

Behind the numbers

Medical cost trends for 2012

*Health Research Institute
May 2011*

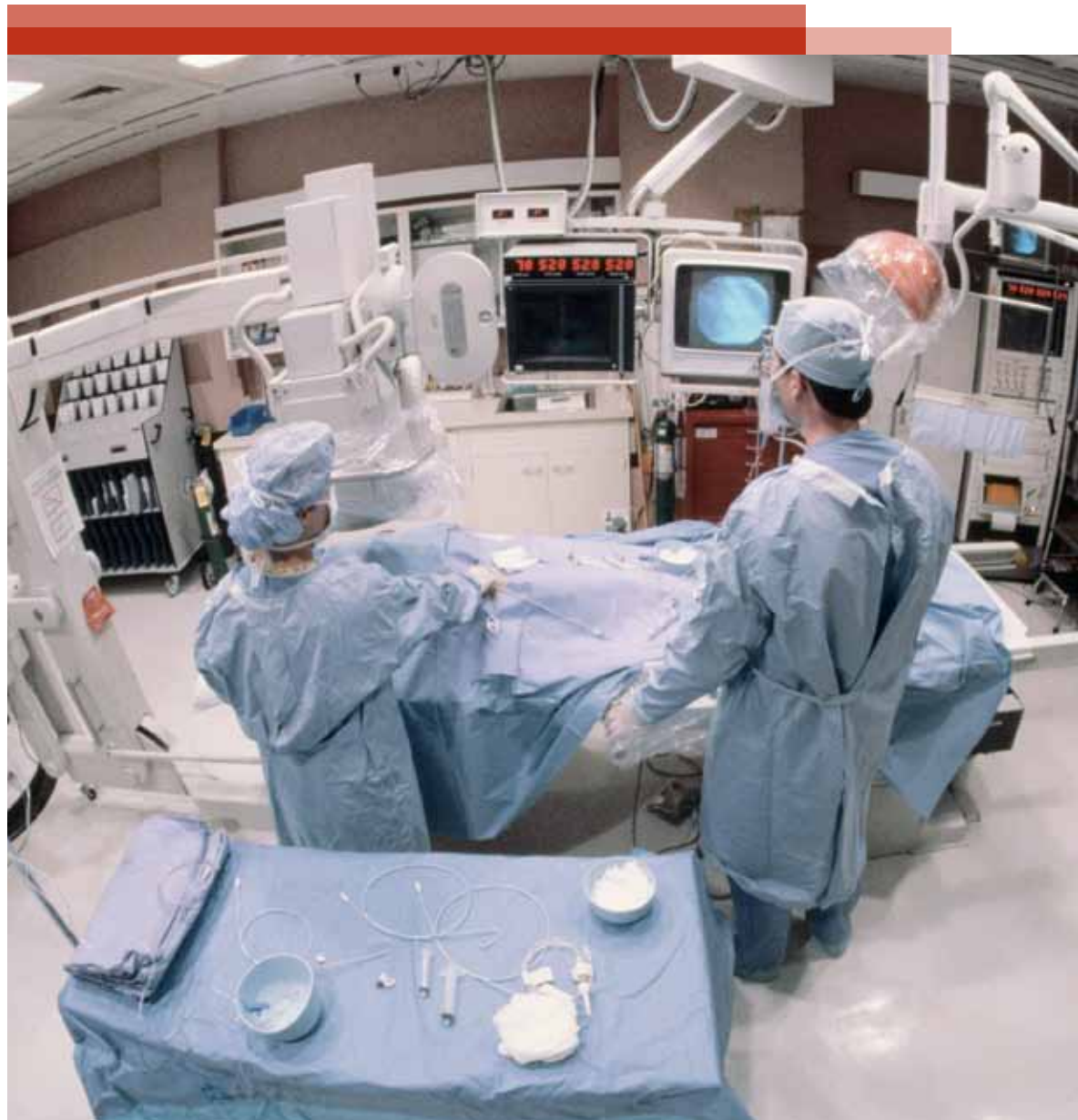


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Health reform is pressuring employers, providers, insurers, and drugmakers to be more cost conscious. They'll be held more accountable for costs as well as performance while coping with new tax and government payment regulations.

The heart of the matter

An interesting blend of reactions to the recession, the slow recovery, health reform, and other variables will affect the medical cost trend in 2012.

Given the unsettled nature of the economy the past three years, employers have feared the worst about their health benefit costs. However, just as the recession slashed consumer spending, it dramatically slowed the growth in medical spending in 2010, surprising nearly everyone. Now, a few months into 2011, employers and health plans say utilization remains somewhat deflated, but they're already worried about a rebound in 2012. Add to this recessionary effect the changes brought on by health reform, and the variables affecting cost trends in 2012 become an interesting blend of reactions.

Our research indicates that medical costs for workers are expected to increase 8.5% in 2012, up from an 8% increase in 2011. In estimating the medical cost trend growth for 2012, PwC's Health Research Institute (HRI) relied on PwC's 2011 Touchstone Employer Survey of approximately 1,700 employers from 30 industries. In addition, the research included interviews with hospital executives and health plan actuaries and other executives whose companies have more than 80 million in covered lives.

To the extent that healthcare utilization has fallen off due to the recession, it is likely to stay depressed for some time because of the lagged effect of changes in disposable income and the very slow recovery.

An in-depth discussion

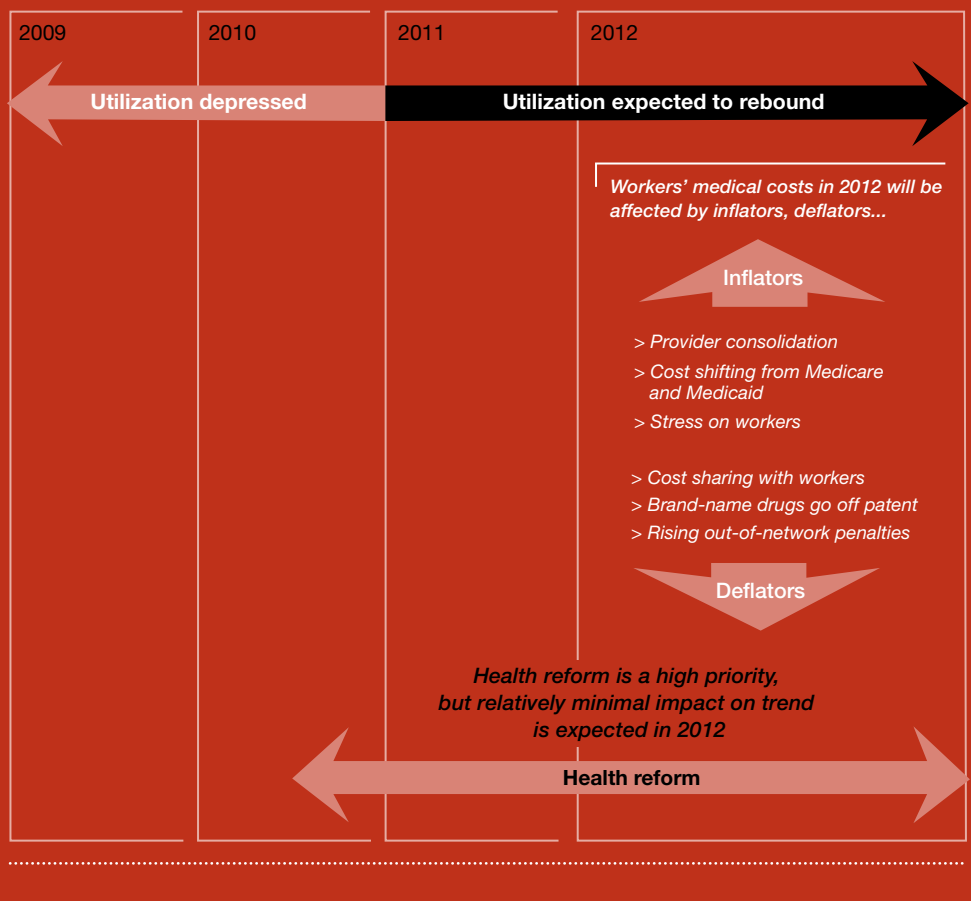
Medical cost trend is expected to increase from 8% in 2011 to 8.5% in 2012.

Executive summary

Here's what employers can expect to see in 2012.

- *Medical cost trend for employers is expected to increase to 8.5% in 2012.* However, benefit plan design changes are likely to keep employers' healthcare cost increases at an average of about 7%.
- *The aftermath of the recession, which stretched from 2007 to 2009, resulted in a negative effect on utilization in 2010 and beyond.* However, relative to 2010, utilization is rebounding and lifting the 2012 trend beyond what it would be otherwise.
- *Three factors will inflate costs in 2012:*
 - *Provider consolidation continues.* More and more physicians and hospitals are merging. Although provider consolidation is being promoted as a way to increase efficiency and reduce costs in the long term, payers are concerned about the impact of increased consolidation on payment rates.
 - *Cost shifting from Medicare and Medicaid increases.* In 2012, the increase in Medicare inpatient hospital rates is expected to be 3.3 percentage points below the expected growth in their costs, according to PwC analysis.
 - *Post recession stress builds up on workers.* Health plans and employers are reporting that they are beginning to notice post recession stress taking its toll on workers' health as well as medical utilization deferred during the depth of the recession.
- *Three factors will deflate costs in 2012:*
 - *Cost sharing continues to increase.* High-deductible plans were the fastest growing plan designs, according to the PwC survey. In 2011, 17% of employers surveyed said high-deductible plans were their most common benefit designs, up four percentage points from 2010.
 - *Blockbuster brand-name drugs go off patent.* In 2012, the cumulative sales of drugs going off patent will be the largest in history.
 - *Tiering on out-of-network providers is put in place.* Employers are increasing deductibles, making it far less attractive for workers to go out of network. In some markets, payers are becoming more selective about who's in the network.
- *Health reform, also known as the Patient Protection and Affordable Care Act (PPACA), will contribute to more cost shifting because it further discounts Medicare rates for inpatient care.* Aside from that, the law will have minimal effect on the cost trend in 2012.
- *Health reform is pressuring employers, providers, insurers and drugmakers to be more cost conscious.* Increasingly, they'll be held more accountable for costs as well as performance while coping with new tax and government payment regulations.

Major factors behind medical cost trends in 2012



How the medical cost trend is determined

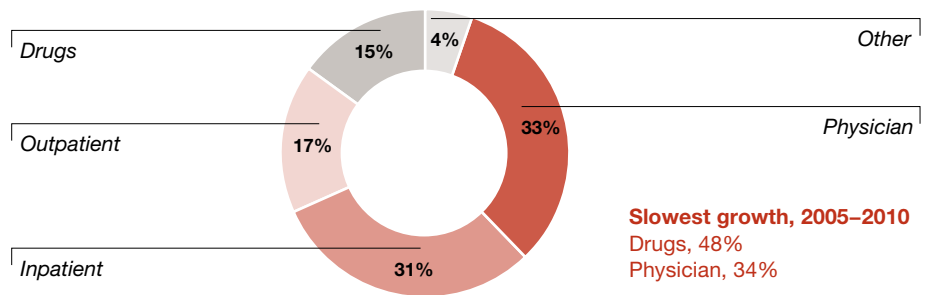
Medical cost trend is the projected increase in the costs of medical services assumed in setting premiums for health insurance plans. The largest single component of spending is physician services, which accounts for about 33% of all benefit costs. Inpatient hospital costs are a close runner-up, with 31% of benefits. (See Figure 1.) Outpatient hospital services account for 17%, and prescriptions are at 15%. A smattering of other services such as home health, skilled nursing, and medical equipment account for a meager 4% of benefit costs.

For each percentage point in growth, medical cost trend has been affected more by growth in physician, inpatient and outpatient hospital services and prescription drugs. Between 2005 and 2010, the fastest growing components of spending were other services, outpatient hospital and inpatient hospital. For every 1% increase in spending on physician services, medical cost trend is increased by one-third of 1%. By comparison, a 1% increase in prescription drug costs increases medical trend by less than one-sixth of 1%. According to the Milliman Medical Index, from 2005 to 2010, overall benefit costs increased by 48%.

Figure 1: 2010 Private health insurance benefits by spending category

Fastest growth, 2005–2010

Other, 106%
Outpatient, 67%
Inpatient, 51%



Slowest growth, 2005–2010

Drugs, 48%
Physician, 34%

Source: PwC analysis of Milliman Medical Index 2005 and 2010

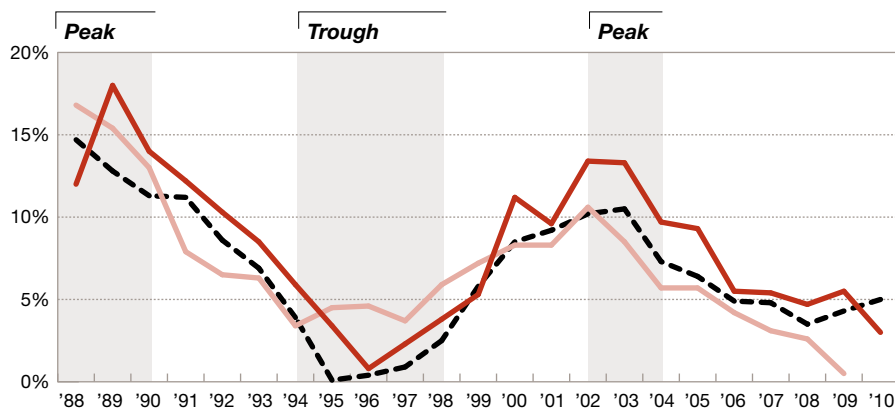
The level of growth in medical costs varies considerably over time. The past few decades have witnessed periods of peaks and troughs. As seen in Figure 2, changes in costs, or trends, tend to move in the same direction for a period of years before reversing. In the late 1990s, cost trends—whether measured by premium trends from the Kaiser Family Foundation, private health insurance (PHI) spending per capita from the Centers for Medicare & Medicaid (CMS), or the employer cost index from the Bureau of the Census (BLS), are similar. After a peak in 1988 and 1989, healthcare costs trended downward for six or seven years, hitting a trough in the mid-1990s. Then, for the next six or seven

years, trends increased, in an almost mirror image of the previous six or seven years of decline. From 2002 to 2008, trends were clearly falling again. Analysts began to ask when the next six or seven years of growth trend would begin. As we discuss later, the 2007 to 2009 recession, particularly the drop in employment, had a profound impact on medical cost trends.

The record has been mixed since 2008. Some series, such as the BLS employer cost index and CMS’s private health insurance costs, seem to suggest that the next growth spiral is already in progress. Other series, such as the Kaiser Family Foundation premium trend series, do not.

Figure 2: Growth in premiums, spending per capita, and employer cost index for insurance

Change in growth



- Kaiser Family Foundation estimate of employer premiums
- Centers for Medicare & Medicaid Services (CMS) private health insurance spending per capita
- Bureau of Labor Statistics employer cost index for insurance

Note: 2010 CMS private health insurance per capita was not available at the time of this report.

Sources: Kaiser Employer Health Benefits Annual Surveys for 2009, 2008, and 2007; CMS; Bureau of Labor Statistics

The direction of trends for the next few years is clearly confounded by the recession. Many trends were completely changed by the severe recession, which began in late 2007 and which continues to depress employment and wages. The decline in cost trends, which seems to bottom out in 2008, could continue for many years.

After a surprisingly low growth rate of 7.5% in 2010, medical cost trends will rebound to an estimated 8% in 2011 and 8.5% in 2012

To aid employers in designing their health benefits, HRI provides annual estimates of how much private medical costs will grow over the next year and what the leading drivers of the trend are expected to be. This report looks at the projected increase in costs of medical services assumed in setting premiums for health insurance plans. Insurance companies use medical cost trends to estimate what the same plan would cost in the next year. For example, a 10% trend indicates that a medical plan that costs \$10,000 per employee this year would cost \$11,000 next year.

¹ Benefit design change is not a factor in projections of medical cost trend, and the impact is assessed separately. However, observing actual trend separately from the impacts of benefit design changes is difficult, since benefit design changes are embedded into the actual trend.

The projected medical cost trend is influenced primarily by:

- unit cost inflation, or changes in the intensity, and changes in the unit prices of medical products and services, which may be affected by the economy, general inflation, and new technology
- utilization increases, or changes in the volume of services used, which may be affected by demographic changes, advertising, and the use of new technology

The projected medical trend is not affected by such factors as the following:

- Changes in benefit design of health plans¹
- Changes in profitability of insurance coverage
- Decisions by the insurer to seek larger market share

Medical cost trend is related to, but not the same as, premium trend. For example, suppose the expected medical trend is 10%. The health plan increases the deductible, co-payments, and the catastrophe limit on spending—changes that turn out to reduce costs by 2%. Also, suppose that the projected trend for the previous year was 3% too high, so the cost came in 3% lower than expected. In this case, premium would increase by only 5% (10% minus 2% minus 3%).

A recession-effected medical cost trend characterizes 2010 to 2012 time frame

PwC estimates that the medical cost trend for 2012 is expected to be 8.5% compared with our estimate of 9% for 2011 and 2010. (See Figure 3.) However, PwC found that the trend for 2010 came in much lower than expected for both years, 7.5% in 2010 and an expected 8% in 2011. The recession and depressed utilization lowered the trend, and discussions leading up to the PPACA in 2010 could have had a depressive effect as well. The modest growth in trend in 2011 reflects the increase in utilization offset by the end of the subsidized COBRA coverage in 2010.

In 2012, the trend is expected to uptick to 8.5%. The increase for 2012 is based largely on the expectation by health plans and employers that the surprisingly low growth in utilization in 2010 is rebounding in 2011 and will continue to do so in 2012 as a result of the release of pent-up demand during the recession.

The medical trend does not take into account changes in benefit design, such as changes in cost sharing. Typically, these changes reduce the trend by 1.5 to 2 percentage points. For example, plan changes reduced trend an estimated 1.5 percentage points from 7.5% to 6% in 2010. The benefit changes in 2011 were able to reduce trend by only 0.5 percentage point, from 8% to 7.5%, because of mandates imposed by the PPACA, such as dependent coverage to age 26 and exclusion of lifetime and annual maximums.

All numbers are national estimates. Cost trends may vary from market to market depending on the level of provider and health plan competition and the regional economy. In addition, these numbers will vary by employer based on benefit plan design and impact of their specific health and productivity efforts.

Figure 3: Medical cost trend, 2010–2012

	2010	2011	2012
<i>What we said</i>	9.0%	9.0%	8.5%
<i>Current estimate (before plan changes)</i>	7.5%	8.0%	8.5%
<i>Current estimate (after plan changes)</i>	6.0%	7.5%	7.0%

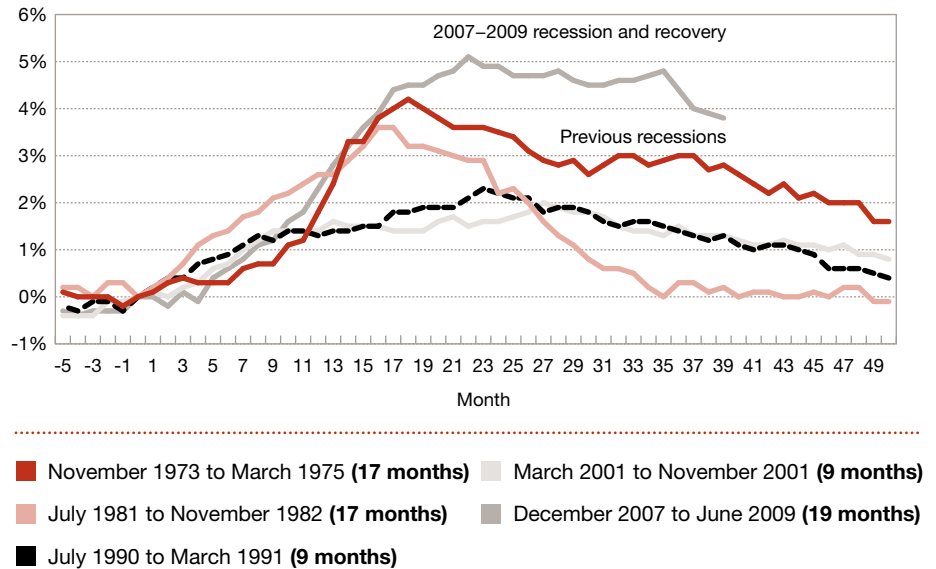
Source: PwC analysis

The Great Recession could suppress medical cost trends in 2010 and beyond

The US economy entered a major recession in 2007, which was followed by a major financial crisis in the last half of 2008. That downturn, the worst since the Great Depression, has been dubbed the “Great Recession” by many market analysts and economists. Not only has the increase in unemployment been sharper than in past recessions, but also the recovery has been quite slow. (See Figure 4.) About five months into the recession, unemployment peaked at more

than 5 percentage points above its low point. Thirty-six months into the recession, unemployment is still above 4.5 percentage points. By contrast, the Congressional Budget Office (CBO) estimates that “during the first 18 months of past recoveries, employment rose by an average of 4.4 percent.”² According to the CBO, the unemployment rate will not fall to 5.3%, close to its “natural” rate, until 2016.³

Figure 4: Change in unemployment from start of recession



Source: Sizing Up the 2007–09 recession: comparing two key labor market indicators with earlier downturns December 2010, Bureau of Labor Statistics (<http://www.bls.gov/opub/ils/pdf/opbils88.pdf>)

² Statement of Douglas W. Elmendorf, CBO director, The Budget and Economic Outlook: Fiscal Years 2011 to 2021, before the Committee on the Budget, US House of Representatives, February 10, 2011.

³ The natural rate of unemployment is the rate of unemployment arising from all sources except fluctuations in aggregate demand, which CBO now estimates to be 5.2 percent. That rate is sometimes described as the rate of unemployment that is consistent with stable inflation levels.

Impact of the recession on medical cost trend

Economists say healthcare spending is related positively to level of income. However, the impact of income on health spending is generally not thought to be immediate. For example, economists at CMS estimate that changes in personal healthcare spending have been affected by changes in disposable income levels over the past five years. The effects of the recession, which ended in 2009, will be felt through 2013. A slow economic recovery could further prolong the number of years before health spending is back to levels expected before the recession. The rationale behind the lag is based on the fact that consumers are significantly insulated from income changes because a large portion of services are paid by their third-party payers. Changing health insurance options takes time because it requires annual renegotiation of health insurance contracts. Provider practice norms will need to adjust, and insurers may require new organizational structures due to regulatory scrutiny and additional capital investment.⁴

As predicted by economists, utilization of many healthcare services seems to be down—or at least on a slower-than-expected growth trajectory. By late 2008, medical centers were noting a drop-off in some elective services, and medical trend appears to have been lower than expected due to weaker-than-expected utilization. In 2009, about 27% of Americans reported reducing their use of routine medical care since the economic crisis.⁵ In 2010, 70% of hospitals reported depressed volumes in overall patient volumes and 72% in elective procedures.⁶ To the extent that utilization has fallen off due to the recession, it is likely to stay depressed for some time because of the lagged effect of changes in disposable income and the very slow recovery.

4 Projections of National Health Expenditures: Methodology and Model Specification, February 4, 2010, <http://www.cms.gov/NationalHealthExpendData/downloads/projections-methodology.pdf>.

5 The Economic Crisis and Medical Care Usage, Annamaria Lusardi, Daniel Schneider, and Peter Tufano, Harvard Business School, Cambridge, MA.

6 Hospitals Continue to Feel Lingering Effects of the Economic Recession, American Hospital Association, June 2010, <http://www.aha.org/aha/content/2010/pdf/10june-econimpact.pdf>.

What goes down must come up

If utilization continues to be lower because of the recession, does it imply that the medical cost trend must be lower in 2012? Absolutely not. Although the initial downturn in utilization deflated the trend in 2010, the continuation of the depressed levels in 2011 may actually push the medical cost trend up if the decrease in utilization in 2011 is less severe than the decrease experienced in 2010. In other words, the medical cost trend is related to the change in utilization and not the level of utilization.

A simple example illustrates the situation. If utilization usually grows at an annual rate of 2%, then the recession might well reduce utilization and result in a decline in utilization of 1%. This is a three-percentage-point turnaround, which might reduce the medical trend by that much as well. Eventually, utilization will return to the normal growth level of 2%, and when it does, the medical trend will be pushed up by three-percentage-points.

This is precisely what appears to be happening. As the negative impact of the recession begins to fade, utilization trends are expected to rebound in 2011 and 2012, as utilization growth returns to normal levels.⁷

Alternative view: Long decline in trend after recessions

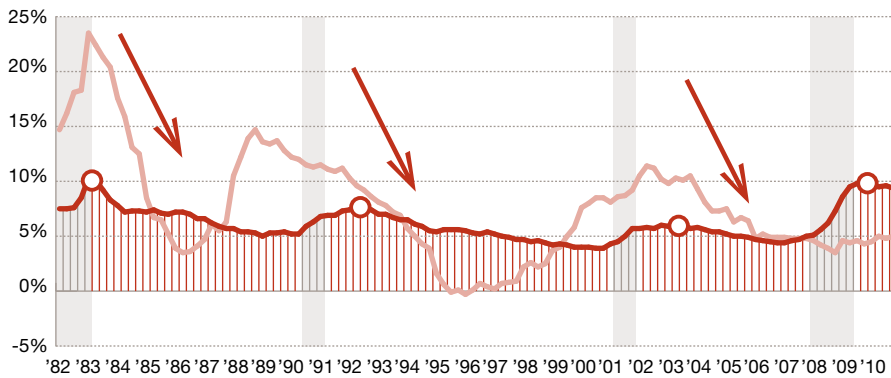
Analysts at Goldman Sachs recently presented data to show that health-care cost trends tended to decline for years after the recession ended.⁸ PwC looked into this and found similar results by using BLS health-care cost data. As shown in Figure 5, the growth trend in the BLS health benefit cost index⁹ begins to fall in 1983—well after the recession ends in 1982. The decline continues until 1986. The trend is already falling during the 1990-1991 recession but continues to decline until 1996. Once again in the 2001 to 2002 recession, the cost index begins to decline after the recession and continues to do so until well into the recent 2007-2009 recession. Based on this analysis, the Great Recession may affect medical cost trends for several more years.

7 Note that utilization in 2012 may still be depressed below the previously expected levels for 2012 based on levels of utilization before the recession and normal growth in utilization. In other words, the growth rate, but not the level of utilization, has recovered by 2012.

8 The big slowdown: Post-3Q review and outlook, November 2010, Goldman Sachs.

9 Employment Cost Index (ECI) for health benefits (or insurance) includes measures of change in the cost of employee benefits, <http://www.bls.gov/ncs/ect/sp/ehealth.pdf>.

Figure 5: Quarterly growth in employment cost index (health benefits) versus unemployment rate and recessionary periods



- Unemployment rate
- Quarterly growth in employment cost index (health benefits)
- Recession
- Peaks in unemployment rate

Sources: Bureau of Labor Statistics, National Bureau of Economic Research, PwC analysis

These results are interesting but are based on only the example of a handful of recessions. Moreover, the recent recession is severe relative to anything else in the past 80 years. The length and severity of the recession and the psychological impact of the financial crisis may affect the relationship between healthcare spending and income—and timing

of the recovery. This could work in either direction, but it is possible that the traditional relationships do not apply. The impact of this recession on health spending may have hit harder and sooner than in the past. This could imply a higher growth in medical trend now that the recession has ended.

Factors affecting 2012 trend

Each year, HRI conducts research to identify which factors, beyond general inflation and technology, are tending to increase costs trend (inflators) or decrease costs trend (deflators). The 2012 candidates described below were selected based on a series of interviews with health plan officials and review of analyst reports and other published sources.

Inflators are consolidation, cost shifting, and stress

Hospital and physician consolidation will impact costs in 2012

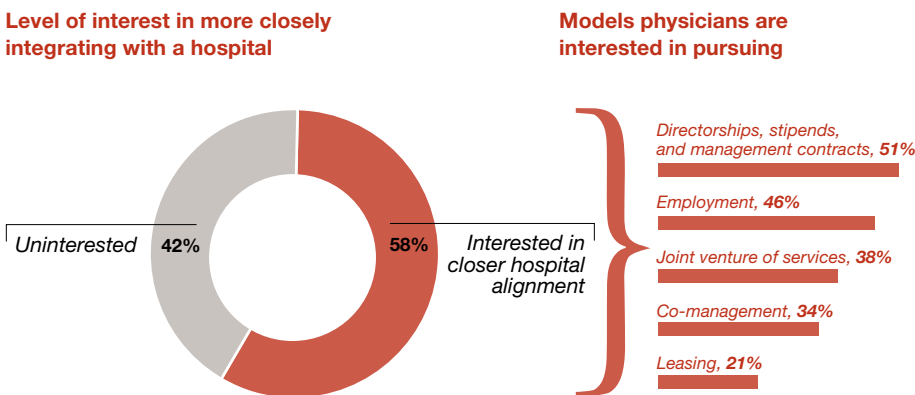
Hospitals have been slowly consolidating for the past two decades, as have physicians. On average, more

than 2,200 physicians were involved in mergers and acquisitions each year since 2007, according to Irving Levin Associates, a Norwalk, Connecticut, investment research firm. Hospitals and physicians are aligning closer together for many reasons, not the least of which is to gain better leverage with health insurers in payment negotiations. Health reform also gave hospitals and physicians an additional nudge to move closer together. Going to 2012, that trend is expected to accelerate due to the incentives for hospitals and physicians to align and form Accountable Care Organizations (ACOs) under the PPACA.

The health reform law encourages consolidation in more-subtle ways as well. For example, it requires cuts in Medicare payments to hospitals for preventable readmissions in 2012. In 2010, CMS reported that 30-day readmission rates were 18% for pneumonia, 20% for acute myocardial infarction, and 25% for heart failure.¹⁰ To reduce readmissions, hospitals need to work more closely with physicians on discharge planning and follow-up care.

At the same time, physicians are more interested in aligning with hospitals, as shown in Figure 6.

Figure 6: Physician interest in alignment by type of model



Source: PwC Health Research Institute Physician Survey, 2010.

¹⁰ Report to the Congress, Medicare Payment Policy, March 2011.

When hospitals acquire or align with physician practices, it can affect costs because a service may switch from a physician's office to a hospital-based outpatient clinic, where the charge is often higher. While figures are not available for health insurers, many of them follow Medicare's payment practices. MedPAC, which advises Congress on Medicare issues, recently reported that the combined fees paid for visits to hospital-based practices can be more than 50% greater than those paid to freestanding practices. In addition, MedPAC reported that the volume of Medicare visits to hospital-based clinics was growing faster as well.¹¹

In addition, health insurers fear that too much consolidation will reduce competition among providers and drive up reimbursement rates. In many communities, payers already say there is a lack of competition, although providers say the same about health plans. Most employers have favored broad networks and have been hesitant to drop large or prestigious institutions for fear of backlash from employees. This enables certain providers to demand higher payment rates from insurers. A Robert Wood Johnson Foundation study found that hospital consolidation in the 1990s raised inpatient prices by at least 5%.¹²

Hospital systems argue that the long-term effect will reduce costs by eliminating waste. Indeed, the ACO model is designed to incentivize care coordination by allowing providers to share in the savings to Medicare. Logically, the savings from an ACO would benefit private-pay patients as well, as providers set up more-efficient processes for all patients.

Payment reductions by Medicare and Medicaid will increase cost shifting to private payers

Private health plans generally pay above costs, while Medicare and Medicaid pay below costs to hospitals and physicians. For example, in 2009, on average, Medicare and Medicaid paid about 90% and 89%, respectively, of cost to hospitals, while private payers paid 134% of cost to hospitals.¹³ Medicare accounts for about 42% of hospital inpatient days; Medicaid accounts for about 11%. Both shares have been increasing and thus pushing uncovered costs onto a smaller base of private payers. Medicare and Medicaid rates are expected to decline relative to private payment in 2012 because of the impact of the PPACA on Medicare payment rates and the impact of the recession on Medicaid. The reductions in 2012 might be even larger if Congress agrees on further cuts in the

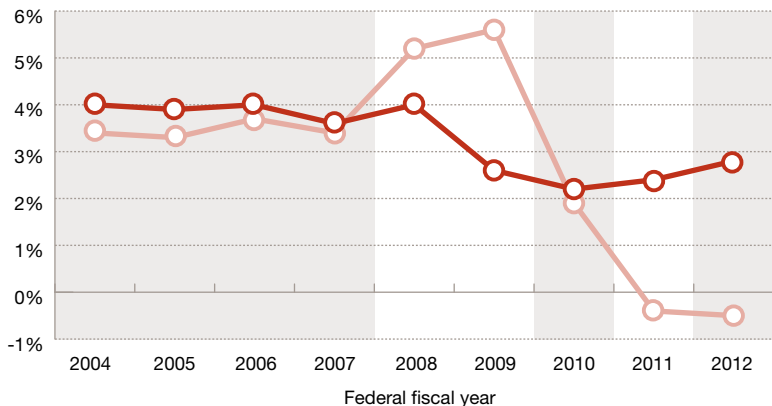
11 Report to Congress: Medicare Payment Policy. Medicare Payment Assessment Commission, March 2011.

12 Robert Wood Johnson Foundation, How Has Hospital Consolidation Affected the Price and Quality of Hospital Care? February 2006.

13 TrendWatch Chartbook 2011, American Hospital Association, <http://www.aha.org/aha/research-and-trends/chartbook/index.html>.

Figure 7: Growth in payment for inpatient Medicare compared to growth in the CMS hospital market basket

Percentage change



■ Market basket change (inflation) ■ Medicare payment change

Note: 2010 to 2012 market basket data are forecasted by CMS.

Sources: CMS, Quarterly Index Levels in the CMS Prospective Payment System (IPPS) Hospital 2006 Input Price Index 1995-2020.

2004 to 2007: During these years, hospitals received payment increases that nearly kept up with inflation increases

2008 to 2009: New coding system boosted payments to hospitals higher than inflation increase

2010: Hospitals get full market basket increase

2011: Medicare takes back coding overpayments, and health reform law cuts the market basket

2012: Same as 2011 plus additional cuts to the market basket (i.e. productivity adjustment begins) and a one-time increase in response to litigation

2012 federal budget. Hospitals and health plan executives agree that when Medicare and Medicaid pay less than costs, private payers must make up the difference.

Medicare payment is tethered to a market basket index, which is an inflation proxy that CMS uses to set Medicare payment increases for hospitals. It is calculated by predicting the next year's cost of supplies and labor for hospitals through a market basket of prices. In 2008 and 2009, Medicare increased its inpatient rate to hospitals far above the increase in the market basket. However, this is expected to completely reverse in 2011 and 2012. (See Figure 7.) Here's why: In 2012, the market basket¹⁴ increase for inpatient hospital services is forecast to be 2.8%, while the Medicare inpatient payment rate payment is expected to be cut by 0.5%,¹⁵ further widening the gap between costs and payment rates. As a result, the rate increase paid by Medicare is expected to be 3.3 percentage points below the price growth of the inputs required by hospitals to provide services.

¹⁴ The CMS market baskets reflect input price inflation facing providers in the provision of medical services.

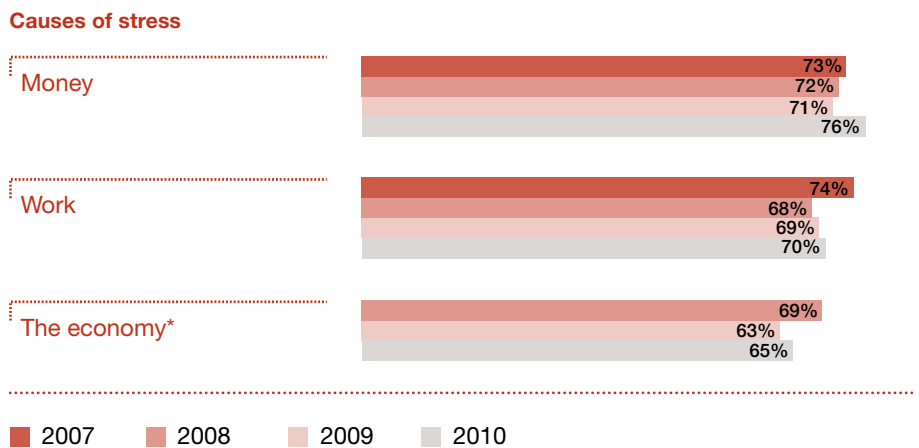
¹⁵ For 2012, updates to forecast market basket increase of 2.8% include a reduction of 0.1 percentage point mandated by the health reform law and a further reduction of 3.15 percentage points for behavioral coding adjustments. These reductions also apply to the 2011 market basket, and for more details, see Behind the Numbers 2011. In 2012, the health reform law mandated a new reduction under the sentiment that the industry needs to be increasing productivity. The 2012 productivity adjustment is currently estimated to reduce the market basket by 1.1 percentage points. Also in light of the DC Circuit Court of Appeals decision in *Cape Cod v. Sebelius* on January 14, 2011, an increase of 1.1 percentage points is estimated. As a result of these adjustments, the expected Medicare payment to hospitals will be reduced by 0.5%.

Does an over-stressed nation spend more on medical care?

The distressed economic conditions of the past few years may have taken a toll on Americans’ health. Several health plans interviewed indicated that they were seeing more claims for stress-induced illnesses. Specifically, as stress levels increase, health becomes less of a priority and people are less likely to maintain a healthy lifestyle. Several studies suggest that stress causes health problems or at the very least, is highly correlated to adverse health effects, such as heart disease. According to the American Psychological Association (APA), 43% of adults suffer adverse health effects from stress; more than 75% of physician office visits are for stress-related ailments and complaints; and stress is linked to the six leading causes of death: heart disease, cancer, lung ailments, accidents, cirrhosis of the liver, and suicide. The Occupational Safety and Health Administration has declared stress a hazard of the workplace.¹⁶

Referring to an “overstressed nation,” the APA went on to say in its 2010 Stress in America survey findings that “Americans are struggling to balance work and home life and make time to engage in healthy behaviors, with stress not only taking a toll on their personal physical health, but also affecting the emotional and physical well-being of their families.”¹⁷ The survey shows that stress is frequently related to economic conditions and that the top three causes of stress from 2007 to 2010 are money, work, and the economy. (See Figure 8.)

Figure 8: Things respondents indicated as somewhat significant or very significant sources of stress in their lives



*No responses in 2007 for the economy.

Sources: 2010 Stress in America Findings, American Psychological Association, November 9, 2010, <http://www.apa.org/news/press/releases/stress/national-report.pdf>; PwC analysis.

¹⁶ <http://www.apa.org/helpcenter/stress-effects.aspx>.

¹⁷ 2010 Stress in America Findings report, American Psychological Association, November 9, 2010, <http://www.apa.org/news/press/releases/stress/national-report.pdf>.

Deflators are cost sharing, generics, and out-of-network tiering

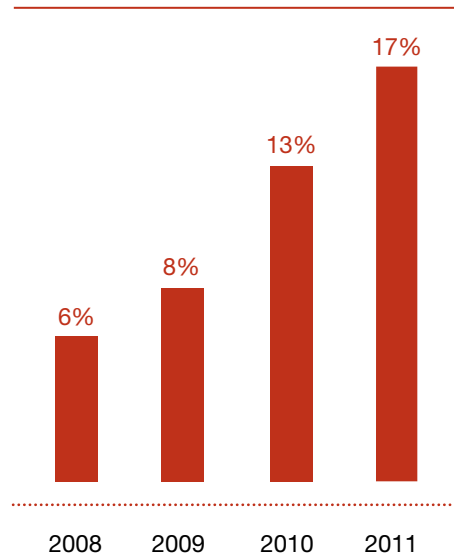
Increased cost sharing

Employers are increasingly shifting the burden of rising medical costs to their employees through higher cost sharing. Third-party payers pay for a majority of the healthcare spending, insulating patients from actual costs. By increasing cost-sharing tools such as co-insurance, patients are more sensitive about the actual costs of the services they consume. In some cases, they may shop around to find less-expensive solutions when possible.¹⁸

From 2010 to 2011, employers increased their deductibles, out-of-pocket maximums, and co-pays, according to the PwC survey. In addition, high-deductible plans showed the greatest growth rate of all plan designs. The percentage of employers whose most-enrolled plan was high deductible went from 13% in 2010 to 17% in 2011, an increase of 4 percentage points. (See Figure 9.)

Many employers offer workers a choice of health plans. For the survey, PwC asked employers to respond based on their most-common plan—the one with the highest enrollment. For some, it may be their only plan. According to the survey, 22% of employers said their most-common plan had an in-network deductible of \$1,000 or greater in 2011, a six-percentage-point rise over the previous year. In addition, more employers said their out-of-network

Figure 9: Percentage of firms whose most common plan was high-deductible



Source: PwC 2011 Touchstone Employer Survey, May 2011. Percent of survey participants who selected high-deductible when asked which of their plans had the highest enrollment.

deductible had crossed the \$1,000 threshold as well: according to the survey, 44% of employers, up from 29% in 2010, said the out-of-network deductible was \$1,000 or greater in 2011.

Drug patent expirations in 2011 and 2012 will be biggest in history

The expiration of patents for blockbuster drugs has enabled generic versions to moderate health spending growth for the last few years. This downward pressure is expected to be particularly strong in 2012 when the full effect of generic atorvastatin (Lipitor) is felt on prescription drug spending. Lipitor, the world's top selling drug, loses its patent

in late 2011. Several other blockbuster drugs go off patent in 2011, including Seroquel, Actos, Zyprexa, and Levaquin. Then in May 2012, Plavix, which is the second biggest selling drug, goes off patent. Enbrel, Singulair, Lexapro, Lovenox go off patent as well in 2012. In 2012, the cumulative sales of drugs going off patent will be the largest in history.

Generics average about 30% of the price of their brand-name originals. However, the lower costs of generic drugs may not be fully realized in the same year the patent expires. In some cases, the generic version is not yet approved by the FDA, and a single generic has exclusivity for six months. In addition, it takes a few months for most patients to switch to the generic formulation. The biggest impact is felt on the brand name drug itself, whose sales usually fall to 90% of the previous level in the first year after a patent expires. The impact may also be felt in other drugs in the same treatment class, as therapeutic substitution is made for the much-less-expensive generic drug. The use of generics is increased by the use of financial incentives, known as tiers, under which copayments on generic drugs may be a few dollars compared to \$20 or more for brand drugs.

¹⁸ Technically, medical cost trend does not take account of the direct impact of benefit design changes. However, the higher cost sharing not only reduces the benefit cost of current utilization; higher cost sharing also reduces utilization; and has an impact on medical trend.

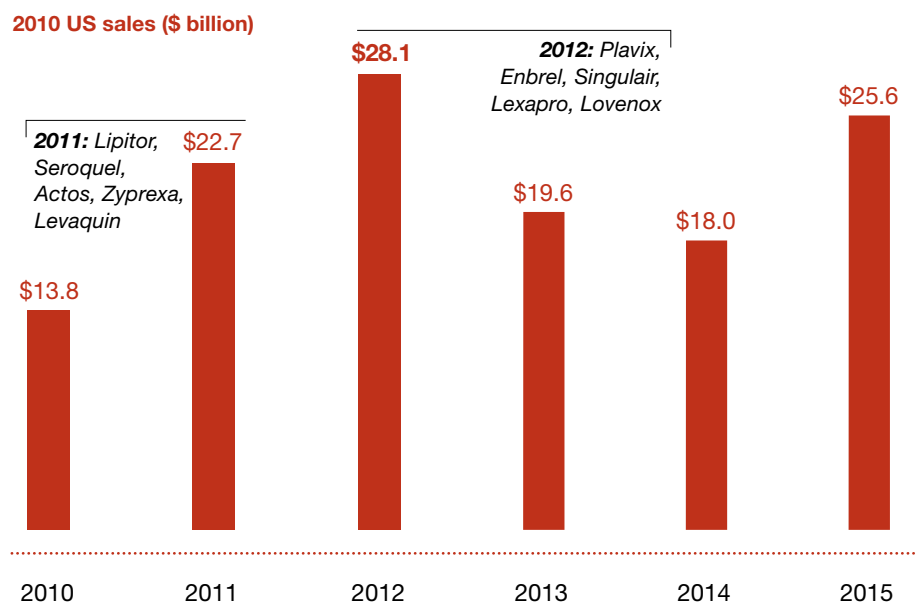
Although pinning down the exact magnitude and timing of the impacts is challenging, US sales at risk due to patent expiration in 2012 are \$28.1 billion compared to \$22.7 billion in 2011 (See Figure 10.) The actual story is more complex because the “sales at risk” measures only the dollar value of drugs going off patent in that respective year. Lipitor, which will have the single largest impact of any drug in 2012, is counted in the 2011 estimate in this statistic because that’s the year its patent expires.

Out-of-network penalties rise, some networks contract

For years, employers have defined providers as out of network and in-network. To address employee concerns about provider accessibility, employers paid for out-of-network use but paid only at in-network prices or set up a higher cost sharing for out-of-network providers, or both. For some providers, particularly in the outpatient surgery and imaging areas, this worked perfectly well. They didn’t have to succumb to network discounts, and the higher cost sharing wasn’t expensive enough to deter patients who wanted to follow their physicians.

The type of network a provider is in can strongly affect the out-of-pocket costs to consumers who choose to go out of network. HMOs frequently do not pay for out-of-network care, except in emergencies. PPOs and point-of-service plans allow out-of-network care but require that the patient pay the difference between the network

Figure 10: US sales at risk due to patent expiration

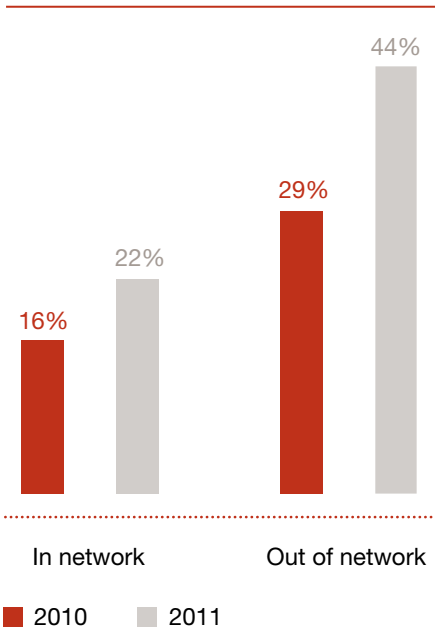


Sources: Company filings, United States Patent and Trademark Office (<http://www.uspto.gov/patents/resources/terms/156.jsp>, accessed on April 16, 2011), PwC analysis

price and the price that the provider charges the patient. For example, if the patient has major surgery performed out of network and the physician charges \$6,500 but the plan pays only \$2,000, the patient must pay the full difference of \$4,500 plus cost sharing on the \$2,000. In addition, the excess payment may not count toward the annual spending limit, in which case the patient may have to pay \$9,500 before the \$5,000 out-of-pocket cap is triggered.

Another, less-common method is to modify co-payments for services by tiers in the same way that prescription drugs are priced. A visit to an in-network physician might be \$20,

Figure 11: Percentage of medical plans with \$1,000 or greater deductible



Sources: PwC 2011 Touchstone Employer Survey, May 2011; based on employers' plans with the highest enrollment

but a visit to an out-of-network physician might be set at \$50. This has the advantage of making the difference between in network and out of network immediately obvious to the patient rather than tied to the difference between some unknown list of actual charges and network prices.

Health plans are making it more costly for consumers when choosing an out-of-network provider. In 2010, according to the PwC Touchstone Survey, 29% of plans with an out-of-network feature had a deductible of \$1,000 or more for out-of-network care. In 2011, this had jumped to 44% of plans. By comparison, only 22%, or half as many, of enrollees in these plans faced deductibles of \$1,000 or more. (See Figure 11.) Some high-deductible plans also have much higher deductibles for out-of-network use or do not count that out-of-network use as part of the deductible. Some physicians in specialty practices like sports medicine may be able to thrive without participating in a network.

However, for inpatient hospital services, participation in a network is important, since most hospital services are not voluntary and the level of cost sharing would be quite high for out-of-network services.

In addition, in some markets, employers and health plans are excluding the premier hospital systems from their networks, a move that several years ago would have been considered unthinkable. Recently, one health plan said members will face extra charges if they go to one of 15 higher-cost hospitals—such as an extra \$1,000 for an inpatient stay or outpatient surgery and \$450 more for an MRI.

Health reform expected to have minimal impact on medical cost trend in 2012

Most of the major provisions under the PPACA are in the future. The Medicaid expansions, health insurance exchanges, subsidies to buy private insurance, mandates for employers to offer insurance, and mandates for individuals to buy it—all of these take place in 2014 or later.

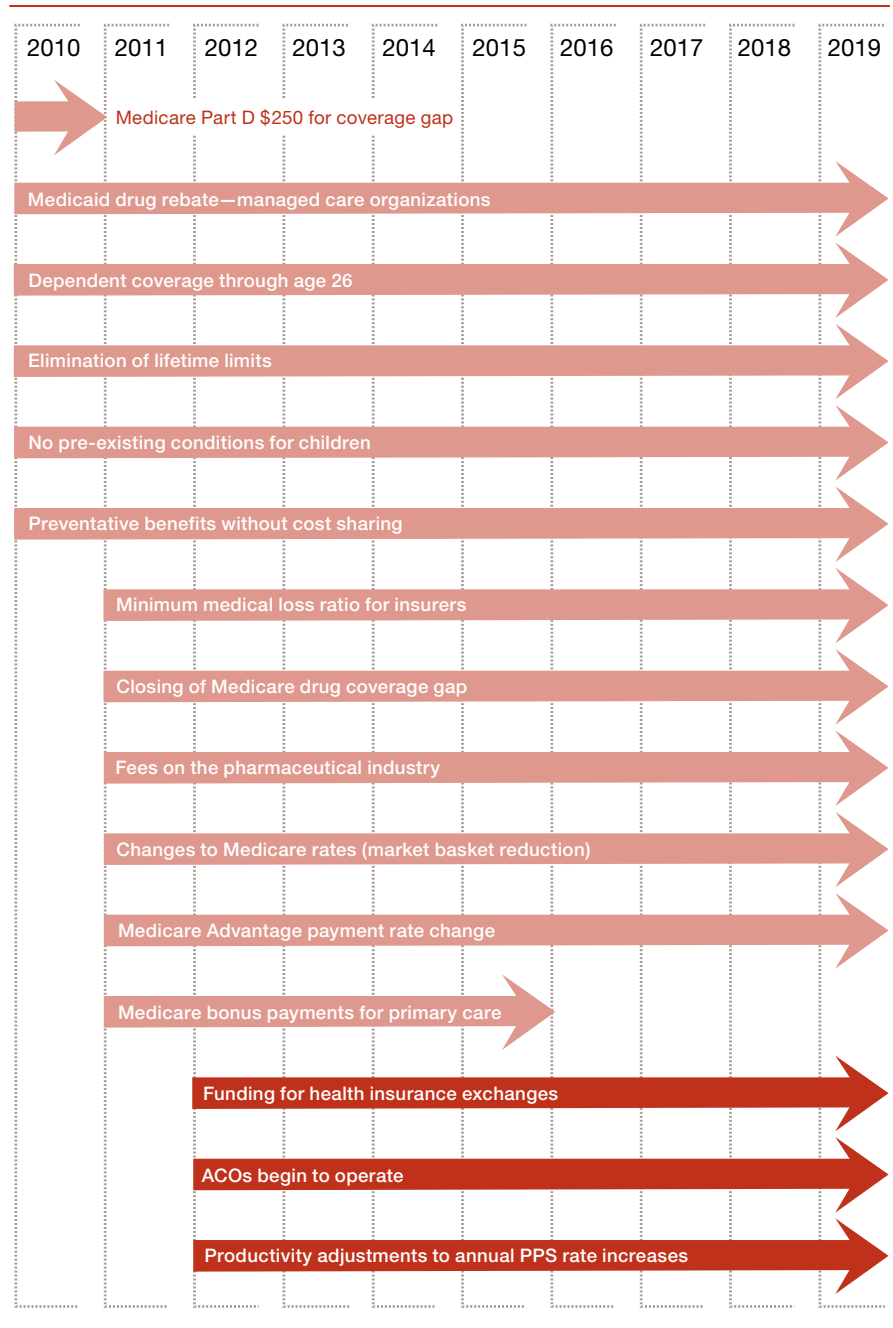
The provisions that took place prior to 2012, such as elimination of lifetime limits, dependent coverage through age 26, and no preventative benefits without cost sharing won't affect trend in 2012, because they were small changes and employers will have fully adjusted to them before 2012.

As shown in Figure 12, three key provisions take place in 2012:

- Funding for states to develop health insurance exchanges, which will open in 2014. It's still uncertain how health insurance exchanges will affect healthcare costs but the effects will begin in 2014 or later.
- Medicare ACOs begin to operate. This program, which allows providers to share in savings on Medicare beneficiaries, could have a spillover effect if an ACO's efficiencies are passed on to privately insured patients as well.
- Reductions in Medicare Inpatient PPS Update. The update factor will be reduced to account for increased productivity.

Only the last item—a reduction in the Medicare inpatient hospital annual—update has potential to increase medical trend in 2012. All things considered, 2012 appears to be a slow year for health reform, at least from the standpoint of impact on medical trend.

Figure 12: Timing of major provisions of the PPACA through 2012



What this means for your business

Health reform is pressuring employers, providers, insurers, and drugmakers to be more cost conscious. They'll be held more accountable for costs as well as performance while coping with new tax and government payment regulations.

With health reform provisions pending and a hazy economic outlook, the healthcare industry is in a state of flux. In this uncertain environment, healthcare organizations need to understand each other's reactions and motives to respond to a rapidly changing market.

Employers

What are they doing now?

Some employers are becoming less confident in their ability to offer health benefits on a long-term basis. They continue to increase cost sharing, focus more on wellness, and drop retiree health plans to help bend their own healthcare cost curve. While some employers are hesitant to make any major changes until they have a better grasp on the final health reform regulations, others are taking a more proactive approach. According to PwC's employer survey, 84% of respondents are likely to make changes to offset costs associated with the PPACA, 86% are likely to re-evaluate their overall benefits strategy, 50% are considering significantly changing or eliminating company subsidies for dependent medical coverage, and 89% will likely increase their health and wellness efforts.¹⁹

Things to consider

Health reform

Employers have had their hands full complying with the avalanche of new regulations under the PPACA. However, they need to look past compliance to a host of other changes that the law is bringing to the healthcare marketplace, beginning last year and coming to a crescendo in 2014, but continuing until the end of this decade.

States are just beginning to develop their insurance exchanges. Employers can begin by identifying potential future scenarios and defining triggers, actions, and contingency plans. For example, under the PPACA, high-cost plans will be subject to an excise tax in 2018. Employers should assess whether their current benefit plans, given likely medical cost trends, will be subject to the excise tax, and if so, make plans to change benefits gradually so as to avoid the tax in 2018.

For retirees, changes in the treatment of the coverage gap under Medicare Part D make it advantageous for most employers to switch from their current retiree prescription drug coverage to a combination of Medicare Part D plan and a commercial wraparound plan. In fact, by 2020, the coverage under the standard Medicare Part D plan becomes close enough to most employer plans that employers may be able to limit their costs to paying a modest monthly premium for the standard plan.

Employee engagement

Employers should rethink and consider realigning health and wellness reward programs, applicable across a diverse and global workforce, so that there is a shared commitment to health and well-being. Employers may want to consider shifting away from incentives for employee participation in wellness programs and toward incentives for actual health improvement. Although not every employer has evidence of cost-saving benefits, expanding and improving

health and wellness programs help attract and retain employees. As the economy improves, the competition for top people will become fierce, and as healthcare costs rise, employers can increasingly use health benefits as a tool to attract and retain top people.

Value-based consumption/ performance-based reimbursement

Economists have singled out the lack of incentives, or even perverse incentives, as a leading cause of waste and inefficiency in the healthcare sector. Employers should consider ways to make incentives work in the right direction both in the way that workers make choices and in the ways that providers are reimbursed.

Employers should begin to seek benefit plan designs that encourage efficient lower-cost, higher-value-based consumption. Examples include tiered networks of medical providers based on their performance (e.g. more coverage or lower premiums for high-quality lower cost providers) and promotion of generics over branded drugs. Many employers have started limiting benefit options and implemented mandates toward lower-cost options, such as mail delivery for prescription drugs versus local pharmacies. At the same time, employers should tie provider payment to performance. Medicare is introducing a number of payment changes that provide incentives for better outcomes. For example, hospitals that have excessive preventable readmission rates will receive lower payments than those with lower rates.

¹⁹ PwC 2011 Touchstone Employer Survey, May 2011.

Providers

What are they doing now?

Hospitals have not completely recovered from the effects of the severe recession. Many patients continue to forgo care because of financial strains. Because hospitals have high fixed costs, decreased utilization reduces margins and productivity. About 70% of hospitals reported decreased overall patient volumes, and 72% reported depressed elective procedures in 2010.²⁰ A majority of hospitals are cutting administrative costs, delaying capital investment, and reducing staff to relieve some of the financial pressures. Others are working to consolidate for scale and consolidate market share as a strategy to offset declines.

Things to consider

Health reform

Further reductions in the market basket update in the form of a productivity adjustment reduced Medicare payments for preventable hospital readmissions, and Medicare value-based purchasing will reduce revenues. Hospitals should develop financial models and scenarios to understand the impact on providers, determine potential obstacles and, decide what action needs to be taken to address identified issues.

Transparency

Increased cost sharing can be frustrating to patients when providers don't provide transparency in pricing and billing practices. Many hospitals have moved toward patient-friendly billing practices to ensure better patient relations and collections. Unpleasant surprises are reduced by careful explanation of out-of-pocket costs before the hospital stay or visit. At the same time, patients can be counseled as to sources of assistance for payment, and the full array of possible third-party payers can be considered.

Coordination of care

Hospitals and physicians should explore ways to better coordinate services. HRI research has shown that hospitals are increasingly aligning with physicians, who determine patterns of care and affect hospital profitability in a myriad of ways.²¹ Hospital systems should also consider community-based programs such as patient-centered medical homes and ACOs. Both offer opportunities for better care coordination and increased efficiency. Also, providers that implement electronic medical records, that understand how to extract valuable data, and that embrace the use of business analytics for clinical decision making may achieve greater coordination of care across a wider spectrum. And speed in delivering more efficient care will be important in competitive markets.

Vendor relationships

With close alignment with physicians, hospitals have an opportunity to consolidate vendor contracts. By establishing standard devices for a defined set of procedures, hospitals can better manage device purchases and possibly negotiate lower prices. In addition, many states have new reporting requirements whereby device manufacturers must report financial relationships with physicians.

²⁰ Hospitals Continue to Feel Lingering Effects of the Economic Recession, American Hospital Association, June 2010, <http://www.aha.org/aha/content/2010/pdf/10june-econimpact.pdf>.

²¹ From Courtship to marriage: Why health reform is driving physicians and hospitals closer together, PwC HRI, 2010.

Health insurers

What are they doing now?

As employers reassess their benefit strategies and seek new plan options, those health insurers that are able to offer plan designs that meet employers' new objectives will maintain or gain market share. Several health insurers have begun to pilot programs to identify viable solutions:

- Coordinated care models along with shared savings incentives
- Focus on primary care. No cost sharing for preventative and routine care, diagnostic/lab tests and X-rays, cancer screening, and certain generic medications. Members receive financial awards for being and staying healthy (e.g. smoking status, acceptable blood pressure/ cholesterol levels, immunization, body mass index measures).
- Performance-based contracts between a health insurer, pharmacy benefit manager, and pharmaceutical company. One example is discounting drugs based on patients' medication adherence. In another example, a health insurer monitors relapse-free progression based on number of hospitalizations and emergency department visits.

Things to consider

Health reform

With an eye to 2014 and beyond, health insurers should develop business models that target new opportunities for increased market share in the world of insurance exchanges, subsidies, and mandates. Focusing on improving the multi-channel member experience through health insurance exchanges may enable health insurers to differentiate themselves and attract and retain members. Health insurers should think about whether their current markets will be profitable given the federal fee on commercial insurance, minimum MLR²² requirements, and other rules in the new commercial market. Finally, health insurers should assess the likelihood that their current benefit packages for employers will be taxed as having excess benefits and if so, develop new benefit designs.

Collaboration with other sectors

Health insurers could work more closely with employers to develop plan designs. Health insurers hold vast amounts of claims data and should collaborate with hospitals and providers to better understand patient behavior with health systems and then develop healthcare delivery models that enable more-efficient care. In addition, payment models could be jointly developed that aim their financial incentives toward common goals that promote lower cost, better-quality care, and more patient engagement.

²² Medical loss ratio (MLR) is the minimum percentage of premium dollars that must be spent on medical care (as opposed to administrative costs).

Pharmaceutical

What are they doing now?

The business model for pharmaceutical manufacturers is in flux. The number of new blockbuster drugs on the market has plummeted, and the generic share has soared. The PPACA increased mandatory rebates and discounts in Medicare and Medicaid, which account for nearly half of pharmaceutical sales. The industry is focusing more on specialty drugs. By 2020, many of the medicines the industry makes will be specialist therapies that require totally different manufacturing and distribution techniques from those used to produce small molecules. The economies of scale the industry leaders have traditionally enjoyed are rapidly diminishing.²³ Major pharmaceutical companies have been buying smaller companies with new products in hopes of capturing new blockbuster drugs. Many major companies have purchased or merged with other large companies. And some brand manufacturers are moving into the generic market.

Things to consider

Health reform

Overall net profits have been reduced by health reform. The assessment fee, which is based on government sales, is essentially a tax on doing government business. Medicaid is subjected

to higher rebates, and rebates will now be collected on Medicaid sales to private Medicaid managed care organizations. The discounts on prescription drug sales in the Medicare Part D coverage gap represent an even larger discount. Finally, biologics are under new rules that increase competition from bioequivalent products.

Avoid double rebates

Pharmaceutical manufacturers have been paying rebates to both private and public payers. However, under the PPACA, the new rebates and discounts have been added on top of private rebates in the Medicaid and Medicare programs. Manufacturers should re-evaluate discounts to private payers for Medicaid health plans, since they will be paying substantial government rebates on those sales. Similarly, prescription drug sales in the coverage gap may be subject to double rebates as well. In some cases, the rebates may be worthwhile to continue to maintain product placement on the formulary, but the level of the rebate may be reduced. In other cases, such as in the coverage gap, where preferred status in the formulary may be negated by 50% discounts by all pharmaceutical companies, a good argument may be made to lower the rebate to the private payer. Rebates on these double-rebated programs should decline over time because the value of being on the formulary has been cheapened by the new government discounts.

Specialty drugs

The elimination of caps on high-cost patients could increase the use of pharmaceuticals, especially high-cost drugs for small patient populations. However, increased competition among health plans based on price could put pressure on prices. The benefits required by the government to be a qualified plan may be a ceiling for many plans as well as a floor. Formulary decisions may be left to the entities taking risk, such as physician organizations, hospital organizations, and ACOs.

Cost-effectiveness

Pharmaceutical products that can demonstrate improved clinical or economic outcomes—especially cost-effectiveness to reach the established quality measures—have opportunities to grow. Increased focus on total cost supports increased drug use to avoid higher medical cost. With bundled payments, the medical home, and ACOs, providers' income will depend on their ability to manage total cost. A new marketing approach to providers must address this new dynamic. However, this increases the pressure to use generics, and it decreases the use of drugs with perceived marginal value.

²³ Pharma 2020: Supplying the future, PwC, 2011.

PwC Health Research Institute

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