



# Rural Provider Needs Assessment: **Partnering to Improve Access to Pediatric GI Subspecialty Care**

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# Conflict of Interest Attestation

There are no relevant financial relationships with a manufacturer(s) of any commercial product(s) and/or provider(s) of services discussed in this presentation

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Seniors who have driven long distance for their specialty care for over 68 years-



# Disparities in Health Care for Rural Children

## Health and Poverty of Rural Children: An Under-Researched and Under-Resourced Vulnerable Population



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The authors have no conflicts of interest to disclose.

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### ABSTRACT

Nearly 1 in 5 children in the United States live in rural areas. Rural children experience health and health care disparities compared to their urban peers and represent a unique and vulnerable pediatric patient population. Important disparities exist in all-cause mortality, suicide, firearm-related unintentional injury, and obesity. Rural children experience decreased availability and accessibility of primary care and specialty care (especially mental health care) due to a decreased number of health care providers as well as geographical and transportation-related barriers. Other geographic and socioeconomic determinants, especially concerning poverty and substandard housing conditions, are likely important contributors to the

observed health disparities. Increased funding for research focused on rural populations is needed to provide innovative solutions for the unique health needs of rural children. Policy changes positioned to correct the trajectory of poor health among children should consider the needs of rural children as an under-researched and under-resourced vulnerable population.

**KEYWORDS:** health care delivery; health disparities; health equity; rural health; social determinants of health

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# Interest in Telemedicine application for outreach extends back two decades

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## Using Telemedicine to Provide Pediatric Subspecialty Care to Children With Special Health Care Needs in an Underserved Rural Community

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**ABSTRACT.** *Objective.* For children with special health care needs (CSHCN) that live in rural, medically underserved communities, obtaining subspecialty care is a challenge. Telemedicine is a means of improving access to these children by addressing rural physician shortages and geographic barriers. This article reports a medical-needs assessment of parents/guardians with CSHCN and the status of a telemedicine program for CSHCN as well as the results of parent/guardian and local provider satisfaction with the telemedicine program.

*Design.* We report the results of a pretelemedicine medical-needs survey conducted in March 1999 by using a convenience sample of CSHCN living in a rural, medically underserved community located 90 miles north of the University of California Davis Children's Hospital (Davis, CA). In April 1999, a telemedicine program was initiated to provide consultations to CSHCN and has continued since. We also report the parent/guardian's

"very good." The frequency of telemedicine consultations has increased with time.

*Conclusions.* Pediatric subspecialty telemedicine consultations can be provided to CSHCN living in a rural, medically underserved community with high satisfaction among local providers and parents/guardians. Telemedicine should be considered as a means of facilitating care to CSHCN that, relative to the customary delivery of health care, is more accessible, family-centered, and coordinated among patients and their health care providers. *Pediatrics* 2004;113:1-6; *telehealth, telemedicine, children, pediatrics, rural health, medical home, children with special health care needs, subspecialties, referral and consultation.*

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ABBREVIATIONS. CSHCN, children with special health care needs; UCDC, University of California Davis Children's Hospi-

# Child Health, Vulnerability, and Complexity: Use of Telehealth to Enhance Care for Children and Youth With Special Health Care Needs



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## ABSTRACT

Telehealth, or the use of telecommunications technology and infrastructure to deliver health-related services and information that support patient care, has the potential to improve the quality of care, particularly deficiencies related to access and patient experience of care. Telehealth may also reduce disparities for children and youth with special health care needs (CYSHCN) with barriers to accessing in-person care, for example, those residing in rural areas and children with medical complexity who are particularly fragile. While important foundational work has been done to study telehealth's effectiveness and implementation, key gaps remain regarding its use for CYSHCN. The CYSHCN national research agenda development process, described in a companion article, identified as key priority areas for future research telehealth as an innovative care delivery model for all CYSHCN and as a mechanism to address rural-urban disparities in health care

access. Here, we review the current knowledge around telehealth, identify populations for whom telehealth could be especially beneficial, discuss the important gaps identified, and make recommendations for specific studies that will move the field forward. There are ample opportunities for telehealth to improve health and patient/family experience of care and quality of life for CYSHCN while requiring less time and resources from families accessing this care. Innovative research to inform best practices around incorporation and implementation of telehealth will improve its efficiency and effectiveness and achieve optimal outcomes.

**KEYWORDS:** children with special health care needs; health equity; telehealth; telemedicine

**ACADEMIC PEDIATRICS** 2022;22:S34–S40

## Telemedicine in Pediatric Gastroenterology: An Overview of Utility

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Affiliations + expand

PMID: 29271722 DOI: [10.1089/tmj.2017.0234](#)

JLT

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### Abstract

**Background:** The availability of pediatric subspecialty services is a problem evident throughout the United States. Access to pediatric gastroenterology services, especially in rural areas, can be scarce. Telemedicine has been proposed as a tool capable of decreasing healthcare costs while extending medical care.

**Objective:** The purpose of this article is to review available literature regarding the utility of telemedicine as it applies to pediatric gastroenterology, specifically its role in eliminating healthcare disparities.

**Methods:** Research articles were identified through a PubMed search with key words focusing on telemedicine initiatives in pediatric gastroenterology, pediatric subspecialty, rural pediatric care, and

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# Improving Outreach Care in OHSU Peds GI in Partnership with Referring Entities & Leaders

- Embedded subspecialists in Eugene and Salem
- Educational grand rounds locally & regional conferences with OHSU experts
- Partnering with leadership in person and with Zoom meetings
- Zoom sharing with local ED leaders re: esophageal battery management
- Coordinating care with local adult GI using Zoom
  - better transition and shared care
- Medford Mix and Mingle in fall of 2022



**Medford  
Mix &  
Mingle,  
2022**

Needs Assessment:

Reaching out to our referring entities to determine how we can better meet their patients' needs.





# Introductions / Review of Needs Assessment Study

# Barriers to Pediatric Subspecialty Care in Rural Areas

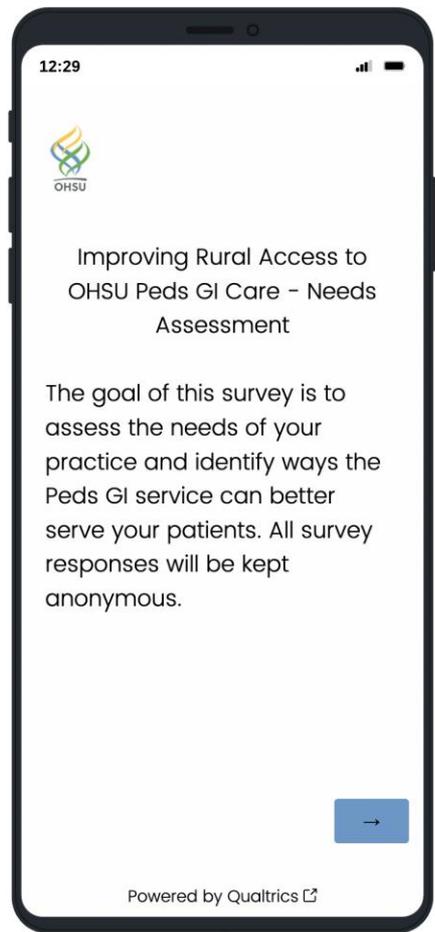
- Access to pediatric gastroenterology care in rural communities is limited
  - Fewer providers<sup>1,2</sup>
  - Transportation/socioeconomic barriers<sup>3</sup>
  - Health literacy disparities<sup>4</sup>
- There are several consequences of these access issues
  - Delayed care
  - Inferior health outcomes<sup>5</sup>
  - Increased ED visits<sup>1</sup>

# The Aims Of Our Study:

- Assess the needs of referring pediatric providers from communities serving a large proportion of rural patients
- Identify strategies to improve pediatric gastrointestinal (GI) care in underserved communities through outreach partnership

# Needs Assessment Survey

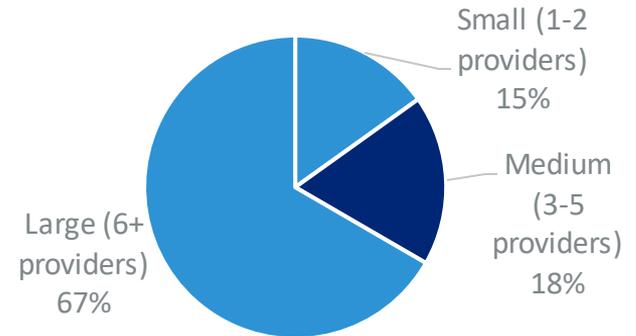
- 8-question Qualtrics survey
- Overall satisfaction, strengths, weaknesses, other suggestions, perceptions around E-consults



# Survey Population

- Survey was distributed to 59 PCPs practicing in rural areas in Oregon
- Response rate of 59% (35 providers)
- Respondents practice in Medford, Grants Pass, Ashland, and Klamath Falls

WHAT IS THE SIZE OF YOUR PRACTICE?



# How providers rated their overall experience with Peds GI service on a scale of 1 to 10

- Range: 5-10
- Mean 8.52 (SD 1.4)



In the past year, how would you rate your overall experience with the Peds GI service on a scale of 1-10 (0=poor, 10=excellent)? Please use the slider to select a number on the scale.

0 1 2 3 4 5 6 7 8 9 10

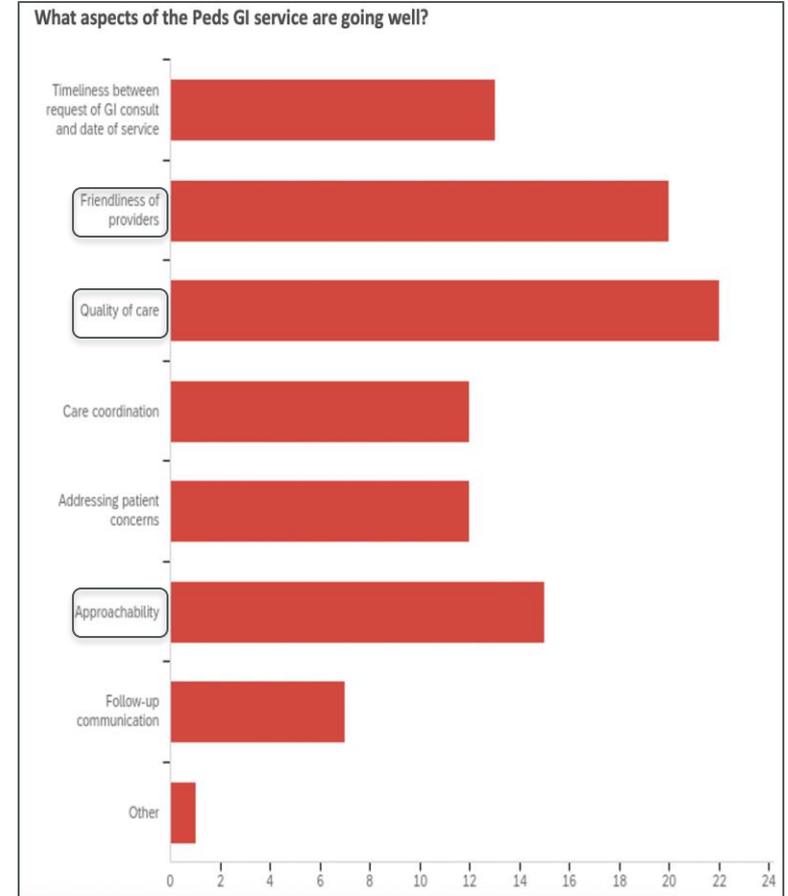
Click to write Choice 1



What has been your experience working with OHSU's GI specialty service?

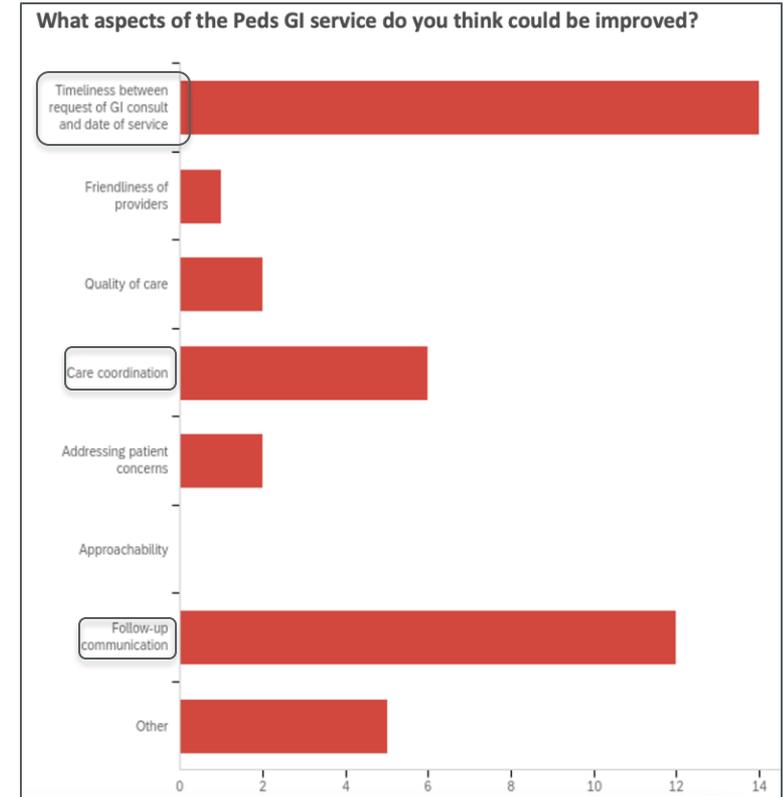
# Strengths of the Program

1. Quality of care
2. Friendliness of providers
3. Approachability

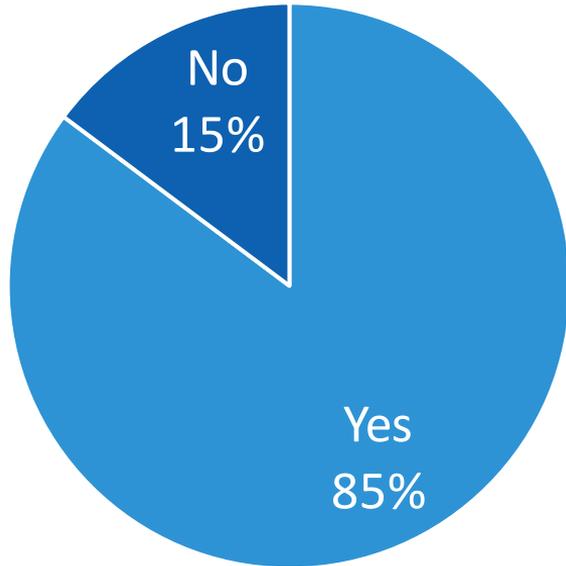


# Weaknesses of the Program

1. Timeliness between consult request and date of service
2. Follow-up communication
3. Care coordination



# Would you find E-consults helpful?



**Particularly for the following conditions:**

- Constipation
- Diarrhea
- Nausea/vomiting
- Reflux
- Dysphagia

# Other Suggestions from Respondents

- Additional options for non-urgent communication with Medford outreach team for simple questions about stable patients
- Inpatient telehealth
- In-person appointments outside of Portland
- Coordinate endoscopic procedures with visits for patients traveling long distances
- E-consult options for one-time consultations not requiring ongoing management (e.g., constipation or reflux treatment plan)
- Telehealth support in conjunction with in-person PCP visits for family reassurance
- Pre-clinic suggested work-up (labs to obtain, medications to try, etc.)

# Conclusions

- Through partnering with rural PCPs, pediatric gastroenterologists can help to decrease disparities in rural healthcare access and outcomes
- Long wait times for consultation are a current limitation of this partnership.
  - E-consults
  - Asynchronous care (physician access hotlines, EMR messaging, etc.)
    - Non-integrated electronic health records pose a barrier
- Understanding referring provider needs can help tailor GI input

# Limitations from a GI Perspective

- We want to see everyone but have limited access
  - We receive a high volume of referrals
- Referral questions are variable
  - Some referrals are for taking on care, others are for reinforcing PCP recommendations
- Sometimes patients want to stay with the specialist

# Ideas Moving Forward

- Educational conferences regarding topics with frequent inquires
- More effective integration of telemedicine and in-person visits<sup>1,2,6</sup>
- Increased on-demand provider availability through physician hotlines and EMR messaging

# Small Group Discussion

- What suggestions do you have?
- Putting yourself in the role of a specialist with limited access, how would you design a consultative service?

# Questions for Discussion

1. What ideas do you have to strengthen the current structure of the program?
2. What are strategies that you might recommend for getting the consultative advice you need asynchronously or without necessarily seeing the patient?
  - Would you be comfortable with this?

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Thank you!

# Thank You Partners!

