

# Disability and Workers' Compensation Absences Associated with Major Depressive Disorder and the Overlap with Family Medical Leaves Among United States Employees

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## Background

- Major depressive disorder (MDD)<sup>1</sup> is a chronic psychiatric disease:
  - That affects approximately 7.1% of United States (US) adults
  - With 80% of MDD patients reporting difficulties with work, home, or social activities
- The US Family and Medical Leave (FML) Act of 1993<sup>2</sup> allows eligible employees of covered employers to take unpaid, job-protected leave for specified (person or family) medical reasons with continuation of insurance coverage as if the employee had not taken leave.
  - Once opened, an FML claim remains open for a year
  - Because FML is unpaid, some employees take an overlapping paid leave under their other benefits
- US employee benefits can have a significant impact on business performance, and generally include:
  - Sick Leave (SL) for paid time off, generally without a specific reason
  - Short- and Long-term Disability (STD and LTD, respectively) for non-work-related injuries/illnesses
  - Workers' Compensation (WC) for work-related injuries/illnesses

## Objectives

- This study aims to examine the use of paid leaves and the overlap with non-paid Family and Medical Leaves (FMLs) in US employees with major depressive disorder (MDD).

## Study Population

- US employees within the Workpartners Research Reference Database (RRDb) from 2001 to present, which contains employees in all states:
  - Medical and pharmaceutical claims for over 5.5 million employees and dependents
  - Enhanced employee demographics (including race and marital status)
  - Job-related employee information (salary, job type, full/part-time status, exempt/non-exempt status)
  - Claims with absence durations and payments for employee populations eligible for STD=1.3 million, LTD=1.2 million, WC=2.8 million.
  - Dental (21.2 million) and vision claims (12.0 million)
  - Self-assessed presenteeism records for 185,094 employees (579,042 total records)
- Workpartners RRDb has been used for research on conditions including:
  - Disability and workers' compensation trends for employees with mental disorders and substance use disorders<sup>3</sup>, cancer<sup>4</sup>, and eye disorders<sup>5</sup>
  - The impact on employees of conditions such as rheumatoid arthritis,<sup>6</sup> bipolar disorder<sup>7,8</sup>, cancer<sup>4</sup>, diabetes<sup>9</sup>, and eye disorders<sup>5,9</sup>, and multiple sclerosis<sup>10</sup>
  - Caregiver research on the impact of major depressive disorder with and without suicidal ideation<sup>11</sup>, pediatric asthma<sup>12</sup>, epilepsy<sup>13</sup>, cancer<sup>14</sup>, and multiple sclerosis<sup>15</sup>

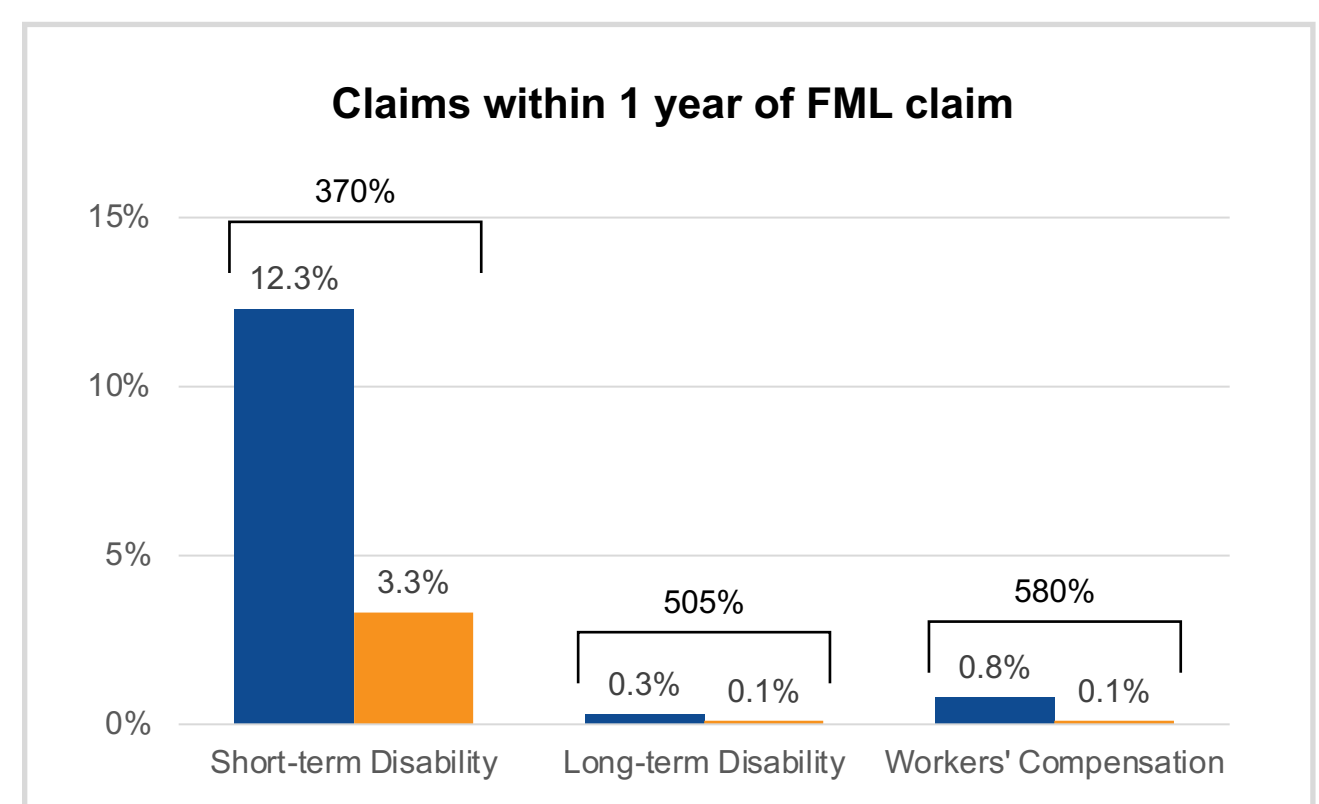
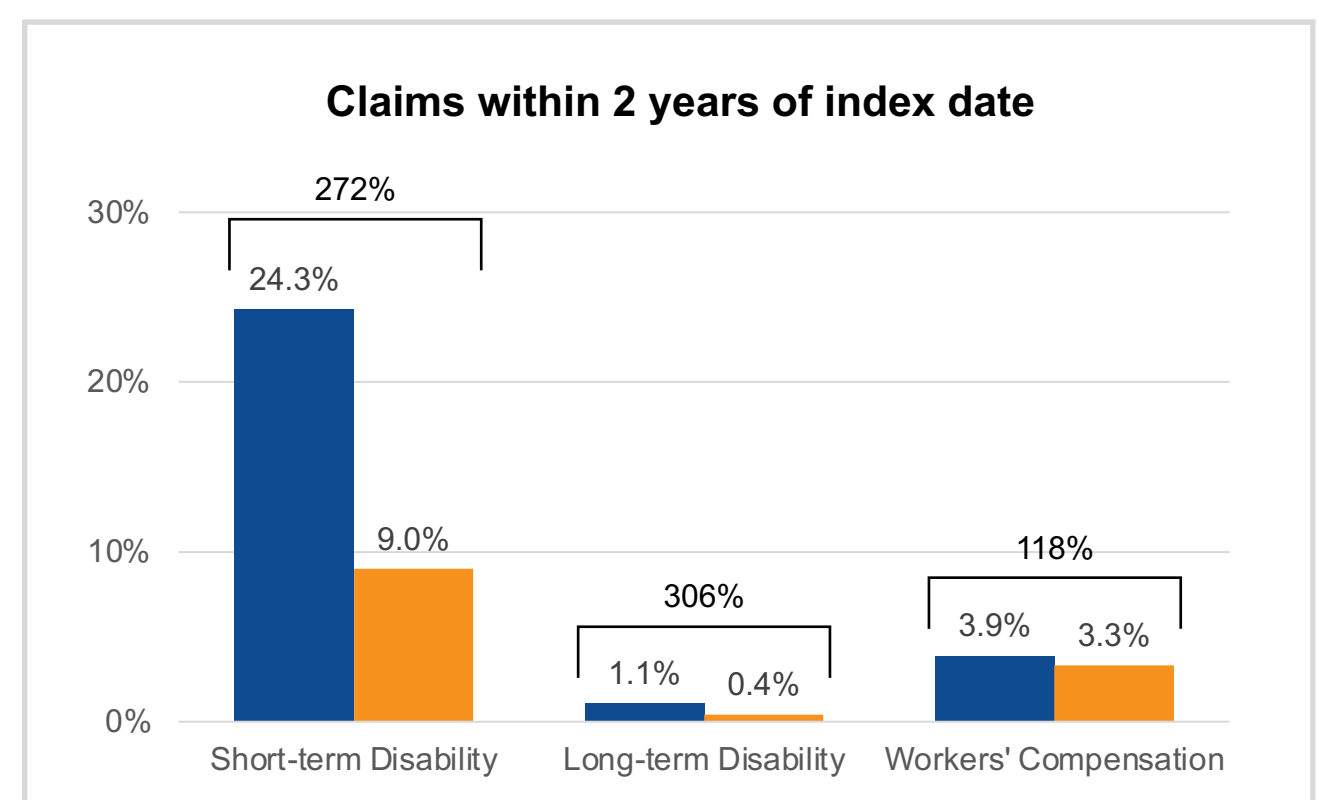
## Methods

- Retrospective analysis of US employees with two years of post MDD diagnosis.
- FML, STD, LTD, and WC eligibility between 2018 and 2022.
- Employees with MDD were identified and indexed by the initial ICD-10 code claims.
- FML utilization based on employer human resource data.
- The control group was a 3:1 random subset of employees without MDD, with an index date randomly assigned between 2018 and 2020.
- All employees had ≥2 years continuous eligibility following their index date.
- The following outcomes were evaluated and reported:
  - FML claims opened in the year after the index date
  - STD, LTD, and WC leaves initiated during the first 2 years after the index date
  - STD, LTD, and WC leaves initiated during the year following an FML leave to measure overlap
- All reported comparisons  $P < 0.01$ .

## Results

- There were 7888 employees with MDD and 23,586 controls.
- Almost 3x (277%) the FML claims were filed by those with MDD in the year following the index date. 1806 (22.9%) by those with MDD and 1950 (8.3%) by controls.

Legend: ■ MDD (N=7888) ■ Controls (N=23,586)



## Conclusions

- Employees with major depressive disorder utilize a variety of paid and unpaid leaves approximately three times more than controls.

## References

- Goetzel RH, et al. *J Occup Environ Med*. 2003 Jan;45(1):5-14
- Fact Sheet #28: The Family and Medical Leave Act. <https://www.dol.gov/agencies/whd/fact-sheets/28-fmla>
- Brook RA, et al. *Mental Health Clinician* (2021) 11 (5): 279-286.
- Brook RA, et al. *J Oncol Res Ther* 7: 10142.
- Brook RA, et al. *Am Health Drug Benefits*. 2023 [Web Exclusive]
- Kleinman NL, et al. *J Occup Environ Med*. 2013;55(3):240.
- Gardner HH, et al. *J Clin Psychiatry*. 2006;67(8):1209-18.
- Brook RA, et al. *Am J Manag Care*. 2007;13(4):179-86.
- Brook RA, et al. *Postgrad Med*. 2015 Jun;127(5):455-62.
- Hersh CM, et al. *J Med Econ*. 2021;24(1):479-486.
- Kuvadia H, et al. *Prim Care Companion CNS Disord*. 2021;12;23(4):20m02893.
- Kleinman NL, et al. *Ann Allergy Asthma Immunol*. 2009; 103(2):114-20.
- Brook RA, et al. *Am Health Drug Benefits*. 2018;11(8):396-403.
- Brook RA, et al. *J Oncol Res Ther* 7: 10143.
- Hendin B, et al. *J Health Econ Outcomes Res*. 2023 Apr 13; 10(1):91-101.

