

programs in 2007-2008. Likewise, the number of resident positions has been generally increasing since 2002 after a net loss of 328 positions in 2002. In the past 2 years, the net gain of resident positions has nearly tripled the previous highest net gain. The previous highest net gain was 57 positions in 2010-2011, with 176 and 186 net positions in 2012-2013 and 2013-2014 respectively. Even with these new programs, the percentage of new program directors has remained stable, which could indicate even less program director turnover in the past 2 years.

For the past 3 years, the AFMRD has queried the attendees of its annual meeting, representing most family medicine residencies, through an audience response system. Although not a scientific survey, the results correlate with a stable program director turnover rate. Nine percent to 10% of respondents indicated they plan to remain as program director for 1 year or less, 48% to 52% indicated they plan to remain as program director for 2 to 5 years, and 39% to 42% plan to remain as program director for more than 5 years. Forty-eight percent responded they have held the position for more than 5 years.

Past program director turnover rate was much higher. A 2008 *Annals of Family Medicine* article highlights that when the National Institute for Program Director Development (NIPDD) fellowship began in 1994 the annual turnover rate of program directors was 33%; by 2007 the turnover rate was down to 13%.<sup>1</sup>

The stability of family medicine program director turnover, while the number of family medicine residency programs is increasing, bodes well for providing continued educational leadership as medicine rapidly changes. Nevertheless, it remains unclear whether a 12% to 14% turnover rate is significant. We know program directors leave the position for a variety of reasons—ranging from burnout from increasing regulations and administrative pressures to being tapped for other high-level administrative positions.

The AFMRD remains vigilant in supporting program directors. In addition to NIPDD, the AFMRD has a goal to provide advanced training opportunities for program directors to further develop skills to address new requirements, increased administrative burdens, and higher level administrative functions.

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From the North American  
Primary Care Research Group

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## HOW PRIMARY CARE PRODUCES BETTER OUTCOMES – A LOGIC MODEL

Roger Lienke, MD, a pediatrician-turned-family physician, who died at the age of 91 last year, founded one of the first 4 family medicine residency training programs in the United States at the University of Oklahoma. (The other 3 programs were established by Lynn Carmichael in Miami, Florida, Gene Farley in Rochester, New York, and Gayle Stephens in Wichita, Kansas.)

A conversation with Roger in 2011 about the origins of our discipline and its subsequent evolution led to a 2-year quest to create a logic model explaining how and why more and better primary care produces better health outcomes at lower cost.

The work was driven by our concern that primary care was still not well understood by many of those now engaged in its transformation. It was our shared bias that primary care is qualitatively different from other medical disciplines, being defined by a set of processes or attributes rather than by a set of clinical problems, organ systems, or demographic characteristics of patients.

We began by creating a list of desired outcomes based upon a review of the literature. Based upon that list, we identified a set of intermediate outcomes again from our systematic literature review. Finally, we developed a list of attributes derived from the Institute of Medicine's 1996 definition of primary care and attempted to identify, based upon the available literature and our own clinical experience, a set of possible mechanisms through which the attributes might act to produce better intermediate outcomes. The result is a long, extensively referenced manuscript that we agreed to post on the NAPCRG website as a living document. A medical student, Brenden Drew, created an accompanying Prezi, also posted, which contains definitions, constructs, and published measures for most of the components of the model. Our hope was that this material could be useful to teachers, researchers, and policy makers. We also hoped that others might want to get involved in its ongoing development. It has not been published elsewhere.

I have used the logic model for teaching 3rd-year medical students about primary care and when advising researchers about what to assess when measuring the impact of ongoing primary care innovations. It was

also used as a framework for advising the Office of the National Coordinator for Health Information Technology about meaningful use of electronic health records in primary care.

Those who want to add material or references or to discuss or dispute any of its contents in a constructive way, please contact james-mold@ouhsc.edu.

The manuscript can be found at: [https://www.napcrgr.org/AboutUs/Committees/CommitteeonAdvancingtheScienceofFamilyMedicine\(CASFM\)](https://www.napcrgr.org/AboutUs/Committees/CommitteeonAdvancingtheScienceofFamilyMedicine(CASFM)).

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## AHRQ UPDATES ON PRIMARY CARE RESEARCH: CARE COORDINATION MEASURES ATLAS AND DATABASE

The Institute of Medicine has identified care coordination as a key component of strategies to improve the effectiveness, safety, and efficiency of the American health care system.<sup>1</sup> Care coordination involves deliberately organizing patient care activities and sharing information among all of the participants concerned with a patient's care to achieve safer and more effective care. Achieving coordinated care typically involves specific care coordination activities, such as creating a proactive plan of care and sharing information across providers and sites of care, and using broad approaches that are commonly used to improve health care delivery (for example, team work and health information technology). Well-designed, targeted care coordination can improve outcomes for everyone: patients, providers, and payers. Care coordination is particularly critical for people living with multiple chronic conditions.

While the need for care coordination is clear, it can be challenging for primary care practices to assess the quality of their existing care coordination activities, identify gaps, and determine where improvements are needed. One aspect of the challenges facing practices is that there are many definitions of care coordination and few agreed-upon measures to guide implementation and evaluation of effective care coordination efforts. The Agency for Healthcare Research and Quality (AHRQ) has developed 2 resources to fill this gap:

- The **Care Coordination Measures Atlas** presents a framework that identifies key domains for measuring care coordination and their relationship to potentially

measurable effects. The Atlas also measures care coordination from the perspectives of patients and caregivers, as well as from the perspectives of health care professionals and health system managers. The Atlas is available at <http://www.ahrq.gov/professionals/systems/long-term-care/index.html>.

- Building on the Atlas, AHRQ has created the **Care Coordination Measures Database** to further assist evaluators and researchers interested in care coordination measurement. Users can compare more than 80 validated tools and search by coordination activities, approaches, or individual perspective, eg, patient/family, health care professional, or health system representative. The database may be accessed on the AHRQ website.

For additional information about AHRQ's efforts in this area, visit AHRQ's **Care Coordination page**: <http://www.ahrq.gov/professionals/prevention-chronic-care/index.html>, and AHRQ's **Innovations Exchange**: <http://www.innovations.ahrq.gov/>. The Innovations Exchange is a one-stop resource that offers health professionals and researchers opportunities to share, learn about, and adopt a diverse array of evidence-based innovations and tools that can speed the implementation of new and better ways to deliver health care.

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## JUST-RELEASED CLERKSHIP STUDY: GROWING SHORTAGE OF CLINICAL TRAINING SITES CHALLENGES MEDICAL SCHOOLS

What has appeared to be solid progress toward growing an adequate US health care workforce could be derailed by an escalating shortage of clinical training sites to accommodate many of those learners.

That's the crux of the message delivered in a recently released report titled *Recruiting and Maintaining U.S. Clinical Training Sites: Joint Report of the 2013 Multi-Discipline Clerkship/Clinical Training Site Survey*. The