PART 6 — SUSTAINABLE PATIENT BEHAVIOR CHANGE (ENGAGEMENT)

PROVIDER SURVIVAL STRATEGIES IN AN AT-RISK ENVIRONMENT

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Provider Survival Strategies in an At-Risk Environment – Full Report
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In this compilation of a six-part series, A&M is focused on providing context for the actions deemed necessary by providers to succeed in an increasingly at-risk, value-based environment. All healthcare is local. Siloed activities now require convergent integration. Each provider needs to consider federal (Medicare) and state (Medicaid) reimbursement and regulatory initiatives, local market conditions such as demographics, socioeconomics, competitive intensity, market share and relative performance, and its own capabilities and risk profile.

https://www.alvarezandmarsal.com/insights/provider-survival-strategies-risk-environment

SUSTAINABLE PATIENT BEHAVIOR CHANGE (ENGAGEMENT)

Patient engagement has been defined "as a concept that combines a patient's knowledge, skills, ability, and willingness to manage his own health and care with interventions designed to increase activation and promote positive patient behavior."[7] Patient engagement is critical, as behavioral (lifestyle) patterns and social circumstances represent 40 percent and 15 percent, respectively, of the contributors to premature death.[8]

Patient engagement requires self-management and supportive provider and/or payer interventions. Patients (and their caregivers) are active participants in optimizing their own care, inclusive of changes in lifestyle, treatment (drug) adherence, condition monitoring and intervention.

Despite a theoretical understanding of behavioral change, the availability of remote monitoring and digital health tools, and growing recognition of the importance of self-management, many insurers, employers and providers have not been successful in increasing patient engagement. A study published by RAND Corporation highlighted disappointing results (or lack thereof) from a formal assessment of employer-based health and wellness programs.

Recognition of behavioral change as a complex process requires a fundamental paradigm shift in the provider approach to patient interaction from "push" to "pull." The change is particularly applicable to the 5–10 percent of patients accounting for 43–68 percent of costs. Unidirectional and infrequent contacts need to be replaced with bidirectional and frequent contacts focused on developing self- management and caregiver support skills. The availability of EMR consumer portals, combined with advent of digital media and enabling technology, facilitates the generation of a lower-cost "pull" approach to whole person care delivery. At least three to six months is required for effective behavior change, with another 6 to 18 months required for sustainability.

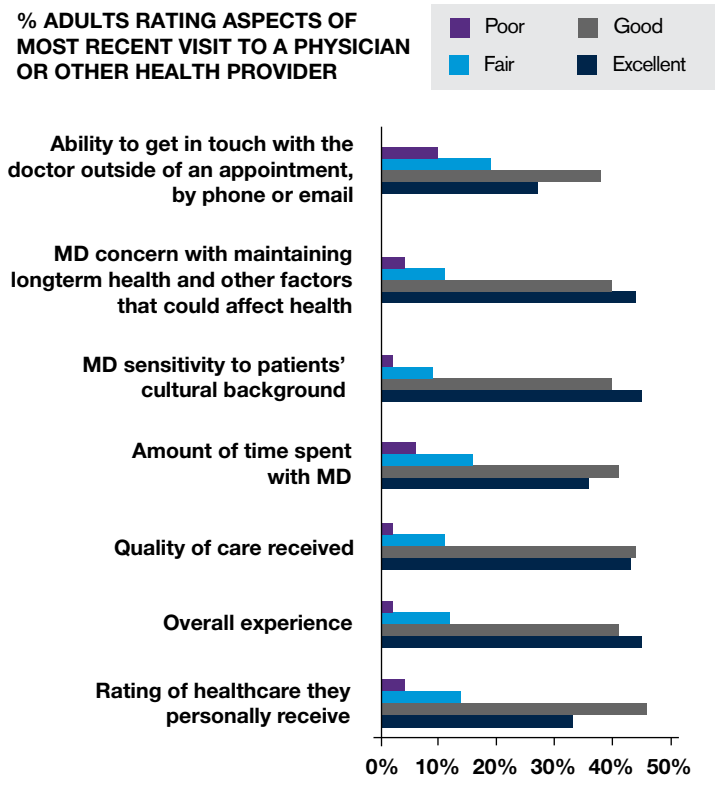
As Everett Koop, the former surgeon general, stated, "Drugs don't work in patients who don't take them."[9]

According to the AHRQ, "patient experience encompasses the *range of interactions* that patients have with the health care system, including their care from health plans, and from doctors, nurses, and staff in hospitals, physician practices, and other health care facilities. Satisfaction, on the other hand, is about whether a patient's *expectations* about a health encounter were met."[131] The majority of Americans rate their *personal experience of care* during their last physician (provider) visit as excellent or good.[132]

Americans also rate their hospital experience as positive, though at a lower rate of satisfaction than physician (provider) visits. Nurse communications appears to be more important than perceived medical quality in driving overall patient satisfaction (above a baseline threshold level).

However, from the overall healthcare system perspective, adults have a far less favorable impression of healthcare delivery, with only 38 percent having a good or excellent impression. During 2015–16, the perceived health status of state residents other than themselves appears to be declining at nearly two times the rate of those who appear to be improving. The cost of healthcare is a major problem for 52 percent of survey participants, with serious financial disruption for 26 percent.

FIGURE 86 | CONSUMER RATING OF PERSONAL CARE

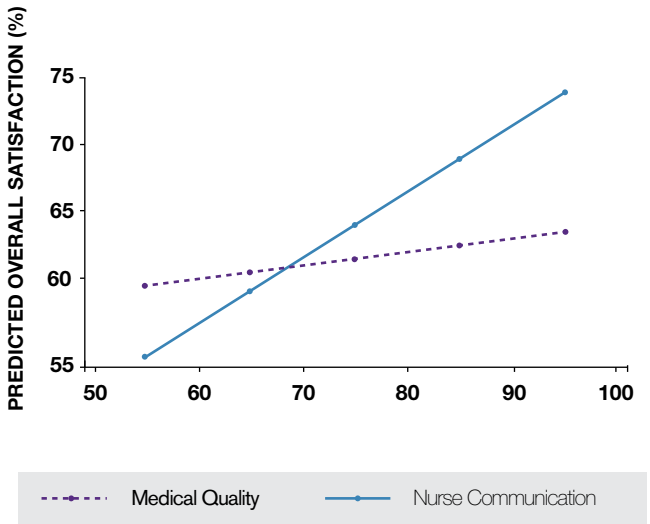


Reason(s) for being extremely or very satisfied	Determinants of Primary Care Satisfaction2
Customer service (42%)	Caring/Cares about me/my health Personable/Friendly/Good personality Patient/Takes sufficient time with me/ Doesn't rush you in and out Provides good/quality care Other positive customer service mentions
Communication (36%)	Listens to me/my concerns Takes time to talk with me/Explains situation/issues Answers questions Other positive communication mentions
Treatment (35%)	Addresses all my problems/needs Thorough/Takes time when examining me Good/Accurate diagnosing/treatment Other positive treatment mentions
General positive feelings (26%)	Good/Like doctor physician Good/Happy/Satisfied with experience Efficient/Good job Other positive mentions
Scheduling (17%)	Availability/Able to get appointment in timely manner Quick/Fast/Handles everything in timely manner Other positive scheduling mentions
Intelligence (12%)	Intelligent/Knowledgeable Professional Other positive intelligence mentions
Relationship (10%)	Have been with same doctor for long time Other positive relationship mentions

Source: Patients' Perspective on Healthcare in the U.S., 2016. http://www.npr.org/assets/img/2016/02/26/PatientPerspectives.pdf; Harris Interactive for The Physicians Foundation. Consumer Attitudes toward Family / Primary Care Physicians and the U.S. Healthcare System; July 2012, Table 1c (n=1,807);

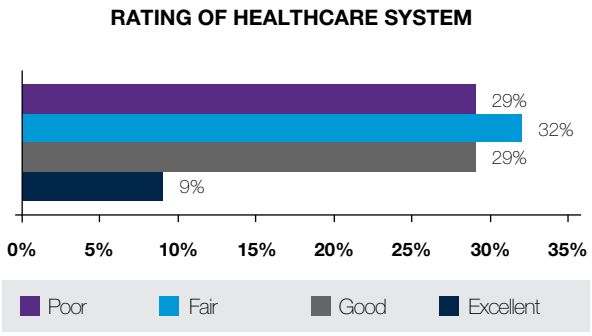
FIGURE 87 | DETERMINANTS OF HOSPITAL (INPATIENT) CUSTOMER SATISFACTION

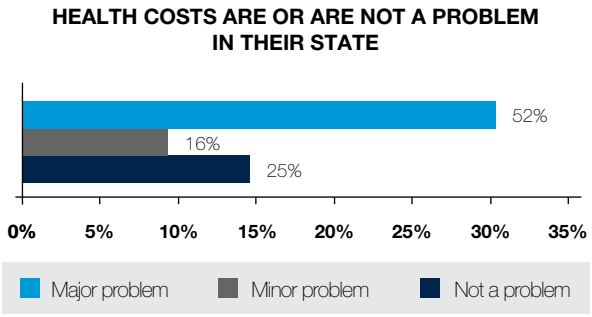
	U.S. Average 2015
Patients who reported that the nurses "always" communicated well	80%
Patients who reported that their doctors "always" communicated well	82%
Patients who reported that they "always" received help as soon as they wanted	68%
Patients who reported that their pain was "always" well controlled	71%
Patients who reported that staff "always" explained about medicines before giving it to them	65%
Patients who reported that their room and bathroom were "always" clean	74%
Patients who reported that the area around their room was "always" quiet at night	62%
Patients who reported that YES, they were given information what to do during their recovery at home	86%
Patients who gave their hospital a rating of 9 or 10 on a scale from 0 (lowest) to 10 (highest)	71%
Patients who reported YES, they would definitely recommend the hospital	71%

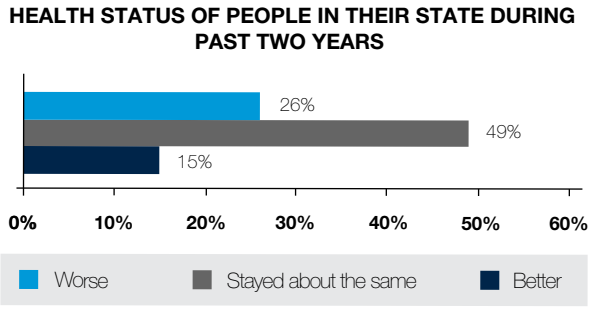


Sources Summary of Hospital Consumer Assessment of Healthcare Providers and Systems (HCHAPS) Survey Results, July 2015 to June 2016 Discharges
http://www.hcahpsonline.org/Files/April_2017_%20Summary%20Analyses_States.pdf

FIGURE 88 | OVERALL CONSUMER RATING OF HEALTHCARE SYSTEM





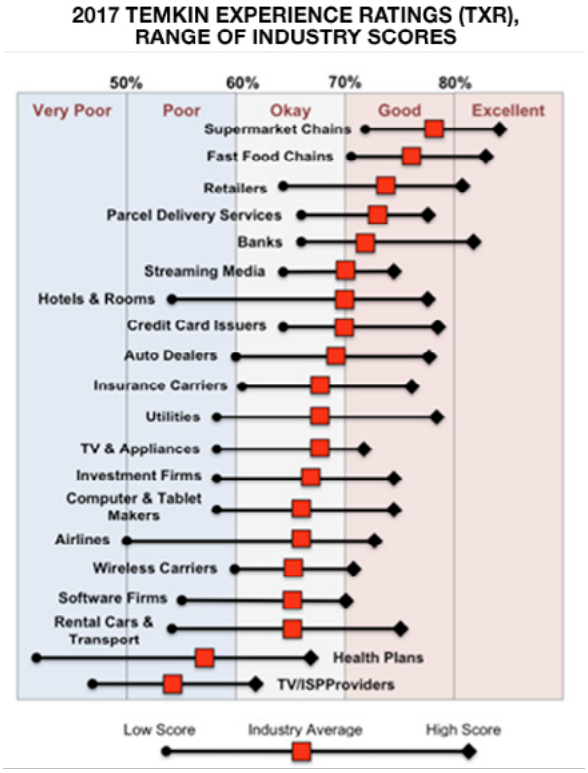


HEALTH CARE COSTS CAUSED A SERIOUS FINANCIAL PROBLEM	26%
Set up a payment plan with a hospital or health care professional	44%
Spent all or most of their personal savings	42%
Contacted by bill collectors	39%
Unable to pay for basic necessities like food, heat or housing	27%
Taken on credit card debt that may be difficult to pay off	23%
Taken out a loan that may be hard to pay back	19%
Declared bankruptcy	7%

Source: Patients' Perspective on Healthcare in the U.S., 2016. http://www.npr.org/assets/img/2016/02/26/PatientPerspectives.pdf

The Temkin Group, a leading market research firm, determined the average consumer experience rating of health plans as poor based on three criteria: Functional – How well do experiences meet customer needs?; Accessibility – How easy is it for customers to do what they want to do?; and Emotional – How do customers feel about the experience? Rating contributors include rising premiums, limited understanding and transparency associated with payment terms (e.g., deductibles, co-payments, out-of-pocket maximums), service coverage, network inclusion and billing, and customer service issues.

FIGURE 89 | EXPERIENCE RATING BY INDUSTRY



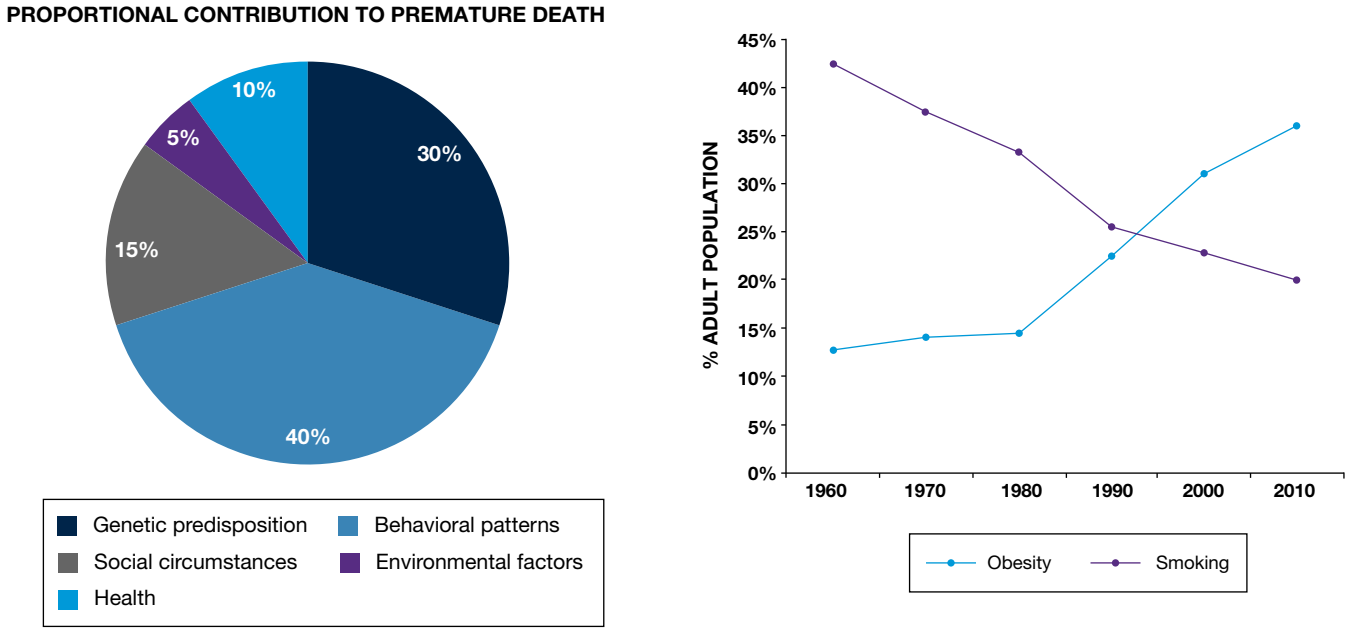
2017 TEMKIN EXPERIENCE RATINGS (TXR), TOP AND BOTTOM ORGANISATIONS

Rank	Top Rated	Industry	TxR
1	Publix	Supermarkets	84%
2	Chick-fil-A	Fast Food	83%
2	H-E-B	Supermarkets	83%
4	Regions	Banks	82%
4	Hardees	Fast Food	82%
4	Chipotle Mexican Grill	Fast Food	82%
4	Hannaford	Supermarkets	82%
8	Subway	Fast Food	81%
8	QVC	Retailers	81%
8	BJ's Wholesale Club	Retailers	81%
8	Ace Hardware	Retailers	81%
8	Food Lion	Supermarkets	81%
8	Trader Joe's	Supermarkets	81%
14	KFC	Fast Food	80%
14	Arby's	Fast Food	80%
14	Sam's Club	Retailers	80%
14	Winn-Dixie	Supermarkets	80%
14	Save-a-Lot	Supermarkets	80%
14	Wegmans	Supermarkets	80%
14	Kroger	Supermarkets	80%
14	AmazonFresh	Supermarkets	80%

Rank	Bottom Rated	Industry	TxR
331	Health Net	Health Plans	42%
329	Blue Shield of California	Health Plans	47%
329	Comcast	TV/ISP	47%
327	Medicaid	Health Plans	48%
327	Time Warner Cable	TV/ISP	48%
326	Spirit Airlines	Airlines	50%
325	Cox Comm.	TV/ISP	51%
322	BCBS of Florida	Health Plans	53%
322	Aetna	Health Plans	53%
322	Anthem	Health Plans	53%
320	Days Inn	Hotels/Rooms	54%
320	Avis	Rental Cars & Transport	54%
318	Blackboard	Software Firms	55%
318	Cablevision	TV/ISP	55%
316	Airbnb	Hotels/Rooms	56%
316	AT&T	TV/ISP	56%
314	Motel 6	Hotels/Rooms	57%
314	Verizon	TV/ISP	57%

Source: https://temkingroup.com/research-reports/2017-temkin-experience-ratings/

FIGURE 90 | PATIENT BEHAVIORS CRITICAL TO HEALTH OUTCOMES



Source: Schroeder. We Can Do Better. NEJM 2007;357:1221-1228, Figure 1 adapted from McGinnis, et al. The Case for More Active Health Policy Attention to Health Promotion. Health Affairs 2002; 21:78-93; and CDC, National Health and Nutrition Examination Surveys (NHANES);Pharmacy Solutions LLC from American Heart Association, 2009 http://www.pharmsolutions.org/Pages/MedicationAdherence.aspx

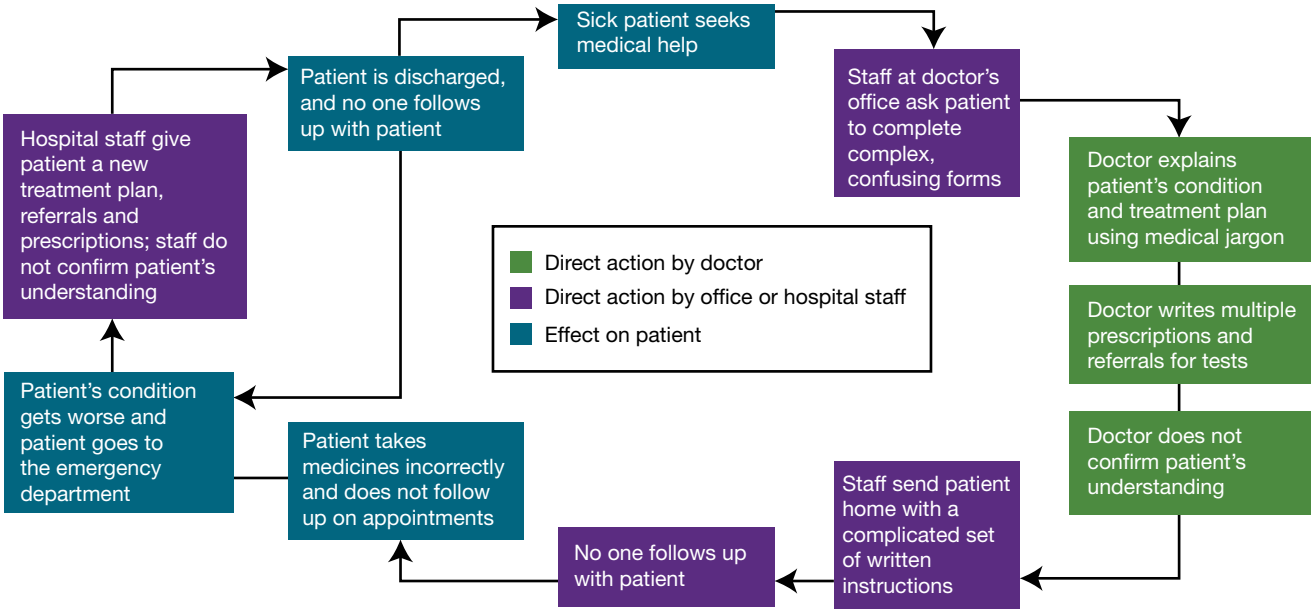
Patient engagement has been defined "as a concept that combines a patient's knowledge, skills, ability, and willingness to manage his own health and care with interventions designed to increase activation and promote positive patient behavior."[133] *Patient engagement is critical, as behavioral (lifestyle) patterns and social circumstances represent 40 percent and 15 percent, respectively, of the contributors to premature death.*

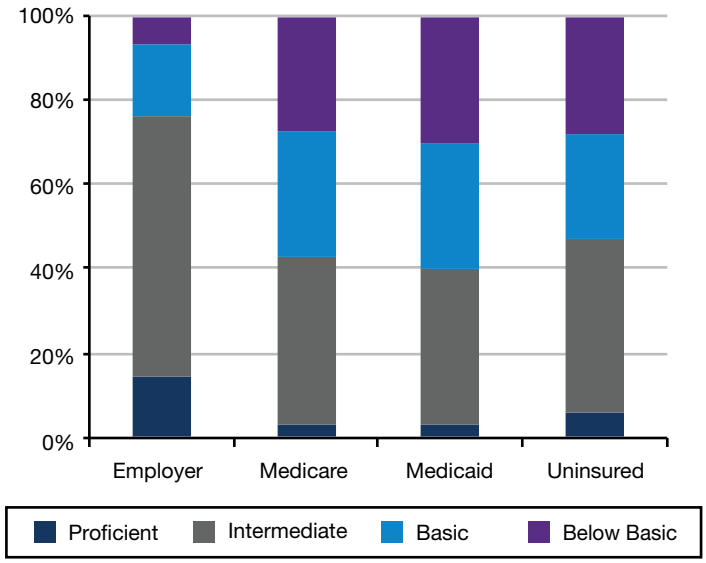
The decline in smoking can be attributed to widespread dissemination of information regarding health risks, restrictions on advertising and smoking in public areas, availability of smoking cessation programs, changes in social norms and higher costs (driven by taxes).[134] Patient activation and engagement increased substantially, resulting in behavior change, i.e., smoking cessation. Since 1991, the incidence of lung cancer has declined by 24 percent,[135] whereas the age-adjusted prevalence of COPD remains unchanged for chronic bronchitis and is higher for emphysema, most likely due to residual effects.[136]

According to Angela Coulter, a recognized expert in patient-centered care, the primary pillars of patient engagement include:

- Improving the process of care as reflected by patient experience and satisfaction
- Improving health literacy, i.e., "the ability to obtain, process, and understand basic health information and services to make appropriate health decisions"[137]
- Sustained shared (patient-provider) decision-making

FIGURE 91 | PATIENT'S NEGATIVE EXPERIENCE OF CARE





HEALTH LITERACY LEVEL	TASK EXAMPLES	PERCENTAGE OF ADULTS
Proficient	Using a table, calculate an employee's share of health insurance costs for a year	12%
Intermediate	Read instructions on a prescription label, and determine what time a person can take medication	53%
Basic	Read pamphlet and give two reasons a person with no symptoms should be tested for a disease	21%
Below Basic	Read a set of short instructions and identify what is permissible to drink before a medical test	14%

Sources: Koh H K et al. Health Affairs 2012;31:434-443; U.S. Department of Education, Institute of Education Sciences, 2003 National Assessment of Adult Literacy.; HHS Office of Disease Prevention and Health Promotion. America's Health Literacy: Why We Need Accessible Health Information http://www.health.gov/communication/literacy/issuebrief/

Patient engagement requires self-management and supportive provider and/or payer interventions. Patients (and their caregivers) are active participants in optimizing their own care, inclusive of changes in lifestyle, treatment (drug) adherence, condition monitoring and intervention.

Behavior change is essential to patient engagement. Alternative models focused on the individual and/or individual interactions with people and their environment have been identified. At least three to six months is required for effective behavior change, with potentially another six to 18 months required for sustainability.

FIGURE 92 | REQUIREMENTS FOR PATIENT ENGAGEMENT

BACKGROUND

- Clinicians are present for only a fraction of the patient's life
- Motivation is not enough. People also need self-confidence and certain skills that can be modelled and taught
- Nearly all outcomes are mediated through the patient's behavior

SELF-MANAGEMENT [SYSTEM] SUPPORT

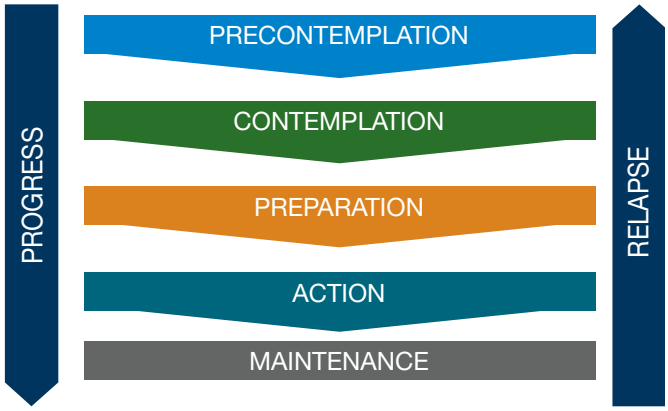
The systematic provision of education and supportive interventions by health care staff to increase patient skills and confidence in managing their health problems, including regular assessment of progress and problems, goal setting and problem-solving support (Institute of Medicine)

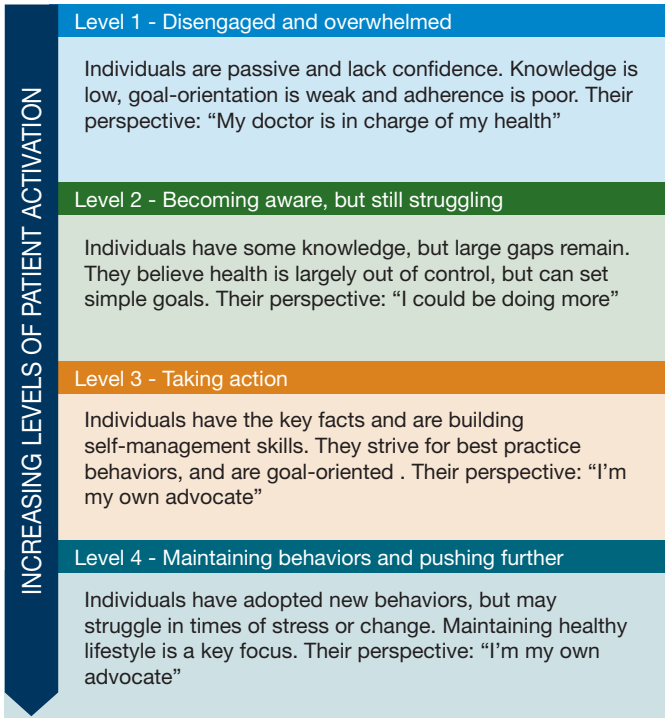
ACCORDING TO AHRQ, PATIENTS MAY BE ASKED TO:

- Actively share in decision making
- Change lifestyle to promote health
- Adhere to a treatment plan, including medication regimens
- Make office visits for lab tests, physical exams and clinical consultations
- Closely monitor signs and symptoms
- Respond with appropriate actions, as appropriate:
  - Adjust medications
  - Call a provider; e.g., nurse
  - Schedule telehealth session
  - Schedule MD visits

FIGURE 93 | MODELS OF BEHAVIOR CHANGE

MODEL	DESCRIPTION
FOCUS ON THE INDIVIDUAL	
Health belief model	Originally developed to predict adoption of preventative behaviors, this model posits that an individual's decision to act stems from people's perceptions of (1) the severity of the threat to their health, (2) their susceptibility to this threat, and (3) the benefits of barriers to action.
Microeconomic consumer choice theory	The microeconomic theory describes how individual consumers make consumption choices under income and other constraints, given their preferences and the opportunity costs.
Theory of planned behavior / theory of reasoned action	The theory of planned behavior is an extension of the theory of reasoned action. It adds the individual's attitude toward the behavior, and the norms for behavior as determinants of an individual's intent to perform a behavior. This intent is identified as the mediator for all the other individual attributes and influences.
Transtheoretical model	This model describes five stages of change; precontemplation, contemplation, preparation, action and maintenance of behaviors. Individual change processes occur within each stage.
FOCUS ON INTERACTIONS WITH PEOLE AND ENVIRONMENT	
Social cognitive theory	This theory posits that human behavior is learned through social interactions. Individual beliefs about the ability to perform behaviors (self-efficacy), control behaviors (self-regulation), and expected outcomes are shaped by interactions in social environment, and vice versa (reciprocal determinism)
Social netowrk theory and social support	Social network theory focuses on how the characteristics of interpersonal relationships, such as number and degree of reciprocity, influence outcomes like health behaviors. Social support theories also focus on interpersonal relationships and how these relationships provide support that is protective or detrimental to health.
Social ecological model	This model focuses on the relationship between the individual and the environment. While individuals are responsible for their own lifestyle choices, behavior is largely determined by the context of the social environment (e.g. community norms, policy, regulation)



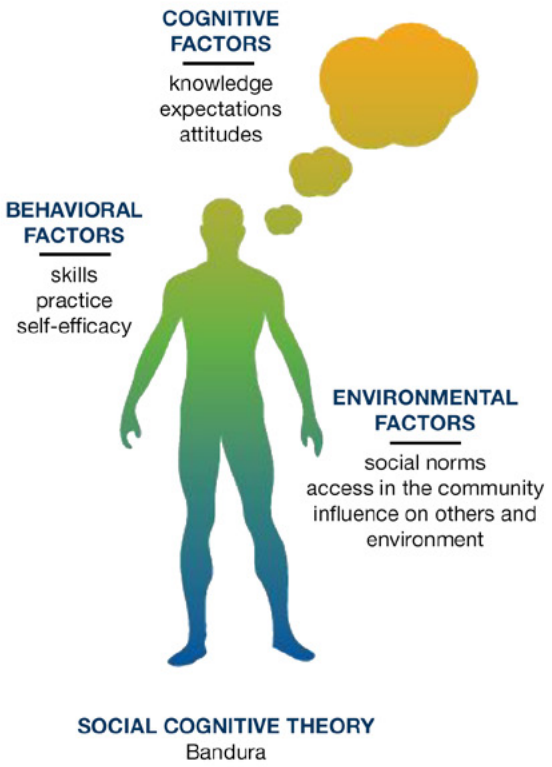


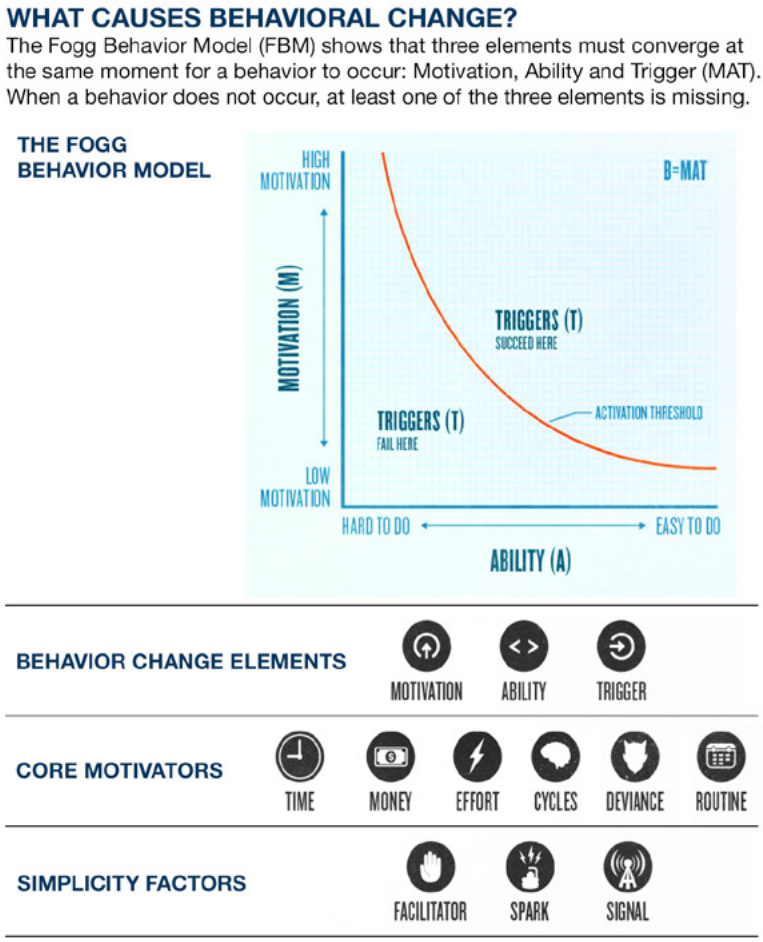
Source: Mittler, Jessica N., et al. "Making Sense of "Consumer Engagement" Initiatives to Improve Health and Health Care: A Conceptual Framework to Guide Policy and Practice." Milbank Quarterly 91.1 (2013): 37-77.

The importance of environmental factors such as social norms as a change agent cannot be understated. The New England Journal of Medicine published an article in July 2007 in which the investigators "examined several aspects of the spread of obesity, including the existence of clusters of obese persons within the [social] network, the association between one person's weight gain and weight gain among his or her social contacts, the dependence of this association on the nature of the social ties (e.g., ties between friends of different kinds, siblings, spouses, and neighbors), and the influence of sex, smoking behavior, and geographic distance between the domiciles of persons in the social network."[138] The study suggested "that obesity may spread in social networks in a quantifiable and discernable pattern that depends on the nature of social ties [more than geographic proximity]." The risk of obesity appears to decrease with each degree of social separation, assuming an equal prevalence of obesity, i.e., one degree of separation (close family, friends and peers): 45 percent; two degrees of separation: 25 percent; three degrees: 10 percent; and four degrees: none.

Recognition of behavioral change as a complex process requires a fundamental paradigm shift in the provider approach to patient interaction from "push" to "pull." The change is particularly applicable to the 5–10 percent of patients accounting for 43–68 percent of costs. Unidirectional and infrequent contacts need to be replaced with bidirectional and frequent contacts focused on development, self- management and caregiver support skills. The availability of EMR consumer portals, combined with advent of digital media and enabling technology, facilitates the generation of a lower-cost "pull" approach to whole person care delivery.

FIGURE 94 | COMMON FACTORS TO BEHAVIORAL HEALTH MODELS





Sources: http://hl250wt2014.weebly.com/key-points.html; and http://www.behaviormodel.org/

FIGURE 95 | PATIENT ENGAGEMENT EXPLAINED

> **Are you buying momentary attention or are you investing in a long term asset? Stop renting an audience - build one.**
>
> Seth Godin,
> best-selling author

PARADIGM SHIFT

- Old Communications Models: one-way messages, brand dictates topics, infrequent distribution, no feedback, brand finds the audience (push)
- New Communications Model: two-way dialogue, patients dictate the topics, frequent distribution, continual feedback, audience finds the brand (pull)

PASSIVE PATIENT MANAGEMENT (PUSH)

- Unidirectional instructions
- Limited provider access
- Infrequent contact ("touch points")
- Negative or indifferent experience of care

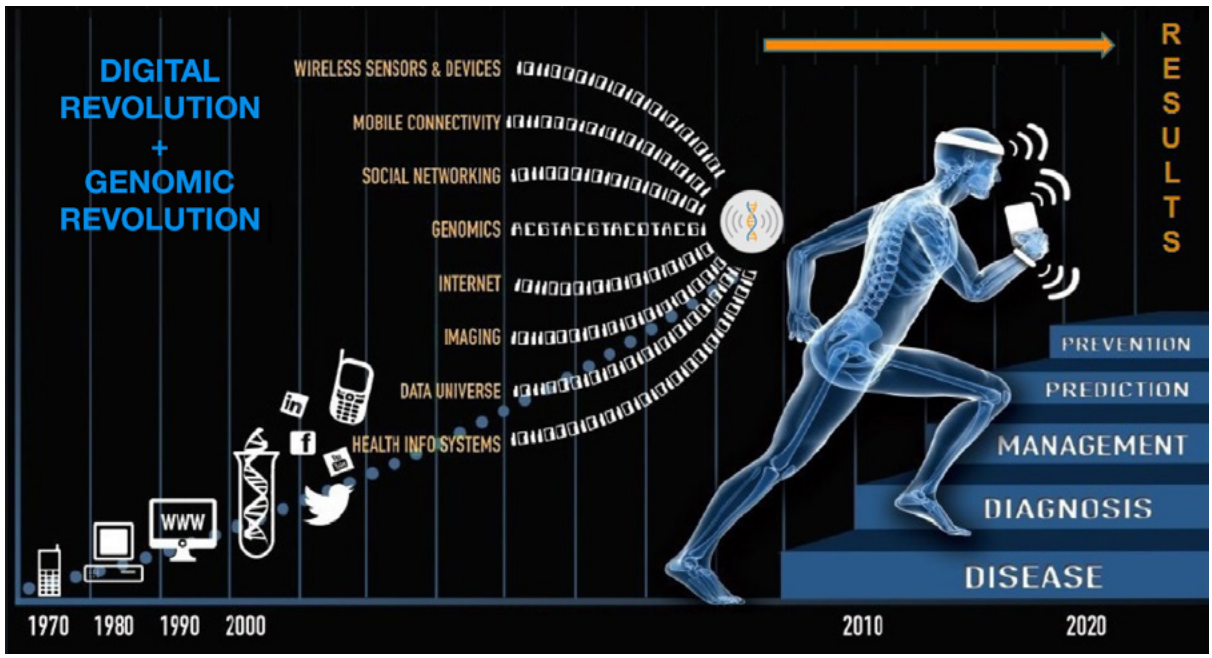
PATIENT ENGAGEMENT (PULL)

- Bidirectional discussion (shared decision making)
- Cultural sensitivity (race/ethnicity) and persona-aware; i.e., treat patient as an individual
- Increased provider access
- Supportive and frequent contacts
  - Personal communications
  - Digital media with relevant content
- Use of enabling technology
- Positive experience of care (builds trust)
- Inclusion of caregiver

Source: Engagement Marketing: Finding, Connecting Converting Profitable Buyers. https://www.slideshare.net/stevepattiCMO/healthcare-marketing-strategy-basics

Digital health has emerged from the convergence of healthcare with computer, internet, mobile, wireless and sensor technology to enable patient monitoring, access, communication and intervention. A fee-for-service reimbursement environment has not been supportive of digital health due to its focus on incremental costs and not the total cost of care; a value-based, at-risk ecosystem would consider evidence-based digital health technologies attractive.

FIGURE 96 | THE DIGITAL HEALTH REVOLUTION



Source: Infographic by Paul Sonnier; www.storyofdigitalhealth.com

Many consumer applications have been focused on the health and wellness segment. A study published by RAND Corporation highlighted disappointing results (or lack thereof) from a formal assessment of employer-based programs. From the direct-to-consumer perspective, a significant market has emerged for wearable fitness trackers and, to a far lesser extent, smartwatches; approximately 12 percent of Americans own a device.[139]

Digital applications for medical education, condition-specific social networking and support, disease and medication management, genetic screening, price transparency, provider (physician) search and other areas have emerged and offer consumers an opportunity to increase their engagement.

Remote monitoring technology includes devices to measure vital signs (heart rate, respiratory rate, blood pressure), blood glucose (diabetes), blood oxygen, weight (fluid retention in congestive heart failure) and other parameters. The "early detection" data can be used by the patient and/or caregiver, and/or be sent to a service provider for exception reporting. They can also be used to allow older and disabled people or, even more recently, very ill patients to avoid transfer to a skilled nursing facility or hospital.

Telehealth potentially offers consumers access and convenience, whereas providers can triage patients based on actual clinical need for a visit. If necessary, a nurse can make a home visit to a patient and use electronic instruments to transmit vital signs, heart and lung sounds, images and other details to primary care and/or specialist physicians.

Smart home sensor technology is being used for automated response to changes in motion and/or position (falls), as well as to monitor changes in physical activity, bathroom habits, sleep patterns and medication adherence. Oftentimes, an engaged caregiver is involved in the decision to use these technologies.

Despite a theoretical understanding of behavioral change, the availability of digital health tools and growing recognition of the importance of self-management, many providers have not been successful in increasing patient engagement. A patient-centric "pull" approach to care delivery has not yet been institutionalized. Increasing unaffordability represents another barrier to patient engagement. As former Surgeon General Everett Koop stated, "Drugs don't work in patients who don't take them."[9]

FIGURE 97 | RAND WORKPLACE WELLNESS PROGRAMS STUDY

Over the last several decades, an epidemic of "lifestyle diseases" has developed in the United States: Unhealthy lifestyles, such as inactivity, poor nutrition, tobacco use and frequent alcohol consumption are driving up the prevalence of chronic disease, such as diabetes, heart disease, and chronic pulmonary condition.

Out of concern about the impact of chronic disease on employee health and well-being, the cost of health care coverage, and competitiveness, employers are adopting health promotion and disease prevention strategies, commonly referred to as workplace wellness programs.

> **"Only about half [of surveyed employees] stated that they have evaluated program impacts formally and only 2 percent reported actual savings estimates."**

> **"We estimate the average annual difference to be $157, but the change is not statistically significant."**

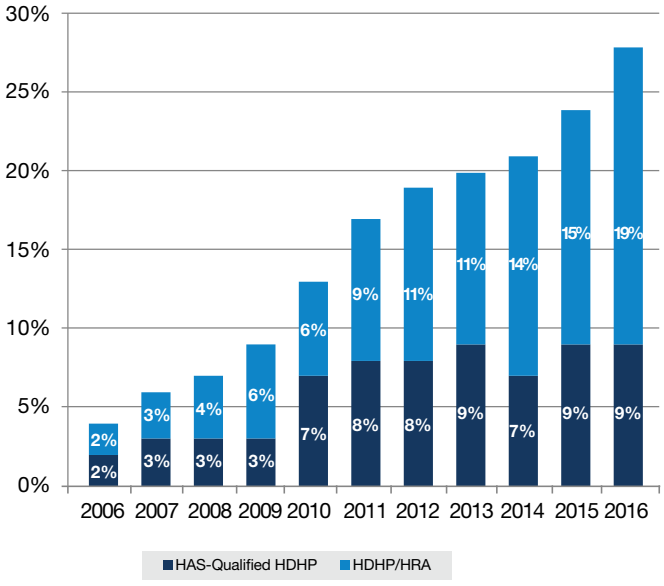
Workplace wellness takes advantage of employers' access to employees at an age when interventions can still change their long-term health trajectory.

In the RAND Employer Survey, employers overwhelmingly expressed confidence that workplace wellness programs reduce medical cost, absenteeism and health-related productivity losses. But at the same time, only about half stated that they have evaluated program impacts formally and only 2 percent reported actual savings estimates. Similarly, none of our five case study employers had conducted a formal evaluation of their programs on cost; only one employer had requested an assessment of cost trends from its health plan. Our statistical analyses suggest that participation in a wellness program over five years is associated with a trend toward lower health care costs and decreasing health care use. We estimate the average annual difference to be $157, but the change is not statistically significant.

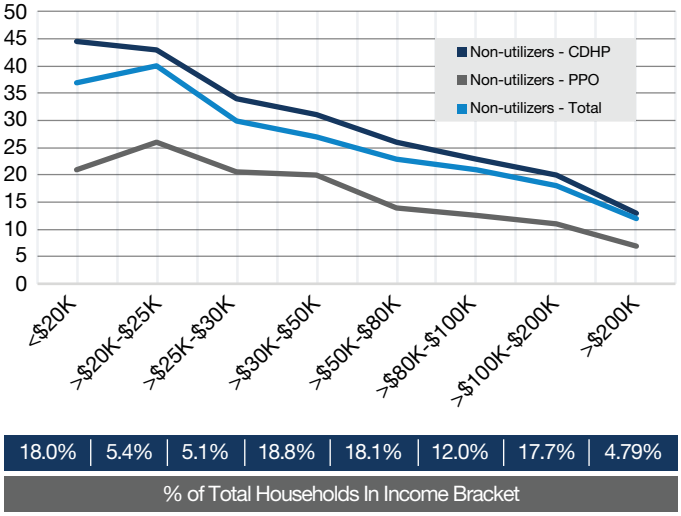
**Examples include Stanford Patient Education Research Center Chronic Disease Self-Management Programs (CDSMP); University of Pittsburgh Diabetes Prevention Program (DPP)*

FIGURE 98 | IMPACT OF COST SHIFTING

Percentage of Covered Workers Enrolled in an HDHP or HAS-Qualified HDHP, 2006-2016



Percentage of Enrollees Not Filing Medical or Pharmacy Claims by Wage Band



Source: MGMA, 2016

ENDNOTES

7. Patient Engagement in Healthcare: The Impact of the Patient Centric Model of Care. Liaison Technologies blog post, June 20, 2017 https://www.liaison.com/blog/2017/06/20/patient-engagement-healthcare-impact-patient-centric-model-care; Health Affairs RWJF Policy Brief; February 14, 2013 https://www.rwjf.org/content/dam/farm/reports/issue_briefs/2013/rwjf404446

8. Schroeder. We Can Do Better. NEJM 2007;357:1221-1228, Figure adapted from McGinnis, et al. The Case for More Active Health Policy Attention to Health Promotion. Health Affairs 2002; 21:78-93; and CDC, National Health and Nutrition Examination Surveys (NHANES)

9. Drugs don't work in patients who don't take them' (C. Everett Koop, MD, US Surgeon General, 1985). Eur J Heart Fail. 2017 Sep 10. https://www.ncbi.nlm.nih.gov/pubmed/28891126

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David Gruber, MD, MBA, is a Managing Director and the Director of Research with Alvarez & Marsal's Healthcare Industry Group in New York, specializing in strategy, commercial due diligence, analytics, new ventures and health benefits. Dr. Gruber brings 32 years of diversified healthcare experience as a consultant, corporate executive, Wall Street analyst and physician.

Dr. Gruber's A&M publications include: Getting (Much) Closer to the Cost Precipice; Safety Net Hospitals at Risk: Re-thinking the Business Model; Behavioral Health: Key to Chronic Disease Costs; Healthcare: Economic Value Need Not Apply (Yet); and Post-Acute Care: Disruption (and Opportunities) Lurking Beneath the Surface.

Before joining A&M, he spent three years as the Founder of Healthcare Convergence Associates, a consulting firm focused on the convergence of healthcare, technology and the consumer. His initiatives included wireless and tele-health opportunities, chronic obstructive pulmonary disease (COPD) technology assessment, pharmacy benefit management (PBM) diabetes innovation, and retail health and wellness. He was also involved in three healthcare-related information technology (IT) start-ups.

Until 2008, Dr. Gruber was Vice President of Corporate Development and New Ventures with the Johnson & Johnson Consumer Group of Companies. His primary focus was in dermatology / aesthetics, consumer engagement and wireless health across the company. From 1995 to 2004, he worked on Wall Street as a top-ten rated medical supplies and devices analyst at Lehman Brothers, Piper Jaffray and Sanford Bernstein. He was the lead analyst for the initial public offering of Intuitive Surgical (robotics) and Given Imaging, and a merchant banking investment in Therasense.

Prior to entering Wall Street, Dr. Gruber was Vice President of Planning and Business Development for the $1.6 billion healthcare group at Bristol-Myers that included Zimmer, ConvaTec, Linvatec and Xomed-Treace. While at Bristol-Myers, he represented the company with the Health Industry Manufacturing Association (HIMA) as it deliberated the merits of Hillary Clinton's healthcare reform proposals.

Dr. Gruber has recently appeared on NPR and C-Span; was quoted in the Washington Post, Los Angeles Times, The Deal, Healthcare Finance News, Managed Care Executive, Managed Care Outlook, Becker's Hospital Review and Inside Health Policy; and was published in the Journal of Diabetes Science & Technology, Turnaround Management Association Newsletter of Corporate Renewal and American Bankruptcy Institute Journal.

Dr. Gruber is a magna cum laude graduate of a six-year BS-MD program, having earned a bachelor's degree from the Sophie Davis School of Biomedical Education, CCNY in 1981 and a medical degree from the Mt. Sinai School of Medicine in 1983. He also has an MBA from Columbia University and was a Kellogg Foundation National Fellow. Dr. Gruber is currently a Senior Fellow, Healthcare Innovation and Technology Lab (HITLAB) at Columbia Presbyterian. He is a re-elected Trustee to the Teaneck Board of Education.

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