

BEYOND TRANSPARENCY: New Strategies to Control Rising Healthcare Costs

Technology finally exists to fully manage healthcare investments
and deliver better outcomes for employees.

BY TOM STARNER

Your Guide to Curing Enterprise Healthcare

HR Leaders have used technology to advance critical areas ranging from performance to learning, and recruiting to retention. Technology finally exists to do the same with enterprise healthcare.

The Challenges



The Cure

Controls: Powering Strategic Benefits Design

Care: Creating Healthcare Consumers

Connect: Driving Utilization of Your Programs

Insights: Actionable Decision Support



The Results

Talent
 Increase benefits satisfaction
 Establish a recruiting competitive advantage

Engagement
 Improve rollout of benefit changes
 Boost workforce engagement

Spend
 Increased adoption of cost-efficient benefit designs
 Empower employees to make more informed choices
 Increase impact of health and wellness programs

Productivity
 Reduce absenteeism
 Improve workplace performance

In its modern era, HR has used technology to advance critical areas ranging from performance to learning, recruiting to retention and many other processes along the way. For most every HR function, technology has been right there helping HR leaders make the best possible decisions.

While things have been far from perfect, by and large, it's been a fruitful partnership.

Yet, despite that success, there remains an elephant in the room. Healthcare, a top three business cost that rises 5 to 7 percent per year¹, has been largely ignored by technology solutions. As a result, employers have looked to soften the economic blows healthcare benefits delivered, mainly by experimenting with plan design. Best intentions aside, however, costs have continued to rise while quality of care has been largely left to chance.

Bottom line, employer-funded healthcare has been devoid of an effective tech-based management solution. That is, until now. San Francisco-based Castlight Health offers employers a means to overcome many of these challenges.

"HR is such a fascinating space today, with so many technology options and platforms," says Dr. Giovanni Colella, Castlight's CEO and co-founder. "Until recently, unfortunately, few of those options were available for managing healthcare programs and investments. HR executives had to accept cost increases and low engagement in benefits despite their best efforts. They had no means for tackling this problem."

In terms of numbers, the United States is currently ringing up a \$3 trillion annual healthcare tab—equal to the entire French gross domestic product and 1/3 of China's GDP. Of that

\$3 trillion, \$620 billion is spent by the American enterprise, the nation's businesses². Colella says that scenario represents a stark competitive disadvantage within the global economy, especially in countries where healthcare is subsidized by government.

From his conversations with key business leaders, Colella knows that CEOs, CFOs, and HR executives across the nation today are desperate to fix this business problem. They are asking their teams to optimize their healthcare spend while becoming the leaders and strategists who are needed to solve the most compelling problem U.S. companies face today.

Colella, and his company, Castlight Health, deliver a technology solution that enables HR executives to understand and manage their healthcare like never before. Their solution addresses employer and employee needs.

For the employer, Castlight provides a cloud-based suite of applications that enables them to understand and control healthcare spending, optimize healthcare benefits and promote employee health and productivity. For the employees, Castlight provides user-friendly web and mobile access to the personalized information they need to make better healthcare decisions and proactively manage their care. In sum, the HR executive finally has a solution to truly address the enterprise healthcare crisis for their company and its employees.

Finally, a Solution Exists to Manage Enterprise Healthcare

Like Colella, Constellation Research has highlighted an opportunity for technology to dramatically improve how healthcare investments are managed, publishing a report on

Castlight Enterprise Healthcare Cloud (EHC)

A cloud-based suite of applications that enables employers to manage and optimize their investment in healthcare benefits and empowers employees to improve their healthcare decisions and make better choices. Castlight's Enterprise Healthcare Cloud includes four components.

Castlight Insights, to accelerate insight with dashboards, reports, and analytics.

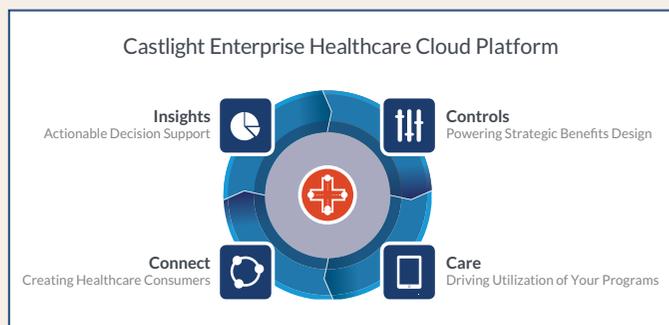
Information-rich executive reports deliver visibility into healthcare spending data. With Castlight, you can pinpoint the best opportunities to eliminate waste and improve outcomes. You'll gain insight into the healthcare spending habits of employees and KPIs such as registration, engagement, savings, and support, and be able to track their engagement with the Castlight platform.

Castlight Controls, to fine-tune benefits programs.

Meet evolving organizational needs with enterprise-healthcare-management controls that enable you to develop and deploy advanced benefits designs that reduce costs while improving outcomes. Introduce innovations such as reference-based pricing, which increases employee awareness of provider pricing while preserving choice. Motivate employees to make smarter healthcare decisions with a flexible incentive application, and educate employees with engaging videos and quizzes that improve healthcare literacy.

Castlight Connect, to integrate a wide range of health-benefits programs.

Integrate third-party benefits programs with Castlight's natural language search results to drive utilization and awareness at the point of need. Promote employer programs such as nurse call lines, telehealth or on-site clinics as high-value options. Target text,



graphic and video messages to employees based on demographics, past medical claims and benefits usage. Health-fund-account balances embedded in Castlight help users efficiently manage their healthcare finances.

Castlight Care, to encourage healthcare consumerism with user-friendly web and mobile access to information.

Support healthcare shopping and education that allows employees and their families to make informed decisions. Deliver personalized cost, network and historical-claims data, along with educational and quality information. Create a comprehensive resource that supports proactive healthcare consumerism through data transparency.

¹"Medical Cost Trend: Behind the Numbers 2015," PwC Health Research Institute, 2014: 3, <http://www.pwc.com/us/en/health-industries/behind-the-numbers/index.jhtml>

²Centers for Medicaid and Medicare Services, National Health Expenditure Data, Table 5, National Health Expenditures by Type of Sponsor, 2013.

Enterprise Healthcare Management (EHM). The report states, “Enterprise Healthcare Management is a new category of software that helps organizations select, deploy, manage, and influence the outcomes of the healthcare investments to align with business goals.”³ So, just as supply chain management software enables positive business outcomes at U.S. companies such as Amazon, Zappos, and Walmart, Enterprise Healthcare Management will enable U.S. companies to achieve their business objectives and maximize ROI on their healthcare investments.

This report, authored by Ray Wang, Principal Analyst, Founder, and Chairman of Constellation emphasizes that both healthcare costs and efficacy of health and wellness programs remain top of mind for CEOs, CFOs, and Chief People Officers. Wang notes five signs that the healthcare system is not working efficiently. These issues plague employers’ efforts to effectively manage the health and productivity of their workforce.⁴

- **Rising healthcare costs:** With the aforementioned \$620 billion in annual employer-paid U.S. healthcare cost, employers seek both improved utilization of programs and cost reductions.
- **Under and over utilization of benefits:** Many employees don’t utilize the health benefits they have. In fact, they often don’t even know the extent of their benefits. At the same time, it’s often a small proportion of the employee population that consumes a disproportionate share of the healthcare spend. The common theme here is that employers haven’t had the data to judge program efficacy or the tools to actively engage employees in healthcare decision-making.
- **Complicated regulatory compliance:** More than a decade ago, employers faced the enormous—and expensive—task of complying with Sarbanes-Oxley. Today, the Affordable Care Act (ACA) has created a similar “compliance crisis.” ACA regulations and existing healthcare deliver models are frequently at odds.
- **Benefit program complexity:** Complexity adds cost. In addition to a compliance burden, the Affordable Care Act has introduced more complexity into the benefits equation. The individual mandate and elimination of pre-existing conditions have run headlong into other trends such as greater cost shifting to employees, increased utilization of services and an aging population. Again, few organizations have a platform to manage these variables.
- **Systems integration:** EHM technologies can help employers regain control of healthcare spending while increasing quality of care and employee productivity. With one important caveat: These technologies need to be integrated with an organization’s information systems as well as third-party data providers. Information silos—the barrier to the effective use of so many enterprise software technologies—are just as debilitating for Enterprise Healthcare Management.

How Technology Enables

Holger Mueller, Vice President and Principal Analyst at Constellation, also sees enterprise healthcare as a major challenge for HR. An expert in cloud technology, big data and

analytics, he posits that healthcare has not yet been transformed by technology in the same way that other HR processes, such as recruiting have.

“If you can solve the healthcare challenge, it truly becomes a strategic business advantage. Enterprise Healthcare Management is a discipline that HR leaders need to practice. They must manage employee health as a strategic investment.”

“Using a platform like Castlight’s, you can not only control healthcare costs, but you also will increase productivity, engagement and other desirable competitive outcomes,” says Mueller.

The Constellation report defines five key components of cloud-based EHM:⁵

- Employer driven policy framework to enable employers to easily design new benefits plans.
- Employee centric marketplace to provide relevant information to make better healthcare decisions and engage with benefits plans.
- Partner network ecosystem for employers to connect employees to on-site clinics, pharmacies, tele-medicine, nurse call lines, and other programs.
- Insights and analytical engine to identify opportunities to improve quality of care and reduce the cost of care by using data and analytics.
- Data and information exchange to bring all pertinent and relevant data in the healthcare ecosystem including medical, dental, pharmacy, wellness and provider claims.

“Why not use cloud technology to manage healthcare?”

Mueller says. “Benefits leaders have been aching for this type of solution. Castlight is one of the vendors that offers to tie it all together.”

Time Warner: Positive Feedback

Kathleen Harris, Vice President of Benefits at Time Warner, is keenly aware that, for employees and employers, the healthcare marketplace is extremely complex and challenging to navigate. So for Time Warner to get the most out of its healthcare spend, it needs to have the best possible technology for its employees—especially those using high-deductible healthcare plans, where being a smart consumer is critical.

“With Castlight’s platform, our employees have instant access to critical healthcare data in the palms of their hands, giving them options they can actually use,” she says. “Insights such as pricing information, quality information ... things not easily consolidated. For employees without time and patience to navigate the system, it’s so much more effective to put it at their fingertips using an application like Castlight’s.”

Being a media company, Time Warner employees typically are tech-savvy by nature, so they practically expect that fingertip ease of access. Before Castlight, employees didn’t have that for healthcare. Now, more than 1/3 of those eligible are currently registered with Castlight.

The idea all along was for Time Warner employees to be better healthcare consumers, a daunting task before Castlight arrived. Until then, Harris says, Time Warner was limited in what it could supply them in terms of actionable data covering both cost and quality of care.

³ R “Ray” Wang, “Insights into the Future of Cloud-Based EHM Solutions: How Enterprise Healthcare Management Improves the Health of Enterprises and their Employees.” San Francisco: Constellation Research, Inc., 2014: 3, <https://www.constellationr.com/research/insights-future-cloud-based-ehm-solutions>

⁴ Wang, “Insights into the Future of Cloud-Based EHM Solutions: How Enterprise Healthcare Management Improves the Health of Enterprises and their Employees,” 4-5.

⁵ Wang, “Insights into the Future of Cloud-Based EHM Solutions: How Enterprise Healthcare Management Improves the Health of Enterprises and their Employees,” 6.

A snapshot of U.S. employees' healthcare needs.



Sex appeal: Men and women have different search triggers.



Women are more likely than men to search for:*

- 1 Bone density scan
- 2 Bariatric medicine
- 3 Fibromyalgia
- 4 Levothyroxine
- 5 Hip replacement

*Excludes reproductive health



Women search using doctors' terminology.

"colposcopy"
"laparoscopic fibroid removal"
"endometrial ablation"



Women are more likely to seek healthcare information during the **day** than the night.



66% of searches by women are during work hours.



Men are more likely than women to search for:*

- 1 Shoulder
- 2 Hernia
- 3 Broken arm
- 4 Wisdom tooth
- 5 Tennis elbow

*Excludes reproductive health



Men use natural language to search for a specific problem or body part.

"tooth"
"rash"
"knee"



Men are more likely than women to seek healthcare information during the **night**.



Younger men (ages 20-34) are 3 times more likely to search in the wee hours of the night (12am-5am), especially if they're from the Midwest.

Location, location, location: Search behavior reflects regional trends.



Alternative medicine searches are more popular on the **West Coast**.

Women on the West Coast search for **naturopathy and massage therapy** more than women from every other U.S. region combined.

Searches across ages and genders in the Pacific West include:

Naturopathic doctor
Massage therapy
Acupuncture



Men and women in **Southern regions** are almost 3 times as likely to search for surgery related to **weight loss and obesity-related health issues**.

Employees in the South are more likely to search for:

Bariatric surgery
Gastric bypass
Lap band
High blood pressure
Metformin
CPAP

Source: Castlight Health. The primary source of data used for this analysis is Castlight's database of terms users have searched for on Castlight's platform over the past year (September 2013 - August 2014). Castlight de-identifies the data used in this study in accordance with the Health Insurance Portability and Accountability Act (HIPAA).

Methodology: Except where noted, topics highlighted are based on "distinctive searches" by region, gender and age. The most distinctive search for each group is defined as the term the group searches for at the highest rate as compared to Castlight's overall population of end users. Only the top 1,000 searches by volume were included in the analysis, and at least 10 unique people in the group had to have searched for that term for it to be considered the group's most distinctive search.

“Castlight is a major step in providing that valuable information,” she says.

Ultimately, Harris adds, it’s about getting the best value for the employee, the best care at the best price. Cost and quality are not directly correlated in healthcare. For example, in the case of joint replacement, it makes more sense to choose the hospital that has done that type of surgery hundreds of times than to choose a facility whose name is well known, but that may have less experience and therefore poorer outcomes and ultimately higher cost for that type of surgery.

“The key is balancing cost and quality,” Harris says. “The best possible value is the objective.”

So far, employee feedback from those using Castlight has been overwhelmingly positive, she says, adding that while it’s early in the game, HR has experienced very positive anecdotal feedback about employees finding high-quality care providers and urgent care centers, ultimately driving more strategic healthcare spend for Time Warner.

In fact, she says, Castlight also brings an empowerment factor to the table, giving employees an actionable way to really have an impact and make smart decisions when it comes to their health.

“Employees certainly seem to recognize the value of it,” she says. “We have to reach a higher volume because the more information we gather, the more accurate and more valuable Castlight’s platform will become. But we are off to an excellent start.”

Like any company, Harris says, Time Warner has limited benefits resources, and Castlight factors into the idea that the company wants its employees to make the most of their benefits.

“We are all in it together, the pie is only so big,” she says. “We are looking to optimize our benefits resources for everyone.”

Unlocking Mindshare Data

Maeve O’Meara, Vice President of Product Management at Castlight, understands why customers such as Time Warner are

seeking innovative new ways to truly impact their healthcare spend.

“Companies realize that they’ve used technology to optimize other important parts of their business. Now they are asking, ‘Why can’t we use technology to manage and optimize our benefits strategy too?’” explains O’Meara, a five-year Castlight veteran. “As a result, leading organizations are starting to introduce an Enterprise Healthcare Management platform like Castlight.” (See related box on page A3.)

Castlight believes that Enterprise Healthcare Management starts with harnessing the power of that data. For example, it’s essential for employers to have actionable insights into the healthcare needs of their employees. But, that means more than just analyzing spending and utilization data.

“We also think its important for companies to understand what their employees are searching for, what they care about, what decisions they are about to make. We call that ‘mindshare data,’” added O’Meara. “With mindshare data, organizations can better understand what employees want and need, better ensuring that employees take full advantage of their benefits and are satisfied with them.”

By combining spending, utilization, and mindshare data, Castlight can pinpoint the best opportunities to eliminate wasted healthcare dollars spent on unnecessary, repetitive, or unneeded care and help improve outcomes for the employees. For example, these integrated data sets can help organizations proactively identify specific groups of employees that would most benefit from specific interventions or programs.

“Putting these pieces together gives employers a unique and timely perspective,” O’Meara says, noting that HR executives she talks with often complain about only having access to static data that’s as much as 6-9 months old.

“There is the adage that you can’t manage what you can’t measure,” she says. “Once benefits leaders have that real-time

Castlight Helps Higher Ed Cut Costs

 INDIANA UNIVERSITY	CUSTOMER	INDUSTRY	GEOGRAPHY	EMPLOYEES	REVENUE
	Indiana University, Bloomington, Ill.	Education	Mid-west	10,000	\$3.1 billion
CHALLENGE		RESULTS			
With 43,000 covered lives, healthcare expenses were outpacing other overhead costs at Indiana University. IU sought to migrate as many employees as possible to a high-deductible-health-plan design while preserving choice for employees and their families.		<ul style="list-style-type: none"> Castlight’s integrated benefits strategy, including plan design and care programs, enabled continued migration to HDHP while delivering an engaging user experience. IU drove a 5 percent reduction year-over-year in its healthcare cost trend. 33,149 total Castlight users 			

CUSTOMER FEEDBACK

“Most of corporate America is talking about healthcare costs going up by 5 percent. This coming year, our healthcare costs will drop by 5 percent. What made it all possible is an application that employees could access from home or the worksite to get better information about providers, access and prices.” — AN IU ASSOCIATE VICE PRESIDENT OF HR

“Castlight has been a win we can provide [to] our employees that they’re really excited about. It’s something HR has done that has really simplified my life.”

— CHRISTAN ROYER, HEALTH CARE PROGRAMS MANAGER OF UNIVERSITY HUMAN RESOURCES AT INDIANA UNIVERSITY.

and predictive data, they can develop an effective strategy. They will know what the problems are and what employees care about. HR executives want precise and relevant data, data that can drive behavior change.

“As Castlight has grown as a company, so have the needs of our customers,” says O’Meara. “What started as a push for transparency has grown into the need for a broader solution. Companies are asking for a technology that addresses benefit program engagement, incentives, partners and analytics, all within a one-stop-shop platform. We believe that our ability to meet that broader need is what sets us apart.”

Making Data Actionable

To Dr. Jennifer Schneider, Castlight’s Chief Medical Officer, nothing in today’s U.S.-healthcare-benefits system is simple. For her, in fact, “fragmentation” best describes the status quo.

“Employers get different pieces of information from different places and often fail to use that data because it is so fragmented,” she says. “To make data actionable you have to bring it under a single umbrella to really move forward.”

Schneider cites the simple example of a Castlight customer, a leading consumer-goods packaging company that was seeing emergency room visits at a much higher rate than the national benchmark. Looking into the data, Castlight analytics found that one specific manufacturing plant was driving the trend. Employees using ERs inappropriately were mainly night-shift workers and, by way of the Castlight experience, their access to non-ER care was expanded by integrating and promoting an existing telehealth benefit into the Castlight platform. The result was a 21 percent reduction in ER visits at the specific site and a 9 percent reduction in ER visits overall.

In addition to uncovering these types of examples for customers, Castlight is able to leverage its data engine to provide actionable insights for employers to optimize their healthcare benefits while promoting employee health and well-being.

Castlight recently released a nationwide analysis that explores the search behaviors of U.S. employees who are also users of Castlight’s solution. The study shows the different ways in which men and women search, and how search behavior reflects regional trends, and revealed potential strategies that may appeal to different employee populations, such as Millennials and working age Baby Boomers. For example, the data showed Millennial employees search frequently for dental care. They search for the term two to five times more than the rest of the population, so employers with younger workforces may want to consider how best to put in place and promote a strong dental plan to this group of employees.

“We can connect the dots on healthcare,” Schneider says.

Sophie Pinkard, Castlight’s Senior Director of Analytics, says that combining and leveraging disparate sources for healthcare data gives Castlight a true competitive advantage.

“Without having real-time access to a data platform that drives insights, HR leaders can’t truly understand how they are spending their healthcare dollars or how best to engage employees.”

For example, HR executives can use Castlight’s products to pinpoint the most promising opportunities for employees to improve the quality and cost-effectiveness of their care, ultimately creating positive behavior change

The generation gap:

Appealing to Millennials and working age Boomers.

castlight
health

Millennials value dental care and behavioral health benefits.



Millennial men and women are 2x to 5x more likely to search for dental care.



They are also 1.5x to 2x more likely to search for anxiety disorders.

What working age Boomer searches are revealing about chronic disease.

As Boomers age, analysis of big data can provide insight into preventing and managing chronic diseases that cost employers billions of dollars every year.

*Millennial is defined as the Millennial Generation or Generation Y (the demographic cohort following Generation X). There are no precise dates when the generation starts and ends. Researchers and commentators vary, but most range from the early 1980s to the early 2000s. However, we used the demographic information from the 2010 Census to define Millennials and 50+ to be Baby Boomers.

Source: Castlight Health. “The primary source of data for this analysis is Castlight’s database of terms users have searched for on Castlight’s platform over the past year (September 2013–August 2014). Castlight identifies the data used in this study in accordance with the Health Insurance Portability and Accountability Act (HIPAA).

Methodology: Except where noted, results are based on “distinctive searches” by region, gender and age. The most distinctive search for each group is defined as the term that group searched for at the highest rate as compared to Castlight’s overall base of employees. Only terms with 100+ searches by region were included in the analysis, and at least 10 unique people in the group had to have searched for that term to be considered the group’s most distinctive search.

“Leveraging data is going to transform the way employers manage their healthcare benefits,” Pinkard says. “They have never had this opportunity before ... Data is only useful if you can distill it into insights that drive,” Pinkard says. “We spend a tremendous amount of energy transforming raw data into accurate, actionable analytics.”

An End to the Healthcare Affordability Crisis?

In the end, Constellation’s Mueller says, employers must treat healthcare benefits like any other HR discipline because healthcare touches everyone.

“Castlight is one of the possible solutions in the EHM conversation,” he says. “You start with transparency, which is the low-hanging fruit, by helping employees understand cost and quality so they can make better decisions.” He adds, however, that transparency is only one aspect.

Most of all, he says, employers need to start using vendors with cloud-based technology to determine how to best engage employees in their decisions, get them to really “pay attention,” especially the 20 percent of employees using the highest amount of healthcare services.

Once employees are engaged, Mueller continues, “HR now can see what’s going on along with the added ability to do something about it.”

“The cloud has allowed us to deliver the enterprise-software platform that provides HR leaders with the tools to finally chip away at healthcare costs and effectively engage their employees,” says Castlight’s Colella. “We are proud of the fact that we are at the forefront of creating a new category. I can’t imagine any HR leader going to bed without thinking about the cost of healthcare eroding competitiveness, and at the same time not even necessarily providing the best-quality care to employees.

“Finally, these leaders now have real solutions to impact employees positively within healthcare and also help the enterprise compete on a level playing field with the rest of the world,” he says.



Cure Healthcare.
Build Business.

castlight
HEALTH™

Spending the most to give employees the least?



Over \$620 billion spent every year on enterprise healthcare



A top-three business cost, increasing 5-7% every year



30% of healthcare spend is wasted



97% of CFOs say it's time to fix enterprise healthcare

Castlight's Enterprise Healthcare Cloud enables employers to reduce their healthcare costs and increase productivity while improving employee health and well being.

It's time to turn this crippling cost into a strategic advantage.

www.castlighthealth.com