In February 2014, Robert Wood Johnson Foundation (RWJF) payment reform grantees met to explore innovative activities that providers and payers had initiated to ensure that new payment models were successful in propelling improvements in quality of care and reductions in the growth of health care costs. Experts from around the country joined the grantees to share experiences and best practices. The primary focus of the meeting was on provider-based activities that were making a difference in terms of systems transformation. This brief summarizes the following selected innovations described by presenters during the meeting:

- experimenting with target population identification for care management;
- applying a laser focus on target population needs and creative care management responses;
- understanding costs in order to improve efficiency; and
- supporting providers with information and consultation.

This brief explores each of these “bright lights” and draws lessons from providers and insurers on the ground. The brief also identifies characteristics that position organizations for success in these efforts:

- An organization’s willingness to create cultural and temporal space for innovation by valuing change as a catalytic agent and dedicating resources to problem solving;
- A willingness of those involved to look at the problem and possible solutions through a different lens; and
- Recognizing the importance of data to build evidence-based processes.

Readers are encouraged to view the webinars associated with these examples of providers and insurers in action. Links are provided within the text to help guide this exploration.
#1: Experimenting With Target Population Identification for Care Management

One of the oft-referenced essential elements of care delivery reform is providers risk-stratifying their patient populations and then applying differentiated care management resources based on a patient’s risk profile. Therefore, accurately identifying high-risk patients is essential to effective use of care management services. To help practices identify these patients, payers often generate patient lists from their predictive modeling software and provide those lists to practices. However, the quality of the lists can be highly variable, including names of deceased patients, patients who may have been at high risk in the past but are no longer so, patients listed as high-risk because of pregnancy, and/or patients who are not being seen by the practice. As a result, providers often do not use the lists to identify their high-risk patients.

Pamela Peele, PhD, chief analytics officer at the UPMC Health Plan in Pittsburgh, Pa., offered the following insights on why practices have grown frustrated with payer-supplied patient lists. She explained that insurers and providers often confuse two key, interrelated analytic concepts when working with predictive modeling, resulting in reports that are not very useful to providers and lead to misunderstandings among the parties. First, predictive modeling reports are built on correlation, not causation. When providers expect all patients listed to be high-risk patients, they are expecting the claims data to be able to make the causal links to risk status, which is not possible.

Second, when providers expect all patients listed to be at high risk, they assume no false positives. Because predictive models are future predictions and not past observations, the list will include both true positives and false positives. Based on her experience, Dr. Peele suggests maximizing the accuracy and usefulness of predictive modeling results by minimizing false positives.

Dr. Peele explains that the challenge is for the analytics to be smart in finding useful correlations and to optimize the trade-off between the number of true and false positives produced. Both providers and insurers can work collaboratively to achieve that goal.

- **Insurers can create forward-looking models, rather than past-oriented models.** UPMC Health Plan has found that approximately 80 percent of people who are high utilizers of medical care in one year are not the high medical utilizers in the next year, creating the challenge to find the 20 percent who will be year two high medical utilizers. As a result, UPMC Health Plan has created several models that focus on the future use of services. In one, UPMC Health Plan analyzed 441,000 clinical notes from medical records, looking for words that were associated with high future use of urgent clinics or emergency departments. One correlation they found was associated with entry of “wheeled walker” in the clinical record. An important aspect to this finding is that the signal isn’t the walker per se, but the fact that the clinician included the wheeled walker in their clinical notes.

UPMC Health Plan has also created a model that predicts the likelihood of readmission within 30 days. The benefit of the model is that, unlike other predictive readmission models, the risk of readmission is calculated prior to the first admission; that is, the risk of readmission is known before the member even shows up at a hospital for the initial admission. This enables UPMC hospitals to initiate readmission reduction management during the initial admission for each patient identified under this methodology as being at high risk for readmission.

**Linda Thomas-Hemak, MD**, president and CEO of The Wright Center, in northeastern Pennsylvania, a patient-centered medical home and residency training facility for primary care providers, described ways in which her practice has worked collaboratively with their payers to improve predictive modeling.

- **Insurers can share modeling details with providers and providers can clean their data to support more accurate and predictive modeling.** As reported by Dr. Thomas-Hemak, the health plans participating in a statewide patient-centered medical home initiative shared detailed information about their respective predictive models with all participating providers. The two dominant plans for Dr. Thomas-Hemak’s practice also met individually with her and members of her team, including care managers and an electronic medical record (EMR) data and application specialist, to discuss ways to optimize report accuracy and integration into practice workflow. This information enabled the Center’s team to not only better understand the meaning of the respective point scores, but also to realize that they needed to take corrective action and actively engage and communicate with payers in an ongoing registry-validation process. Specifically, they needed to update their active patient and care management registry. This “clean” list of assigned patients led to a more useful risk-stratified care management list.

- **Providers need to be curious and demanding about how a model’s predictions are developed.** Dr. Thomas-Hemak and her team have a detailed understanding of the two predictive models used by their major health plan partners. In order to reach that level of understanding, they had to:
  
  - **Be persistent.** They met with plan representatives multiple times to discuss the same questions or issues until they were answered or resolved.
  
  - **Be collaborative.** They approached the payers with the attitude and intention of mutually solving a problem or learning together. As a result, the initial defensive attitude of some payers dissolved and the parties were able to develop trusting
relationships that have led insurers and providers to make systemwide improvements in their business processes and to enhance payer-practice collaboration.

- **Accept the model’s limitations and apply discerning logic.** By understanding the models’ data sources, prediction logic, false positive rate, and model limitations, the Wright Center’s providers and care managers can account for model limitations, such as having pregnant women appear on the high risk list, without dismissing the entire list. By having an in-depth understanding of the predictive models, the team’s care managers recognized the superiority of one model over another. Dr. Thomas-Hemak describes one as more predictive and population-based, and the other as reactive and outdated. With this understanding, her practice is able to maximize the usefulness of the information provided by the insurers.

View a webinar, “Unlocking Capacity for Health Care Transformation,” featuring Dr. Thomas-Hemak presenting a summary of her findings.

#2: Applying a Laser Focus on Target Population Needs and Creative Care Management Responses

Organizations that have strong program results know the importance of understanding the needs of their target population and developing new program interventions to address those needs. The following are two examples of innovations focused on creatively meeting patient needs.

- **Breaking a proven model to meet new needs.** Geisinger Health Plan and the larger Geisinger Health System are built on a primary care model anchored by practices that are supported by clinical care managers. In fact, effective care management is a core component of its ProvenHealth Navigator (Advanced Medical Home) program. However, Geisinger leadership recognized that there was a group of complex patients that needed additional services and asked Joann Sciandrea, RN, BSN, CCM, associate vice president, population health at Geisinger Health Plan, to lead a cross-functional team to develop a new care model.

The team saw an opportunity to further differentiate interventions by developing an interdisciplinarily “pod” to provide intensive ambulatory care services for a subset of very complex patients. The model is being piloted with five clinics that are in close proximity and have a strong connection to the local hospital. The pod, which consists of a care manager, a non-licensed community health assistant, and a social worker, has a caseload of 40 patients and provides extensive in-hospital, in-home, and telephone contacts with the patients. The care manager, community health assistant, and social worker work closely to meet total patient needs, including medical, behavioral health, housing, transportation, and other social service needs. This model allows both the social worker and care manager to work at the top of his/her license. The goal of the model is to provide intensive services during a time of crisis in order to stabilize patients so they can return to their regular care managers. During the time that the pod is supporting a patient, the team members work closely with each patient’s primary care team. Thus far, the pod has transitioned two patients back to the regular case manager. Early experience suggests that there will be a sub-group of patients who will be best served by the pod on a long-term basis.

Accepting the new model has taken time. In implementing this program, coaching was necessary to help current care managers and primary care clinicians understand that the pods were designed to augment what was otherwise being provided. With time and experience, primary care physicians and practice-based care managers are becoming more supportive of the model and are making referrals to the pod.

Geisinger will be formally evaluating the effectiveness of the pilot pod in July 2014, comparing patients receiving support from the pod with matched patients receiving standard care management services.

- **Using data to select and track program success.** Health Quality Partners (“HQP”) is an organization dedicated to the design, testing, and dissemination of models of advanced preventive care that improve the health of vulnerable populations. Its core program is a community-based care management program for Medicare beneficiaries at risk of needing emergency department and inpatient services. By providing intensive care management services and an array of targeted support services, HQP has been able to significantly reduce inpatient admissions and patient deaths among this population, while reducing costs for higher-risk patients.

One of its key success factors is providing population-relevant services. Since its 2000 launch, HQP has developed a robust portfolio of 30+ carefully selected interventions, which includes implementing strong, evidence-based patient education interventions that teach patients about their diseases and conditions, how to recognize symptoms and do self-care—for example, adhering to diet and exercise regimens—and how to do condition-specific self-monitoring. Moreover, to assure that patients have access to services such as exercise programs, HQP offers classes at convenient locations. For example, Cooper Aerobics Center in Dallas created a seated chair exercise program that demonstrated effectiveness for participants, and HQP adopted that program and now offers it to its participants.
Once an intervention has been selected, HQP carefully implements the intervention in the same way it was originally evaluated and found to be effective at mitigating risk. For each intervention, HQP collects performance data and runs statistical analyses correlating program offerings with key success indices, such as emergency department and inpatient utilization. Data are reviewed regularly and program adjustments are made as necessary. Ken Coburn, MD, HQP’s CEO and medical director, emphasizes that continually assessing the need for new programs, seeking out best-in-class interventions, systematically implementing the programs, and assessing them is foundational to his organization’s success.

View a webinar, “Population-Based Approaches to Care Management,” featuring Dr. Coburn and Ms. Sciandra presenting their findings.

#3: Understanding Costs in Order to Improve Efficiency

Vivian S. Lee, MD, PhD, MBA, senior vice president of the University of Utah Health System, described in compelling fashion how her academic medical center “developed an algorithm for change management” when it decided to tackle the problem of not knowing the actual costs of the services it delivers.

The impetus for this work was multifold. First, in 2012, the system discussed the need to reduce its costs and decided that it had to better understand its costs in order to reduce them. Second, the health system was considering a bundled payment project but had no means for appropriately allocating funds without knowing how to accurately allocate costs. Finally, Dr. Lee and her peers were reading and talking about the writings of Michael Porter and Bob Kaplan of the Harvard Business School, who said that one of health care’s biggest problems was not knowing costs.5

With the goal of developing a tool to measure value systemwide for any provider, diagnosis, or even patient, a dedicated team of employees took six months to define costs and then tie them to quality outcomes. The resulting tool, referred to as “value-driven outcomes,” gave health system employees the ability to see real cost data and how costs varied within their system with little associated variation in quality.

Having created the analytic tool, the health system then needed to equip its physicians and other staff with the means to use the data to improve performance. It started with systemwide lean training to help clinicians learn how to identify opportunities for improvement and “make providers problem solvers.” The training was introduced to clinicians as a way to help them make their own lives easier, and not as an initiative to save money. For example, physicians were asked to address concerns such as “why do I have to wait so long for the procedure room to turn around?” Physicians embraced the new tool they were given, seeing a significant opportunity to improve day-to-day practice. Armed with scorecards to track progress on quality indices that they have defined, physician groups are showing that improvements in quality parallel decreases in costs. A recent collaboration with Kaplan6 has led the group to explore the benefits of a more refined costing approach called time-driven, activity-based costing. This method encourages use of personnel at the top of their license. Seeing data indicating a 20-fold difference in the cost per minute to perform a task, with no corresponding quality difference, is motivating additional change. Another result of physician access to new cost information was the orthopedists creating a “perfect care quality index” for their own initiative that integrated numerous measures with supporting dashboards.

Dr. Lee reported that quality has climbed across the system as a result of this work, and costs have plummeted in the areas where this approach has been piloted. She opined that the widely referenced estimates of 30 percent waste in the U.S. health care system7 are significant understatements, based on her experience at the University of Utah Health System.

Interestingly, the University of Utah Health System to date has been involved in little payment reform or provider compensation reform. Dr. Lee reported that the health system is entering into the CMS Bundled Payment for Care Improvement Initiative. In addition, it has not changed provider compensation incentives (although discussions have begun), and has not found the current clinician compensation system to be an impediment to efforts to reduce system waste.8

View a webinar, “Harnessing Your Organization’s Big Data to Improve Outcomes, Reduce Costs, and Improve Service,” featuring Dr. Lee presenting a summary of her findings.

#4: Supporting Providers With Information and Consultation

Working with providers operating under population-based payment contracts to support their cost and quality management efforts was the focus of a presentation by Lisa Whittemore, MSW, MPH, vice president, Network Performance Improvement, for Blue Cross Blue Shield of Massachusetts (BCBSMA). Ms. Whittemore explained that BCBSMA has a four-component strategy to assist the 85 percent of its provider network operating under the plan’s “Alternative Quality Contract.”9

- **Consultative support**: BCBSMA meets quarterly with each of 18 medical groups. A medical director attends each meeting, and may be joined by a pharmacist, social worker, and/or nurse. The plan and medical group prepare for each meeting and jointly set the agenda. The meeting’s focus is on concrete actions the group can take to improve performance, e.g., how to reduce the emer-
gency department visit rate for attributed patients. BCBSMA will also work with groups between meetings if health plan data analysis identifies a significant opportunity for improvement.

• **Training**: The health plan is assisting its contracted providers to develop new sets of skills so that they will succeed in a transformed business environment. Training programs have included a rigorous leadership program on topics including adaptive reserve and behavior change that takes place one day per month over eight months, and a 2.5-day specialist leadership training focusing on negotiation skills and practice variation analysis.

• **Best practice sharing/collaboration opportunities**: BCBSMA regularly conducts practice variation analysis, looking for opportunities for improvement, and develops distribution curves to be shared with the medical groups. These analyses are used as the basis for conversation, and have created a means for engaging specialists. In addition, the plan convenes a provider forum three times a year to discuss topics of interest to the groups. Finally, BCBSMA sets annual performance goals with each group every January and February.

• **Data and actionable reports**: BCBSMA produces many quality and efficiency reports for its contracted medical groups. The central report, however, is a dashboard containing the trend in the medical group's population health risk and seven graphs. The dashboard graphs contain the following information:
  – quality indicators, comparing performance to the prior year and to current year performance targets;
  – total medical expense trends;
  – avoidable emergency department visit opportunities, by condition;
  – spending by expense category compared to all medical groups, adjusted for differences in health status;
  – spending vs. expected by condition category;
  – potential savings that could be achieved by moving patients with low-weight disease-related groups to lower-cost hospitals; and
  – percentage of admissions and spending at different hospitals.

BCBSMA produces a suite of additional reports for medical groups. For example, a medication refill report provides information for five conditions, identifying patients who have been filling their prescriptions in a timely manner less than 80 percent of the time. Examples of other reports and notifications include daily hospital admission notification, weekly chronic condition opportunity reports, and emergency department and inpatient utilization reports.

BCBSMA has demonstrated how health insurers can serve as valuable partners to providers functioning under payment reform models, supplying sophisticated analyses that increase the likelihood of provider success.

**Conclusion**

The programmatic “bright lights” discussed in this paper vary widely. However, when considering why these innovations were effective in these particular organizations, there are several unifying organizational characteristics that are distinctive and instructional:

• **An organization's willingness to create cultural and temporal space for innovation by valuing change as a catalytic agent and dedicating resources to problem solving**:
  – The Wright Center made time to meet regularly with insurers and pushed for changes that enhanced alignment and collaboration.
  – The University of Utah Health System had a dedicated group of analysts focused on new cost accounting activity for six months.

• **A willingness of those involved to look at the problem and possible solutions through a different lens**:
  – UPMC Health Plan focused on developing predictive models that were forward looking.
  – Geisinger saw intensive outpatient care management pods as complementing primary care providers, rather than undermining them.

• **Recognizing the importance of data to build evidence-based processes**:
  – BCBSMA is dedicating leadership and analytic resources to share reports with their risk-based provider groups.
  – HQP utilizes a portfolio of multiple proven interventions, the reliable delivery and effectiveness of which are continuously monitored.
  – The University of Utah Health System shares the results of its cost reports to drive cost savings and quality improvement.

Finally, and critically, each organization has leadership that is firmly committed to driving delivery system change. All of the cited organizations have developed a vision of best practice, and have pushed themselves to innovate on an ongoing basis, always seeking ways to better what they are doing. Organizations wishing to adopt these “bright light” strategies and emulate their organizations must be willing to question the status quo in their organizations and challenge themselves to improve.
Endnotes


