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THE HIDDEN WAVE:

Navigating the Emerging Autoimmune Epidemic

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INTRODUCTION - AUTOIMMUNE CONDITIONS



What are autoimmune conditions?

Autoimmune conditions are a group of more than 100 chronic illnesses where the immune system mistakenly attacks the body's own organs, tissues and cells.

What is the focus of this research?

This study examines five of the most prevalent and costly autoimmune conditions:

- Rheumatoid arthritis
- Multiple sclerosis
- Inflammatory bowel diseases
- Psoriasis
- Thyroid autoimmune disorders



How are employees and employers affected?

Autoimmune conditions presents significant challenges for employers attempting to understand and manage these conditions in their workforce.





Fragmented Standards of Care

The variety of specialists that patients must see for their specific conditions can lead to disjointed and fragmented standards of care.



Under-recognized Impacts

Because each condition falls under different major diagnostic categories, they do not appear collectively in aggregated claims data.



Diagnosis Challenges

The complexity of diagnosing autoimmune conditions leads to patients appearing in claims reports with an "unspecified" diagnosis, On average, it takes about 4.5 years and visits to 4-5 doctors to receive a diagnosis.



OUR RESEARCH

This report examines the health and productivity impacts of five of the most prevalent and costly autoimmune conditions:

- Rheumatoid arthritis
- Multiple sclerosis
- Inflammatory bowel diseases
- Psoriasis,
- Thyroid autoimmune disorders.

While these conditions represent some of the major types of autoimmune diseases, they do not encompass the full magnitude and prevalence of the over 100 recognized autoimmune conditions.

Data for this study comes from:

- Agency for Healthcare Research and Quality's (AHRQ's) Medical Expenditure Panel Survey (MEPS)
- IBI's Health and Productivity Benchmarking System
- U.S. Bureau of Labor Statistics (BLS) Occupational Employment Statistics (OES) program
- National Compensation Survey.

Our analysis provides scalable cost benchmarks to assess potential savings from reducing the prevalence of symptoms, treatment costs, and illness-related absences and disability leaves.



KEY FINDINGS

Prevalence

7.2%

of employed U.S. adults received treatment for one of the five studied autoimmune conditions

2X

the incidence rate for women

Worker Absence

\$27K

in annual STD claims and up to 73 calendar

days per claimant

\$82K

in annual LTD claims and up to 67% remain on LTD for years

2X

excess sick days per year

\$800

in lost average annual wages and benefits

per employee

Comorbidities

Mental health conditions, including anxiety and depression, are among the most common and significant comorbidities in individuals with autoimmune conditions.

Excess Costs

from \$2200 to \$33,500 in excess medical and

Rx costs per employee, per year

2x-6x as expensive as average employee

16x

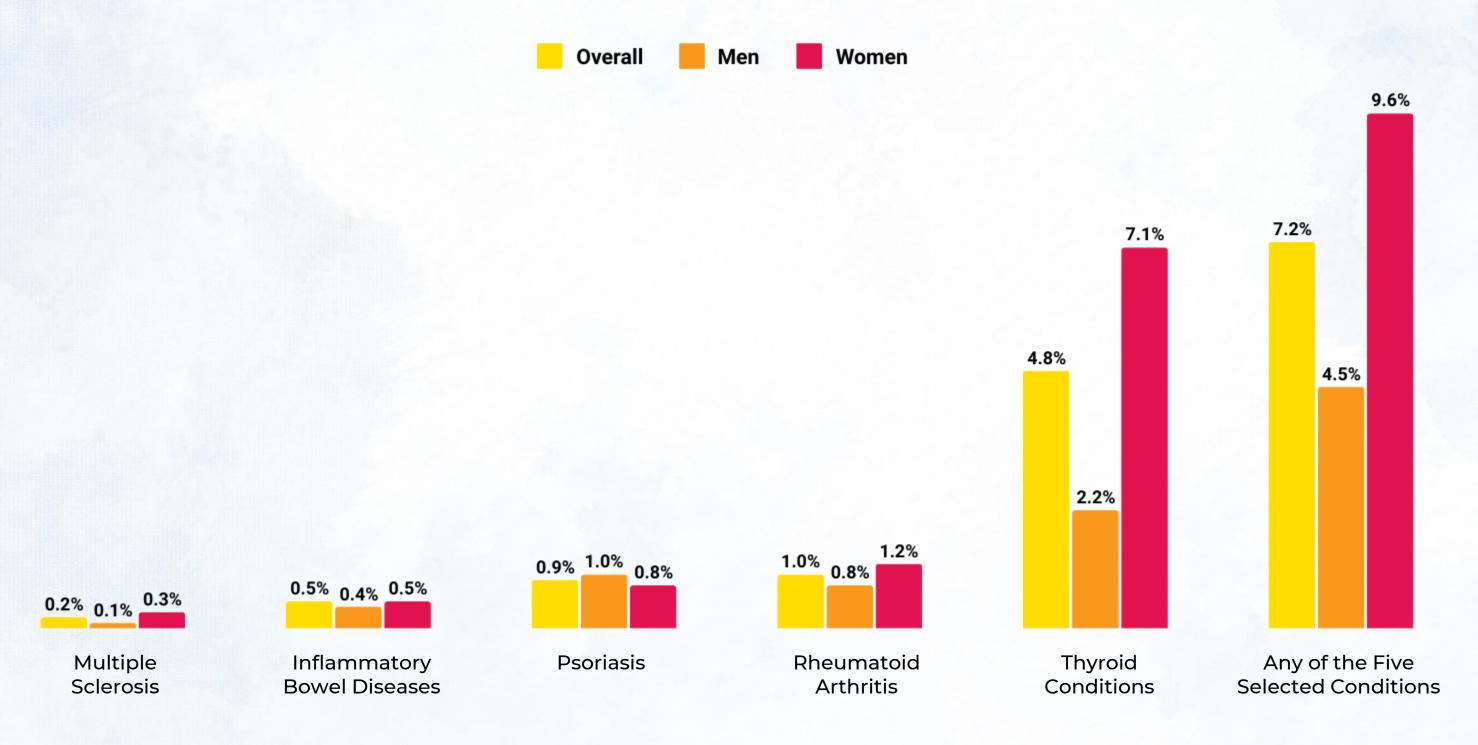
as expensive for prescription medications

\$580K in annual overall excess costs for a 1,000-

employee organization



Prevalence of Autoimmune Conditions Among Employed US Adults



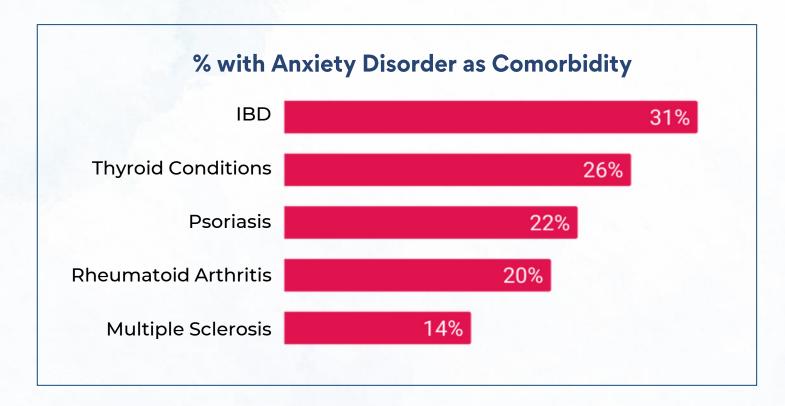
Source: Agency for Healthcare Research and Quality, Medical Expenditure Panel Study, 2021–2022.



Common Comorbidities

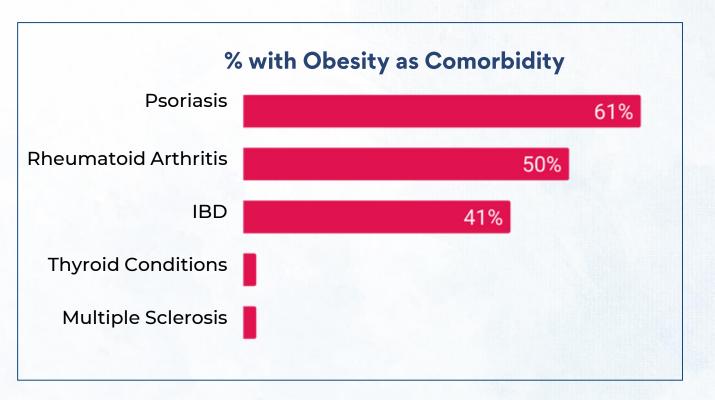
Mental Health:

- Anxiety and depression are among the most common comorbidities
- Significantly impacts quality of life and productivity



Physical Conditions:

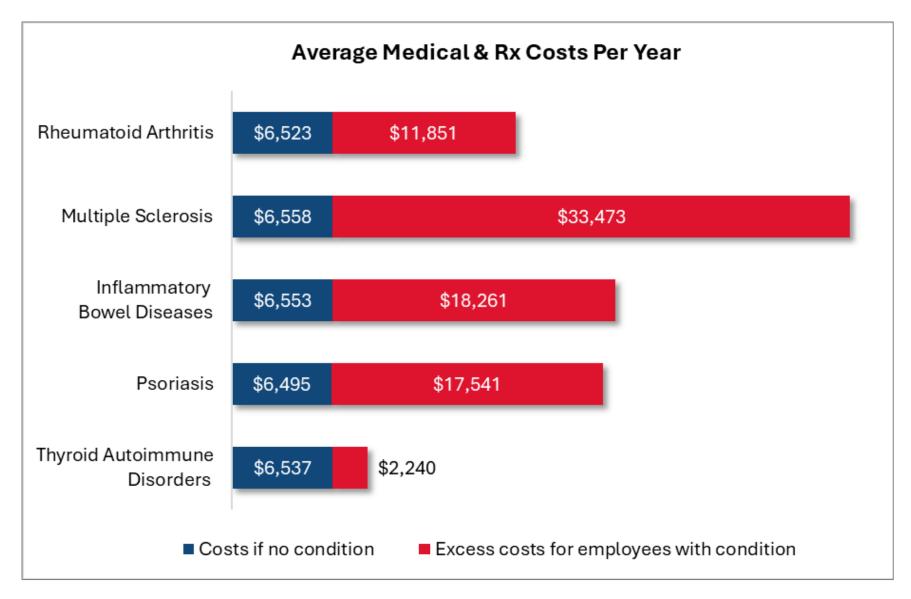
- Obesity
- Hypertension
- High cholesterol
- Arthritis (in non-RA patients)



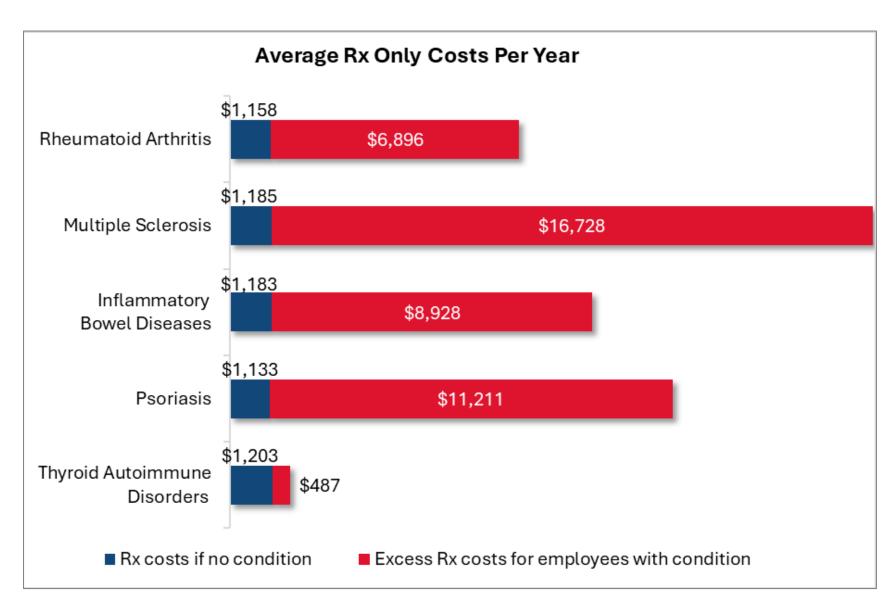


Excess Medical & Pharmacy Costs

How much are medical/Rx treatment costs for employees with autoimmune conditions?



Source: Agency for Healthcare Research and Quality, Medical Expenditure Panel Study, 2021–2022. Costs include expenses for all medical and pharmacy treatment, regardless of reason. Costs are estimated from multivariate regression models controlling for other comorbid chronic conditions.

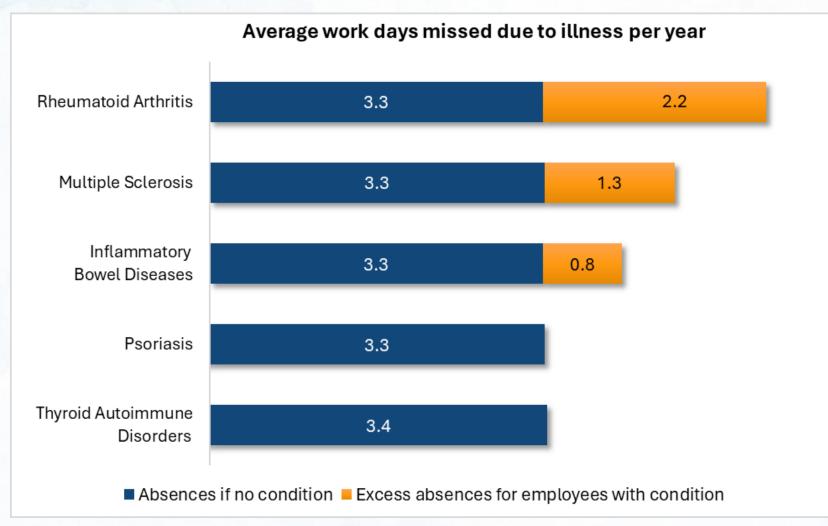


Source: Agency for Healthcare Research and Quality, Medical Expenditure Panel Study, 2021–2022. Costs include expenses for all medical and pharmacy treatment, regardless of reason. Costs are estimated from multivariate regression models controlling for other comorbid chronic conditions.



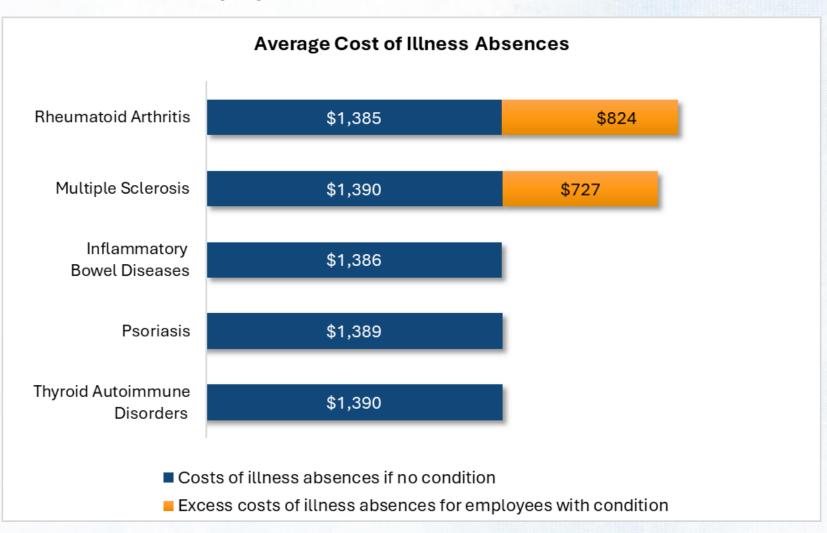
Illness Absences

How often are employees with autoimmune conditions absent from work due to illness?



Source: Agency for Healthcare Research and Quality, Medical Expenditure Panel Study, 2021–2022. Illness absences (i.e., number of 8-hour workdays missed) are estimated from multivariate regression models controlling for other comorbid chronic conditions, age, sex, race and ethnicity. See the appendix for details on the model.

What are the costs of illness absences for employees with autoimmune conditions?

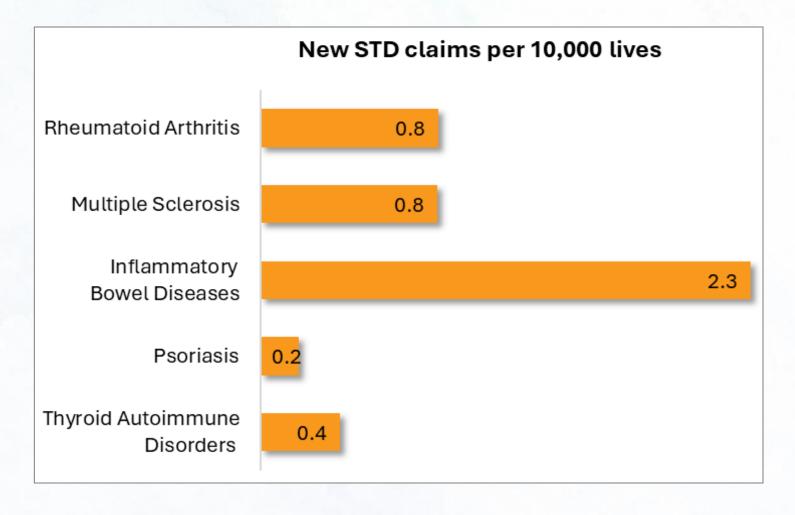


Source: Agency for Healthcare Research and Quality, Medical Expenditure Panel Study, 2021–2022 in combination with wage and benefit costs from the Bureau of Labor Statistics 2021 and 2022 Quarterly Census of Employment and Wages survey and Employer Costs for Employee Compensation data.

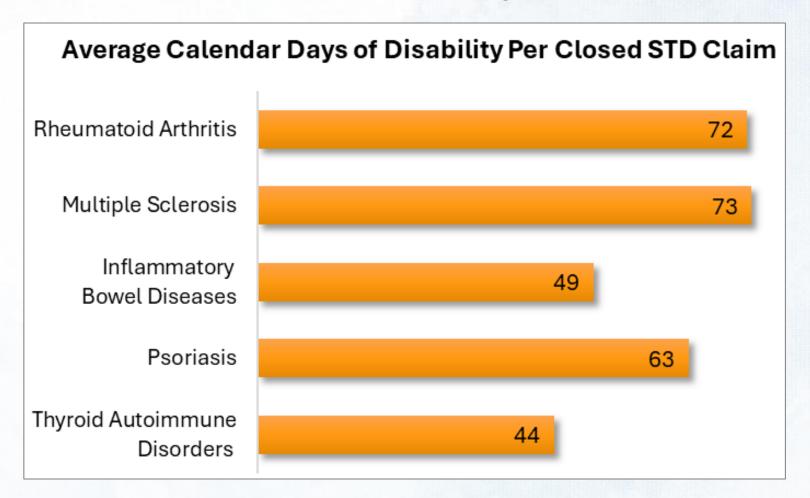


Short-Term Disability (STD) Outcomes

How often do employees take STD leave for autoimmune conditions?



How long is the average STD claimant for autoimmune conditions away from work?

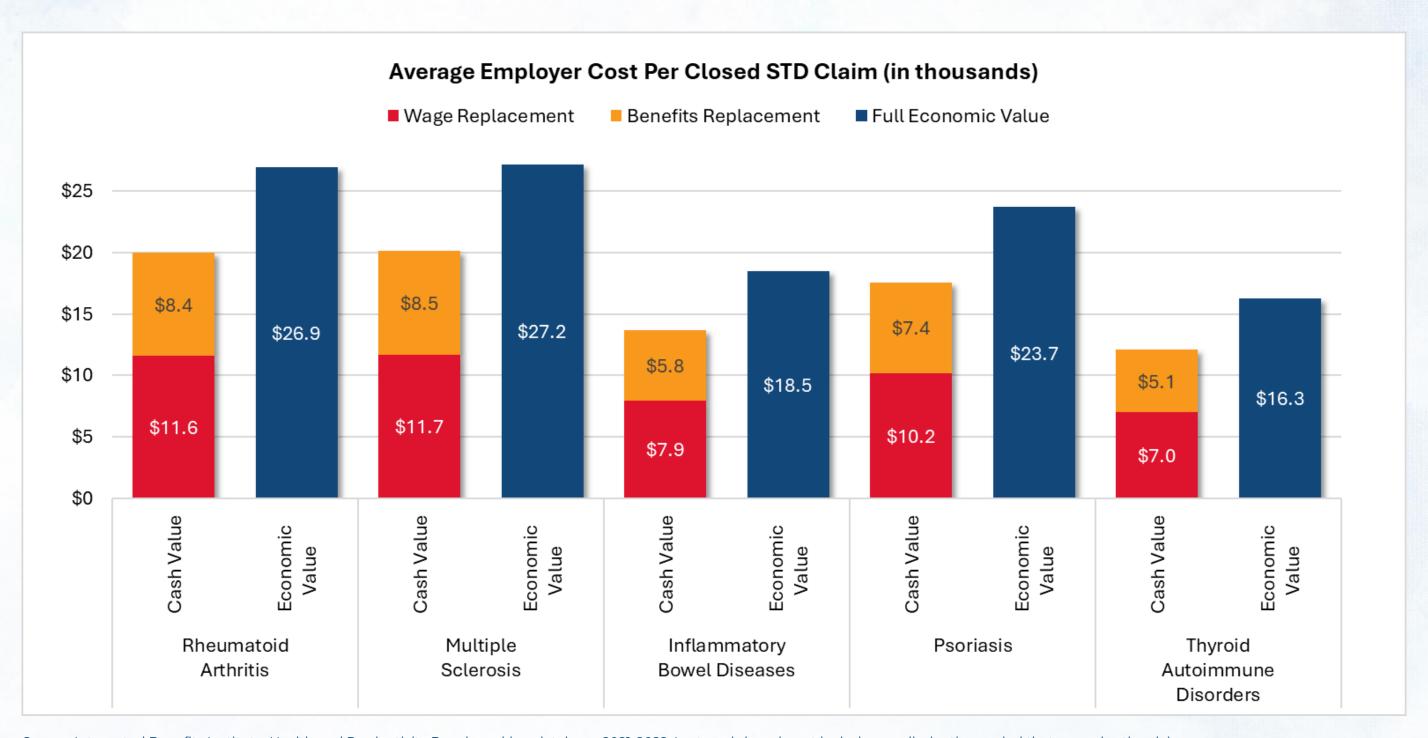


Source: Integrated Benefits Institute, Health and Productivity Benchmarking database, 2021-2022.



Short-Term Disability (STD) Outcomes

How much does the average STD claim for autoimmune conditions cost?

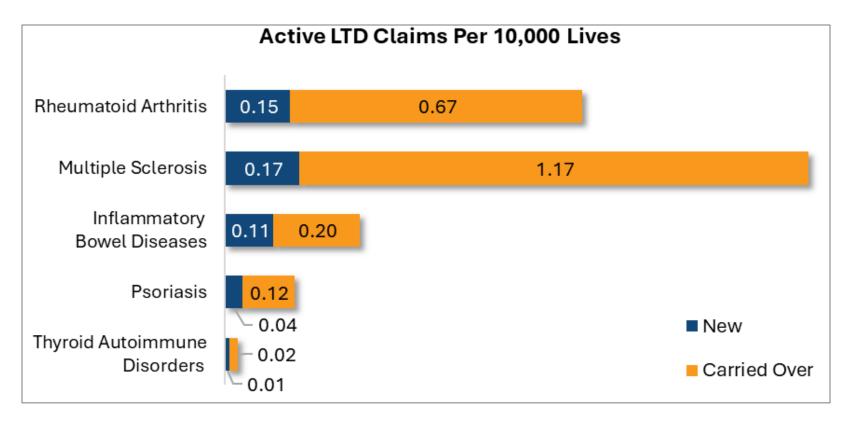


Source: Integrated Benefits Institute, Health and Productivity Benchmarking database, 2021-2022. Lost workdays do not include any elimination period that precedes the claim.

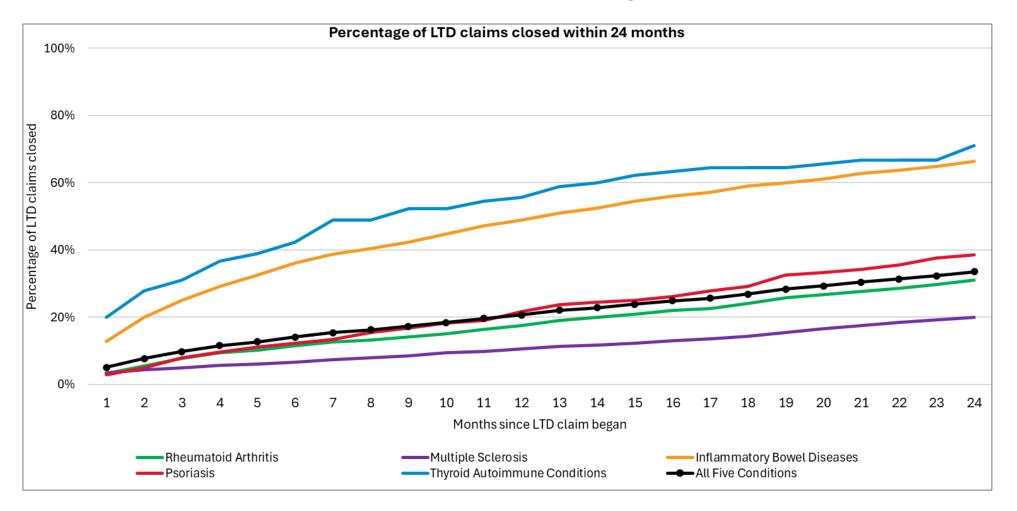


Long-Term Disability (LTD) Outcomes

How many employees are on LTD leave for autoimmune conditions over a given year?



How many LTD claims for autoimmune conditions close within two years?



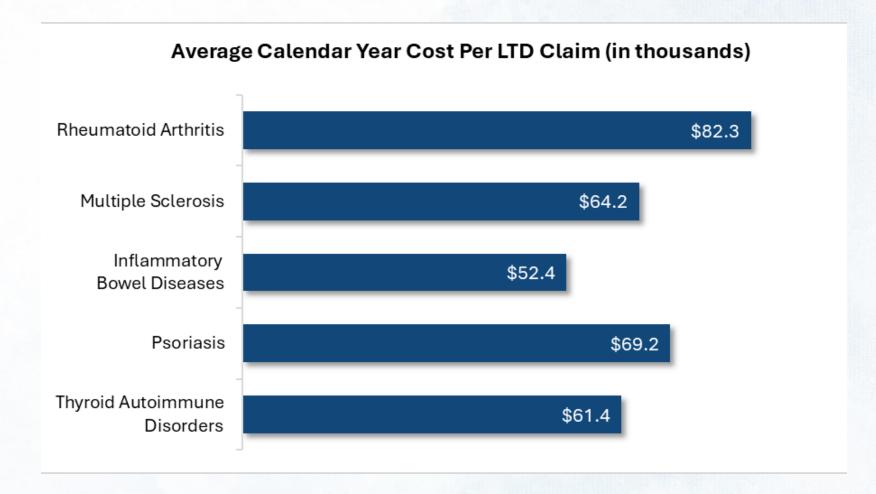


Long-Term Disability (LTD) Outcomes

How much of each work year is lost by the average LTD claimant for autoimmune conditions?



How much does the average LTD claim for autoimmune conditions cost each year?



Source: Integrated Benefits Institute, Health and Productivity Benchmarking database, 2021-2022. Days for LTD claims represent wage replacements for lost workdays occurring within 2021-2022.



Total Costs of Autoimmune Conditions

What are the estimated annual costs associated with selected autoimmune conditions in a 1,000-person workforce?

	Excess medical and Rx costs	Excess illness absences	STD claims	LTD claims	Total
Rheumatoid Arthritis	\$118.5	\$8.2	\$2.2	\$6.7	\$135.7
Multiple Sclerosis	\$66.9	\$1.5	\$2.2	\$8.6	\$79.2
Inflammatory Bowel Diseases	\$91.3	\$0	\$4.2	\$1.6	\$97.1
Psoriasis	\$157.9	\$0	\$0.4	\$1.1	\$159.4
Thyroid Autoimmune Disorders	\$107.5	\$0	\$0.6	\$0.2	\$108.3
All five selected conditions	\$542.2	\$9.7	\$9.7	\$18.3	\$579.8

Source: : Agency for Healthcare Research and Quality, Medical Expenditure Panel Study, 2021-2022; Integrated Benefits Institute, Health and Productivity Benchmarking database, 2021-2022; Bureau of Labor Statistics.

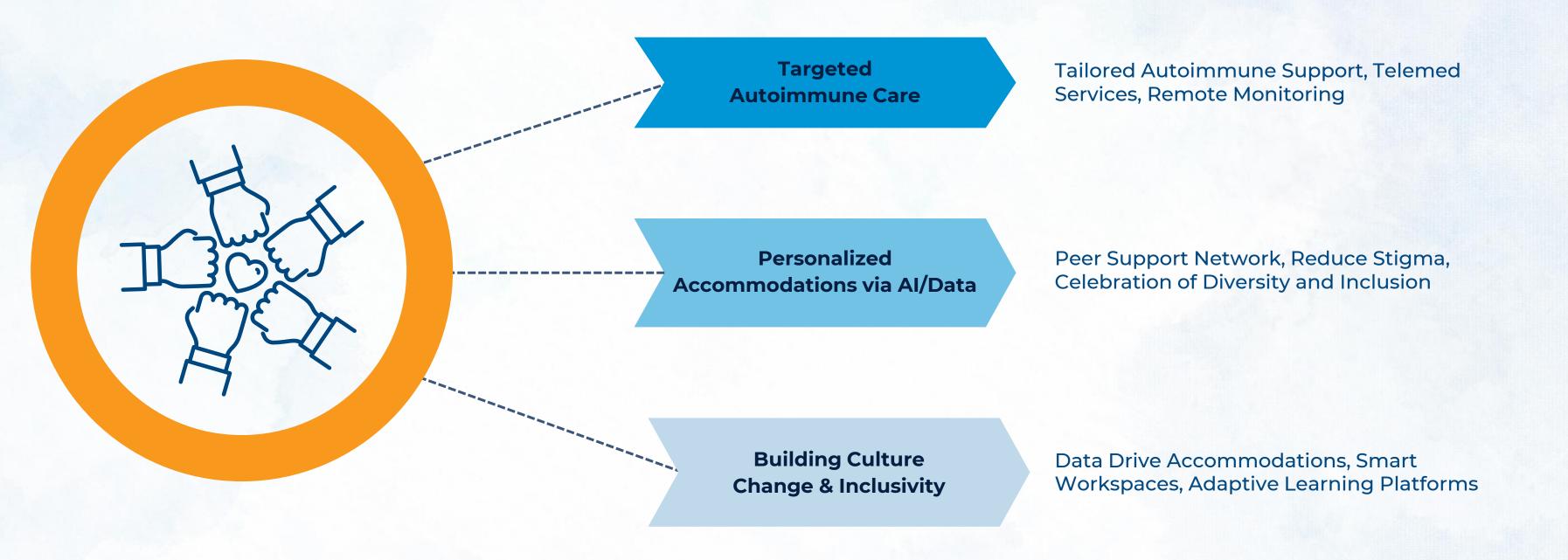


Current Interventions





Emerging Interventions









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IBI 2nd Annual Research Summit

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