



## IBI BENCHMARKING ANALYTICS

*IBI members occasionally request information about disability leaves that is not included in the standard benchmarking reports. When IBI can provide an answer that may be of interest to other members, we make the results available in a series of analytic findings.*

### WHICH DIAGNOSES DRIVE STD INCIDENCE, COSTS AND LOST TIME?

January 2019

#### Background

We are frequently asked about not only which diagnoses drive short-term disability (STD) outcomes, but also whether the impact of these diagnoses is changing over time. To answer these questions, we categorized STD claims by ICD-9/ICD-10 diagnosis code and examined results from data years 2011 through 2017.

#### Summary Findings

- The overall STD incidence rate decreased by 8% between 2011 and 2017, from about 54 to about 50 new claims per 1,000 covered lives. Six diagnosis categories consistently drive the lion's share of new claims: pregnancy, musculoskeletal conditions, injury and poisoning, diseases of the digestive system, mental and behavioral disorders, and neoplasms.
- Alone among the top six diagnosis categories, the pregnancy claims rate increased by 6% between 2011 and 2017.
- Payments per covered life decreased by 6%, from about \$216 per covered life in 2011 to about \$203 in 2017. The largest decrease (-26%) was seen among mental disorder claims. Payments for musculoskeletal, pregnancy, and neoplasm claims increased over the observed period. The largest growth (4%) occurred among pregnancy claims.
- Lost time per covered life declined by 9% from about 3.0 days per covered life in 2011 to about 2.7 days in 2017. Among the six most prevalent condition categories, the largest decrease in lost time (-14%) occurred among injury and poisoning claims, followed by mental disorders (-13%).

#### Data

The analysis was conducted using disability claims data from [IBI's disability benchmarking system](#). Each year, 15 major US disability insurers and absence management firms provide IBI with more than 6 million short-term disability (STD), long-term disability (LTD), Worker's Compensation (WC), and federal Family and Medical Leave Act (FMLA) claims from more than 65,000 employers' disability and leave management policies. Claims

include information on costs and durations of disability, as well as claim, claimant, and employer characteristics such as industry, plan design, state, date of birth, sex, and the primary diagnosis (International Classification of Diseases, 9th Revision [ICD-9] or 10th Revision [ICD-10]) or reason for leave.

## DATA PREPARATION

We include information from STD claims from 2011 to 2017. The analysis is based on 9.6 million claims from 56,690 employers.

Claims were categorized by their ICD-9/ICD-10 code into the 19 categories outlined in the ICD-10 system. Incidence rates are defined as new claims per 1,000 covered lives for all employers with at least 100 covered lives. To account for changes in the composition of employers and data suppliers in the data over time, we control for each employers' data supplier, industry, and covered lives using a multivariate regression approach. The share of claims in each category is then applied to the average claims rate to produce the diagnosis-specific claims rate.

## Results

Figure 1 shows that from 2011 to 2017, the average new claims rate fell by 8%, from about 54 to about 50 claims per 1,000 covered lives. The six categories shown in Figure 1 accounted for about three in four claims in each year. Among the categories shown, only pregnancies increased over time, from 10.3 claims per 1,000 covered lives in 2011 to 10.9 in 2017 (a 6% increase).

**Figure 1: STD Claims fell by 8% between 2011 and 2017, but pregnancies increased by 6%**

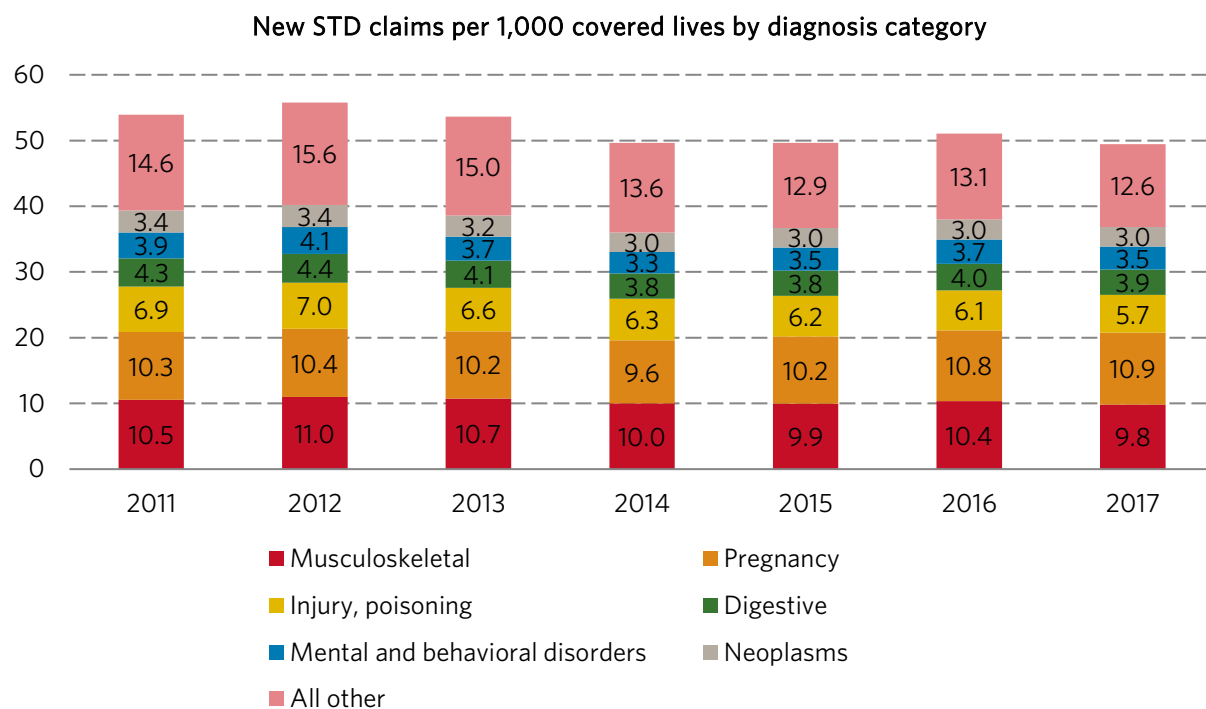


Figure 2 shows that STD payments fell by about 6% from 2011 to 2017 (from about \$216 to about \$203 per covered life). Much of the decrease occurred among the mental health category, which saw payments decline by 26%. Payments for musculoskeletal, pregnancy, and neoplasm claims increased over the observed period. The largest growth (4%) occurred among pregnancy claims.

**Figure 2: Payments per covered life decreased by 6%, primarily among mental disorder claims**

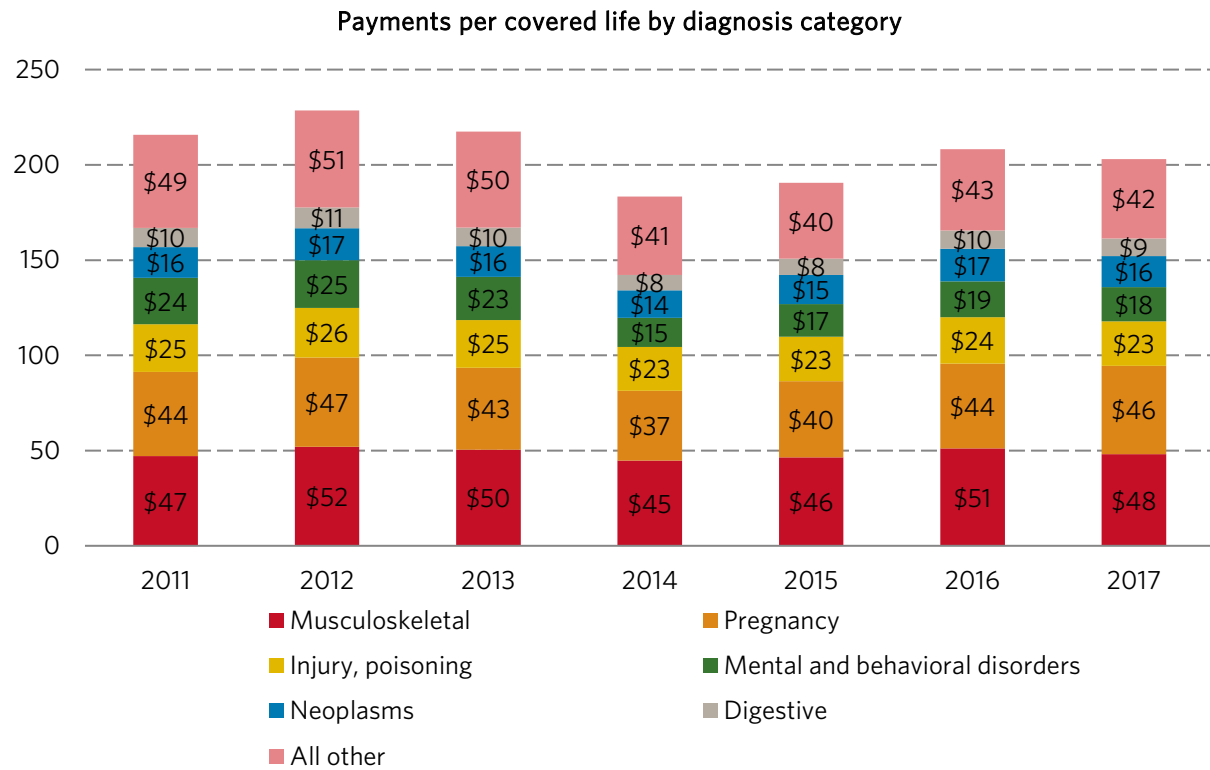
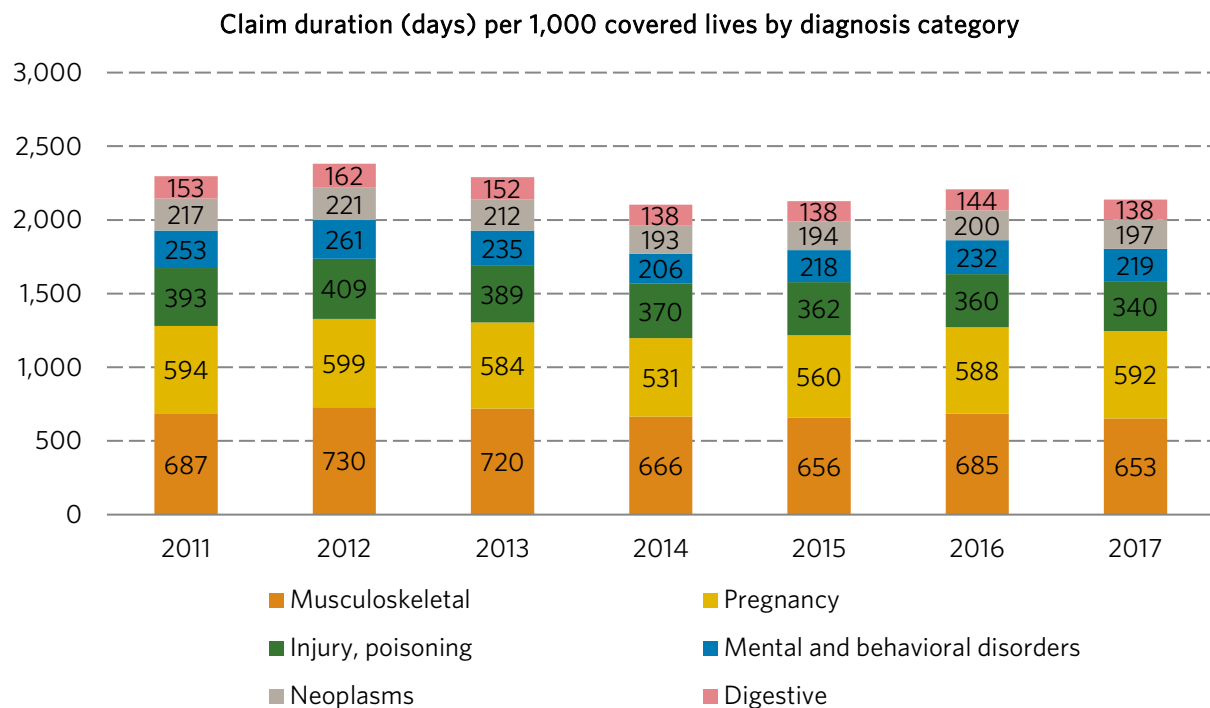


Figure 3 shows that lost time (in calendar days from the beginning of the elimination period to the closing date) for fell by about 9% from 2011 to 2017, from about 3.0 to about 2.7 days per covered life. The finding that lost time decreased by a greater amount than payments shown in Figure 2 suggests that elimination periods got longer or that wage replacements increased as a function of wage growth or plan design changes. Among the six most prevalent condition categories, the largest decrease in lost time (-14%) occurred among injury and poisoning claims, followed by mental disorders (-13%).

**Figure 3: Lost time per covered life declined by 9%, driven by decreases in injury and mental disorder claims**



*Analysis conducted January 2019 by Dr. Brian Gifford, Director of Research and Analytics and Skyler Parry, Program Director, IBI.*