

Improving Patient Engagement with Effective Population Health Management

By Megan Sterling

The call for national healthcare reform has triggered a care delivery and payment model shift from fee-for-service to pay-for-performance, and ultimately, to value-based care. The reform has compelled the industry to improve both the quality and cost-effectiveness of care, which has led the healthcare industry to rethink care delivery methods, organizational structures and workflows. New care delivery models such as Accountable Care Organizations (ACO) and Patient-Centered Medical Homes (PCMH) were created to promote coordination and collaboration. Providers are exploring reorganizations of staff and workflows and actively seeking technology solutions that can effectively analyze, track and report on quality measures.

These emerging technology solutions are called Population Health Management Systems. The healthcare marketplace is hoping that by successfully implementing Population Health Management technology they will be able to meet and improve quality measure performance. However, in order for Population Health Management solutions to truly be effective, several components must seamlessly work together – including the patient. Getting patients more engaged in their healthcare has become a top priority for providers across the country because it is proving to be essential to improve their quality of healthcare.

Unfortunately, patient engagement has been viewed as a weak link in the healthcare industry until President Obama's policies made it an industry priority. The Center for Advancing Health defines patient engagement, as "actions individuals must take to obtain the greatest benefit from the health care services available to them." [1] In order for a Population Health Management program to succeed, patient engagement must be front and center in a provider's priorities. Studies prove that patient engagement creates positive outcomes such as improved patient health and reduced cost. [2] Involving patients in their care transforms patients from passive recipients of treatment into collaborators in their own health. The evidence for this is mounting: healthcare organizations are seeing readmission reductions; a decrease in costly interventions; increased appointment attendance; higher numbers of patients receiving health screenings; and other indicators of improved interest in preventive care and wellness when patients are actively engaged. But to really reap the benefits of engaged patients, healthcare providers must have a viable and functioning strategy for facilitating, maintaining and improving effective patient engagement through the impactful use and dissemination of health literacy information; the usage of effective and automated outreach methods; and open communication between patients and care teams.

Time and time again, obstacles to effective patient engagement are shown to be an issue of patient access. Whether patients have been unable to make use of health information, talk to their provider, speak the language of their provider or even get to their appointments all

affects patient access. Improving the effectiveness of patient engagement tools to reach patients with access difficulties improves patient access, and can make successful patient engagement possible.

Patient engagement is ultimately the final piece in the ongoing mission to improve the quality of care because it brings the focus to patient health, and patient responsibility. Recent changes in legislation have put preventive care in the spotlight and, as studies have shown, the foundation of preventive care is a better-informed and engaged patient who takes an active role in the improvement of their health. Now seen as the precursor to high quality care, lower costs and better health [3], providers looking to improve health outcomes need to embrace patient engagement and the tools necessary to implement it.

Stumbling Blocks to Patient Engagement

A number of barriers must be addressed and overcome in order to achieve effective patient engagement. As in other areas of healthcare, issues are manifested across the continuum of care. A few examples of these obstacles include, but are not limited to; lack of health literacy, limited access to quality care and a high cost of care — particularly for uninsured or underinsured patients. Moving beyond these hurdles requires a multi-tiered approach. Studies show that there is not one magic tool that can bridge the care gap. Rather, approaching difficult-to-reach patients through holistic, inclusive strategies that address the individual needs of a person are required to ensure that patients receive the care they need.

Under-Informed Patients

The lack of access to information about potential treatments and other health information continues to be a serious problem. Under-informed and uninformed patients are more likely to be uninsured or underinsured, and are most likely to miss or skip appointments, or fail to reschedule them.

As patient-centric care and active patient decision-making becomes the new normal, a patient's ability to process and understand the health information conveyed is a vital component in their effective care. An under-informed or uninformed patient is more likely to avoid or not understand preventive measures; live with chronic conditions and be less likely to successfully manage those conditions. [4-5]

Access to Care

The lack of access to quality care is prevalent nationwide. Even though recent health reforms aim to decrease the number of under-insured and uninsured Americans, many patients still find themselves without health insurance. Moreover, patients with a primary care provider often find themselves unable to schedule an appointment in a timely fashion due to either a lack of staffing or an overloaded schedule. These factors all hinder efforts to engage patients in their care. Patients may not need to physically see a provider for every health issue, but giving patients an opportunity to regularly connect with care providers regarding their health allows them to more readily, and successfully, receive information and seek care when they need it.

Dr. Adrian Zai, Clinical Director of Population Informatics at the Massachusetts General Hospital's Laboratory of Computer Science, explains that engaging patients through increased outreach is not only crucial, but that it needs to escalate in order to improve outcomes.

“If you have 50 percent of patients due for a mammogram who did not get them, you can send a letter as a reminder. That can move the outcome from 50 to 60 percent. But that’s not the end. Now you need to find a new way to reach out and further close the gap. That could be case management. So, an effective Population Health Management system would alert a case manager to reach out and contact the patients by phone. Maybe you get another 10 percent, which brings you to 70 percent. What about the 30 percent that are left? Those are patients who might be lacking transportation or face a language barrier. So that would require reaching out with the appropriate language skills or providing transportation services. A Population Health Management system needs to scale over time with multiple interventions and refined approaches in order to really achieve best results.”

Providing patients with regular access to health information and convenient access to members of their care team are two integral components of effective outreach and patient engagement. Over time, the ultimate goal would be for patients to actively participate and maintain their own health as a way of life.

Cost of Care

Along with improving patient care, the cost of healthcare remains an ever-present concern and access deterrent. Documented in numerous medical journals and publications, the cost of healthcare is increasing at alarming rates. Approximately \$2.9 trillion was spent on healthcare in the United States alone in 2016[6]. Further complicating matters is the out-of-pocket cost to patients. A patient without health insurance is less likely to seek healthcare services as a way to eliminate the costs associated with care, which often translates to under-insured or uninsured patients suffering from chronic conditions. The shift to preventive care and the adoption of patient engagement tools may mitigate the costly care for many ailments and diseases.

Patient Engagement Challenges for Providers

Far too often primary care providers lament about the lack of time they have to actually see patients due to overfull schedules; overly burdensome and time consuming paperwork; or inefficient, disparate technology systems, such as an EHR that doesn't work with the billing system. In order to better manage patients and implement effective patient engagement, providers need to remediate the issues that have consistently plagued them and hindered their successes, such as; not having enough time; a lack of a “team-focused” care team; and access to the right tools.

Not Enough Time

Providers feel rushed during appointments and over-worked due to required documentation for follow-ups, referrals and billing. When physicians feel overworked, they focus on the most pressing component of their work. Due to liability and governance reasons, correctly processing paperwork may take priority. This does not give them the

time they need to build relationships with patients or spend time problem solving with care teams. As a result, implementing shared decision-making — the foundation of patient engagement — is compromised.[7]

Lack of “Team-Focused” Care Team

A team-based care model allows for all members to work to the top of their licensure, while the current system requires that care team members spend countless hours attempting to contact patients to remind them of upcoming appointments or tests. Robust technology management tools reduce the time spent hunting for files, looking up numbers or deciphering which patients to call. Effective Population Health Management solutions employ patient engagement tools that positively impact every member of the care team — allowing them to focus on what they each were trained to do. In addition, when algorithms and analytics are applied, at-risk patients can automatically be flagged, alleviating the burden of manually determining which patients to call. This is about working smarter, not harder, and leveraging the oceans of data that most providers have available to them.

The Pressing Need For the Right Tools

Improved patient engagement tools are creating easy access for patients to actively participate and collaborate in their own care. Many engagement tools are taking it one step further and offering motivational incentives to participate, such as a point system that offers rewards and prizes for preventive measures that are taken. Patient engagement tools can deepen the connection between both care teams and patients, and patients and their own health. Patients feel that their health decisions matter and their primary care physician and care team are directly involved in their care — both essential elements to creating a sense of accountability and personal responsibility necessary in a preventive care model.

In the team-based care models, care team members become more accountable for patient health.[9] Through the use of patient engagement tools, especially automated ones, care teams are freed up to engage with patients requiring or desiring a higher touch. Alleviating some of providers’ time constraints provides opportunities for increased contact and improved relationships. More time to focus on providing care can be motivation for care teams to increase face-time and interaction, resulting in improved relationships and better health outcomes.

Effective Population Health Management initiatives employ health IT tools to identify and track defined populations for interventions. As population health initiatives evolve and begin to not only manage the care of defined populations but also become responsible for their outcomes — effective patient engagement becomes even more important. As a result, this new incentive-driven, quality care delivery model is greatly affected by patient behavior.

For example, improving quality measures within defined populations; increasing the number of health screenings; improving attendance for appointments and check-ups, are all at some level dependent on patient behavior.[10] This enhanced patient awareness,

connectivity and education, takes precedence over the costly intervention model and empowers patients to have an impact on their own health.

Population Health IT solutions can help facilitate patient engagement by providing tools for interfacing between care teams and patients; allowing patients opportunities to be engaged in their care before, during and after their medical visit, which ultimately improves relationships between care teams and patients.

Improving patient engagement must include the four following tools:

1. Automated Outreach
2. Health Literacy
3. Population Analytics
4. Risk Stratification

Automated Outreach

An effective Population Health Management solution will engage patients and care teams prior to, during and after the patient's medical appointments. Automating outreach has proven to be beneficial in making this happen with minimal work by the care team. A first step in automated patient engagement is allowing the patients to personally schedule their own appointment via a patient portal. Instead of waiting to receive a call from the practice, the patient now takes ownership by scheduling the necessary appointments directly with their provider through online tools. Appointment scheduling should allow patients flexibility to cancel and reschedule their appointments rather than simply missing them. This "first step" initiates patient empowerment, increases workflow efficiency and benefits healthcare organizations' aim to decrease gaps in care.[11]

Addressing gaps in care via automated outreach is one of the simplest, yet most effective ways to improve patient engagement. Many patients miss their appointments simply because they forgot, and far too often, patients who either do not schedule or do not show up for scheduled appointments suffer from poor health as a result.

Automated outreach reduces forgetfulness by automatically reminding patients of upcoming appointments and providing them easy access to adjust appointments online if their schedule has changed. This automated reminder reduces costly "no-shows" and saves valuable staff time. Also, by automating processes through the use of dashboards and reminders, outreach attempts are documented and tracked, allowing providers to clearly see what attempts were made, by whom, and whether or not those attempts were successful in bringing patients in the door or ensuring that they keep up to date with screenings or medications. This fosters a cycle of continuous improvement.

The provider-to-patient relationship remains a vital component of care, because it is a relationship that can be leveraged to improve patient engagement and care delivery. A provider has tremendous influence on motivating patients to become more engaged in their care. The care provider can encourage patients to read educational material and be available to discuss this material with them in person or through the patient portal. When patients receive their automated updates and reminders, they are more likely to engage

and respond to them.

The importance of the acknowledgment and promotion of these tools from providers to patients cannot be overstated. When providers explain future outreach to the patient at the onset, it immediately becomes more influential. Even though the outreach is automated, patients associate it directly with their provider. It is still communication from the provider, not a machine. Instead of ignoring a reminder, they are more likely to respond, improving overall patient compliance and improved health outcomes.

Automated outreach is not intended to replace person-to-person interaction, but rather, acts as a powerful supplement to interaction. By delivering some messages electronically, such as medication refills, lab results reviews and appointment summary reviews, workflows can be more efficient and physicians and care teams are freed up to interact with patients.

The patients who appreciate being able to speak with a familiar care team member will actually be more likely to do so. Automated outreach enables care providers the time to communicate with these identified patients who may not be easy to reach, speak other languages, or require special attention. It makes the provider's ultimate task, that of treating patients and improving patient health, that much easier.

Health Literacy

Low health literacy has been shown to be an obstacle to effective patient engagement. The more patients know about their condition, the more confident they become and the more likely they are to engage in their care. But choosing the appropriate patient education materials requires more planning than simply handing patients a packet of information. To be more effective, providers should produce a variety of education materials and facilitate a variety of ways for patients to access these materials.

Evaluating the level of literacy so that level appropriate materials are provided is critical, as is meeting the patient where they are in terms of their fluency with technology matters. The more a provider or healthcare organization is able to hone in on effective health literacy materials and the most effective means of delivering those materials to their patient population, the more patients' knowledge-base, behavior, adherence and health will improve.

Population Analytics

Robust population analytics tools aggregate data to analyze the behavior of patients and then automatically organize and flag the patients by risk category and steps which create greater opportunities for meaningful patient engagement and optimized clinical care. Population analytics enhance Population Health Management solutions by understanding the identified population, health trends and patterns to inform interventions and models for engagement. Population analytics can positively impact the care of patients and reduce costs of interventions. Advanced population analytics that are predictive and prescriptive are most useful for analyzing patient population data, allowing for informed, data-driven

decisions that can affect improved patient care, patient outcomes and organizational governance.

While traditional analytics deal primarily with risk, advanced population analytics can provide the predictive analysis algorithms and behavior risk patterns that create opportunities to directly target populations and improve patient engagement. For example, within a defined population, predictive analytics may demonstrate a pattern in a population subset of whom may become “high risk,” like continued progression of a disease state or missing appointments. These high-risk factors can increase the cost of treating patients. Using analytics to identify these at-risk patients allows for preemptive intervention to avoid poor outcomes and increased cost.

At-risk patients are flagged and care managers are automatically notified to take actions in order to reduce this risk. For example, care managers are reminded that they should not solely rely on the automated notifications to remind these at-risk patients of upcoming appointments because they now require increased engagement. Instead, care managers receive reminders from the system to reach out to the at-risk patients who need the human connection to ensure that they follow-up on screenings or appointments. It is far better to predict and prevent than to identify and remediate.

Two significant care delivery features that contribute to the reduction of at-risk patients are patient coaching and care coordination — both effectively engage the patient in their care. TopCare™, a Population Health Management solution jointly developed by Massachusetts General Hospital’s Laboratory of Computer Science and SRG Technology (a cutting-edge software solutions company), uses advanced data analytic tools to give care managers the insight they need to actively reduce risk. By automatically identifying patients with a history of missed screenings or appointments, patients are flagged, care teams notified and actions are taken to improve care and reduce cost. As a result of these analytics tools, TopCare has seen the reduction in the number of missed screenings and appointments by nearly 10 percent. The future of large-scale improvement of population health lies with the unlimited potential of advanced population analytics and all of its possibilities. Monitoring and stratification of patient populations is one Population Health Management method used to improve health outcomes. Forecasting patient health risk and prioritizing interventions can mitigate adverse outcomes. Patient populations can be stratified into subgroups for further refinement of interventions. While there are many appropriately tiered and complex models, there are three main risk stratification levels, which commonly guide patient engagement:

Risk Stratification

Alternatively, a “risk score” can be used to identify the level of risk as opposed to a high/medium/low risk scale. According to defined criteria and/or algorithms created for risk stratification, Population Health IT tools are able to monitor various populations and identify those in danger of elevating risk levels. Risk stratification enables care teams to prioritize the higher risk population for their varying needs and allows providers to keep a close watch on lower risk patients to prevent their level from escalating. To avoid patients at low risk moving to medium or high risk, the patients must be fully engaged with their

care team, which allows opportunity for interventions to be identified early. Since patients at higher risk levels require more health services and costlier treatment, maximizing the number of patients at low risk is a win-win for patients and providers: healthier patients, cost savings for providers. Therefore, maintaining different levels of engagement with low, medium, and high-risk groups through population management tools simply makes sense.

Conclusion

Recent health reforms have stressed the importance of improving care quality while reducing costs. Population Health Management programs strive to achieve these reform goals by improving health outcomes via improved patient engagement, which requires solutions to obstacles experienced across the continuum of care, such as low health literacy, access to care, and risk stratification. Recent paradigm shifts in healthcare have led to a new generation of health IT tools created for improved patient engagement and better healthcare organization management, such as TopCare. Healthcare organizations must include patients as part of their care-team, while also embracing the Population Health Management technology tools now available. All of these strategies make it easier for patients to engage in their care and achieve the goal of improving their health while providers improve the health and viability of their healthcare organizations.

References

1. Wilkins, Stephen. "Patient Engagement & the Primary Care Physician: The Quest for the Holy Grail." Smart Health Messaging. 2012.
2. IOM (Institute of Medicine). "Partnering with patients to drive shared decisions, better value, and care improvement: Workshop proceedings." Washington, DC. The National Academies Press. 2013.
3. Scott TL; Gazmararian JA; Williams MV; Baker DW. "Health literacy and preventive health care use among Medicare enrollees in a managed care organization." Medical Care. 40(5): 395-404.2002.
4. Schillinger, D; Grumbach, K; Piette, J; Wang, F; Osmond, D; Daher, C; Palacios, J; Sullivan, G; Bindman, AB. "Association of Health Literacy with Diabetes Outcomes." Journal of the American Medical Association. 288(4): 475-482. 2002.
5. National Health Expenditure Accounts: Methodology Paper, Definitions, Sources, and Methods. 2013. <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trendsand-Reports/NationalHealthExpendData/Downloads/DSM-13.pdf>
6. Goold, SD; Lipkin, M. "The Doctor–Patient Relationship: Challenges, Opportunities, and Strategies." Journal of General Internal Medicine. 1999;14(Suppl 1):S26-S33. doi:10.1046/j.1525-1497.1999.00267.x.
7. Carman, Kristin L.; Dardess, Pam; Maurer, Maureen; Sofaer, Shosanna; Adams, Karen; Bechtel, Christine; and Sweeney, Jennifer. "Patient and Family Engagement: A Framework For Understanding the Elements and Developing Interventions and Policies." Health Affairs, vol. 32 no. 2 223-231. February, 2013.
8. Atlas, Steven. "Population-based breast cancer screening in a primary care network." Am J Managed Care. 2012;18(12):821-829. December, 2012.
9. Kocot, S. Lawrence. "Why Patient Engagement is Key to Improving Health, Reducing Costs." The Brookings Institute. 2014. <http://www.brookings.edu/blogs/up-front/posts/2014/11/10-patient-engagement-accountable-care>.
10. Hoversten, Shanna. "A Consumer Driven Culture of Health: The Path to Sustainability and Growth." Deloitte University Press. 2012. <http://dupress.com/articles/future-of-us-health-care/>
11. Persaud, David. "Creating a Culture of Accountability in Healthcare." The Health Care Manager. April/June 2009 Volume 28 Number 2 Pages 124 - 133 <http://www.nursingcenter.com/static?pageid=935642>