# The impact of coverage shifts on hospital utilization

For most health systems, the one-time impact of expanded insurance coverage on utilization will be small but significant (nearly 100 basis points in margin for the average provider). Systems that can capture a substantial share of the increase in utilization may gain a competitive advantage.

Hospital utilization is under siege. Despite population growth and demographic shifts (such as the gradual increase in the number of elderly patients), hospitals have faced declining growth in inpatient utilization since 2005, driven largely by the ongoing shift of many procedures to the outpatient setting.<sup>1</sup> Although outpatient utilization has been a source of revenue for many acute hospitals, most of these facilities have found it exceedingly difficult to achieve organic growth profitably in the current environment.

In the near future, however, a new force could drive healthcare utilization upward: the onetime effect of up to 30 million people gaining insurance coverage for the first time under healthcare reform.<sup>2</sup> The newly insured will fall into two categories: those covered under the expanded Medicaid program and those who purchase commercial plans on the exchanges (whether in response to the individual mandate, market reforms, or new subsidies).

A number of previous studies have estimated how insurance coverage can affect healthcare utilization. We have found, though, that these studies have two significant shortcomings: they reached widely varying estimates of projected demand, and their results are difficult to apply in a local market context.

We therefore decided to conduct original research and supplement it with a review of the available literature on hospital utilization. As part of this process, we developed projections to estimate growth in inpatient services, emergency room (ER) care, and outpatient elective procedures. Although we aggregated the data to reveal national patterns, we also examined the potential for regional differences. This paper describes our data-driven approach and the literature review that informed our perspectives. In addition, it presents the key findings of our research, their significance at the market level, and the strategic implications for health systems.

# Methodology

We established baseline numbers for the utilization of hospital services as a first step to estimating potential changes. To do so, we examined data from two large national surveys from the Centers for Disease Control and Prevention (CDC) and the Healthcare Cost and Utilization Project (HCUP), taking into account a number of patient demographic factors, such as gender, age, race/ethnicity, and insurance type. After establishing baseline utilization rates, we conducted three analyses to determine how the acquisition of health insurance might change:

 A multivariate regression analysis that focused on hospital utilization based on data from the Medical Expenditure Panel Survey (MEPS)<sup>3</sup> Edward Levine, MD; Noam Bauman; and Bowen Garrett, PhD

<sup>1</sup>This shift has been driven primarily by evolving clinical practices and emerging technology and innovations. <sup>2</sup>As of this writing, several states have indicated that they will not expand their Medicaid programs. Depending on the number of states who decline to expand their Medicaid programs, the expected increase in the number of people with insurance, and the corresponding decline in the number of uninsured, could be smaller than this estimate.

<sup>3</sup>The Medical Expenditure Panel Survey (MEPS) is a set of largescale surveys of families and individuals, their medical providers, and employers across the United States. MEPS contains comprehensive information about the health services that Americans use, how frequently they use them, the cost of these services, and how they are paid for, as well as data on the cost, scope, and breadth of health insurance held by and available to workers.





<sup>4</sup>The National Hospital Discharge Survey (NHDS) is a national probability survey designed to collect data on inpatients discharged from non-Federal short-stay US hospitals (those that have an average length of stay of fewer than 30 days). Sample size in 2010 was 239 hospitals. <sup>5</sup>The National Hospital Ambulatory Medical Care Survey (NHAMCS) is designed to collect data on the utilization and provision of ambulatory care services in hospital emergency and outpatient departments. Findings are based on a national sample of visits to the emergency departments and outpatient departments of noninstitutional general and short-stay hospitals.

- <sup>6</sup>The 2010 Healthcare Cost and Utilization Project (HCUP) Nationwide Inpatient Sample (NIS) contains all discharge data from 1,051 hospitals located in 45 states, approximating a 20-percent stratified sample of US community hospitals.
- <sup>7</sup>Manning WG et al. Health insurance and the demand for medical care: Evidence from a randomized experiment. RAND Corporation. *Health Insurance Experiment Series*. 1988.
   <sup>8</sup>Finkelstein A et al. The Oregon Health Insurance Experiment: Evidence from the first year. National Bureau of Economic Research Working Paper No. 17190. July 2011.

- A demographic-controlled analysis of several data sets that provided information on hospital discharges, ambulatory care, and inpatient care
- A comprehensive literature review of wellrespected studies focusing on hospital utilization in populations with different types of insurance coverage

## Multivariate regression analysis

This analysis, which examined MEPS data for the years 2006 through 2008, demonstrated how hospital utilization patterns vary based on demographic and other characteristics, such as age, gender, ethnicity, household income, smoking status, health status, and—most importantly for our purposes health insurance coverage type. By comparing utilization among individuals with and without insurance (controlling for the aforementioned variables), we were able to isolate the impact of insurance status on utilization and project utilization shifts in a post-reform environment.

We applied the percentage changes in utilization rates to the baseline rates we obtained from the CDC and HCUP, since we view these sources as more comprehensive and robust. Although we controlled for the effect of many variables that influence utilization, our calculations (like other observational studies) could not control for all such factors. For instance, it is difficult to isolate the effect of gaining Medicaid coverage on hospital utilization for women between the ages of 18 and 39, because pregnancy simultaneously results in utilization of healthcare services and Medicaid eligibility, and the MEPS data did not allow us to fully control for pregnancy status.

#### **Demographic-controlled analysis**

To gain additional perspective, we conducted a demographic-controlled analysis that focused on individual hospital services. It examined large data sets from three sources: the National Hospital Discharge Survey<sup>4</sup> (NHDS-CDC), the National Hospital Ambulatory Medical Care Survey<sup>5</sup> (NHAMCS-CDC), and the Nationwide Inpatient Sample from the HCUP<sup>6</sup> (NIS-HCUP).

In this analysis, as in the multivariate regression analyses, we were able to control for a number of patient characteristics, such as payor type, gender, age, and race/ethnicity. The HCUP data did not allow us, however, to control for underlying health status. Accordingly, we focused on comparisons between self-pay and commercially covered groups in the HCUP analysis because we expected more modest underlying health status differences in those cohorts than if we compared the uninsured to the Medicaid population. (Medicaid recipients, as a group, tend to have high levels of medical need.)

### Literature review

To supplement our data analysis, we conducted a thorough literature review of well-respected studies and experiments on healthcare utilization, looking at sources ranging from the 1980s RAND Study<sup>7</sup> to the recent Oregon Health Insurance Experiment.<sup>8</sup> The sidebar on p. 82 contains a complete list of our literature sources.

For each study, we analyzed the one-time effect of gaining insurance across a multitude of age groups, regions, and hospital channels. The study results varied widely, making it difficult to reach a definitive conclusion about impact. There were also important caveats to each study. Ultimately, however, we were able to synthesize common directional trends across the literature sources.

### An important caveat

Over the next few years, we expect the trend toward high-deductible health plans (HDHPs) and increased co-payments to accelerate, as payors attempt to curb costs by offering consumers incentives to reduce utilization and steering them to lower-cost care settings. This may have a significant effect on the use of hospital services—in particular, outpatient elective services (which have the highest sensitivity to greater consumer cost-sharing) and outpatient emergency services (as incentives to access lower-cost, primary care settings increase).

There is also a growing trend toward innovative, risk-sharing payor-provider partnerships, which are designed to encourage health systems and physicians to reduce their costs. These partnerships may also have a significant effect on the use of higher-cost care, such as inpatient and outpatient emergency services.

Both the MEPS regression and the HCUP/CDC demographic-controlled analysis are based on historical data reflecting the impact of gaining insurance coverage on the utilization of hospital services. Given that innovative benefit and payment designs may affect hospital utilization over the next few years, it is possible that utilization trends could be lower than one would expect based on historical data alone.

# Primary results

Four primary conclusions emerged from our investigation.

## Usage patterns and coverage type

The populations who will be newly covered under Medicaid and commercial insurance are likely to differ significantly, with those covered under Medicaid typically having a much lower household income. The extent of a given patient's insurance coverage will also differ depending on whether Medicaid or private insurance is paying. Nevertheless, the expected changes in utilization that will result from gaining coverage are remarkably similar in both groups. The explanation for this pattern may lie in two factors that often determine whether a patient seeks treatment: access to healthcare and cost sharing.<sup>9</sup>

Patients with Medicaid face a lower degree of cost sharing than their privately insured peers. All else (including health status) being equal, it would be logical to assume that patients newly insured under Medicaid would demonstrate larger increases in health consumption because they have less of a financial incentive to curb their usage. But all factors are not equal. Our research found that Medicaid beneficiaries face many "indirect" costs, such as longer travel times, difficulty finding providers, and longer wait times.<sup>10</sup> Such problems greatly impede access to care and are likely to offset the lower cost sharing.

A 2005 study by Long et al., which showed that utilization of services is similar under Medicaid and private insurance, supports our findings.<sup>11</sup>

## Inpatient hospital utilization

Our demographic-controlled analysis of HCUP inpatient data suggested that people who transitioned from self-pay to commercial insurance would increase their inpatient utilization by 35 percent (Exhibit 1).<sup>12</sup> When we considered results from both this analysis and the literature, we concluded that insurance status could well drive an increase of about 30 percent in inpatient utilization.

<sup>9</sup>Manning WG et al. Health insurance and the demand for medical care: Evidence from a randomized experiment. RAND Corporation. *Health Insurance Experiment Series*. 1988.

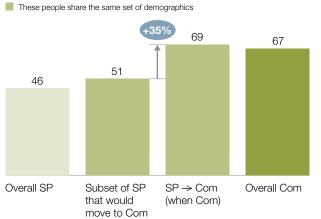
- <sup>10</sup>Davidoff AJ et al. Children eligible for Medicaid but not enrolled: How great a policy concern? The Urban Institute. No. A-41 in series, New Federalism: Issues and Options for States. September 2000.
- <sup>11</sup>Long S et al. How well does Medicaid work in improving access to care? *Health Services Research*. February 2005; 40(1): 39–58.
- <sup>12</sup>We looked at commercially insured and Medicaid patients in the HCUP demographic analysis. Because we determined that the incremental increase in utilization is likely to be the same regardless of whether the uninsured convert to commercial or Medicaid coverage, we have focused on the commercial analysis here.



# EXHIBIT 1 Inpatient utilization will likely increase by ~30% as the uninsured gain coverage

# HCUP demographic analysis<sup>1</sup> suggests that inpatient utilization will increase as the uninsured gain coverage

Estimated annual inpatient admissions per 1,000 lives among people moving from self-pay (SP) to commercial (Com)



#### Literature review reveals similar and consistent findings

- Randomized experiment in Oregon showed that as uninsured gain Medicaid coverage, there was ~30% overall increase in inpatient utilization (Finkelstein et al. 2011)
- Study of Medicare launch demonstrated a ~28% increase in hospitalization expenditures (proxy for percentage increase in utilization of services) between 1965 and 1970 (Finkelstein. 2005)
- RAND study found a ~30% increase in hospital expenses and a ~29% increase in admissions for those with "free care" (in comparison with those facing 95% cost-sharing) (Manning et al. 1988)

<sup>1</sup>Inpatient data is based on the nationwide inpatient sample (NIS) from the Healthcare Cost and Utilization Project (HCUP). 2010 NIS contains all discharge data from 1,051 hospitals located in 45 states, approximating a 20% stratified sample of US community hospitals. The projected shift in utilization used the Medical Expenditures Panel Survey (MEPS) multiplier with the McKinsey Predictive Agent-based Coverage Tool (MPACT) version 4.9 lives to account for the shifting coverage types. Source: CDC, HCUP, MEPS analysis using MPACT 4.9 lives

#### Explanation of bar charts in exhibits 1 to 3

In the charts, the vertical bars represent annual utilization rates per 1,000 lives for three types of health services: inpatient (Exhibit 1), hospital emergency (Exhibit 2), and outpatient elective (Exhibit 3). In Exhibit 1, for example, the first bar, labeled "Overall SP," shows that in a given year there are, on average, 46 inpatient admissions for every 1,000 self-paying (SP) individuals.

The second bar, labeled "Subset of SP that would move to Corn," isolates the probable current utilization of inpatient services by the subset of self-paying consumers who are expected to gain commercial (Corn) insurance coverage in the near future. We were able to estimate this figure because we have detailed demographic information about these consumers that permits us to approximate their current use of health services. Our research suggests that this subset has a slightly higher utilization rate (51 inpatient admissions per 1,000 lives) than the overall self-paying population does. The third bar, "SP⇒Com (when Com)," shows the likely future utilization of inpatient services among the same subset (self-paying consumers who are expected to gain commercial insurance coverage) *once those consumers have health insurance*. We estimated this figure by examining a comparison group: people who have the same demographic profile as those expected to move from self-paying to commercial status, but who currently have commercial insurance. We estimate that the inpatient utilization rate among self-paying consumers who gain insurance coverage is likely to be about 69 inpatient admissions per 1,000 lives (a 35% increase above their current utilization rate).

The final bar, "Overall Com," reports, for comparison, the current inpatient utilization rate among all consumers with commercial insurance (67 inpatient admissions per 1,000 lives annually). This group uses inpatient services far more frequently than the self-paying segment does.

Our results were similar to those reported in the Oregon Health Insurance Experiment, a randomized study that examined about 29,000 low-income adults who had obtained Medicaid coverage approximately one year earlier and a control group of similar size.<sup>13</sup> As the uninsured patients gained coverage, their inpatient utilization rose about 30 percent. Furthermore, a 2004 study by Finkelstein et al., which focused on the impact of acquiring Medicare coverage, detected a 28-percent increase in hospital expenditures (a proxy for increased utilization of hospital services).<sup>14</sup>

# **Hospital emergency services**

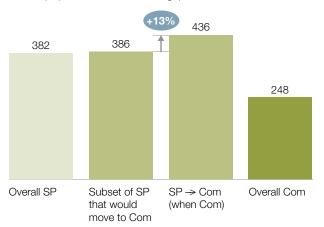
People without insurance often visit ERs when they need treatment, since they lack other affordable alternatives. Although it may seem logical that newly insured patients would take advantage of their improved access to physicians and clinics and thus reduce their ER utilization, our analyses suggest that increased coverage may actually cause ER utilization rates to rise. As shown in Exhibit 2, the MEPS regression revealed a 13-percent increase in the use of hospital emergency services as people move from self-pay to commercial coverage. Overall, we concluded from our analyses and literature review that an increase of about 15 percent in ER utilization could well occur.

Other investigations have shown a much higher increase in ER utilization when the uninsured gain coverage. For example, a study by Ander-

# EXHIBIT 2 ER utilization will likely increase by ~15% as the uninsured gain coverage

# MEPS regression<sup>1</sup> suggests that outpatient emergency room (ER) utilization will increase as the uninsured gain coverage

Estimated annual inpatient admissions per 1,000 lives among people moving from self-pay (SP) to commercial (Com)



#### These people share the same set of demographics

Literature review also suggests an increase, but a much smaller one than the increases in inpatient or outpatient elective services

- Randomized experiment in Oregon could not reject the null of no change in outpatient ER utilization; however, point estimates suggested that it may have increased (Finkelstein et al. 2011)
- Study of people turning age 65 found an ~6% increase in ER utilization when they gained Medicare coverage (previously, people could have been uninsured or had commercial coverage) (Card et al. 2004)
- <sup>13</sup>Finkelstein A et al. The Oregon Health Insurance Experiment: Evidence from the first year. National Bureau of Economic Research Working Paper No. 17190. July 2011.
- <sup>14</sup>Finkelstein A. The aggregate effects of health insurance: Evidence from the introduction of Medicare. National Bureau of Economic Research Working Paper No. 11619. September 2005.

<sup>1</sup>Original Medical Expenditure Panel Survey (MEPS) multipliers were used, except for one-off changes for smokers vs. nonsmokers and controlling for pregnancy in ages 18-39.



- <sup>15</sup>Anderson M et al. The effects of health insurance coverage on the use of medical services. *National Bureau of Economic Research Working Paper No. 15823*. March 2010.
- <sup>16</sup>Finkelstein A et al. The Oregon Health Insurance Experiment: Evidence from the first year. National Bureau of Economic Research Working Paper No. 17190. July 2011.
- <sup>17</sup>Manning WG et al. Health insurance and the demand for medical care: Evidence from a randomized experiment. RAND Corporation. *Health Insurance Experiment Series*. 1988.
- <sup>18</sup>Hahn B. Health care utilization: The effect of extending insurance to adults on Medicaid or uninsured. *Medical Care*. 1994;32:227-39.
- <sup>19</sup>Marquis MS, Long S. The uninsured access gap: Narrowing the estimates. *Inquiry*. 1994-1995;31:405-14.
- <sup>20</sup>Long SH et al. Do people shift their use of health services over time to take advantage of insurance? *Journal of Health Economics*. 1998:17:105-15.
- <sup>21</sup>Buchmueller TC et al. The effect of health insurance on medical care utilization and implications for insurance expansion: A review of the literature. *Medicare Care Research and Review*. 2005;62:3-30.

son et al. examined a reverse phenomenon (when young adults lose parental insurance coverage).<sup>15</sup> Based on their results, the authors inferred that the acquisition of health insurance produces a 66-percent increase in ER use.

What explains the somewhat paradoxical situation of ER visits increasing despite better coverage? It is possible that two contrasting forces are at play. Expanded coverage is expected to increase the use of preventive services and reduce ER utilization by improving access to primary care and other channels. The likelihood of this outcome is supported by our MEPS analysis, which suggests that the uninsured are likely to make much greater use of physician visits when they gain coverage, and these visits may substitute for some ER use. At the same time, reduced out-of-pocket ER co-payments for the newly insured may drive up ER utilization. In addition, outpatient capacity constraints and expected physician shortages could make it increasingly difficult for some people to get appointments for outpatient physician visits, a problem that could be exacerbated if many of the newly insured lack a primary care provider.

#### **Outpatient elective services**

When we tried to estimate how the acquisition of insurance coverage would increase utilization of outpatient elective services, our analyses produced very different results. The MEPS analysis suggested that there could be a 125percent increase. Although we anticipate that outpatient elective services could be more sensitive to coverage type than other hospital services, we consider this figure to be an outlier relative to other estimates in the literature and likely an overestimate.

At the other end of the spectrum, our HCUP demographic-controlled analysis estimated

a 49-percent increase in utilization as people moved from self-pay to commercial coverage. This figure may be an underestimate, because the analysis did not control for underlying health status. However, it was more in line with other estimates in the literature (Exhibit 3).

When we considered the results of all our analyses together, we estimated that acquisition of insurance coverage could increase utilization of outpatient elective services by about 40 to 70 percent. This figure is in line with results of both the Oregon Health Insurance Experiment (which showed a 35-percent overall utilization increase in patients newly covered under Medicaid<sup>16</sup>) and the RAND study (which found that utilization of outpatient services was 66 percent higher among those with "free care" than among those with 95-percent cost sharing<sup>17</sup>). In addition, three other studies that used a two-part regression analysis to gauge the impact of gaining commercial insurance on outpatient utilization estimated that the utilization increase would average between one and two visits per person per year,<sup>18-20</sup> a rate that is equivalent to a 35- to 76-percent rise in outpatient elective utilization.

Preventative services, in particular, tend to be highly sensitive to insurance coverage. A series of studies that looked at the impact of gaining insurance coverage on the use of specific preventive services (such as flu shots, blood pressure or cholesterol checks, and physical examinations) found a strong and statistically significant effect between the two.<sup>21</sup> Over the longer term, increased access to preventive services would likely reduce utilization of highercost inpatient and emergency services. In the short term, however, increased use of preventive services may actually increase utilization of downstream elective outpatient (and even inpatient) services.

# The impact nationally

With the surge in insurance coverage and the accompanying increase in inpatient, ER, and outpatient utilization, it might seem reasonable to assume that the US healthcare system will face capacity challenges. But the increases in

utilization we have projected for the newly insured (approximately 30 percent for inpatient, 15 percent for ER, and 40 to 70 percent for outpatient elective) are likely to translate into relatively modest growth for overall hospital utilization at the national level, assuming that population growth and all other factors remain



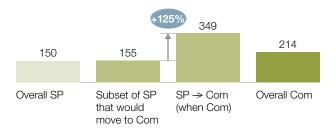
# EXHIBIT 3 The newly insured are likely to fuel the largest growth (~40–70%) in outpatient elective hospital services

# Both of our data analyses suggest that an increase in outpatient elective services will occur as the uninsured gain coverage

#### MEPS regression<sup>1</sup>

Estimated annual inpatient admissions per 1,000 lives among people moving from self-pay (SP) to commercial (Com)

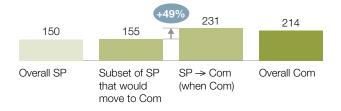
These people share the same set of demographics



#### HCUP demographic analysis<sup>2</sup>

Estimated annual inpatient admissions per 1,000 lives among people moving from self-pay (SP) to commercial (Com)

These people share the same set of demographics



Literature review indicates that growth is likely to be >30% but not more than twice the increase in inpatient utilization

- Randomized experiment in Oregon showed that as uninsured gain Medicaid coverage, there was ~35% overall increase on outpatient elective services (Finkelstein et al. 2011)
- RAND study found that those on "free care" had 66% higher utilization of outpatient services (from physicians and other healthcare providers) and ~67% higher expenses than did those with 95% cost-sharing (Manning et al. 1988)
- Three studies using a two-part regression model looked at the impact of commercial insurance on outpatient utilization:
  - -Hahn (1995): ~60% increase
  - -Marquis and Long (1994):
  - ~76% increase
  - Long, Marquis, and Rogers (1998):
    ~35% increase

<sup>1</sup>Original Medical Expenditure Panel Survey (MEPS) multipliers were used, except for one-off changes for smokers vs. nonsmokers and controlling for pregnancy in ages 18-39.

<sup>2</sup>Outpatient elective data in the Healthcare Cost and Utilization Project (HCUP) demographic analysis rely on CDC data from the National Hospital Ambulatory Medical Care Survey. The projected shift in utilization used the MEPS multiplier with McKinsey Predictive Agent-based Coverage Tool (MPACT) version 4.9 lives to account for the shifting coverage types.

Source: CDC, HCUP, MEPS analysis using MPACT version 4.9 lives



age shifts (i.e., health systems

that are able to capture a substantial share of the growth

in the individual segment may

be able to derive increased revenue per patient by shifting their patient mix toward the

commercially insured).

constant. For instance, if newly insured patients do increase their inpatient hospital utilization by 30 percent, the total number of discharges in the country would rise by only 0.6 percent, from 36.4 million to 36.7 million (Exhibit 4). The reasons: the newly insured will constitute a relatively small portion of the overall US population, and their baseline level of utilization is lower than the national average because they tend to be younger (and therefore healthier than elderly patients) and poorer, and are more likely to be members of minority groups. (The latter two segments—the poor and minority groups—tend to have less access to health services.)

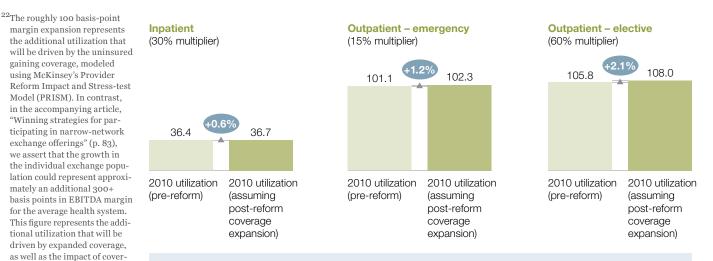
Although these increases may seem modest, combined they would drive nearly a 100-bps margin expansion for the average US hospital.<sup>22</sup>

# Local market variability

The impact of coverage shifts will vary at the local level because the number of uninsured people who will gain coverage differs by region. An examination of two counties in California illustrates the point. For a hospital in San Luis Obispo, we forecast a 0.4-percent increase in inpatient utilization when the uninsured gain coverage, whereas we forecast a 2.6-percent rise for a hospital in Los Angeles, largely because a higher percentage of people in this city currently lack health insurance.

The financial implications of treating newly insured patients will also vary by region, because some areas will see gains primarily in Medicaid patients, whereas others will see stronger growth in commercial coverage on the exchanges.

# EXHIBIT 4 All channels are likely to experience an increase in overall growth because of coverage expansion and changes in utilization patterns



• Depending on a hospital's local demographics and types of services offered, impact could differ across channels. Understanding these differences will be important for strategic planning post-reform

• Increased utilization could be the equivalent of an additional year's worth of growth for outpatient channels and could offset a year's decline in the inpatient channel

# Strategic implications

How can providers prepare for the uptick in healthcare utilization that will occur as the result of shifts in insurance coverage driven by healthcare reform? We outline five winning strategies:

# Develop narrow-network exchange strategies

Payors are looking to lower the cost of the products they offer on the exchanges through limited (narrow or tiered) networks. As discussed in the accompanying article, "Winning strategies for participating in narrow-network exchange offerings" (p. 83), providers looking to capture a substantial share of the patients who will gain individual coverage through the exchanges need to carefully consider their posture toward these limited-network offerings. Providers must develop a clear perspective on how and when they will trade price for volume, how distinctive their value proposition is in the local market, when it makes sense to compete for exchange patients (and at what discount), and when it makes sense to focus their attention elsewhere.

# Build primary care capacity and alignment

A second strategy for providers that want to benefit from the increase in insurance coverage is to invest in primary care capacity and alignment. The majority of the currently uninsured who are expected to gain coverage do not have an established primary care physician today. These physicians will play a key role in which health systems these patients choose in the future.

#### Enhance consumer focus and appeal

Targeted, direct-to-consumer communications are likely to be increasingly important in a future retail healthcare environment. The results can be compelling. For example, St. Anthony's Medical Center in St. Louis is using consumer data to personalize mailings with an individual's name and a picture of someone of similar age and gender.<sup>23</sup> This approach, although expensive, produces high conversion rates. From October 2010 to July 2011, St. Anthony's spent \$25,000 on a targeted mailing to 40,000 women about mammographic screenings. As a result, about 1,000 women came to the medical center for mammograms, which generated \$530,000 in revenue from screenings, biopsies, and related services.

# **Enhance ER competitiveness**

With or without an increase in utilization rates, hospital ERs may experience significantly improved profitability, because coverage shifts may drive the most pronounced payor mix changes in this channel. Among the approaches providers can use to enhance their ER offerings are operational improvements (such as decreased wait times), better customer service (e.g., phones to contact family members), prearrival services (such as scheduling systems), and strengthened relationships with local emergency medical services providers.

#### Compete directly on the exchanges

Providers with strong brand recognition could develop highly competitive co-branded insurance products with payor partners. For example, Aetna has a co-branding arrangement with Carilion Clinic, a health system in Southwest Virginia that includes eight not-for-profit hospitals and more than 600 physicians in a multispecialty group practice.<sup>24</sup> Aetna formed an accountable care organization with Carilion in 2011 and then created a co-branded Carilion Clinic–Aetna suite of products for the commercial market. In addition to co-branding, providers could also consider offering proprietary branded products using a white-box insurer backbone for the plan component.<sup>25</sup>

- <sup>23</sup>Galewitz P. Hospitals mine personal data for customers mail campaigns push profitable screenings. USA Today. February 5, 2012.
- <sup>24</sup>Gamble M. Payor-provider relationships: Checking in with Aetna. Becker's Hospital Review. May 22, 2012.
- <sup>25</sup>In this arrangement, the product would be sold on the exchange under the provider's brand (the payor's brand would remain masked).

# Studies included in our literature review

Anderson M, Dobkin C, Gross T. The effects of health insurance coverage on the use of medical services. *National Bureau of Economic Research Working Paper No. 15823.* March 2010.

Buchmueller TC, Grumback K, Kronick K, et al. The effect of health insurance on medical care utilization and implications for insurance expansion: A review of the literature. *Medical Care Research and Review*. 2005;62(1):3-30.

Card D, Dobkin C, Maestas N. The impact of nearly universal insurance coverage on health care utilization and health: Evidence from Medicare. *National Bureau of Economic Research Working Paper No. 10365.* March 2004.

Davidoff AJ, Garrett B, Shirmer M. Children eligible for Medicaid but not enrolled: How great a policy concern? The Urban Institute. No. A-41 in series, *New Federalism: Issues and Options for States.* September 2000.

Finkelstein A. The aggregate effects of health insurance: Evidence from the introduction of Medicare. *National Bureau of Economic Research Working Paper No. 11619.* September 2005. Finkelstein A, Taubman S, Wright B, et al. The Oregon Health Insurance Experiment: Evidence from the first year. *National Bureau of Economic Research Working Paper No. 17190*. July 2011.

Hahn B. Health care utilization: The effect of extending insurance to adults on Medicaid or uninsured. *Medical Care*. 1994;32:227-39.

Kolstad JT, Kowalski AE. The impact of health reform on hospital and preventative care: Evidence from Massachusetts. *National Bureau of Economic Research Working Paper No. 16012*. May 2010.

Long S, Coughlin T, King J. How well does Medicaid work in improving access to care? *Health Services Research*. 2005;40(1):39-58.

Long SH et al. Do people shift their use of health services over time to take advantage of insurance? *Journal of Health Economics*. 1998;17:105-15.

Manning WG, Newhouse JP, Duan N, et al. Health insurance and the demand for medical care: Evidence from a randomized experiment. RAND Corporation. *Health Insurance Experiment Series*. 1988.

Marquis MS, Long S. The uninsured access gap: Narrowing the estimates. *Inquiry*. 1994-1995;31:405-14.

Although demographic shifts and other factors will have a greater long-term effect on healthcare utilization, the looming one-time coverage shifts and resulting increase in utilization are a material opportunity for health systems. To take advantage of this opportunity, providers must understand how much utilization will shift, what channels will be most affected, and what new patients will look like. They can then craft strategies to capture a substantial share of the growth in the commercial segment, while building sustainable delivery models for the expanding government segment. O

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