This is the second in a three-part series of issues briefs on patient engagement. The first issue brief focused on how healthcare organizations (HCOs) can advance a business and clinical case for engagement. This issue brief zeroes in on how HCOs can implement engagement strategies by following a multi-step process. The third issue brief will cover how HCOs can develop and sustain interprofessional teams that plan, implement, monitor, evaluate and enhance HCOs’ education, engagement and empowerment initiatives. For more information on patient engagement solutions, visit elsevierpatientengagement.com.

The healthcare industry is dominated by buzzwords – ICU bounce back, BYOD breach, infomediation, population health management, patient portals, and interoperability. Engagement is an equally exotic and ambiguous term that often confuses providers, payers, associations and government agencies committed to developing more savvy, involved healthcare consumers.

The reality: Engagement, which begins with education and ideally closes with empowerment, is both a discipline and a process. Following are major action steps HCOs must take in their quest to ensure patient and consumer education, engagement and empowerment:

**Identify top engagement prospects.**
Not every patient/consumer qualifies as a realistic prospect for education, engagement and empowerment. HCOs must zero in on current and prospective patients and consumers intrigued by the concept of health ownership and the process of health education, learning and information sharing.

Among the areas recommended by Dr. Peter Edelstein, Chief Medical Officer, Elsevier Clinical Solutions, for screening candidates for education and engagement through electronic, print and face-to-face channels are the following:
- Level of personal responsibility and accountability
- Commitment to learning
- Willingness to take action
- Long-term investment in personal, family and community change.

About Peter Edelstein, MD, FACS, FASCRS
Peter Edelstein, MD, is the Chief Medical Officer at Elsevier. Edelstein is board certified by the American College of Surgeons and the American Society of Colon and Rectal Surgery. He has more than 35 years of experience practicing medicine and in healthcare administration.

Edelstein was in private practice for several years before serving on the surgical faculty at Stanford University, where he focused on gastrointestinal, oncologic and trauma surgery. He then spent more than a decade as an executive in the Silicon Valley medical device industry. Edelstein’s most recent role was as Chief Medical Officer for the healthcare business at LexisNexis Risk Solutions, a Reed Elsevier company. He is also the author of the recently published book, ‘Own Your Cancer: A Take-Charge Guide for the Recently Diagnosed & Those Who Love Them’. 
“Healthcare providers, payers, vendors and government agencies must acknowledge the spectrum of possible patient and consumer education engagement,” says Dr. Edelstein. “Operating on the assumption that all patients and consumers think, feel and act the same wastes time and scarce financial and human resources.”

The education, engagement and empowerment of patients and consumers is a disciplined process and journey, not a simple target or destination. Dr. Edelstein is convinced that HCOs that aspire to inform, educate, counsel and empower patients and consumers across the life cycle must choose their battles and targets carefully.

Edelstein sees the strongest opportunities for education, engagement and empowerment in conditions and diseases with the least favorable outcomes: asthma, stroke, cancer, chronic obstructive pulmonary disease (COPD), diabetes, heart disease, obesity and tobacco use. The issue is simple: How can HCOs mobilize education and engagement strategies, tactics and technologies to improve outcomes, enhance cost efficiencies and facilitate empowerment and behavior change?

Assess the capacity of health information technology (HIT) systems to fulfill education and engagement goals.

Sonika Mathur, Senior Vice President, Patient Engagement, Elsevier Clinical Solutions, suggests that HCOs invest in technologies that match the criteria suggested in the following questions:

• Is the patient data collection platform integrated into the electronic health record (EHR)?
• Can the HCO create, manage, edit and integrate surveys, forms and questionnaires across the enterprise?
• Is the HCO able to customize data collection tools and view results in real time?
• How does technology help the HCO collect more accurate, specific information about patients, including social determinants of health?
• Does the information collected help the HCO make more timely, accurate evidence-based decisions that could improve outcomes and reduce costs?

Among the most vital engagement tasks is risk stratification, the process of separating patients into high-risk, low-risk, and rising risk categories based on claims data and a patient’s health status or severity of illness.

“HCOs that seek to revamp cost structures and boost outcomes must intervene in the lives of high-risk, high-cost patients who demand proactive management,” says Mathur. That, in turn, means tapping HIT to generate information, education and advice that matches the “five rights” criteria:
• Right patient
• Right time, or teachable moment
• Right information, for the education, engagement, or empowerment intervention
• Right format, channel, medium or technology
• Right reasons

Zero in on barriers.
Once HCOs hone in on top engagement prospects, they can identify barriers and roadblocks to education, engagement and empowerment – from health and numeric literacy, language and education, to financial resources, family support, culture and age, advises Mathur.

A 69-year sleep apnea patient, for example, may realize that he should take medication at least once daily. However, he fails to comply due to multiple factors – from the medication’s hefty price or an illegible prescription label, to his belief that the medication has failed to improve his health and quality of life.

Consider seniors. They may lack easy access to computers and mobile devices. Plus, they may have grown up in a time when questioning physicians was viewed as rude or insolent. In the same way, immigrants are sometimes coached not to challenge healthcare authority figures, including physicians, nurses and allied health professionals.

HCOs also underestimate the impact of illiteracy, including health illiteracy. Thirty-six million adults fail to read better than the average third grader, according to ProLiteracy. Meanwhile, health literacy, defined by the federal government as “the capacity to obtain, process and understand basic health information and services needed to make appropriate health decisions,” is lacking.

Only 18 percent of adults are rated as “proficient” in health literacy, according to a 2015 survey of 1,000 adults from iTriage. Seventeen percent of those surveyed score “below basic,” the lowest level of health literacy, while the remainder of adults are rated as “basic” (29 percent) or “intermediate” (36 percent).

Low health literacy translates into more hospitalizations and readmissions, lack of medication compliance, higher mortality rates and an inability to engage in prevention and self-care. The cost of poor health literacy to the American economy is staggering – between $106 and $238 billion annually, according to researchers from George Washington University.

Organizational barriers also stymie patient and consumer engagement. “Competing priorities” was the most frequently cited barrier in a survey of U.S. hospitals, according to BMJ Quality and Safety. Other barriers included time needed for rounds and shift changes and financial support for patient engagement.

“Operating on the assumption that all patients and consumers think, feel and act the same wastes time and scarce financial and human resources.”

- Dr. Peter Edelstein
The vast majority of the activities that influence healthcare outcomes, utilization and cost do not occur in front of a physician.

Go one-on-one to introduce the benefits and process of engagement, education and empowerment.

Engagement is most likely to succeed if HCOs introduce the concepts of ownership, engagement, education and empowerment via one-on-one and face-to-face interactions, says Edelstein.

He’s convinced the best professionals to advance the case for patient and consumer engagement are not primary care or specialist physicians, but registered nurses, advanced practice nurses (APNs), nurse practitioners (NPs), social workers, care managers and new and emerging patient navigators.

Unlike the majority of physicians, these professionals typically receive in-depth training in patient education and engagement, spend extensive time at the bedsides of patients, and interact regularly with family members and caregivers, according to the Nursing Alliance for Quality Care (NAQC).

Before HCOs begin to hand out printed brochures or dispense well-meaning advice, Mathur advises them to promote the rewards and benefits of good health and personal health ownership. Stated another way, HCOs must make the case for using a seat belt or child safety seat before they hand over a recommended device or piece of equipment.

Making the case for engagement is a first step toward initiating a dialogue on attitudes, beliefs and values – what some experts describe as mindset. Among the issues Mathur advises HCOs to probe are the following:

• How do you feel about getting more involved in your health?
• How do you think getting more involved in your health and healthcare would benefit you and your family?
• Do you have any reservations about getting more involved? What do you see as some of the barriers or roadblocks that you’ll need to overcome?
• Where do you think you’d like to get started? Is there one particular area of your health or healthcare that you’d like to focus on?

At this point, professionals like nurses can begin to share information, education and advice that complements the education, language, literacy levels and social determinants of the patient or consumer. However, HCOs must also accept the limitations inherent in well-intentioned provider-patient interactions.
“Patient engagement and population health management are pathways within the journey toward the type of value-based, accountable care that controls cost and improves outcomes,” says Mathur. “And yet, there are limits to what healthcare professionals can do to transform the attitudes, beliefs, values and actions of patients and consumers.”

While HCOs may be able to control interventions that occur within the expanding continuum of care, they have little control over the information, education and advice disseminated within an ecosystem that envelopes and influences patients, family members and consumers on a daily basis. The evidence is startling. The vast majority of the activities that influence healthcare outcomes, utilization and cost do not occur in front of a physician.

Mathur believes that HCOs – from hospitals, health systems, and physician groups, to pharmacies, medical spas and assisted living facilities – must try to influence the actions of patients, family members and consumers at routine decision points like the following:

- Sleep: Rise after four hours of deep sleep
- Diet: Skip breakfast and grab a first cigarette
- Diet: Order a morning coffee and doughnut at a local chain
- Safety: Drive to work over the speed limit and without a seat belt
- Stress: Argue with co-workers
- Diet: Order a hamburger with double fries for lunch
- Alcohol: Grab a martini during a mid-afternoon break
- Stress: Argue with the boss
- Alcohol: Grab a few beers after a 14-hour workday
- Stress: Argue with spouse and children
- Diet: Eat an 1,800 calorie prime rib dinner
- Exercise: Watch ESPN for four hours
- Sleep: Retire at 2:00 am
- Wake up and start the cycle over again.

“Neither the hospital, health system, medical group nor other entities along the care continuum can assume complete responsibility for dangerous food choices, reckless driving, misuse of alcohol and cancelled visits to the health club or physical therapist,” says Mathur. “Only through engagement, education and empowerment that extends across the care continuum can HCOs ensure that they send the right and most relevant information to the right patient via the right format, channel, medium or technology at the right time or teachable moment.”

Design and choose solutions appropriate to the patient or consumer; provide patients and consumers with form, channel, media or technology options.

Patients, consumers and healthcare professionals tend to accept and rely on the same trusted clinical content, but differ in how they want the content delivered, according to Mathur. Some want standard print communications, while others prefer e-mail communications they can download on a personal computer. And still others desire alerts, reminders and bits of advice delivered via a mobile device.

“HCOs can no longer afford invest-and-run approaches to engagement technology. Just because patients and consumers access a portal doesn’t mean that portals lead to short-term action and long-term behavior change.”

- Sonika Mathur
Solutions, says Edelstein, can range from personal health records, patient portals, health apps and automated alerts and reminders, to social media, wearable devices and fitness trackers, as well as more traditional tools like printed fact sheets, brochures, diaries, logs, posters and wallet cards.

However, HCOs can no longer assume that just because Millennials use mobile devices, entire patient populations are equally enamored with emerging technologies. Instead, HCOs must offer options—from traditional print, direct mail and broadcast communications, to Web sites, mobile devices and patient portals.

Equally important, HCOs can no longer afford invest-and-run approaches to engagement technology. Portals, for example, are no more than portals, says Mathur. Just because patients and consumers access a portal doesn’t mean that portals lead to short-term action and long-term behavior change.

Changing the behavior of patients and consumers demands that providers mobilize the power of caregivers, family members and the entire healthcare and lifestyle ecosystem, according to Mathur. She believes that patients and consumers need and deserve the following:

- Professionals who are willing to explain the rationale and benefits of engagement, education and empowerment
- Availability of the highest quality clinical content – abbreviated, simplified and made understandable to patients and consumers
- Access to formats, channels, media and technologies that fit patient and consumer profiles and preferences

**Example:** *If HCOs can identify heart failure patients who are at high risk for hospital readmissions, they can deliver the right information, education and advice to the patient and family at the right time through the right or most appropriate format, channel, medium or technology.*

While some heart failure patients may prefer 10-page scientific studies and reports, others learn most from short, practical videos, explaining how, for example, they should reorganize their living space to prepare for a return home after surgery. Such a video might suggest that patients move items from the top shelves of kitchen cabinets to avoid breaking their sutures, which could lead to a return trip to the hospital.

Patients and consumers also rarely seek information, insight and advice at the same points in the care process. Among the varied preferences for education and engagement suggested by Mathur are the following:

- **Barbara** wants to read an overview of pancreatic cancer.
- **Katie** wants to prevent heart disease, a condition within her immediate family.
- **Juan** seeks the latest headlines on asthma.
- **Emma** wants to check out the symptoms of chronic fatigue syndrome.
- **Chris** wants to discuss his psoriasis with other patients.
- **Logan** wants information on diagnostic tests for sleep apnea.
- **Devon** wants to review medications for depression.
- **Ryan’s sister** wants to help him recover from prostate cancer surgery.
The ideal scenario for education and engagement incorporates the following advice from Mathur and Dr. Edelstein:

- **Track the journey:** “Deliver engagement, education and empowerment no matter where the patient, family member or consumer stands in the healthcare journey,” advises Mathur. This includes information gathering, knowledge sharing and decision making on prevention, symptoms and diagnostic testing, treatment, recovery and self-care.

- **Embrace the continuum:** “Provide information across every continuum of care setting and beyond — in homes, automobiles, workplaces and other environments where individuals and families are willing to access, assimilate and act upon healthcare content,” says Edelstein.

- **Make it personal:** Customize and personalize the healthcare information and knowledge sharing experience, making adjustments to factors like co-morbidities, health literacy and numeracy, education, ethnicity, culture and other social determinants of health as defined by the Institute of Medicine.

Mathur also advises HCOs to blend information, education and advice with follow-up appointments that ensure the patient and family members understand why and how to take medications or how they should adjust lifestyle—diet, exercise, stress and work. With the appropriate technologies, providers can even predict if a patient’s rising risk index is triggered by factors like weight gain, stress, medication non-compliance or changes in diet.

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### The Process of Education, Engagement and Empowerment

- Identify top candidates for patient or consumer engagement.
- Evaluate the education and engagement capacity of HIT systems.
- Pinpoint barriers and roadblocks to education and engagement.
- Go one-on-one to promote the concepts of education, engagement and empowerment.
- Develop education and engagement solutions personalized and customized to the patient or consumer.
- Empower the patient or consumer to take charge and become an architect of personal health and healthcare.
- Select education and engagement solutions with care, paying special attention to analytics and content management.
- Develop a culture that supports education, engagement and empowerment.
- Probe the results and outcomes of education and engagement. How, for example, does engagement increase the value of healthcare?

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No patient or consumer is an island, which is why HCOs must engage family members, caregivers and others with an emotional investment in the health and wellbeing of the patient or consumer.

“A spouse, long-term partner, parent, child, sibling or close friend is more committed to the patient or consumer than a fitness instructor, nutritionist, or other professional along the expanding continuum of care,” says Dr. Edelstein.
In an ideal scenario, HCOs must view patients and consumers not as diabetics, asthmatics, cancer survivors or stroke victims, but as unique individuals shaped by the complex social determinants of health as identified in HealthyPeople 2020. Among them are the following:

- Availability of resources to meet daily needs (e.g. safe housing and local food markets)
- Access to educational, economic and job opportunities
- Access to healthcare services
- Quality of education and job training

The choice of patient engagement solutions varies with social determinants and more traditional demographic variables like ethnicity, age, gender, language, religion, income and education. Younger patients and consumers, for example, may depend on social media and the Internet for news and information on everything from politics, entertainment and business, to science, technology and health.

Tips for Education, Engagement and Empowerment Success

Patients, family members, caregivers and consumers will understand and take charge of their health and healthcare across the care continuum and throughout the lifecycle if HCOs adhere to the following advice from Elsevier Clinical Solutions' Peter Edelstein, MD, and Sonika Mathur:

- Engage across the continuum: Integrate engagement, education and empowerment initiatives into the expanding continuum of care – from hospitals, physician practices, and imaging centers, to home care, pharmacies, hospice and long-term care facilities.
- Tap into health and lifestyle ecosystems: “Pursue education, engagement and empowerment via the complex ecosystems that shape the health and lifestyle choices of patients, families and consumers,” says Mathur.
- Engage and align clinicians: Mobilize clinicians—physicians, nurses and allied health professionals—to engage, educate and empower patients, families and consumers. The best results are likely to come via interprofessional, collaborative teams.
- Secure support: Use the support networks (family, caretakers) of patients and consumers to accelerate the process of education, engagement and empowerment.
- Rely on outside expertise: “Seek consultants and vendors with a commitment and track record for providing the right information in the right format at the right time or teachable moment to the right patient,” says Edelstein.
Invest in technologies that support education, engagement and empowerment.

Rather than chasing after quick wins, HCOs must make sustained, long-term investments in patient and consumer education and engagement, says Edelstein. Part of that investment involves technology that supports HCOs in their quest to control costs, coordinate care and improve the health of individuals and populations.

“When blended with evidence-based medical content, predictive analytics and data mining solutions improve performance and patient care and support quality and cost improvement,” says Edelstein. “Patients and consumers invariably become more inspired and motivated to participate in their own care and the care of family members.”

Through technology, HCOs may learn that while some patients and consumers experience better outcomes via simple, low-cost e-mail campaigns, those with poor outcomes may need more highly personalized face-to-face approaches to engagement, education and empowerment.

The key is avoiding investment in one-size fits-all patient and consumer engagement solutions. For example, although portals are popular among hospitals and health systems, they sometimes fall short in engaging patients and consumers, according to a 2015 survey from HIMSS Analytics and InterSystems.

Equally challenging is relying on multiple vendors for patient data collection, risk stratification and content development and dissemination. Patients and consumers, for example, may access information and education that contains conflicting evidence and advice. That, in turn, could create problems in care coordination and quality.

Mathur advises HCOs to use a two-pronged approach:

- Consider obtaining education, engagement and empowerment solutions from a single qualified vendor with a strong track record of performance in comparable HCOs.
- Evaluate education, engagement and empowerment solutions based on multiple content variables, including timeliness, authoritativeness, accuracy, consistency, bias, practicality and ease of understanding.

Among the patient and consumer preferences Mathur identifies as vital to education and empowerment are the following:

- Health information anchored in the same clinical evidence clinicians rely on to make evidence-based diagnostic and treatment decisions.
- Accurate, easy to understand content on hundreds, if not thousands of healthcare topics and issues.
- Information and insight that comes not from a healthcare mega site but from a local hospital, health system, medical group, or personal physician.
No patient is an island, which is why HCOs must engage family members, caregivers and others with an emotional investment in the health and wellbeing of the patient.

Other questions suggested by Mathur to review sources of patient-focused healthcare content are the following:

- **Content Scope:** Does the content run the gamut, addressing diseases, conditions, procedures, diagnoses, wellness and prevention?
- **Content Impact:** Does the content strengthen bonds and relationships between patients, consumers, clinicians and the HCO?
- **Content Access:** Are patients and consumers able to easily access content and conduct searches by health issue or topic, diagnosis, condition, lab test or medication?
- **Content Branding:** Can healthcare organizations brand and customize the clinical content?

Mathur is convinced that patients and consumers who seek healthcare are much like moviegoers; they rely on word-of-mouth for movie reactions, reviews and recommendations. When confronted with a healthcare decision, they turn to friends, work associates and family members with questions like the following:

- “Where do you think I should go for my surgery?”
- “Is she the best doctor around for this problem?”
- “Have you heard anything about this medication?”
- “What’s the benefit of traveling out-of-state to take care of this?”

Once patients and consumers secure input from close colleagues and associates, they typically turn to a primary care or specialist physician who’s willing to discuss trusted, evidence-based content on a disease or condition, diagnosis, treatment, preventive measure or self-care strategy.

The strongest engagement solutions allow patients and consumers to benefit from high level content that’s simplified and then shared with and through a physician, nurse or allied health provider,” says Mathur. “Only then do patients and consumers have the motivation to move beyond completion of an annual fitness assessment for a $14 incentive, to prevention, diagnosis and treatment of a serious chronic condition like heart failure, high blood pressure, obesity, COPD, asthma or diabetes.”

**Sustain a culture that supports education, engagement and empowerment.**

Technology enables patient and consumer engagement, education and empowerment. But engagement also calls for enterprise-wide shifts in attitudes, beliefs, values and culture, says Dr. Edelstein. Only then will patients and consumers appreciate the true value of taking charge of their health and healthcare.

A first step, says Mathur, is to connect engagement, education and empowerment to the work of interprofessional care teams, which typically include physicians, nurses, psychologists or social workers, dieticians, pharmacists, occupational, physical or respiratory therapists and friends and family.
“Education and engagement are far from self-service enterprises,” says Mathur. “While patients and consumers can easily access, assimilate and act upon information and education on their own, they’re far more likely to do so with the support and involvement of clinicians across the continuum of care.”

She believes that clinicians—from physicians, nurses and care coordinators, to dieticians, pharmacists and physical therapists—must understand the rationale for patient and consumer education and engagement, as well as its risks, rewards, potential results and available channels and media.

Equally important, care team members must learn how to access clinical content within the workflow so they can deliver the right information at the right time in the right format, channel or medium to the right patient.

As discussed in the second issue brief of this three-part series, resource allocation requires that executives and clinicians make a clinical and business case for education, engagement and empowerment based on the advantages, benefits, results and risks of already implemented programs. That, in turn, means promoting the notion that engagement programs generate a financial return on investment (ROI). Edelstein reminds clinical and business leaders to reinforce the following points:

• Patients and consumers who become engaged and remain engaged in their health and healthcare cost the healthcare system less than those who are disengaged.
• Engaged patients and consumers are less likely to be admitted or readmitted to inpatient facilities.
• Engaged patients and consumers pose fewer reimbursement challenges to providers and payers.
• Engaged patients and consumers who become their own best healthcare advocates and champions emerge as healthcare advocates and champions for family members and close friends.
• The final issue brief in this three-part issue brief series from Elsevier Clinical Solutions focuses on how to mobilize care team members to educate, engage and empower patients and consumers.

Heart Failure: Opportunity for Education, Engagement and Empowerment

Heart failure is a major healthcare challenge. About half of the people diagnosed with heart failure die within five years of diagnosis, according to the Centers for Disease Control and Prevention (CDC). Among Americans with chronic conditions like heart failure, 50 percent fail to take prescribed medications, leading to 125,000 preventable deaths per year and billions of dollars in waste, says the American Heart Association.

Engaging heart failure patients requires that providers steer clear of assumptions and identify barriers to compliance. Among the possible roadblocks as reported by patients are the following:

• Cost: “I can’t afford this medication. It’s too expensive” Or: “I can’t afford the medication, so I decided to cut the pills in half.”
• Perceived Benefit: “The medication didn’t seem to be helping me so I stopped.”
• Gossip: “One of my neighbors had bad side effects from this drug, so I decided not to take it anymore.”
• Over Confidence: “I feel fine. I only take a pill when I get shaky or start to feel bad.”
• Embarrassment: “I lost the bottle and was afraid to call you.”
All of these are legitimate patient concerns that create barriers to medication compliance. Rather than coming down hard on patients and consumers, HCOs can pose a series of probing questions that illuminate the nature and extent of barriers related to cost, convenience, ease of use and fear.

The HCO can then select from available engagement, education and empowerment solutions, choosing those that remove or minimize barriers to compliance and complement the patient’s education, background, lifestyle, language and literacy.