

# CIGNA's 2007 Integration Value Study



November 2007

CIGNA's Integration Value Study quantifies the impact of integrating CIGNA's medical and disability programs on disability and medical costs and clinical outcomes. For this study, CIGNA defines integration as coordination of care management programs between disability, health care and behavioral health programs, both prior to and after the filing of a disability claim.

## Key Study Findings



“Our analysis demonstrates that having a tight connection among CIGNA's medical, behavioral and disability management programs yields better

return-to-work results. For employers, this translates into lower overall benefit costs and improved productivity. Most importantly, for individuals, it means a better health outcome and the opportunity to return to work sooner.”

– Allen Woolf M.D., chief medical officer, CIGNA Group Insurance

### Employees with disability claims drive a large percentage of employers' overall medical costs

Top Cost Drivers				
Conditions	Medical		STD	
	% of Costs	Rank	% of Claims	Rank
<b>Musc/Fract/Sprain</b>	<b>20%</b>	<b>1</b>	<b>20%</b>	<b>1</b>
<b>Heart/Circulatory</b>	<b>14%</b>	<b>2</b>	<b>7%</b>	<b>5</b>
<b>Cancer</b>	<b>14%</b>	<b>3</b>	<b>9%</b>	<b>3</b>
Gastrointestinal	9%	4	6%	6
Genitourinary	8%	5	4%	9
Neurological	6%	6	5%	7
Respiratory	6%	7	3%	10
Pregnancy	4%	8	18%	2
Mental health	3%	9	7%	4

- 91% of employee medical costs are accounted for by 20% of the employees:
  - One quarter of employees in the top 20% have disability claims.
  - This 5% of the employee population – those with disability claims – account for 37% of total employee medical costs.

#### Analysis: Relationship between health care and disability

Employees who are absent from work due to a disability claim spend more on health care than those actively at work. Early identification of employees at risk for a potential disability claim, followed by intervention with programs designed to assist the employee in improving their health and returning to work, is key to helping contain health care, disability and lost productivity costs.

## Key Study Findings continued



“Essentially, we are seeing a small percentage of the employee population – disability claimants with chronic- or lifestyle-related conditions – contributing to a large portion of medical expense. Our early identification of at-risk employees, and proactive outreach to these employees, leads to a healthier, more productive workforce and also reduces costs.”

– Jeff Kang M.D., chief medical officer, CIGNA HealthCare

### Accounts with active integration of CIGNA’s disability and health care programs showed improved disability management results

#### Overall Disability Claim Results

- CIGNA was able to statistically isolate the impact of its clinical integration activities from other variables that impact return to work, such as employee age, health risk status, and disability plan design. Employees in CIGNA’s Disability & HealthCare Connect<sup>SM</sup> program have at least a 5% – and up to 37% – greater likelihood of returning to work as a result of CIGNA’s integrated clinical activities.
- The 37% rate improvement is calculated by comparing the integrated vs. non-integrated study participants (40 accounts, 300,000 employees), most of which are larger accounts.
- The 5% improvement is a result of comparing the same integrated vs. non-integrated data for our entire book of disability business (approximately 5,700 policies with 4 million covered employees), a much larger database with a greater variation in account size.

#### Acute/Episodic Disability Claim Results

- Clinical program coordination appears to have the greatest impact on return-to-work results for episodic conditions such as fractures and complicated pregnancies.
- Employees in integrated plans that were on disability for episodic conditions were almost twice as likely to return to work from STD as those in disability-only plans.

#### Chronic Disability Claim Results

- While clinical program coordination appears to provide a greater opportunity to influence return-to-work results for acute or episodic conditions, employees with certain chronic conditions (circulatory, digestive and respiratory) experience a significant increase in their odds of returning to work directly as a result of CIGNA’s integrated program.
- Employees with cardiac disease have a 3% reduction in the incidence of disability and a 7.7% reduction in disability durations<sup>1</sup>.
- Employees with back pain have a 1% reduction in the incidence of disability and an 18% reduction in disability durations<sup>1</sup>.

#### Analysis: Impact of early intervention

Coordination between disability and medical case management (acute/episodic) and early referrals to disease management programs (chronic) can help improve return-to-work results and decrease the frequency and length of certain disability claims. With fewer employees transitioning into long-term disability, more employees are back on the job sooner, which can improve productivity savings.

**Example:**  
**5,000 employees x 10% STD incidence =**  
**500 STD claims per year**

**5% RTW improvement**  
**for integrated vs. disability only =**  
**21 more employees return-to-work**

**Potential Productivity Savings**

\$50,000 <i>avg. wage</i>	+	\$15,000 <i>avg. benefit</i> <small>(30% of wage)</small>	x	1.35 <sup>2</sup> <i>absence multiplier</i>	x	21 <i># of employees</i>	=	\$1,842,750 <i>per year</i>
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<sup>2</sup> Nicholson, Sean, Mark V. Pauly, Daniel Polsky, Claire Sharda, Helena Szrek, and Marc L. Berger, 2004a, *Measuring the Effects of Workloss on Productivity With Team Production*.

<sup>1</sup> CIGNA’s *The Disability and Health Care Connection – How Strong is the Link?*, March 2004.

## Key Study Findings continued

### FML study sample

#### 3 accounts<sup>3</sup>:

- 46,000 employees
- 3,300 STD claims (7%+)
- 6,300 FML events

#### Considered STD after start of FML

<sup>3</sup> Accounts had CIGNA medical, disability and FML coverage.

### Family medical leave (FML) events are an indicator of future short-term disability (STD) claims

- Employees on FML are five times more likely to file a subsequent STD claim (24%) than those who have not requested FML (4.5%).
- Those who take FML for family reasons are 50% more likely to have a behavioral-related STD claim than those who take FML for other reasons.
- Employees on intermittent leave are even more likely to file an STD claim (38%) than those on continuous leave (16%).
  - Employees on intermittent leave, regardless of the reason for the leave, are two times more likely to file an STD claim for behavioral illness than those on continuous leave.

#### *Analysis: FML as an indicator of future STD*

FML requests open up a new avenue for proactive interventions for employers and employees, by using the request as an opportunity to intervene with care management programs to help stabilize employees' medical conditions and EAP to address work-life challenges and behavioral illness, in advance of a possible disability claim.

### Integration helps lower STD incidence

- Overall STD incidence appears to be slightly lower, with a notable decrease in circulatory-related claims.
- Durations of integrated claims appear to be slightly longer overall in this study population.

#### *Analysis: Impact on STD claim incidence and duration*

Integration appears to have the greatest impact on cardiovascular STD claims, which may be attributed to employees taking advantage of referrals to disease management programs.

This may be attributed in part to STD claims that were filed involving more complex conditions, increasing the case's average duration. Longer durations may also be attributed to the elimination of what would have been simpler, short duration disability claims identified through our health care programs and successfully treated through early intervention (disease management, behavioral health programs). Since these may have been identified and managed prior to an STD claim being filed, the result could be fewer short-duration claims.

### Integration appears to drive down employer medical costs over time

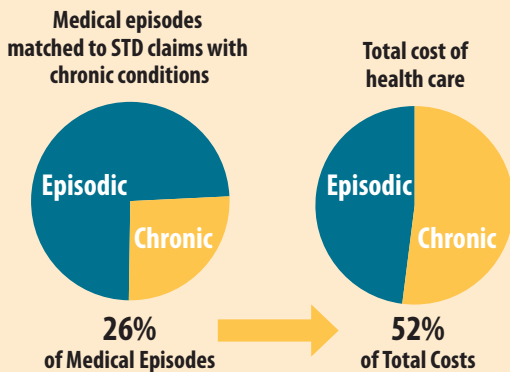
- Early indications are that integrated customers have lower health care costs (approximately 0.5%) than health care-only customers.

#### *Analysis: Cost advantage of integrating health care and disability coverages*

Integrating medical and disability coverages with CIGNA makes it easier to coordinate care management for disabled employees between disability and health care and to share data to identify at-risk employees before they incur disability claims that lead to absence and additional medical costs. Once identified, CIGNA can more effectively and efficiently engage the various health care and disability resources to achieve optimal outcomes.

## About the Study

### Chronic conditions leading to a disability account for the highest percentage of STD-related medical costs



CIGNA's *The Disability and Health Care Connection – How Strong is the Link?*, March 2004.

## Background

Industry trends and historical experience suggest that the ability to identify the risk factors that can lead to disability, and intervene by applying the right programs and resources, can help prevent a disability-related absence or reduce the duration of that absence.

To determine the impact that CIGNA's integrated medical and disability programs have on disability and medical outcomes and costs, CIGNA analyzed 2004-2005 claims data of 40 customers and their 300,000 employees with either or both of our health care and disability coverages.

The 2007 study, a continuation of two previous studies, was designed both to validate the original findings and to provide new insights. There are some key differences between this study and prior studies:

- Significantly more data across the various CIGNA medical, behavioral and disability programs was included in the 2007 study.
- More rigor was used to adjust for severity and other variables to ensure only looking at impact of integration activities.

## Methodology

For the study, CIGNA analyzed accounts with a different mix of coverages. Some of the 40 accounts had both health care and disability coverage with CIGNA, some had health care only, and some had CIGNA disability coverage only. In addition, a few of the accounts had FML coverage through CIGNA Group Insurance. The following claims and activities were analyzed:

### CIGNA Group Insurance coverage (CGI)

- STD claims
- LTD claims
- Connect eligibility
- Family medical leaves
- Nurse case manager referrals
- Behavioral health claims

### CIGNA HealthCare coverage (CHC)

- Medical claims
- Pharmacy claims
- Demographics
- Eligibility
- Medical case management

Among the accounts with both disability and health care coverage, not all of the accounts were integrated through CIGNA's Disability & HealthCare Connect<sup>SM</sup> program. To analyze a larger sample, return-to-work and durational comparisons were also made between CIGNA's entire book of integrated disability and health care business and CIGNA's disability-only business.

## Study Database – Crossover/Population Study

- Demographics/risk scores/program participation consistent across all four study segments:
  - CGI/CHC Connect
  - CGI/CHC No Connect
  - CGI only
  - CHC only
- Notable exceptions:
  - ERG Risk Score<sup>4</sup> significantly higher for the Connect group
  - Greater % of population over 65 years old in Connect group
  - ERG Risk Scores<sup>4</sup> when 65+ population excluded brings Connect group (1.14) in line with CHC/CGI (1.08) and CHC only (1.13)
- Further analysis excluded 65+ population.

<sup>4</sup>The ERG (Episode Risk Groups) risk score is a measure of the relative expected medical resources needed to treat an individual, based on his or her conditions, diagnoses, procedures during the past 12 months. A score of 1.0 would indicate an individual requiring an average amount of resources, while a score of 2.0 would mean the individual is twice as expensive as average.

## About the Study continued

### Study Conclusion

The study supports the premise that integrating disability and health care programs with CIGNA offers employers significant opportunity to improve medical and disability outcomes and reduce costs. The filing of an STD claim, and perhaps even an FML claim, is a critical point to engage newly disabled employees into appropriate health advocacy programs to help with their recovery and return to work.

Employers also have a greater opportunity to realize increased productivity savings and improvements by tightly coordinating care management and return to work management for disabled employees and by understanding the drivers of absence and disability to identify at-risk employees early and engage them in preventive programs prior to filing a disability claim.

### Health and Productivity Continuum

<b>Lost Time/ Productivity Management Programs</b>	<ul style="list-style-type: none"> <li>• Presenteeism</li> <li>• Absenteeism</li> <li>• FML</li> </ul>	<ul style="list-style-type: none"> <li>• Presenteeism</li> <li>• Absenteeism</li> <li>• FML</li> <li>• STD</li> </ul>	<ul style="list-style-type: none"> <li>• Presenteeism</li> <li>• Absenteeism</li> <li>• FML</li> <li>• STD</li> </ul>	<ul style="list-style-type: none"> <li>• Presenteeism</li> <li>• Absenteeism</li> <li>• FML</li> <li>• STD</li> <li>• LTD</li> </ul>	<ul style="list-style-type: none"> <li>• Presenteeism</li> <li>• Absenteeism</li> <li>• FML</li> <li>• STD</li> <li>• LTD</li> </ul>
	<b>Well</b> No Disease	<b>At Risk</b> Obesity High Cholesterol	<b>Acute Illness</b> Pneumonia Fracture	<b>Chronic Illness</b> Diabetes Heart Disease	<b>Catastrophic Illness or Injury</b> Cancer
<b>Medical Care Management Programs</b>	<ul style="list-style-type: none"> <li>• Health Coaching</li> <li>• Website Wellness</li> <li>• Screenings</li> <li>• Employee Assistance</li> </ul>	<ul style="list-style-type: none"> <li>• Targeted Health Coaching for Risk Reduction</li> <li>• Website Wellness</li> </ul>	<ul style="list-style-type: none"> <li>• Case Mgmt</li> <li>• Utilization Mgmt</li> <li>• Treatment Decision Support</li> </ul>	<ul style="list-style-type: none"> <li>• Disease Mgmt</li> <li>• Case Mgmt</li> <li>• Treatment Decision Support</li> <li>• Pre-habilitation</li> </ul>	<ul style="list-style-type: none"> <li>• Case Mgmt</li> <li>• Utilization Mgmt</li> <li>• Treatment Decision Support</li> </ul>



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