Only One Third of Family Physicians Can Estimate Their Patient Panel Size

Lars E. Peterson, MD, PhD, Anneli Cochrane, MPH, Andrew Bazemore, MD, MPH, Elizabeth Baxley, MD, and Robert L. Phillips, Jr., MD, MSPH

In addition to payments for services rendered to individual patients, primary care physicians will increasingly be paid for their ability to achieve goals across the body of patients most closely associated with them: their "panel." In a 2013 survey, however, only one third of family physicians could estimate their panel size, raising concern about their ability to perform more advanced primary care functions. (J Am Board Fam Med 2015;28:173-174.)

Keywords: Health Policy, Practice Management

The ability to assign patients to a specific provider in a practice, or empanelment, is a foundational step toward achieving more advanced primary care functions, such as creating patient registries and managing population health.^{1,2} Empanelling patients also allows practices to align a physician's panel size with the needs of his or her patients and available practice and community resources.³ Our objective was to determine what proportion of family physicians could estimate the size of their patient panel and, secondarily, to report estimated panel sizes.

We used demographic data provided by family physicians during their application for the American Board of Family Medicine recertification examination in 2013; the application included the question, "Approximately what is the size of your

See Related Commentary on Page 170.

patient panel?" Respondents could answer "I do not know" or "Does not apply" or could provide a free-text estimate of their panel size. Because panel size may vary by clinical effort, we characterized panel sizes by quintiles of time spent in direct patient care. This study was approved without restrictions by the American Academy of Family Physicians Institutional Review Board.

Among 11,231 respondents who provided direct patient care, nearly half (48.4%) could not estimate their panel size and 15.2% responded "does not apply"; only 36.4% provided an estimate. Among those who provided an estimate, panel sizes varied widely and by the percentage of time spent in direct patient care. For example, approximately one quarter (26.2%) of all respondents reported a panel size of 2001 to 3000 patients, but this percentage exceeded 30% among those spending 80% to 100% of their time in patient care and only 20% of those spending 60% to 80% of time (Table 1). Panel sizes of fewer than 1000 patients were far more common among those spending less than 40% of their time in patient care compared with those spending 80% to 100% of their time in direct patient care (nearly 80% vs 13%).

Our finding that only one third of family physicians could estimate their panel size is concerning given the increasing emphasis in primary care on creating disease registries, managing populations, and coordinating care. It is also surprising given that nearly 70% of family physicians use electronic health records.⁴ Without the ability to identify members of their panel, family physicians are handicapped when

This article was externally peer reviewed. Submitted 17 September 2014; revised 14 November 2014; accepted 21 November 2014.

From the American Board of Family Medicine, Lexing-ton, KY (LEP, AC, RLP); The Robert Graham Center, Washington, DC (AB); and the Department of Family Medicine, East Carolina University, Greenville, NC (EB).

Funding: none.

Conflict of interest: LEP, AC, and RLP are employees of the American Board of Family Medicine.

Corresponding author: Lars É. Peterson, MD, PhD, American Board of Family Medicine, 1648 McGrathiana Parkway, Suite 550, Lexington, KY 40511-1247 (E-mail: lpeterson@theabfm.org).

Patient Panel Size (n)	Time Spent in Direct Patient Care					
	1% to 20% (n = 90)	21% to 40% $(n = 175)$	41% to $60%(n = 228)$	61% to $80%(n = 543)$	81% to 100% (n = 3,049)	All Respondents $(n = 4,085)$
0–500	68.9	48.6	17.5	10.9	5.4	10.1
501-1000	10.0	29.7	26.3	12.2	7.6	10.3
1001-1500	6.7	4.6	16.2	18.8	11.8	12.6
1501-2000	6.7	10.3	17.5	20.8	21.3	20.2
2001-2500	2.2	2.9	7.0	8.8	14.1	12.3
2501-3000	0.0	0.6	4.8	11.8	16.1	13.9
3001-3500	1.1	0.6	1.8	3.7	5.4	4.7
3501-4000	0.0	0.6	2.2	4.8	6.6	5.7
4001-500	0.0	0.0	0.9	1.5	0.4	1.0
4501-5000	1.1	0.6	2.6	3.3	6.0	5.1
≥5001	3.3	1.7	3.1	3.5	4.6	4.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

 Table 1. Panel Sizes of Family Physicians Able to Provide an Estimate by Percentage of Time Spent in Direct

 Patient Care

performing advanced primary care functions that are increasingly valued or required. In addition, only one third of respondents who estimated a panel size had a panel size in a "reasonable" range of 1387 to 1947, as estimated by Altschuler et al.³ This raises concerns that family physicians may have excessively large panel sizes, which could lead to poor access for patients and burnout among physicians. Panel definition and management tools should be standard features of electronic health records, and their use may need to be an urgent focus for training, developing tools, and transforming practice.

References

1. Wagner E, Coleman K, Reid R, Phillips K, Sugarman J. Guiding transformation: how medical practices can

become patient-centered medical homes. New York: The Commonwealth Fund; 2012. Available from: http:// www.commonwealthfund.org/publications/fund-reports/ 2012/feb/guiding-transformation. Accessed December 31, 2014.

- 2. Bodenheimer T, Ghorob A, Willard-Grace R, Grumbach K. The 10 building blocks of highperforming primary care. Ann Fam Med 2014;12: 166–71.
- 3. Altschuler J, Margolius D, Bodenheimer T, Grumbach K. Estimating a reasonable patient panel size for primary care physicians with teambased task delegation. Ann Fam Med 2012;10: 396-400.
- Xierali IM, Hsiao CJ, Puffer JC, et al. The rise of electronic health record adoption among family physicians. Ann Fam Med 2013;11:14–9.