

## Pediatric Critical Care Telemedicine in Rural Underserved Emergency Departments

Barry W. Heath, MD, FCCP  
University of Vermont College of Medicine  
Vermont Children's Hospital at Fletcher Allen Health Care

### Introduction:

- Disparity in access to pediatric subspecialty health care exists between urban and rural areas
- Implemented a program of pediatric emergency critical care telemedicine consultations in a rural underserved area

### Methods:

- Pediatric emergency telemedicine consultations prospectively
- 10 Emergency Departments
- 19 rural underserved counties with a population of 1 million in upstate NY and VT

### Results:

- 80 consultations 10 sites (mean 8, range 3-23)
- 284 specific recommendations (mean 3.5)
- Questionnaire
  - Intensivists (n=79)
    - Improved quality of care 80%
    - Superior to telephone 89%
    - Very-good provider communication 90%
  - Referring providers (n=50)
    - Improved quality of care 82%
    - Equal to telephone 26%
    - Very-good provider communication 98%

### Conclusions:

- Feasible to provide urgent subspecialty care in rural underserved ED with a high degree of provider satisfaction
- Application of telemedicine technology may help to address the disparity in access to specialty health care in rural areas

Heath et al. Pediatric critical care telemedicine in rural underserved emergency departments. *Pediatric Critical Care Medicine* 2009;10:588-91.

Dharmar and Marcin. A picture is worth a thousand words: Critical care consultation to emergency departments using telemedicine. *Pediatric Critical Care Medicine* 2009;10:606-7.