Health Coaching in the Medical Home: Lessons from Early Adopters

March 2015



Introduction

Chronic conditions account for between 78 percent¹ and 86 percent² of total health care spending, with total spending on these conditions exceeding a trillion dollars a year. This expenditure level is expected to grow to over four trillion dollars by 2023.³ With forty-five percent of the U.S. population having a chronic medical condition, estimates are that 10.6 hours per day are required for an individual clinician to provide good chronic care to an average patient panel. By 2020, the numbers of chronically ill are expected to grow by 18 percent, while the ratio of generalist physicians to the population is expected to fall 9 percent during that same time.⁴

The Affordable Care Act (ACA) is changing the landscape of healthcare, impacting consumers and healthcare organizations alike. Although the net change in the number of insured persons attributable to the ACA is subject to debate, there are substantial populations newly eligible for state Medicaid and subsidized insurance plans on the state and federal exchanges. Many of the newly eligible represent vulnerable populations: low income, low health literacy, disabled, and those with complex medical conditions and chronic diseases.

Escalating costs for chronic care management and the increased population of insured presents both challenges and opportunities. On one hand, millions may be accessing healthcare that was unavailable to them before, and on the other hand, a continuation of the volume-based business models that have dominated the market will be unsustainable for the long-term. Efforts to reduce high-cost encounters and shift the focus of healthcare delivery to more proactive and preventive care will accelerate as the "business of healthcare" moves from volume to value-based care. The Centers for Medicare and Medicaid Services' adoption of the Triple Aim – improved patient experience (including quality and satisfaction), improved health of populations, and decreased per capita cost of care – is informing strategies for its Innovation Center, which is catalyzing creative models of value-based care. These models are built around *practice transformation*, which includes multi-dimensional strategies to improve the delivery of healthcare. Key elements are improved access, population health management, team-based care and patient-centered decision making.

The elements of practice transformation represent a particularly acute need within primary care, where two-thirds to three-quarters of chronic illness care takes place. With increasing frequency, primary care practices are recognizing that "patients are the most underutilized resources" in the U.S. health system (Dr. Charles Safran, 2004) and that engaging them in self-management and helping them build self-care skills can unleash their potential for greater health and well-being. In many of these practices, individuals trained in health coaching skills are being deployed as a key member of the health care team to do just that.

The purpose of this survey is to advance the national dialogue around health coaching as it supports the new models of healthcare. Specific focus areas include operational strategies, challenges, successes, and plans for the future. In sharing lessons learned from early adopters of health coaching, we encourage those who have already implemented health coaching and those who are considering doing so to evaluate the practice and promise of coaching as a pivotal strategy in their own practice transformation.

The *Health Coaching in the Medical Home* survey was sponsored by Opus Science and the Iowa Chronic Care Consortium and conducted by Roberts Health Solutions, LLC.

© 2015 Roberts Health Solutions, LLC. All rights reserved. No part of the work may be used, distributed, sold, reproduced or transmitted in any form without prior written permission of Roberts Health Solutions. Direct inquiries to shirley@robertshealthsolutions.com.

Definitions

Patient Centered Medical Home (PCMH) – The patient centered medical home provides primary health care that is relationship-based with an orientation toward the whole person. Rather than simply a place, the PCMH is a model of organization that is accountable for meeting the majority of each patient's physical and mental health care needs, coordinating other medical services as needed, responding to patients' preferences regarding access, and using evidence-based medicine and clinical decision-support tools to guide shared decision making. The PCMH actively supports patients in learning to manage and organize their own care at the level the patient chooses.⁶

To earn a formal PCMH designation by one of the several accrediting bodies, primary care practices must meet rigorous standards for addressing patient needs that include redesigned care processes, after-hours access, coordination of care with other providers and community resources, and maximizing efficiency by ensuring that highly-trained clinicians are not doing tasks lower level staff can do.

Health Coaching - Health coaching strategies play a vital role in this new high-value health care system by 1) providing self-management support; 2) bridging the gap between clinician and patient; 3) helping patients navigate the health care system; 4) offering emotional support; and 5) serving as a continuity figure. Health coaches in the medical home typically, but not always, have a clinical background and may carry titles such as care manager, care coordinator, or patient care assistant. In some settings, they have a title of health coach.

Health care team members in a coaching role perform many of the following functions:

- Partner with patients to identify health goals.
- **Collaborate** with and support physicians and other healthcare providers in helping patients improve health and well-being.
- ❖ Facilitate the process of lifestyle change to prevent or ameliorate lifestyle-related diseases and optimize whole health and well-being.
- **Explore and provide** information, resources, and referrals to providers as appropriate.
- Support client self-empowerment and active directing of one's own path of healing.
- Guide population health processes and practices of the medical home. 8,9

This survey focused on health coaching practiced in a primary care clinical setting. Often referred to as a Clinical Health Coach (or Physician Office Health Coach), the term is used to describe trained professionals who have mastered skills that integrate coaching for behavior change with best practice care processes to achieve better clinical outcomes and individual health improvement.

Process

We talked to thought leaders and coaching training programs to identify leading clinics and health systems that were in the process of implementing or had already implemented health coaching in a medical home environment. From those recommendations, the list was culled to ten systems, representing geographic and practice diversity. These systems ranged from academic medical centers to regional and rural systems in nine states across the United States. Practices ranged from small, one-clinic operations to multi-practice environments with more than 500 physicians.

Most of the systems we interviewed had at least 3 years of experience utilizing health coaches, typically with NCQA accreditation (Level 1 to Level 3) or other recognized status. Although individuals interviewed held a variety of positions within the practice - ranging from health coaches themselves to clinic managers and VPs - all had a perspective of both the strategic goals for coaching within the practice and an operational familiarity with coaching in the real-world setting.

To encourage frank and open discussion, individuals and their participant organizations were granted anonymity. In-depth interviews were conducted throughout 2014 and focused on:

- Organizational and operational models, including how health coaches are utilized, staffing levels, referral practices, and how coaching is incorporated into the workflow;
- Qualifications and criteria for those in coaching roles, including the types of individuals utilized for coaches, the primary skills and competencies required, and how such individuals are compensated.
- Common barriers and challenges encountered when implementing the coaching program.
- Outcomes, including physician and patient satisfaction with coaching, clinical measures being tracked and perspectives on return-on-investment.
- Training, including the types of basic and refresher training received and distinguishing features of training programs.
- General advice for others attempting to successfully adopt a coaching model in the primary care setting.

Survey Participants: Characteristics

- Urban, suburban, and rural locations
- Geographic representation: Northeast, Southeast, South, Midwest, and West
- Most owned by a health system; one freestanding practice; one stand-alone health/wellness center
- Number of primary care clinics either through ownership or affiliation ranging from 1 – 200+
- Payor mix: most balanced; others with more 1) commercial, 2) Medicare Advantage, 3) Medicaid/county funding; one capitated; one self-pay for coaching

Observations

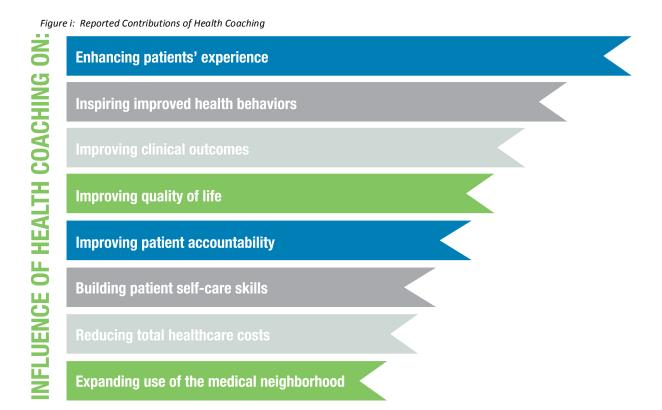
#1: There is great optimism for health coaching as a strategy for activating and equipping patients to take charge of their own health.

Health coaching as a medical home strategy is based upon a growing body of evidence that patients will respond to opportunities that engage them in their own health and healthcare. 10 Consequently, "enhancing patients' experience" and "inspiring improved health behaviors" were deemed to be the most important contributions of health coaches in the practices we interviewed. Improving clinical outcomes, quality of life and patient accountability were also listed as impact areas (see Figure 1). Clinical leaders were optimistic that reducing costs would eventually prove to be an outcome as well, but few practices have enough experience to report solid metrics on savings or information systems capable of tracking total healthcare utilization.

Systems reported that a desire to influence both health behaviors and process behaviors influenced their decision to adopt a health coaching model.

Process factors frequently cited included a desire to:

- Increase treatment adherence in high-risk patients
- Decrease no-shows for follow-up appointments;
- o Increase efficiency within the offices;
- Manage chronic conditions in non-acute settings, using health coaches as physician extenders.



5

Other systems acknowledge that a motivating factor for the use of health coaching relates to their intent to prepare practices to assume financial risk in the future or to decrease re-admissions in order to maximize payor reimbursements. Several systems incorporated health coaching initially as part of a clinic study or grant program focused on a specific disease, such as diabetes or cardiovascular care, and integrated the model into primary care offices because of its positive results.

Physicians and clinic managers were most often cited as the person responsible for bringing trained coaches into the PCMH. Most health coaches report that physicians are "very satisfied" with the model and perceived value returned from health coaching. However, some acknowledge that their physicians have remained neutral or undecided, often related to the lack of outcome data and the relatively low ratio of health coaching staff to physicians in *most* practices.

Almost all of the individuals we interviewed believed that health coaching in the clinical setting has the potential to revolutionize the way we achieve better outcomes for those with chronic conditions. When asked: "What is the secret to making this work?" respondents cited:

- Getting the right people into the coaching role;
- Having specific staff trained to function as coaches in a full-time role;
- Documenting outcomes with data;
- Moving from volume to a valuebased payment;
- Recognizing the value of team-based care;
- Realizing that time with patients is critical in helping them reach their potential;
- Supportive physicians who will identify patient referrals to coaching at the most opportune time.

#2: Commitment to coaching as a transformational strategy is greatly facilitated by a financial model that is value-based rather than volume-based.

The practices in this survey encompassed the entire continuum of financial models – from a strict feefor-service (FFS) system all the way to fully capitated and prepaid primary care models. Most are somewhere in between, acknowledging that even though revenue capture may be done in a FFS manner, profitability for the entire system is moving toward a value and performance-based model. In those systems that have some level of capitation or bundled payment for both primary and specialty care across all settings, virtually no financial performance information is available to the primary care practice itself.

The extent to which leadership identifies itself with a FFS vs. value-based model often drives the evaluation of whether coaching is an added value or an added expense. Primary care reimbursement, already low in comparison to other providers, may make it more difficult to access capital for information technology and other resources that support the health coach role. The additional time and costs associated with health coaching can be perceived as a drain on the financial performance of a practice. In these settings, there can be pressure to have the health coach function more as a navigator - directing patients to the lowest-cost setting - rather than a coach focused on activating patient self-management. And, although the literature gives examples of health coaches being a "business accelerator" within a FFS system, only one system we spoke with mentioned this as a financial strategy.

In the practices with primary care capitation or a self-insured employee population, there was great clarity on the part of the entire health care team about the purpose and value of individuals in a health coaching role.

#3: Models of coaching within the PCMH and related settings vary widely, but most perform similar functions and are well integrated with care management processes.

The primary function of an individual in a health coaching role – coaching conversations with patients for self-management and support – is practiced by all those with whom we interviewed (see Figure 2). Beyond this commonality, we found significant variation in how the role is operationalized. We highlight six dimensions of this variability, and we hypothesize that in most cases the variability works to enhance the impact of coaching at the local level – that a "one size fits all" strategy is not necessarily warranted.

Full-time vs. part-time staff

One of the distinguishing features among the different models is the degree to which the health coach is dedicated to coaching as his/her primary role, or whether coaching is one of many responsibilities. In many practices, coaching duties

accompany traditional nursing or other professional roles. As a result of this difference in role definition, it is not surprising that the reported percentage of time involved in actual coaching with patients ranged from 15%-100%.

Types of individuals trained

The professional roles and credentials of health coaches in our study varied significantly. Individuals with the title of health coach were primarily nurses, but medical assistants, dietitians, social workers, and exercise physiologists were also represented. Not all health coaches have medical credentials; in fact, one system indicated it specifically shies away from hiring nurses for the coaching role, noting the difficulty in moving from a "teaching/telling" role as a nurse to a "coaching/encouraging" role as a health coach. This system believes that willingness to be trained in a new role, bilingualism, and the ability to connect and engage with patients are better predictors of success than specific medical knowledge.

Figure 2: Functions performed by health coaches

COACHING CONVERSATIONS FOR SELF-MANAGEMENT AND SUPPORT

CONDUCTING PERSONAL OR TELEPHONIC FOLLOW-UP/MONITORING

SETTING UP/USING A REGISTRY

PARTICIPATING IN CARE MANAGEMENT/CARE COORDINATION

REFERRING/CONNECTING PATIENT TO MEDICAL NEIGHBORHOOD RESOURCES

LEADING CHANGE PROCESSES

PREPARING FOR PLANNED PATIENT VISITS

WORKING TO REDESIGN CARE PROCESSES

Despite the variability in backgrounds of health coaches, there was virtually unanimous agreement that the qualifications for successful health coaches include exceptional communication skills, active and reflective listening skills, emotional intelligence, interest in helping patients reach their potential, and a commitment to change and learning.

Staffing Ratios

In the systems we interviewed, the ratio of staff in coaching roles to physicians or other primary care providers ranged from 1:2 to 1:15. Most systems report that their ratio is not where they would like it to be, with many systems indicating an ideal of between 1:2 and 1:7. Many health coaches report that the lack of coaching capacity has impeded their progress in reaching enough patients to demonstrate significant clinical outcomes and obtain physician buy-in. Many believe this also obscures a practice's ability to justify its return on investment.

Incorporating coaches into workflow

We found numerous ways that coaching is incorporated into the workflow of the practice. Some practices set up back-to-back appointments with the physician and the health coach on the first visit of a patient deemed high-risk. More commonly, health coaches follow up with patients after a physician referral and establish their own panel of patients for telephonic or in-person contact. Health coaches report that physicians who have been trained in and use readiness-to-change assessments are able to refer patients to a coach at potentially the most opportune time. While most practices identify which patients should receive health coaching services – via risk stratification and registries - some practices use online and in-person assessments that allow patients to opt into coaching on a self-referred basis.

Compensation

Health coaches may operate with a coachingspecific job description, but the majority work from their respective clinical job ladder. This is particularly the case with medical assistants and nurses, who often carry titles such as care managers and care coordinators.

In some cases, the specific job description and clinical ladder assignment result in increased compensation. However, this is not the norm for the practices with whom we spoke. Still, a number of these individuals find that the job satisfaction from the coaching role outweighs the value of additional compensation, and the movement into coaching roles has in some cases played an important role in the retention of individuals within their respective organizations.

Criteria for identifying patients

Perhaps because of the nascent role of health coaching, we did not find alignment among practices on the criteria for identifying which patients should be referred to a health coach. While many practices target patients with chronic conditions across the spectrum of severity, others apply different strategies based on their own experience. These include readiness-to-change assessments by the physician/primary care provider and condition-specific criteria. The latter criteria may be medically based, such as focusing only on diabetes in order to be able to target interventions and analyze outcomes more readily, or based on a behavioral health assessment. One practice is using depression as its single criterion, in part because of its increasing prevalence and in part because of its findings that remission rates for depressive disorders at both 6 and 12 months improved for patients who had "touch points" with a health coach.

#4: Using a combination of national and local resources for health coach training appears to be most effective. Models that train the entire healthcare team in some manner appear to drive increased staff satisfaction and a perception of increased value to patients.

While some larger systems have developed their own curricula and internal training programs, most practices use outside institutes and certification programs for staff training. Online training is growing in use to increase facility with specific coaching skills. Regardless of the formal training programs used, it appears incumbent on organizations to provide a modicum of localized training to address how the coaching roles are integrated into the care team. As well, an orientation to the specific goals, values, and measures important to the local practice is critical to successful implementation of the coaching role.

In addition to training for individuals already in these roles, systems must be prepared to offer training for new positions and new hires, to offer refresher or continuing education classes, and "a la carte" training for other health team members. Several practices noted that patient feedback helps evaluate the skills and competencies that are required of coaches. Skills and competencies deemed important include: motivational interviewing, appreciative inquiry, SMART goals, vision planning, short-term goal setting, active and reflective listening, stages of change, decisional balance, and building on self-esteem.

Many of the coaches we interviewed stressed the importance of cross-training and learning that takes place in the organizational collective, not just on the part of individuals who bear the coach title. Some practices are adopting a strategy to give all of the healthcare team members training in motivational interviewing in an effort to maximize the opportunity for patient activation and to create a coaching culture.

#5: Challenges exist for health coaches in terms of measurement of outcomes, resource constraints, and – in many cases – role clarity.

Measurement - We lead with this barrier because of its importance to articulating the value of health coaching. Without demonstrated value, there will not be sustained financial and organizational support for coaches within healthcare practices. And, while few systems are yet publishing outcome data, there is a rigorous level of measurement being sought in most settings. As might be expected, process measures are more readily accessible and are routinely being incorporated into virtually all of the practices we interviewed.

In light of general practice variability and how health coaching often incorporates other practice transformation elements simultaneously, it is difficult to segregate the specific impact or return-on-investment of any one element. Furthermore,

Common Process Measures

- Level of hospitalizations, utilization of ER and urgent care
- Number of interventions during the immediate post-hospitalization period
- Patient activation measures (e.g., patients having the knowledge and/or skills to self-manage, collaborate with provider, prevent declines, etc.)
- Patients with A1c checks or compliance with selfreported at-home testing
- Keeping appointments in and out of the practice
- Decreasing calls and unscheduled appointments
- Frequency of use of home health and telehealth options
- Medication adherence
- Patient experience

,

there are several influencers of metrics in the PCMH: e.g., meeting pay-for-performance targets, achieving NCQA accreditation, and evaluating performance under an accountable care organization (ACO) model. Sometimes the metrics for the PCMH are set within the broader health system and not in the primary care practice itself.

In the context of these measurement challenges, most of the practices interviewed said it was "too early to tell" whether their efforts had been successful in reducing costs or improving outcomes. However, in one practice that tracked and analyzed over 500 diabetic patients over a 5-year period, data showed statistically significant improvements in the percentage of patients with controlled hemoglobin A1c, blood pressure and LDL cholesterol.

Nearly all practices are tracking those parameters - as well as weight loss/BMI reduction, smoking cessation, depression and/or positivity index scores – with about half of the practices citing improvement in one or more of these measures.

Resource Constraints - The most oft-mentioned barrier to the participant organizations achieving desired results in helping patients manage their chronic conditions was the present FFS reimbursement system. This was followed by variation in adopting best practices across clinics, time pressures, and space constraints. That said, the organizations that had a payment model not involving FFS seemed more able to identify and deploy needed resources to make the coaching role work.

Role Definition — Individuals in health coaching roles emphasize the importance of having a clear strategy and approach to team-based care and the coaching role, including who (hospital, ACO, physician leadership, practice management) will drive the deployment, setting and desired results of coaches. Top-down strategies are preferred because of the commitment and resources required to ensure staying power over the course of learning and inevitable missteps. In cases where mid-level leadership is pursuing

a coaching strategy absent executive physician or administrative leadership, it is more challenging to achieve true practice transformation.

It is equally important to standardize the coaching role throughout the health system and to commit to the redesigned care processes and technology that will enable success. As referenced earlier in the discussion of training, this role definition is best accomplished internally.

#6: Behavioral health integration is increasingly important to primary care practices and, as such, the coaching role.

We found that the presence of mental health conditions - as well as the risk for such conditions -is a trigger for health coaching referrals in many practices. This is perhaps not surprising when considering the fact that people with chronic illness are 25-30 percent more likely to suffer from a depressive disorder. Depression can aggravate a chronic condition and also prevent the individual from managing a chronic condition effectively.

Most of the practices we interviewed are using screening tools for depression, such as the Patient Health Questionnaire (PHQ-9) or other indices that can give the provider information about the extent to which a patient may be either receptive or more resistant to adopting new behaviors.

NCQA's recognition program for PCMH designation – particularly the NCQA 2014 Standards – as well as new CMS payment codes underscore the importance of further integrating behavioral health care into the medical home, either by bringing primary care into behavioral health practices or providing mental health expertise in primary care practices. Some of the clinics we interviewed have embedded psychologists or psychiatrists in their practices. Most have strong ties with behavioral therapists. Some health coaches we talked to are actively engaged with patients who have various intellectual disabilities. Many coaches (other than medical assistants) are authorized to make referrals to behavioral health specialists.

Opportunity Spaces for Health Coaching

Based on the responses of survey participants, we have identified a number of "opportunity spaces," or areas that appear to have potential to advance the effectiveness of health coaching in the medical home. Some of these opportunities are specific to individual practices and healthcare systems and others relate to the field as a whole.

#1: Acknowledgment – across the entire patient care team – of patients as a capable resource may hold the greatest potential for engaging them in their care.

Health coaching is rooted in the belief that patients are capable, especially in building self-care skills, and that they can be more accountable for improved health behaviors if adequately inspired. When best practiced, health coaching holds high potential for shifting the focus of healthcare practitioners from a paternalistic system to one that activates patients toward improved outcomes. Engagement of patients in this journey will not be successful if relegated to a single physician, nurse, or health coach. Instead, the entire patient care team must adopt this mindset and work collaboratively to that end. In those practices that we surveyed where this was the case, health coaches felt more supported and effective in their roles.

#2: Focusing on the role of health coaching within a framework of strategic practice transformation may reduce intra-system variation when operationalizing health coaching.

To cement the value of health coaching as a strategy on a local basis, the variability of implementation likely needs to be reduced. Some systems we interviewed mentioned that failure to standardize the health coaching title, job description, skill sets expectations, compensation and the way in which the health coach is incorporated into the patient flow has hindered the progression of the role and the adoption of best practices across multiple clinic settings. In some cases, deployment of coaches is left to the discretion of the individual clinic physicians and management, resulting in highly variable care processes from practice to practice.

Having a common, articulated strategy for overall practice transformation that includes health coaching was one factor that appeared to reduce variation across large systems with multiple primary care practices. Having a strong team orientation to care provision was another.

#3: Increasingly, the value of health coaching roles may be measured by both clinical and financial outcomes.

Most practices we spoke with are still developing measurement systems to track and report outcomes. Information technology resources are not consistently available or are often assigned to higher priority operational activities, such as building registries. The development of sophisticated population health-based systems has not yet occurred within the practices we spoke with and will need to be a major priority if practices are to be successful within ACOs and other value-based arrangements.

It will be difficult, if not impossible, to separate the impact of health coaching on outcomes from all other care coordination and care management strategies. On an individual basis, practices will likely see outcomes that can be attributed to coaching, but population-based reporting may not sufficiently be able to parse the factors influencing patients' changes in health status and chronic condition management. Nonetheless, it will be increasingly important to tie clinical outcomes to population-based financial outcomes as value-based payment systems become more prevalent.

#4: There appears to be as yet untapped potential in the use of mobile technology within health coaching.

As the number and type of mobile technology applications around health increase, health coaches specifically and medical homes in general run the risk of losing their patients' attention and focus to other health platforms and programs. In spite of the challenges posed by privacy and regulatory concerns, pursuing mobile technology strategies that incorporate health coaching may be necessary for medical homes to serve their patients in an environment that expects 24/7 connectivity and responsiveness.

#5: Variability in the types of individuals in health coaching roles suggests that a focus on competencies rather than a national certification process might be warranted.

Despite the differences in credentials of individuals in health coaching roles, all the organizations we spoke with were comfortable with their training strategies for their own organizations. And most believe that a certification process or credential from a respected training organization is an important quality measure. The majority of resondents did not think it imperative to have a national certification process, but some did express concern that the lack of consistency in training and role definition nationally is harmful to the progression of the field as it seeks to gain traction and credibility.

Given the variability in use of health coaches across clinical practices and differences in their training – ranging from technical, pre-baccalaureate to master's programs, it is difficult to identify a singular strategy for certification. A national consensus conference held in 2010 called for – among other initiatives – the creation of an independent national certification board to develop standards and certification for the professional health and wellness coach, as well as standards for basic coaching skills that all health professionals including nurses, physicians, physical therapists, dietitians, social workers, and personal trainers can integrate into their professional work. As the roles continue to emerge, it may be useful to make distinctions between how wellness coaches and health coaches embedded in clinical settings are trained and certified.

#6: As the role of health coaching in the medical home matures – and becomes a resource in demand – the criteria for which patients receive priority for coaching services may become more critical.

Although some practices at this time have formal, articulated criteria for referring patients for health coaching, some are relying solely on primary care physicians who are supportive of this strategy or believe that the health coach can spend time in patient education that s/he cannot afford to spend. When clinical criteria are used, we found a rather wide array of such criteria. Like other aspects of health coaching that are tailored to the specific clinical environment, each practice or health system may continue to make its own judgments about which patients are the most appropriate to receive health coaching. It would appear beneficial, however, to have greater alignment nationally on criteria. A particular area of discussion would appear to be the trade-off between clinical acuity and readiness-to-change assessments.

References

Opus Science is a forward-thinking education, advocacy, and quality improvement organization that develops programs for healthcare professionals and patients through collaborations with medical specialty societies, foundations, patient advocacy groups, and health systems.

The Iowa Chronic Care Consortium is an independent, not-for-profit entity whose purpose is to develop capacity with others to bring effective, personalized health improvement and chronic care strategies to individuals where they live and work.

¹ Bodenheimer, T, Chen, E and Bennett, H, Confronting the Growing Burden of Chronic Disease: Can the U.S. Health Care Workforce do the Job? Health Affairs, 28, no. 1 (2009): 64-74

² http://www.cdc.gov/chronicdisease/

³ DeVol, R and Bedronssian, A. *An Unhealthy America: The Economic Burden of Chronic Disease*. Santa Monica, CA: Milken Institute, October 2007.

⁴ Bodenheimer, T, Chen, E and Bennett, H, Confronting the Growing Burden of Chronic Disease: Can the U.S. Health Care Workforce do the Job? Health Affairs, 28, no. 1 (2009): 64-74

⁵ Data abstracted Aug 2008 by John Edward Watts IV, from National Center for Health Statistics, *National Ambulatory Medical Care Survey*, 2006 (Hyattsville, MD: NCHS, 2006).

⁶ http://pcmh.ahrq.gov/page/defining-pcmh

⁷ Bennett, H D, Coleman, E A, Parry, C, Bodenheimer, T and Chen, E, *Health Coaching for Patients*, Family Practice Management, Sept/Oct 2010.

⁸ Lawson, K and Wolever, R Q, Health Coaching Education and Research. Duke Integrative Medicine. University of Minnesota Health Coaching Program. Consortium of Academic Health Centers for Integrative Medicine (CAHCIM). Retrieved from http://www.imconsortium.org/prod/groups/ahc/@pub/@ahc/@cahcim/documents/asset/ahc_asset_14757 6.pdf

⁹ http://clinicalhealthcoach.com/faq/

¹⁰ Bodenheimer T, Ghorob A, Willard-Grace, R, and Grumbach, K, *The 10 Building Blocks of High-Performing Primary Care*, Annals of Family Medicine, Vol 12, No 2, March/April 2014.

¹¹ http://www.instituteofcoaching.org/Index.cfm?page=healthcare