While the provisions of the Affordable Care Act (ACA) roll out through 2017, many health care providers are moving from fee-for-service revenue models to compensation that is based on quality outcomes. Entering into such risk-based contracts for Medicare, Medicaid, and commercial patient populations may expose these organizations to dramatically higher financial losses in the event of patients with catastrophic accidents or illnesses. C-suite executives and other senior leaders are concerned about the potential bottom-line impact of these losses. Analytics can help these providers to better quantify the cost of catastrophic claims and evaluate the available risk management solutions.

### NEW PAYMENT MODELS

Historically, the health care industry used a fee-for-service payment model, under which providers were reimbursed for each hospital admission or office visit, test, and procedure. Critics of this model say it can help drive health care costs higher by providing incentives to order a high volume of procedures — often resulting in tests or treatments being repeated as patients move across the continuum of care.

A principal goal of the ACA, signed into law in March 2010, was to lower health care costs. To do this, the law discourages fee-for-service models and includes provisions for payments to be made under a variety of new models:

- **Capitation**: Under this model, a health care provider receives a fixed payment from a health plan to cover all possible services provided to its patients. Capitated payments are typically made on a per-member per-month (PMPM) basis. For example, a hospital contracts with a health plan to provide care to its 5,000 members; in exchange, the health plan makes capitated payments of $50 PMPM. This means that the hospital receives $3 million per year as reimbursement for coverage of all of the health plan members — regardless of the actual costs associated with any individual patients.

- **Bundled payments**: Under this model, a health care provider receives a single, fixed payment for the expected cost of a patient during a clinically defined period of injury, illness, or condition, also known as an “episode of care.” The definition of an episode of care may differ by contract and condition; for example, it may include an inpatient stay only, or it could include both the inpatient stay and follow-up care. Bundled payments are typically set for specific conditions and forms of treatment — for a knee replacement surgery, for example, a bundled price could be set to cover the expected cost of the surgeon, hospital facility, and medical device.

- **Medicare shared savings program**: Under this program, accountable care organizations (ACOs) are incentivized to provide high-quality care to Medicare patients at a negotiated cost. After completion of treatment, the Centers for Medicare & Medicaid Services (CMS) will share a percentage of any achieved savings with ACOs that meet established quality performance and savings requirements.

For providers, these risk-based contracting models shift the focus from revenue maximization to cost management and quality of care. Because revenue under these models is not tied to the volume of procedures, providers have an incentive to eliminate unnecessary tests and treatments and prevent repeat visits to doctors and hospitals. Many hospitals, physician groups, and other providers have responded by forming or joining ACOs and similar networks through which they can better coordinate care.

Many providers previously flirted with capitation and similar business models in the 1980s and 1990s, but returned to the more profitable fee-for-service model. It now appears that an industry-wide shift to risk-based contracting is inevitable. As of 2013, more than one-third...
And the most expensive of these claims are occurring more often. The frequency of claims greater than $1 million, including incurred but not reported losses from 2012 and 2013, increased more than tenfold between 2006 and 2013, according to PartnerRe Health (See Figure 3).

Other provisions of health care reform create additional risk for health care providers and concerns for organizations about the potential impact on their balance sheets. Under the ACA, health insurers cannot deny coverage to individuals with severe preexisting medical conditions or perform “medical underwriting” — meaning that they must accept potentially unhealthy individuals into their commercial populations, often without much insight into their medical histories. Health plans also cannot apply annual or lifetime dollar limits on individual members’ spending for “essential” health care services.

Providers that enter into risk-based contracts with these insurers are ultimately responsible for providing potentially unlimited care to these populations. Combined with an expansion in Medicaid eligibility in many states, providers are exposed to more significant financial risks associated with high cost or “catastrophic” claims.

These costs can be substantial. While the average annual per capita cost of health care for the total population is $4,000, several illnesses or conditions can increase costs to $25,000 or more per year for certain patients, according to Milliman Consulting (See Figure 2).
PEL coverage typically allows a health care provider to limit its exposure to individual catastrophic health claims stemming from patient care. Similar in concept to health plan reinsurance, PEL insurance can provide coverage for a health care organization’s capitated members. The financial protection afforded by a PEL policy is substantial: After a deductible and coinsurance, coverage typically allows a provider to transfer 80% to 90% of its catastrophic financial loss to an insurer.

A provider may be able to purchase PEL insurance directly from a health plan, but private insurers often offer more competitive pricing and coverage options that can better ensure the organization’s financial stability. Normally purchased on a per-patient per-year basis, a PEL policy can be customized to provide coverage for:

- Specific populations, including Medicare, Medicaid, and commercial patients.
- Specific exposures, such as organ transplants, in vitro fertilization, and knee and hip replacements.
- Losses exceeding a specific value — as little as $25,000, or $1 million or more, depending on the organization’s business model, exposures, and risk tolerance.

**ANALYTICAL TOOLS**

To structure an effective insurance policy, a health care provider must estimate both the likelihood that a catastrophic loss involving one of its patients will occur and the potential cost of such an event. Industry loss data can be crucial here, helping providers to understand the type and size of losses that competing providers have suffered. For organizations that rely primarily on fee-for-service models, this data may also help them to look ahead by examining the losses suffered by organizations that have already transitioned to risk-based contracting.

When structuring any commercial insurance policy, an important consideration is the deductible; generally, the lower the deductible, the higher the premium. A health care organization can use a deductible analysis to make this decision based on its own historical claims data. Such an analysis can help an organization to understand, for example, how much it would save or lose in a given premium policy period by changing its deductible from $225,000 to various levels (SEE FIGURE 4).

**POTENTIAL SAVINGS THROUGH PROVIDER EXCESS LOSS INSURANCE**

In a hypothetical example, ABC Hospital has contracted with XYZ Health Plan to provide care for 10,000 of its members, receiving capitated payments of $50 per member per month (PMPM). Under the terms of the contract, ABC bears nearly all of the financial risk associated with the treatment of patients with serious injuries, illnesses, and chronic conditions. For example:

- The annual cost of blood clotting factor and other treatments for a hemophiliac patient is $2 million.
- The cost of completing an organ transplant is $1.5 million.
- The cost of chemotherapy and other cancer treatments is $1 million per patient.
- The cost of treating a hepatitis C patient is $750,000.

ABC elects to purchase a provider excess loss (PEL) insurance policy to protect itself from these sizable risks. While the cost of coverage can vary due to a provider’s risk profile, ABC is able to secure a policy at a premium cost of $1 PMPM, for an annual cost of $120,000. The PEL has a deductible of $250,000 per person, with no aggregate limit, and 90% coinsurance after the deductible is met.

Under this policy, ABC can be reimbursed for 90% of the expenses that it would incur above the $250,000 per person deductible in the event of these and other catastrophic losses. For example, instead of being responsible for the full $2 million for one typical hemophiliac patient, ABC’s actual financial loss from such an event is only $425,000. Factoring in the cost of the policy, this means that ABC can save nearly $1.5 million for a hemophiliac patient by purchasing PEL insurance coverage. A PEL insurance policy can also help ABC realize substantial savings in the event of other types of catastrophic claims (see chart below).

**ABC’S POTENTIAL SAVINGS FROM A PEL INSURANCE POLICY**

<table>
<thead>
<tr>
<th>Loss Type</th>
<th>Potential Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hemophilia</td>
<td>$1,455,000</td>
</tr>
<tr>
<td>Organ Transplant</td>
<td>$1,005,000</td>
</tr>
<tr>
<td>Cancer</td>
<td>$555,000</td>
</tr>
<tr>
<td>Hepatitis C</td>
<td>$330,000</td>
</tr>
<tr>
<td>All of the above</td>
<td>$3,705,000</td>
</tr>
</tbody>
</table>

The example above is hypothetical. Actual results will vary based on a policy’s specific terms and a health care provider’s unique characteristics.
Using data on the frequency of catastrophic losses for the industry — and specifically for organizations with similar revenues and population size — a provider can estimate the likelihood that it will suffer a large loss. Other unique organizational characteristics — for example, whether it specializes in organ transplantation, neonatal care, or other costly disciplines — can help clarify the probable susceptibility to a loss and its potential size.

Of course, historical data will not always offer a definitive guide to what providers should expect — especially as more previously uninsured individuals purchase new health insurance policies. A loss distribution analysis can help an organization identify a broader range of potential loss outcomes, with probabilities for each. This information can help providers determine how much coverage to purchase, and how to structure the policy based on its risk appetite and other preferences.

PROTECTING AGAINST CATASTROPHIC LOSS

As the industry continues its transition to risk-based contracting, health providers must grapple with increased exposure to potentially catastrophic claims. Analytical tools can help risk managers better understand this exposure, prepare for discussions with senior leadership and underwriters, and ultimately build more effective insurance programs to protect their organizations.

For more information, contact your Marsh representative or:

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Marsh’s HealthCare Practice provides clients with high-quality, innovative, practical solutions for risks facing the rapidly changing health care industry. Our team of professionals works with clients to define, design, and deliver workable solutions involving risk identification, risk minimization, risk financing and risk administration.

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