

International Perspectives on Primary Care Access, Equity, and Outcomes for Children

Astrid Guttman, MDCM, MSc

Numerous studies, across multiple health systems, have demonstrated the value to child health of accessible and high-quality primary care.¹⁻⁴ The past decade has witnessed an unprecedented pace of primary care reform, most not specific to children. Although the health policy contexts and mechanisms vary across jurisdictions, a common goal of reform efforts is access to timely care with a focus on both extending hours, and providing same or next day care for sick visits. According to the most recent international Commonwealth Fund study,⁵ there is wide variation reported by (adult) patients on both access measures. The United Kingdom ranked highest on after-hours care (69%), yet use of emergency departments (EDs) by children is higher than in the United States, which ranks eighth on this access metric (39%) and continues to have underinsurance problems. Many countries report high (and in some cases increasing) nonurgent ED visit rates by children,⁶⁻⁹ and in England additional concerns have been raised around increasing short-stay admissions.¹⁰ Whether these trends relate to ineffective primary care reform for children's needs or factors outside of the primary care system is not well understood.

In this issue of *Pediatrics*, Cecil et al¹¹ explore the relationship of access to general practitioners (GPs) and health care outcomes (ED visits, short- and longer-term hospital admissions) in a population-based sample of almost 10 million children

(0-15 years) registered to all but 1% of GPs in England. The authors capitalize on the 2011 to 2012 cycle of the GP Patient Survey, linked to other practice characteristics and individual patient records in multiple health administrative data sets. Overall, primary care access is very high, with only 414 of 8035 practices characterized by <75% of patients reporting the ability to see/speak with their GP or nurse at last attempt. The authors report significant associations of modest magnitude between enrollment in the most (versus least) accessible practices and reduced ED visits (9% overall, 10% for after-hours visits). Associations of access and hospital admissions were not consistent. High primary care access was associated with reduced admissions for asthma, short stays for chronic conditions (21% and 8%, respectively), and a 4% lower risk of any longer-term (>2-day) admission. There was no association between primary care access and admissions for acute ambulatory care-sensitive conditions,¹² diabetes complications, or overall short stays. Finally, an exploration of the proportion of patients older than 65 in the practice showed no association with ED visits but a modest 2% higher risk of unplanned admission.

The authors discuss a number of study limitations. Perhaps the most relevant is the potential for unmeasured confounding. Examination of the baseline characteristics of children by practice-level access reveals

Division of Paediatric Medicine and Child Health Evaluative Sciences, Hospital for Sick Children; Institute for Clinical Evaluative Sciences; and Department of Paediatrics and Institute for Health Policy, Management and Evaluation, University of Toronto, Toronto, Ontario, Canada

Opinions expressed in these commentaries are those of the author and not necessarily those of the American Academy of Pediatrics or its Committees.

DOI: 10.1542/peds.2015-4163

Accepted for publication Nov 18, 2015

Address correspondence to Astrid Guttman, MDCM, MSc, Institute for Clinical Evaluative Sciences, G1 06, 2075 Bayview Ave, Toronto, ON M4N 3M5, Canada. E-mail: astrid.guttman@ices.on.ca

PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275).

Copyright © 2016 by the American Academy of Pediatrics

FINANCIAL DISCLOSURE: The author has indicated she has no financial relationships relevant to this article to disclose.

FUNDING: Dr Guttman receives salary support from an Applied Chair in Child Health Services and Policy Research from the Canadian Institutes for Health Research.

POTENTIAL CONFLICT OF INTEREST: The author has indicated she has no potential conflicts of interest to disclose.

COMPANION PAPER: A companion to this article can be found online at www.pediatrics.org/cgi/doi/peds.2015-1492.

To cite: Guttman A. International Perspectives on Primary Care Access, Equity, and Outcomes for Children. *Pediatrics*. 2016;137(2):e20154163

important differences that should be highlighted as an important study finding. Children in the lowest-versus highest-access practices are much more likely to be low income (56.8% vs 7.7% in the most deprived quintile, with a stepwise gradient across all quintiles) and urban. Disease burden, known to be higher in lower income (and in some cases urban) children, could account for higher ED use, and asthma and chronic disease admissions. Patterns of care-seeking also may vary by socioeconomic characteristics, and explain differences in ED use.^{13,14} Generalizability to other countries may be limited by the relatively high level of access and explain the attenuated findings relative to similar studies.¹

Albeit these limitations, findings are relevant to the evolution of the National Health Service and clinical commissioning groups. The results point to the need to address demographic inequities in accessible primary care and the potential benefit in lowering ED visits and some hospital use. A recent systematic review¹⁵ of organizational interventions to reduce ED use points to evidence for other policy options, including cost-sharing, and against others, such as gatekeeping. The study findings also suggest that addressing high short-stay admission rates will require more root-cause analysis.

Primary care access alone will not be a panacea for all potentially avoidable hospital use. For the wider audience, this study sharpens the construct validity and provides benchmark data of a number of commonly used health system indicators. It underlines that universal coverage does not ensure universal access, and introduces hypotheses around potential competing dynamics of care of children and adults/elderly within primary care general practices.¹⁶ Finally, the study is an exemplar of the potential for population-based

data to inform policy. The relative paucity of comparative child health system data and research capacity in the context of large natural experiments in health care delivery redesign disadvantages children. Efforts such as the UK Farr Institutes,¹⁷ the Pan-Canadian Real-world Health Data Network,¹⁸ and US attempts to integrate data across payers can improve access to relevant data. Building an international community of child health services researchers also will be important.

ABBREVIATIONS

ED: emergency department
GP: general practitioner

REFERENCES

- Guttman A, Shipman SA, Lam K, Goodman DC, Stukel TA. Primary care physician supply and children's health care use, access, and outcomes: findings from Canada. *Pediatrics*. 2010;125(6):1119–1126
- Shi L, Macinko J, Starfield B, et al. Primary care, infant mortality, and low birth weight in the states of the USA. *J Epidemiol Community Health*. 2004;58(5):374–380
- Starfield B, Shi L, Macinko J. Contribution of primary care to health systems and health. *Milbank Q*. 2005;83(3):457–502
- Evans TAD-G, Van Lerberghe WW. The world health report 2008: primary health care now more than ever. Available at: www.who.int/whr/2008/whr08_en.pdf. Accessed November 6, 2015
- Mossialos E, Wenzl M, Osborn R, Anderson C, eds. 2014 International profiles of health care systems. 2015 Jan 1. Report No.: 1802. Available at: www.commonwealthfund.org/~media/files/publications/fund-report/2015/jan/1802_mossialos_intl_profiles_2014_v7.pdf. Accessed November 6, 2015

- Centers for Disease Control and Prevention. List of trend tables. 2015. Available at: www.cdc.gov/nchs/hus/contents2014.htm#079. Accessed November 6, 2015
- Benahmed N, Laokri S, Zhang WH, et al. Determinants of nonurgent use of the emergency department for pediatric patients in 12 hospitals in Belgium. *Eur J Pediatr*. 2012;171(12):1829–1837
- Dawson H, Przybysz R, Weerasooriya J, et al. Emergency Departments and Children in Ontario. Apr 1. Report: Analysis in Brief. Toronto, Ontario, Canada: Canadian Institute for Health Information;2008
- Vedovetto A, Soriani N, Merlo E, Gregori D. The burden of inappropriate emergency department pediatric visits: why Italy needs an urgent reform. *Health Serv Res*. 2014;49(4):1290–1305
- Gill PJ, Goldacre MJ, Mant D, et al. Increase in emergency admissions to hospital for children aged under 15 in England, 1999-2010: national database analysis. *Arch Dis Child*. 2013;98(5):328–334
- Cecil E, Bottle A, Cowling TE, Majeed A, Wolfe I, Saxena S. Primary care access, emergency department visits, and unplanned short hospitalizations in the UK. *Pediatrics*. 2016;137(2):e20151492
- Quality Indicators AHRQ. US Department of Health and Human Services, Agency for Healthcare Research and Quality. Available at: www.qualityindicators.ahrq.gov/. Accessed November 6, 2015
- Alpern ER, Clark AE, Alessandrini EA, et al; Pediatric Emergency Care Applied Research Network (PECARN). Recurrent and high-frequency use of the emergency department by pediatric patients. *Acad Emerg Med*. 2014;21(4):365–373
- LaCalle E, Rabin E. Frequent users of emergency departments: the myths, the data, and the policy implications. *Ann Emerg Med*. 2010;56(1):42–48
- Flores-Mateo G, Violan-Fors C, Carrillo-Santistevé P, Peiró S, Argimón JM. Effectiveness of organizational interventions to reduce emergency department utilization: a systematic review. *PLoS One*. 2012;7(5):e35903

16. Katz A, Bogdanovic B, Ekuma O, Soodeen RA, Enns J. Pediatric primary care services in Manitoba: is the health of the next generation of children at risk? *Health Policy*. 2012;105(1):84–91
17. The Farr Institute of Health Informatics Research. About. Available at: www.farrinstitute.org/1_about.html. Accessed November 6, 2015
18. Pan-Canadian Real-world Health Data Network (PRHDN). Home page. Available at: <https://www.prhdn.ca/SitePages/Home.aspx>. Accessed November 6, 2015

International Perspectives on Primary Care Access, Equity, and Outcomes for Children

Astrid Guttmann

Pediatrics 2016;137;

DOI: 10.1542/peds.2015-4163 originally published online January 20, 2016;

Updated Information & Services

including high resolution figures, can be found at:
<http://pediatrics.aappublications.org/content/137/2/e20154163>

References

This article cites 10 articles, 3 of which you can access for free at:
<http://pediatrics.aappublications.org/content/137/2/e20154163#BIBL>

Subspecialty Collections

This article, along with others on similar topics, appears in the following collection(s):
Evidence-Based Medicine
http://www.aappublications.org/cgi/collection/evidence-based_medicine_sub

Permissions & Licensing

Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at:
<http://www.aappublications.org/site/misc/Permissions.xhtml>

Reprints

Information about ordering reprints can be found online:
<http://www.aappublications.org/site/misc/reprints.xhtml>

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™



PEDIATRICS®

OFFICIAL JOURNAL OF THE AMERICAN ACADEMY OF PEDIATRICS

International Perspectives on Primary Care Access, Equity, and Outcomes for Children

Astrid Guttmann

Pediatrics 2016;137;

DOI: 10.1542/peds.2015-4163 originally published online January 20, 2016;

The online version of this article, along with updated information and services, is located on the World Wide Web at:

<http://pediatrics.aappublications.org/content/137/2/e20154163>

Pediatrics is the official journal of the American Academy of Pediatrics. A monthly publication, it has been published continuously since 1948. Pediatrics is owned, published, and trademarked by the American Academy of Pediatrics, 141 Northwest Point Boulevard, Elk Grove Village, Illinois, 60007. Copyright © 2016 by the American Academy of Pediatrics. All rights reserved. Print ISSN: 1073-0397.

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™

