More Isn’t Always Better: Encouraging Proper Utilization of Health Care

White Paper

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Overutilization of health care services has driven medical costs in the U.S. to exorbitant levels, with no improvement in outcomes. Effectively managing utilization is essential to delivering affordable, high-quality health care.

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Executive Summary

Health care costs in the U.S. continue to rise. Per-capita expenditures reached $8,233 in 2010, according to a study by the Organisation for Economic Co-Operation and Development (OECD). That outpaced Switzerland, the closest developed country in the study, by nearly 56%. More importantly, the U.S. spends over 2.5 times as much per capita on health care as the average of developed countries — with no improvement in outcomes. In fact, by most measures — such as life expectancy or obesity, or by number of hospital beds or physicians per person — the U.S. ranks below average, while spending at the top of the scale.

In 2010, total spending on health care in the U.S. reached $2.6 trillion, or approximately 18 percent of the national GDP (Gross Domestic Product). This saps the vitality of the U.S. economy — making it critical to find ways to cut waste and inefficiency from the delivery of health care services, without impacting quality.

One of the areas of greatest concern is the appropriate utilization of medical services. This ranges from the rapid escalation of diagnostic tests, to performing medically unnecessary procedures, to prescribing medications without adequate justification.

This white paper takes a close look at the growing epidemic of health care spending in the U.S. and explores ways to more effectively manage the utilization of medical services. This includes reviewing:

- Some of the most common services that are subject to overutilization and the significant scale of the spending in relation to the U.S. economy
- Strategies that can help employers eliminate or minimize overutilization of medical services by employees
- The role of a comprehensive health care transparency solution in achieving proper utilization
- Key guiding principles to follow when encouraging the efficient utilization of care

Introduction

Overutilization of health care services is typically defined as the provision of medically unjustified, more costly, or a higher volume of services than recommended or required. Among the most common examples of overutilization are:

- Antibiotics for viral infections — up to 89% of the time
- Coronary angiography — up to 22%
- Carotid endarterectomy — up to 33%
• An MRI or other advanced imaging procedure when a more conservative test, such as an x-ray, would suffice
• A shotgun approach to food allergy testing in non-critical cases

Billions of Dollars Wasted
In Figure 1, you can see how the U.S. population uses common diagnostic tests and surgical procedures much more frequently than their counterparts in other developed nations. MRI exams, CT scans, and tonsillectomies are performed approximately twice as often in the U.S. as the average calculated by the Organisation for Economic Co-operation and Development (OECD), while cesarean sections are a significantly more common occurrence in the U.S. than in most other nations.6

<table>
<thead>
<tr>
<th>Procedure</th>
<th>U.S. vs OECD Frequency</th>
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<tbody>
<tr>
<td>MRI Exams</td>
<td>2.1x</td>
</tr>
<tr>
<td>CT Exams</td>
<td>2.1x</td>
</tr>
<tr>
<td>Tonsillectomy</td>
<td>2.0x</td>
</tr>
<tr>
<td>Knee Replacements</td>
<td>1.9x</td>
</tr>
<tr>
<td>Coronary Bypass</td>
<td>1.7x</td>
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<tr>
<td>Cesarean Section</td>
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How much money is wasted in the U.S. is due to overutilization? A staggering $750 billion annually7, according to the latest estimates, which represents approximately 30 percent of the nation’s entire health care spend. Just imagine how this could be used to substantially lower both your expenses — and out-of-pocket costs for your employees.

More Can Be Worse
Although there is some debate about its veracity, a recent study suggests that utilizing more health care services does not improve outcomes. In fact, it may make them worse. A study examining patient histories in the United Kingdom and 14 other countries suggests that excessive radiation from diagnostic tests such as CT scans and x-rays may be responsible for one to three percent of cancers.8 (See Figure 2).
“It’s critical to deliver information to employees in the right place and at the right time. Communications must be clear and concise.”

Figure 2: Lifetime Attributable Risk of Cancer from Exposure to Radiation (number of cases per 100,000 persons exposed to single dose of 0.1 Gy)
Note: 1 gray (Gy) is the equivalent of approximately 5 CT scans of the chest, abdomen or pelvis

Contributors to Overutilization
What contributes to the overutilization of medical services? The drivers can come from both the “supply” and “demand” side.

Figure 3: Contributors to Overutilization
For example, under the current fee-for-service reimbursement model of medicine in the U.S., physicians (the supply side) have a financial incentive to order an extra diagnostic test or perform an additional procedure, especially if a patient is strongly requesting one. Doctors may also order additional tests out of fear of being sued if something is missed.

On the other hand, patients (the demand side) often fall prey to the misguided notion that the more care they receive, the better. Physicians may be pressured to order an MRI for a patient whose back pain has persisted for only a few days, or to provide antibiotics to a patient with symptoms that are most likely viral.

**Practical Management Strategies**

Fortunately, there are a number of strategies that employers can use to effectively manage the overutilization of medical services by their employees. These programs are designed to build in mechanisms that require or strongly motivate employees to actively participate in and be held accountable for the course of their care. Among these mechanisms are:

- **Prior-authorization programs** — Employees must obtain pre-approval from their health plan prior to receiving medical treatment or services.

- **Mandatory second-opinion programs** — These are designed to ensure that the care being prescribed is medically necessary. A good example of this is cardiac valve replacement, where many self-insured employers send employees to a specialized care unit or hospital to explore every possible medical option prior to undergoing costly valve-replacement surgery. In an estimated 60% of cases, a more conservative, alternate treatment approach is recommended by these second-opinion programs.

- **High-deductible health plans** — Employees are made to take on greater fiscal responsibility by paying the first $2,500, $5,000, or even $10,000 of medical expenses before insurance kicks in. As a result, most patients have an incentive to carefully research recommendations from different providers and evaluate cost options before deciding on non-emergency care.

In addition, recognizing that patients often request tests and procedures that may not be medically justified or in their best interests — and that physicians sometimes agree to these unnecessary services to cover all the bases — the American Board of Internal Medicine (ABIM) Foundation has joined with leading medical specialty societies to develop the Choosing Wisely campaign. These lists of tests and procedures are designed to help physicians, patients, and other health care stakeholders think and talk about the overutilization of health care resources (See Figure 4).
Do Utilization Management Programs Work?

Many employers offer utilization management programs as a benefit to their employees. Let’s take a closer look at the process of prior authorization to understand whether it’s effective or not. Recently, Castlight Health conducted a study to determine whether prior authorization has an impact on the use of advanced-imaging procedures.

The study included 11 self-insured employers representing nearly 225,000 employees. Up to four years of claims data were analyzed for each employer. Incidences of overutilization were identified using a claims grouper. The study focused on four types of diagnostic imaging tests.

The analysis revealed that the vast majority of employers have a prior authorization requirement for advanced imaging studies. Employees at all 11 employers surveyed were required to receive prior authorization for an MRI or CT scan of their lumbar area, and 10 of the 11 employers required it for knee MRIs. None of the employers required prior authorization to have an x-ray of the lower back region (See Figure 5).
The results clearly indicate that prior authorization can be quite effective (See Figure 6). For advanced imaging tests, requiring this pre-approval decreased overutilization by anywhere from 82% to 97%. For services that didn’t require prior authorization (lumbar x-ray), overutilization rates as compared to the literature remained high. Although the cost of x-rays is relatively lower than that of advanced imaging procedures, the high volume at which x-rays are utilized represents a potential savings that is similar to effective management of the more costly advanced imaging studies.
Nationwide, between 70 and 80 percent of Castlight customers rely on prior authorization to help manage overutilization. The vast majority of these employers use the program for advanced imaging tests. But it is also effective in managing many other medical procedures and services, such as high-priced prescription drugs and inappropriate visits to the emergency room.

As most employers are acutely aware, ER utilization for non-emergency cases, such as a bad cold, is extremely wasteful. Sophisticated health care management solutions can be helpful when administering a prior-authorization program. These solutions can be set up to guide patients to preferred options, such as being seen at cost-efficient urgent care clinics or guiding patients to contact their family physicians via an after-hours phone call.

Employers can also analyze their claims history to see where their highest areas of health care spend are. With this data, employers can implement a prior-authorization process that quickly filters what medical care is being provided appropriately and what’s not. This has the potential of providing significant cost savings for employers.

Key Guiding Principles

When you’re considering how best to address the issue of the overutilization of health care services, there are several important principles to keep in mind.

**Do No Harm**

One of the central edicts of modern medicine, this certainly applies to managing the utilization of medical services. When you're designing a prior-authorization program or any other plan to address the rising cost of health care, you need to ensure that appropriate and medically necessary care and services are never denied to those who need them.

For example, while a colonoscopy can be a relatively expensive imaging study, its efficacy as a screening and preventive measure for colorectal cancer is well documented in the literature. The latest guidance is that adults 50 years of age or older should have a colonoscopy every ten years. Individuals who are younger than 50, but who have higher risk factors such as a family history of cancer, are also indicated for this type of advanced imaging.

Other preventive measures, such as mammography and pap tests, offer similar benefits, so you want to encourage the use of these tests by your employees — but it should be appropriate use.
Communicate Well
It's critical to deliver information to employees in the right place and at the right time. Communications must be clear and concise. Messages should also be customized, depending on what stage an employee is in when consuming care. This could be just starting to explore whether or not to get care, waiting for a scheduled appointment, or having already received the sought-after care (especially if there's a likelihood that they will need similar treatment in the future).

Stay Positive
Finally, if you want to help your employees change how they approach the need for care in the future, keep your messages positive. Let people know that there are better, more cost-effective ways to obtain the care they need — without being overly critical of past decision-making. Keeping the tone light and informative can make your employees much more receptive to your message.

Critical Role of Health Care Transparency
Health care transparency solutions are an integral part of making utilization management programs a success.

At their core, health care transparency solutions should provide employees with detailed, personalized information and education on both provider-specific costs and quality of services and procedures, regardless of their plan status or health plan. This kind of meaningful data benefits everyone with a stake in medical care — from self-insured employers and their employees to medical providers and plans.

Moreover, the best health care transparency solutions provide easy ways for employees to make the right choices, without needing to dig into the details if they don’t have to. For example, Castlight’s health care transparency platform can target specific messages to users who are searching for acute care treatment — reminding them to seek an urgent care clinic rather than an emergency room if their need isn’t life-threatening.
Conclusion

Overutilization of health care services is a serious issue that has contributed substantially to the soaring costs of health care within the U.S. It’s estimated that as much as $750 billion, or around 30% of what the nation spends annually on health care, is wasted.

There are a number of ways employers can manage overutilization. Prior authorization, mandatory second-opinion programs, and high-deductible health plans all can be quite effective in controlling unnecessary procedures and inappropriate expenses — with prior-authorization programs proven to eliminate the vast majority of overutilization on advanced imaging studies.

To maximize the effectiveness of any of these programs, it’s essential that you implement a sophisticated health care transparency solution. By providing employers and employees insight into the costs and many different quality measures that can be applied to medical providers and facilities, it enables all parties to work together to better manage health care spending and reduce the costs for employers and employees alike.

Most importantly, when implementing any program to address overutilization, make sure that your employees receive the medical care they need, and always communicate the benefits and operation of your program in clear, concise, and positive terms. Doing this will result in an effective program that you can afford and that your employees truly can’t afford to be without.

References

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About Castlight Health

Castlight Health enables employers, their employees, and health plans to take control of health care costs and improve care. Named #1 on The Wall Street Journal’s list of “The Top 50 Venture-Backed Companies” for 2011 and one of Dow Jones’ 50 Most Investment-Worthy Technology Start-Ups, Castlight Health helps the country’s self-insured employers and health plans empower consumers to shop for health care.

Castlight Health is headquartered in San Francisco and backed by prominent investors including Allen & Company, Cleveland Clinic, Maverick Capital, Morgan Stanley Investment Management, Oak Investment Partners, Redmile Group, T. Rowe Price, U.S. Venture Partners, Venrock, Wellcome Trust, and two unnamed mutual funds.