

# Jammed access: Widening the front door to healthcare\*



\*connectedthinking



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New flexible models that use the right technology, incentives and behavior change can unclog the jammed access points.

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Health organizations and government can open the access logjams through changes in behavior, incentives and patient throughput.

The heart of the matter

Access to care is  
jammed and universal  
coverage is not the  
only fix.

By several measures, access to care is jammed for many Americans, both insured and uninsured. As health reform in Massachusetts has demonstrated, access to coverage does not translate into access to care. Almost immediately after health reform brought near universal coverage to that state, residents began complaining about long waits to access care. If universal coverage meant that Massachusetts, a state with the highest number of physicians per capita, was wracked with physician shortages, then what are the implications for the rest of the nation?

As Congress discusses ways to provide the universal coverage that other nations have, discussion of access to care must follow closely behind. Indeed, the ultimate issue is how to expand access without increasing costs. Cranking up supply to increase access is likely not the answer. The United States now spends more than any nation on healthcare and has record number of clinicians in the workforce. Instead, solutions will lie in new models of care and in using technology, incentives and behavior change to unclog the jammed access points. A consumer survey conducted by PricewaterhouseCoopers' Health Research Institute shows that the current system has numerous jammed access points, but that consumers and some providers are open to changes.

An in-depth discussion

New flexible models that use the right technology, incentives and behavior change can unclog the jammed access points.

## Executive summary

### Where are the jams in healthcare occurring?

Universal coverage, if it passes Congress, won't be a panacea for increased access. Only 45% of consumers surveyed by PwC said they thought universal coverage would create equal access for all Americans.

### Crowded entry points set up a rough start to the healthcare journey

- A line is forming at the front door to healthcare, especially at the most visible entry point: the emergency department (ED). According to PwC's consumer survey, half of consumers visited the ED for a need other than an emergency during the last 12 months. Medicaid patients use hospital EDs twice as much as the uninsured.
- While crowded EDs are frequently cited as a corollary to uninsured patients, uninsured status does not necessarily increase ED usage. For example, Massachusetts, which has the nation's lowest rate of uninsured residents, has one of the highest per capita utilizations of hospital EDs.
- Many hospitals are marketing and expanding their EDs as a way to increase admissions. About one-third of patients who go to EDs were admitted for an inpatient stay, according to PwC survey results. Medicaid patients are least often admitted while Medicare patients are most often admitted, according to the survey.
- In addition to primary care, people are also finding lines to specialty care and mental health. One in four consumers said it takes more than 30 days to get an appointment with their doctors and 10% said they've had to wait three months or longer. About 13% of those surveyed said it was more difficult accessing a specialist compared to 8% for primary care doctors. Residents living in inner city areas reported the most difficulty in accessing specialty care, followed by rural areas.
- Individuals in need of mental health services exceed primary care by nearly 23 million. The average length of stay for psychiatric patients in the ED is double that of other patients.

### The system maze causes false starts and unnecessary stops

- Disease management programs, which are designed to coordinate interventions, reminders, and self-care solutions, are rarely used. Employers report less than 15% of eligible patients participate in disease management programs.
- Consumers surveyed said they prefer their clinicians practice as a team, and care coordination has been shown to reduce volume, increase access and improve quality. However, coordination is lacking largely because medical students aren't taught about multidisciplinary teamwork, according to MedPAC, the agency that advises Congress.
- Few pathways are available to clearly guide people in their journey through the health system. Even though some people have a preference to guide themselves, they are still struggling to navigate through all the data.

### **Individuals fail to act on their health early**

- Access to care could worsen if more Americans succumb to chronic illness. Approximately half of individuals surveyed said their current lifestyle was less than healthy. However, 90% of individuals indicated they would become active in improving their health if they were diagnosed with a chronic condition.
- When asked what keeps them from getting more involved in their own care, a fourth of consumers surveyed said they don't know where to find good information and 10% said they're intimidated by the health system.

### **New openings are widening the front door**

By widening the front door, designing new sidewalks for care and creating a sustainable environment for continued access, universal coverage can translate into broadened access for all.

### **New means of access are available**

- Many consumers would prefer more electronic means of accessing care. One in two consumers surveyed said they'd be likely to seek healthcare through online consultations. In Hawaii, more than 1,000 health plan members have engaged in an online consultation with physicians since the service was launched in 2009.
- Organizations are using telehealth technologies to expand access to specialists, managing costs and increasing patient satisfaction. For example, the Veterans Health Administration has reduced health system utilization by 30% through telehealth technology during the past six years, is seeing satisfaction scores at 86% and has reduced health system utilization by 30%.

- Retail and worksite clinics provide access points that are convenient and timely for patients. Ten percent of employers surveyed by PwC in 2009 said that they're providing worksite clinics, up from 1% in 2008. Of consumers surveyed by PwC, 37% said they'd be likely to use a worksite clinic, and 36% said they'd be likely to use a retail clinic.
- The chance to participate in clinical trials opens doors of future care access. Approximately half of consumers surveyed indicated they would be very or somewhat likely to participate in clinical research or experimental treatments. However, without a direct connection to a primary care physician or medical home, patients are unlikely to know about future treatments and cures such as cancer clinical trials.

### **Coordination among practitioners helps build better delivery pathways**

- When asked about how consumers preferred to receive their future healthcare, team care came was rated the highest at 32% followed by being their own health coach at 27%.
- Nonphysicians such as pharmacists, social workers and life coaches are increasingly included into a team care model of care delivery.
- New payment models emphasize team care. In MedPAC's proposal to Congress for bundling payment for an episode of care, physicians and hospitals may receive relative risk-adjusted performance information and share in savings from re-engineering inefficient care processes.
- Technology and data liquidity can increase patient engagement, physician productivity and operational efficiency. Kaiser Hawaii saw its per-member office visits drop by 26% after installing electronic health

records and web-enabled messaging between patients and providers. That freed up physicians for patients who needed in-person consultations.

- “Frequent flyers” overuse hospital emergency department services, and can represent a high percentage of patients in hospital EDs. In Texas, one consortium is addressing this by electronically connecting patient records and using a predictive model to identify patients for outreach.

### **A supportive community will boost patient engagement**

- Shared medical appointments (SMAs), where 10 to 15 patients meet together with a provider, deliver more value for chronic care patients. One in four consumers surveyed by PwC indicated they would be very or somewhat likely to try shared medical appointments as new method of accessing healthcare.
- The Cleveland Clinic and Harvard Vanguard report that shared visits are popular with both clinicians and patients. Instituting a 90-minute weekly shared appointment can double a physician’s productivity by an additional six patients per clinic session (defined by four hours).

## **About this research**

PricewaterhouseCoopers’ Health Research Institute (HRI) conducted 37 in-depth interviews with thought leaders and executives representing healthcare providers, Veterans’ Health Administration, community health centers, private healthcare organizations, private sector technology organizations, academic medical centers and professional healthcare associations. HRI also conducted a thorough literature review of current access issues and models of care, as well as an analysis of publicly available data to support and complement findings. PwC used data from the firm’s Management Barometer survey of employers. PwC also commissioned an online survey in April 2009 of 1,000 consumers regarding their access to care in the United States.

This report focuses on access to care, defined as “the timely use of personal health services to achieve the best health outcomes.” The three key steps to attain access are:

- Gaining entry into the healthcare system
- Getting access to sites of care where patients can receive needed services
- Finding providers who meet the needs of individual patients and with whom patients can develop a relationship based on mutual communication and trust<sup>1</sup>

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<sup>1</sup> Agency for Healthcare Research and Quality, National Healthcare Disparities Report, 2007.

# The jams: Crowded entry points set up a rough start to the healthcare journey

Various studies have shown that more Americans are delaying care or have unmet medical needs.<sup>2</sup> If Congress succeeds in its attempt to cover 46 million uninsured Americans, access points could get even more crowded, leading to a crisis for many. If healthcare is viewed in terms of miles of life, individuals are getting stuck at the front of the line before they even enter the care delivery system. Once people venture into the health system, they meander through an uncoordinated system of care.

Broadening access without increasing costs requires more than improving the health system supply-and-demand formula. Americans are treated by record numbers of physicians and nurses and spend more per capita on healthcare than any other country.

## EDs have become the front door to healthcare

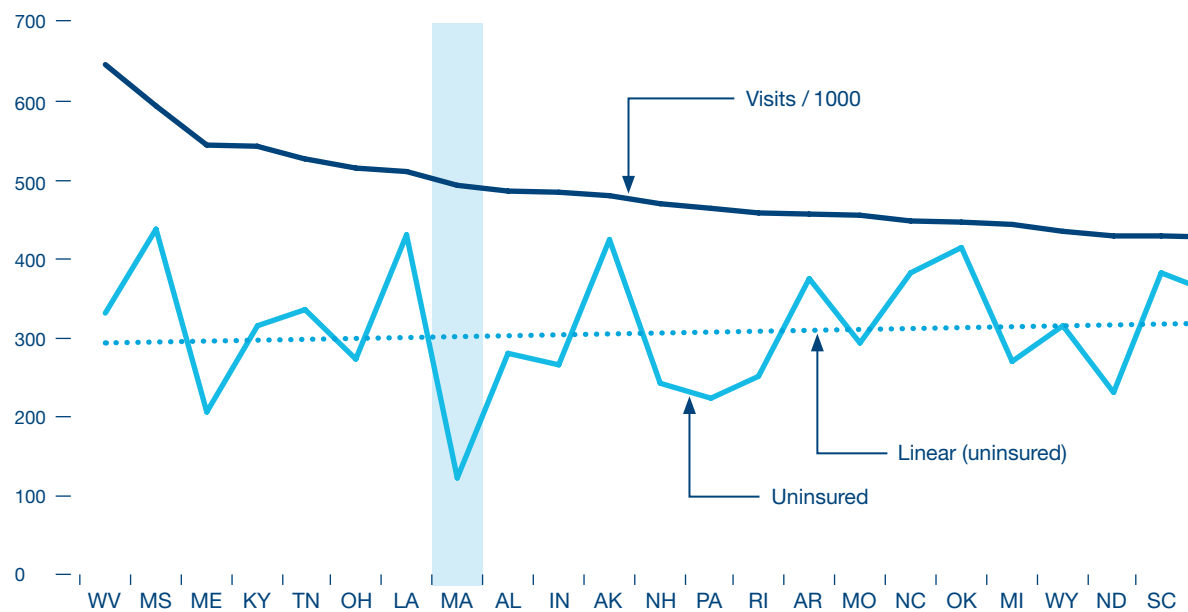
Usage of hospital EDs is at a record high, prompting reports of overcrowding, ambulance

diversions and unreasonable waits. In a 2009 report, the American College of Emergency Physicians gave the nation a D-minus on “access to emergency care.”<sup>3</sup> EDs are jammed for two simple reasons: too much in-flow and not enough out-flow.

In terms of in-flow, hospitals reported 121 million ED visits in 2007, a 30% rise over the past 10 years. Only half of the increase stemmed from population growth; visits per capita increased 15% to 400 visits per 1,000 people during that same period.<sup>4</sup>

EDs are being used by consumers for a variety of reasons other than emergencies. According to PwC’s consumer survey, more than half of the people who went to the ED in the last year indicated they went for a reason other than an emergency, including reasons such as their doctor’s office was closed or they couldn’t get an appointment with doctor in a reasonable time frame (See Figure 1).

**Figure 2. Inverse relationship between emergency departments visits and uninsured population**



Source: Kaiser Family Foundation (statehealthfacts.org), 2007; U.S. Census Bureau, 2007

2 Falling Behind: Americans’ Access to Medical Care Deteriorates 2003-2007, by Center for Studying Health System Change, Tracking Report No. 19, June 2008.

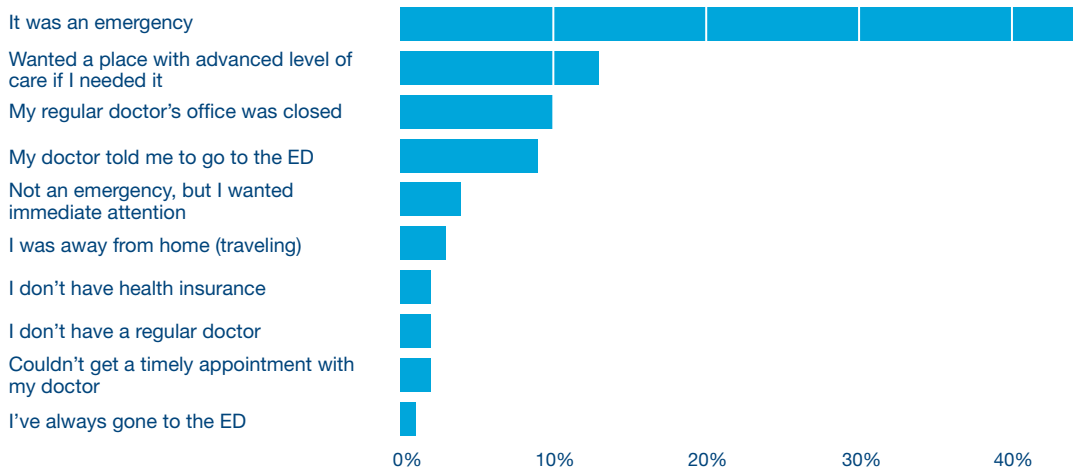
3 The National Report Card on the State of Emergency Medicine: Evaluating the Emergency Care Environment State by State 2009, ACEP.

4 AHA Hospital Statistics, 2009.

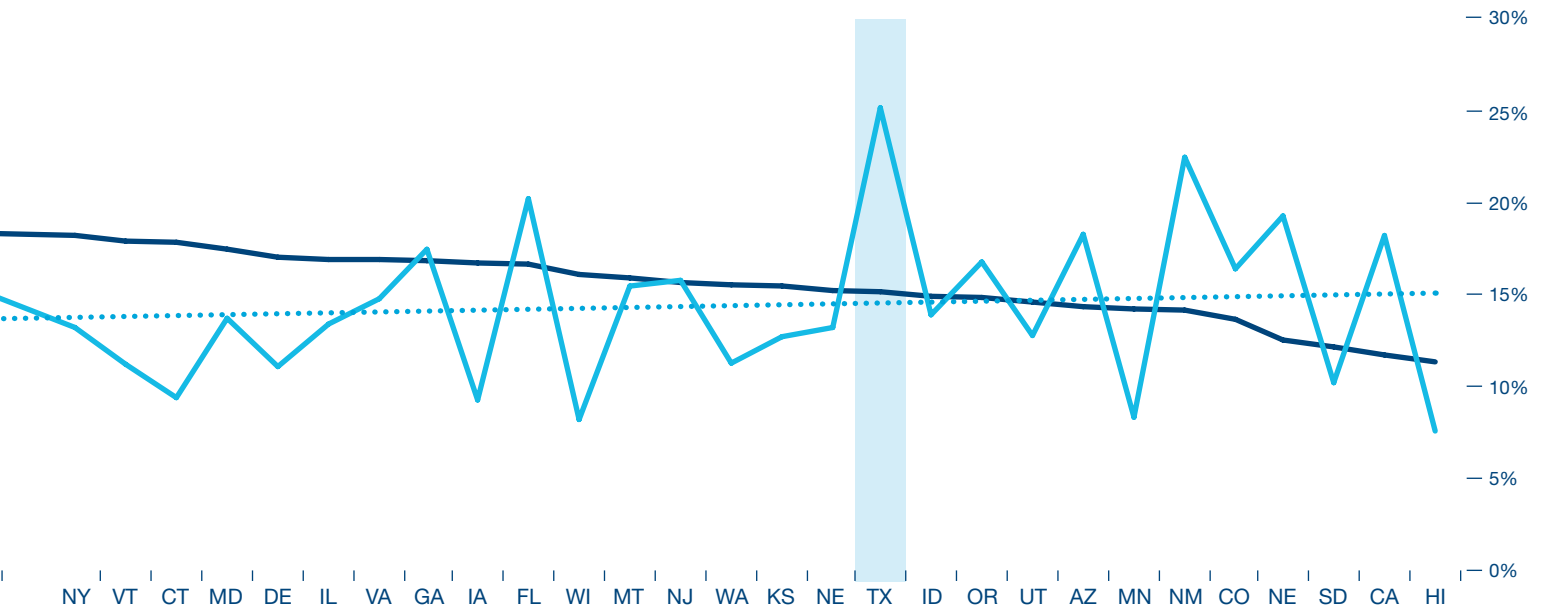
Crowded EDs are frequently blamed on uninsured patients; however, insured patients use them more than the uninsured. And, insurance status does not necessarily correlate to ED usage. A PwC analysis revealed an inverse relationship between

uninsured population and ED utilization. Generally, states with high-uninsured populations had lower ED utilization than states with lower uninsured populations (See Figure 2). The best example of this is the State of Massachusetts, which has one of the

**Figure 1: Reasons consumers visited the emergency department in the past year**



Source: PwC Consumer Access Survey



lowest rates of uninsured residents, yet one of the highest per capita utilization rates of hospital EDs. The opposite is true in Texas, where there is a 25% uninsured rate and lower ED utilization.

The nation's growing population is crowding into fewer, but larger EDs. Responding to this growing demand, ED expansions have been a popular capital project for hospitals intent on improving patient satisfaction and increasing admissions. The number of active EDs has decreased 5% from 4,813 to 4,545 since 1997.<sup>5</sup> However, since 2007, hospitals have announced nearly 150 expansion projects that included emergency department expansions, at an estimated cost of about \$10 billion, according to figures compiled from Billian's Health Data.<sup>6</sup>

For hospitals, EDs are a mixed blessing. They are a haven for sick patients who have nowhere else to go. Yet, they make a significant contribution to a hospital's total revenue through inpatient admissions. About one-third of consumers who went to an ED

were admitted to the hospital, according to PwC's consumer survey. Patients with commercial insurance and Medicare were the most likely to be admitted to the hospital, compared to uninsured and Medicaid patients who had the lowest admittance rates as a result of their visit to the ED.

For hospitals, EDs typically lose money. A 2002 study commissioned by the California Healthcare Foundation found that California EDs lost an average of \$84 per patient. However, ED patients who were admitted generated an average profit of \$1,220 per admission.<sup>7</sup>

In terms of out-flow, EDs have become boarding areas when there aren't enough inpatient beds or the hospital isn't efficiently moving patients through its system. "EDs live for rapid response, and the back door of the ED — getting people to the right type of bed — is where the big jam is," said Dan Killebrew, AIA, principal, FKP Architects, which works with hospitals to restructure and redesign EDs.

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5 ED visits, ED visits per 1,000, and Number of Emergency Departments, 1991-2006: American Hospital Association Trendwatch Chartbook, 2009.

6 Estimated based on aggregated data from Billian's HealthDATA Vitals News Reports between 2007 - 2009.

7 California's Emergency Departments: Do They Contribute to Hospital Profitability, by California Healthcare Foundation, July 2003.

# How Medicaid policies and payment contributed to jammed access

Universal coverage has the potential of bringing 46 million uninsured Americans into the health system, but access problems could quickly follow. That would put even bigger strains on physicians and hospitals, especially in states like Texas and Florida, where nearly one-fourth of residents are uninsured. PricewaterhouseCoopers has estimated that universal coverage, if modeled after Massachusetts' health reform, would bring 5 million Americans into Medicaid and 8.1 million into a government-subsidized system, which may or may not be through Medicaid.<sup>8</sup>

Nationally, 13% of the nonelderly are on Medicaid and 16% are uninsured, according to the U.S. Census Bureau. While these groups are somewhat similar in size, they can be very different in behavior and health status. The Medicaid population is a particularly vulnerable group and also a significant user of the healthcare system. Medicaid recipients comprise of low-income individuals, while the uninsured are much more diverse; for example, 23% of the uninsured have incomes of more than \$50,000.<sup>9</sup> Additionally, while Medicaid recipients in many cases have relatively high-cost medical conditions, there is a bimodal distribution of health status among the uninsured, with a large percentage being young and healthy, and another cohort having high-risk medical conditions that precludes them from purchasing affordable coverage.

So, one can't assume that the uninsured will mirror the behavior of Medicaid patients. However, there are some implications that are worthy of discussion.

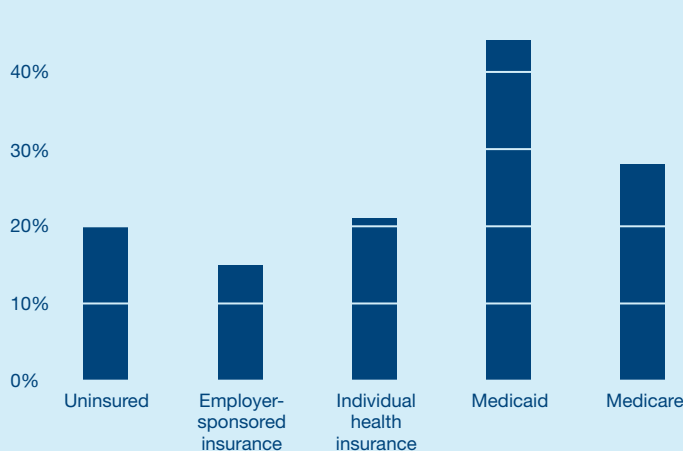
## Accessing providers is a particular challenge for Medicaid patients

Medicaid patients are most likely to be made to wait by physicians, according to PwC's consumer survey. Nearly one-third of Medicaid patients had to wait 30 days or more for an appointment, compared to 22% for individuals with employer-sponsored commercial insurance. According to the Center for Studying Health System Change, low Medicaid payment rates and high administrative burdens are major reasons cited by physicians for not accepting Medicaid patients. One-fifth of physicians reported accepting no new Medicaid patients in 2004-05.<sup>10</sup>

Poor access to physicians likely contributes to Medicaid patients' high utilization of hospital EDs. While crowded EDs are often attributed to uninsured patients, Medicaid patients are actually the most frequent users (See Figure 3). Based on the survey, 44% of Medicaid respondents reported an ED visit in the past 12 months, compared to 20% of uninsured respondents.

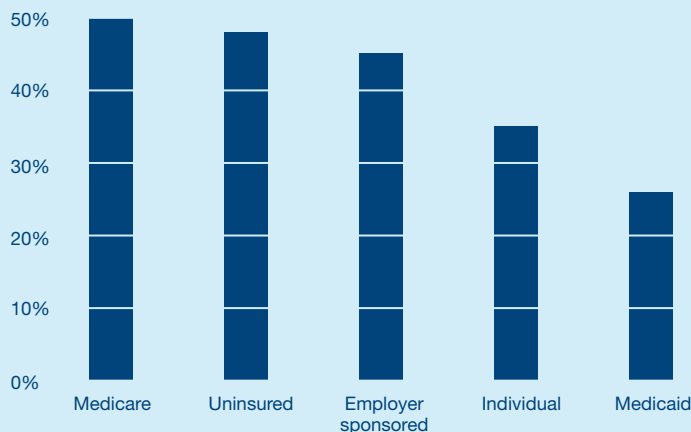
Medicaid patients are also the most likely to utilize the ED for non-emergent care. According to PwC's consumer survey, only 26% of Medicaid patients who had been to the ED in the last 12 months said it was an emergency, compared to 45% of individuals with Medicare, individual or group insurance plans (See Figure 4).

**Figure 3: Percentage of consumers with an ED visit in the last 12 months by insurance type**



Source: PwC Consumer Access Survey

**Figure 4: Percentage of ED visits that were considered an emergency**



Source: PwC Consumer Access Survey

8 PricewaterhouseCoopers. Healthcare policy in an Obama administration: Delivering on the promise of universal coverage, November 2008.

9 US Census Bureau: Income, Poverty, and Health Insurance Coverage in the United States 2007, Issued August 2008.

10 Medicaid Patients Increasingly Concentrated Among Physicians, Center for Studying Health System Change, Tracking Report No. 16, August 2006.

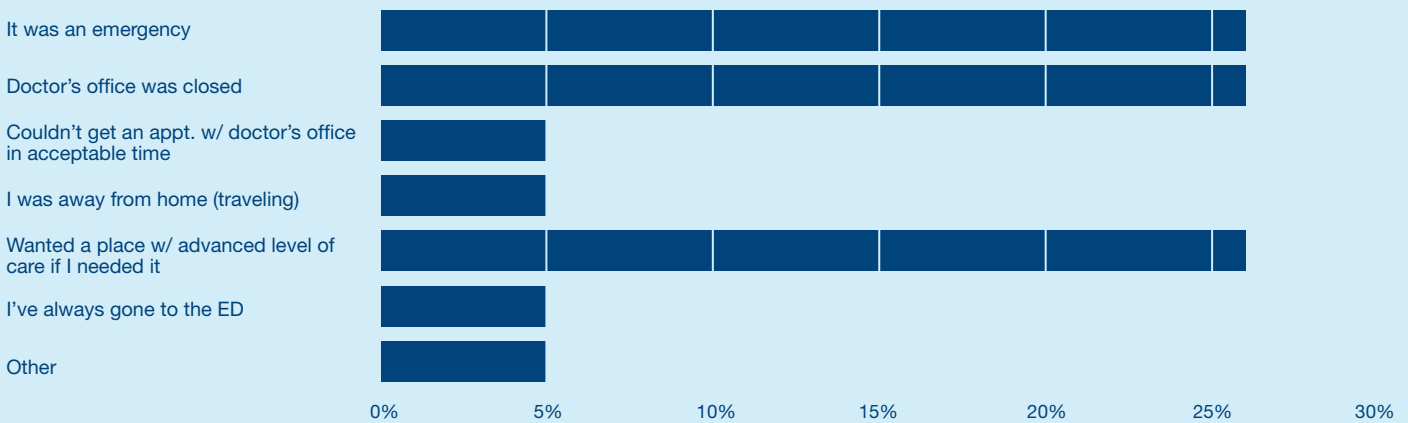
The disproportionately high use of the ED for non-emergent care by Medicaid patients likely stems from a number of factors:

- State Medicaid eligibility requirements vary and exacerbate movement in and out of the public insurance system. For example, in Texas, the eligibility process runs on a six-month cycle, so Medicaid members are in a frequent process of renewal; some states have shorter guaranteed eligibility periods, while others are as long as a year.
- Medicaid patients are less likely to have a personal primary care physician. In some states, they are assigned to a community health clinic rather than a specific physician and often must find their own physician. In many instances, Medicaid members have to call individual offices to seek care and are often told their coverage is not accepted, further limiting where they can go for care.
- Medicaid survey respondents cited long wait times to get a physician appointment as the top reason for poor access to care (See Figure 5). As a result, the ED becomes their most reliable and easiest access point for healthcare.

PwC’s consumer survey found that the Internet was one of the most popular alternative ways to improve access to healthcare. However, Medicaid recipients were the least likely to use this technology, possibly because of limited access or costs. Only 35% of Medicaid respondents indicated they would likely use the Internet or a computer, compared to 57% of those with commercial insurance.

Enabling services, such as transportation and social services, are key drivers of access issues, yet they take a back seat to clinical healthcare solutions. Overall, 10% of consumers surveyed indicated the lack of transportation as a reason why receiving healthcare is not always easy. Of that group, Medicaid patients were disproportionately higher, with one in four individuals citing transportation as an issue. Countries in Europe, such as Germany, the UK and the Netherlands, reimburse patients for transportation costs for certain conditions. In some circumstances, patients prearrange payment with their insurance company, and in others, patients get reimbursed directly after a visit during the checkout process.

**Figure 5: Reasons for visiting the ED for patients with Medicaid coverage**



Source: PwC Consumer Access Survey

**Individuals are not getting to the providers they need or want, particularly for specialty care**

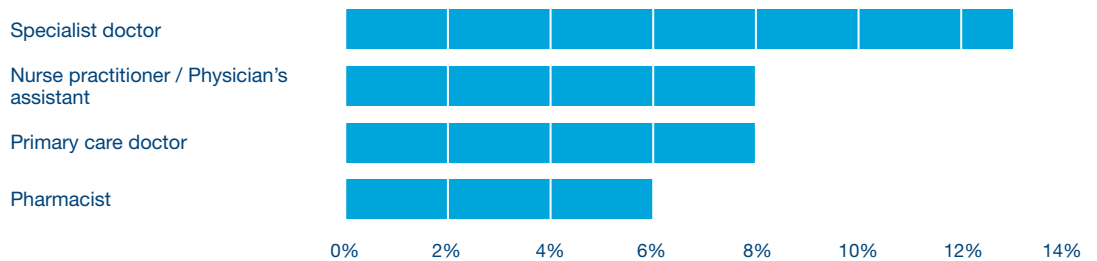
Increasing utilization of EDs is often blamed on poor access to physicians. However, there are more doctors per capita now than at any other time. The number of active physicians increased 19% from 21.3 per 10,000 persons in 1995 to 25.3 in 2006. And, visits to physician offices are also up, although at a slower pace. Office visits per capita increased 13% between 1995 and 2006, going from 271 visits per 100 people to 305. However,

between 2001 and 2006, the number of per capita visits has dropped.<sup>11</sup>

Despite these numbers, consumers say they wait too long to get an appointment with their doctors. This ranked second to costs as a barrier to access, according to the survey.

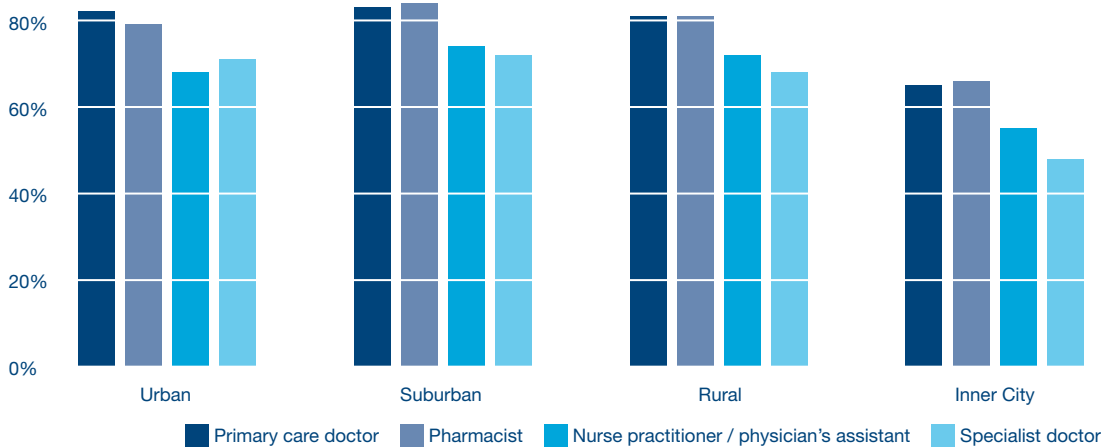
Concern about physician access has tended to center on primary care, but consumers said specialists were the most difficult to access (See Figure 6). In particular, those living in inner-city areas reported the most difficulty, followed by rural areas (See Figure 7).

**Figure 6: Percentage of consumers indicating difficulty accessing care**



Source: PwC Consumer Access Survey

**Figure 7: Percentage of consumers indicating providers are very or somewhat easy to access**



Source: PwC Consumer Access Survey

11 National Center for Health Statistics: Health, United States, 2008.

**Shortage of mental health providers jams up other healthcare services**

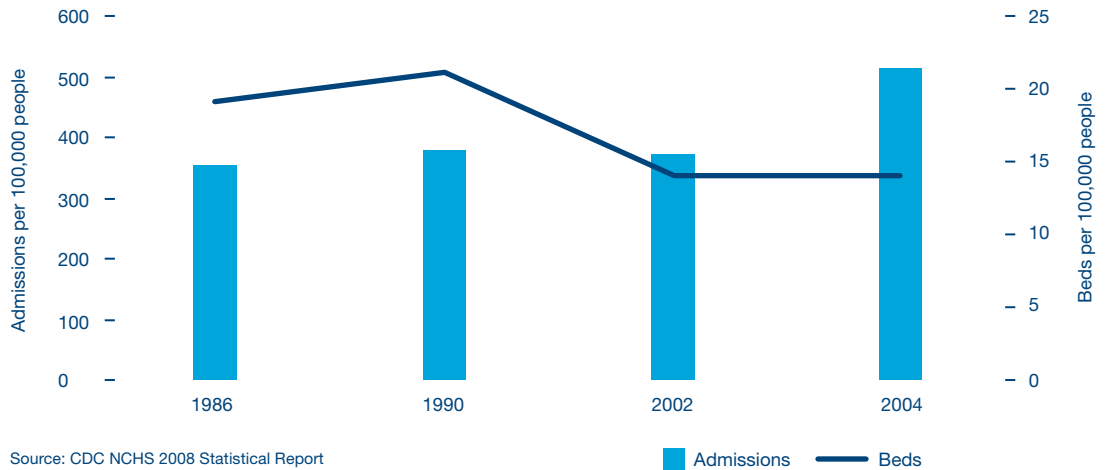
Mental health services are disappearing in many communities, making the ED a frequent boarding area and referral point. The government estimates an additional need of 5,329 mental health providers to serve the nearly 59 million underserved Americans.<sup>12</sup> Bev Dorney, RN, FKP Solution Management and former ED nurse, said, “Patients are sometimes on hold for three to four days in the ED before they’re moved to the proper mental health area of care.” In a survey by the American College of Emergency Physicians, 33% of ED physician respondents said that, on average, psychiatric patients waited more

than eight hours in the emergency department for an inpatient bed.<sup>13</sup>

A 2009 GAO study showed that even though psychiatric patients represent a lower volume of overall ED visits, their average length of stay is double that of all other patients (397 minutes compared to 194 minutes).<sup>14</sup>

Access to care is being exacerbated by a growing need for psychiatric services. Nonfederal hospitals report a 70% increase in psychiatric admissions between 1986 and 2004. However, bed capacity dropped 35% over the same period of time, from 19 to 14 psychiatric beds per 100,000 people (See Figure 8).

**Figure 8: Admissions and bed rates for nonfederal hospital psychiatric services**



12 Designated Health Professional Shortage Area Statistics (HPSA), Office of Shortage Designation Bureau of Health Professions Health Resource and Services Administration, June 17, 2009.  
 13 American College of Emergency Physicians (ACEP) Psychiatric and Substance Abuse Survey 2008.  
 14 Hospital Emergency Departments: Crowding Continues to Occur and Some Patients Wait Longer than Recommended Time Frames, GAO Report 09-347, April 2009.

# The jams: The system maze causes false starts and unnecessary stops

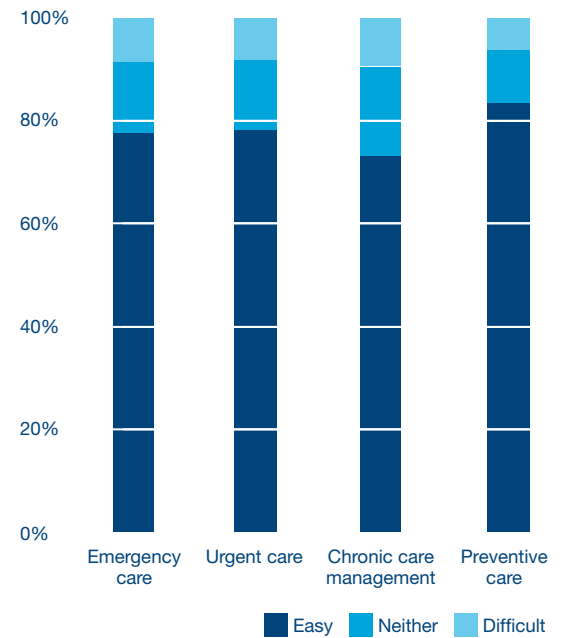
When individuals need medical care, they often stumble through the system. There are clear paths for acute care, less for preventative care and disjointed programs for chronic care. “Americans have been conditioned for the last 50 years to think about access to healthcare in one way [acute illness],” noted Michelle Silbar, director of brand strategy at Kaiser Permanente. “People are going to have to learn a whole new model of accessing care as the infrastructure shifts to a wellness and prevention model, but that is going to take time and a lot of education.”

## Chronic care drives the soaring needs curve

The health system isn’t viewed as a place for healthy people. Patients typically enter the healthcare system when something happens — an accident or illness is diagnosed. Once something happens, the needs curve soars as consumers suddenly require a lot of education, resources and decision-making tools (See Figure 9). And, that’s where access bogs down. “Those with significant medical problems are left to navigate through the system without a comprehensive guide,” said William Eveloff, assistant vice president involved in master facility planning at St. Joseph Health System in southern California.

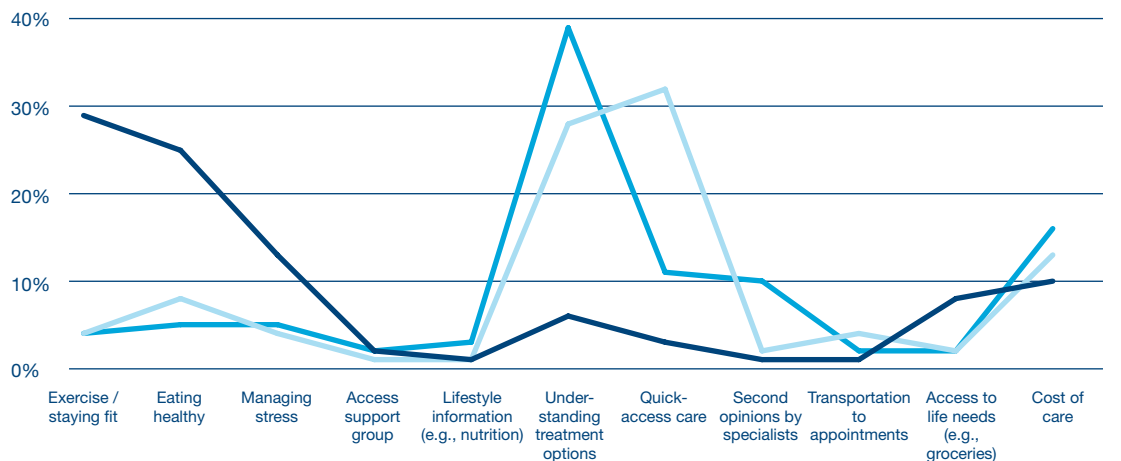
Chronic care management was viewed as the least easy to obtain among emergency care, urgent care and preventive care/maintenance (See Figure 10).

**Figure 10: Ability to access type of care when needed**



Source: PwC Consumer Access Survey

**Figure 9: What consumers value the most based on health status**



Source: PwC Consumer Access Survey

— Healthy — Sick / injured — Chronic illness

**Disease management needs to be better managed**

Disease management programs are designed to coordinate interventions, reminders and self-care solutions. When patients are fully engaged, they're more likely to take positive corrective actions. Unfortunately, too few patients do. According to PwC's 2009 Touchstone Employer survey, the majority of employers offering disease management programs have less than a 15% participation rate among eligible patients. Assessment of one large employer's program found that only 50% of enrolled members interacted with a clinician two or more times during the program.

The use of technology and information sharing continues to be siloed, interrupting communication and use of available data and information. "A key barrier to disease management programs being effective is how information flows from payers to providers and consumers," said Susheel Jain, vice president of corporate and product strategy for Resolution Health, a data analytics-driven personal healthcare guidance company. "Dissemination as well as coordination of

information needs to be improved and made more efficient."

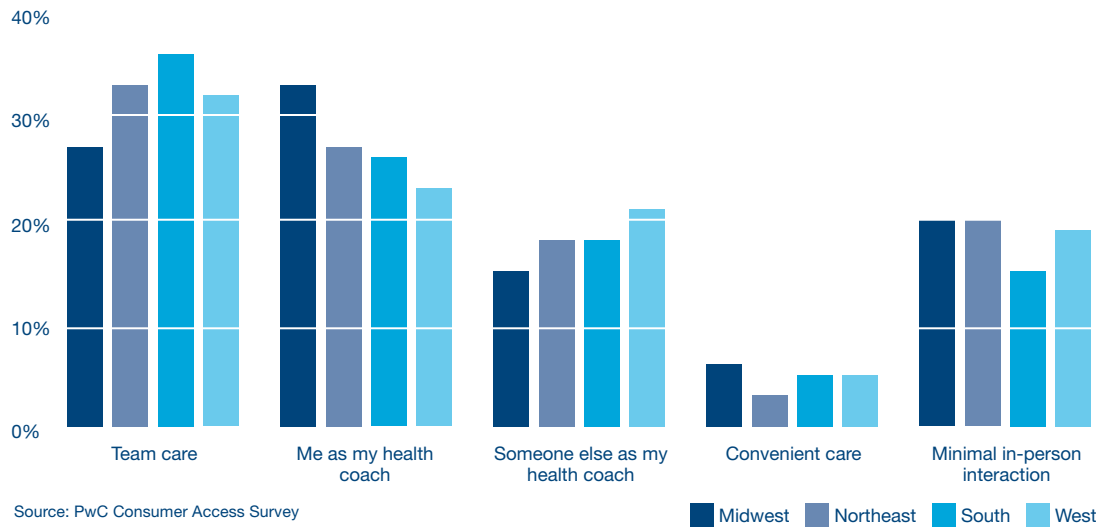
**Patients need direction**

"There's often a mismatch in expectations of what healthcare can provide," said Steve Tough, president, Health Net Federal Services. Getting patients to the right care at the right time is a complex issue because consumers have different preferences on who provides direction. People in the Midwest are more likely to want to be their own health coach, while those in the West are more likely to want someone else to be their health coach, according to PwC's consumer survey. More Southern residents prefer a team approach (See Figure 11). Understanding people's preferences for receiving care would allow providers to better match how services are delivered.

**Healthcare organizations are working hard, but not necessarily together**

Coordinating information among dozens of clinicians and providers is a challenge and can often be frustrating to patients. A typical primary care physician works with 229 other

**Figure 11: Preferences for receiving future healthcare by region**



physicians to coordinate care for his or her patients, according to the Center for Studying Health System Change.<sup>15</sup> Such complexities can limit a provider's ability to make informed treatment decisions, often resulting in redundant testing and procedures. According to Jonathan Curtright, chief operating officer of ambulatory services at University of Kentucky HealthCare, "Seeking medical care and making the process seamless to the patient can be a challenge, especially for patients with complex medical conditions. Tracking and coordinating information among primary care doctors, ancillary services and specialists can often be difficult and time consuming."

While people are mobile, most often their information is not. Patient information, treatment plans and other vital medical

information is mainly stored in paper-based medical records. Information that is electronic is typically not portable because of a lack of interoperability and a disconnection between IT systems and vendors used across the country. Because the ability to share information is cumbersome, most patients have multiple health records with different doctors, hospitals, clinics and pharmacies.

The military experiences this daily in transferring information between its military treatment facilities and civilian providers that treat military personnel and their dependents. "When care transcends both systems, often neither one knows what the other one has done if we don't have effective information sharing," said Health Net Federal Services' Tough.

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<sup>15</sup> Pham H., O'Malley A., Bach P., Saiontz C., Schrag D., "Primary Care Physicians' Link to Other Physicians Through Medicare Patients: The Scope of Care Coordination," *Annals of Internal Medicine*, 150:236-242 (February 2009).

# The jams: Individuals fail to act on their health early

## Individuals are generally inactive in their own health until they're sick

In the United States, about four out of every 10 Americans (125 million people) suffers from a chronic condition.<sup>16</sup> Diseases such as diabetes and heart disease can be preventable through healthier living, yet half of all individuals, according to PwC's survey, indicated their current lifestyle was less than healthy. Ninety percent of individuals indicated they would become active in improving their health if they were diagnosed

decline. Diseases such as type 2 diabetes (commonly called adult onset diabetes) started in the fifth or sixth decade of life. Today, however, more American are becoming ill before approaching an advanced age. Type 2 diabetes now accounts for close to 50% of pediatric diabetes in many communities. According to Brigitte Piniewski, MD, director, BioWellness Research at Oregon Medical Labs, "This dramatic shift in earlier onset by decades results in access needs of our youth that compete with and add onto the traditional background health access needs of

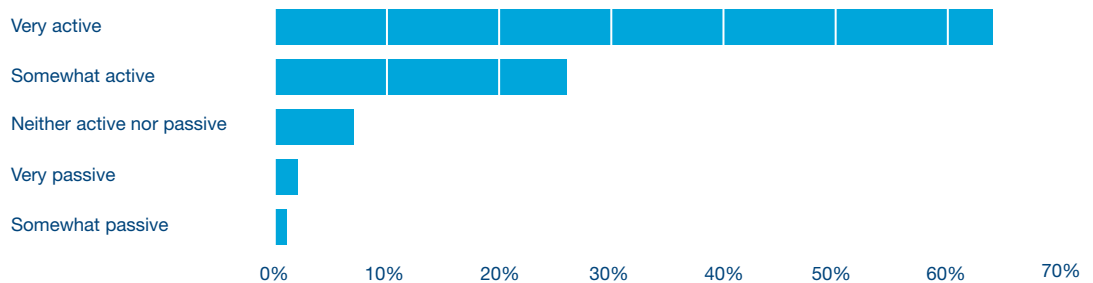
"Containing the containable will be a significant contribution to addressing the access to care challenge moving forward."

with a chronic illness (See Figure 12). Too many people are waiting until they're already at the chronic illness phase to become active in their health.

A few decades ago, the chronic illness phase was largely associated with age-related

the community. A medical community charged with safeguarding the health of a nation must now tackle pro-active prevention strategies aggressively. Containing the containable will be a significant contribution to addressing the access to care challenge moving forward," noted Piniewski.

**Figure 12: Consumers' level of involvement in their health, if diagnosed with a chronic condition**



Source: PwC Consumer Access Survey

<sup>16</sup> Centers for Medicare and Medicaid Services, The Bridges to Health Model, 2007.

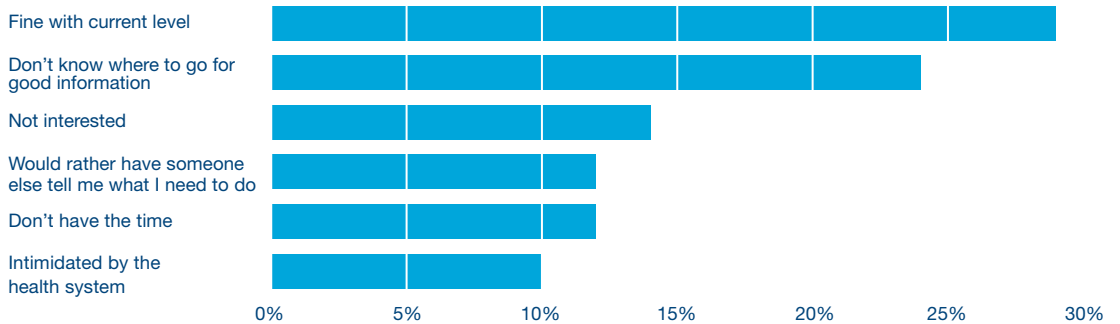
### Searching for information

Some consumers said they were being passive about their health because of frustration with how to access care. When asked what keeps them from being more involved in their healthcare, one-fourth of surveyed individuals said they did not know where to go to find good information, and 10% said they were intimidated by the health system (See Figure 13). The largest segment of respondents, who indicated not knowing where to find good information, were individuals within the age group of 25-44 and those within the employer-sponsored health insurance group (See Figure 14). The

amount of health information provided by employers varies, observed Kristin Juel, senior brand strategist of member experience, Kaiser Permanente. “The larger employers tend to have the resources to provide health information and education for their employees, compared to smaller employers who have fewer resources to dedicate to providing this type of information.”

Data also suggests that those in poor health are the least involved in their healthcare and treatment choices. One out of four people with poor health status are not at all involved in their personal healthcare and treatment choices.

**Figure 13: Primary reasons for consumers not being more involved in their healthcare**



Source: PwC Consumer Access Survey

**Figure 14: Primary reasons for consumers not being more involved in their healthcare by insurance type and age grouping**

By insurance type	No Insurance	Employer	Individual	Medicaid	Medicare
	Fine with current level	27%	33%	17%	29%
Don't know where to go for good information	15%	33%	10%	29%	22%
Not interested	21%	9%	17%	14%	16%
Would rather have someone else tell me what I need to do	10%	9%	24%	0%	22%
Don't have the time	15%	8%	14%	14%	9%
Intimidated by the health system	12%	7%	17%	14%	3%

By age grouping	Age 18-24	Age 25-44	Age 45-64	Age 65+
	Fine with current level	16%	25%	40%
Don't know where to go for good information	23%	32%	23%	5%
Not interested	20%	17%	5%	5%
Would rather have someone else tell me what I need to do	14%	8%	8%	32%
Don't have the time	19%	12%	8%	0%
Intimidated by the health system	8%	5%	15%	14%

Source: PwC Consumer Access Survey

# The openings: New means of access are available

Based on PwC’s interviews with leaders across the health system, many organizations are building new pathways to care that increase access, lower cost and can be replicated in other regions. The future of healthcare access will be defined by the cost pressure to try something different. “The more efficient means of delivery may mean better and faster access to medical information and treatment, but with less face-to-face interaction,” noted Marty Webb, vice president benefits, AT&T.

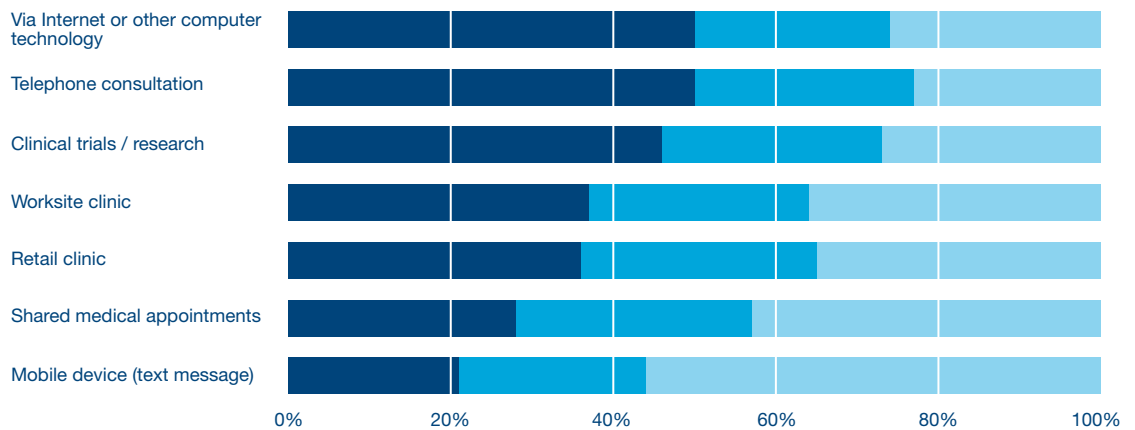
PwC’s consumer survey shows that individuals are interested in participating in alternative ways to access healthcare. The most popular alternatives cited by consumers were the Internet or other computer technology and the telephone for consultations (See Figure 15). Using text messaging was the least popular, although 21% of consumers said they would likely use their mobile phones as an alternative method if such a service was conveniently available.

## Accessing the Internet for care and not just information will become more common

Consumers are willing to take new pathways to care; in fact, 61% already are. They’re accessing medical information at online sites such as WebMD.com, which receives over 61 million visitors per month. Much of the traffic may be generated by patients waiting to see their physicians. Craig Froude, executive vice president of WebMD Health Services said, “Accessing your primary care provider for nonemergent care is becoming increasingly difficult. As a result, we are seeing individuals looking for alternative outlets to fulfill these healthcare needs.”

The next step is online access. One in two survey respondents indicated they would be very or somewhat likely to use the Internet or other computer technology to access healthcare if it was conveniently available. In addition, 15% of respondents indicated always or often using the Internet for other

**Figure 15: Willingness to utilize alternative methods of accessing healthcare if they were available**



Source: PwC Consumer Access Survey

Legend: ■ Likely ■ Neither ■ Unlikely

activities, such as scheduling appointments or accessing personal health information. Patients are also finding access to health information and interacting with other patients on social networking sites like PatientsLikeMe, which give tools to individuals with life-changing illnesses to connect with others and get involved in research opportunities. Another site, Daily Strength, hosts blogs and numerous support groups where individuals can learn from each other about treatment options, reactions to different treatments and referrals to physicians.

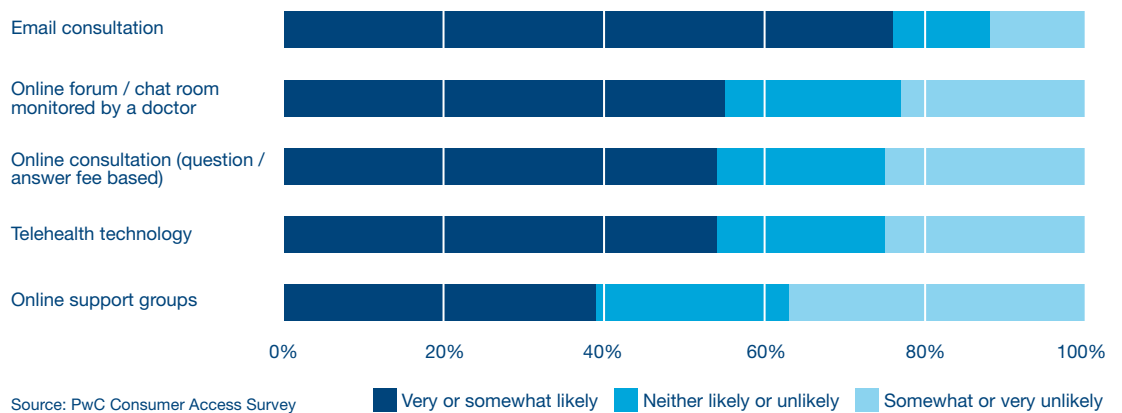
Consumers who said they would use the Internet for healthcare delivery indicated e-mail consultations as the most preferred, followed by online consultations (See Figure 16).

According to Scott Sarran, MD, chief medical officer of Blue Cross Blue Shield of Illinois, “We believe that in the near future, services such as online consultations are going to become a major trend.”

But can they reduce cost? A 2008 study conducted by the actuarial firm Milliman showed that online care has the potential for generating savings for health plans if they can be used as a substitution for nonemergent ED visits and in-person office visits.<sup>17</sup> However, because most health plans do not currently reimburse for this service, the cost of an online encounter is still relatively undetermined.

For patients, online care is already helping their pocket book. The Hawaii Medical Service Association (HMSA), which launched an online care program early 2009, charges HMSA members \$10 and non-HMSA members \$45 for a 10-minute online consultation. Compared to the national average cost for a doctor’s visit of \$110 for a low-level new patient office visit, this alternative would provide an immediate savings for an uninsured patient paying out of pocket.<sup>18</sup>

**Figure 16: Preferred uses of healthcare via the Internet**



17 Milliman study for American Well. [http://www.americanwell.com/pressRelease\\_Milliman.html](http://www.americanwell.com/pressRelease_Milliman.html)

18 Based on 2009 Medicare Nonfacility payment rate for E&M code 99202 adjusted 75% to represent the estimated average physician's charge for services, based on findings from the 2008 Physician Fee Schedule Survey, by physicianpractice.com. <http://www.physicianpractice.com/index.cfm?fuseaction=articles.details&articleID=1293>

# Hawaiian health plan members embrace online physician consults

An online physician consult service launched in January 2009 by Hawaii's largest health plan, Hawaii Medical Service Association (HMSA), generated more than 1,000 encounters in the first five months. The 24/7 service is seen as "an important initiative to bring us into the twenty-first century and a valuable tool that we are now using to help address access problems in Hawaii," said Patricia Avila, MD, HMSA medical director for Online Care. The problem is especially acute in rural areas on Oahu and on the neighbor islands where it can be difficult to find both primary and specialty care. Online care provides access to care for people who need it — those with time constraints, distance constraints, mobility and disability and coverage constraints.

Patients can access physicians when they need them through web-based video conferencing, secure chat or telephone. Patients create online accounts through a secure website and select physicians from more than 20 specialty areas. Consultations typically begin as an online chat and many transition to the telephone. However, all three modalities of video, chat and telephone are used equally. Web-conferencing is also available for patients with video cams on their computers. Ten-minute consults cost \$10 for HMSA members and \$45 for non-HMSA members. Visits can go longer for an extra three minutes at no charge, but few of them do. The average call time is 10.3 minutes.

Even though specialty care drove the need for the service, Bill Osheroff, MD, medical director in medical management, says that primary care consults are in the highest demand. Since January, 140 physicians have agreed to participate in the program, which pays them \$25 per consult. Physician feedback has been positive. One advantage is flexibility — physicians can log in anytime and are notified when requested by a patient. HMSA provides documentation of the visit, which is populated in each patient's personal health record. The Hawaiian health plan has partnered with Microsoft Health Vault, which also provides non-HMSA patients with a personal health record.

## Online consultations at a glance:

<b>Average session time:</b>	10.3 minutes
<b>Peak times:</b>	43% of consultations occur between 8am and 4pm. Another 43% of consultations occur between 8pm and 12am.
<b>Demographics:</b>	The most common user is female (63%) between the ages of 26 and 45.

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### Demand for services:

- 79% of consultations are for primary care physicians.
- Upper respiratory and infections are the most common issues raised by patients.
- Other common issues include cough, nausea, urinary tract infections, strep throat, acute conjunctivitis, fever and diarrhea.
- The tool is also being used by physicians to manage chronic disease with established patients.

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### User satisfaction:

- 85% of consumers rate their experience as "excellent" or "good"
  - 89% of physicians rate their experience as "excellent" or "good"
- 

## The future:

According to Avila, "We made this project a key priority because we felt the Online Care program would improve access to care, has the potential to reduce costs and really is the way of the future." HMSA is also piloting several additional projects to test how the program might be used for physician-to-physician medical consultations, follow-up patient consultations for chronic disease management and providing follow-up care for organ transplants. There are also plans to expand the service to include allied health professionals in the near future.

## Lessons learned:

1. Physician champions are critical to early buy-in. Recruiting physicians was cited as one challenge. Being able to articulate the value of using the technology to the physicians and community is vital.
2. Don't underestimate the amount of organizational resources and time commitment to implement the program.
3. Success will depend on understanding your community in general and their level of technology acumen.
4. It's important to be able to have the visits linked to a patient's electronic medical record. HMSA is currently working on adding this capability.

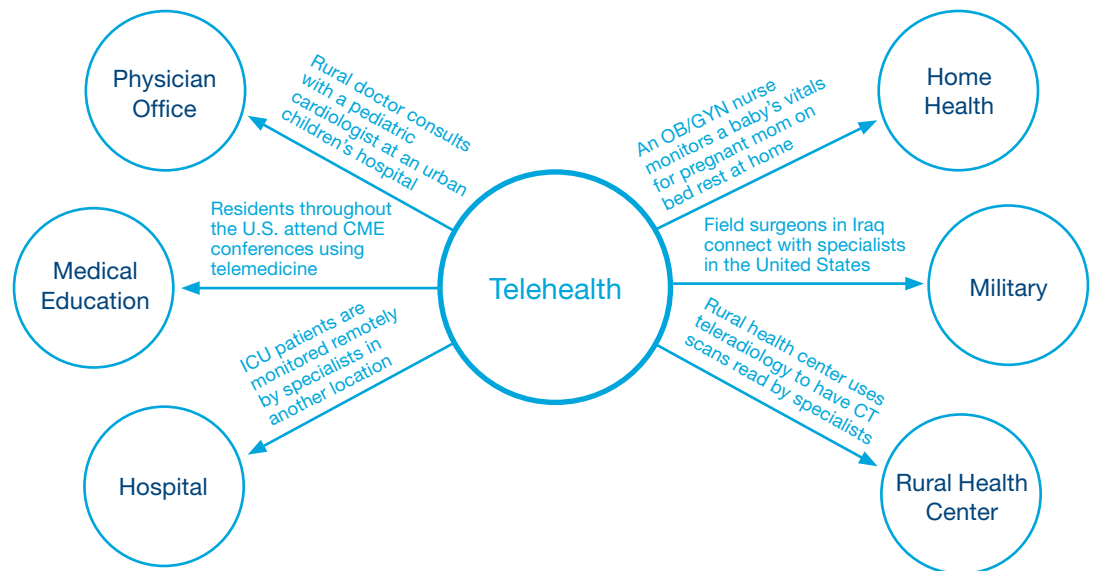
**Telehealth is increasing access to much needed specialists**

After nearly 40 years of slowly growing usage, telehealth, also known as telemedicine, is becoming an affordable alternative that demonstrates savings. As a result, its use is growing. Sales of telemedicine services and products are projected to exceed \$1.8 billion by 2013, up from just \$77 million in 1995.<sup>19 20</sup> Telehealth includes the use of medical information exchanged from one site to another via electronic communications such as videoconferencing, transmission of still images, e-health including patient portals, and remote monitoring of vital signs, according to the American Telemedicine Association.<sup>21</sup> According to the AT&T Center for Telehealth Research and Policy, widespread implementation of telehealth could save the healthcare system more than \$4 billion just from reducing transfers of patients from one location to another for medical exams.<sup>22</sup>

Within the Department of Veterans Affairs health system, 110 of 153 hospitals and half of its 700 community-based outpatient clinics use telehealth. Telehealth can expand access to services ranging from prevention to palliative care. “Home technologies work especially well to manage patients with chronic diseases,” said Adam Darkins, MD, chief consultant, care coordination, Office of Patient Care Services, Veterans Health Administration. “The VA can monitor these patients so if they begin to deteriorate, you can call them at home or see them in the clinic with the aim of treating them and avoiding their unnecessary admission to the hospital.”

The VA’s national home telehealth program showed a 25% reduction in numbers of inpatient days and a 19% reduction in hospital admissions.<sup>23</sup> This translates into quantifiable savings. Comparing the costs of telemedicine versus outpatient care, Bob Perreault, former

**Figure 17: Industry applications for telehealth**



19 Demands for better care, cutting costs spur telemedicine's growth, The BBI Newsletter, January 1997.  
 20 Telemedicine Revenues to Exceed \$1.8 Billion by 2013, Marketwire News Release, July 23, 2008. <http://www.marketwire.com/press-release/Pike-and-Fischer-882137.html>  
 21 American Telemedicine Association. <http://www.americantelemed.org/i4a/pages/index.cfm?pageid=3333>  
 22 The Telehealth Promise: Better Healthcare and Cost Savings for the 21st Century, by AT&T Center for Telehealth Research and Policy Electronic Health Network, May 2008.  
 23 Care Coordination / Home Telehealth: The Systematic Implementation of Health Informatics, Home Telehealth, and Disease Management to Support the Care of Veteran Patients with Chronic Conditions, by Telemedicine and e-Health, December 2008.

VA medical center director noted, “Telemedicine costs about \$1,600 per patient per year compared to \$16,000 per patient per year for outpatient ambulatory care.”

On the private delivery side, Clarian Health System in Indiana has found a high demand for its telemedicine program, especially for expanding access to specialists like dermatologists and pediatric urologists. Adult sleep consultations and postsurgical follow-up also generate high telemedicine volumes. Since March 2004, over 1,500 Clarian patients have had clinical consults and saved more than 440,000 travel miles. Prevention education for patients and distance learning for physicians are some of the largest growth areas, along with behavioral health services in the ED. Currently, Indiana EDs are exploring the utilization of this capability. “Telemedicine is an investment,” said Jennifer Baron, director, Clarian Telemedicine. “Ten years from now, the healthcare decision makers will demand technology, because the upcoming generations are increasingly technology driven and also because this technology overcomes age-old barriers to care delivery.” After implementing an orthopedic telehealth program, Clarian noted a significant decrease in lower-level fracture cases being transferred to its hospital. By utilizing telehealth, ED physicians in neighboring communities were able to consult with Clarian’s orthopedic trauma specialists and treat the patients instead of transferring them to a level-one trauma center for care.

### **Low-cost mobile technology gives self-care a boost**

Technology is getting smaller, mobile, more sophisticated and cheaper. And its usage can reduce the need for face-to-face office visits. “One example is the use of biometric remote devices to monitor patient information. Biometrics opens the door for improved coaching programs, wellness programs and disease management,” said Craig Froude, executive vice president of WebMD Health Services. He added that “Information from remote monitoring is being actively used to populate personal health records, allowing physicians to monitor patients and deliver targeted health information to help patients make the best health decisions.”

Seventy-three percent of consumers surveyed by PwC indicated they would be interested in using remote monitoring. In anticipation of such demand, a flurry of medical devices is either on the market or in development. To guide users and manufacturers, Continua Health Alliance has developed the industry’s only interoperability and certification program for personal medical devices. For example, the not-for-profit consortium recently certified its first mobile device that wirelessly transmits patient vital signs to clinicians. The consortium, whose membership of more than 200 healthcare and technology companies has grown 10-fold in three years, focuses on interoperability and extending solutions into the home. Personal medical devices

### **Success factors for telehealth**

1. Understand and address patients’ initial and ongoing needs
2. Find physician champions who embrace the potential of telehealth
3. Employ skilled staff to support technology and process changes
4. Establish or ensure that there’s an underlying electronic health record
5. Use networks that are standardized and engineered to manage appropriate legal issues
6. Develop a systematic strategy for implementation
7. Pay attention to details from process flows to equipment to training of resources
8. Conduct user testing and refine interfaces and interactions

use “nonlinear communications to improve healthcare of individuals and save money by enabling recovery and self-management away from the four walls of typical healthcare environments,” said Chuck Parker, Continua’s executive director. “Individuals can capture data through various mobile technologies and transmit data in near real-time or in the timeframe needed by the provider. Physicians and their staffs can monitor as necessary and manage patients at the spikes of abnormal or non-activity rather than in a structured visit. An EHR platform is key to sharing of information from these devices; otherwise physicians would need alternate workflows and staff members who can aggregate and monitor the data by other means,” added Parker.

Mobile solutions can improve access and quality by increasing collaboration through communication and better visibility into individuals’ compliance and health habits. Mobile applications can act as a virtual health coach by enabling consumers to set goals, track tasks, monitor results and receive health reminders. That’s the mission of companies like Vive, a new Silicon Valley company, whose goal is to help consumers engage in their own health. “Mobile technology enhances a person’s ability to capture and make use of observations of daily living through constant monitoring and feedback, which simply can’t be provided by physicians, nurses or health coaches who only have limited and sporadic interaction with a patient,” said Doug Keare, co-founder of Vive Solutions.

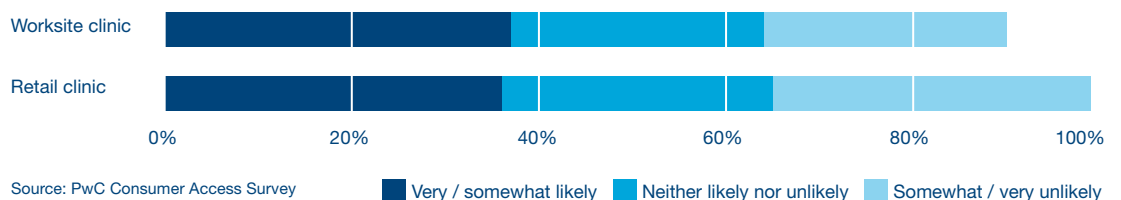
### Alternative points of care in the community provide convenient and timely access

While physician offices have been the traditional first point of care for most consumers, other alternative sites of care are gaining traction. When asked where patients go first to get their healthcare needs met, approximately one-third of individuals surveyed indicated alternatives such as retail health clinics and worksite clinics.

While only 1% of consumers surveyed indicated using worksite clinics as their first source of healthcare, almost 40% indicated they would be willing to use a worksite clinic if it was available (See Figure 18). Both retailers and employers are taking note. Walgreens is investing in worksite clinics, purchasing two of the leading worksite clinic chains last year. Employers are also responding by opening onsite health clinics or highlighting services at existing facilities in an effort to reduce health insurance costs by emphasizing preventive care and making services more accessible to their workers. According to PwC’s 2009 Annual Employer Barometer Survey, 10% of large employers surveyed offer onsite medical clinics compared to only 1% last year.

Worksite clinics are expanding beyond large employers. One growing practice by smaller employers is to share nearsite clinics — either one employer opening its onsite clinic to nearby companies or neighboring employers banding together to establish a communal facility.<sup>24</sup> That enables midsized employers, as well as smaller employers, to consider

**Figure 18: Patients willingness to utilize worksite and retail clinics**



<sup>24</sup> Mercer, Survey: Worksite medical clinics, 2009.

this new take on a not-so-new employee healthcare strategy.

After opening an urgent care/primary care practice in an Irvine, California retail center, Felix Horng, MD, formed an agreement with nearby employer, Parker Hannifin, which has 1,700 workers. Horng set up a satellite clinic on site one to two days a week, with the option to visit or perform additional services at the retail center three miles away. “We intentionally went to a place where there are other life service providers. 17% of our new patients came in because they saw us while shopping in this outdoor center. We’ve created informal synergies by cohabitating with businesses that people go to on a regular basis (grocery, coffee shop, pharmacy). We have a symbiotic relationship,” said Horng.

Retail health clinics have expanded across the country in an attempt to bring access closer to consumers. According to the Convenient Care Association, approximately 1,200 clinics have served over 3.5 million people in the past eight years. About 10% are managed by health systems.<sup>25</sup> The remainder are owned by retail chains such as Walmart, Walgreens and CVS. The most prevalent use of retail clinics are for minor conditions such as colds, earaches, and sore throats, but some are piloting specialized services such as injections for chronic conditions.

Compared to traditional physician offices and urgent care centers, retail clinics have a small facility footprint and very minimal overhead costs. Having low fixed costs gives retail clinics a financial flexibility that other providers lack; they can close during slow periods. As such, some have moved to seasonal schedules. This translates into lower costs to consumers. Retail clinic visits were found to cost consumers half as much as doctor appointments for similar conditions.<sup>26</sup>

In Massachusetts, where access issues were exacerbated after universal coverage reforms were enacted in 2006, many patients turned to community health centers that provided both enrollment assistance and access to medical, mental health and dental care for thousands of newly insured residents. According to James W. Hunt, Jr., president and CEO of the Massachusetts League of Community Health Centers, in a period of one year 200,000 people came into Massachusetts’ state health system, mostly adults 45 and over. “While these health centers have helped to open up critical access for the newly insured, they also serve as the primary educators and enrollers of people seeking the new coverage,” added Hunt. The Erie Community Foundation, which is a collection of charitable endowments, is considering a promising approach used in Cincinnati, where they helped fund a Patient Navigator System, which is housed at a hospital or a federally qualified health center (FQHC). They are used like a case manager in locating resources for patients. Currently, this service is mostly disease or population specific (e.g., OB/pregnant women). The program has had a significant impact on women who otherwise would not know how to move through the healthcare system during their pregnancy. “The challenge with this program, as with many navigator programs, is that it has been funded mostly by grants and is not a standard reimbursable service,” noted Shiloh Turner, vice president, Erie Community Foundation.

### **The chance to participate in clinical trials opens future care access**

For some patients, access to care means access to the latest developments. Ora Pescovitz, MD, chief executive officer of University of Michigan Health System, believes that access to research is difficult. “We need to understand that we practice

<sup>25</sup> Convenient Care Association: About us, [www.ccaclinics.org](http://www.ccaclinics.org)

<sup>26</sup> Convenient Care Association, “Reducing Costs For Consumers and Third-Party Payers,” [www.ccaclinics.org](http://www.ccaclinics.org)

medicine with the best of what we know versus what might be better in the future. Every patient should be offered the opportunity to participate in research.”

About half of consumers surveyed indicated they would be very or somewhat likely to participate in clinical research or experimental treatments (See Figure 19). The barriers to entry and involvement, however, include lack of information for patients, lack of informed physicians and misconceptions and mistrust about clinical trials.<sup>27</sup>

### Expanding roles of nonphysician providers

The roles and responsibilities of providers are shifting, in particular for pharmacists, who may begin playing a greater role in providing comprehensive patient care. Consumers rated primary care physicians and pharmacists as the most accessible, with the least difficulties accessing a pharmacist. “Pharmacists are the most underleveraged resource in the healthcare industry; we need to free them up to do more patient counseling,” said Stanley B. Blaylock, president of Walgreens Health Services. Pharmacists can be effective “to educate, inform, interact and intervene. Their scope of practice may expand, but mostly it’s to help them practice the way they were trained — to augment physician and nursing care.”

The cost effectiveness of pharmacists is documented in the much-referenced Asheville Project, started in 1996, which used

pharmacists as personal health coaches and liaisons to physicians. Their intervention helped more than half of patients improve their chronic health conditions, resulting in an annual decline of 10% in the number of insurance claims. This resulted in a decreased mean insurance cost per member of \$2,704 in the first year and \$6,502 per member in the fifth year.<sup>28</sup>

Other nonphysician providers, such as nurse practitioners (NPs) and physician assistants (PAs), can act as force multipliers of a physician’s baseline evaluation skills and treatment of common acute illnesses and injuries. They expand the physician’s capacity to focus on more complex problems for more people by helping reduce the burden of care for routine and common illnesses or procedures. For example, PAs, whose training focuses on a similar medical model as physicians, can act as physician extenders in inpatient settings such as the operating room or in an ED setting in an urgent care capacity. Nurse practitioners, who have unique training in health promotion and ongoing care management, can be especially effective with patients’ continuing care needs. The Purdue School of Nursing developed and implemented a nurse-managed delivery model for five primary care clinics, where nurse practitioners provided acute and episodic care. Under the NP-led model of care, patient costs per year amount to \$800,000 for 10,000 patients, compared to \$3 to \$5 million per year for similar number of patients in a traditional physician-led clinic model.<sup>29</sup>

**Figure 19: Patients’ willingness to participate in clinic research or experimental treatments as a way of getting healthcare**



27 Faster Cures: the Center for Accelerating Medical Solutions, “Patients Helping Doctors Program: How can we improve recruitment and retention in clinical trials,” [http://www.fastercures.org/objects/pdfs/factsheet/Fastcures\\_ClinicalTrialsv3.pdf](http://www.fastercures.org/objects/pdfs/factsheet/Fastcures_ClinicalTrialsv3.pdf)

28 Cranor C.W., Bunting B.A., Christensen D.B., “The Asheville Project: Long-Term Clinical and Economic Outcomes of a Community Pharmacy Diabetes Care Program,” *Journal of the American Pharmaceutical Association*, Vol. 43, No.2, March/April 2003.

29 Jennifer Fisher Wilson, “Primary Care Delivery Changes as Nonphysician Clinicians Gain Independence”, *Annals of Internal Medicine* Vol. 149, No. 8, October 2008.

# The openings: Coordination among practitioners helps build better delivery pathways

## Delivering team care

Consumers want a team of individuals managing their care, but they disagree on who should direct them. Regardless, they want them to work together. Individuals surveyed favored a team care approach to healthcare, followed by people wanting to be their own health navigators (See Figure 20). Team care was defined as someone who would like a team of people to take care of them — people who understand their social, medical and general health needs. Primary care physicians want to provide a team care environment, but execution is hindered by the lack of incentives and higher costs.

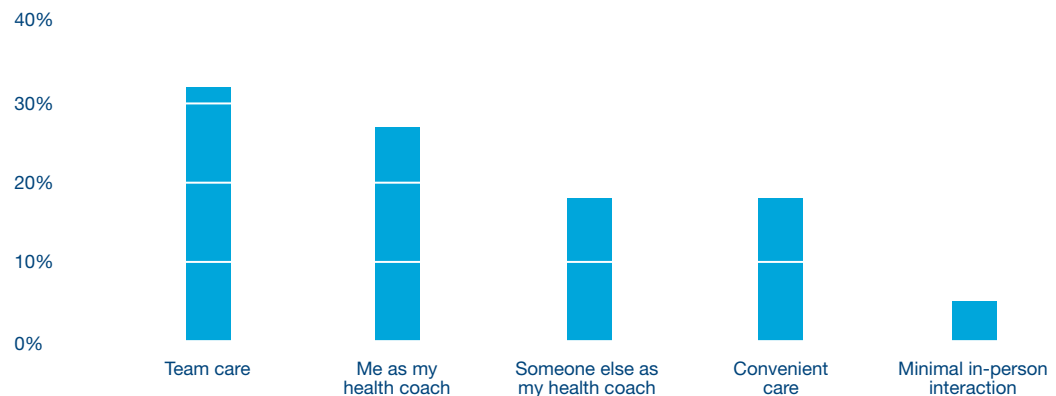
The need for team care is even more important as consumers continue to access care in nontraditional ways. They're choosing physicians through the Internet or going to retail clinics or pharmacies in grocery stores. And the increasing numbers who are going to EDs are circumventing the whole traditional referral relationship. "One of the solutions implemented by some emergency department administrators is to 'triage out' or medically screen a patient up front and determine whether an 'emergency medical condition' exists. In these situations, referral patterns are reversing. Instead of physicians referring patients to hospitals, hospitals are referring patients to physicians, clinics or in some

cases to no specific care giver," said David Mendelson, MD, vice president, medical affairs, EmCare. "This has big implications for delivery models and patient-directed care. In hospitals where this is managed appropriately, the non-emergency patients are screened, sometimes provided prescriptions but follow up is done in appropriate local clinics or offices over the next few days. However, if this process is not managed well, there is potential for harm," he said.

Some private primary care physician groups are trying to move toward team care in which they provide mental health and lifestyle assistance in combination with primary care services. Robert L. Phillips, MD, director, Robert Graham Center, a research and policy arm of the American Academy of Family Physicians (AAFP), discusses the importance of team care and using the skills of clinicians appropriately: "Simply increasing scope of practice and having physicians and nurse practitioners do more of the same activities defeats our training and reduces access to our mutual capacities and exposes everyone to limitations."

"We need to better use technology and data to help community health centers understand care in the context of community," added Andrew Bazemore, MD, assistant director, Robert Graham Center. "With the right tools,

**Figure 20: Preferred methods of receiving future healthcare**



Source: PwC Consumer Access Survey

they can provide targeted care that meets population needs and also improve their practice's efficiency." The Robert Graham Center is helping practices in Virginia use geospatial tools to understand where their patients are coming from so that they have more information about their patients. Understanding their living situations helps physicians deliver care more effectively. The problem is that reimbursement is in silos, and cooperation is not rewarded.

Philip Fasano, chief information officer, Kaiser Permanente, described how "connecting the time and space gap will allow the typical knowledge worker to be leveraged in a team with the clinical experts." Kaiser is exploring the concept of virtual rounding in the inpatient setting where they could use a combination of primary care providers and specialists to meet the needs of patients, essentially improving access of physicians at the bedside.

In some cases, medical homes have been described as a solution to team care. However, there's disagreement over who directs the care — is it a primary care physician or a specialist? "The medical home gets at the access, deals with some of the backend problems by dealing with the front end. Change impacts all, and there is an equilibrium with providers that must be maintained," cautioned Scott Sarran, chief medical officer, Blue Cross Blue Shield of Illinois. "If we move a dollar more toward primary care, that's coming from specialists and hospitals."

Health reform proposals are attempting to address this issue. The Medicare Payment Advisory Commission (MedPAC) recommends that Medicare provide incentives for physicians and hospitals to work together throughout an episode of care. MedPAC proposes providing physicians and hospitals with relative risk-adjusted performance information and potential shared savings from reengineering inefficient care processes.<sup>30</sup> The

purpose of bundling Medicare payments is to encourage providers to work together to deliver the most appropriate mix of services at the time needed.

### **Technology and data liquidity can increase patient engagement, physician productivity and operational efficiency**

The team model of care needs to be supported by technology such as electronic health records (EHR) and the effective flow of data from one practitioner to another and from one entity to another. "Data liquidity is a requirement to make health patient centric," said Adam Bosworth, former vice president of Google Health and CEO of Keas. "It puts data into the hands of patients and allows them to send it and share it with who they want." The concept of data liquidity can be expanded to include the flow of information that gives feedback to patients and practitioners. Data that's tied up in an unusable form will not do anyone any good.

The Integrated Care Collaboration (ICC) of Central Texas, is connecting patient records and using the information to predict ED frequent-use potential. Its ICare system, a national health information exchange for uninsured patients, provides treatment, evaluation and research support to providers at the point of care. "The point is to use data to improve care for individuals and address costs," said Ann Kitchen, executive director, ICC. "For example, analyzing the root cause of frequent emergency room visits helps ICC members help patients get the right care, in the right place and at the right time. Some people may go to the emergency room because they don't have a doctor in the community; others may have complex needs and may need other types of care, like supportive housing."

Kaiser Permanente's Hawaii region experienced a 26% drop in per-member

<sup>30</sup> PricewaterhouseCoopers. Healthcare policy in an Obama administration: Delivering on the promise of universal coverage, November 2008.

office visits three years after implementing an integrated EHR system that includes online tools for appointment scheduling, obtaining lab results, and doctor-to-patient secure email exchanges. “The impact of implementing this system has been very positive for both patients and physicians,” said Terhilda Garrido, Kaiser’s vice president, Strategic Operations, National Quality and Clinical Systems Support. The 25% office visit decrease for primary care and 21% for specialty care opened up capacity for providers to see additional patients and reduced the wait time to get an appointment.<sup>31</sup> It also increased the ability to focus on population care activities such as proactive outreach to patients with chronic conditions to make sure patients are current with routine testing.

The new EHR improved the coordination of care by giving physicians across Kaiser immediate access to comprehensive patient information that enhanced clinical decision making. Garrido noted other benefits such as increased cost savings, “We have saved money in a number of areas, including reduced dictation costs and medical record costs.” Paper chart costs savings alone resulted in a 52% reduction in net costs in one KP region (\$4.3 million annually).<sup>32</sup> However, the new system has also been challenging as physicians and staff adjust to new processes and determine the most efficient workflows and new staff roles.

### **Patient throughput involves all areas of the delivery system**

Organizations are relooking at processes that move across an episode of care versus improvement within a single department. The

opportunity to enhance patient throughput starts by assessing key areas such as patient access, bed assignment, care coordination/ case management, discharge planning and out-placement, follow-up (both financial and clinical) and ancillary services. The overall results of enhancing patient throughput are to reduce emergency department diversions and long wait times, decreasing the length of stay thereby alleviating inpatient bed saturation, and reducing costs and loss of revenue.

John Robb, vice president, FKP Solutions Management, said “In order to maximize utilization of acute ED exam rooms, other venues of care, such as discharge lobbies, nonacute care fast tracks and clinical decision units, are being included in operations planning and ED facility design. In addition, the special needs of behavioral health patients need to be appropriately accommodated in a separate venue of care.” Registration processes are also changing. The use of mobile bedside registration helps free up crowded lobbies of EDs and enables efficient gathering of critical patient information.

States like California are providing the catalyst for hospitals to try new and creative ways to alleviate ED capacity constraints. A proposed assembly bill mandates every acute care hospital to file its full-capacity protocol and assess its ED capacity up to every four hours.

Throughput is significantly impacted by complex outplacement needs. In light of the current economy, it is increasingly more difficult for case managers and discharge planners to locate placement for individuals who continue to require mental health services, or have continued skilled nursing or rehabilitation needs.

<sup>31</sup> Chen C., Garrido T., Chock D., Okawa G., Liang L., “The Kaiser Permanente Electronic Health Record: Transforming and Streamlining Modalities of Care,” *Health Affairs* 28, No. 2 (2009) 323-333.

<sup>32</sup> Thompson et al., “The value of vendor-reported ambulatory EHR benefits data,” *Healthcare Financial Management*, April 2007.

# The openings: A supportive community will boost patient engagement

## Shared medical appointments for chronic care lets patients learn from each other

Shared medical appointments (SMAs), also referred to as group visits, are a model of care that blends individualized medical care with group education and interaction. A shared medical appointment, which is typically 60 to 90 minutes, may include one or a team of clinicians and support staff that conduct elements of an individual visit, such as medical history, vital signs and physical exam, in addition to a group session focused on patient education.<sup>33</sup> They differ from other forums such as support groups, which do not include one-on-one consultations with a physician as part of the visit. According to PwC's consumer survey, 28% of consumers indicated they would be very or somewhat likely to participate in group sessions as an alternative method of healthcare if it was conveniently available.

"This model of care has been well received by both patients and providers. Patients, in particular, say they enjoy listening and learning from other patients' experiences," said Jessica Hernandez, vice president of operations for community-oriented primary care at Parkland Health and Hospital System in Dallas. Parkland has provided shared medical appointments at its community-oriented primary care health centers. Each group visit includes 10 to 15 patients, who are each required to sign a confidentiality release.

Daniel Hawkins, senior vice president of the National Association of Community Health Centers, agreed with the benefits of shared medical appointments: "The clinicians become the coaches and the cheerleaders and the patients are the team, whose job it is to win the game — in this case, their own

good health. Group visits allow us to use a team of clinicians and support staff to focus on all aspects of patient and community needs such as housing, work and nutrition. The challenge is that these services aren't reimbursed, but they make a big impact on the patients' health and overall well being."

Shared medical appointments also can reduce healthcare costs. Randomized controlled studies found that shared medical appointments not only improved patient and physician satisfaction, but also decreased healthcare utilization, particularly for visits to the ED and to specialists and also decreased hospitalizations.<sup>34</sup> For example, SMAs resulted in a 30% decrease in ED visits, 20% decrease in hospitalizations and a decreased cost per member, per month of \$14.79, according to Kaiser.<sup>35</sup>

At the Cleveland Clinic, shared medical appointments have been well received by physicians, other care delivery team members and the patients. "It's very telling that an average of 85% of patients said they wanted to use SMAs for their next appointment," said Richard Maxwell, MD, who has championed SMAs at the Clinic since 2002. Physicians who conducted both individual and shared medical appointments found that their "excellent" rating increased by 25% for those patients that attended shared medical appointments. Michelle Berkley, a nurse practitioner and director of a new community health center for the Clinic is evaluating the potential for shared medical appointments. "Shared medical appointments may be an option for us to see more patients with limited staff. The day I had 10 youth physicals to conduct would have been a perfect opportunity."

33 Huang J, Carrier B., "Group Visits in Safety Net Hospitals and Health Systems: A Model for Increasing Access to Care," Academy Health Meeting (2005 Boston, Mass.).

34 Jabar R., Braksmajer A., and Trilling S., "Group Visits: A Qualitative Review of Current Research," Journal of the American Board of Family Medicine, 19:276-290 (2006).

35 Illinois Foundation for Quality Healthcare: Group Visit Starter Kit Improving Chronic Illness Care. [http://www.ifqhc.org/provider/documents/group\\_visit\\_starter\\_kit.pdf](http://www.ifqhc.org/provider/documents/group_visit_starter_kit.pdf)

In addition, there's the issue of increased productivity, which frees up physician time. "Shared medical appointments (particularly the Drop-In Group Medical Appointment, or DIGMA, model for follow-up visits in primary and specialty care, and the Physicals Shared Medical Appointment, or PSMA, model for private physical examinations in primary care as well as the medical and surgical sub-specialties) are very powerful economic and efficiency engines which, if done right, can greatly improve access and a physician's productivity, plus result in additional revenue for an organization," said Ed Noffsinger, PhD, vice president of shared medical

appointments and group-based disease management at Harvard Vanguard Medical Associates/Atrius Health, who pioneered the development of SMAs. The key elements for success are a busy physician, full groups and adequate support. For example, instituting one 90-minute weekly DIGMA or PSMA can double a physician's productivity over individual office visits and increase the physician's productivity during a clinic session (defined by four hours) by an additional six patients (See Figure 21). This increases patient access and yields a 37.5% increase in productivity.

**Figure 21: Improving access and productivity through shared medical appointments**

**Traditional office visits**



= 16 patients in 4 hours

**Traditional office visits + 1 shared medical appointment**



= 22 patients in 4 hours

Source: PricewaterhouseCoopers' Health Research Institute

# Solving jammed access: alternatives and attitudes

## Team care and social services address life needs

Janet is an 18-year-old who just became pregnant. She is eligible for Medicaid, but is overwhelmed by the complexity of the healthcare system.

Janet hasn't received prenatal care and figures she will just go to the ED if a need arises.

The EDs in Janet's neighborhood coordinate care with community health centers, which have established patient navigator programs. Janet is now working with a women's health navigator to get necessary resources for her prenatal care.

## Retail clinics provide convenient and timely care

Kim, a recent graduate from college, doesn't have insurance or a regular doctor. She thinks she has a urinary tract infection.

Kim asks her friend for a recommendation and calls the doctor's office. The next appointment is in four days and she'll have to pay \$110.

Kim stopped by a local retail clinic and was treated that day by a nurse practitioner. The appointment cost \$60.

## Improving patient throughput frees up access

Sally has a 100.4 degree fever, nausea, headache and double vision. The doctor's office is closed so she goes to the ED.

Sally sits in the waiting room for five hours before seeing a doctor, who determines she should be admitted. She has to wait 10 hours because no inpatient beds are available.

The hospital recently standardized ED exam rooms making them multifunctional, and redesigned bed assignment and discharge planning processes. Sally is seen by a physician within one hour of arriving at the ED and was admitted shortly thereafter.

## Expanding roles of nonphysician providers and shared medical appointments give patients more time with providers

Max is 42, has high blood pressure, high cholesterol and a family history of heart disease. He doesn't take his medication regularly.

Max feels somewhat intimidated to visit his doctor for a short visit just to get advice and is not very motivated to change his lifestyle. The result is that he doesn't do anything except visit the pharmacy to pick up his prescription, when he remembers.

Max participates in monthly consultations with his pharmacist, who provides coaching and monitors adherence to his medication regimen. He has also started to attend shared medical appointments at his doctor's office and learns from other patients who are struggling with similar conditions. He finds it inspiring and doesn't feel so alone.

## Low-cost mobile technology boosts self care

Jack has diabetes and is struggling to manage his condition.

Jack is enrolled in a disease management program with his health plan. Aside from receiving some material in the mail and speaking to a health coach two months ago, he isn't very active in the program.

Jack uses an inexpensive glucose monitor to track his blood sugar levels. The monitor sends data to his health coach and updates his personal health record. He enjoys the convenience, feedback and continued education. He will soon participate in a pilot mobile program that allows him to track other health indicators to improve his overall wellness.

## Worksite clinics keep employees productive

Carlos just turned 45 and hasn't had a physical in five years.

Carlos makes a doctor's appointment but has to wait four weeks for an opening.

Carlos' employer has an onsite clinic and is running a "Know your numbers" health campaign. He is able to get a physical the next day, is rewarded with a health food store gift card and doesn't need to take a half day off work.

## Telehealth bridges space and time

Tom lives in a rural area and was transported to the nearest ED for heart palpitations. The physician determined that he needs a psychiatric evaluation.

Because of the rural location of the ED, the appropriate mental health professionals are 90 miles away.

The rural hospital formed an affiliation with University Hospital, which has a telemedicine program. With an ED physician in the room, a video mental health evaluation was performed by a specialist three hours away, and the appropriate care was determined within the hour.

## Online care turns on a new channel of access

Sarah is 17 and wants to see a dermatologist regarding acne treatment.

The next available in-person appointment for Sarah is in three weeks. The problem is that prom is in two weeks.

Sarah decided to try the online care program from her insurance company and scheduled an online visit with a dermatologist in another state. She was able to see the doctor the same week and after a 10-minute online consultation, was able to go to her local pharmacy to pick up a prescription.

●●● Flow of people □ Jams □ Openings

Consumers surveyed by PwC describe their top recommendations for health organizations to increase their access to care.

### Providers

- Improve appointment lag
- Provide more face time during appointment
- Reduce costs
- Utilize Internet (ask questions, test results, etc.)

### Health plans

- Reduce costs
- Expand benefits (e.g., prevention, drugs)
- Provide larger in-network selection
- Eliminate referrals / preauthorizations

### Pharmacies

- Provide more affordable medications
- Reduce wait time to fill prescriptions
- Be available to answer questions / discuss treatment
- Educate on alternative treatments / generics

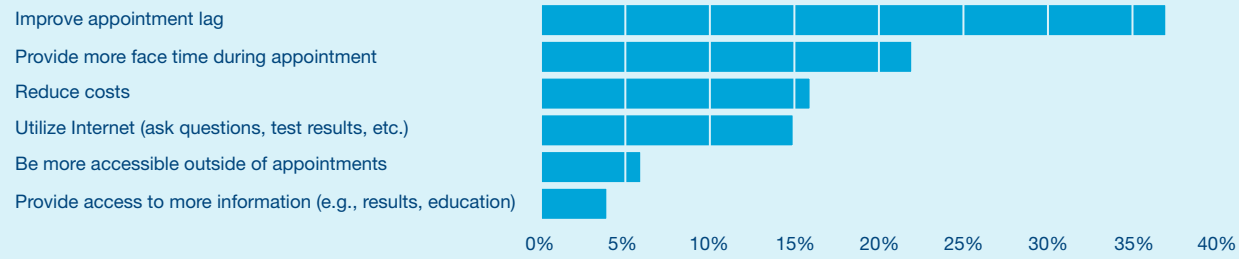
### Employers

- Reduce costs
- Expand benefits / drug coverage
- Offer more in-network selection
- Provide health insurance

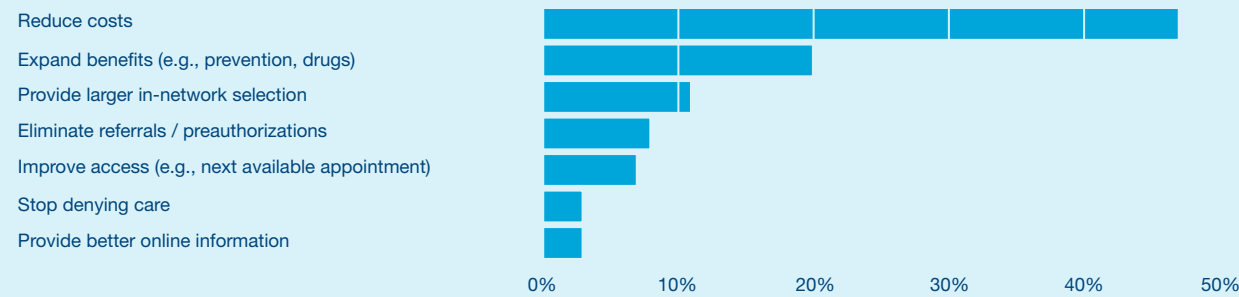
Consumers note what they want their providers, health plans, pharmacies and employers to do differently to increase their healthcare access.

**Figure 22: How the industry can improve access for consumers**

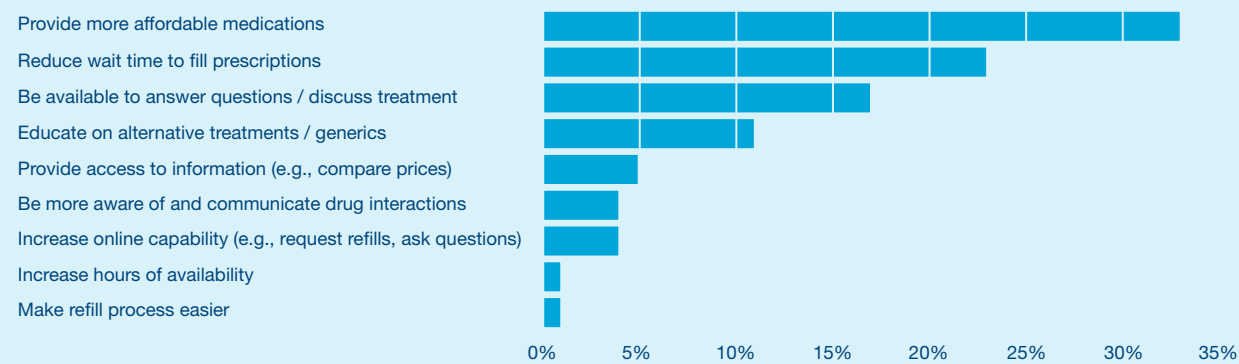
**Providers**



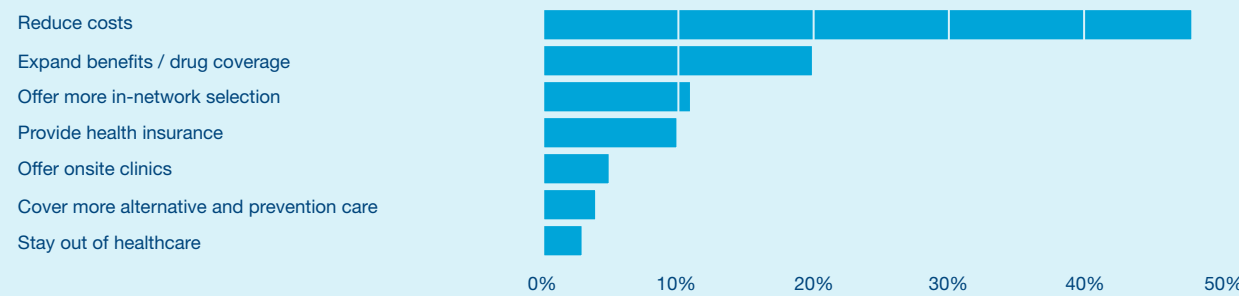
**Health plans**



**Pharmacies**



**Employers**



Source: PwC Consumer Access Survey

What this means for your business

Health organizations and government can open the access logjams through changes in behavior, incentives and patient throughput.

Access will be the key issue of this decade as demand for services grows, clinician shortages worsen, and coverage issues are addressed through policy changes. As described in this report, solutions are available, although implementation may hinge on behavioral changes, incentives and new partnerships.

### Get efficient

- **Improve patient throughput.** The delivery system must improve the movement of patients through an episode of care. This may require an overhaul of patient throughput, with an eye toward streamlined and cost-effective patient access and discharge. For example, assessment methodologies can evaluate data such as handoffs within the ED, inpatient capacity, average length of stay and wait times. Simulations are available to test new scenarios and approaches in a virtually risk-free environment. This is especially important in today's financial markets that are making capital costs higher.
- **Reexamine the effectiveness of disease management programs.** Members are more likely to work closely with their providers in managing their disease factors. Sharing patient data directly with providers on a real-time basis would facilitate active physician intervention when required. Disease managers should integrate the physician's treatment plan with the disease management plan to augment member coaching and support. For example, research has shown that focusing on members who are ready to change is more effective than casting a wide net across a population.
- **Flow with traffic.** In directing patients to different paths of care, payers and providers need to try to meet them at their most frequented places (physical and virtual). If it's the ED, partner with the ED to educate patients on community programs and step-down services or alternative neighboring locations.

### Innovate

- **Shift emphasis on the first miles of the health continuum.** Create "sidewalks" for people to make informed choices throughout their lives regarding their health and healthcare. Feedback is a powerful motivator and better communication of personal health information via different modalities will help patients engage in healthy behaviors.
- **Find ways to administer and deliver care using technology that's available: phone, mobile, Internet.** Access solutions need to include not only physical location of providers, but also how information is delivered and how one has access to information.
- **Steer patients through a flow of information.** Despite an emphasis on transparency, many consumers still don't understand the system, what to do or how much it costs. Find new ways to communicate processes and costs to patients.

### Reward through incentives and reimbursement

- **Anticipate payment changes that will bundle payments for hospitals and physicians.** The coordination that consumers demand matches the cost savings the government would like to see from the industry. The current fee-for-service system is viewed as a cost driver, so MedPAC has recommended combining hospitals and physician payments around episodes of care. Three concepts are being discussed: medical home, bundled payments and accountable care organizations. All would require physicians, hospitals and other providers to share in integrated payment.

- **Understand the implications of the changing definition of performance in payment methodologies.** For some time, pay-for-performance has rewarded hospitals and physicians for doing things safely or at a benchmarked quality level. However, with the emphasis on access, the definition of performance may change to “did this procedure/admission need to be done?” As the focus moves toward funding new ways to access care, the funds to do so must come in savings to the system, and that likely will be in reducing unneeded hospital and physician services.

### Team

- **Revitalize the healthcare workforce and move to team care.** Healthcare needs to leverage the clinical skills and scope of practice of nurses, nurse practitioners, physician assistants, and pharmacists to provide care in harmony with physicians.
- **Adopt flexible models of care.** Organizations need to rethink how to use physicians and other nonphysician providers in new models of delivery, such as shared medical appointments, telehealth and online consultations. Medical assistants, who have training in billing and documentation, can provide real-time

### What this means for healthcare policy

Reengineering access will occur only if patients, clinicians and health industry leaders are rewarded for change. The right incentives need to be given to organizations that provide and pay for care and to the consumers who seek care. Policies in health reform need to enable team care, reward use of technology for delivering care, recognize the interconnectedness of mental health, and shift medical education to conform to new delivery models. Special needs of vulnerable populations also need to be considered to ensure access to primary care outside of emergency departments.

### Use medical education funds to teach team care

It may be time for a refreshed “Flexner report” for medical education, one that incorporates team care and an understanding of the societal needs that affect care delivery. Published more than a century ago, the Flexner report fundamentally changed and standardized medical education so that the public received care from high-quality, scientifically trained physicians. Flexner’s report emphasized keeping pace with the changing needs of society. “The physician is a social instrument,” Flexner wrote.<sup>36</sup> For

## Improve Medicaid beneficiaries’ access to physicians

The large and increasing gap in physician reimbursement for private pay and Medicaid patients creates cost-shifting and prompts physicians to take more private patients and fewer Medicaid ones. While raising Medicaid rates may help, an improved solution would be closer parity of rates that reduces or eliminates cost shifting. Another solution would be paying for case management for Medicaid patients.

documentation during shared medical appointments. This increases accuracy of data collection, frees up physician time and increases satisfaction for assistants who enjoy being more involved in direct patient care.

example, physicians today must understand the science, but also how people behave and change, what populations and communities need, how practice patterns are affected by changing populations, and how to use and connect data. Equally as important, physicians need to understand how other

<sup>36</sup> Albert Flexner, “Medical Education in the United States and Canada,” New York, NY: Carnegie Foundation for the Advancement of Teaching, 1910.

clinicians play a role in the overall healthcare system and how they can better team to meet patients' needs. Medical specialties that focused on specific diseases or body parts flourished in the wake of the Flexner report. While these specialties ensured high quality, they also led to silos of care, turf wars and lack of coordination.

In June 2009, MedPAC underlined the need for medical education to emphasize team care. Noting that Medicare spends \$100,000 per medical resident per year on medical education, the agency that advises Congress on Medicare spending said medical education is too focused on hospital care. It recommends that Medicare create incentives for medical schools to teach multidisciplinary, coordinated care.<sup>37</sup>

### **Enact force multipliers**

Use of physician extenders, such as nurse practitioners and physicians assistants, should be increased as a way to complement physician care delivery. PAs and NPs need to be included as part of primary care provider teams during medical training. In addition, regulators need to review scope of practice laws that limit a team delivery model. For example, 22 states do not require physician involvement in NP diagnosing and treating, and 11 states do not require physician involvement in NP prescribing.<sup>38</sup>

### **Reward efficient community care**

Rather than duplicate services, providers need incentives to work together to expand access. For example, Riley Children's Hospital in Indianapolis has expanded access in Indianapolis by providing pediatric services in hospitals outside its health system. Community health centers need to be seen as a partner in providing care to a population. Incentives should be given for formal

collaboration among hospitals, social services and community care centers. Populations within a community need to be defined and every health system stakeholder should share in the risk of that population's appropriate care as in accountable care organizations.

### **Recognize and act on the mental health burden on access entry points**

Hospital EDs have become holding tanks and last resorts for mental health patients. Lack of access to mental health providers and facilities is hurting access to care for other patients in the system. Mental health needs to be seen and treated as a must-have part of the equation for care.

### **Encourage nontraditional models of care**

To leverage different modes of delivery, like telehealth, online consultations and shared medical appointments, government payers need to create reimbursement models that enable adoption of these technologies. Standards and guidelines need to accompany those practices to ensure privacy, generate desirable outcomes and evolve with the changing needs of consumers in their health journeys.

### **Improve payments and access for Medicaid patients**

States make policy decisions that either open or restrict access. For example, Medicaid typically pays below-market rates to providers. In addition, in states like Texas, applicants often wait months to get enrolled in the Medicaid program, and then must re-enroll every six months. This makes continuity of care difficult, if not impossible for patients and providers. In addition, hospitals EDs need to be better connected to community health centers and private practices through a medical home that provides collaboration.

<sup>37</sup> Report to Congress: Improving Incentives in the Medicare Program, MedPAC, June 2009.

<sup>38</sup> Linda Pearson, "The Pearson Report: Annual state-by-state national overview of nurse practitioner legislation," *The American Journal for Nurse Practitioners* Vol. 13 No. 2, February 2009.

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