals.

## Pediatric TeleHealth

The Pediatric TeleHealth Acute Consult Program not only symbolizes the convergence of technology and healthcare but also the unwavering commitment of Intermountain Health to improving pediatric patient outcomes across the Intermountain West. The notable success and impact of the program serves as a compelling model for regions and healthcare systems worldwide, pushing the boundaries of what is possible in the TeleHealth domain.

## Partnering with Intermountain TeleHealth

Intermountain TeleHealth provides patients, no matter where they are located, with high-quality specialty care from Intermountain's world-class clinical experts. We strive to enable our partners to improve the patient experience, increase access, lower costs, and keep revenues in local community facilities whenever possible. Partnering with Intermountain Health showcases your commitment to your providers, patients, and community.

## About Intermountain Health

Intermountain Health is a team of nearly 60,000 caregivers who serve the healthcare needs of people across the Intermountain West, primarily in Utah, Idaho, Nevada, Colorado, Montana, Wyoming, and Kansas. We are an integrated, non-profit health system based in Salt Lake City, with clinics, a medical group, affiliate networks, hospitals, homecare, telehealth, health insurance plans, and other services, along with wholly owned subsidiaries including SelectHealth, Saltzer Health, Castell, Tellica, and Classic Air Medical.

## References

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