



## Ix, Health 2.0, and the Patient-Centered Medical Home

### Speakers:

Don Kemper, MPH, Founder and CEO, Healthwise  
 Joe Kvedar, MD, Director, Center for Connected Health, Partners HealthCare  
 Alan Glaseroff, MD, President, Humboldt Independent Practice Association

### Background:

On December 22, 2008, The Health Care Blog posted a piece by Joe Kvedar and David Kibbe on what they described as the “Connected Medical Home.” Less than two weeks later, Healthwise published a white paper on the “Virtual Health Home.”

These concepts are closely tied to the IxCenter’s exploration of the intersection of Ix and Health 2.0 in the context of the patient-centered medical home (PCMH) model over the last two years. Given the fact that people—especially those with chronic conditions—spend nearly all of their time outside of health care facilities, we need to ensure that their care needs are met in their homes and workplaces. To manage their health, consistently choose healthy behaviors, and ultimately live healthier lives, consumers require access to the information they need, where and when they need it. Current IxCenter thinking about the role of Ix and Health 2.0 to facilitate what the Institute of Medicine describes as “continuous healing relationships” is presented in the graphic below.



## **The Connected Medical Home**

### **Joe Kvedar and David Kibbe**

#### **Thoughts on the PCMH**

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**Ix Insight #1: Success of the PCMH model requires more emphasis on infrastructure aside from human resources.** Rounding out office staff has received a disproportionate amount of “airtime” in consideration/discussion of the PCMH. Overemphasis on the human resources component of the PCMH results in a prohibitively expensive approach to modifying the health care system. Additionally, the PCMH still lacks the sophisticated IT necessary to make it work, which requires further investment.

**Ix Insight #2: Dramatic growth in chronic illness and cost pressures on the health care system suggest the currently envisioned PCMH model, is economically infeasible.**

Deloitte Center for Health Solutions has estimated the costs as the following:

- initial investment of \$100,000 per primary care physician
- ongoing expenses increase by \$150,000 or more per primary care physician
- EMR required for each practice
- hospitals risk a 30% decrease in revenue

**Ix Insight #3: The fundamental process of health care needs to change to address the combined effects of the enormous capacity problem of the current health care system and the staggering growth in chronic illness.** We are not training enough additional health care providers to provide health care under the current model of health care.

#### **Transitioning from the PCMH to the Connected Medical Home**

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**Ix Insight #4: Health 2.0 tools are, in effect, testing the question of whether or not the wisdom of crowds outweighs the wisdom of the physician.** There are not a lot of doctors involved in this discussion, but the question remains: Is it possible that the crowd could be more informed than a physician on a particular condition?

**Ix Insight #5: The concept of participatory medicine offers a framework for merging the PCMH model and Health 2.0.** Although many patients have begun to regularly use technology for their health information searches, they often prefer to have their searches be filtered and guided by health care professionals. Many also expect to be able to interact with health care professionals using modern forms of communication and coaching.

**Ix Insight #6: The Connected Medical Home is based on design principles involving patient monitoring, patient involvement, coaching, and optimized provider involvement.** The Connected Medical Home provides:

- ongoing, accurate physiologic information (via patient monitoring)
- physiologic information to the patient (as well as their provider)
- coaching based on physiologic information
- optimized provider involvement (i.e., involving the provider only when necessary)

**Ix Insight #7: Placing emphasis on monitoring and messaging technology will help moderate costs for people with chronic conditions.** Providing continuous, population-based care reduces unnecessary follow-up care and targets supplemental care for those who need it. Utilizing health 2.0 tools allows more efficient communication and coaching to either avert the need for care or direct patients to receive medical attention when needed.

## **The Virtual Health Home** **Don Kemper and Leslie Kelly-Hall**

### **Thoughts on the PCMH**

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**Ix Insight #8: Episodic care is one of the root causes of many major problems in the U.S. health care delivery system.** The problems of health care, as outlined by Kemper are:

- poor coordination of care
- supply-sensitive care/geographic variance in quality and availability of care
- lack of patient preference-sensitive care
- “stop and go care” – no care between episodes
- medical model (focus on health problems, rather than health)

**Ix Insight #9: Despite PCMH advances in addressing poor care coordination and (to some extent) supply-sensitive care, it has limited impact on preference-sensitive care, episodic care, and health and wellness.**

**Ix Insight #10: The PCMH is patient-centered, but from the perspective of the medical provider.** The PCMH is what Kemper calls “looking in” and referred to the following picture to illustrate his point.



## **Transitioning from the PCMH to the Virtual Health Home**

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**Ix Insight #11: We need a different kind of system to supplement the PCMH, that allows the patient to “look outward” towards the health care world.** The doctor plays a key part in the health of the patient, but so does the health environment of the patient. The health environment consists of things like:

- diet
- exercise
- stress management
- air quality
- relationships
- support groups

At certain times, the doctor plays the biggest role, but the rest of the time, other factors come into play.

**Ix Insight #12: The Virtual Health Home is the “missing half” of the PCMH.** The Virtual Health Home works from the patient perspective to balance health care services with other factors affecting their health. The basic functions of the Virtual Health Home are:

- patient view of clinical records
- information prescriptions (Ix)
- decision aids
- guided self-management plan
- guidance for late-life care

**Ix Insight #13: The key component of the Virtual Health Home is the “dashboard,” where patients use technology to manage their health from their personalized perspective.** The dashboard/VHH could include any combination of the following resources, depending on patient needs and preferences:

- wellness and prevention plans
- healthy living resources
- social networks and 2.0
- monitoring and incentives
- family history and genomics
- predictive modeling and self-management scores
- caregiver access
- reminders
- virtual care

**Ix Insight #14: The Virtual Health Home addresses the five major problems with health care, as outlined by Kemper.** Again, the problems of health care are as follows:

- poor coordination of care
- supply-sensitive care/geographic variance in quality and availability of care
- lack of patient preference-sensitive care

- “stop and go care” – no care between episodes
- medical model (focus on health problems, rather than health)

## Discussion

**Ix Insight #15: The Connected Medical Home mirrors the Virtual Health Home except that it uses chronic illness as a starting point.** The two approaches are mostly describing the same things, except they use slightly different terminology. The Connected Medical Home focuses more on chronic illness as a way to address unsustainable health care costs.

**Ix Insight #16: Both the Virtual Health Home and Connected Medical Home create a more truly patient-centered platform for the PCMH model.** Health 2.0 technology has facilitated the evolution of another stage of patient-centered care by incorporating the patient perspective into the health care journey.

**Ix Insight #17: Both the Virtual Health Home and Connected Medical Home address a major reality/component of health care: Patients live their lives 24/7 and probably spend less than 1% of their lives in a health care facility.** Both updated models of the PCMH meet the patients where they are, which is usually not in a medical facility.

**Ix Insight #18: Patients are an underutilized resource for learning about health management.** For Alan Glaseroff, the advice of his own patients has been the most valuable information he has received about self-management and peer support. He learned how to manage his own Type 1 diabetes from his patients and, as a result, focused on self-management and peer support in his own independent medical practice.

**Ix Insight #19: The people who develop Health 2.0 apps are smart; the person who figures out how to implement them in small medical practices will be a genius.** Dr. Glaseroff quoted the following statement by Uwe Rheinhardt:

“The man who invented the wheel was pretty smart, but the person who invented the other three was a genius.”

## Additional Resources

For the PowerPoint presentation, visit the IxInsights section of the member portal: <http://www.ixcenter.org/members/insights.cfm> and click on “PowerPoint Presentation” for IxInsights #42.

The Connected Medical Home: Health 2.0 Says “Hello” to the Medical Home Model  
David Kibbe and Joe Kvedar (The Health Care Blog) <http://tinyurl.com/ixie0014>

The Virtual Health Home (The Health Care Blog) <http://tinyurl.com/ixie0015>

The Virtual Health Home: The Dashboard for Health and Health Care  
Don Kemper, MPH and Leslie Kelly Hall <http://tinyurl.com/ixie0016>

## Recent IxCenter Blog Posts Related to the PCMH



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