ISSUEBrief

Predict, Prioritize, Prevent
Nine things practices should know about risk stratification and panel management

Do you *really* know who your patients are? Before a practice can deliver appropriate care to the patients who need it most, it must first identify those individuals.

Today's patient with diabetes may have been pre-diabetic last year. Not only is the patient sicker today, but he or she probably generates higher costs than a year ago. Risk stratification is a tool for identifying—and *predicting*—which patients are at high risk—or likely to be at high risk—and *prioritizing* the management of their care in order to *prevent* worse outcomes—in this case, amputation, blindness or death.

Put simply, to risk-stratify patients is to sort them into high, moderate and low health risk tiers. Risk stratification aligns a practice's very limited time and resources to prioritize the needs of its patient population. It can—and should—involve sophisticated algorithms and robust registries, but it relies just as much on patient experience and physician judgment.

"Risk stratification is an intentional, planned and proactive process carried out at the practice level to effectively target clinic services to patients," explains Asaf Bitton, MD, MPH, FACP. "It represents a move from a reactive single physician to a more proactive team of providers to address the total health needs of the total patient population."

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Bitton, a practicing primary care physician and researcher at the division of general medicine at Brigham and Women's Hospital and at the Center for Primary Care at Harvard Medical School, is also a senior advisor to the Comprehensive Primary Care initiative at the Center for Medicare and Medicaid Innovation.

Risk stratification is just one technique—albeit a very important one—in the broader process of population health management (PHM), says Patrick Gordon, executive director of the Colorado Beacon Consortium. (See sidebar on page 3.)

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Gordon identifies three goals for risk stratification:

1. Predict risks

2. Prioritize interventions

3. Prevent negative outcomes (e.g., disability and death—as well as unnecessary costs)

Primary care practices must embrace this approach if they hope to achieve the Triple Aim of better health outcomes, better care and lower costs[1], say Bitton and Gordon.

Advanced primary care practices now realize this—in part, because of their payment contracts, risk sharing, the move toward value-based and global payments and similar trends, providers are increasingly responsible for managing quality and costs for their entire population of patients.

To that end, Bitton and Gordon shared nine things physicians and their teams need to understand about risk stratification.

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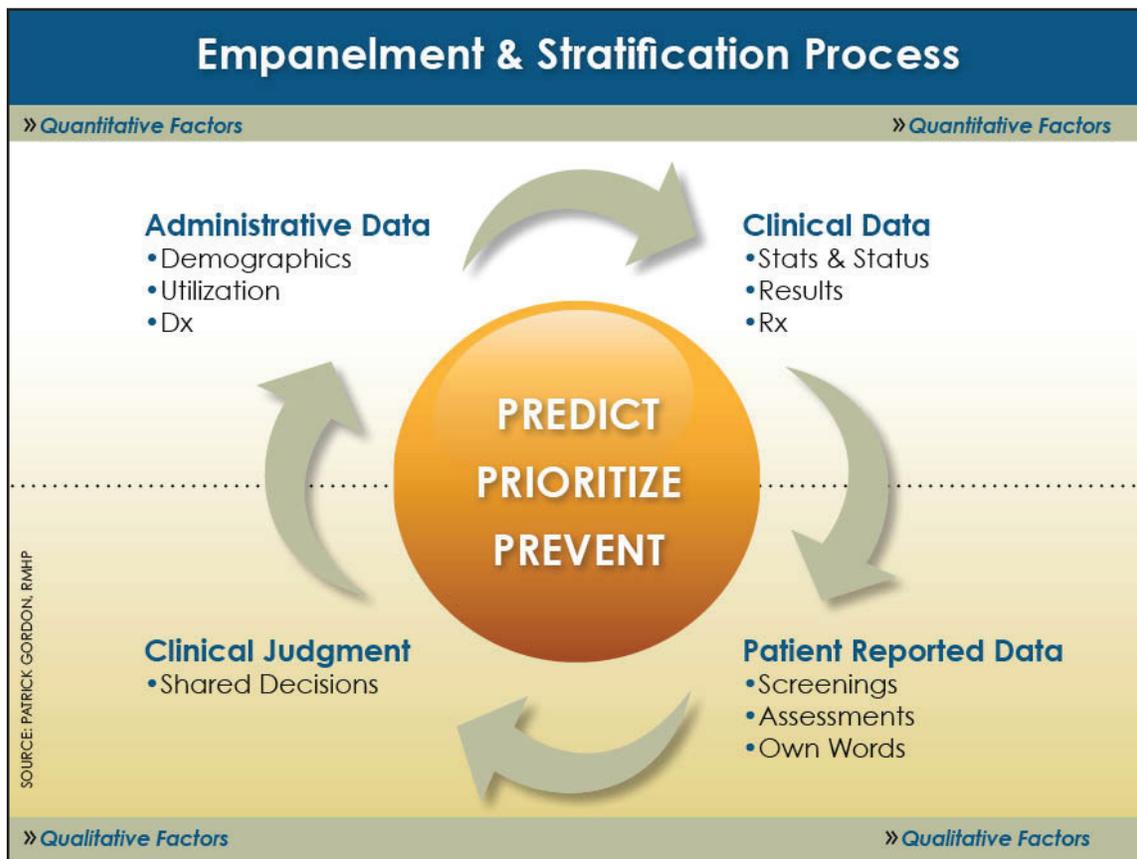[1] Developed by the Institute for Healthcare Improvement

1. Better data means a better process.

The ability to get a useful stratification depends on integrating multiple sources of data. "The more data you have, the better able you are to predict outcomes. Access to more actionable data within a process driven by clinical judgment and shared patient decision-making improves the ability of a practice team to proactively align resources with patient needs," Gordon explains.

2. The patient's voice and the clinician's judgment are both essential.

Perhaps the most important source of data, says Gordon, is the patient. Patient Activation Measures,[2] screening and health risk assessments all have predictive value. But so does asking "Do you think your health is 'good,' 'fair' or 'poor'?"

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[2] The Patient Activation Measure® (PAM®), a tool from Insignia Health, gauges the knowledge, skills and confidence essential to managing one's own health and health care.

Empanelment & Stratification Process

» Quantitative Factors   » Quantitative Factors

Administrative Data
• Demographics
• Utilization
• Dx

Clinical Data
• Stats & Status
• Results
• Rx

PREDICT PRIORITIZE PREVENT

Clinical Judgment
• Shared Decisions

Patient Reported Data
• Screenings
• Assessments
• Own Words

» Qualitative Factors   » Qualitative Factors

SOURCE: PATRICK GORDON, RMHP

CBC: Poised at the starting line

The Colorado Beacon Consortium is at the forefront of what Bitton considers an inevitable trend—risk stratification and panel management.

CBC has far to go before it is able to integrate all the applicable data and perform sophisticated risk stratification. But it's ready to move ahead, says Gordon. "We're at the starting line. We have a good idea of what the course will be. We've worked hard to get in position. We have the skills and tools that we need to be successful."

CBC is an alliance of physician leaders, hospitals, a community-based health information exchange and a local payer working to strengthen existing IT infrastructure, advance patient-centered primary care and create a better system for patients, providers and the community as a whole. The seven-county (Mesa, Delta, Montrose, Garfield, Gunnison, Pitkin and Rio Blanco) multi-stakeholder initiative continues to develop, test and execute new ways to improve the way patients experience health care while controlling costs. CBC is one of 17 Beacon communities across the country selected to demonstrate how health care organizations, including physician offices, can achieve meaningful use of health information technology and demonstrate the value of data-driven health care.

With more robust collection of—and timely access to—patient data, clinicians are better equipped to improve the health of individual patients, patient panels and the community. Applications include community-wide patient-centric registry tools for population monitoring that report at the practice level. The registry functionality allows providers to identify gaps, target resources and design effective interventions—in a much more coordinated fashion. Another resource, Archimedes IndiGO, is a decision-support tool that calculates and displays the risk a patient has of adverse events, such as heart attacks, strokes and onset of diabetes. Not only does the physician get a better understanding of a patient's risk, but the data is presented in an easy-to-understand graphic that captures the patient's attention and fosters true patient engagement.

The Beacon demonstration gave the community an opportunity to develop new skills, to build and strengthen its health information technology infrastructure, and to engage providers in population-focused quality improvement efforts on a broad basis. In effect, Beacon accelerated the region's progress as a learning lab and innovation hub. Because of this, CBC has developed the technology, quality improvement experience, the population health expertise and the coaching resources necessary to move forward with risk stratification and advanced panel management.

"Now we just need to start the race," Gordon says.

"If we look only through the lens of survey instruments, without the context of the patient's own words, the process is incomplete," says Gordon.

Likewise, data need to be filtered through the clinician's judgment; it provides a common-sense validation and helps identify false positives that may arise from the data.

"If we really want to be effective, we must take advantage of the data and the technology and the methodologies that are available—but not to the exclusion of qualitative feedback from the patient, clinical expertise and judgment," Gordon says. Similarly, Gordon notes "Clinical judgment is a powerful basis for risk stratification, but it can be augmented greatly with data-driven support and analysis."

3. Start where you are.

There's no one perfect way to stratify risk, says Bitton. The "how" of getting that list varies depending on the practice, its patients and the reasons for making a list in the first place. But Bitton and Gordon are adamant on one point: Don't become bogged down in the "how." As Bitton puts it, "The process should not prevent achievement of the goal. There's no one right way: Start somewhere—

don't be paralyzed by the multitude of choices at the outset. Think of it as a classic process improvement challenge. Start with something, measure how it works, learn from it, and keep refining it as you go through iterative cycles."

Gordon agrees. "You actually *can* start without having a perfect system in place, with what you have. Don't let the perfect be the enemy of the good." No practice is going to have access to all the possible data and tools. There are many reasons not to start, none of them good.

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A simple three-question patient survey has predictive power. Many practices have data in various disease registries they can tap. "It may be embryonic, but it's actionable data," Gordon says. "Start with what you have, fill in the gaps and then use your own clinical judgment to put it into motion. What you have may be more powerful than you think."

Bitton points out that, at the Everett Clinic, one approach is asking physicians to identify high-risk patients with just one question: *Who would you* not *be surprised to hear was admitted to the hospital in the next six months?* Those patients are likely to be at high risk and in need of care management services and outreach. That's simple enough for any practice to start.

4. Know your patient (empanelment).

To achieve the intent of risk stratification, a clinician needs to know who his or her patients are. You need a clean, updated list of patients clearly assigned to a provider or care team. That's where the concept of empanelment comes in. Advanced primary care requires a continuous relationship between a team of providers and the patient. Empanelment is a mechanism to make that happen, by linking each patient with a responsible primary care provider.

But differentiate empanelment and attribution, Bitton explains.

Attribution assigns a patient to a provider or provider team. That may be done by the insurance company or, at the practice level, by the EHR. "Attribution happens with about 60-90 percent fidelity, so some patients fall through the cracks. It is a key starting point for knowing generally who your clinicians care for, and getting to near-100 percent attribution within your EHR is an important milestone at the outset of your journey toward population management," Bitton explains.

Attribution is the foundational aspect of empanelment; it links each patient with an assigned provider or team of providers. "Empanelment is the never-ending process of making sure a patient has an identified provider at all times, that they agree with that assignment, *and* that that provider has a right-sized panel of patients," he says. It's knowing who you take care of, when and how, and it involves assessing the needs of the patients and the practice.

"Much of the work we do in new models of primary care is based on the principles of identifying, knowing, updating and asking patients if they agree the provider is whom they want him or her to be—not to whom they were randomly assigned," he notes. Attribution or assignment algorithms can help start the process, but they are only a beginning. A patient may see multiple providers in a practice, and identify most with one particular physician, not the doctor they happened to see on the last three visits. Asking the patient whom he or she considers their primary care provider is an important later step.

Empanelment and panel management are essential to risk stratification, he explains. "You are stratifying because you want to manage the care of those with the greatest need. You can't manage actively those patients who aren't identified and assigned—actively, proactively and continuously."

That's why empanelment is a constant process of going through the list, cleaning it up and updating it until, Bitton says, "you have an almost-perfect list of whom you are responsible for." From the 2,000 on the panel, the physician can then figure out the 200 or so that most need attention.

Attribution is static. Empanelment is dynamic. Bitton likens it to driving in the dark. With attribution, you can turn on your lights and see the road ahead. With empanelment, you have your lights on and your GPS activated to optimize your navigation to the intended destination.

5. Know why you stratify.

A physician should ask, "Why am I stratifying my patients? What is the underlying goal here?" It could be a good strategy to reduce costs because the practice is in a shared savings arrangement, or simply because she wants to better coordinate care for the most complex patients who all too often fall through the cracks in an uncoordinated system. "Having this clear reason in mind is critical and will inform her other activities, including the choice of the risk stratification tool or measure," says Bitton.

6. Risk is dynamic, not static.

People move up and down tiers of risk. This is why claims-based algorithms are sometimes not that accurate. A patient can have a bad year. A person can have a heart attack one year, but recover, stop smoking and start exercising. By the next year, he's at a different risk level; but claims data do not often capture that in real time because of incomplete data and a delay in processing it.

Panel management involves watching people move into and out of risk categories in real time.

Practices can show value to purchasers by demonstrating their ability to bend the cost curve for those in the highest tier. As practices become more adept at managing panels and stratifying risk, they can look at the next-highest 20 percent on that pyramid, and the next 20 percent. Bitton expects to see this become more common over the next five years. As systems build in case management for

those at the highest risk, the team can then ask "What's next? Who can I work with now to avoid having them end up in the highest risk categories?"

7. Risk stratification and panel management demand *and* foster workflow redesign.

Panel management and risk stratification both demand and facilitate practice transformation. They require redistribution of workload among staff, with team members working at the top of their licenses.

The approach also allows practices to prioritize activities. If hospital readmissions are a problem, once the practice has a list of patients at high risk of readmission the team can design workflows around post-discharge appointments.

Risk stratification and panel management not only fit into primary care system redesign; they are essential. They create a process sorting patients into populations and allow for a group of patients to be easily identified, including those that don't come in.

Functional registries—lists of patients identified by some level of risk—enable a practice to come together as a team, delegate work and determine how and when to reach out, Bitton says. "It helps to realize that the value of primary care is more than the value of the 15-minute visit," he notes.

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Such an approach can later become a way to address patient supply and demand—and to fairly distribute the practice workload. It provides a view of the practice that allows for data-based business decisions—adding staff, opening or closing panels, etc.

8. Data alone is a start, not an endpoint; transformation requires action.

"You aren't going to make any impact without targeted outreach, engagement and interventions," Gordon says. "The purpose of ranking is to systematically align practice resources with population needs and gaps."

The patient needs to be involved in the decision on how to act on the data. Shared decision-making must be incorporated into the risk stratification process, he adds.

The challenge, explains Gordon, is converting concepts of empanelment and risk stratification into practice. A complex undertaking, it involves aligning the multiple sources of data concerning a patient's status in a process centered around a patient's own decisions—and doing so in a clinically relevant and actionable manner.

Just as empanelment isn't simply an arbitrary catalogue of patients, risk stratification isn't a mere ranked list of patients. That's just the beginning. "The output cannot be the list itself. It has to be a new set of roles and shared responsibilities. That's why this isn't an overnight process," Bitton explains.

Who on the practice team will be involved in taking action? What will the practice do with the knowledge it gains? "Risk stratification must be approached with the purpose of coordinating and planning action—it must be proactive," says Bitton.

As both Bitton and Gordon counsel, start where you are. If you have limited data, focusing team resources on the highest-risk patients can be as simple as using registries to identify a patient with HbA1c above 9 or a woman who hasn't had a mammogram in the last several years.

9. Risk stratification is the way of the future.

Gordon sees risk stratification as central to effective PHM. But it's still in its infancy. "If you define population health management as a process by which

"Better prediction equals better prioritization."

—Asaf Bitton, MD, MPH, FACP, Center for Primary Care at Harvard Medical School

you integrate data and patient feedback in a systematic process to predict, prioritize and prevent adverse trends and outcomes you find that few health systems do that effectively, and even fewer bring all the elements together in one place."

Bitton finds it hard to imagine new, value-based models of care without risk stratification. Risk stratification/advanced panel management allow practices to move to value-based reimbursement and practice transformation. "I would be hard pressed to think of a value-based arrangement involving primary care that doesn't include the primary care practice using risk stratification and panel management. Better prediction equals better prioritization. More prevention equals better health at lower costs. It's absolutely fundamental to our goal, which is to achieve the Triple Aim." ■

CBC Annual Report Released

Colorado Beacon Consortium's 2012 annual report, released in January 2013, tells how this dedicated group of health care innovators is fostering better health by meaningfully using health information technology to transform health care delivery. It elaborates on the quality improvements discussed in this issue brief, offers practical lessons learned and includes videos that tell the CBC story and in which physicians share their perspectives on the CBC experience.

2012 Annual Report

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Colorado Beacon Consortium: On the Ascent

On the Western Slope of Colorado, in a seven-county community with 320,000 residents across 17,500 square miles, a group of health care leaders—including 51 medical practices—is collaborating to make health care better—not by tinkering around the edges of the status quo, but by rejecting it in favor of a better model.

The impetus behind this effort is the Colorado Beacon Consortium (CBC)—an alliance of physician leaders, hospitals, a community-based health information exchange and a local payer—which is working to strengthen existing IT infrastructure, advance patient-centered primary care and create a better system for patients, providers and the

PATRICK GORDON
Colorado Beacon Consortium
Executive Director

Patrick Gordon joined Rocky Mountain Health Plans (RMHP) in 2004 as the director of government programs. In addition to his current role as executive director of the Colorado Beacon Consortium, he is also leading the implementation of the Medicaid Accountable Care Collaborative project in Western Colorado. Within RMHP, he is accountable for the operational, financial and regulatory performance of the Medicaid, Dual Eligible, CHP+ and Medigap programs supported by the health plan. He has led and implemented several strategic projects for RMHP and stakeholders in Western Colorado, including the design and implementation of a performance incentive arrangement with the State of Colorado and participating physicians to achieve Triple Aim objectives; the implementation of a Medicare Part D Prescription Drug program and targeted coverage arrangements for dual eligible beneficiaries; development of Medicare Supplemental insurance offerings; and a Medicare service area expansion in 10 Wyoming counties and two Colorado counties. Prior to joining RMHP, he held various positions within the Colorado Department of Health Care Policy & Financing related to Medicaid, CHP+ and Nursing Facilities policy development and program management.

Gordon received his Master of Public Administration in Health Policy/Economics from the University of Colorado, and has received certification from America's Health Insurance Plans Executive Leadership Program. He also serves as president of the Pinon Institute, a center for thought, leadership and culture change within long-term care.

ASAF BITTON, MD, MPH, FACP
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Asaf Bitton, MD, MPH, FACP, is associate physician and instructor in medicine at the Division of General Medicine at Brigham and Women's Hospital, as well as instructor in Health Care Policy at the Department of health care policy at Harvard Medical School. Along with being a practicing primary care physician, his work focuses on evaluating the scope and quality improvement possibilities of patient-centered medical home pilots locally and nationally, as well as ways to effectively transform practices toward new models of primary care.

He serves as a senior advisor to the Center for Medicare and Medicaid Innovation for their Comprehensive Primary Care initiative. His main academic interests are in primary care delivery, policy, and innovation. To that end, he both implements and evaluates the patient-centered medical home model, a revamped mode of primary care delivery that is being rapidly disseminated across the US. His recent work in this area has been published in *JAMA, Health Affairs, Milbank Quarterly, Archives of Internal Medicine, Journal of General Internal Medicine,* and *Medical Care*. He chairs the Clinical Quality Working Group in the Patient Centered Medical Home Evaluators' Collaborative, a national group convened by the Commonwealth Fund.

Bitton received his medical degree from the University of California, San Francisco School of Medicine and his MPH from the Harvard School of Public Health.

About the Colorado Beacon Consortium

The Colorado Beacon Consortium is made up of executive-level representation from four mission-driven, not-for-profit, Western Colorado-based organizations, all of which have nationally acknowledged track records of coordination to achieve superior outcomes. They are Mesa County Physicians IPA, Quality Health Network, Rocky Mountain Health Plans and St. Mary's Regional Medical Center. The Colorado Beacon Consortium's mission is to optimize the efficiency, quality and performance of our health care system, and integrate the delivery of care and use of clinical information to improve community health. The geographic focus of the Consortium's activities includes the Colorado counties of Mesa, Delta, Montrose, Garfield, Gunnison, Pitkin and Rio Blanco.