



A Smart and Connected Ecosystem for Faster Return to Work for Disability and Workers' Comp Insurers

To combat the rising cost of claims and significantly improve customer engagement, disability and workers' comp insurers must transform their RTW programs with innovative digital technologies and digital health programs that deliver better and faster outcomes as well as operational cost savings.

Executive Summary

Here's the good news: The workers' comp and disability insurance sectors achieved solid premiums results in 2015, as sales began to increase post-recession.¹ The bad news: Despite improved results, industry leaders remain wary, primarily due to persisting high loss ratios.

In 2015, the workers' comp industry experienced losses of about \$34.07 billion in value.² The large deficit was primarily due to continuing medical inflation and indemnity costs. The individual and group disability sector also witnessed significant losses, of more than \$10 billion.³ In addition, with the worker population aging in developed economies, insurers today find themselves with a tough business predicament - a larger potential for increased payouts.

Thus, the key mandate for disability and workers' comp insurers is to reduce their loss ratios further.

To do this, they need to improve their measures of loss prevention and loss reduction. The long tail nature of workers' comp liability claims makes it even more important to reduce and prevent claims. Our earlier paper, "[Employing Telematics to Transform Workers' Compensation](#)," provided a view on how workers' comp insurers can deliver enhanced loss prevention measures to their clients.

Loss reduction can be achieved, in part, through efficient and effective return to work (RTW) programs. This paper discusses how digital health concepts and innovative digital technologies can be used by disability and workers' comp insurers to transform RTW programs and enable a safe and faster return to work for disabled employees and injured workers. Even a few days of early return to work could mean a significant dollar savings for these insurers, making this an important goal for them.

RTW Program Challenges

Most disability or workers' comp insurers have RTW programs in place to help facilitate the disabled/injured to return back to work in a safe and timely manner. However, continuously high disability and workers' comp claims indicate that insurers can achieve even better results from their RTW programs.

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Based on our industry expertise, we have identified the following key challenges faced by the various stakeholders in the RTW landscape.

Employer

- Lack of a comprehensive RTW policy within the organization.
- No mechanism from which insights on workers/employees' behavior during the disability period can be derived.
- No analytics-driven decision-making on job modification planning or alternate employment planning.
- Absence of any standard procedures to ensure compliance with all applicable employment laws with respect to return to work, exposing employers to potential lawsuits.

Disabled Employee/Injured Worker

- Lack of motivation among workers/employees to return back to work faster.
- Ineffective communication between the worker/employee and the other key RTW stakeholders.
- Absence of a concrete RTW plan makes workers/employees uncertain about the future and increases their dependencies on indemnity/disability income.

RTW Coordinator

- Lack of a centralized, integrated and collaborative platform to perform RTW tasks.

- No real-time mechanism for the RTW coordinator and physician to monitor worker/employee wellness status and prescribe changes.
- Lack of sufficient real-time worker/employee wellness data to take timely actions. The "day-in-the-life" data of an injured worker or disabled employee is not captured.
- Lack of effective communication tools to enable stronger collaboration with all other key RTW stakeholders.

As a result, disability and workers' comp insurers must bolster their RTW programs by creating a smarter and more connected RTW ecosystem. A more robust ecosystem would result in a win-win situation for all key RTW stakeholders - employers, employee/worker, insurers and physicians.

Crafting a Smarter and More Connected RTW Ecosystem

The concept of connected cars and telematics is transforming the auto insurance industry. (See "[Developing a Comprehensive Safe Driving Program for Teens.](#)") With these connected devices expanding into the healthcare space, giving rise to digital health concepts, the case becomes all the more compelling for insurers to leverage these devices and transform the RTW ecosystem in a similar way.

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Quick Take

Connected Devices and Wellness

Growth Market for Wearables

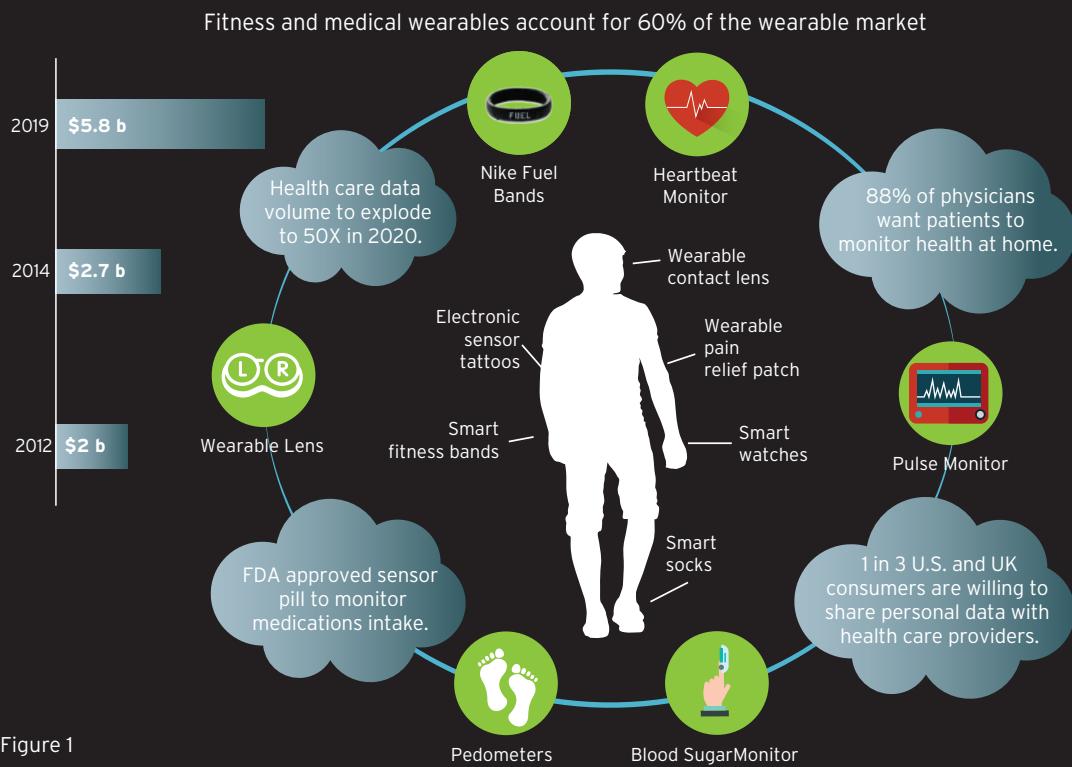


Figure 1

The global mobile healthcare market is estimated to reach \$20.7 billion by 2018 at a CAGR of 26.7% and reach more than 100 million devices annually.⁴ Connected medical devices such as diagnostic equipment, implantable devices and personal instrumentation devices are on the rise too. The penetration of these devices among the assistive population is also very high.

The key for insurers is to seamlessly integrate with these devices, and extract meaning from the data captured to facilitate a safe and faster return to work. If the employer has not invested in providing such devices to injured workers or disabled employees, the insurer can take it up on a case-by-case basis, where the cost can be borne fully by the employer or by the insurer, or it can be shared.

As depicted, this smart ecosystem would facilitate two key aspects:

- Help generate a wealth of continuous, real-time wellness data (what we call Code Halos™)⁵ from injured workers/disabled employees.
- Facilitate better operational effectiveness and efficiency across stakeholder functions:
 - Enable real-time monitoring of the injured's medical conditions for physicians and other stakeholders.
 - Enable better recovery experience for the injured worker/disabled employee.
 - Enable RTW coordinator to be more

productive and effective.

- Enable better decision-making and productivity gains for employers.

As noted, a plethora of real-time data can be generated by the injured worker or disabled employee with this new smart and connected RTW ecosystem. Figure 2 (next page) highlights some of these key data points that can be collected.

Such breadth of data has not been available until recently. But with more data in hand, insurers have better scope upon which to improve their RTW functions across stakeholder functions (see Figure 3). It also provides them with additional analytical insights to inform better decision-making.

Personal Code Halos: Analytical Data for an Injured Worker or Disabled Employee with Connected Devices

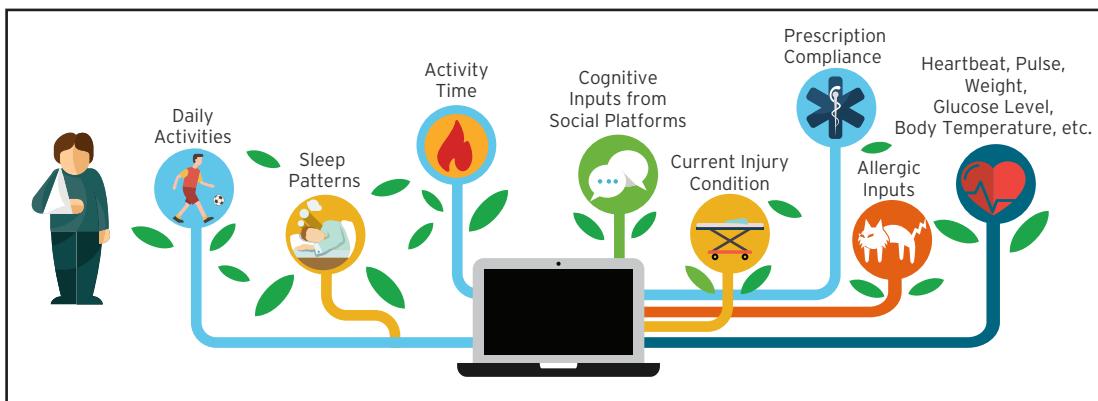


Figure 2

Transforming the RTW Ecosystem with Connected Devices

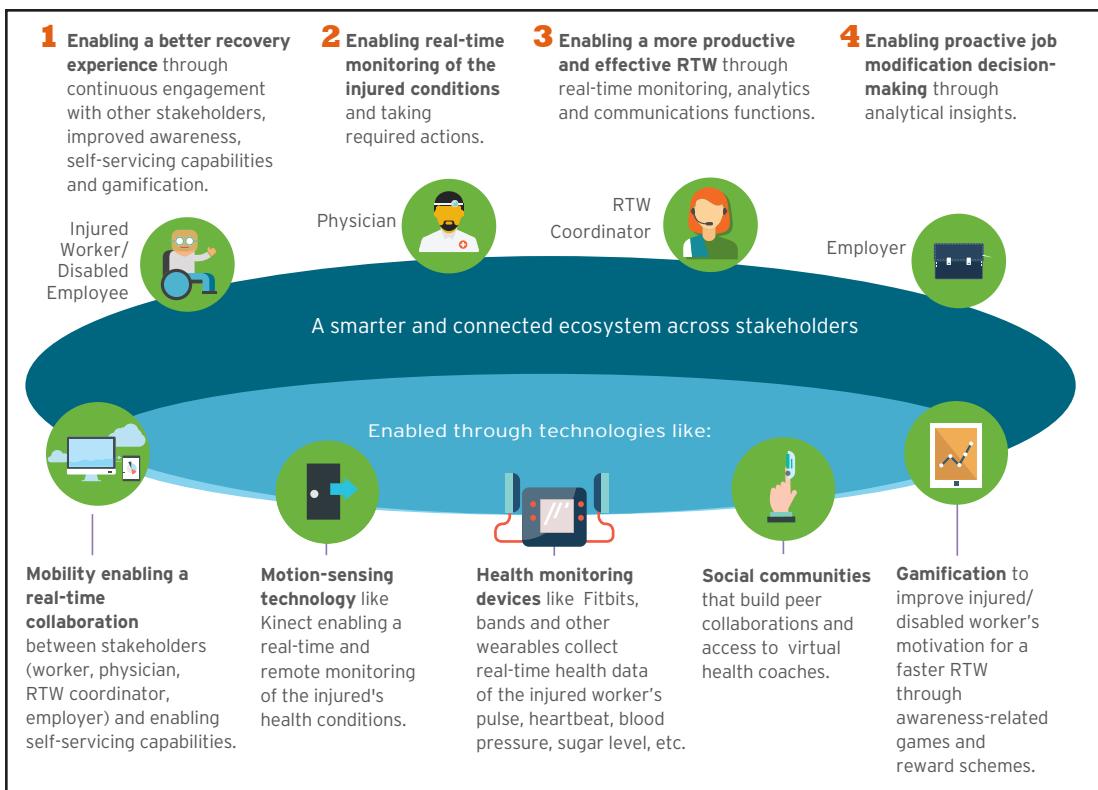


Figure 3

Enabling Real-Time Monitoring of Medical Conditions by Physicians, Other Stakeholders

The traditional way of monitoring progress involves several repeated hospital visits and tests. This new RTW ecosystem, however, has the potential to enable more real-time collaboration between physicians and patients, thanks to connected devices such as quantified self-motion devices (e.g., Kinect, Fitbits and related

wearables). A physician could program physical exercises on Kinect, for example. The injured or disabled then performs the exercises, as guided by Kinect, which delivers progress reports to the individual's physician. The physician can then use the data contained in the report to monitor the injured/disabled worker's recovery. Relevant and allowed information can also be extended to other stakeholders - RTW coordina-

tors, employers and insurers - who could use it to improve RTW functions/operations.

Enabling a Better Recovery Experience for Injured/Disabled

Injury can bring about emotional distress for a worker/employee. There are risks of the injured/disabled experiencing cognitive disorders (i.e., mental or physical illness occurring simultaneously due to financial pressures, social life cutoffs, dietary restrictions, etc.). These cognitive conditions have a great impact on the number of RTW days. For example, the median duration of

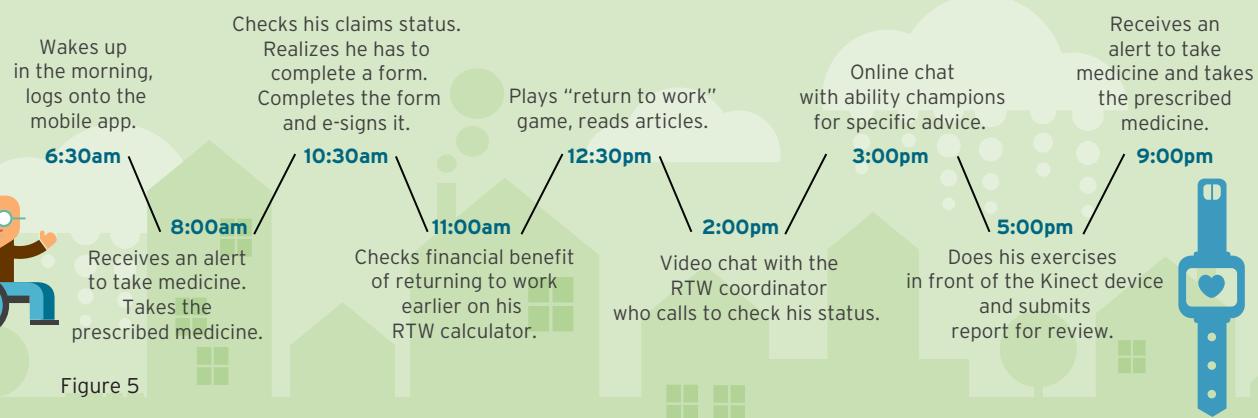
RTW for a lumbar strain is 10 days, while it is 26 days for depression with anxiety.⁶ When these two conditions coexist, median RTW jumps to 153 days. It is thus important to maintain better emotional levels for the injured/disabled. In current RTW programs, organizations often overlook the injured/disabled's emotional enablement and engagement levels during their recovery. By continuously engaging with the worker/employee and by supporting him with self-servicing tools, education and motivational techniques, the worker/employee will stay connected, motivated and focused on faster RTW (see Figures 4 and 5).

Improved Injured/Disabled Awareness, Engagement During the Recovery Period

Improving Injured's Awareness
Know the entire RTW lifecycle - who's involved and relevant dates.
Receive announcements, notifications, health guidance and wellness tips.
Compare employer's expectations with physician's progress report.
View financial benefits from a faster RTW.
View peer RTW comparison for similar age, gender and disability.
Providing Servicing Capabilities to Injured
Manage the claims or the payments involved and track status.
Tools to calculate payments.
Interactive/enhanced communication with employer and insurer.
Receive alerts and notifications to facilitate on-time prescriptions.
View job modification, alternate employment, self employment FAQs.
Assist in alternate employment - resumé upload on job sites; interview status updates; calendar, venue, job details.
View Social Security FAQs for assistance with SS filing.
Continuous Engagement with Injured
Gamification for education and motivation; leaderboards for engagement.
Engage in online communities, blogs, etc. and receive tips/notifications on faster RTW.
Best-practice sharing of peers who had successful RTW with similar injury.

Figure 4

A Day in the Life of the Injured Worker or Disabled Employee



Quick Take

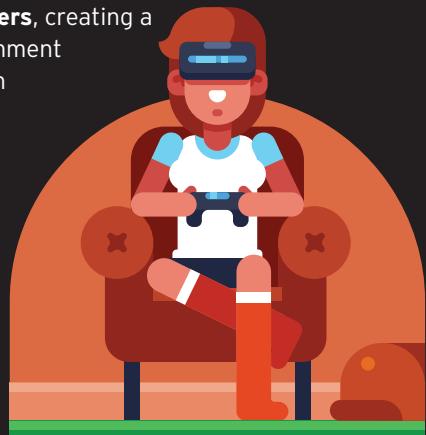
Gamification: A Tool to Improve Engagement, Motivational Levels

Gamification is garnering significant traction in the insurance sector, especially within the health insurance industry. Recent cases of benefits achieved by health insurers from gamification have emerged. For instance, Cigna and Hope Lab jointly offered Re-Mission 2 for young cancer patients to stick with their treatments.⁷ Research shows that playing the games boosts players' positive emotions, increases self-efficacy (their belief in their ability to fight cancer) and shifts attitudes about chemotherapy, which lead to better adherence to prescribed treatments. A recent study by Microsoft reveals an increasing number of gamers originating from the assistive community - people injured or with disabilities.⁸

Insurers should thus look to power this ecosystem using gamification techniques. Among the considerations are to develop games in such a way that they have impact on specific psychological and

behavioral outcomes associated with successful treatment. Key gaming techniques insurers should investigate include:

- **Continuous and positive reinforcement of the need to return to work** in a safe and timely manner through gamifications.
- **Leaderboards featuring the results of other RTW gamers**, creating a competitive environment fostering a focus on returning to work.



Quick Take

Ensuring the Sustenance of RTW Motivation Through Rewards



What if an injured worker or disabled employee is not motivated enough to cooperate with the RTW program or doesn't comply with the prescribed medications or even play RTW games? Success thus resides in the heightened motivational levels and the participation among injured workers/disabled employees. Reward schemes would help achieve this and also help sustain motivational levels. In this new ecosystem, they can also earn rewards for activities that include:

- Compliance with prescriptions.
- Providing mentorship to others who are injured/disabled.
- Contribution to blogs.
- Engaging in "faster RTW"-related games.

Earned rewards points can be redeemed by workers/employees for personal insurance premium discounts, cash-backs, vouchers or existing reward programs of the employers.

Enabling a More Productive and Effective RTW Coordinator

One of the key opportunities for insurers is making their RTW coordinators more productive. Their productivity may be undermined by a lack of data and poor communications. But with this smart ecosystem, they have continuous access to more data and collaborative features, through

which they can perform their daily tasks better, better manage the injured worker or the disabled employee, provide more value to the employers and, therefore, deliver improved RTW outcomes to the insurer.

Figure 6 illustrates how a RTW coordinator is better enabled for improved outcomes.

Facilitating RTW Coordinator Productivity

Improved Enablement Through Self-Servicing Capabilities
RTW portfolio dashboard for effective RTW management.
Workflow management, automatic "task/action" created from claim system through business rules.
Track real-time progress of the health of the worker/employee.
Monitor worker/employee prescription compliance.
Create wellness report to send to physician.
Create job modification planning report to send to employer.
Conduct exit interview to capture best practices during the RTW journey.
Manage claim outcome (action/referral/outcome).
Capture expenses/time spent on administrative services.
Deriving Better Insights Through Enhanced Analytical Information
Plan effective job modifications based on analytics insights on successful/unsuccessful modification planning done by other similar employers.
Plan effective alternate employments based on analytics insights on successful/unsuccessful alternate employment done by other similar employers.
View and plan based on guidelines and benchmarking data obtained from external disability duration providers.
Benchmark self performance vis-a-vis other coordinators in terms of RTW costs reduced or days reduced.

Figure 6

Quick Take

Integrating the New RTW Ecosystem with the Employer's Existing Health and Wellness Programs

Most employers have active, institutionalized health and wellness programs. Insurers can look to provide the employers with a better value proposition where they can maximize the ROI of these programs by integrating them within this new ecosystem.

This enables employers to attain optimized value from their investments in health and wellness programs. It also provides a positive feeling to employees/workers that their employers are providing wellness programs and helping in their recovery.



Enabling Improved Employer Engagement, Better Decision-Making

Employers typically are disconnected from affected employees during the RTW period, except when there is a need for job modification. The new ecosystem transforms this, where the employer is continuously kept in the loop on the injured/disabled employee's progress. When a job modification need comes into play, it is easier for the RTW coordinator to work with the employer to make the right decision. The analytical insights presented can help improve employer awareness that job-planning activities are the norm, and that similar businesses are doing it successfully.

This new RTW ecosystem is also capable of providing several predictive and prescriptive analytical RTW insights. They can enable several self-servicing capabilities on their mobile app such as the creation of a work plan, viewing of claim details, etc. which make their daily jobs easier.

The Result: Win-Win-Win for All Stakeholders

Enabling injured workers or disabled employees to return to work in a safe and timely manner will benefit the insurer, employer and injured worker or disabled employee, resulting in a win for all. Employers benefit from reduced produc-

tivity losses, lower insurance costs and enhanced compliance. Injured workers or disabled employees benefit through faster income restoration and subsequent lifestyle gains. Insurers benefit directly through reduced claims costs and indirectly through improved brand image among agents and customers (see Figure 7).

Looking Ahead

A new era of digital health is emerging, where healthcare is brought to the patient's home through quantitative movement devices and digital technologies. Real-time data-sharing and collaboration platforms provide for completely new insights into the "day in a life" of a disabled/injured employee/worker to the insurer, which were not available before.

Connected devices and digital technologies will fundamentally alter the way in which disability and workers' comp insurers will establish and administer their RTW programs. A smarter and connected RTW ecosystem will radically change the scope of possibilities available to insurers, companies and employees to continuously improve RTW outcomes. Early adopters will gain early-mover advantages that can deliver and sustain competitive edge versus those insurers that have not embraced this new RTW ecosystem approach which is enabled by Code Halo thinking.

How All Stakeholders Benefit from Faster RTW

Faster RTW provides benefits for injured workers or disabled employees by:				
	Restoring Income <ul style="list-style-type: none">76% of Americans live paycheck to paycheck (Source - Bankrate survey, 2014). Average disability pay is only 2/3rd of average weekly wage. Thus, resumption to 100% income will boost injured/disabled workers' satisfaction levels.	Improving Satisfaction <ul style="list-style-type: none">Less disruption to family, work and social life.Improved employment and financial security.Less time spent recovering from injury.Reduced level of cognitive impairment.		
Faster RTW provides benefits for employers by:				
	Reducing Productivity Impact <ul style="list-style-type: none">Frequency of lost time.Length of time lost.Productivity losses. Total direct and indirect costs with disabled employee or injured worker absenteeism is 3.25% of payroll (Source - SHRM survey, 2013).	Reducing Insurance Costs <ul style="list-style-type: none">Workers' compensation or disability premium costs.Lawsuits.Wage replacement costs.Worker replacement costs.	Better Compliance <ul style="list-style-type: none">Compliance with Americans with Disabilities Act Amendment Act (ADAAA) and the applicable state statutes.	
Faster RTW provides benefits for insurers by:				
	Reducing Costs <ul style="list-style-type: none">Reduced claims payouts.Reduced claims handling costs.	Improving Business Benefits <ul style="list-style-type: none">More analytical information for better decision-making and outcomes across product development, underwriting and claims.Reduction in cancellations and non-renewals due to improved customer/client satisfaction.Increased satisfaction of agents selling workers' comp/disability insurance.Effective use of acquisition cost and customer retention.Increased competitive edge for insurers.Increased cross-sell opportunities.		

Figure 7

Quick Take

Extending and Enhancing RTW Programs



Our WorkActivate™ enables all key RTW stakeholders - disabled employees or injured workers, employers, insurers, RTW coordinators and physicians - to collaborate tightly and achieve better RTW outcomes. Delivered as-a-service, WorkActivate is designed to support both workers' compensation and disability RTW scenarios. Key capabilities include:

- **Communicate:** By leveraging innovative communications tools (text, video conferencing, etc.), the platform helps to establish a regular and more personal communications channel that connects all key stakeholders.
- **Collaborate:** Throughout the RTW journey, WorkActivate helps to develop a one-on-one partnership with the employee/worker.
- **Educate:** The platform provides education and awareness on a range of topics: the overall claims process, disability durations, health and wellness, fitness and career development.
- **Measure/Manage:** WorkActivate analytics provides continual measurement of the activities and progress of each key stakeholder in the RTW process. Ongoing data analysis and management ensures efficiency and effectiveness in each interaction.
- **Motivate:** The platform leverages motivational tools and techniques to keep the employee/

worker connected to the work environment and focused on return to work.

- **Comply:** WorkActivate helps ensure employer compliance with all applicable employment laws associated with RTW.

Our platform integrates with an insurer's data and application landscape. It includes five mobile and/or desktop applications that support the day-to-day activities of each of the key RTW stakeholders. Key features include:

- An integrated platform that provides mobile-based applications to support each of the key RTW stakeholders.
- Collaboration tools to foster and enhance interaction and collaboration amongst the stakeholders.
- Third-party educational content in the areas of health and wellness, fitness and career development.
- Integration with wearable devices and fitness platforms such as Fitbit and Kinect.
- Gamification tools and techniques to keep workers/employees motivated.
- Data analytics to measure and track wellness plans versus industry benchmarks.
- A security platform to ensure zero compromise in personal data.

Footnotes

- ¹ <http://www.insurancejournal.com/magazines/features/2015/09/21/381741.htm>;
<http://www.businessinsurance.com/article/20140428/NEWS08/140429839>.
- ² 2015 Statistical Study: U.S. Workers' Compensation - Industry's Top 25 Adjusted Loss Ratio Increased to 62.7%, AM Best.
- ³ http://www.disabilitycanhappen.org/research/CDA_LTD_Claims_Survey_2014.asp.
- ⁴ <http://mhealthwatch.com/the-booming-business-of-mhealth-app-marketing-21908/>.
- ⁵ For more on Code Halos and innovation, read "Code Rules: A Playbook for Managing at the Crossroads," Cognizant Technology Solutions, June 2013, <http://www.cognizant.com/Futureofwork/Documents/code-rules.pdf>, and the book, "Code Halos: How the Digital Lives of People, Things, and Organizations Are Changing the Rules of Business," by Malcolm Frank, Paul Roehrig and Ben Pring, John Wiley & Sons, 2014, <http://www.wiley.com/WileyCDA/WileyTitle/productCd-1118862074.html>.
- ⁶ Preventing and Identifying Comorbidity to Reduce the Impact on Workers' Compensation Claims, Procura, 2013, http://www.procura-inc.com/pdf/press-releases/FINAL_Comorbidities_Position_Paper_2014.pdf.
- ⁷ <http://newsroom.cigna.com/NewsReleases/games--tech-keep-young-cancer-patients-connected.htm>.
- ⁸ Microsoft study on the potential market of accessible technology in the United States, [http://msdn.microsoft.com/en-us/library/windows/desktop/ee415219\(v=vs.85\).aspx](http://msdn.microsoft.com/en-us/library/windows/desktop/ee415219(v=vs.85).aspx).

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About Cognizant

Cognizant (NASDAQ: CTSH) is a leading provider of information technology, consulting, and business process outsourcing services, dedicated to helping the world's leading companies build stronger businesses. Headquartered in Teaneck, New Jersey (U.S.), Cognizant combines a passion for client satisfaction, technology innovation, deep industry and business process expertise, and a global, collaborative workforce that embodies the future of work. With over 100 development and delivery centers worldwide and approximately 221,700 employees as of December 31, 2015, Cognizant is a member of the NASDAQ-100, the S&P 500, the Forbes Global 2000, and the Fortune 500 and is ranked among the top performing and fastest growing companies in the world. Visit us online at www.cognizant.com or follow us on Twitter: Cognizant.



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