Innovation in the Kaiser Permanente Colorado Region: Where We’ve Been, Where We Are Going

By Bill Marsh, MD
David Price, MD

Across the Kaiser Permanente (KP) Colorado Region, innovative groups manage patient care visits differently: At the Baseline Medical Office, a physician assistant manages patients with multiple co-morbidities using population registries. At the Hidden Lake Medical Office, diabetic patients are seen in multistation group visits. At the Aurora Centrepoint Office, a team uses multistation group visits to care for the elderly. Another group in this office is utilizing different visit types (Internet, group, RN, mid-level, etc) to manage patient demand stream in a joint effort with the call center. At the Complementary Medicine Center, mind-body medicine techniques are utilized with selected patients with chronic conditions. All of these teams are attempting to streamline care, improve quality and service, and impact affordability. All are receiving support from the Innovation Support Team in Colorado.

Why an Innovation Support Team? Why now?

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Address the crisis of affordability through the vehicle of innovation.
– Jack Cochran, MD
and Chris Binkley

Why an Innovation Support Team? Why now?

A “perfect storm” looms: 46 million uninsured Americans, steadily rising health care costs, and the baby boom generation approaching retirement. In 2004, Jack Cochran, MD, Executive Medical Director of the Colorado Permanente Medical Group, and Chris Binkley, then President of Kaiser Foundation Health Plan of Colorado issued a charge: address the crisis of affordability through the vehicle of innovation. An infrastructure was developed to “help cultivate the spirit of innovation so that anyone in our organization can effect change that will lead to improved care, member loyalty, and affordability.” As part of this infrastructure, KP Colorado developed a Knowledge Management Team (“K-Team”) (Table 1) and an Innovation Support Team (“I-Team”) (Table 2).

Innovation isn’t new in the KP Colorado Region. As in other regions, KP Colorado is innovating in patient care; however, the efforts have been random and “on the margins” of the day-to-day exigencies of patient care in an expensive, traditional, inefficient, “one-clinician one-exam room one-patient one-appointment” model. Many in KP Colorado have been reluctant to try new ways of care delivery for fear of failure. Even when successful, new ideas were seldom disseminated, resulting in duplicating efforts and mistakes in implementation.

K-Team

Knowledge Management is a significant aspect of innovation. In Colorado, there is an important Intranet-based communication hub: “kpcolorado.net”, decision-support capabilities of HealthConnect; and resources available on the KP Clinical Library. However, computer-based archives alone are insufficient for spreading knowledge. The charge of K-Team is to link organizational “creators” and “disseminators” of knowledge, and build on central repositories to facilitate “just-in-time” knowledge sharing so that individuals in the organization can connect with each other to

Table 1. Knowledge Management Team (K-Team)

| Brent Bowman, Director of KPCO Call Center |
| Megan Darricau, Program Manager, Clinical Tools and Guidelines |
| Lisa Dawkins, Information Technology, KPCO |
| Dorothy Jackson, Quality Assurance Manager, KPCO and Codirector of Knowledge Management |
| Amy Jacobs, Technology Lead, KFHP Colorado Organizational Effectiveness |
| David Price, MD, CPMG Physician Director of Education |
| Craig Robbins, MD, Director of Knowledge Management |
| Aaron Snyder, MD, Physician Director, KPCO Clinical Library |
| Matthew Taylor, Strategic Management Consulting |
| Kim Warth, Director, Integrated Communications and Brand Management and Codirector of Knowledge Management |
| Ted Witt, Senior Web Coordinator |

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share lessons learned in different improvement attempts.

I-Team

Throughout the Region, the I-Team supports teams who wish to create new models of care. Five physicians and six Health Plan employees (4.5 FTE, total) bring a wide range of skills to the team while continuing to work in their other roles in the organization.

There are mechanisms for local teams to request support from the I-Team, and a grid to help evaluate the expected impact of proposed projects. In order to receive I-Team support, proposed projects must be aligned with strategic priorities of KP Colorado and address affordability (short-term or long-term). Using a range of creativity tools, the I-Team helps teams consider a range of possibilities, instead of “jumping from problem to solution to roll-out”: measure current status; develop specific, measurable, important goals; seek sponsorship; divide the project into individual hypotheses that can be tested quickly using concepts of rapid cycle change; learn from each rapid cycle; and document the learnings (Figure 1). I-Teams are connected to operations to assist in the diffusion of successful innovations.

Table 2. Innovation Support Team (I-Team)

<table>
<thead>
<tr>
<th>Name</th>
<th>Title and Department</th>
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</thead>
<tbody>
<tr>
<td>John Merenich, MD</td>
<td>Physician-Director of Population Management (Endocrinology)</td>
</tr>
<tr>
<td>David Price, MD</td>
<td>Physician-Director of Education (Family Medicine)</td>
</tr>
<tr>
<td>Liz Kincannon, MD</td>
<td>Hospital Operations and a physician with extensive experience in rapid cycle change (Neonatology)</td>
</tr>
<tr>
<td>John Williams, MD</td>
<td>allergist and a relentless patient advocate</td>
</tr>
<tr>
<td>Bill Marsh, MD</td>
<td>Associate Medical Director of Clinical Process Improvement</td>
</tr>
<tr>
<td>Jan Ground, a full-time Project Manager</td>
<td></td>
</tr>
<tr>
<td>Linda Smith, RN</td>
<td>Health Plan Director of Nursing &amp; Innovation</td>
</tr>
<tr>
<td>Kim Oberg, Health Plan Director of Strategic Management Consulting</td>
<td></td>
</tr>
<tr>
<td>Arne Beck, PhD</td>
<td>Health Plan Director of Research and Development</td>
</tr>
<tr>
<td>Jacqueline Cobb, RN</td>
<td>Diabetes Nurse Care Manager and Local 7 Steward</td>
</tr>
<tr>
<td>Sally Butler, LCSW</td>
<td>Health Plan Director of Organizational Effectiveness</td>
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Learnings from the Past Year

- Up-front team sponsorship from operations is critical, as well as continued dialogue with sponsors throughout the project. In addition to helping teams break down barriers to innovation, operations leaders will ultimately be responsible for continuing and propagating new, successful practices. Conversely, lack of up-front sponsorship and continued sponsor dialogue can undermine a project. We have had several projects put on hold after discussions revealed that sponsors would be unlikely to disseminate an idea, even if successful.
- It has taken longer than anticipated for teams to clearly define the problem and set appropriate, specific measures of...
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Success. As an example, the Aurora Centerpoint team moved from the problem of “managing appointment demand” to managing the flow of messages, differentiating between messages that could be handled up-front at the Call Center and messages from members that could be handled at the facility level with advice, or a number of different appointment options. Their measures of success include patient satisfaction, percentage of messages resolved on the initial call, provider and staff satisfaction, in-person visits/1000 members, number of group visits, number of “e-visits,” and changes in daily call volume.

- Patient registries enable teams to explore models of care delivery other than one-to-one visits. Integrating HealthConnect with population registries is essential, but the work doesn’t stop there. To truly effect change, most of the work is in supporting individuals and teams in their development and implementation of new ways of delivering population-based care. The geriatric and diabetes multistation visits and the Baseline physician assistant comorbidity management projects have used registries to target specific groups of patients for intervention, as well as record outcomes.

- All teams need support developing metrics and collecting data in the rapid cycle testing of project components. The diabetic footcare project team has worked very hard to focus their initial efforts on conducting cycles to measure and improve documentation and proper coding of foot exams in patients with diabetes.

- We have received consistent feedback from all teams that project management support helps teams more easily formulate, conduct, and evaluate small scale rapid cycle change pilots while staying focused on the teams’ “big picture” measures of success. The innovation infrastructure provides teams time to work together and to access others in the organization with facilitation or content expertise. Without time and support, the “tyranny of the urgent” day-to-day rigors of clinical practice can overwhelm attempts at new care delivery models.

- Physician involvement in projects is important, but physicians do not always have to be the “project leader.” Both the geriatric and diabetes multistation programs were initially envisioned by physicians; however as the work has evolved, other members of the team (nurse practitioner and clinical pharmacist) have assumed responsibility for day-to-day oversight of the programs and facilitating team meetings.

- Passionate individuals who first develop an idea (innovators) often focus on the “big picture” of how their new model will improve care. Sometimes, however, innovators can get too far ahead of the rest of the team. Ongoing communication between team members is critical to ensure that key viewpoints are considered, resistance is surfaced, potential barriers are thoughtfully ad-

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Figure 2. Cultural transformation.

Innovation (Be Different) vs. Strategic Alignment

- High innovation
- Low strategic alignment

Figure 3. The sweet spot.
dressed, and learnings from each test of an idea are used to evolve and improve the initial idea. This realization helped the diabetes multistation group to realize that team members more focused on the “nuts and bolts” of daily events could help the team continue to rapidly test and refine their model, freeing up the physician-innovator to consider possibilities for future application of the model to other conditions.

• Determining the return on investment from the I-Team is difficult. Credit for innovation clearly rests with the teams attempting new models of care delivery. The role of the I-Team is to support the clinical teams. We have qualitatively demonstrated our value by asking teams to evaluate I-Team work. An I-Team scorecard provides some quantitative measures (number of trainings conducted, number of teams assisted, etc) However, deriving a dollar amount to quantify value of the I-Team work has proved difficult.

Fear of failure is decreasing. A number of teams are innovating and sharing learnings with others. As more teams identify ideas and patient populations, a clear problem definition and clear metrics will help them in the development and rapid testing of new models of care. Given permission to try (and to fail), time, project support, rigorous metrics and available data, new models can be developed that will improve the value of care for KP Colorado patients, members, and employer groups and that will create a dynamic, fulfilling, sustainable career for physicians and staff.

Acknowledgments
The authors would like to acknowledge the other members of KP Colorado’s Innovation and Knowledge Management Support teams, for their passion and countless hours of hard work.

Recommended Reading

Worthy
Problems worthy of attack prove their worth by hitting back.

—Piet Hein, 1905-1996, Danish poet and scientist