INTEGRATED BENEFITS INSTITUTE

# *Planning for the Future Workforce: Leave Patterns across Generations*

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## Executive Summary

While most "Baby Boomers" will leave the workforce in the next decade, the Bureau of Labor Statistics (BLS) projects that by 2024, one in five American workers will be age 55 or older. The aging workforce will pose a challenge for employers' human capital management strategies as well as their efforts to support their employees' health and productivity. We use IBI's disability benchmarking data to compare disability outcomes across generations. This includes:

- The proportion of workers who file STD claims, and for what reasons.
- How long claimants are off the job for an STD claim and at what cost in wage replacements and lost productivity (defined as the opportunity costs or foregone revenues or excess labor costs).
- How likely an STD claimant will enter the LTD system and how much LTD age replacements will add to the total costs of a disability incident.

## Results

- 9 of every 100 female Baby Boomers are expected to have an STD claim, compared to just 8 per 100 male Baby Boomers. Excluding pregnancy claims, Generation X employees will claim STD benefits at about half this rate, and Millennials at about one-third the rate of Baby Boomers.
- Musculoskeletal claims are more common among Baby Boomers than younger employees, but both Millennials and Generation X employees have slightly higher claims rates for mental health disorders than their counterparts in the Baby Boomer generation. For all groups, however, injuries, musculoskeletal disease and mental health disorders account for nearly half of all non-pregnancy claims.

- Older workers generally have more lost work time than their younger counterparts. The average Baby Boomer on STD loses between 35 and 38 work days, compared to about 32 days for Generation X employees and between 28 and 30 days for Millennials.
- With the exception of Millennials, males tend to have more lost work time than females in in their generation. However, the gender in gap in wage replacements exceeds the gender gap in lost work days. This likely reflects larger pay differentials as well as differences in disability benefits across industries where male and female employees are concentrated.
- Assuming expected STD and LTD wage replacements and opportunity costs, the final costs for a male Baby Boomer's disability incident is expected to be around $15,000. Costs for female Baby Boomers (≈$10,000) are about 25% greater than the costs for Generation X females and about twice the costs for female Millennials. The ratios for male Baby Boomers' costs compared to Generation X and Millennial males are 1.5 (i.e., 50% greater) and 1.9, respectively.
- If today's younger workers experience similar claims rates and costs as their older peers as they age, the approach of this study suggests that the productivity impact of disability in 2025 will be 11% greater than in 2015. By contrast, the labor force itself will grow by only 5% over the same period.[1]

## Implications for Employers

Because older workers have more and costlier disability leaves, the growth in disability costs to business will outpace labor force growth as the workforce ages. Employers need to recognize their workers' risk of extended disability absences in order to plan for and avoid costly productivity disruptions. Understanding the kinds of conditions that disrupt older workers' ability to remain on the job is the first step towards developing prevention, care management and return-to-work (RTW) strategies to mitigate productivity losses. By the same token, observing lost work-time patterns across generations can give potential insights into the types of conditions that we should be paying attention to now – not only to preserve current productivity, but to minimize the potentially larger losses down the road as today's Generation Xer and Millennial employees age.

[1] U.S. Bureau of Labor Statistics, *Employment Projections: 2014-24* <http://www.bls.gov/news.release/ecopro.t01.htm>

# Introduction

In this report, we analyze STD and LTD claims in order to shed light on generational differences in:

- The proportions of workers who file STD claims, and for what reasons.
- How long claimants are off the job for an STD claims, and at what cost in wage replacements and lost productivity (that is, the opportunity costs or foregone revenues or excess labor costs)
- How likely and STD claimant will enter the LTD system, and how much LTD age replacements will add to the total costs of a disability incident.

# Method

Since 2007, IBI's Health and Productivity Benchmarking[2] database has collected short-term disability (STD), long-term disability (LTD), Family Medical Leave Act (FMLA) and workers' compensation claims (WC) from major disability carriers' and absence management firms' books of business. The 2015 data year includes more than 5 million claims from more than 52,000 employer policies.

As the largest collection of information from employers' policies, the data provide the foundation for IBI's industry benchmark reports. The reports allow employers to compare their disability and lost time experiences to what is typical of their industry peers. In addition to providing critical business intelligence, the benchmarking data are a rich analytic resource. Deep information about employers, policies, claims and claimants can be used to identify patterns of lost work time and to call attention to emerging challenges.

We report disability outcomes for workers in different generations using STD and LTD from suppliers' books of business in the calendar year 2015. Because the STD system permits claims for pregnancies and because men and women tend to develop different patterns of illness as they age, we further stratify our analysis by sex. See the Appendix for more detail on the representativeness of the data and the calculation of age- and sex-specific claims rates.

# Who goes on STD, and why?

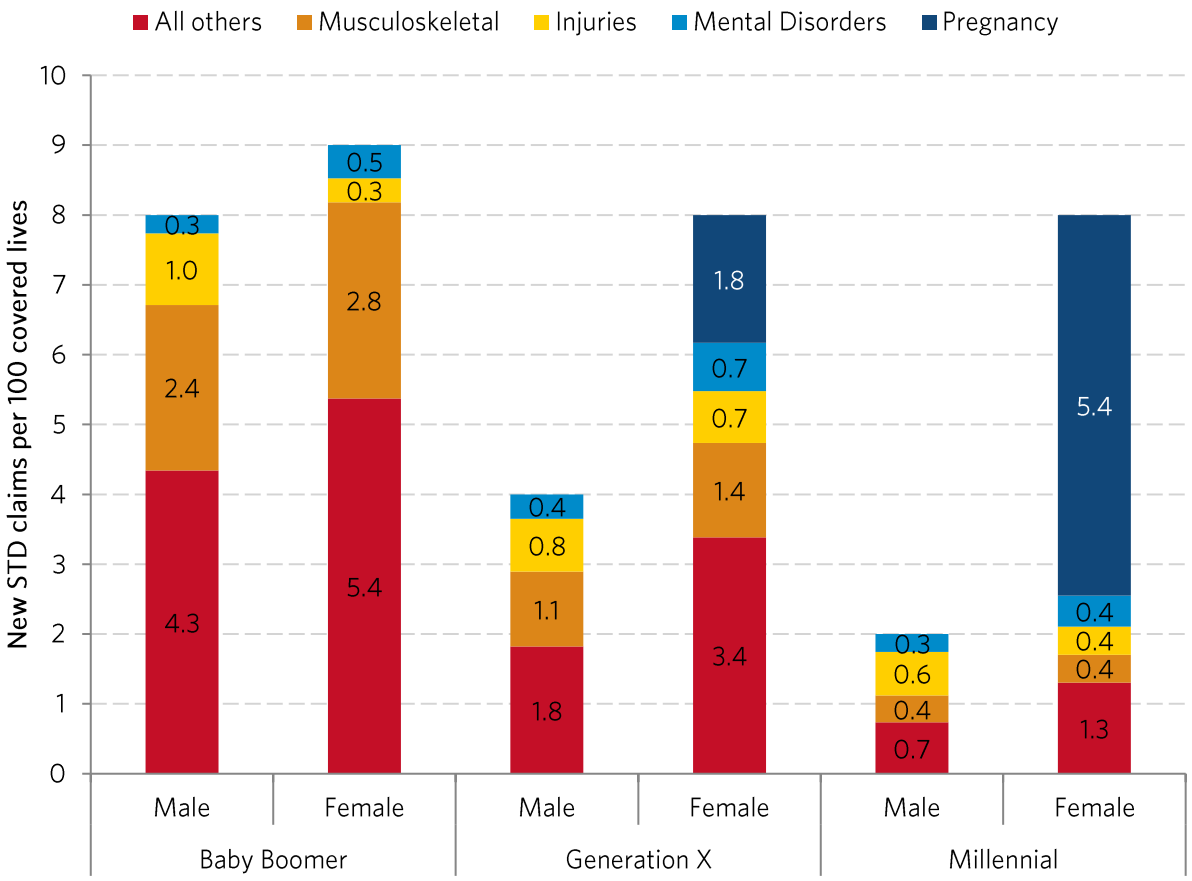
Figure 1 shows STD claims rates for different disability diagnoses by age and sex. Generally, Baby Boomers are more likely than younger employees to have a disability claim. Within generations, females are more likely than males to have a claim—even after accounting for pregnancy claims among Generation X and Millennials.

For example, almost 9 out of every 100 female Baby Boomers is expected to have an STD claim, compared to just 8 per 100 male Baby Boomers. Female Generation X and Millennial employees have claims rates that approach that of female Baby Boomers—in large part due to pregnancy claims among younger employees. Generation X and Millennial males have claims rates of 4.0 and 2.0 per 100, respectively—lower than the non-pregnancy claims rates of their female counterparts.

[2] https://ibiweb.org/tools/benchmarking

Musculoskeletal claims are more common among Baby Boomers than younger employees, but both Millennials and Generation X employees have slightly higher claims rates for mental health disorders than their counterparts in the Baby Boomer generation. This could reflect generational differences in the stigma around mental health. This could contribute to younger workers being more likely to seek treatment for episodes of psychological distress. For all groups, however, injuries musculoskeletal disease and mental health disorders account for nearly half of all non-pregnancy claims.

*Figure 1: Baby Boomers have the most STD claims. Females in each generation have more STD claims than males.*




## What are the cost and lost work time impacts of STD claims?

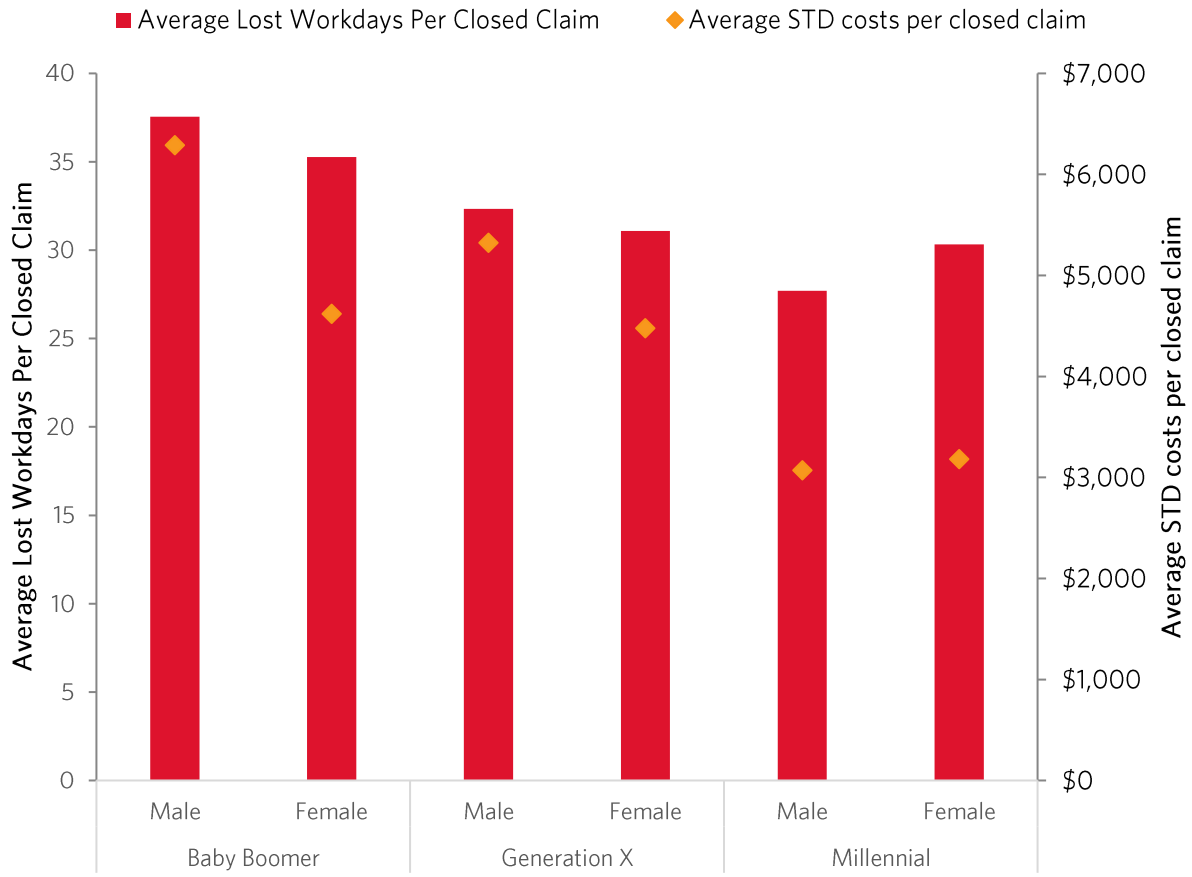
While Baby Boomers and females are the most likely employees to have an STD claim, the impact on lost work time and costs are not as straightforward. Figure 2 shows that older workers generally have more lost work time than their younger counterparts, and that with the exception of Millennials, males tend to have more lost work time than females in in their generation. However, within generations the scale of wage replacements does not match the scale of lost work time.

For example, the average male Baby Boomers loses 6% more lost work days than the average female Baby Boomer (about 38 days compared to about 35 days) 36% higher wage replacement costs (about

$6,300 compared to about $4,600). This disparity appears within each generation, and across generations in the case of male Generation X workers, who lose 8% fewer work days than female Baby Boomers, but incur 15% greater wage replacement costs.

These discrepancies likely reflect the larger societal wage gap between men and women.[3] However, industry differences may also play a role to the extent that different populations of unionized workers may have different wage replacement terms written into their disability insurance policies. For example, one third of male claimants worked in manufacturing (NAICS 31-33) employed one-third of male claimants, but only 15% of female claimants. By contrast, approximately 37% of female claimants worked in healthcare and social assistance (NAICS 62) or retail trade (NAICS 44-45), compared to only 13% of male claimants.

*Figure 2: Older claimants tend to have more lost workdays than their younger peers—but a wage replacement gap is evident among male and female claimants.*




[3] "Women's earnings 83 percent of men's, but vary by occupation". U.S. Bureau of Labor Statistics. January 15, 2016. <http://www.bls.gov/opub/ted/2016/womens-earnings-83-percent-of-mens-but-vary-by-occupation.htm>

## Transitions into the LTD system

In addition to greater costs, long STD claim durations indicate a higher risk that a claimant will exhaust their benefits and transition into the LTD system (assuming they are covered for LTD benefits). As Figure 3 illustrates, for both males and females, Baby Boomers are — 50% more likely than Generation X to transition into the LTD system and between 3 and 4 times as likely as Millennials. Within each generation, males are more likely than females to enter the LTD system. For Millennials, this is a departure from the durations seen in Figure 2, where females tended to have more lost work time than males. The shift is partly due to the inclusion of pregnancy claims, few of which transition to LTD.

*Figure 3: Baby Boomers are more likely than younger workers to transition from the STD system into the LTD system.*

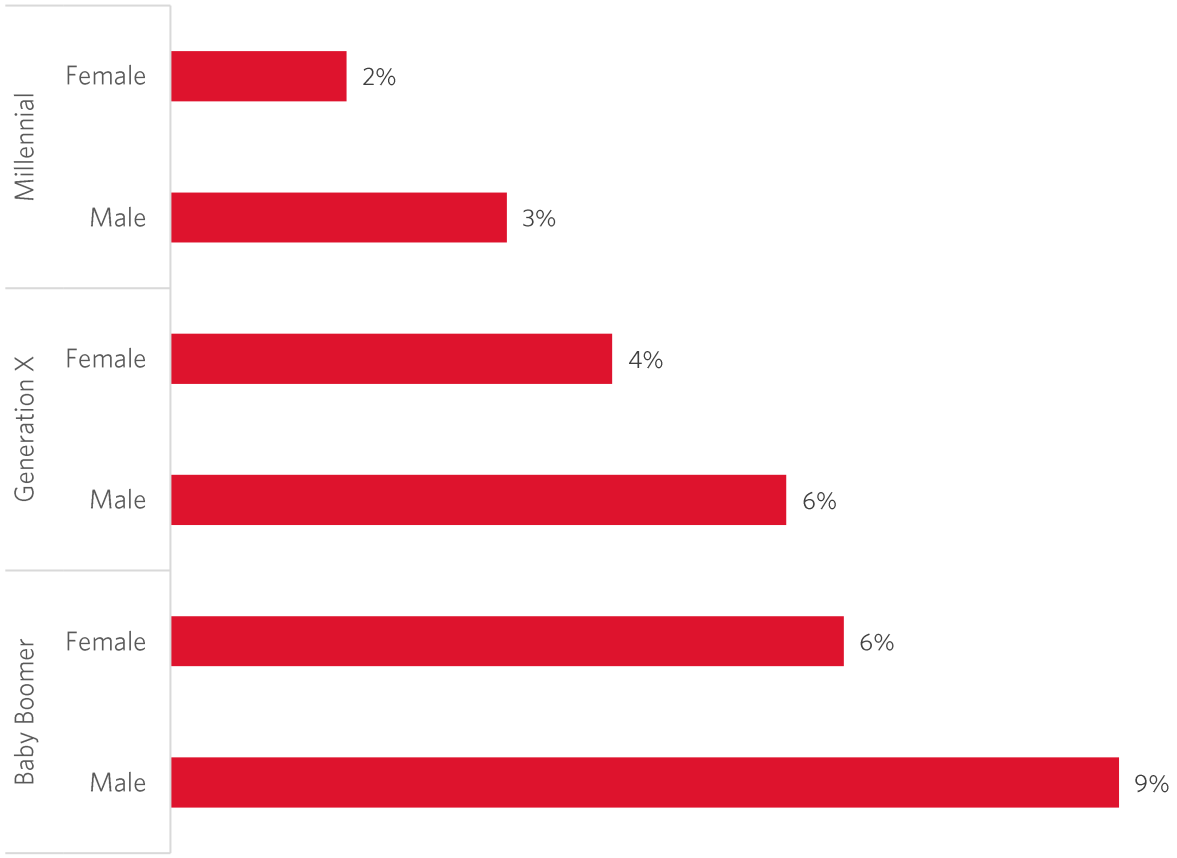



Figure 4 shows that once Baby Boomers enter the LTD system, their claims take much longer to resolve. Nearly all Millennials' LTD claims were closed within two years, compared to between 82 and 86% of claims for Generation X claimants. At the same point, only slightly more than half of Baby Boomers' LTD claims had closed. It takes nearly seven years for 80% of Baby Boomers' LTD claims to close, and 15% remain open after ten years.

The sharp increase in the percentage of LTD claims closed at 24 months partly reflects the conventional timing of claim reassessments to determine whether or not claimants can perform any job functions other than their own.[4]

*Figure 4: Baby Boomers' LTD claims take much longer to close than younger workers' claims*

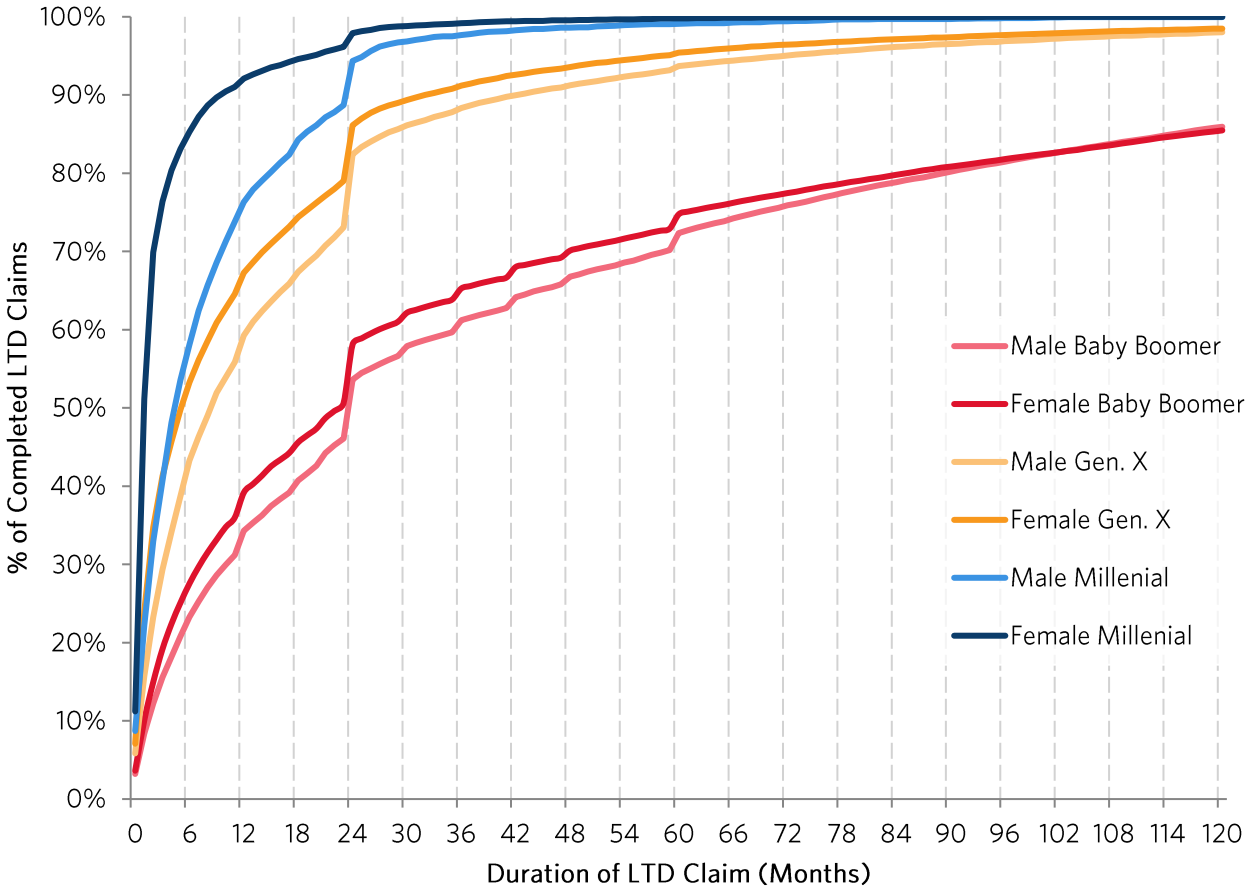



Figure 5 shows that on a per claim basis, the extended duration of LTD claims for Baby Boomers result in much higher wage replacement costs—from between $41,000 and $58,000 for Baby Boomers to between $6,000 and $13,000 for Millennials.

Average LTD claims costs are also higher for males than females in each generation. This is partly due to the longer duration of LTD claims for men as illustrated in Figure 4, but also to wage discrepancies and plan variations as discussed above.

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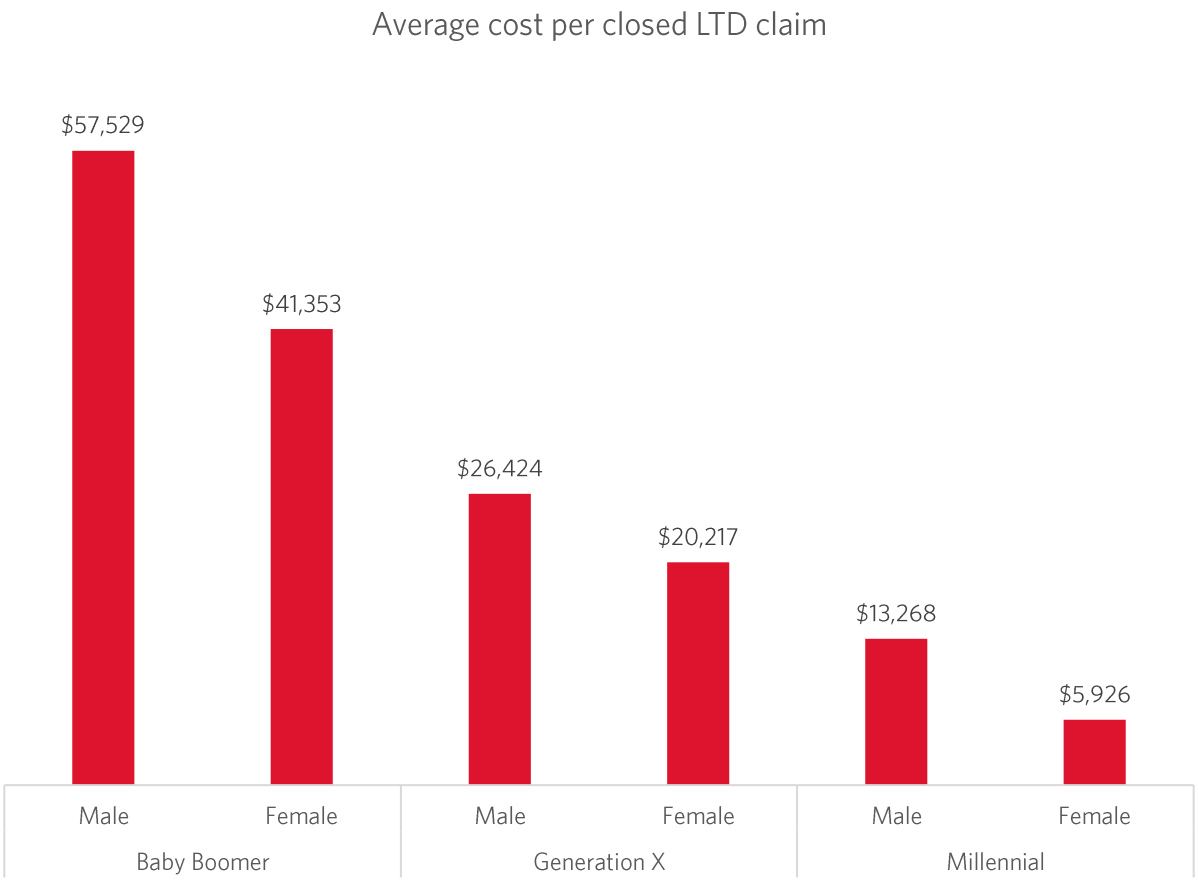
[4] See Group Disability Benefits Specialist Course Handbook. The National Underwriter Company. October, 2011. The sharp increase in percentage of closed LTD claims is due to a change in definition of disability from "own occupation" to "any occupation". This is referred to as a test change and own occupation refers to the claimant's original occupation while any occupation is defined as one the claimant can reasonably perform based on their education, training or experience.

*Figure 5: LTD claim costs are highest for Baby Boomers*




## What is the final disability tally?

The expected wage replacement costs of a disability incident can be modeled as the average STD costs plus the costs for the share of claims expected to enter the LTD system (the product of figures 3 and 5, assuming that all STD claimants who reach their maximum benefit duration are eligible for LTD benefits and transition into the LTD system). Additionally, lost work days for STD claims carry lost productivity costs in the form of either foregone revenues when absent employees cannot provide goods and services, or in the form of additional labor expenses to recover all or part of an absent employee's output. Research by Professor Sean Nicholson of Cornell University and Professor Marc Pauly of the University of Pennsylvania concludes that, generally speaking, opportunity costs are higher when employees are not easily replaced by equivalent substitutes, when they perform work that cannot be postponed, and when they work as members of teams.[5] Based on their studies, we estimate that each

[5] See Nicholson, S., Pauly, M.V., Polsky, D., Sharda, C., Szrek, H. and Berger, M.L. "Measuring the effects of work loss on productivity with team production." Health Economics. 2006;15(2):111-123. Using the Nicholson-Pauly Method, our lost productivity estimates assume that for each STD claim, employers incur losses of 38% of the absent employee's average daily wages and benefits wages on top of the wage replacement costs. Lost productivity costs are not calculated for LTD on the assumption that absent employees are replaced. We

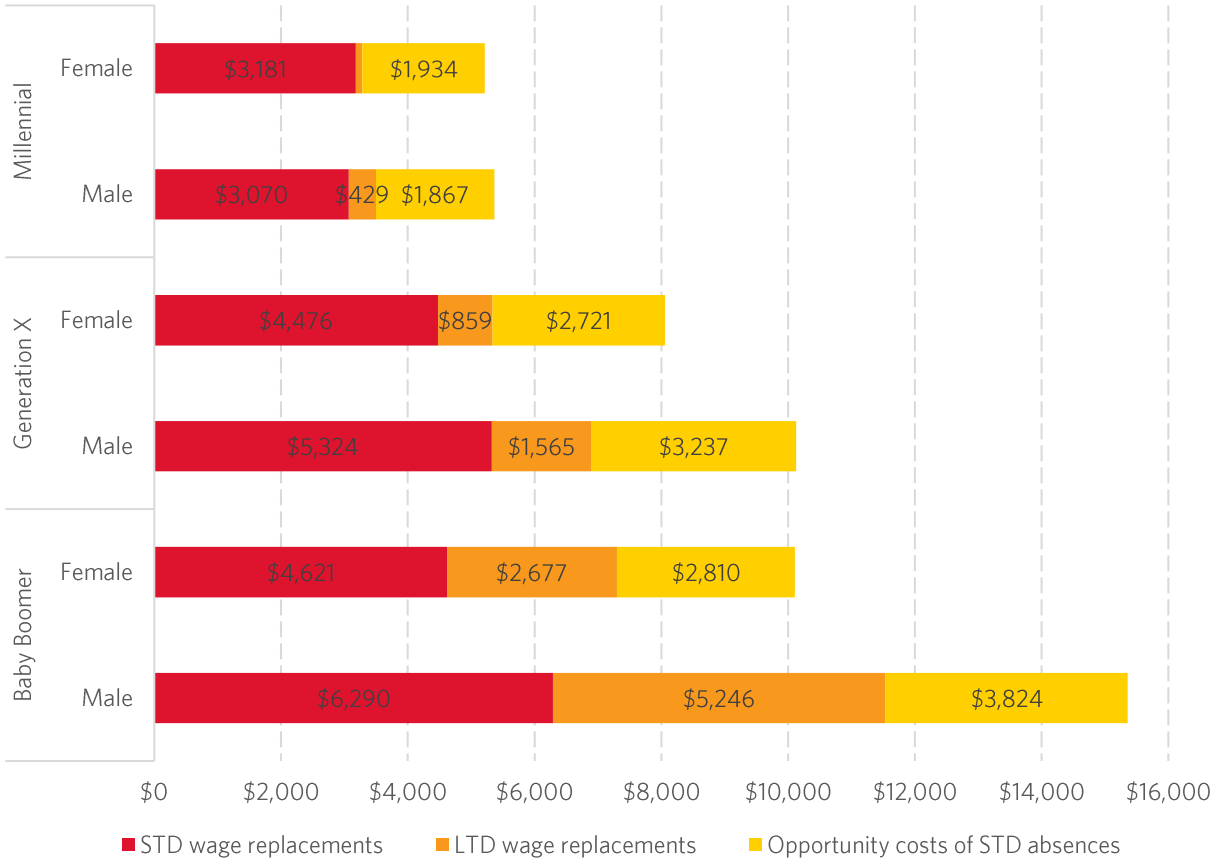
day of absence costs an employer about 138% of the absence employees daily wages—or conversely, that an employer can replace only 72% of the value of an absent workers' lost output at the cost of their normal wages.

Figure 6 shows the modeled costs of a disability incident, assuming average STD and LTD wage replacements and opportunity costs.[6] While male Baby Boomers stand out as very high cost claimants—with final costs for a disability incident expected to be around $15,000—there is nonetheless a generational trend within both males and females. Costs for female Baby Boomers (≈$10,000) are about 25% greater than the costs for Generation X females and about twice the costs for female Millennials. The ratios for male Baby Boomers' costs compared to Generation X and Millennial males are 1.5 (i.e., 50% greater) and 1.9, respectively.

estimate average daily wages and benefits on the assumption that STD wage replacements are paid at an average of 63% of wages and that employers continue to pay costs for benefits such as retirement, health premiums, and payroll taxes (at a value of 43% of wages). Average STD wage replacement rates and benefits loads come from the BLS.

[6] We assume that wage replacements for STD claims are paid at the national average of 62.5% of wages. See the BLS Employee Benefits survey for more details < http://www.bls.gov/ncs/ebs/benefits/2015/ownership/civilian/table26a.htm>. Opportunity costs are therefore estimated as (STD wage replacements ÷ 0.625) × .38. We do not attribute opportunity costs to LTD absence on the assumption that employees on LTD leave are replaced permanently by equally qualified employees.

*Figure 6: Baby Boomers have the highest cost for disability claims and males in each generation have higher costs for total disability claims than their female counterparts.*




## What does the future hold?

As mentioned above, most of the growth in the U.S. workforce over the next 10 years will occur among workers aged 55 and above. If today's younger workers experience similar claims rates and costs as their older peers as they age, the approach of this study suggests that the productivity impact of disability in 2025 will be 11% greater than in 2015. By contrast, the labor force itself will grow by only 5% over the same period.[7] This implies that illness could offset some of the productivity gains afforded by a more skilled, technologically-enabled workforce.

[7] U.S. Bureau of Labor Statistics, *Employment Projections: 2014-24* <http://www.bls.gov/news.release/ecopro.t01.htm>

# Conclusion

Because older workers have more and costlier disability leaves, the growth in disability costs to business will outpace labor force growth as the workforce ages. Employers need to recognize their workers' risk of extended disability absences in order to plan for and avoid costly productivity disruptions.

The findings of this study suggest that while younger workers tend to take disability for mental health conditions and for injuries, their risk of leave for musculoskeletal conditions and many other ailments will increase as they age. Identifying contributing factors—including workplace contributors but also health risk factors such as unhealthy body weight or sedentary behaviors—could help many employers lay the foundations for a workforce that is prepared to maintain productivity as it ages.

Understanding both the risks and the costs of leaves for older workers should also alert employers to the steps they should take to help mitigate the impact of disabilities. Not all disability leaves can be avoided. But as recent IBI research shows,[8] RTW resources and work accommodation policies can help reduce lengthy disability durations—particularly among employers that are already struggling with costly, extended claims. Given that the productivity impact of disability—and ultimately the impact on a business' bottom line—will reflect the shifting demographics of a workforce, employers can benefit from regularly reviews of their disability experiences against industry benchmarks. This will help them and their supplier partners design effective strategies that anticipate and adapt to their workers' needs.

[8] *The Value of Disability Return-to-Work Programs*, September 2016, Integrated Benefits Institute. <https://ibiweb.org/research-resources/detail/the-value-of-disability-return-to-work-programs>

# Appendix

### REPRESENTATIVENESS OF THE BENCHMARKING DATA

IBI's benchmarking claims do not come from a random sample of employer policies. We assessed the appropriateness of generalizing outcomes to the U.S. workforce by weighting the number of covered lives in each two-digit North American Industrial Classification System (NAICS) sector to match the NAICS distribution of participants in employer-sponsored short-term disability benefits in the U.S. workforce. The source for sector employment is the U.S. Census Bureau's *Current Population Survey* (CPS).[9] The source for disability participation is the Bureau of Labor Statistics' (BLS) *Employee Benefits Survey*.[10]

As Appendix Table 1 shows, the biggest difference in the benchmarking and labor force data is the overrepresentation of retail trade employees in benchmarking. Other large sectors such as health care, finance and manufacturing have roughly the same percentage of employees.

[9] Sarah Flood, Miriam King, Steven Ruggles, and J. Robert Warren. *Integrated Public Use Microdata Series, Current Population Survey: Version 4.0.* [Machine-readable database]. Minneapolis: University of Minnesota, 2015. < https://cps.ipums.org/cps/>

[10] U.S. Department of Labor, Bureau of Labor Statistics, "Life, Short-term Disability, and Long-term Disability Insurance Benefits," March 2015. <http://www.bls.gov/ncs/ebs/benefits/2015/benefits_life.htm>

*Appendix Table 1: Industry representation in labor force and benchmarking covered lives*

| NAICS sector | NAICS Code | % of total STD-eligible employees (CPS & BLS) | % of total Benchmarking covered lives |
|---|---|---|---|
| Agriculture, Forestry, Fishing and Hunting | 11 | 1.1% | 0.1% |
| Mining, Quarrying, and Oil and Gas Extraction | 21 | 0.8% | 0.6% |
| Utilities | 22 | 1.2% | 1.5% |
| Construction | 23 | 4.6% | 1.5% |
| Manufacturing | 31-33 | 17.9% | 17.6% |
| Wholesale Trade | 42 | 3.4% | 3.2% |
| Retail Trade | 44-45 | 7.9% | 18.5% |
| Transportation and Warehousing | 48-49 | 5.3% | 2.8% |
| Information | 51 | 4.3% | 6.1% |
| Finance and Insurance | 52 | 9.3% | 10.4% |
| Real Estate and Rental and Leasing | 53 | 1.7% | 1.4% |
| Professional, Scientific, and Technical Services | 54 | 9.5% | 8.1% |
| Management of Companies and Enterprises | 55 | 0.1% | 0.3% |
| Administrative and Support and Waste Management and Remediation Services | 56 | 2.5% | 2.4% |
| Educational Services | 61 | 6.8% | 4.6% |
| Health Care and Social Assistance | 62 | 12.2% | 13.6% |
| Arts, Entertainment, and Recreation | 71 | 1.9% | 0.7% |
| Accommodation and Food Services | 72 | 3.2% | 2.5% |
| Other Services (except Public Administration) | 81 | 3.1% | 1.5% |
| Public Administration | 92 | 3.3% | 2.9% |

Appendix Table 2 shows that the age and sex distribution of benchmarking claimants are relatively similar whether or not covered lives are weighted to match the sector distribution of STD-eligible employees in the U.S. workforce. For this reason, this report presents unweighted results.

*Appendix Table 2: Demographic distribution of STD claimants, unweighted and weighted for covered lives to match the sector distribution of STD-eligible employees in the U.S.*

| Demographic groups | | Unweighted | Weighted |
|---|---|---|---|
| Baby Boomer | Male | 13% | 14% |
| | Female | 13% | 13% |
| Generation X | Male | 18% | 19% |
| | Female | 31% | 30% |
| Millennial | Male | 6% | 6% |
| | Female | 20% | 19% |

### CLAIMS RATES

The claims rates for each age and generation category is defined as the ratio of new claims for each group to an estimate of the number of covered lives for each group. Covered lives are estimated by applying industry-level demographic distributions from the CPS to the number of covered lives represented by employers in the benchmarking data. For example, if male Baby Boomers comprised 15% of the manufacturing sector, and manufacturing employers in the benchmarking data covered 3,000,000 lives, then we would estimate that there are 450,000 covered male Baby Boomers in manufacturing. The total number of covered lives for an age and sex category is the sum of estimated covered lives for each industry. Both the numerator and denominator are limited to workers employed at companies with at least 100 covered lives.