

Paid Leave for Illness, Medical Needs, and Disabilities

ISSUES AND ANSWERS

AEI-Brookings Paid Leave Project

NOVEMBER 2020

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A Note from the Codirectors of the AEI-Brookings Paid Leave Project

Paid family leave is getting increased attention in the United States. At the time of this volume's publication, the United States (and world) is still reeling from the COVID-19 pandemic. The public health threat and economic fallout from COVID-19 have left many of us rethinking the relationship between health and economic security. But it did not take a pandemic for the American public to understand the importance of paid time off from work for family or medical needs. Polls show the great majority of Americans favor providing some paid time off to adults facing a medical emergency, parents needing to care for a new baby, or family members caring for a sick or elderly relative. Such policies are common in other countries and adopted by nine states and the District of Columbia in the US. Many US employers offer paid leave voluntarily. Even so, many workers, especially the lowest paid, do not have access to paid leave. During normal times, this creates challenges when parents are both breadwinners and caregivers. Amid a pandemic, it takes on increased urgency.

We established the AEI-Brookings Paid Leave Project four years ago to study these challenges. In light of various assumed goals and the relevant evidence, what should elected leaders do? This volume on medical leave, edited by Angela Rachidi and Christopher J. Ruhm, is simply the latest publication in this stream of crucial work on paid family leave. Its purpose is to provide new research and data to inform policy on medical leave specifically.

Two reports preceded this one. The first, *Paid Family and Medical Leave: An Issue Whose Time Has Come*, was released in May 2017. It focused on paid parental leave and recommended, as a compromise among the diverse opinions in the group, eight weeks of paid

leave surrounding the birth or adoption of a baby, paid for by a modest increase in employee payroll taxes and some spending cuts in other programs.

Building on that report, we released a second in September 2018, *Paid Family and Medical Leave: Charting a Path Forward*. This report focused on medical and caregiving leave. It also included new estimates of the costs of paid leave and commissioned reports on where paid leave fits in a broader social insurance or budgetary context. We concluded that we lacked sufficient data or evidence to come up with a proposed consensus solution to the issues of caregiving or medical leave. We therefore commissioned the research presented in this volume and the companion volume on caregiving leave.

In all this work, we have been privileged to work with a distinguished and diverse group of experts and scholars as authors and advisers. You will find all their names at the end of this note. We want to express our deep appreciation for their work without in any way suggesting that they all agree with the conclusions of our various reports on this issue.

In spring 2020, one of us (Aparna Mathur) joined the staff of the Council of Economic Advisers to advise members of President Donald Trump's administration on the new economic challenges raised by the pandemic, ending her work as codirector of this project. In her absence, AEI's Angela Rachidi took over to coedit this volume. We especially want to thank Angela, along with all the other staff at AEI and Brookings, who worked so tirelessly on this project and whose names are also listed below.

We hope all this work will provide a foundation for thinking more clearly about whether a national policy on paid leave is needed, what it might look like, what

it might cost, how businesses and households would be affected, and its role in providing more or better care for both the young and the elderly.

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Paid Leave for Illness, Medical Needs, and Disabilities

AN INTRODUCTION

Christopher J. Ruhm and Angela Rachidi

It is now more important than ever to facilitate labor force participation among prime-age adults while also supporting good health and well-being among workers. The United States lags behind many other advanced economies in the share of working-age people participating in the labor force.¹ Midlife adults in the US also tend to be of worse health than their counterparts in other advanced economies are, and the recent pandemic highlights the important link between good health and employment.² Now is an opportune time to assess the state of current US policy in protecting workers who get sick or disabled or face medical issues from income and job loss and to consider policies that support the health and well-being of working-age people and their families.

The chapters in this volume describe what we know and what we have yet to learn about paid sick, medical, and disability leave policies in the US. They seek to answer the following key questions: How many workers receive paid medical leave in the US, and what are their characteristics? What are usage rates among those with access to paid medical leave? How do sick, medical, and disability leave policies interact with each other? How do paid leave policies affect labor market outcomes and worker well-being? The authors could answer some of these questions, either partially or fully, but others remain unanswered due to insufficient data or the challenges associated with empirically evaluating public policies. While prior literature describes well the coverage rate of paid medical leave policies in the US, we know much less about

the extent of unmet need and the consequences of these policies, including how they affect worker health and behavior, businesses, and aggregate employment.

Workers periodically need time off from work to address health problems, short-term disability, or medical needs. These may require a few days off to recover from a sickness or several weeks to address a more serious health issue or injury. Paid medical leave policies can be complex, requiring decisions about permissible time away from work, the wage replacement rates, and the documentation required to verify an illness or medical issue, as well as decisions around who makes medical determinations. Currently, the availability of paid time off for sickness or short-term medical issues largely depends on what employers offer their workers and on the employer-employee relationships influencing these decisions. However, some cities and states across the country have mandated that businesses provide paid sick leave, and a few states operate their own temporary disability insurance (TDI) programs.

Data show that the majority of workers in the US have access to paid sick leave and short-term disability coverage through their employer, but certain groups remain less covered. Individuals with a disability that prevents employment altogether may be eligible for federal disability benefits through Social Security Disability Insurance (SSDI) or Supplemental Security Income, but the availability of paid sick leave and short-term disability can interact with and directly or indirectly influence the need to use

publicly funded long-term disability benefits. The design of short- and medium-term medical leave policies can encourage an easy transition back to work or incentivize workers to enroll in long-term disability benefits such as SSDI and leave the labor force altogether. All this raises questions about the appropriate role for the federal government in filling gaps in the existing system, including possibly establishing a federal paid medical leave policy.

The chapters in this volume inform this debate as policymakers assess the need for and potential design of a federal paid medical leave policy. We brought together leading scholars to define the different types of medical leave and policies that currently offer paid medical leave to workers and to describe these policies' current reach. The authors identify gaps in our existing knowledge and recommend future research to give us a better understanding of how these policies affect individual workers and their employers.

Ideally, a coordinated system of medical leave policies would protect workers with health issues or short-term disabilities from substantial financial hardship during periods away from work while limiting the burden on employers or taxpayers who will finance these work absences. Many perspectives exist on the acceptable trade-offs to achieve this goal, with some people more concerned about covering leave at all costs and others uncomfortable with the expense this might impose. In the end, policymakers need to weigh all the evidence and make informed decisions.

The remainder of this chapter summarizes the key points from each contribution to this volume, drawing out the issues we face and the answers we have on several questions. We conclude this chapter with our assessment of the remaining questions to answer to inform an effective paid medical leave policy.

Paid Sick, Medical, and Disability Leave Policies in the US

In the first chapter, Jack Smalligan and Chantel Boyens sketch the landscape of paid medical leave policies. Paid medical leave refers to benefits replacing a portion of wages during periods of serious medical

conditions that fall between shorter-term sick leaves and longer-term disabilities that force work stoppage for an extended period or permanently. The two primarily available forms of paid medical leave include employer-sponsored short-term disability insurance (SDI) and several state TDI programs, as well as newer state paid family and medical leave programs.

Using data from the National Health Interview Survey, Smalligan and Boyens show that the average employed adult has around four “work loss” days per year, with evidence of a modest decline over time. Conditional on using leave, around 10 percent of workers age 45–64 and 8 percent of those age 18–44 used six or more days per year. The most common reasons for using medical leave include pregnancy, musculoskeletal problems, injuries, digestive disorders, and mental health conditions. Lower-income workers use the bulk of paid medical claims, under state programs, with shorter durations but more frequent use of leaves for women than men. A significant fraction of workers report needing but not taking medical leave or taking leave without being paid for it. In contrast to evidence presented that work-limiting disabilities have remained fairly constant over time, the fraction of insured workers receiving SSDI rose steadily from 1991 through around 2013, after which it dropped slightly for reasons not well understood.

Smalligan and Boyens next describe the patchwork of employer-provided federal, state, and local medical leave laws or programs that cover some workers but leave out many others. Approximately two-fifths of workers have access to employer-provided SDI, with widely varying benefit levels and durations: Several states have provided SDI since the 1940s and 1950s, and, more recently, multiple states have offered paid family and medical leave. Leave available through workers' compensation (WC) programs, the (unpaid) federal Family and Medical Leave Act (FMLA), and the Americans with Disability Act is also described.

An exploration of special administrative challenges related to a federal (paid) medical leave program follows, including questions related to the proper duration of leave, the basis for establishing initial and continued eligibility, and the way to encourage the return to work after the disability has ended

or lessened in severity. Related to the last aspect, the authors discuss prior research providing evidence supporting the efficacy of return-to-work (RTW) policies, including information from the experiences of programs in Washington state and the Netherlands. Finally, they recommend that any new federal paid medical leave program should (1) include services aimed at helping workers initially stay at home and subsequently return to work and (2) set maximum durations to balance workers' needs for economic security while keeping program costs manageable, avoiding undue employer burdens, and maintaining labor force attachments. Based on the available evidence, they conclude that a well-designed federal SDI program would likely have only modest work disincentives while possibly improving labor market outcomes if accompanied by a robust RTW emphasis.

In the next chapter, Stefan Pichler and Nicolas R. Ziebarth focus on sick leave policies, defined as work absences up to a maximum of a couple of weeks to recover from short-term illnesses or injuries. They point out that the US is one of three Organisation for Economic Co-operation and Development countries that does not guarantee universal access to paid sick leave, instead leaving this decision to employers. While political opposition has prevented various federal proposals from passing, 12 states and 21 cities have passed sick leave mandates that typically allow for around seven days of work absence per year.

The chapter begins by distinguishing between different types of health-related leaves that may be related to work (e.g., WC) or unrelated to it (e.g., sick leave). The authors point out that because most sick leave mandates in the US have been enacted fairly recently, empirical research on their effects is limited. Nevertheless, the analyses that have been conducted suggest they impose fairly minimal burdens on businesses or labor markets while increasing coverage rates and use and reducing certain types of illnesses, probably by decreasing presenteeism at work.

Pichler and Ziebarth then delve more deeply into the details of existing paid sick leave mandates in the US, pending legal questions surrounding them, and differences in access to paid leave across types of workers. As of March 2019, 73 percent of workers had some

type of paid sick leave available from employers—but with less availability for part-time, nonunion, or low-wage workers and those employed in small firms. They further estimate that privately provided sick leave costs about 1.3 percent of gross wages, for workers with access to it, and that such workers use about 2.8 sick days per year, on average. In contrast to health insurance coverage and paid vacation days, which have shown little recent trend, paid sick leave coverage grew by around 4 percentage points from 2015 to 2017. These increases were observed for both small and large firms, in industries that previously had both low and high coverage rates, and by especially large amounts for low-wage workers.

Pichler and Ziebarth conclude with a discussion of implementation issues related to paid sick leave laws, first discussing the experiences of states that have enacted policies and then turning to a possible federal program. They make three key points. First, policymakers need to harmonize the incentives in short-term sick leave and long-term medical leave to avoid introducing work disincentives. Second, the concerns that direct employer payments of sick leave benefits induce hiring and employment discrimination are likely minimal in the US context, since benefits are financed through individual sick leave accounts. Third, the prospects for establishing a national benefit may be surprisingly favorable, despite the highly polarized political environment. However, regarding this last point, the authors note that while current reform proposals represent a step forward, they fall short of a system whereby short- and long-term medical leaves are holistic and fully integrated with each other. Finally, they argue that new paid leave systems should be integrated with the existing WC and SSDI systems (rather than replacing or fundamentally reforming them) and that, ideally, paid sick leave would be developed separately from TDI or paid family leave, with useful lessons to be learned from the experiences of several European countries.

Christine Jolls examines the effects on employment of state laws mandating that employers provide short-term disability benefits to workers whose leave occurs due to qualifying medical conditions. A distinguishing feature of this chapter is its inclusion of

a careful theoretical analysis pointing out the potential efficiency and incidence effects of such mandates and distinguishing between those directed to all employees and those targeting specific subgroups. In particular, the mandates could discourage hiring and retaining individuals at high risk of using the leaves. This may be offset by the difficulty employers may have in observing these risks and the resulting benefits for employees likely to experience periods of short-term disability, as well as possible outward shifts in the labor supply curve because employees value the benefits.

Jolls then conducts her own empirical analyses of the potential effects of mandated medical leave on employment, using March Current Population Survey data for 21–58-year-olds. She uses the presence of a state law mandating rights to medical leave *before* the federal FMLA was enacted as a source of variation in her analyses, under the hypothesis that the FMLA would affect workers in the five states that have FMLA less than it would affect those in the states without it. Jolls also shows that medical leave was the most common reason for taking time off work under the FMLA, at least in its early years after enactment.

Jolls estimates event study (generalized differences-in-differences) specifications. These models compare changes over time in labor market outcomes for individuals with and without self-reported health limitations and in states offering medical leave protections before the FMLA versus in those that did not. The results suggest that federally mandated medical leave (though unpaid) slightly reduced employment in the years immediately after its enactment but that most of these negative effects dissipated fairly quickly, resulting in no employment effects. Jolls also acknowledged that many employees received employer-provided short-term medical leave, which made much of the leave mandated under FMLA paid.

Yonatan Ben-Shalom examines the lessons from state TDI programs in helping workers return to work following an injury or illness. The chapter begins by pointing out that these individuals have little federal support to remain in the labor force, due to fragmentation of public responsibilities. He argues that states could, but generally do not, use available tools

to support workers with new health problems, such as existing public health agencies and Medicaid programs. Next, he provides a detailed overview of TDI programs in the five states that have them—California, Hawaii, New Jersey, New York, and Rhode Island—followed by a theoretical discussion of TDI’s potential effects on labor force participation. He compares the differing incentives of TDI programs and the federal SSDI program and discusses the evidence from prior analyses of how sick leave and paid family leave programs affect labor force participation.

Ben-Shalom acknowledges the dearth of research on the outcomes associated with TDI programs, such as labor force participation, but takes a deep dive into the results of two descriptive studies examining claimants in Rhode Island’s and California’s TDI programs. Here he documents greater take-up rates but shorter durations in Rhode Island, which may reflect the combined effects of lower wage replacement rates and stricter limits on weeks allowed for specific diagnoses, which more than offset the effects of longer statutory maximum durations than in California. Those exhausting TDI benefits in California were shown to be similar to those entering SSDI along several dimensions (e.g., frequency of having musculoskeletal illnesses as a primary impairment), although new SSDI awardees are older than TDI benefit exhausters and less likely to enter because of injuries.

Ben-Shalom closes the chapter by discussing important areas for future research, noting that we do not yet know whether TDI raises or decreases long-run labor force participation, which is an important question to answer for policymakers. Reductions in labor force participation could occur if TDI results in more individuals ending up on SSDI rolls, whereas increases might take place if TDI facilitates continuation in the old or other job after recovery from the illness or injury. The answer to this question likely depends on the TDI program’s specific characteristics, such as wage replacement rates, maximum benefits and benefit durations, RTW options, and proactive efforts to encourage the rapid return to work. Research is needed to examine the effects of each individually and combined. Ben-Shalom also discusses how the availability of enhanced data

would help answer these questions, citing, for example, the desirability of matching TDI data with SSDI administrative records and establishing statewide longitudinal data systems, such as those existing in Rhode Island.

The final chapter, by Andrew G. Biggs, discusses integrating private, employer-sponsored disability plans with the federal SSDI program. After an introductory framing of the issues, he contrasts the availability of short-term and long-term disability benefits to private- and public-sector workers and then examines differences in these benefits for private-sector employees as a function of industry and occupation. He next describes these private programs' characteristics, including the frequency of required employee contributions, the wage replacement rates and durations of the coverage, and the maximum benefits replaced.

Biggs then turns to a more detailed examination of the SSDI program, discussing funding mechanisms, coverage, and the nature of the disabilities that trigger payments. He describes the disability payment formula, along with simulations of the wage replacement rates for workers at different points in the earnings distribution. Following this, he details the incentives involved when integrating SSDI with private programs, highlighting not only the RTW incentives that often exist in employer-based programs but also the incentives to transition those employees to the federal SSDI program, which generally offsets employer long-term benefits dollar for dollar.

The chapter concludes by discussing specific proposals in prior literature for SSDI reforms, including (1) mandating that employers provide disability benefits for up to two years with vocational rehabilitation and workplace accommodations, (2) recasting SSDI to allow for temporary and partial disability payments, and (3) restructuring SSDI to operate more similarly to state-run WC programs. Biggs describes the specific characteristics of these reforms and the incentives resulting from them, and he views them as all worth exploring. However, he also highlights how strong labor markets can increase the employment of Americans with self-reported disability limitations and emphasizes the importance of focusing policies

on keeping disabled individuals in the workforce, rather than trying to return them to work once they have started receiving SSDI payments. This also suggests the efficacy of policies that increase the demand of employers for workers with disabilities.

While the chapters in the volume provide rich information on the characteristics of current sick, medical, and disability leave policies and some evidence of their effects, data limitations provide significant barriers to obtaining a more complete understanding of how various policies affect the individuals who experience them. However, researchers have numerous opportunities, perhaps unknown to them, to explore existing data sources to answer some of these questions. To help remedy this problem, the volume closes with a data appendix, constructed by Smalligan and Boyens, which details national surveys containing data on paid medical leave (e.g., the National Health Interview Survey, Medical Expenditure Panel Survey, and American Time Use Survey), private surveys (e.g., the IBM MarketScan Research Databases), and data on state programs plus those indicating disability prevalence and usage. The appendix also references various studies using one or more of these datasets.

Conclusion

The chapters in this volume provide a comprehensive look at the paid sick, medical, and disability leave landscape in the US. They offer several important data points on coverage rates and the characteristics of workers not covered by existing policies. We learned that paid medical leave policies cover many workers in the US, but coverage comes from a patchwork of policies offered by employers, state governments, and the federal government. This means that certain populations are less likely to receive paid sick leave and paid leave for short-term medical issues or temporary disabilities, depending on their employer, their employment status, and their location.

One common theme throughout this volume is that we still have more to learn about paid medical leave. While national surveys offer important insights into coverage and take-up rates, there is a

dearth of information about the outcomes and effectiveness of various paid sick and medical leave policies. For example, proposals to establish federal paid sick leave or medical leave policies primarily focus on expanding coverage, yet we still know little about how such policies affect hiring, aggregate employment, and the costs to businesses. Several additional areas of study emerged from the recognition that we have more to learn.

The authors offer considerations for the administrative aspects of what a federal paid medical leave policy might include, which would greatly influence the effectiveness of such policies. They also outline the potential negative and positive implications that federal paid sick and medical leave policies might have on labor force participation, offering specific guidance for further study. Further, the authors pose the theoretical impacts on labor force participation

that come from private short- and long-term disability insurance programs and their interaction with the federal long-term disability insurance system. The evidence base is also slim here, though the availability of data from private insurers could advance our knowledge. Finally, the following chapters confirm that we have more to learn about how all these policies might interact with each other, how those interactions affect worker and employer behavior, and whether different variations of policies and policy components could result in different outcomes.

While the following pages substantially advance our knowledge of paid sick, medical, and disability policies in the US, we also recognize that this volume is only a beginning. We call for a robust research agenda to further build the evidence base on this important issue and inform the most appropriate paid sick and medical leave policies for American workers.

Notes

1. Chad P. Bown and Caroline Freund, “The Problem of US Labor Force Participation,” Peterson Institute for International Economics, January 2019, <https://www.piie.com/system/files/documents/wp19-1.pdf>.
2. Bradley Sawyer and Daniel McDermott, “How Do Mortality Rates in the U.S. Compare to Other Countries?,” Peterson Institute for International Economics and Kaiser Family Foundation, February 14, 2019, <https://www.healthsystemtracker.org/chart-collection/mortality-rates-u-s-compare-countries/>.

Paid Medical Leave Landscape

TRENDS, EXISTING PROGRAMS, AND RECOMMENDATIONS FOR A FEDERAL PROGRAM

Jack Smalligan and Chantel Boyens

In the United States, whether workers have access to time off and pay to address their own serious medical condition depends on who they work for and where they live. Workers are covered by a patchwork of voluntary employer-provided benefits and federal, state, and local laws and benefits that leave many out. This system of coverage results in access to paid medical leave benefits that are not universal and vary significantly by income level, occupation, and employer size, with low-wage workers having the least access to benefits. States and localities are increasingly taking action to address these gaps and expand access to also include paid leave to care for a new child or family member with a serious health condition.

In just a few years, the number of states with enacted statewide paid family and medical leave programs has more than doubled to nine (including Washington, DC).¹ In addition, many state and local governments are providing paid sick days for workers. However, many stakeholders see a need to address these issues at the federal level to secure more universal access to benefits. In addition, the COVID-19 pandemic has spurred federal action, resulting in the first national legislation to provide emergency sick leave and paid family and medical leave to millions of workers.

In this chapter, we delve more deeply into the current landscape of paid and unpaid medical leave. In the first half, we look at trends in usage of existing public and private benefits. We start by defining paid medical leave and exploring data on trends in worker

usage of currently available benefits, gaps that exist, and the relationship to trends in long-term disability. Overall, the data show that workers' need for medical leave is modest and stable over time. However, gaps in coverage mean there is significant unmet need under current law.

With this in mind, the second half of the chapter describes the range of paid medical leave benefits currently available to some workers, including state programs and typical private-sector benefits, and federal mandates on employers to provide unpaid medical leave and accommodations for workers with temporary and permanent disabilities. We then identify three elements that are uniquely important to designing a robust paid medical leave program and provide recommendations on how those elements could be structured in the context of a new federal program.

Defining Paid Medical Leave

“Paid medical leave” is a somewhat ambiguous term that can be used differently depending on the context. One chapter in this volume provides a thorough classification of terms referencing the full array of benefits workers access to address their own medical conditions. Consistent with that chapter, we use the term “paid medical leave” to refer to benefits that replace a portion of workers' wages while taking time off to address their own serious medical condition. Medical leave falls in between shorter-term sick leave

(or sick days), which is used to address short-duration illnesses such as the common cold or routine medical care, and long-term disability, which includes conditions that force a person to stop working permanently or for an extended period, such as serious forms of cancer.

Medical leave is used to address medical conditions that temporarily affect a person's ability to work and typically last weeks or months, such as a knee injury or abdominal hernia. However, medical leave cannot simply be defined by duration, since it can also include time off that is taken intermittently to address a medical condition. For instance, one cancer patient may need four months off from work for treatment and surgery; another may need one day every week for many months to accommodate his or her treatment. Another key distinction is that individuals who take medical leave, unlike those who take long-term disability benefits, generally expect and intend to return to work after taking leave. For this reason, paid medical leave can help support continued employment, health, and well-being for workers who experience non-job-related illnesses and injuries.

The two primary forms of paid medical leave available to workers include private, employer-sponsored short-term disability insurance (SDI) and publicly financed state paid medical leave benefits. The four oldest state medical leave programs, known as temporary disability insurance programs, closely mimic private SDI by providing benefits that range from 26 weeks to 52 weeks in California. Newer state programs were enacted following the passage of the Family and Medical Leave Act (FMLA) of 1993 that provided certain workers with job-protected rights to unpaid leave.² These state programs are referred to as "paid family and medical leave" programs, and, like the FMLA, most provide 12 weeks of medical leave but vary from two weeks in Washington, DC, to 20 weeks in Massachusetts.³

In the current federal policy context, most proposals to establish a new paid family and medical leave program have also targeted a shorter benefit duration similar to the FMLA. These publicly funded paid leave programs can be thought of as an expansion of social insurance protections offered to workers. By insuring

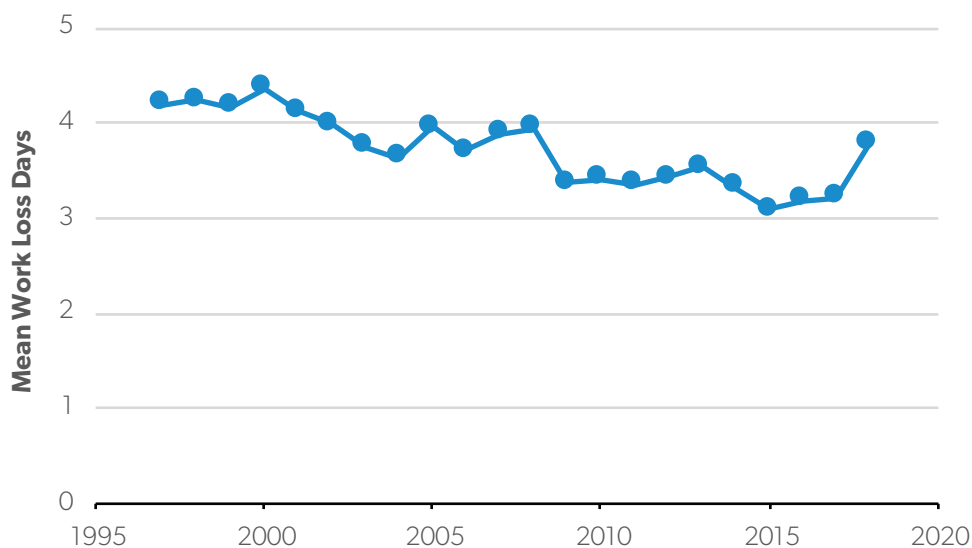
against lost wages due to the onset of a work-limiting health condition, paid medical leave can help workers weather the negative effects often associated with health and income shocks.

Trends in Short- and Long-Term Medical Leave

Paid medical leave coverage is not universal, and benefits are most often provided to workers through employer-based private insurance. This makes tracking worker access, usage, and demand for medical leave difficult since a lot of the data are proprietary. Nationally representative survey data often do not distinguish clearly between sick leave and medical leave, posing a different challenge.

Many workers are also covered by state programs; however, there are many limitations to the publicly available administrative data. To provide a better understanding of how paid medical leave is used and past trends, we use a combination of all these data sources. We also review data on long-term disability to provide context and inform discussions of how the two types of leave interact. We find that trends in the usage of short-term and long-term disability insurance are distinct. While policymakers are interested in examining potential interactions between the two, less is known about that relationship, making it difficult to draw policy conclusions.

Short-Term Medical Leave. To understand how workers use medical leave and how it has changed over time, we use data from the National Health Interview Survey (NHIS). NHIS captures worker self-reported data on "work loss" days, defined as days taken off to address an illness or injury. Work loss days can include both sick days and days of medical leave. As shown in Figure 1, the average annual number of work loss days was roughly four days from 1997 to 2018. Over this period, the average number of days taken declined modestly until 2017, before ticking up in 2018. These data show that the average amount of time taken for combined sick and medical leave is quite modest and has been stable over time.

Figure 1. Average Number of Work Loss Days Among Those Employed Age 18 and Older (1997–2018)

Note: Excludes cases with unknowns.

Source: IPUMS, National Health Interview Survey (1997–2018).

Looking only at average work loss days provides an incomplete picture, however. Workers use sick leave far more frequently than medical leave; thus, averages mask substantial variation in usage of leave by duration. As shown in Figure 2, approximately 50–60 percent of employed individuals reported taking no medical leave from 1997 to 2018, while roughly 9 percent of workers reported taking leave for six or more days.

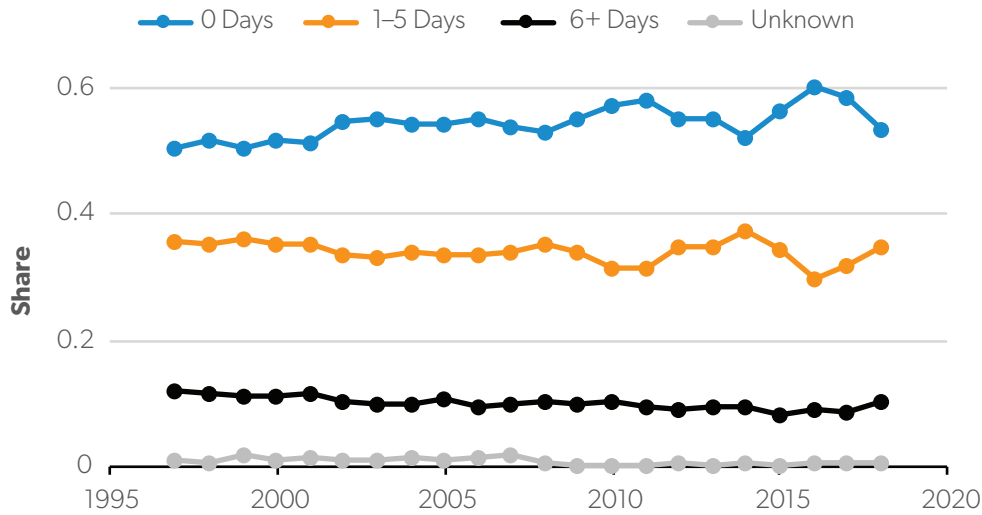
Of those who reported taking no sick or medical leave, there was little variation by age. However, older workers are more likely to report taking six or more days of leave than younger workers are. Approximately 10.4 percent of workers age 45–64 took leave lasting six or more days, compared to 8.1 percent of workers age 18–44. Workers with less education and lower incomes were also more likely to report more days of leave.⁴

Similar to the NHIS, data from private insurers also show that usage of medical leave has been flat or declining since 2011. The Integrated Benefits Institute

(IBI), a nonprofit industry research organization, gathers and analyzes data on millions of SDI claims pooled from 15 disability insurers and absence management firms, representing the bulk of the industry. In a recent report, the institute found that lost time per covered worker, per leave year, declined by 9 percent, from 3.0 days in 2011 to 2.7 days in 2017.⁵ It also found that the short-term disability claims rate decreased by 8 percent over the same period, from 53.9 claims per 1,000 covered individuals in 2011 to 49.4 in 2017.

According to IBI, the decline in the SDI claims rate occurred across all six of the most common conditions for which SDI claims were filed, except pregnancy-related claims.⁶ Pregnancy-related conditions are the most common reason for claiming SDI, representing roughly 25 percent of total claims. From 2011 to 2017, the share of pregnancy-related claims increased by 6 percent. It is not clear what has driven the overall decline in private SDI claims. The Bureau of Labor Statistics (BLS) reports that the portion of the workforce covered by private SDI has modestly

Figure 2. Proportion of Employed Workers Age 18 and Older Taking Sick or Medical Leave (1997–2018)



Note: Excludes cases with unknowns.
 Source: IPUMS, National Health Interview Survey (1997–2018).

increased during this time. It is unclear whether changes in coverage are related to this trend.⁷

Outside pregnancy-related claims, the next four most common conditions include musculoskeletal disorders (19.5 percent); injuries such as fractures, sprains, and strains of muscles and ligaments (11.5 percent); digestive disorders (7.6 percent); and mental health conditions (7 percent).⁸ A study using Truven MarketScan data found the median days of leave to be 54 days for musculoskeletal conditions, 44 days for injuries, 48 days for mental disorders, 28 days for digestive conditions, and 19 days for respiratory conditions.⁹

Publicly available data and research on state paid medical leave claims are limited and do not provide details on claims by medical condition. However, some data exist on claim rates by age, income, gender, and average duration. A National Partnership for Women & Families study using state microdata shows that in New Jersey and Rhode Island (the two states for which data are available), lower-income workers make up the bulk of paid medical leave claims,

representing roughly two-thirds and three-quarters of all medical leave claims, respectively.¹⁰ In New Jersey, workers with incomes under \$50,000 represent about 55 percent of the workforce and about 67 percent of all medical leave claims. In Rhode Island, those figures are 63 percent and 74 percent, respectively.

This pattern of medical leave benefit claiming among low-income workers is striking because these workers are underrepresented as a share of claims for parental and caregiving leave. While higher-income workers receive larger benefits because of their higher earnings, these claiming rates suggest that the state programs are helping a significant share of the low-income workforce. In addition, since medical leave claims represent the bulk of all paid leave claims costs, this pattern of claiming could significantly affect the extent to which the program is progressive overall.

Looking at the state data on duration of leaves shows that, overall, the duration of benefits is longer for older workers and men, while women file twice as

many medical leave claims as men do.¹¹ The average duration of state medical leave claims not only ranges from 9.3 weeks to 16.4 weeks but also reflects variation in the maximum length of leave allowed in each state, as shown in Table 1.

Rhode Island provides more detailed data on claims by duration of leave. According to its administrative data, nearly three-quarters (roughly 73 percent) of all claims were for 12 weeks or less. In addition, recently released estimates by Social Security actuaries and the Congressional Budget Office assume that the average duration of medical leave claims under the Family and Medical Insurance Leave (FAMILY) Act would be roughly two months.¹² The FAMILY Act would provide up to 12 weeks of paid family and medical leave to workers in all states.¹³

Table 1. Duration of State Temporary Disability Insurance Claims (Weeks)

	Average	Maximum
California	16.4	52
Rhode Island	10.3	30
New Jersey	9.3	26

Source: National Partnership for Women & Families, *Meeting the Promise of Paid Leave: Best Practices in State Paid Leave Implementation*, 2019, <https://www.nationalpartnership.org/our-work/resources/economic-justice/paid-leave/meeting-the-promise-of-paid-leave.pdf>.

The data described above shed light on current usage of paid medical leave by workers with access to benefits but do not help assess the ability to take leave or true demand for paid leave. The 2017–18 American Time Use Survey found that 20.7 percent of workers took leave for their “own illness or medical care” in the past week, which includes both sick and medical leave. Of the leave taken, almost two-thirds was paid, a third was entirely unpaid, and 2.4 percent was a combination of paid and unpaid leave. Overall, 8.7 percent of workers identified as needing to take leave but not taking it. Of those who did not take the leave they needed, 35.8 percent said the needed leave was to address their own illness.¹⁴

A 2012 survey of employees at work sites covered by the FMLA similarly found a significant portion of

workers who took leave but did not receive pay. The survey found that 15.6 percent of employees were provided no pay while on leave.¹⁵ Approximately 9.3 percent of employees were provided full pay, and 26.3 percent of employees were provided partial pay. The largest group of employees, 47.9 percent, reported some other pay policy being in effect, such as requiring workers to use accumulated paid time off balances.

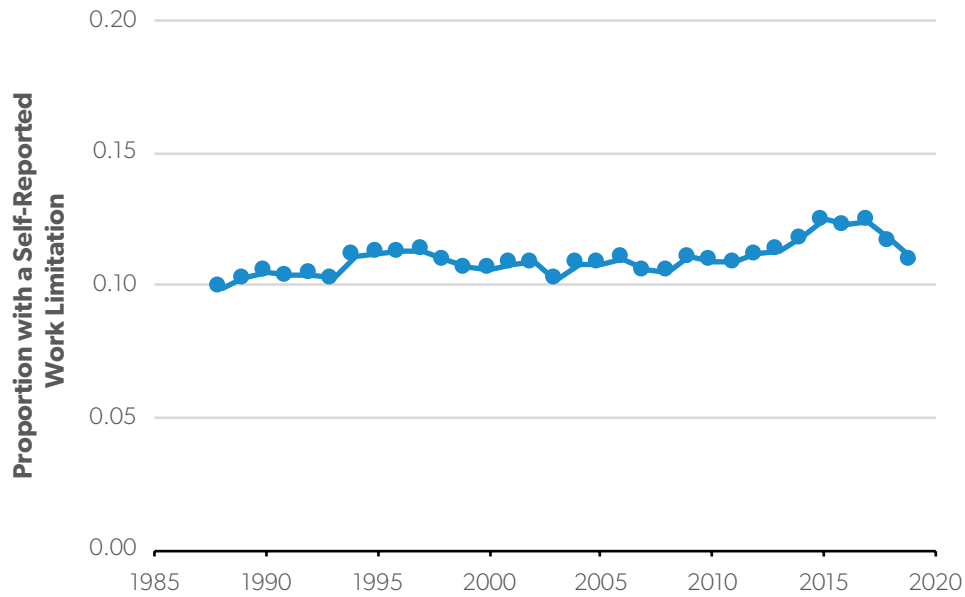
In addition to the FMLA survey data, research on presenteeism, or “working while sick,” also suggests a significant unmet need for paid medical leave. For example, some studies have shown that lack of access to paid sick leave prevents many people from taking the time off they need to address their own health condition and increases the frequency with which a worker goes to work while ill.¹⁶ Experts estimate that three million workers go to work sick every week in the US.¹⁷ Presenteeism has been estimated to have a greater cost to employers than absenteeism has.¹⁸

Long-Term, Work-Limiting Disabilities. The prevalence of serious, long-term, and work-limiting disabilities is distinct from the prevalence of short-term temporary disabilities. Medical leave to address an injured knee may require a short work absence, whereas a serious back injury or degenerated disk could limit the length of time a person can stand and therefore limit his or her ability to continue working in certain jobs long term.

As shown in Figure 3, since 1988, the percentage of non-elderly adults who report having a disability remained fairly stable at around 11 percent, with a temporary increase from 2012 to 2017. However, most fluctuations in the overall rate can be explained by the aging workforce and from baby boomers reaching age 62 and gradually leaving the workforce. As shown in Figure 4, the age-specific rates remain largely flat.¹⁹

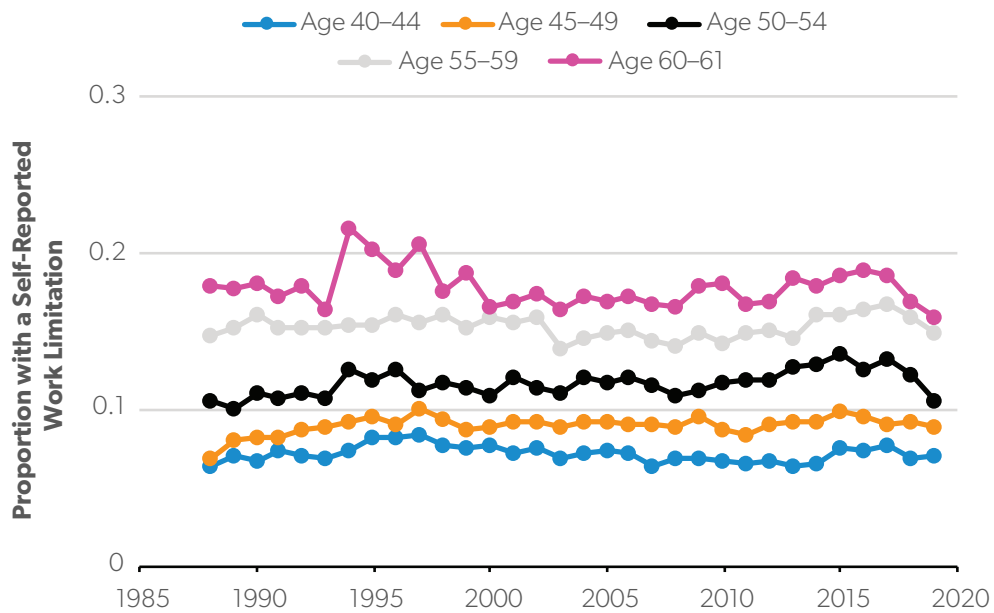
Another measure used to track trends in long-term disabilities is the participation rate in the Social Security Disability Insurance (SSDI) program. The SSDI program provides benefits to workers and certain family members if the worker becomes disabled for at least 12 months or has a condition that is expected to result in death. The number of people receiving SSDI

Figure 3. Self-Reported Work Limitation Disabilities (1988–2017)

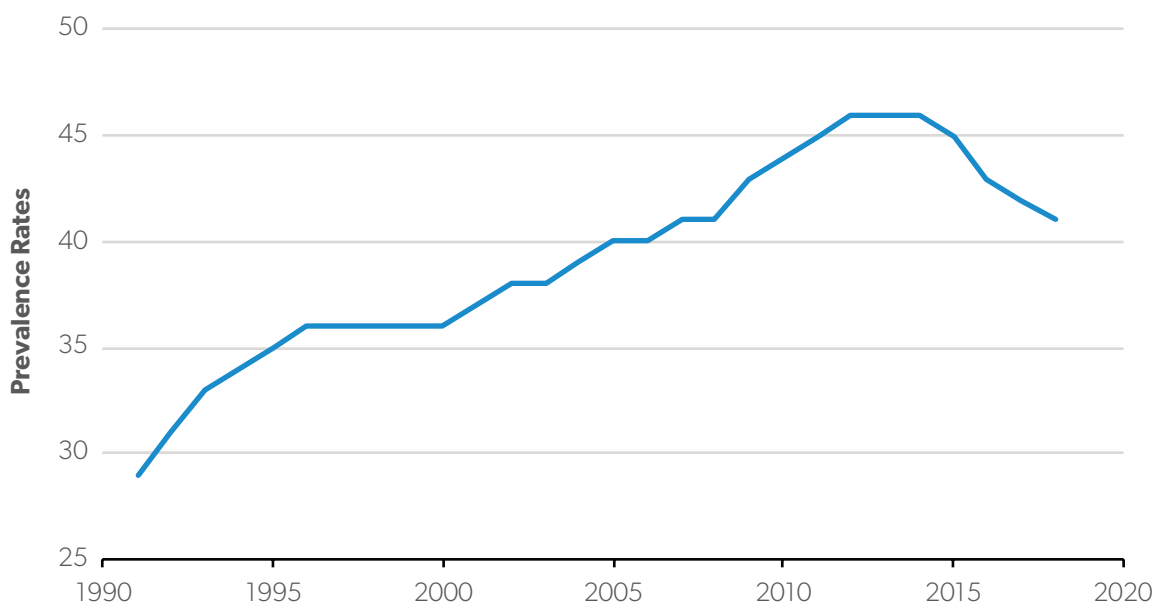


Source: IPUMS, Current Population Survey (1988–2019).

Figure 4. Self-Reported Work Limitation Disabilities by Age (1988–2017)



Source: IPUMS, Current Population Survey (1988–2019).

Figure 5. Insured Workers Receiving Social Security Disability Insurance Benefits

Note: Age- and sex-adjusted prevalence rates per thousand persons insured for disability benefits.

Source: Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds, *The 2019 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds*, Table V.C5, <https://www.ssa.gov/OACT/TR/2019/tr2019.pdf>.

benefits has increased in absolute numbers, from 3.2 million in 1991 to 8.5 million in 2018.²⁰

However, factors behind growth in the program have been widely debated. Many experts now describe the trend as having two distinct components: programmatic and demographic changes. Growth in SSDI participation in the early 1990s has been attributed primarily to legislative and regulatory changes in the 1980s that expanded eligibility, including for applicants with mental health conditions and conditions that required estimating the severity of pain, while later growth is largely attributable to changing demographic factors and short-term economic factors.²¹ Figure 5 shows the change in SSDI participation from 1991 to 2018 adjusted for two demographic factors:

- *Growth in Women's Labor Force Participation (LFP)*. Initially, as women's LFP increased, their application rates lagged behind their male counterparts, but as women worked longer careers, their participation in SSDI grew on par with men's.

- *Aging of the Workforce*. Older workers are more likely to acquire a disability.

The gradual rise in the Social Security full retirement age (FRA) has also been a factor. Individuals on SSDI transition to retirement benefits at their FRA. As the FRA increases, more beneficiaries stay on SSDI longer, leading to higher participation.

Most recently, the program experienced a significant decline in participation, returning to prerecession levels. The drivers behind the decline, which has exceeded the Social Security actuaries' projections that already account for economic factors, are not yet fully understood. A range of internal management changes could have reduced the likelihood that an applicant will be allowed.²² Short-term economic factors also could have played a greater than expected role in program participation.

Some workers who entered the program during the Great Recession may have simply accelerated their entrance into the program, so some recent reductions

in applications may be temporary. Because of these developments, the financial solvency of the SSDI trust fund has been extended beyond 2022, as projected just a few years ago, to 2052 in the latest Social Security trustees report.²³

Overall, the trends on short-term medical leave and long-term chronic disability appear to have little relationship to each other. Over the past decade, self-reported rates of disability have increased with the aging labor force, but the use of existing short-term medical leave has either declined or been flat. Trends in short-term medical leave for workers with access to it do not necessarily have to be consistent with rates of chronic disability among the overall adult, non-elderly population. Workers without a disability may be relatively healthier or benefit from improved medical care. Meanwhile, the rate of serious functional limitations in the overall population may be modestly increasing due to the aging workforce.

Existing Medical Leave Benefits

As noted earlier, the US has a patchwork of sick leave, paid and unpaid family and medical leave, short- and long-term disability insurance, and occupational illness and injury insurance. Moving forward, we summarize each type of benefit and provide a comparison of benefits between private SDI and publicly financed medical leave benefits, which share many common features. Workers' compensation (WC) is a form of paid medical leave for work-related injuries but is distinct in several ways and described separately.

Paid medical leave programs also have important interactions with federal employer mandates to provide unpaid family and medical leave and accommodations for persons with disabilities. We provide an overview of relevant FMLA rules and recent developments related to the Americans with Disabilities Act (ADA) that expand the right to unpaid medical leave.

Private SDI. Approximately 42 percent of workers have access to employer-provided paid medical leave for serious medical conditions through SDI.²⁴

Employers that provide SDI often purchase insurance from a private carrier, though some choose to “self-insure” for this benefit.²⁵ SDI plans provide benefits that replace a portion of lost wages while the worker is on leave due to a serious medical condition.

The level of wage replacement and duration of benefits can vary widely. For example, the BLS National Compensation Survey finds that two-thirds of SDI plans in 2018 offer a maximum benefit duration of 26 weeks, while a third offers shorter periods ranging in most cases from 12 weeks to 20 weeks.²⁶ Wage replacement rates vary from 50 percent to 100 percent, and the median plan had a 60 percent wage replacement rate and a \$637 maximum weekly benefit.²⁷

In addition, the median SDI plan in 2018 included an unpaid, seven-day waiting period, sometimes referred to as an “elimination period.”²⁸ Employees must often complete a length of service requirement before becoming eligible for benefits, though in most plans, it is one month or less.²⁹ High-wage workers are much more likely to have access to SDI than low-wage workers are, with 54 percent of the top quartile of workers having access, compared to 19 percent of workers in the lowest quartile. Additionally, some employers offer long-term disability insurance (LTD) that picks up when SDI benefits are exhausted.

Publicly Financed Paid Medical Leave Programs. The first state-based programs to provide paid leave to address a worker's own serious medical condition were developed in California, New Jersey, New York, and Rhode Island. These SDI programs were established within existing unemployment insurance systems in the 1940s and 1950s.

Beginning in the early 2000s, and more than a decade after the passage of the FMLA, states with SDI programs also began expanding their programs to allow workers to take paid time off to care for a new child or a close family member with a serious health condition, among other reasons.³⁰ The SDI programs already included pregnancy-related conditions under a worker's own serious health condition.

Following these states' lead, several other states joined the movement toward providing comprehensive paid family and medical leave benefits. In 2020,

Washington state and Washington, DC, both began paying benefits from their programs. Connecticut, Massachusetts, and Oregon have also enacted legislation and will begin paying benefits over the next three years. Meanwhile, more states are actively considering legislation.

Table 2 describes key features of typical private SDI benefits and existing state SDI programs. The newer state programs adhere more closely to the FMLA's mold by providing benefits that are somewhat shorter in duration than are the older public SDI programs and typical private SDI plans. Three of the newly enacted paid medical leave programs offer benefits up to 12 weeks (with certain conditions allowed more time), while Washington, DC, provides benefits for up to two weeks and Massachusetts up to 20 weeks. The older state SDI programs have benefit durations ranging from 26 weeks to 52 weeks.

The newer programs and California have also adopted progressive benefit formulas that replace a larger share of earnings for low-wage workers. Maximum weekly benefits range from \$170 in New York to \$1,300 in California and are usually pegged to growth in average state wages. Almost all programs include an unpaid, seven-day waiting period. Only some include job protections (in addition to those available under FMLA or other state laws) that guarantee a worker's right to return to his or her job after taking leave.

Workers' Compensation. WC provides resources for wage replacement, medical care, and rehabilitation to workers who are injured on the job or become ill from a work-related cause. In contrast, public medical leave programs cover non-workplace-based illnesses and injuries. In 2016, WC policies covered 138 million workers and paid \$61.9 billion in benefits, divided evenly between cash benefits and medical expenditures.³¹ While WC is a type of medical leave program, it differs from the state SDI and private SDI programs described above in several important ways that make comparisons difficult.

WC is a largely employer-funded, state-supervised program with only limited federal oversight by the Department of Labor. Worker access to WC benefits and services depends on the state-specific

requirements for employers, and these rules vary widely depending on where a worker lives. Unlike SDI benefits, WC program benefits have declined substantially over the past 25 years. Cash benefits peaked in 1991 at an average of \$0.99 per \$100 in wages for covered workers, dropping to \$0.41 in 2016, accompanied by a more modest drop in medical benefits.

Some of the drop in expenditures reflects the changing work environment and reduction in workplace injuries. The incidence of injuries or illnesses requiring days away from work or a job transfer dropped from 8.1 cases per 100 full-time workers in 1995 to 3.0 cases by 2015.³² However, some reductions also appear to be from states making their programs less generous and more difficult to access.³³

Several distinct programmatic features are also embedded in WC. For example, employers are subject to experience rating based on the number and cost of claims filed. Employers face higher costs as the number of claims go up, creating an incentive for employers to reduce real and reported illness and injury rates.

Given the workplace origin of the illness and injury, workers often have greater legal rights than with other programs. With serious, permanent conditions, the program can involve extensive litigation. While the federal government has minimal oversight of state WC policies, every state must have at least a basic WC legal framework for its state.

Unpaid Medical Leave, Job Protection, and Accommodations. FMLA provides a legal right to 12 weeks of unpaid leave for parental, caregiving, and medical leave for covered workers. FMLA applies generally to employers with 50 or more employees in a 75-mile radius. Workers are eligible to take FMLA leave if they have worked for their employer for at least 12 months and completed 1,250 hours of service.

The FMLA also ensures that employees have the right to return to their employer in the same job or one similar. Medical leave is the most common reason for taking FMLA leave, representing 55 percent of the reasons for taking leave.³⁴ Later in this volume, Christine Jolls examines whether the enactment of the FMLA in 1993 depressed employment for individuals reporting work-limiting conditions.

Table 2. Comparison of Paid Medical Leave Benefits: Private Short-Term Disability Insurance and Existing State Programs

	Typical Short-Term Disability Insurance Plan	Rhode Island	California	New Jersey	New York	Washington	District of Columbia	Massachusetts	Connecticut	Oregon
Maximum Benefit Duration (Weeks)	26*	30	52	26	26	12**	2	20	12**	12**
Average Duration (Weeks)**	—	10.3	16.4	9.3	—	—	—	—	—	—
Wage Replacement Rate (% of Average Weekly Wages)	60%****	60%	Low earners: 70% All others: Greater of 23.3% of state average wage or 60% of wages	85%	50% (benefit capped at \$170/week)	90% of earnings up to state average wage + 50% of wages above that	90% of wages up to 150% of state minimum wage + 50% of wages above that	80% of wages up to 50% of state average wage + 50% of wages above that	95% of wages up to 150% of state minimum wage + 60% of wages above that	100% of wages up to 65% of state average wage + 50% of wages above that
Current Maximum Benefit (Dollars per Week)	\$633*****	\$667	\$1,300	\$667	\$170	\$1,000	\$1,000	\$850	\$780	120% of state average weekly wage
Average Benefit (Dollars per Week)	—	\$500	\$622	\$465	—	—	—	—	—	—

Note: Shaded states have enacted legislation but are not yet paying benefits. Hawaii also operates an employer-based temporary disability insurance program. For more information, see State of Hawaii, Disability Compensation Division, "About Temporary Disability Insurance," <https://labor.hawaii.gov/dccd/home/about-tdi/>. *US Bureau of Labor Statistics, "Employee Benefits Survey: Short-Term Disability Plans: Duration of Benefits," <https://www.bls.gov/ncs/ebs/benefits/2017/ownership/gov/table25a.htm>. **Program provides an additional two weeks for pregnancy-related health needs. ***National Partnership of Women & Families, *Meeting the Promise of Paid Leave: Best Practices in State Paid Leave Implementation*, Appendix C, 2019, <http://www.nationalpartnership.org/our-work/resources/economic-justice/paid-leave/meeting-the-promise-of-paid-leave.pdf>. **** See International Foundation of Employee Benefit Plans, "Employee Benefits Survey," 2018, <https://www.ifebp.org/store/employee-benefits-survey/Pages/default.aspx>. ***** National Compensation Survey data reflect the median plan from Table 27. See US Bureau of Labor Statistics, "Employee Benefits Survey," <https://www.bls.gov/ncs/ebs/benefits/2018/ownership/private/table27a.htm>. Source: Except where noted, the information presented here is based on summaries of state laws prepared by the National Partnership for Women & Families and A Better Balance. See National Partnership for Women & Families, "State Paid Family and Medical Leave Insurance Laws," August 2019, <http://www.nationalpartnership.org/our-work/resources/economic-justice/paid-leave/state-paid-family-leave-laws.pdf>; and A Better Balance, "Comparative Chart of Paid Family and Medical Leave Laws in the United States," January 2020, <https://www.abetterbalance.org/resources/paid-family-leave-laws-chart/>.

In addition to the FMLA, the ADA mandates that employers provide reasonable accommodations to employees with disabilities, and medical leave is one form of reasonable accommodation. The ADA applies to employers with 15 or more employees, and there is no length of service requirement. However, one important limitation to the right to take leave under the ADA is that an employer can refuse to grant an accommodation if it would impose undue hardship on the business.

In contrast, employers covered by FMLA cannot refuse to grant leave due to hardship concerns. The Pregnancy Discrimination Act (PDA), as an amendment to Title VII, provides protections to workers based on pregnancy, childbirth, or related medical conditions. Under the PDA, employers must treat pregnant workers the same as other temporarily disabled workers.³⁵

Since both the ADA and PDA cover more employers and workers than the FMLA does, a recently issued resource document from the Equal Employment Opportunity Commission (EEOC) significantly affects how these protections interact. In 2016, the EEOC issued a resource document clarifying when access to medical leave can be considered a form of reasonable accommodation under the ADA.³⁶ Employees with disabilities have a right to take medical leave as a reasonable accommodation even if an employer is not covered by FMLA or a state paid medical leave law or does not offer any medical leave benefits to its employees. Employees with disabilities can also take medical leave if they have exhausted other benefits.

The EEOC resource document also highlights how the right to take medical leave under the ADA as a reasonable accommodation could be exercised in addition to other medical leave benefits. For instance, the ruling extends the right to take leave for many conditions such as recovery from a surgery, addressing a major depression, or requiring intermittent leave to manage a disability.

However, a health condition must be substantially limiting for a worker to have ADA rights. The EEOC gives as examples a routine broken leg or hernia as conditions that generally would not qualify.³⁷ For access to leave to be an accommodation, the leave must

eventually enable the individual to return to work. In addition, to address ambiguity that was causing litigation, the EEOC has specifically issued guidance that employees with cancer should be considered to have a disability under the ADA,³⁸ as should women during pregnancy.³⁹ As a result, workers who exhaust their paid or unpaid medical leave benefits could be entitled to additional leave when returning to work.

EEOC's clarifying explanation that medical leave is a reasonable accommodation is not widely understood, so the full impact of the guidance is still unknown. The legal framework around the FMLA and ADA is evolving. EEOC has consent decrees with some major employers that include multimillion dollar penalties,⁴⁰ and EEOC continues to identify this issue as a significant concern in its enforcement plans.⁴¹

However, these laws clearly extend important protections to many workers and affect many employers. The interactions of these policies will need to be considered in designing any new federal medical leave benefit. Greater awareness of the ADA protections will likely lead more workers with serious health conditions to take additional medical leave, requiring employers to make accommodations at the work site. However, this additional leave may also be largely unpaid, posing financial challenges for workers.

Key Elements of Paid Medical Leave Benefit Programs

Paid medical leave differs from parental and caregiving leave because the need to take leave is based on a worker's own medical condition. The nature and severity of the medical condition and the requirements of the worker's job interact in complex ways that affect the length of leave an individual worker may need. Determining whether to approve a claim for medical leave benefits requires a more nuanced eligibility determination process. In addition, time away from work, and the medical condition itself, can affect whether workers can retain their job, find new work after recovery if needed, or be at risk of dropping out of the labor force altogether.

This interplay between health and work has important consequences for workers, their employers, and benefit providers, as well as a potential interaction with the SSDI program. Paid medical leave therefore presents unique policy choices compared to parental and family caregiving leave.

First, a medical leave program will need to establish a more nuanced process for determining eligibility for benefits based on how a worker's own illness or injury interacts with the requirements of his or her job. Second, after a benefit is provided, a program will need to have a strategy for helping workers who have difficulty returning to work. Third, the duration of benefits has important implications and raises potential interaction effects with long-term disability benefits. We explore how these areas are addressed under existing SDI programs and provide recommendations on how a federal program might approach these issues based on available evidence and experience.

Eligibility Determination Process. The process for determining whether a worker's claim is valid for paid medical leave under existing private and public SDI programs is fairly similar. Workers fill out a claim form (paper or electronic) and ask their physician to fill out the portion detailing what the worker's medical condition is, whether the condition necessitates time off from work, and a recommendation on the length of leave required. The decision and recommendation from the physician are then reviewed by a private insurance or state agency claims official and could be approved, denied, or flagged for follow-up action to clarify or request additional information.

Some insurers and state agencies rely almost exclusively on a physician's recommendation, combined with in-house administrative data and experience with certain conditions to flag claims that may be problematic. Some state SDI programs, such as California and Rhode Island, and many private insurers and medical providers use private medical guidelines to inform decisions about the length of leave associated with a given medical condition. Physicians identify the International Classification of Diseases (ICD) codes associated with the worker's conditions. The guidelines then typically

provide physicians and claims reviewers with minimum, average, and maximum lengths of leave associated with the given ICD codes.

Issue: How Should the Eligibility Determination Process Look Under a Federal Medical Leave Program? The agency responsible for administering a new federal medical leave benefit will need to establish a determination process for medical claims that serves workers well while providing an adequate level of oversight. The process should recognize that claims for paid medical leave benefits are modest and temporary by definition.

In addition, most workers taking paid medical leave plan to continue working, unlike individuals claiming retirement or long-term disability benefits, and need quick access to benefits to replace lost wages. The timeliness of the benefit payment is particularly important for lower-wage workers, many of whom may live paycheck to paycheck and are often paid weekly or biweekly.

Establishing the proper duration of leave that a worker needs is particularly important. The length of leave can affect a worker's health and well-being. Leave that is too short may prevent an adequate recovery or result in reinjury or additional complications. Leaves that are too long or overly restrictive may not improve health and could weaken a worker's connection to his or her current employer, erode skills, and sever important social connections. Length of leave also affects employers that must decide whether and how to adjust to accommodate the employee on leave. Duration of benefits significantly affects program costs and can affect real or perceived notions of whether benefits are being used properly.

Recommendation. As in the state and private SDI programs, a report from a worker's treating source should be the initial basis for establishing eligibility for a new federal medical leave benefit. For shorter-duration claims, relying solely on the recommendation of workers' physicians may be sufficient. For longer-duration claims, a federal medical leave program should consider using private medical duration guidelines as a resource. However, usage of

private medical guidelines introduces opportunities, questions, and challenges.

In the US, two sets of guidelines are most commonly used, the ODG (originally titled Official Disability Guidelines but now identified by its acronym), owned by WCG Health, and MDGuidelines, owned by the ReedGroup. These two guidelines are used in some existing state paid leave programs, including California and Rhode Island, and many private SDI plans.⁴² The companies that create and update medical duration guidelines report they gather data and evidence from many sources, including expert opinion, academic research, and thousands and sometimes millions of leave usage reports from their clients and other sources.

Some guidelines were developed with a heavy focus on use in the administration of WC programs and are marketed to insurers and employers. The more sophisticated guidelines customize recommendations for the length of leave based on the nature of a worker's job requirements, age, gender, and comorbidities, such as obesity. As such, these guidelines could provide physicians and claims reviewers with valuable data to support their recommendations and provide an outside source of validation.

One concern with existing guidelines is that there is a notably wide variation in recommendations among them. The American Medical Association guide for the evaluation of work ability discusses many different medical conditions. For example, for a worker with a "heavy" job classification who has a shoulder rotator cuff impairment, one guide recommended the minimum number of leave days as zero, whereas another guide gave the minimum as 28 days.⁴³ A review of guidelines in North America and Europe found an overlap in expected duration and differences.⁴⁴

Other experts have reviewed the quality of the disability management guidelines and reached mixed conclusions. The RAND Corporation examined ODG and concluded it "appears acceptable to clinicians, but ODG requires greater rigor to keep pace with methodological advances in the field of guideline development."⁴⁵ An international team of experts considered guidelines used in many countries, including the MDGuidelines and ODG in the US, and found

"in several countries, certifying physicians are provided with guidelines that contain statements about expected duration of sickness absence for different health conditions. These statements seem to have a limited base of evidence and an unknown impact."⁴⁶

Medical leave duration guidelines are a small subset of a broader set of clinical practice guidelines. For many years, the Agency for Healthcare Research and Quality (AHRQ) managed the National Guideline Clearinghouse cataloging all evidence-based guidelines that included ODG and MDGuidelines. However, AHRQ revised its standards for inclusion in the clearinghouse based on recommendations from the Institute of Medicine (IoM) Committee on Standards to increase the use of systematic evidence reviews.⁴⁷ As a result, neither guideline met AHRQ's new standards, and both were dropped from the clearinghouse in 2016. In 2018, funding for the clearinghouse was discontinued, and AHRQ is exploring options for reconstituting it.

In the next section, we discuss how to support the continued employment of workers who take extended periods of medical leave and how those considerations interact with decisions regarding the use of duration guidelines. For example, Rhode Island's medical leave program uses the ODG and identifies beneficiaries as "at risk" when they are at 90 percent of the leave indicated in the ODG guidelines.⁴⁸ Alternatively, Kaiser Permanente uses the MDGuidelines for approving medical leave for its own employees and will identify options, such as intermittent leave, that may result in a shorter overall leave absence. These efforts show potential and require further evaluation.

Federal legislation on paid medical leave should give the administering agency discretion in issuing regulations specifying standards for reviewing and approving applications for leave. In IoM's review of clinical practice guidelines (CPG) discussed earlier, it concluded, "The committee sees greater value in having a variety of organizations developing CPGs than in limiting all development to a single agency."⁴⁹ However, how a single federal agency would use multiple guidelines simultaneously poses not only questions and administrative challenges but also an opportunity to evaluate different approaches. Federal legislation

could be an opportunity to provide new authority or funding to support efforts to improve the evidence base for the existing guidelines. A determination process should also use state-of-the-art data analytics to spot anomalous patterns of reports from treating sources as is done in state SDI programs.

The challenge of treating sources managing their conflicting roles is not unique to the US. A survey of Swedish physicians regarding the certification of sickness leave found the responsibility created morale issues for physicians.⁵⁰ A study of the process in Norway found that when the market for physician's services was more competitive, physicians provided more lenient leave certifications; however, the study estimated the leniency increased the length of leave by only 3–4 percent.⁵¹ In US academic literature, there is limited research on the role of the treating source.

Supporting the Employment of Workers Who Take Medical Leave. Workers who take paid medical leave face serious health conditions that at least temporarily limit their ability to work. Most of these workers will recover and return to work quickly without further assistance. However, some workers will face difficulties returning to work or may have conditions that limit their ability to perform the same duties as before. A smaller number of workers may develop long-term disabling conditions that force them to leave the labor force for an extended period or permanently.

Workers who take longer leaves, or do not return to work, lose out on earnings and are at greater risk of unemployment and economic insecurity. Data from the Panel Study of Income Dynamics indicate that each year, an average of 4.2 percent of adults age 18 to 62 who are in the labor force report developing a new work-limiting condition or experiencing a new health shock.⁵² In addition, those who experienced a new health shock were three times more likely to have left the labor force two years later compared to those who had not.

Employers, insurers, and state SDI programs are also concerned with worker length of absence and health. Workers on medical leave impose costs

on employers for health insurance and wages for replacement workers if needed to backfill. In the WC context, employers with more WC claims also face higher premiums due to experience rating. Longer leaves also impose higher costs on benefit payers, whether they are private insurers or publicly financed programs.

Many employers that offer SDI benefits use disability management services to assist workers and manage benefits and engagement with employees on leave or who require accommodations at work. These services are most common in industries with higher WC claims, where employers face larger cost incentives to address these issues. These services are often referred to in the US as “return to work” (RTW) services and may be offered by third-party benefit administrators and insurers or directly by large employers that develop their own programs. The range of programs and services vary in quality and scope. Most state SDI programs do not have specific RTW programs established in connection with their benefit programs but will refer beneficiaries to other existing services if asked.

RTW strategies are aimed at supporting continued employment for workers who develop a new potentially disabling illness or injury or who experience the worsening of a chronic condition that could limit their ability to work. A condition is “potentially disabling” because what constitutes a disability is complex and often misunderstood. Many workers targeted for assistance through RTW services may not view themselves as having a disability.

The most effective RTW services emphasize early intervention and are provided to a person as soon as is practical after he or she acquires a new medical condition or experiences a worsening of an existing condition. Ideally, these services begin while the person is still adapting to life and work with the new condition. RTW services can take many forms, but the most promising strategies improve coordination, communication, and services among the employee, the employer, and the health care provider, with an overriding focus on the person's functional capacity and work as a positive health outcome. This is referred to as a “multi-domain approach” because it addresses all

the environments a worker must navigate as he or she adjusts to life with the new medical condition.

Effective RTW services can range in complexity. In some cases, they involve an employer providing an accommodation to the employee for ongoing medical visits under the FMLA or a workplace accommodation under the ADA. Frequently, breakdowns or gaps in the delivery of health care services need to be addressed as part of the effort.⁵³ For example, workers who do not receive adequate physical therapy may underestimate their own functional ability as they recover from an injury.

Other times, a worker may be treated for only one medical condition when another is also present. More intensive services and coordination among providers may also be needed when a mental health issue, such as depression, is present in addition to a physical illness, which can greatly increase the risk of long-term unemployment for the newly ill or injured worker.⁵⁴

Issue: Using Evidence-Based RTW to Support the Labor Force Attachment of Workers Who Take Medical Leave. In this section, we summarize the RTW research, much from outside the US, and describe two promising approaches that could inform US policy. There is strong evidence supporting the effectiveness of RTW models that are employer provided and emphasize an early intervention approach to assisting workers after a new illness or injury. For example, six systematic reviews of employer-provided early intervention programs found strong evidence that they were effective, three of which were found to shorten the duration of work absence.⁵⁵

Another study found that RTW programs that address multiple domains were the most effective and they applied across a wide range of medical conditions.⁵⁶ Similarly, two reviews found interventions significantly and positively affected the likelihood of workers with common mental disorders returning to work.⁵⁷

While evidence from employer-based programs is promising, somewhat less is known about the potential effectiveness of a publicly provided model. However, two programs, one in Washington state and the other in the Netherlands, provide some evidence

and insights for incorporating RTW strategies into a potential paid medical leave program.

Washington state. The Washington state Centers for Occupational Health and Education (COHE) is a state-based model for RTW developed in the Washington WC program. COHE addresses occupational injuries and illnesses, most often musculoskeletal conditions. Established in 2001, the COHE staff improves communication among the injured worker, the physician's office, and the employer. It also provides education on best practices to health care providers. COHE identifies obstacles to the employee returning to work and emphasizes that simply returning to work is an important health care outcome.

A recent eight-year follow-up evaluation of the COHE model found that relative to a comparable group of injured workers, workers receiving the COHE intervention had a 30 percent reduction in workplace-based disability and a 30 percent lower rate of injured workers transitioning to SSDI.⁵⁸ For every worker in COHE who returned to work and avoided SSDI, there are another two workers whose condition may not have led to their receiving SSDI but who avoided experiencing long-term unemployment because of their work disability.⁵⁹ Another study found that COHE also helped combat the opioid crisis by detecting and addressing excess prescriptions of opioids.⁶⁰

Netherlands. After experiencing a prolonged increase in the share of adults receiving disability benefits, the Netherlands enacted policies that changed its approach to helping workers return to work. The Netherlands adopted a policy known as the gatekeeper protocol in 2002. The program's objective is to incentivize and require employers to focus on RTW for their employees and the social insurance system to focus on improving occupational health—preserving health and sustainable work ability.

Under the new protocol, on week six of a sick leave spell, the worker's condition is analyzed by an occupational health professional. On week eight, the employer and employee agree to a RTW plan. From week eight to week 52, regular evaluations occur between the

employer and employee with an overall evaluation after the first year.⁶¹ Data from the Netherlands show that the share of insured workers receiving disability benefits decreased from 11 percent in 2001 to 7.2 percent in 2012.⁶² In addition, Jan-Maarten van Sonsbeek and Raymond Gradus examined a 70 percent drop in disability allowances that occurred from 1999 to 2009 and attributed a third of the decline—22 percentage points—to the employer-based gatekeeper protocol and employee treatment requirements.⁶³

Recommendation. A new federal paid medical leave program should also include evidence-based early intervention services aimed at helping workers stay at work and return to work. A responsible program would include this feature to help workers maintain employment and individual economic security following the onset of a new health condition, help employers retain workers, and strengthen overall LFP.

One approach a new program could take is to provide grants to states to develop and test evidence-based RTW services targeted to workers at risk of longer-term work disability. States could consider drawing on models such as the Washington state COHE program or others being developed now under the US Department of Labor's Retaining Employment and Talent After Injury/Illness Network program.⁶⁴ Similarly, if a federal program included an option for employers to opt out of a government-administered program, it could require as a condition of using a private provider that the plan include a well-designed RTW program, such as the Dutch gatekeeper protocol.

Benefit Duration and Interactions with Long-Term Disability. Medical leave benefits cover medical conditions that last longer than a few days or weeks but are not intended to cover permanent or long-term disabilities lasting years. However, they can help bridge the gap between short-term and long-term benefits, to the extent workers have access to them. Most of the recently enacted or proposed state and federal paid medical leave benefits have targeted a duration of 12 weeks, keeping with the length of job protection provided by FMLA. The older state medical leave programs established decades ago provide

benefits for six months or longer, as do most private SDI plans.

Typical LDI plans, including SSDI, begin after five or six months. In 2018, about only 34 percent of workers had access to private LDI plans. Access to LDI varies widely by wage level, with only 8 percent of workers in the lowest quartile having access, compared to 61 percent of workers in the highest wage quartile. The International Foundation of Employee Benefit Plans survey reports that 81 percent of private LDI plans continued benefits until retirement age and 73 percent of the plans replaced 60 percent of wages.

Workers who become disabled can concurrently receive SSDI and LDI benefits, with the LDI benefit functioning as a supplement to the lower SSDI wage replacement rate. Because the SSDI benefit formula is progressive, replacing a higher share of lower-wage workers' earnings, the additional benefit from an LDI plan is larger for higher-wage workers than low-wage workers. For example, for an LDI benefit that achieves a 60 percent overall wage replacement level, a low-wage worker with a 52 percent SSDI replacement rate will see a smaller increase in his or her benefits from the LDI coverage than will a high-wage worker with a 35 percent SSDI replacement rate.⁶⁵

Issue: What Is a Reasonable Duration for a Medical Leave Benefit? Legislation has been introduced in Congress to provide 12 weeks of paid medical leave to workers under the FAMILY Act. However, some experts have suggested that a new paid medical leave benefit should cover six months to bridge between short- and long-term disability benefits. Others suggest that the program should be flexible enough to accommodate even longer absences depending on what a worker's physician recommends.

The optimal benefit duration included in a national program would likely need to balance competing priorities, including expanding economic security for workers, keeping program costs manageable, avoiding undue employer burden, and maintaining strong labor force attachment. Recent state action to enact programs indicates that many policymakers support a shorter benefit duration similar to the FMLA

duration of 12 weeks. As discussed earlier, data from Rhode Island indicate that 12 weeks of leave is sufficient to cover almost three-quarters of all medical leave claims.⁶⁶ In addition, recent estimates from the Social Security Office of the Chief Actuary and the Congressional Budget Office indicate that the average duration of medical leave claims under the FAMILY Act would be about two months.⁶⁷

Experts also debate whether offering a longer medical leave benefit will reduce the cost of applying for LDI benefits and therefore increase participation and costs in SSDI. This is because LDI and SSDI benefits typically have substantial waiting periods and short-term benefits reduce the cost of that waiting period. Some experts, most prominently David Autor and Mark Duggan, suggest that an SDI benefit, funded by employers, will give an employer the opportunity to provide supports and accommodations that could help workers retain their job and support overall attachment to the labor force.⁶⁸

The evidence on how SDI benefits interact with SSDI and LDI benefits are mixed. Autor et al. analyzed state SDI programs and concluded they could not estimate an impact on SSDI, though they attribute the lack of findings to data limitations and the long-standing nature of the programs.⁶⁹ In related work, Autor et al. looked at private LDI data and found relatively healthier individuals were more likely to apply for benefits when waiting periods were shorter and replacement rates higher. Michael Stepaner used variations in SDI policies across employers in Canada to estimate that the availability of an SDI benefit increased participation on LDI benefits by 0.07 percentage points.⁷⁰

Alternatively, Alison Earle, Jody Heymann, and John Ayanian looked at a small sample of nurses and estimated that availability of paid leave increased the probability of returning to work after coronary heart disease by more than 2.5 times.⁷¹ Additionally, Peggy Thoits identified a strong relationship between stress and poor health outcomes and how income security provided by a paid medical leave benefit could reduce stress and thereby improve health outcomes, but more research is needed. Unfortunately, most research in this area can only show correlations

between paid medical or sick leave and improved health outcomes.⁷²

While there are only a limited number of studies on outcomes from medical leave and SDI benefits, the SSDI program has been exhaustively studied. Basic economic theory suggests that providing income support will create some disincentive to work. A long body of research has examined the extent of the disincentive associated with SSDI.⁷³ This research indicates that a work disincentive exists but that the size of the disincentive is small relative to the amount of income support SSDI provides. In other words, at the margin, some applicants for SSDI are forgoing modest potential earnings from work to receive the relatively more stable monthly SSDI income.

The research also concludes that the effect is larger for people with less severe impairments and that eligibility for Medicare (something for which SSDI beneficiaries eventually automatically qualify) provides an additional, significant incentive to apply for SSDI. Katharine Abraham and Melissa Kearney reviewed the literature on LFP and concluded that 0.14 percentage points of the decline in overall LFP could be attributed to the growth of the SSDI program.⁷⁴ Similarly, the White House Council of Economic Advisers concluded that the growth of the SSDI program explains only a small portion of the decline in LFP of prime-age men.⁷⁵

Recommendation. If access to long-term income and health assistance through SSDI creates only a modest work disincentive, access to a short-term benefit could entail an even smaller work disincentive, with a three-month benefit having an even more modest impact than a six-month benefit would have. With a robust RTW emphasis, a well-designed medical leave benefit could improve employment outcomes, as discussed in the previous section. To better measure the cost and benefits, one option uses the establishment of a new federal benefit as an opportunity to test different maximum durations. A 12-week benefit could be established nationwide, and funds could be set aside for states and employers that put forward proposals to rigorously evaluate a longer maximum duration.

Various Social Security experts have recommended testing either time-limited or partial benefits in the context of SSDI.⁷⁶ Testing a time-limited SSDI benefit raises operational issues for the Social Security Administration and many policy and political challenges for Congress. Rigorously testing the impact of greater access to short-term paid medical leave outside Social Security would be much less complicated and an opportunity to evaluate aspects of the Autor and Duggan proposal from 2010.⁷⁷ Combining this paid medical leave benefit with access to RTW services presents further opportunities to expand our knowledge.⁷⁸

Conclusion

The landscape for paid medical leave in the US is evolving quickly as more states establish programs and the first federal sick leave and paid family and medical leave program was enacted in the wake of the COVID-19 pandemic. The recent crisis further exposed gaps in our current patchwork of paid leave benefits for workers juggling health conditions and work. To inform the debate around creating a new national paid medical leave program, we surveyed the trends in usage of and access to sick leave and paid medical leave and find that usage of these benefits has been stable and modest over time. However, significant unmet need exists among workers without access. In addition, data from the existing state programs show that most leaves could be accommodated by a program lasting 12 weeks.

Medical leave provided by state programs also plays an important role in serving lower-income workers. Available data from the states show that while low-wage workers are underrepresented among

claimants for parental and caregiving leave, they make up a majority of medical leave claimants. Moreover, because medical leave is the most common type of leave used, including medical leave in a comprehensive paid leave program would be vital to supporting overall progressivity in the program. More medical leave claims are also made by women than men. Unfortunately, less is known about take-up and usage of benefits among minorities, an area in which further research is needed to understand how paid medical leave may support racial equity.

We conclude that a national paid medical leave benefit would be a significant improvement over the patchwork of benefits now available to workers. However, the design and implementation of a medical leave program will require special attention in three areas. First, determining the appropriate duration of leave for each claim will be a key challenge. We recommend program administrators leverage the existence of privately developed medical duration guidelines as they develop their own evidence-based guidelines. Second, a robust medical leave program will need to help some workers with serious illnesses and injuries return to work. Research suggests evidence-based early intervention programs can improve employment, earnings, and health outcomes for workers while reducing costs for employers and other government programs. Lastly, while we recommend establishing a national 12-week benefit as a starting point, we also recommend rigorously testing benefits with a longer duration.

Taken together, these recommendations would support development of a national program that is responsive to the needs of all workers juggling serious health conditions and work while promoting trust in administration of these important benefits.

Notes

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Sick Leave and Medical Leave in the United States

A CATEGORIZATION AND RECENT TRENDS

Stefan Pichler and Nicolas R. Ziebarth

All but three Organisation for Economic Co-operation and Development (OECD) countries guarantee universal access to paid sick leave for all employees.¹ Besides Japan and Canada, the United States has traditionally let employers decide whether to offer paid sick leave benefits to their employees. Until recently, the only existing federal law was the Family and Medical Leave Act (FMLA) of 1993. This act provides *unpaid* leave of up to 12 weeks a year for pregnancy, own illness, or illness of a family member to full-time employees in firms with at least 50 employees.² Broadly speaking, “sick leave” implies that employees can take days off from work due to a short-term sickness such as the common cold or the flu, whereas “medical leave” (called “long-term sick leave” outside the US) implies coverage for a longer-term, more serious sickness of several weeks.

While the implementation of the Affordable Care Act (ACA) has dominated health policy discussions over the past decade, the debate about universal sick pay coverage has concurrently intensified. Former Sen. Edward Kennedy (D-MA) first introduced the Healthy Families Act to the US Congress in 2005. After several failed attempts to pass and enact it, the bill was reintroduced in the 116th Congress on March 14, 2019. The Healthy Families Act would enable every employee to earn one hour of sick time for every 30 hours worked, up to 56 hours per year, whereby unused days carry over to the next year. Employers with more than 15 employees would have to provide paid sick time, whereas small employers would have

to provide unpaid sick time. The bill explicitly stipulates that paid sick time can be taken for sick or needy children, parents, or other “individuals related by blood or affinity whose close association with the employee is equivalent to a family relationship.”³

Although no bipartisan consensus on passing and enacting the Healthy Families Act has been reached, as of writing, 21 cities and 12 states have passed sick pay mandates that largely follow the structure of the Healthy Families Act. Table A1 provides an overview. For example, California covers all workers, including part time, and covers all firms, independent of size. Moreover, the recent coronavirus pandemic has led to the bipartisan Families First Coronavirus Response Act,⁴ which mandates two weeks of emergency sick leave and up to 10 weeks of additional family and medical leave.⁵ However, the purpose is strictly limited to the coronavirus, exempts firms with more than 500 employees, and expires at the end of 2020.

This chapter reviews and discusses recent trends of access to paid leave in the United States. Although we also categorize and discuss other programs for health-related work absences (such as medical leave or disability insurance), we deliberately focus on recent policy changes and discussions of short-term sick leave in the spirit of the Healthy Families Act. Specifically, we use representative data from the National Compensation Survey (NCS) by the US Bureau of Labor Statistic (BLS) to sketch the most important trends in sick leave access for American employees over the past decade. We also discuss

Table 1. Categorization of Health-Related Paid Leave Benefits

	In Labor Force	Out of Labor Force
Work Unrelated	Sick and Medical Leave	
	Short-Term Sick Leave	Medical Leave, TDI, Long-Term Sick Leave
	Employer Mandates (12 States, 21 Cities)	TDI (Five States) FMLA State-Level Programs (Six States)
	Private Employer Group Insurance (Short-Term Disability)	Private Employer Group Insurance (Long-Term Disability)
	Private Individual Insurance	Private Individual Insurance
Work Related	Workers' Compensation (All US States Except Texas)	

Source: Authors.

changes by type of job and provide evidence on how the recently passed mandates and the intensified policy discussion may have contributed to the observed increase in employee access to short-term sick leave.

A Categorization of Health-Related Paid and Unpaid Leave

This section classifies all existing federal and state-level programs that cover health-related work absences in the United States. Besides FMLA, employees are universally covered by a state-level insurance system that provides sick and medical leave for *work-related* diseases or accidents. Most Americans are also covered by the federal disability insurance program, which provides disability benefits for the *permanently* work disabled.

Moreover, for decades, five states have been running so-called temporary disability insurance (TDI) programs, providing wage replacement benefits for longer, but temporary, work disability. The more recent versions of these programs are no longer

called TDI, but “medical leave” or “state-level FMLA programs,” following the federal FMLA language. See Yonatan Ben-Shalom’s chapter in this volume for further details on disability programs.⁶

Table 1 provides a categorization of the various existing federal or state-level programs that cover temporary or permanent health-related work disability in the United States.

Work-Related Medical Leave (“Workers’ Compensation”). Workers’ compensation (WC) is a mix of health insurance and medical leave. It pays for work-related accidents and diseases and covers medical care costs and wage replacements for employees.⁷ (See Table 1.) The first workers’ accident insurance was implemented in Germany in 1885.⁸ In the United States, WC is the oldest and most comprehensive health-related social insurance program. The first viable WC statute, the Federal Employers Liability Act, was first signed into law by Theodore Roosevelt in 1908.⁹ In the United States, WC is a state-level program, and all states but Texas require employers to have WC coverage.¹⁰

The relevance of this social insurance program has sharply decreased over the past century—because of improvements in workplace safety, worker training, and shifts in the industry structure away from manufacturing toward service-sector jobs in OECD countries. Between the 1950s and 1980s, the workplace fatality rate per 100,000 workers decreased from above 20 to below 10 in several OECD countries.¹¹ In the United States, 2.8 million nonfatal occupational injuries and illnesses were counted in 2018.¹² Bernard Fortin and Paul Lanoie¹³ and Richard Butler and Harold Gardner¹⁴ provide excellent literature overviews, and Olli Kangas¹⁵ provides an institutional overview of statutory accident insurance schemes in 18 OECD countries.

Short-Term Sick Leave. We define “short-term sick leave” as full or partial wage replacements for work absence due to sickness *for the first days of sickness*. The exact number of days covered by this benefit depends on the institutional framework, which differs from country to country. For example, for the United States, we define sick leave in the spirit of the Healthy Families Act and the many recently enacted city- and state-level sick pay mandates, as listed in Table A1.

As sick pay mandates have been enacted recently, suitable data are scarce, as is empirical scientific evidence.¹⁶ There are notable exceptions from the US before the current debate on employer mandates.¹⁷ Donna Gilleskie exploits 1987 Medical Expenditure Panel Survey data to structurally model work absence behavior and simulate the effects of alternative policies.¹⁸ She finds that a quarter of all male employees would not take sick leave when ill if sick leave were unpaid.

Moreover, several reports document select employer experiences with sick pay mandates. For example, Shelley Waters Boots, Karin Martinson, and Anna Danziger¹⁹ conclude that “by and large, most employers were able to implement the paid sick leave ordinance with minimal to moderate effects on their overall business and their bottom line.”

Other papers document inequality in access to paid sick leave and unawareness, or they emphasize relevant statistical correlations. For example, Philip

Susser and Nicolas Ziebarth²⁰ find that up to three million US employees work sick every week and that women and low-income earners are more likely to work sick. In almost half of all cases, the reasons were directly related to a lack of sick leave. LeaAnne DeRigne, Patricia Stoddard-Dare, and Linda Quinn²¹ report that employees without access to paid sick leave are more likely to forgo medical care. And Lucy Peipins and colleagues²² find that employees without access to sick pay are less likely to undergo mammographies, pap tests, and endoscopies at recommended intervals. Finally, Gerod Hall and colleagues²³ report that 30 percent of all employees in New York City were unaware of their recently enacted rights.

A few papers exploit variation in sick pay mandates across US regions over time to conduct causal inference. For example, Stefan Pichler and Nicolas Ziebarth²⁴ use county-level employment and wage data to conclude that sick pay mandates did not significantly disrupt labor markets nor produce job losses or weaker wage growth. Thomas Ahn and Aaron Yelowitz²⁵ come to a similar conclusion for Connecticut.²⁶ In addition, several papers use²⁷ retrospectively reported information from National Health Interview Survey data to estimate that the sick pay mandates increased sick leave use by about one day per year in the short run. Stefan Pichler and Nicolas Ziebarth²⁸ theoretically model these behavioral reactions and the decrease in “contagious presenteeism” behavior. They also show empirically that flu rates decreased significantly because of the first city-level mandates. In line with this finding, Jenna Stearns and Corey White²⁹ find significant decreases in illness-related leave-taking after the introduction of sick pay mandates.

In a recent working paper, Catherine Maclean, Stefan Pichler, and Nicolas Ziebarth³⁰ use government data at firm-job level by the National Compensation Survey to show that state-level mandates increased coverage rates by 13 percentage points and that newly covered employees took two additional sick days in the first year.³¹ These findings are broadly in line with work based on survey data.³² Interestingly, however, Maclean, Pichler, and Ziebarth do not find evidence that the mandated benefits crowd out non-mandated

benefits. Moreover, using a model of optimal sick pay and the authors' empirical causal estimates as sufficient statistics, Maclean, Pichler, and Ziebarth discuss welfare implications and trade-offs by industry and occupation. They conclude that mandating sick pay likely improves welfare under a range of plausible parameter assumptions, even when abstaining from the public health benefits of reduced infection rates.

Finally, although related under the umbrella term "paid leave," paid sick leave differs from paid vacation and parental leave in both aim and scope.³³ Although paid sick time in the spirit of the Healthy Families Act can be used to take care of sick children or family members, its focus has always been on health issues and the short run. Moreover, because of the unpredictability of the risk, it clearly can be framed as an insurance that covers wage losses due to unexpected health shocks.³⁴ However, "family leave" usually (but not always) refers to longer-term leave for (planned) family reasons (e.g., parental leave). In addition, the employer cost implications are much different and significantly higher for parental leave, as take-up among employees of childbearing age is relatively high and the work absence durations are relatively long.

Consequently, basically all countries outside the United States run separate and separately funded parental leave programs.³⁵ Moreover, the labor market consequences of parental leave programs likely differ substantially from those for traditional short- and long-term sick leave programs. For example, Ann Bartel and colleagues³⁶ find that California's paid family leave program has increased the share of fathers who take parental leave. However, there is also evidence that parental leave mandates may reduce the labor supply of women and job promotions.³⁷ On the other hand, Maya Rossin-Slater, Christopher Ruhm, and Jane Waldfogel³⁸ find that weekly work hours of employed women have increased because of the law, and Jane Waldfogel³⁹ finds no impact on women's wages or employment.

TDI, Medical Leave, and Long-Term Sick Leave.

As Table 1 shows, the bridge between short-term sick leave and permanent work disability and withdrawal from the labor force is "medical leave."⁴⁰ We define

medical leave as leave from work due to prolonged sickness of more than six days and before permanent work disability is diagnosed. Usually, patients are still employed while on medical leave, but only a share of them will recover and return to work, whereas another share will be permanently unable to work and potentially qualify for long-term disability insurance. A classic example for medical leave is cancer treatments. See the "Implications for Implementing Medical Leave Systems in the United States" section and Jack Smalligan and Chantel Boyens' chapter in this volume⁴¹ for a more extensive look at medical leave. Ben-Shalom's chapter in this volume also discusses TDI in more detail.⁴²

(Long-Term) Disability Insurance. Public disability insurance is an integral part of social insurance in OECD countries.⁴³ Although institutional details vary over time and across countries, disability insurance mainly aims to provide a safety net in case of permanent work disability. Benefits typically replace a fraction of former gross wages.

The empirical disability insurance literature in economics is rich, for both empirical methods and published papers. It contains structural life-cycle models⁴⁴ and standard reduced-form evidence.⁴⁵ It includes studies on Australia, the United States, and European countries, the large majority of which focuses on the labor market consequences of public disability insurance.⁴⁶ However, private insurance also exists for disability insurance.

Private Insurance. The United States has traditionally relied on voluntary provisions of paid sick and medical leave benefits and health insurance benefits. Because of their sufficiently large risk pool, large employers can purchase and offer insurance policies at modest costs, as they do now for medical leave or long-term disability insurance. However, small employers may not be able to afford such policies. Compared to other countries,⁴⁷ individually underwritten disability policies represent a small market in the United States.⁴⁸

In "Access to Paid Sick Leave in the United States" of this chapter, we discuss who has access to

paid vacation, paid sick leave, and paid family leave in the United States. We also provide access rates for short- and long-term group disability insurance, by types of jobs.

US Sick Pay Mandates

Table A1 provides a detailed summary of most US city- and state-level mandates passed to date.⁴⁹ Although the mandates' details differ in each city and state, all mandates are employer mandates. Several mandates exclude small employers or have other exemptions. Employees “earn” a paid sick leave credit—typically, one hour per 30 to 40 hours worked with a maximum of about seven days per year. If unused, the sick leave credit rolls over to the next calendar year. Because employees must accrue the credit, most mandates explicitly state a 90-day accrual period (in addition to waiting periods for new employees). Several mandates that exempt small employers compel them to provide *unpaid* sick days.⁵⁰

Employers have to post employee rights such as minimum wage laws, harassment and discrimination protection, and sick pay rights at the workplace. Figure A1 shows an earned sick time notice for Massachusetts that employers could post to comply with the Massachusetts workplace poster requirements.⁵¹ Alternatively, posters such as those in Figure A2 (here for Arizona) list *all* employee rights that employers must post to comply with the respective state laws.⁵²

An institutional point is worth mentioning. In several cases, laws were challenged in court, mostly by business groups. For example, Pittsburgh's paid sick leave ordinance was approved on August 3, 2015. Shortly after, business groups sued, and lower courts ruled against the law (because of unique language in the state's home rule charter). However, the city has appealed the decision in Pennsylvania's Supreme Court, where it is currently pending.⁵³ In another pending case, Airlines for America has sued the states of Massachusetts and Washington to seek an exemption from the law, arguing that the law would hurt their carrier prices, routes, and services.⁵⁴ As another example of pending legal questions, the Massachusetts Supreme

Judicial Court ruled that sick pay does not constitute wages, which implies that employers are not liable if they do not pay out unused sick days.⁵⁵

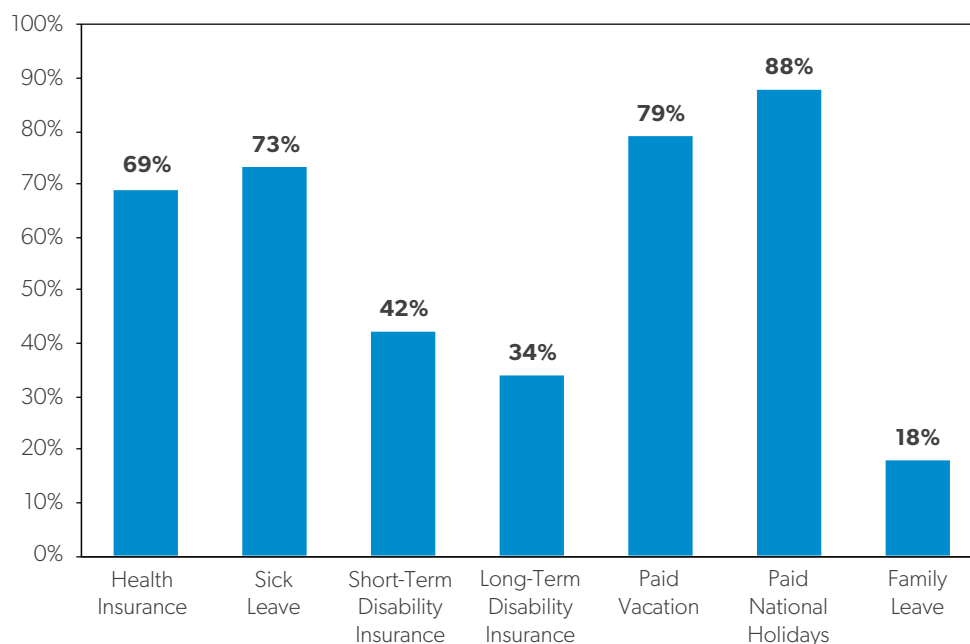
Access to Paid Sick Leave in the United States

This section uses NCS data by the BLS to document access to paid leave in the United States, particularly short-term sick leave. In addition to documenting inequalities in access as of 2019, we also discuss *changes* in access over the past decade.

Although the public NCS data are high-quality government data well suited to documenting access and employer costs, they are not well suited to measuring *take-up* of sick leave benefits. Maclean, Pichler, and Ziebarth find that employees who gain access to paid sick leave because of the state-level mandates take about two days of paid sick leave in the first post-mandate years.⁵⁶ However, because employees accumulate more sick days the longer they work, the long-term take-up rate is likely higher. In addition, because access to sick and medical leave is still not the social norm, there may be take-up barriers even for employees who are formally covered by the benefits (e.g., fear of negative job consequences).

For long-term projections, other countries may provide evidence on take-up. For example, Germany provides universal and low-barrier access to both sick and medical leave. In Germany, in a given year, about 50 percent of all employees take paid sick leave, and about 5 percent of all employees take medical leave.⁵⁷ For more information on take-up in the United States, please see the analysis of self-reported data from the National Health Interview Survey provided in the appendix of this volume.⁵⁸

National Compensation Survey. The NCS is a nationally representative dataset at the establishment-occupation level. The US Census Bureau defines establishments as “a single physical location where business is conducted or where services or industrial operations are performed.”⁵⁹ Because the NCS is designed to provide official government statistics on

Figure 1. Access to Health Insurance, Types of Paid Leave, and Disability Benefits in 2019

Source: Authors' calculations based on 2019 National Compensation Survey data.

a wide range of compensation and labor cost items, it includes information on access to paid sick leave and other paid leave and fringe benefits.

While the NCS is a quarterly survey, we focus on the March responses of the first quarter interview below as, for many benefits (including access to paid sick leave), the BLS provides information from only this interview. We use the public version of the NCS.⁶⁰ In the survey, HR administrators of the establishments provide detailed information on a range of offered benefits.

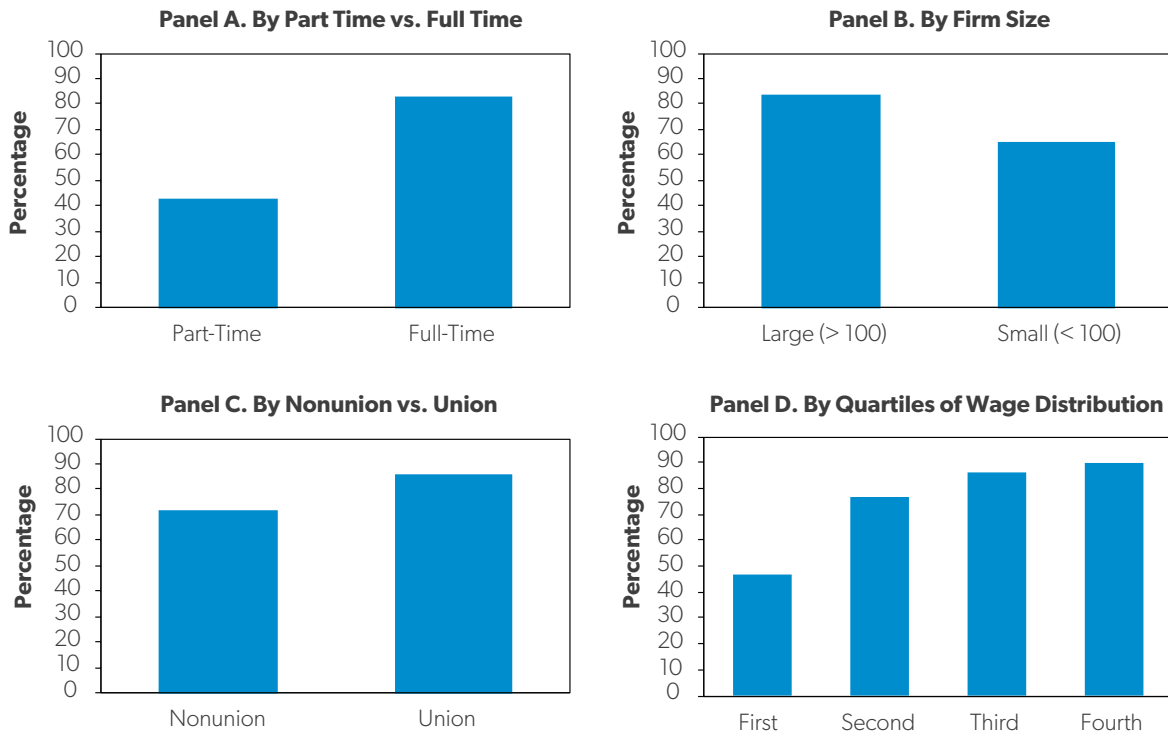
The NCS solely yields evidence on benefits offered by *the employers*. This includes private policies provided by employers and benefit provisions because of employer mandates. However, the data include neither WC, TDI, nor medical leave coverage through systems that the government independently runs. See Smalligan and Boyens' chapter in this volume⁶¹ for details on medical leave and alternative databases.

Access to Paid Leave in 2019. Figure 1 uses the March 2019 wave of the NCS. It shows the share of employees who have access (through their employer)

to (1) health insurance, (2) short-term sick leave, (3) short- and long-term disability insurance, (4) paid vacation and holidays, and (5) paid family leave. Traditionally, US employers have provided all these benefits voluntarily.⁶²

Figure 1 shows that, as of March 2019, 69 percent of all employees were offered health insurance and 73 percent were offered short-term sick leave. The following figures focus on access to short-term sick leave.

Figure 2 investigates sick leave access rates by type of job. Seventeen percent of full-time employees have no access to paid sick leave. Moreover, 57 percent of part-time employees do not have access to paid sick leave in their job (Panel A). Sixteen percent of firms with more than 100 employees do not offer paid sick leave (Panel B), and even in jobs with union representation, 14 percent of employees cannot take paid sick leave (Panel C). Finally, we observe a clear gradient when plotting coverage rates by the quartile of the wage distribution. While 10 percent of employees in the highest income category lack access to paid sick leave, 53 percent in the lowest income category lack access to paid sick leave.

Figure 2. Access to Short-Term Sick Leave by Type of Job in 2019

Source: Authors' calculations based on 2019 National Compensation Survey data.

Figure 3 stratifies coverage rates by industry and occupation. The industry with the lowest coverage rate is the accommodation and food industry (45 percent). Given the high degree of customer contact, such low coverage rates are particularly worrisome from a public health perspective. Research has shown that employees without access to paid sick leave are much more likely to work sick and spread diseases.⁶³

In summary, across all types of jobs, access to short-term sick leave is generally far from universal in the United States. Moreover, access to paid sick leave is highly unequal. Even in 2019, in low-wage and part-time jobs and the accommodation and food industry, more than half of all jobs provided no access to paid sick leave.

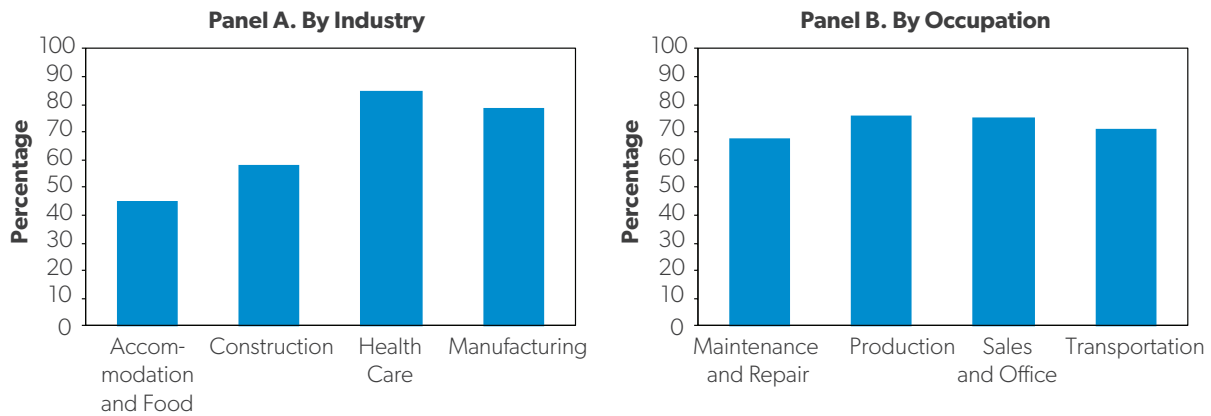
Employer Costs of Providing Paid Leave Benefits in 2019. This section uses the NCS data to provide evidence on labor costs for different types of paid

leave. To put them in perspective, we compare them to costs for wages and other fringe benefits. Panels A and B of Figure 4 provide corresponding overviews for 2019, normalized to costs per hour worked. Of course, the average cost estimates depend on both the rate of benefit provision and benefit generosity.

For example, on average, paid sick leave costs \$0.32 per hour worked. However, as coverage rates are 73 percent (Figure 1), the average costs for workers *with* paid sick leave are \$0.44, or 1.3 percent of gross hourly wages. Under a 100 percent replacement rate and assuming 220 working days per year, a back-of-the-envelope calculation suggests that each worker with access to paid sick leave takes, on average, 2.8 sick days per year.

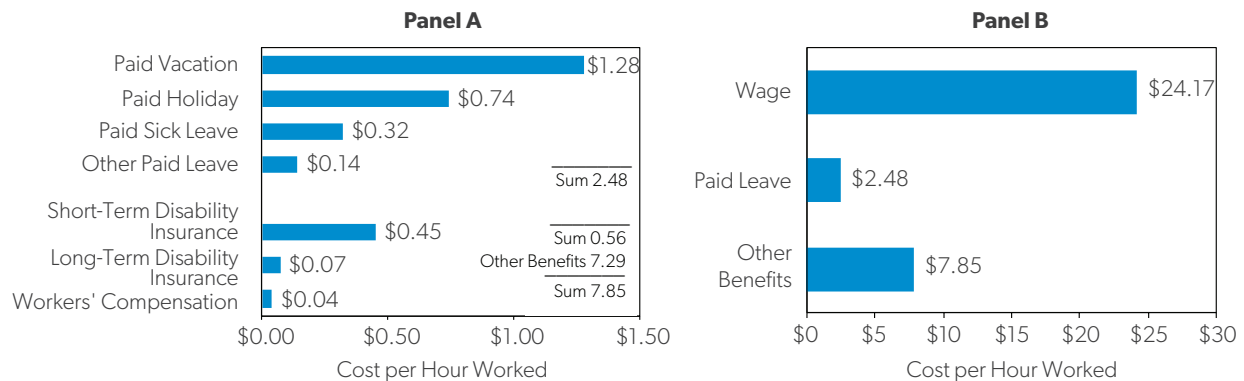
As seen in Figure 4, Panel A, the labor costs for paid vacation days (\$1.28 per hour worked), paid national holidays (\$0.74 per hour worked), and WC (\$0.45 per hour worked) exceed the costs for paid

Figure 3. Access to Short-Term Sick Leave by Industry and Occupation in 2019



Source: Authors' calculations based on 2019 National Compensation Survey data.

Figure 4. Employer Costs of Providing Paid Leave Benefits in 2019



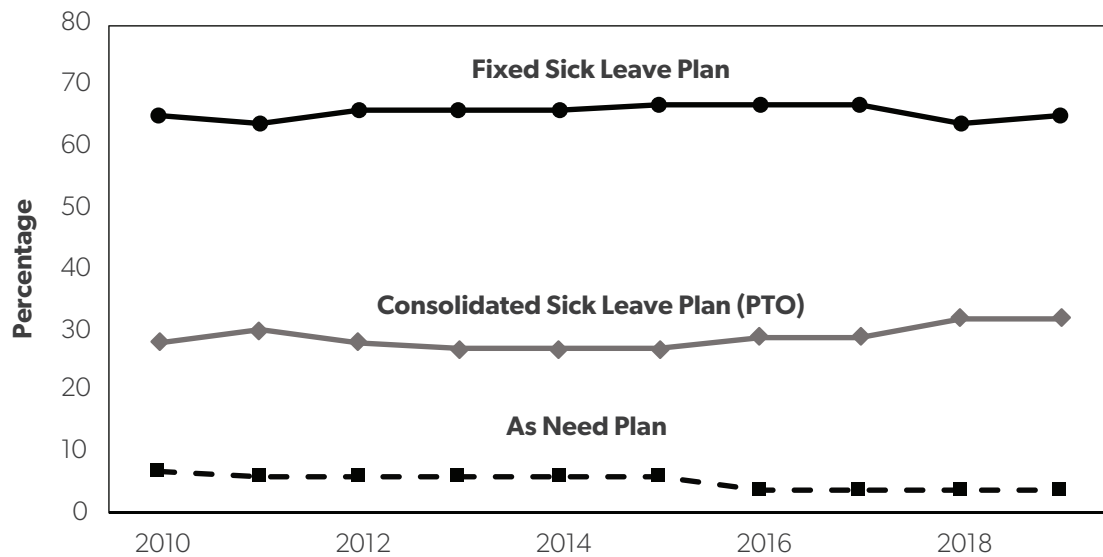
Source: Authors' calculations based on 2019 National Compensation Survey data.

leave. (Costs for paid family leave are not available in the NCS.) Private short- and long-term disability policies cost only \$0.07 and \$0.04 per hour worked, respectively.

Figure 4, Panel B sums up all costs for paid leave and compares the total sum to the costs for wages and other fringe benefits (which includes health insurance benefits of \$3.08 and retirement benefits of \$1.98). The total costs for all forms of paid leave sum up to \$2.48 per hour worked, whereas the total costs for paid vacation and national holidays sum up to \$2.02. Costs for wages are \$24.17, and for all other fringe benefits, jointly they are \$7.85.

Next, we analyze the mode of sick leave coverage (Figure 5). Most sick leave is offered as a fixed plan, in which employees earn up to a fixed number of sick days per year. The second most common plan is a “consolidated leave plan,” often also referred to as a paid time off (PTO) bank. Finally, only few employers offer plans without yearly limits (“as need plans”).

Changes in Access to Sick Paid Leave from 2010 to 2019. As seen in Figure 5, PTO plans have become increasingly popular among US employers, increasing from 17 percent to 23 percent between 2015 and 2019. Under a PTO plan, employers do not provide

Figure 5. Composition of Sick Leave

Source: Authors' calculations based on 2019 National Compensation Survey data.

a *separate* number of days for sick leave, vacation, or parental leave, but rather aggregate or consolidate the total number of paid leave days per year, independent of reason.⁶⁴ For instance, the BLS reports that the average consolidated PTO plan has accumulated 19 days of available paid leave after five years of service with the employer.⁶⁵ Paid sick leave mandates comply with such PTO plans as long as they are at least as generous as the sick leave mandated by the law is.⁶⁶ Maclean, Pichler, and Ziebarth⁶⁷ test the impact of state-level sick pay mandates on the provision of PTO banks. They find clear evidence that the mandates induced employers to set up separate sick leave plans and neither crowded out nor increased the provision of PTO banks. The authors suggest that this was the case for employers to avoid uncertainty as to whether their consolidated PTO plan would comply with the law.⁶⁸

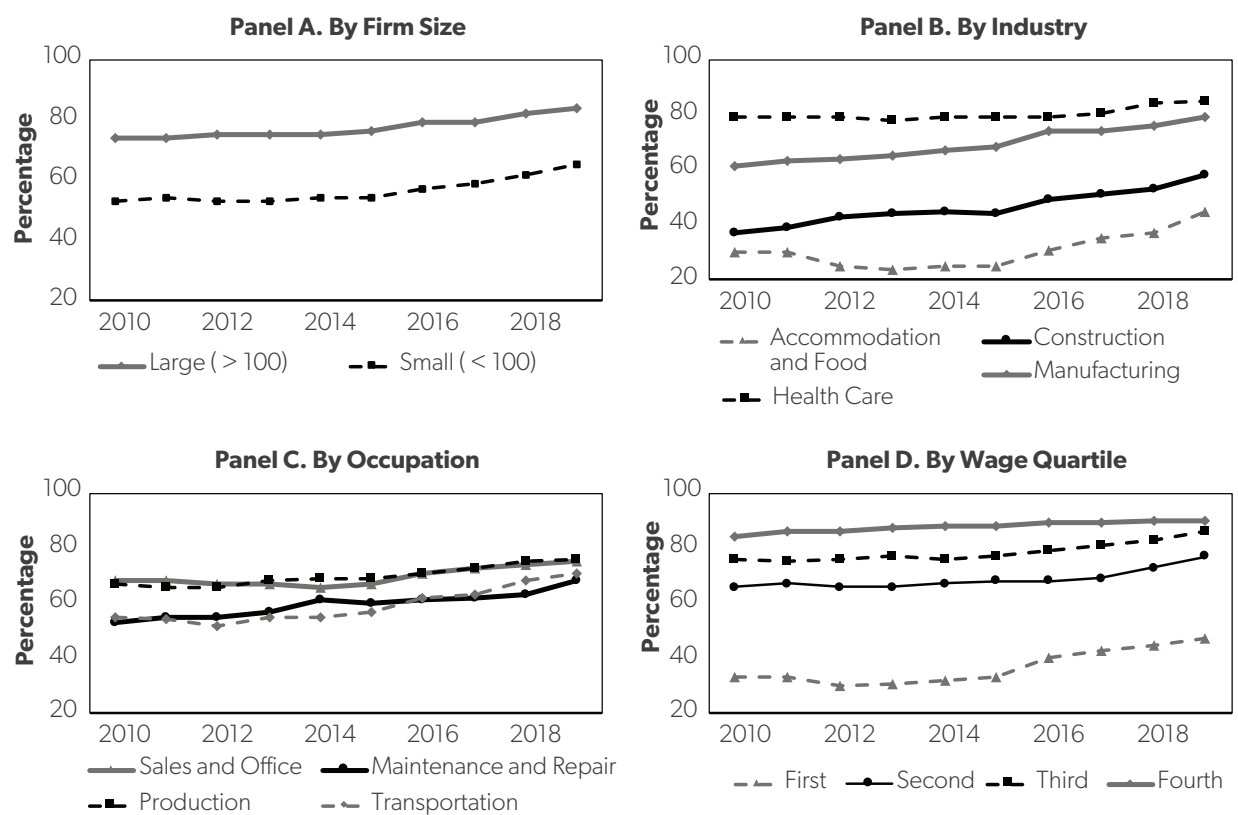
Figure 5 shows a clear increase in the provision of paid sick leave by firms. Comparing changes over time to changes for other benefits can help us assess the impact of the recently enacted sick pay mandates in 12 states, such as California, Massachusetts,

and Oregon. Figure A3 compares changes in coverage rates for short-term sick leave to changes for health insurance and paid vacation from 2010 to 2019. The latter two benefits are approximate “control groups” when trying to eyeball a causal impact of the recently enacted sick pay mandates. As seen, coverage rates for paid vacation have been stable at around 77 percent since 2010. This flat trend aligns with the absence of state or federal mandates for paid vacation days.

Moreover, the share of jobs with health insurance has been stable over time. In 2016 and 2017, we observe a temporary decline by 2 percentage points from 70 to 68 percent. However, in 2019, health insurance coverage rebounded to 70 percent.

Whereas sick leave coverage rates remained stable around 64 percent until 2015, they increased substantially by March 2019. The beginning of this upward trend coincides exactly with the enforcement of the mandates in California (July 1, 2015), Massachusetts (July 1, 2015), and Oregon (January 1, 2016). (See Table A1.) Whereas many relevant cities had enacted mandates before 2015, the number of newly covered

Figure 6. Changes in Employee Access to Short-Term Sick Leave by Type of Job



Source: Authors' calculations based on 2000–19 National Compensation Survey data.

employees was too small to move the needle in coverage rates as measured at the federal level. This obviously changed with the three big states—California, Massachusetts, and Oregon—and further continued with the mandates in Vermont (January 1, 2017), Arizona (July 1, 2017), Washington (January 1, 2018), and Maryland (February 11, 2018). Given the ongoing robust debate and upcoming implementation of mandates (e.g., in Michigan and New Jersey), we expect this trend to continue.

Figure 6 decomposes the strong increase in sick leave coverage rates by firm size, industry, occupation, and wage quartile. Both small and large firms saw substantial increases. Similarly, coverage increased in industries with not only historically low coverage rates such as *accommodation and food* (from 30 percent in 2010 to 45 percent in 2019) but also

high coverage rates in the pre-mandate era such as *health care* (from 79 percent in 2010 to 85 percent in 2019). Finally, stratifying the trends by wage levels, employees in the lowest wage quarter experienced particularly strong increases in access to short-term sick leave, up from 33 percent in 2010 to 47 percent in 2019.

Implications for Implementing Medical Leave Systems in the United States

In the spirit of the 1993 federal FMLA law, nine states have passed state-level FMLA laws over the past years. Whereas the more recent laws use the FMLA terminus explicitly and exclusively, California was the first state to essentially extend its TDI system for care

of sick relatives or bonding with a newborn child in 2004 (often called “paid family leave” and sometimes called “family temporary disability insurance”).⁶⁹ The latest states to pass FMLA state laws were Connecticut, Massachusetts, and Oregon (but benefits can only be withdrawn starting 2021–23).

Basically, although being institutionalized under various state-level legal frameworks and names, all these laws essentially provide paid leave for (1) taking care or bonding with a new child, (2) taking care of a family member with a serious health condition, and (3) taking care of one’s own disability or serious health condition. In that sense, internationally, they represent a mix of parental leave, eldercare, and own long-term sick leave. The benefit duration typically depends on the specific reason for leave-taking and ranges from four weeks (Rhode Island) to 12 weeks (Washington, Massachusetts, California, and Oregon) for family leave and from eight weeks (Washington, DC) to 52 weeks (under the TDI system in California) for own disability per year. Like California, three other states and a territory (Rhode Island, New Jersey, Pennsylvania, and Puerto Rico) have run separate TDI programs for decades that mainly cover own work-unrelated extended work disability.⁷⁰

In some states, benefits are a percentage of average weekly wages, whereas in others the percentage of the benefit depends on the income level.⁷¹ All states have upper weekly benefit caps ranging from \$650 (New Jersey) to \$1,252 (California). Funding occurs basically through employee-employer payroll deductions of between 0.17 and 1 percent of employees’ base wages,⁷² up to a certain cap.⁷³

In the following, we summarize findings from the economic literature and the literature in related fields that broadly relate to paid family and medical leave. These findings may hold lessons for the implementation of FMLA laws at the state level. In particular, we focus on the lessons from long-term sick leave programs outside the United States and TDI programs in the United States. In other words, we focus on insurance programs that cover own health conditions and disability—the “medical leave” aspect of the FMLA programs—and ignore the broad literature on parental leave.

First, there is consensus in economics literature that the labor supply elasticity of paid leave programs is different from zero.⁷⁴ The rich disability insurance literature surrounds the question: How much higher would the employment rate be without the existence of a disability insurance system? The standard approach to answering this question is to exploit quasi-random variation in assignment of disability insurance cases to examiners; the findings show that employment rates are 15 to 30 percentage points higher among “marginally rejected” disability insurance applicants, relative to marginally accepted disability insurance applicants.⁷⁵ Other studies find strong evidence for peer and intergenerational effects in the Dutch and Norwegian context⁷⁶ and that stricter application screening reduces the number of applications and improves targeting efficiency in the Dutch context.⁷⁷

As medical leave programs have precisely the objective of providing longer-term wage replacement benefits while keeping people *employed* and providing job protection, one implication is that medical leave programs keep sick people employed. Thus, they potentially prevent a (permanent) exit from the labor force. Whether and by how much medical leave programs decrease disability insurance applications and rolls is, however, an open question.

Next, medical leave clearly leads to take-up, utilization, and program costs.

However, while rising program costs are almost certainly a consequence of implementing new social insurance programs, the crucial question for most economists is whether new programs are cost-effective and improve welfare. Whereas costs are relatively easy to measure, benefits may not be because they manifest in the long run and indirectly—for example, through higher labor productivity, labor supply, or life satisfaction.

Looking at the underlying reasons for the take-up of medical leave benefits, findings from other countries suggest that around 5 percent of the employed population would take up long-term sick leave programs due to cancer, back pain, or mental illnesses.⁷⁸ One lesson from research on European systems is that when replacement rates and funding between

short-term sick leave and long-term medical leave are not well-adjusted, unintended consequences will result at their intersection.⁷⁹ For example, Elisabeth Fevang, Simen Markussen, and Knut Røed⁸⁰ show that employers discourage workers on (Social Security–funded) long-term sick leave to return to work, because they carry the direct financial costs of relapses through short-term sick leave.⁸¹

Another lesson from Europe is that whenever employers carry the direct benefit costs of sick and medical leave, it could lead to discrimination against workers and applicants in old age, women in child-bearing ages, or the overweight and obese. For example, Nicolas Ziebarth and Martin Karlsson⁸² find that German employers became reluctant to hire sicker workers after the government increased the mandated wage replacement rate for the first six weeks of sick leave in 1999. Moreover, because sick workers took more sick days in response to more generous benefits, healthy workers had to work more overtime hours to compensate for the lost labor.

On the other hand, because US short-term sick leave represents individual sick leave accounts, which tend to minimize moral hazard on the employee side, we do not expect shirking behavior to play a major role in the US context. Recall that mandated sick pay enables workers to earn and budget 2 to 3 percent of their work time as sick time, which can be taken when needed. Pichler and Ziebarth⁸³ find no evidence that sick pay mandates hurt employment or wages growth, and employer surveys indicate that these mandates are not perceived as a major issue and threat to employers' bottom lines.⁸⁴

However, the case for longer-term medical leave might be different as the perceived (and real) risks for disruptions at the firm level might be substantial. This is simply a consequence of the much longer leave spells for medical leave. Hence, discrimination against workers may be a concern for medical leave programs.

How to fund medical leave programs is another crucial question. As medical leave in the US is largely funded through general employee payroll taxes, it exacerbates the risk of discrimination against high-risk workers. Moreover, economists have long debated whether payroll taxes hurt employment or

wage growth. While Francis Kramarz and Thomas Philippon⁸⁵ find negative employment effects, others hardly find such effects.⁸⁶

Medical leave is related to rehabilitation programs and therapies, for which a rich literature outside economics exists. (See, for example, Nicole Hoefsmits, Inge Houkes, and Frans Nijhuis⁸⁷ for a general review; S. J. Tamminga et al.⁸⁸ for a review on cancer; and Karen Nieuwenhuijsen et al.⁸⁹ for a review on depression.) In one of the few empirical economic studies on rehabilitation programs, Markus Frölich, Almas Heshmati, and Michael Lechner⁹⁰ use Swedish register data and find that rehabilitation programs for the long-term sick do not effectively improve their labor market outcomes. Nicolas Ziebarth⁹¹ exploits a doubling of copayments for rehabilitation treatments and finds that demand is more elastic than it is for acute medical treatments. Finally, Lisa Laun and Peter Skogman Thoursie⁹² evaluate a randomized field experiment by the Swedish government and do not find evidence that private providers for vocational rehabilitation treatments outperform public providers in costs and labor market outcomes.

Toward an Integrated and Evidence-Based Paid Sick and Medical Leave System

What can we learn from the description of the status quo, recent trends in the paid leave systems of the United States, and international research findings? What are the lessons and the outlook for the next decades? Given the highly polarized and divided Congress, what are the chances for a bipartisan and political agreement on a coherent federal paid leave reform?

After a decade of experiences with the ACA, one might be tempted to conclude that the outlook would be grim. However, the silver lining in the paid leave debate is that, unlike the ACA, it is not (yet) tied to a specific polarizing figure, leader, or administration. Representatives of both parties have expressed support for various forms of paid sick leave, medical leave, or family leave. Likewise, while being at the top of the

Democrats' agenda for years,⁹³ even President Donald Trump repeatedly expressed support for federal leave reform.⁹⁴ In addition, and maybe most importantly, the general public strongly supports measured and modest (local) reforms such as the wave of recent sick pay mandates. Approval ratings are above 70 percent (and higher) across party lines.⁹⁵

Currently, several proposals for federal sick and medical leave systems have been introduced into Congress. First, there is the Healthy Families Act, which has been under discussion for 15 years and reintroduced to Congress in 2019.⁹⁶ The Healthy Families Act has served as the blueprint for the 12 state-level sick pay mandates and similar mandates in 21 US cities. The experiences in these localities have been overwhelmingly positive. Research has demonstrated that the relatively light sick pay mandates do *not* disrupt labor markets nor reduce employment or wage growth.⁹⁷ Moreover, Pichler and Ziebarth⁹⁸ find that the first city-level mandates reduced influenza-like illness (ILI) rates. Using official Centers for Disease Control and Prevention data on ILI activity, Stefan Pichler, Katherine Wen, and Nicolas Ziebarth⁹⁹ confirm this finding by showing that the state-level mandates reduced ILI activity by 11 percent in the first year.

In the novel coronavirus debate, these findings have received some media coverage and have been cited as one justification for passing a federal sick pay mandate. On March 18, 2020, the Senate passed the bipartisan Families First Coronavirus Response Act (FFCRA) with 90–8 votes, and President Trump signed it. FFCRA contains two weeks of emergency sick leave funding for reasons related to the coronavirus. Moreover, it extended coronavirus-related paid family and medical leave by 10 weeks at two-thirds the employee's regular wage. However, the purpose of the paid leave is strictly limited to the coronavirus, exempts firms with more than 500 employees, and expires at the end of 2020. Pichler, Wen, and Ziebarth¹⁰⁰ provide evidence that FFCRA has helped “flatten the curve.”

In a recent working paper, Maclean, Pichler, and Ziebarth¹⁰¹ find that sick pay mandates in the spirit of the Healthy Families Act effectively increase sick leave

access. Because labor cost effects seem to be modest and much smaller than employees' valuation of the benefit, the authors conclude that they most likely lead to an increase in welfare—even when ignoring the public health benefits. Hence, we strongly support the implementation of sick pay mandates in the spirit of the already enacted state-level mandates and the Healthy Families Act. These mandates are reasonable, mild, and incentive compatible and can be run efficiently without much government bureaucracy.

In 2013, the Family and Medical Insurance Leave (FAMILY) Act was first introduced in Congress. It was reintroduced by Sen. Kirsten Gillibrand (D-NY) in 2019.¹⁰² The FAMILY Act foresees the implementation of a federal family and medical leave system for all workers, including part-time workers and those in small firms. This system would be run by the Social Security Administration and funded through employee and employer payroll taxes. Everyone who is eligible for Social Security Disability Insurance (SSDI) would be eligible to receive a wage replacement benefit of two-thirds of the monthly wage for up to 12 weeks—where the monthly benefit would be capped from below and above at \$580 and \$4,000. Eligibility criteria would be taking care of a newborn child, recovering from one's own serious illness, or taking care of a sick family member including parents, children, and spouses.

While the main parameters of such a system appear to be reasonable in an international comparison, few state-level FMLA systems have been fully implemented yet. This implies an (almost complete) lack of empirical evidence regarding the functioning and possible unintended consequences of such a system in the United States. We are thus more careful in our (immediate) support for the implementation of such a federal social insurance system.

Moreover, while the Healthy Families Act and FAMILY Act have primarily secured support among Democrats, one Republican initiative is the Strong Families Act, introduced by Sens. Deb Fischer (R-NE) and Angus King (I-ME) in 2017.¹⁰³ The act foresees a 25 percent tax credit for employers of any size for family and medical leave benefits.¹⁰⁴ Although we view this tax credit suggestion as a step forward, it is

neither a bold nor an innovative suggestion. It would not ensure that workers who are currently without coverage would be covered. How many additional workers would be covered depends on the employer elasticity in providing paid leave benefits with respect to costs.

Essentially, the proposal provides a taxpayer-funded subsidy for paid family and medical leave. The economics literature does not provide directly applicable elasticity estimates, but, given the experiences with subsidies for employer-provided health insurance, the coverage effect of such a proposal is likely small.¹⁰⁵ Moreover, firms that already provide paid family and medical leave could claim the tax credit and generate windfalls gains. On the plus side, the proposal is not too bureaucratic, has realistic chances of securing enough votes in Congress, and foresees a “study on the effectiveness of the tax credit for paid family and medical leave.”¹⁰⁶

Although all current reform proposals represent a step forward, none alone would lead to an efficient, well-coordinated, and integrated social insurance system of paid sick and medical leave. On the other hand, envisioning a holistic, well-integrated, and coordinated paid leave reform that considers all concerns and demands is certainly wishful thinking. Realistically seen, none of the federal bills discussed above will likely pass in the near future. The more realistic outcome is a continuation of what we have seen over the past decade—grassroots-driven incremental changes, first through city laws, then state laws, and then *maybe* federal laws. The upside of this bottom-up, “organic,” and decentralized approach is that local stakeholders typically have a much better assessment of the problems and desires of local populations and industries. The downside of this approach, however, is the continuation of a fragmented paid leave landscape.

Nevertheless, we believe it is crucial to implement paid leave reforms in such a bottom-up, consensus-oriented, policy approach in which politicians, employees, employers, unions, and industry representatives *work together* in committees and *jointly* implement incremental reforms that a majority can agree on. Only if employers can be convinced that

moderate mandates or payroll taxes are no threat to their businesses, but may actually foster employee productivity and job satisfaction, will they take a proactive, less confrontational position. Social norms and opinions change slowly over time. Past experiences tell us that employers in states that passed sick pay mandates have reported positive experiences and gained confidence in measures that they may have viewed skeptically at the beginning. At the same time, it is crucial not to kill all efforts and modest achievements with a top-down overreach that could further polarize Americans.

A bottom-up, decentralized reform approach has the appeal that states and cities can experiment with alternative approaches and models. It would be helpful, though, if policymakers and all stakeholders could agree on a systematic scientific evaluation of their policies. Such evidence-based evaluations of policy reforms are already standard in other countries.¹⁰⁷ Currently, data availability—or rather a lack thereof—especially at the firm and local level, is the crucial bottleneck in producing more scientific evidence and moving toward an evidence-based paid leave system. For this purpose, it is crucial to collect high-quality, linked employer-employee data, which allow researchers to precisely study benefit take-up at the individual level and how different systems interact. Empirical research has made great progress in the past decades. State-of-the-art statistical methods allow researchers to measure possible positive and unintended consequences of mandating paid leave.¹⁰⁸

Whenever there is evidence that new policies produce more negative effects than intended, they should be abolished or altered. Whenever there is evidence that policies work and enhance welfare, policymakers should proudly promote them, and neighboring regions should carefully consider adopting similar policies. However, without a systematic, evidence-based evaluation, instead of evidence, ideology prevails—on the political right and left.

The question of how to coordinate and best integrate the different paid leave systems remains crucial. While researchers can make recommendations based on empirical evidence, best practices in other countries, or theoretical considerations, it has to be

seen how the implementation works in practice. We believe the rule “don’t fix it unless it’s broken” applies in this context.

First, WC, as the oldest of all US-based systems, has a long tradition and is run by many experienced leaders. Similarly, the SSDI system is a decades-old institution, which is appreciated by the population and policymakers alike. It will be hard—and politically fatal—to radically change the SSDI system in the short run, although there is a clear need for reforms.¹⁰⁹ These two paid leave systems resemble disability insurance systems and “accident insurance” in other countries.

In our opinion, the United States should not fundamentally reform WC or SSDI, but try to build and integrate new paid leave systems around them using the described bottom-up approach (if no agreement can be found for a major federal reform). Just focusing on health-related paid leave, the major difference between the United States and other OECD countries is the lack of universal access to sick and medical leave.

As outlined, substantial improvements in access to short-term sick leave have been made over the past decade. It is important that states continue in their efforts to implement and strengthen state-level sick leave mandates. There will be a time when a broad societal consensus will allow Congress to pass a federal law, such as the Healthy Families Act. It may happen sooner than some may think.

That leaves us with the missing piece in the puzzle: paid medical and family leave. We believe that mixing different types of leave such as short-term disability insurance, parental leave, and eldercare does not help make the case. The AEI-Brookings Working Group on Paid Family Leave has made similar conclusions.¹¹⁰ Moreover, systematically coordinating and integrating into the other (health-related) paid leave systems are more difficult if several different types of leave are lumped together. Finally, this also hinders a systematic evaluation of the causes and consequences of new policies.

One can hypothesize that the lack of access to short- and long-term medical leave results in a long-term decline in the health and labor market prospects

of affected individuals. It could be a driving force of the costly increase in permanent work disability and SSDI caseloads. Many experts would agree that a well-functioning medical leave system could prevent such a long-term decline in work capacity. However, to implement an effective medical leave system, it must be closely integrated with existing short-term sick leave and disability insurance systems and explicitly focus on preventing permanent work disability.

Hence, medical and vocational rehabilitation services must be an integral part of it. When employees experience a health shock—for instance, cancer—doctors, employers, and patients should closely work together and communicate openly about the expected leave of absence, possible workplace accommodation, and part-time work options.¹¹¹ The ideal objective for the employer would be to reduce uncertainty about a possible return of a highly qualified and productive worker. Ideally, employees become healthy, prevent permanent work disability, keep their job, and eventually return to work fully recovered.

Some readers may find such an approach overly optimistic and unrealistic to implement. However, many European countries have managed to integrate their short-term and long-term sick leave systems with their disability insurance systems; they have caseworkers and doctors assigned to long-term sick individuals.¹¹² A description of systems in other countries can also be found in Burkhauser, Daly, and Ziebarth¹¹³ and Duncan McVicar, Roger Wilkins, and Nicolas Ziebarth,¹¹⁴ as well as the references therein.

The Netherlands, Norway, Sweden, and Switzerland have a comprehensive support system with relatively high replacement levels.¹¹⁵ However, these countries are also characterized by high use and take-up. To rectify this, these countries implemented various reforms over the past years. For example, the Dutch reform experience demonstrated that employer incentives can drastically reduce claims.¹¹⁶ In this spirit, David Autor and Mark Duggan¹¹⁷ and Richard Burkhauser and Mary Daly¹¹⁸ propose similar reforms for the US disability insurance system. The core of these proposals seeks to provide monetary incentives to employers to accommodate those who become work disabled.

The United States need not invent from a whole cloth an integrated sick and medical leave system. Many countries around the world provide examples of social insurance systems that work well in practice and could help the United States support a healthier, happier, and more productive workforce in the long run.

Conclusion

This chapter describes existing paid leave systems for health, such as WC short-term sick leave, medical leave, and disability insurance in the United States. After classifying them, we briefly sketch empirical evidence with a focus on research in economics. Then, we use consistently collected, high-quality government data to analyze whether and how often employees had access to paid leave *through their employer* in 2019. Next, we investigate trends in access over the past decade, particularly focusing on short-term sick leave, which has been mandated by dozens of city legislatures and 12 states.

Since the Great Recession, employer provision of medical leave and long-term disability has been stable, whereas access to short-term sick leave has increased by 9 percentage points, from 64 percent in 2015 to 73 percent in 2019. This increase gained momentum when California, Massachusetts, and Oregon enacted their sick leave mandates. Moreover, this increase is observable throughout small and big firms and across occupations and industries, but the largest coverage gains happened in the construction and food and accommodation industries and among low-income earners.

In the last sections of the chapter, we discuss the current policy landscape and the pathways for creating a coordinated and integrated paid leave system, covering short-, medium- and long-term work disabilities. An ideal system would minimize inefficiencies and coverage gaps. It would require coordinated and cost-effective actions among patients, employers, and doctors. And it would lead to a happier, healthier, and more productive workforce in the long run. Although such a system may be wishful thinking given the current polarization in Washington, DC, we point out some silver linings and the progress that has been made in the past decade. Moreover, while the United States lacks a comprehensive and coordinated leave system for work disabilities, experiences from other countries and certain US states can help build and improve the existing support network.

Acknowledgments

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Appendix

Figure A1. Example of Legally Required Employee Right Notifications in Massachusetts

EARNED SICK TIME Notice of Employee Rights

Beginning July 1, 2015, Massachusetts employees have the right to earn and take sick leave from work.

WHO QUALIFIES?

All employees in Massachusetts can earn sick time.

This includes full-time, part-time, temporary, and seasonal employees.

HOW IS IT EARNED?

- Employees earn 1 hour of sick time for every 30 hours they work.
- Employees can earn and use up to **40 hours per year** if they work enough hours.
- Employees with unused earned sick time at the end of the year can **rollover up to 40 hours**.
- Employees **begin earning** sick time on their first day of work and **may begin using** earned sick time 90 days after starting work.

WILL IT BE PAID?

- If an employer has 11 or more employees, sick time must be paid.
- For employers with 10 or fewer employees, sick time may be unpaid.
- Paid sick time must be paid on the same schedule and at the same rate as regular wages.

WHEN CAN IT BE USED?

- An employee can use sick time when the employee or the employee's child, spouse, parent, or parent of a spouse is sick, has a medical appointment, or has to address the effects of domestic violence.
- The smallest amount of sick time an employee can take is one hour.
- Sick time cannot be used as an excuse to be late for work without advance notice of a proper use.
- Use of sick time for other purposes is not allowed and may result in an employee being disciplined.

CAN AN EMPLOYER HAVE A DIFFERENT POLICY?

Yes. Employers may have their own sick leave or paid time off policy, so long as employees can use at least the same amount of time, for the same reasons, and with the same job-protections as under the Earned Sick Time Law.

RETALIATION

- Employees using earned sick time cannot be fired or otherwise retaliated against for exercising or attempting to exercise rights under the law.
- Examples of retaliation include: denying use or delaying payment of earned sick time, firing an employee, taking away work hours, or giving the employee undesirable assignments.

NOTICE & VERIFICATION

- Employees must **notify** their employer before they use sick time, except in an emergency.
- Employers may require employees to **use a reasonable notification system** the employer creates.
- If an employee is out of work for 3 consecutive days **OR** uses sick time within 2 weeks of leaving his or her job, an employer may require documentation from a medical provider.

DO YOU HAVE QUESTIONS?

Call the Fair Labor Division at 617-727-3465 ○ Visit www.mass.gov/ago/earnedsicktime



Commonwealth of Massachusetts
Office of the Attorney General
English - July 2016

The Attorney General enforces the Earned Sick Time Law and regulations.

It is unlawful to violate any provision of the Earned Sick Time Law. Violations of any provision of the Earned Sick time law, M.G.L. c. 149, §148C, or these regulations, 940 CMR 33.00 shall be subject to paragraphs (1), (2), (4), (6) and (7) of subsection (b) of M.G.L. c. 149, §27C(b) and to §150. **This notice is intended to inform.**

Full text of the law and regulations are available at www.mass.gov/ago/earnedsicktime.

Source: Commonwealth of Massachusetts, "Massachusetts Workplace Poster Requirements," <https://www.mass.gov/service-details/massachusetts-workplace-poster-requirements>.

Figure A2. Example of Employee Rights Notification as Legally Required by the Families First Coronavirus Response Act



The **Families First Coronavirus Response Act (FFCRA or Act)** requires certain employers to provide their employees with paid sick leave and expanded family and medical leave for specified reasons related to COVID-19. These provisions will apply from April 1, 2020 through December 31, 2020.

► **PAID LEAVE ENTITLEMENTS**

Generally, employers covered under the Act must provide employees:

Up to two weeks (80 hours, or a part-time employee's two-week equivalent) of paid sick leave based on the higher of their regular rate of pay, or the applicable state or Federal minimum wage, paid at:

- 100% for qualifying reasons #1-3 below, up to \$511 daily and \$5,110 total;
- ⅔ for qualifying reasons #4 and 6 below, up to \$200 daily and \$2,000 total; and
- Up to 12 weeks of paid sick leave and expanded family and medical leave paid at ⅓ for qualifying reason #5 below for up to \$200 daily and \$12,000 total.

A part-time employee is eligible for leave for the number of hours that the employee is normally scheduled to work over that period.

► **ELIGIBLE EMPLOYEES**

In general, employees of private sector employers with fewer than 500 employees, and certain public sector employers, are eligible for up to two weeks of fully or partially paid sick leave for COVID-19 related reasons (see below). *Employees who have been employed for at least 30 days* prior to their leave request may be eligible for up to an additional 10 weeks of partially paid expanded family and medical leave for reason #5 below.

► **QUALIFYING REASONS FOR LEAVE RELATED TO COVID-19**

An employee is entitled to take leave related to COVID-19 if the employee is unable to work, including unable to **telework**, because the employee:

<ol style="list-style-type: none">1. is subject to a Federal, State, or local quarantine or isolation order related to COVID-19;2. has been advised by a health care provider to self-quarantine related to COVID-19;3. is experiencing COVID-19 symptoms and is seeking a medical diagnosis;4. is caring for an individual subject to an order described in (1) or self-quarantine as described in (2);	<ol style="list-style-type: none">5. is caring for his or her child whose school or place of care is closed (or child care provider is unavailable) due to COVID-19 related reasons; or6. is experiencing any other substantially-similar condition specified by the U.S. Department of Health and Human Services.
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► **ENFORCEMENT**

The U.S. Department of Labor's Wage and Hour Division (WHD) has the authority to investigate and enforce compliance with the FFCRA. Employers may not discharge, discipline, or otherwise discriminate against any employee who lawfully takes paid sick leave or expanded family and medical leave under the FFCRA, files a complaint, or institutes a proceeding under or related to this Act. Employers in violation of the provisions of the FFCRA will be subject to penalties and enforcement by WHD.



WAGE AND HOUR DIVISION
UNITED STATES DEPARTMENT OF LABOR

For additional information
or to file a complaint:
1-866-487-9243
TTY: 1-877-889-5627
dol.gov/agencies/whd



WH1422 REV 03/20

Note: This poster includes the labor laws associated with the Families First Coronavirus Response Act.
Source: US Department of Labor, Wage and Hour Division, "Employee Rights," https://www.dol.gov/sites/dolgov/files/WHD/posters/FFCRA_Poster_WH1422_Non-Federal.pdf.

Table A1. Overview of Employer Sick Pay Mandates in the US

Region	Law Effective	Content
San Francisco, CA	February 5, 2007	All employees including part-time and temporary; one hour of paid sick leave for every 30 hours worked; up to five to nine days depending on firm size; for own sickness or family member; 90-day accrual period
Washington, DC	November 13, 2008 February 22, 2014 (retrospectively in September 2014)	"Qualified employees"; one hour of paid sick leave for every 43 hours; 90-day accrual period; up to three to nine days, depending on firm size; own sickness or family; no health care or restaurant workers Extension to 20,000 temporary workers and tipped employees
Connecticut	January 1, 2012	Full-time service-sector employees in firms with more than 49 employees (20 percent of workforce); one hour for every 40 hours; up to five days; own sickness or family member; 680-hour accrual period (four months)
Seattle, WA	September 1, 2012	All employees in firms with more than four full-time employees; one hour for every 30 or 40 hours worked; up to five to 13 days depending on firm size; own sickness or family member; 180-day accrual period
Portland, OR	January 1, 2014	Employees with more than 250 hours per year in firms with more than five employees; one hour for every 30 hours; up to five to 13 days depending on firm size; for own sickness or family member; 180-day accrual period
Jersey City, NJ	January 22, 2014	All employees in private firms with more than nine employees; one hour for up to 40 hours; own sickness or family; 90-day accrual period
New York, NY	April 1, 2014	Employees with more than 80 hours per year in firms with more than four employees or one domestic
Oakland, CA	March 2, 2015	All employees in firms with more than nine employees; one hour for every 30 hours; 90-day accrual period; up to 40 to 72 hours depending on firm size; own sickness or family member
Newark, NJ	May 29, 2014	All employees in private companies; one hour for every 30 hours; 90-day accrual period; up to 24 to 40 hours depending on size; own sickness or family
Philadelphia, PA	May 13, 2015	All employees in firms with more than nine employees; one hour for every 40 hours; up to 40 hours; own sickness or family member; 90-day accrual period
California	July 1, 2015	All employees; one hour of paid sick leave for every 30 hours; minimum 24 hours; own sickness or family member; 90-day accrual period
Massachusetts	July 1, 2015	All employees in firms with more than 10 employees; one hour for every 40 hours; up to 40 hours; own sickness or family member; 90-day accrual period
Oregon	January 1, 2016	All employees in firms with more than nine employees; one hour every 30 hours; 90-day accrual period; up to 40 hours; own sickness or family member
Montgomery County	October 1, 2016	All employees except independent contractors, those without regular schedules, and agency workers; one hour every 30 hours; up to 56 hours every year in firms with more than four employees, up to 32 paid and 24 unpaid in firms with fewer than five employees; own sickness or family member; 90-day accrual

(continued on the next page)

PAID LEAVE FOR ILLNESS, MEDICAL NEEDS, AND DISABILITIES

Table A1. Overview of Employer Sick Pay Mandates in the US (continued)

Region	Law Effective	Content
Vermont	January 1, 2017	Employees with 18 hours/week and more than 20 weeks/year in firms with more than five employees; one hour every 52 hours; up to 24 hours In 2017, 40 hours thereafter; own sickness or family member; underage employees and firms in first year exempt; some state employees and per diem employees in health care or long-term care facility exempt
Arizona	July 1, 2017	All employees; one hour for every 30 hours; up to 40 hours in firms with more than 14 workers, up to 24 hours with fewer than 15 workers; own sickness or family member; employers can impose 90-day accrual period for new employees
Cook County and Chicago, IL	July 1, 2017	All employees with 80 hours in 120 days, some local government employees exempt; one hour for every 40 hours; carry over half of unused up to 20 hours (40 hours if FMLA covered); can use up to 40 hours/year; own sickness or family member; 180 day accrual period for new employees
Minneapolis, MN	July 1, 2017	All employees with 80 hours in firms with more than five employees (fewer than six employees and first year of business: unpaid), independent contractors exempt; one hour for every 30 hours up to 48 hours a year; own sickness or family member; 90 day accrual for new employees
Saint Paul, MN	July 1, 2017 (firms with more than 23 employees) January 1, 2018 (firms with fewer than 24 employees)	All employees with 80 hours (first six months of business: unpaid), independent contractors exempt; one hour for every 30 hours up to 48 hours a year; own sickness or family member; 90-day accrual for new employees
Washington State	January 1, 2018	All employees except those who are exempt from minimum wage law; one hour for every 40 hours; no cap but no more than 40 hours carry over; own sickness or family member; 90-day accrual for new employees
Tacoma, WA	January 1, 2018	All employees with 80 hours; independent contractors, single-person firms, and federal government workers exempt; one hour for every 40 hours; employers can cap and carry over at 40 hours; own sickness or family member; 90-day accrual period for new employees
Austin, TX	October 1, 2018 (firms with more than four employees) October 1, 2020 (firms with fewer than five employees)	All private-sector employees with 80 hours; independent contractors and unpaid interns exempt; one hour for every 30 hours up to 64 hours a year for firms with more than 15 employees (48 hours for firms with fewer than five employees); own sickness or family member; 60-day accrual period for new employees
Maryland	February 11, 2018	Employees with 12 hours/week in firms with more than 14 employees (fewer than 15 employees, 40 hours unpaid); one hour for every 30 hours; employers can cap at 64 hours accrual and 40 hours carry over; own sickness or family member and for parental leave; certain groups exempt (e.g., temporary agency workers)

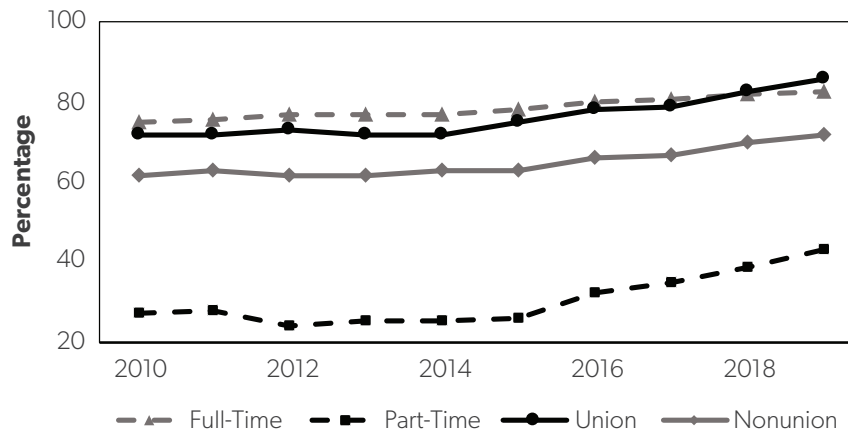
(continued on the next page)

Table A1. Overview of Employer Sick Pay Mandates in the US (continued)

Region	Law Effective	Content
New Jersey	October 28, 2018	All employees; one hour for every 30 hours up to 40 hours/year; per diem health care workers exempt; own sickness or family member; 120-day accrual for new employees; preempts city laws
Michigan	March 28, 2019	Employees with 25 hours/week employed for 25 weeks in firms with more than 49 employees; one hour for every 35 hours; government workers and certain railway and air carrier workers exempt; own sickness or family member; 90-day accrual for new employees

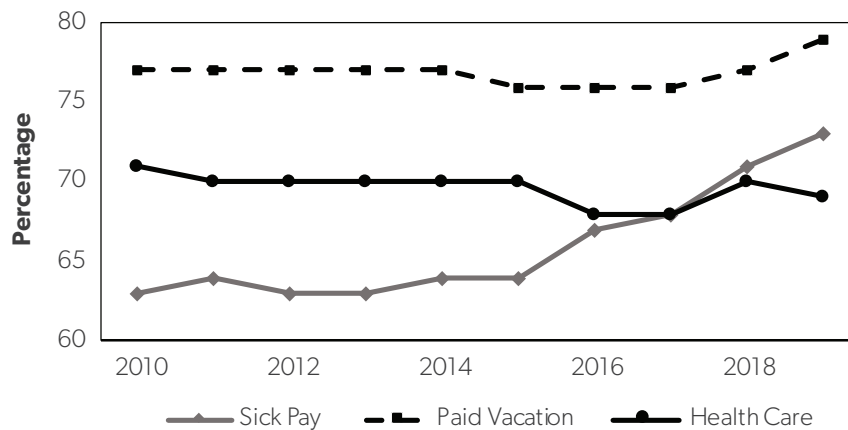
Source: Authors.

Figure A3. Changes in Employee Access to Sick Pay



Source: Authors' calculations based on 2000–18 National Compensation Survey data.

Figure A4. Changes in Access to Short-Term Sick Leave vs. Health Insurance and Paid Vacation



Source: Authors' calculations based on 2019 National Compensation Survey data.

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Employment Effects of Mandated Medical Leave

SOME EVIDENCE FROM STATE-LAW VARIATION

Christine Jolls

Mandated medical leave from work has existed at both federal and state levels in the United States for over 25 years under family and medical leave laws.¹ These laws generally mandate that employers provide a specified number of weeks of leave from work annually to employees with serious health conditions. Under most of these laws, employees' jobs must remain open during the period of mandated medical leave, with no requirement that the leave be paid, although a few state laws mandate the payment of short-term disability benefits to employees whose leave is occasioned by qualifying health conditions.² A key feature of the mandated medical leave context, however, is that employees are often covered by employer-provided short-term disability benefits even when such coverage is not legally mandated under state law.³ Mandated medical leave thus may be de facto paid even when what is legally required is only unpaid leave.⁴

Economists have extensively studied the labor market effects of family and medical leave laws' *family* leave provisions in the United States—provisions mandating leave for employees engaged in caretaking of newborn infants and other family members.⁵ How labor market outcomes are affected by *medical* leave mandates in the United States—the focus of this chapter—has, by contrast, received essentially no attention.⁶ In the years prior to the enactment of the federal Family and Medical Leave Act (FMLA) of 1993, most states did not have state-level mandated medical leave, but a few states did have such leave

(Table 1). This chapter thus explores the effects of mandated medical leave in the United States by analyzing employment outcomes before versus after the enactment of the FMLA in states without versus with pre-1993 state-level mandated medical leave.

At a theoretical level, the effects of mandated medical leave on employment outcomes are ambiguous. Negative effects may follow from such leave's costs, which include the costs employers face in finding and training temporary replacements for on-leave employees and the costs, for a self-insuring employer or one with an experience-rated short-term disability insurance policy, of the short-term disability benefits to which an employee may be entitled during medical leave.⁷ At the same time, the availability of a mandated benefit that employees value—such as mandated medical leave, particularly if paid—may shift labor supply outward and, as a result, produce neutral or even positive employment effects.⁸

The empirical evidence described below suggests limited differences in employment after mandated medical leave under the FMLA went into effect in states without versus with pre-FMLA state-level mandated medical leave. After the FMLA's enactment, employment levels initially showed some relative decline in the former states for employees with versus without health problems, but this chapter concludes that ultimately the data offer limited evidence of significant employment effects—whether negative or positive—of mandated medical leave. The chapter also presents data suggesting that such limited

evidence does not reflect a lack of usage of mandated medical leave.

Mandated Medical Leave: Brief Background

Under the FMLA, an employee with a “serious health condition” that makes the employee “unable to perform the functions of the position of such employee” is entitled to 12 weeks of job-protected leave from work annually.⁹ A “serious health condition” under the FMLA is “an illness, injury, impairment, or physical or mental condition that involves (A) inpatient care; or (B) continuing treatment by a health care provider.” Pre-FMLA state-level mandated medical leave generally involved similar provisions (Table 1, Columns 3 and 4).¹⁰

Decided case law under the FMLA and the state-level provisions in Table 1 illustrate some of the types of health conditions occasioning medical leave under these laws. In *Collins v. NTN-Bower Corp.*,¹¹ for instance, Judge Frank Easterbrook considered the FMLA claim of an employee suffering from depression; mental health also featured in the state-law case *Sieger v. Wisconsin Personnel Commission*.¹² In the domain of physical impairments, *Uema v. Nippon Express Hawaii*,¹³ *Mascioli v. Arby's Restaurant Group Inc.*,¹⁴ and *Harrison v. Children's National Medical Center*¹⁵ involved employees seeking medical leave under the FMLA or a state-level analogue for hepatitis C, a seizure disorder, and a back disorder, respectively.¹⁶ Litigated cases obviously do not provide an unbiased sample of the sorts of health conditions for which employees make use of mandated medical leave—just as litigated cases are generally not a representative sample of the underlying set of disputes—but the case law provides helpful general illustrations of health conditions that may occasion medical leave under the FMLA or a state-level counterpart.

A characteristic feature of mandated medical leave is its application only to firms above a certain size (Table 1). Such firms are also those with the highest prevalence of employer-provided short-term disability benefits.¹⁷ That the set of larger firms

covered by the FMLA and the state-level provisions in Table 1 overlaps with the set of firms most likely to have employer-provided short-term disability benefits increases the degree to which mandated medical leave is often de facto paid even when only unpaid leave is legally required.¹⁸

Theoretical Analysis of the Employment Effects of Mandated Medical Leave

Some employment law mandates are directed to employees as a whole. When, for instance, the Employee Retirement Income Security Act of 1974 regulates health benefits or pensions, the regulation is reasonably viewed as directed to employees as a whole.¹⁹ Other mandates, however, are disproportionately targeted to particular demographic subgroups.²⁰ Mandated medical leave, like many modern mandates, predictably targets some employees to a greater degree than others.

With respect to a mandate directed to employees as a whole, standard economic theory suggests that the employment effects of the mandate turn solely on the relationship between the value of the mandated benefit to employees and the cost of the benefit to employers—a relationship referred to below as the mandate’s “efficiency. An efficient mandate that produces benefits worth $\$X \geq \1 for every dollar of cost incurred by employers will have at least weakly positive employment effects because the full cost of the mandated benefit will shift to employees’ wages, while an inefficient mandate under which such cost shifting will be impossible will have negative employment effects.²¹ But the situation is different with mandates—such as mandated medical leave—targeted to a particular subgroup of employees; in some circumstances such mandates can reduce the employment of targeted individuals even if the mandate is efficient, while in other circumstances such mandates can increase the employment of targeted individuals even if the mandate is inefficient.²² The discussion first describes the reasons mandated medical leave could have negative employment effects and then describes the reasons such leave could have positive employment effects.

PAID LEAVE FOR ILLNESS, MEDICAL NEEDS, AND DISABILITIES

Table 1. Pre-FMLA State-Level Mandated Medical Leave

	(1) Medical Leave Entitlement	(2) Effective Date of Law	(3) Job Protection Language	(4) Covered Health Conditions
Connecticut (An Act Concerning Family and Medical Leave from Employment)	16 weeks biennially for employees at firms with 75 or more employees*	July 1, 1990**	“Upon the expiration of [a] leave of absence, the . . . employee shall be entitled to . . . return to the employee’s original job from which the leave of absence was provided or, if not available, to an equivalent position with equivalent pay.”	Employee has a “disabling physical or mental illness, injury, impairment or condition that involves (A) inpatient care . . . or (B) outpatient care requiring continuing treatment or supervision by a health care provider.”
District of Columbia (Family and Medical Leave Act of 1990)	16 weeks biennially for employees at firms with 50 or more employees***	October 3, 1990****	“Upon return from family or medical leave . . . the employee shall be: (1) Restored by the employer to the position of employment held by the employee when the family or medical leave commenced or (2) Restored to a position of employment equivalent to the position held by the employee when the family or medical leave commenced that includes equivalent employment benefits, pay, seniority, and other terms and conditions of employment.”	Employee is “unable to perform the functions of the employee’s position because of a serious health condition”; “serious health condition” is a “physical or mental illness, injury, or impairment that involves (A) Inpatient care . . . ; or (B) Continuing treatment or supervision at home by a health care provider or other competent individual.”
Maine (An Act to Ensure Family Medical Leave in the State)	Eight weeks biennially for employees at firms with 25 or more employees	August 4, 1988	“Any employee who exercises the right to family medical leave under this subchapter, upon expiration of the leave, is entitled to be restored by the employer to the position held by the employee when the leave commenced or to a position with equivalent seniority status, employee benefits, pay and other terms and conditions of employment.”	Employee has an “accident, disease or condition that: A. Poses imminent danger of death; B. Requires hospitalization . . . ; or C. Any mental or physical condition that requires constant in-home care.”
Rhode Island (An Act Relating to Labor Relations— Family Medical Leave)	13 weeks biennially for employees at firms with 50 or more employees*****	July 12, 1990	“Every employee who exercises his or her right to . . . leave under this chapter shall, upon the expiration of such leave, be entitled to be restored by the employer to the position held by the employee when the leave commenced, or to a position with equivalent seniority, status, employment benefits, pay and other terms and conditions of employment.”	Employee has a “disabling physical or mental illness, injury, impairment or condition that involves (A) inpatient care . . . or (B) outpatient care requiring continuing treatment or supervision by a health care provider.”

(continued on the next page)

Table 1. Pre-FMLA State-Level Mandated Medical Leave (continued)

	(1) Medical Leave Entitlement	(2) Effective Date of Law	(3) Job Protection Language	(4) Covered Health Conditions
Wisconsin (An Act Relating to Providing Family Leave and Medical Leave)	Two weeks annually for employees at firms with 50 or more employees	April 15, 1988	“When an employe returns from family leave or medical leave, his or her employer shall immediately place the employe in an employment position as follows: 1. If the employment position which the employe held immediately before the family leave or medical leave began is vacant when the employe returns, in that position. 2. If the employment position which the employe held immediately before the family leave or medical leave began is not vacant when the employe returns, in an equivalent employment position having equivalent compensation, benefits working shift, hours or employment and other terms and conditions of employment.”	Employee is “unable to perform his or her employment duties” because of a “serious health condition”; “serious health condition” is “disabling physical or mental illness, injury, impairment or condition involving any of the following: 1. inpatient care . . . 2. Outpatient care that requires continuing treatment or supervision by a health care provider.”

Note: The FMLA, with a leave entitlement of 12 weeks annually for employees at firms with 50 or more employees, had an effective date of August 5, 1993. See above for the FMLA’s job protection language and identification of covered health conditions. Columns 1, 3, and 4 are as of 1993, the year of the FMLA’s enactment. *In Connecticut, the leave period immediately following the law’s enactment was 12 weeks biennially. **For Connecticut employers with fewer than 250 but at least 100 employees, the effective date was July 1, 1991. For Connecticut employers with fewer than 100 but at least 75 employees, the effective date was July 1, 1992. ***Beginning in 1994, the District of Columbia law applied to employees at firms with 20 or more employees. ****The District of Columbia law provides that the “rights and responsibilities established” by it would apply beginning 180 days from the law’s effective date of October 3, 1990. *****The Rhode Island law covers leave for the employee’s own health condition under its mandate of “family leave” to care for an ill “family member” because “family member” is defined by the law to include “the employee himself or herself.”

Source: Author.

Negative Employment Effects of Mandated Medical Leave. As noted in the introduction, mandated medical leave involves several potential costs for employers. First, mandated medical leave requires employers to find alternative ways for on-leave employees’ job duties to be performed during the period of absence; employers may need to train replacement employees, who nonetheless may not perform as well as the individuals they are replacing and who may impose higher wage costs on employers if a temporary agency or other third party is involved in the transaction. Moreover, as discussed

above, employees on mandated medical leave will in some cases be covered by employer-provided short-term disability benefits supplying at least partial wage replacement, with associated costs for both self-insuring employers and employers with experience-rated short-term disability insurance policies. Finally, mandated medical leave often imposes various record-keeping and other administrative requirements on employers, requirements that at least some employers perceive to involve costs.²³

Employers may respond to the costs of mandated medical leave by seeking to reduce the employment

of individuals who would otherwise stand to benefit from such leave. To be sure, because many conditions covered by mandated medical leave—such as the conditions in the case law discussed above from the FMLA and its state-law counterparts—will also qualify as disabilities under disability discrimination law, such reductions in employment opportunities could violate prohibitions on such discrimination.²⁴ However, disability discrimination law is likely to be difficult to enforce, particularly at the hiring stage. The problem with enforcement is in part the general difficulty of enforcing any sort of prohibition on hiring discrimination; an employer could choose one candidate over another for many reasons.²⁵ The difficulties are magnified, however, with disability discrimination law because the small number of individuals who have any given health problem makes it extremely difficult to use any sort of statistical evidence to prove discrimination.²⁶ Even a failure to retain (as opposed to hire) an individual with a particular health problem who would otherwise stand to benefit from mandated medical leave may be difficult to challenge under disability discrimination law. Thus, the costs of mandated medical leave may produce negative employment effects notwithstanding nominal protection afforded by disability discrimination law.²⁷

Positive Employment Effects from Mandated Medical Leave. Employment prospects of individuals who may stand to benefit from mandated medical leave may not suffer, however, if employers cannot treat different employees differently in employment decision-making because the employers do not know who is who. At the time of hiring, employers may not view employees of the sort in the mandated medical leave case law discussed above as any more costly than the average employee, as conditions such as depression and other serious mental conditions, hepatitis C, and seizure and back disorders would not necessarily be visually or otherwise observable to an employer at the time of hiring (if they even existed at that time). Some of these conditions would also not necessarily be observable to the employer even once the employment relationship was underway.

If enough conditions for which mandated medical leave is ultimately taken are unobservable to employers, then such leave could provide an example of the sort of targeted mandate that can increase rather than decrease targeted individuals' employment levels. Note that such mandates—in contrast to mandates directed to employees as a whole—may increase targeted individuals' employment *regardless of the efficiency of the mandate*. The reason for this is that, with equality in the wages and employment levels of the targeted and untargeted employees (because of employers' inability to distinguish the two groups), the costs of the mandate will be spread across all employees, while the benefits will be concentrated on the targeted employees. In terms of labor supply and labor demand, the shift in the labor supply curve for targeted employees will depend on the value to them of the mandated benefit, while the shift in the labor demand curve for targeted employees will depend on the cost of the mandated benefit averaged over all employees.²⁸

Data

This chapter utilizes information on employment and health conditions from the March Current Population Survey (CPS) and studies the employment effects of mandated medical leave for both individuals reporting a work-limiting health condition and individuals not reporting such a condition. Individuals are further grouped by whether their state of residence was without or with state-level mandated medical leave in the years prior to the enactment of the FMLA. As Table 1 shows, four of the five states with pre-FMLA mandated medical leave had laws similar both to one another and to the FMLA; in the fifth state (Maine), pre-FMLA mandated medical leave was limited to the most serious medical conditions.²⁹ In states other than those in Table 1, mandated medical leave originated with the FMLA in 1993. Comparing employment outcomes before versus after the enactment of the FMLA in states without versus with pre-FMLA state-level mandated medical leave for individuals of varying health

statuses provides a measure of the effects of mandated medical leave.³⁰

In the years surrounding the FMLA's enactment, mandated medical leave was a common occurrence both in absolute terms and in comparison to leave for family-related reasons. Table 2, taken from a Commission on Family and Medical Leave study of the FMLA shortly after the law's 1993 enactment, shows the prominence of medical leave among the types of leave covered by the FMLA. Nearly nine million medical leaves—over three million extending beyond four weeks in length (Column 4)—were taken by respondents in the Commission on Family and Medical Leave's survey, in contrast to a little under two million leaves taken by respondents to care for a newborn, newly adopted child, or newly placed foster child. Similarly, at the state level, 1991 data from Wisconsin—a state with mandated family and medical leave prior to the FMLA's enactment—show that over a hundred complaints involving medical leave (nearly half of all complaints) were filed under the law following its 1988 adoption.³¹ Although the core public image of leave-taking under the FMLA and the state-level provisions in Table 1 in the period of the laws' enactment was family rather than medical leave,³² Table 2 and available state-level information show the importance of medical leave. Table 3, drawn from the same Commission on Family and Medical Leave study as Table 2, shows the frequency of medical leave across age groups, with high use for all groups and especially extensive use among older employees (lower rows of Table 3).

As just noted, the overwhelming public focus in the period of enactment of the FMLA and the state-level provisions in Table 1 was on leave for family as opposed to medical reasons—a focus that yields important benefits for the empirical approach adopted in this chapter. There is no suggestion that mandated medical leave was enacted—at either the federal or the state level—in response to any changes or trends in the employment opportunities of individuals targeted by such leave. This is helpful to the empirical analysis below because if changes or trends in such employment opportunities differed between the group of five states reflected in Table 1 and the group of states in which mandated medical leave originated

with the FMLA, then examining post-FMLA shifts in employment across the two groups of states might pick up the effects of these other changes or trends rather than the effects of imposing mandated medical leave.

As discussed in previous sections, mandated medical leave under the FMLA and the state-level provisions in Table 1 may be de facto paid—particularly at larger firms—even when only unpaid leave is legally required. At the time of the FMLA's enactment, nearly half of employees in medium and large establishments of 100 employees and more, versus only a quarter of those in smaller establishments, were covered by employer-provided short-term disability benefits.³³

In the empirical analysis below, March CPS respondents who reported a “health problem or disability which prevents them from working or which limits their kind or amount of work”³⁴ are categorized as individuals reporting a work-limiting health condition; the analysis examines employment effects for individuals reporting versus not reporting a work-limiting health condition. Because the measure from the March CPS is self-reported, this measure could be partly influenced by—rather than merely influencing, as sought to be studied in this chapter—an individual's employment status, for individuals who cannot obtain employment may be more likely to report a health condition that limits work, in part to justify their lack of success in obtaining work.³⁵ Such a pattern, however, is unlikely to differ substantially across states without versus with pre-FMLA state-level mandated medical leave, and thus any such self-reporting issues are not likely to bias the empirical findings reported below. Put another way, it seems relatively unlikely that the degree to which mandated medical leave under the FMLA was a legal innovation in a given state would have a meaningful effect on work-limiting health condition reporting—particularly given the observation made above about the lack of focus on medical leave issues at the time of enactment of the FMLA and the state-level provisions in Table 1.

In the following analysis, attention is restricted to individuals with the greatest level of labor force attachment—those age 21 to 58, sometimes further

PAID LEAVE FOR ILLNESS, MEDICAL NEEDS, AND DISABILITIES

Table 2. Types of Leave-Taking at FMLA-Covered Workplaces

Reason for Leave	(1) Number of Employees Taking Leave of Listed Type	(2) Number of Employees Taking Leave of Listed Type with Short Duration	(3) Number of Employees Taking Leave of Listed Type with Medium Duration	(4) Number of Employees Taking Leave of Listed Type with Long Duration
Leave for Own Health Condition (Other Than Maternity Disability)	8,886,950	3,057,111*	2,488,346*	3,341,493*
Maternity-Disability Leave	563,153	58,568**	73,210**	431,375**
Leave to Care for Newborn, Newly Adopted Child, or Newly Placed Foster Child	1,972,861	467,568***	475,460***	1,029,833***
Leave to Care for Ill Child	1,123,486	857,220****	234,809****	31,458****
Leave to Care for Ill Spouse	542,298	355,205*****	101,952*****	85,683*****
Leave to Care for Ill Parent	1,271,182	715,676*****	419,490*****	136,017*****

Note: Data reflect all leaves taken at FMLA-covered workplaces over the 18 months preceding the Commission on Family and Medical Leave's survey. "Short" duration is one week or less. "Medium" duration is more than one week but not longer than four weeks. "Long" duration extends beyond four weeks. *These numbers represent 34.4 percent (short duration), 28.0 percent (medium duration), and 37.6 percent (long duration) of employees taking leave for their own health condition. **These numbers represent 10.4 percent (short duration), 13.0 percent (medium duration), and 76.6 percent (long duration) of employees taking maternity-disability leave. ***These numbers represent 23.7 percent (short duration), 24.1 percent (medium duration), and 52.2 percent (long duration) of employees taking leave to care for a newborn, newly adopted child, or newly placed foster child. ****These numbers represent 76.3 percent (short duration), 20.9 percent (medium duration), and 2.8 percent (long duration) of employees taking leave to care for an ill child. *****These numbers represent 65.5 percent (short duration), 18.8 percent (medium duration), and 15.8 percent (long duration) of employees taking leave to care for an ill spouse. *****These numbers represent 56.3 percent (short duration), 33.0 percent (medium duration), and 10.7 percent (long duration) of employees taking leave to care for an ill parent.

Source: Author's calculations; and Commission on Family and Medical Leave, *A Workable Balance: Report to Congress on Family and Medical Leave Policies*, April 30, 1996, Tables 5.B and 5.D.

restricted to older individuals age 40 to 58, who appear to take medical leave especially frequently (Table 3).³⁶ Table 4 reports some summary statistics for the sample.

Empirical Results

This chapter emphasizes employment outcomes before versus after the FMLA's 1993 enactment in

states without versus with pre-FMLA state-level mandated medical leave; throughout, outcomes are measured over 1990 to 1999. Figure 1 shows that among individuals not reporting a work-limiting health condition, the number of weeks worked per year was trending slightly upward immediately after the FMLA's enactment both in states without pre-FMLA state-level mandated medical leave (dotted line) and in states with such leave (solid line). By contrast, Figure 2 shows that among individuals reporting

Table 3. Medical Leave-Taking by Age

Age	(1) Percentage of All Leave-Taking Employees in Listed Age Group Whose Leave Was for Own Health Condition*	(2) Number of Employees in Listed Age Group (Percentage of All Employees in Listed Age Group**)	(3) Number of Employees in Listed Age Group Taking Leave for Any Family or Medical Reason (Percentage of All Employees in Listed Age Group Taking Leave for Any Family or Medical Reason)**	(4) Number of Employees in Listed Age Group Taking Leave for Any Family or Medical Reason / Number of Employees in Listed Age Group	(5) Estimated Percentage of Employees in Listed Age Group Taking Leave for Own Health Condition (Column 1 x Column 4)***
18–24	54.6%	16,827,720 (13.8%)	2,350,597 (11.5%)	0.140	0.076
25–34	44.0%	27,802,320 (22.8%)	6,050,232 (29.6%)	0.218	0.096
35–49	65.4%	50,605,100 (41.5%)	8,339,509 (40.8%)	0.165	0.108
50–64	77.9%	22,802,780 (18.7%)	3,127,316 (15.3%)	0.137	0.107
65+	81.5%	3,902,080 (3.2%)	592,759 (2.9%)	0.152	0.124

Note: *Data reflect all leaves taken at FMLA-covered workplaces over the 18 months preceding the Commission on Family and Medical Leave's survey. **Data reflect all leaves taken at both FMLA-covered and non-FMLA-covered workplaces over the 18 months preceding the Commission on Family and Medical Leave's 1995 survey; data on intensity of leave-taking by age are not available for FMLA-covered workplaces (approximately two-thirds of the sample) separate from non-FMLA-covered workplaces. ***Data reflect the estimated percentage of employees taking leave for their own health condition on the assumption that intensity of leave-taking by age is similar across FMLA-covered and non-FMLA-covered workplaces.

Source: Author's calculations; and Commission on Family and Medical Leave, *A Workable Balance: Report to Congress on Family and Medical Leave Policies*, April 30, 1996, Figure 4.1 and Appendix E, Tables 5.A and 5.B.

a work-limiting health condition, the number of weeks worked per year in states without pre-FMLA state-level mandated medical leave was level (dotted line), while the number of weeks worked per year in states with pre-FMLA state-level mandated medical leave showed a clear increase (solid line). Thus, the gap in weeks worked per year in states without versus with pre-FMLA state-level mandated medical leave—a gap that Figure 1 shows was fairly similar throughout the 1990s among individuals not reporting a work-limiting health condition—was, among individuals reporting a work-limiting health

condition, less favorable to states without pre-FMLA state-level mandated medical leave in 1993, 1994, and 1995 than over most of the rest of the 1990s (Figure 2). The analysis later examines employment outcomes for individuals reporting versus not reporting a work-limiting health condition in the two state groups before and after the FMLA within a regression framework.

Regression Framework. The effects of the FMLA's 1993 enactment in states without versus with pre-FMLA state-level mandated medical leave may

PAID LEAVE FOR ILLNESS, MEDICAL NEEDS, AND DISABILITIES

Table 4. Some Summary Statistics (Individual-Level Data)

Panel A. Age 21–58

	1989 (1990)		1991 (1992)		1993 (1994)		1995 (1996)		1997 (1998)		1999 (2000)	
	1 Work- Limiting Health Condition	2 No Work- Limiting Health Condition	3 Work- Limiting Health Condition	4 No Work- Limiting Health Condition	5 Work- Limiting Health Condition	6 No Work- Limiting Health Condition	7 Work- Limiting Health Condition	8 No Work- Limiting Health Condition	9 Work- Limiting Health Condition	10 No Work- Limiting Health Condition	11 Work- Limiting Health Condition	12 No Work- Limiting Health Condition
Weeks Worked	37.49	46.74	36.70	46.40	36.79	46.57	37.26	47.14	37.22	47.52	37.85	47.83
Age 21–30	0.24	0.32	0.22	0.30	0.18	0.29	0.17	0.28	0.16	0.27	0.16	0.26
Age 31–39	0.27	0.30	0.27	0.30	0.28	0.30	0.26	0.29	0.22	0.28	0.22	0.27
Age 40–49	0.27	0.24	0.31	0.26	0.30	0.27	0.33	0.28	0.36	0.29	0.34	0.30
Female	0.44	0.46	0.45	0.46	0.46	0.47	0.51	0.47	0.51	0.47	0.50	0.47
White	0.85	0.86	0.86	0.86	0.83	0.85	0.84	0.85	0.83	0.84	0.81	0.83
Post High School	0.32	0.48	0.40	0.53	0.43	0.56	0.46	0.57	0.48	0.58	0.46	0.59
Married	0.51	0.63	0.53	0.62	0.50	0.61	0.51	0.61	0.46	0.60	0.48	0.60
Work Part-Time	0.21	0.12	0.19	0.13	0.22	0.12	0.20	0.12	0.21	0.11	0.21	0.11
Work Part Year	0.56	0.25	0.57	0.26	0.54	0.24	0.52	0.22	0.54	0.21	0.51	0.19
Employer Size*	2.14	2.31	2.17	2.31	2.13	2.25	2.19	2.30	2.17	2.32	2.23	2.33
Union Membership	0.02	0.03	0.01	0.03	0.02	0.03	0.02	0.03	0.02	0.03	0.02	0.03
Work-Limiting Health Condition x State Unemployment Rate	0.05	—	0.07	—	0.06	—	0.05	—	0.04	—	0.04	—
Observations	2,261	66,453	2,226	65,733	2,194	62,751	1,878	54,650	1,758	55,986	1,829	57,535

Table 4. Some Summary Statistics (Individual-Level Data)

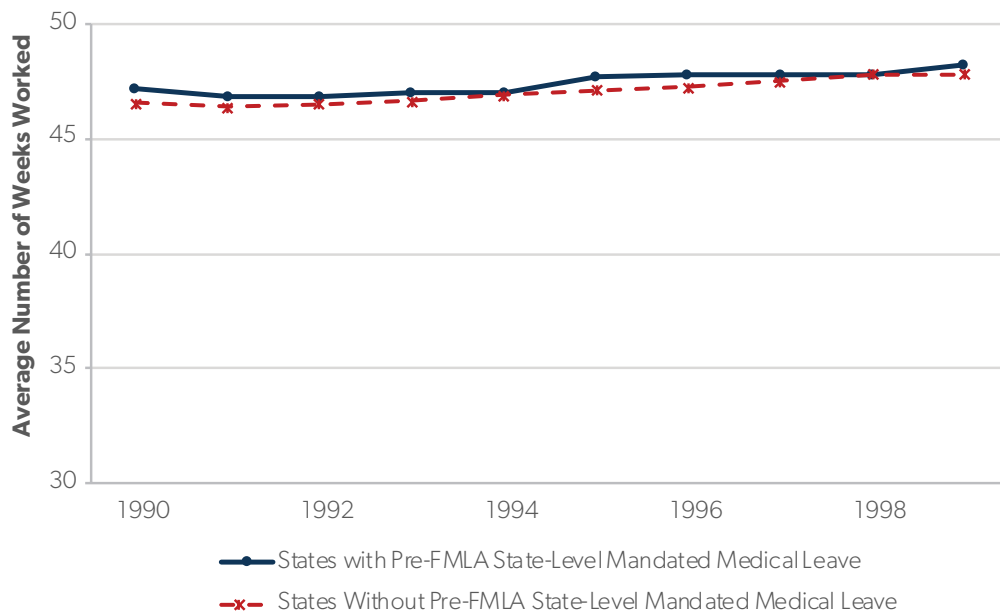
Panel B. Age 40–58

	1989 (1990)		1991 (1992)		1993 (1994)		1995 (1996)		1997 (1998)		1999 (2000)	
	1 Work- Limiting Health Condition	2 No Work- Limiting Health Condition	3 Work- Limiting Health Condition	4 No Work- Limiting Health Condition	5 Work- Limiting Health Condition	6 No Work- Limiting Health Condition	7 Work- Limiting Health Condition	8 No Work- Limiting Health Condition	9 Work- Limiting Health Condition	10 No Work- Limiting Health Condition	11 Work- Limiting Health Condition	12 No Work- Limiting Health Condition
Weeks Worked	37.81	48.29	37.57	47.88	37.95	48.06	37.71	48.34	38.56	48.72	38.66	49.03
Age 40–49	0.55	0.64	0.62	0.65	0.56	0.65	0.58	0.66	0.58	0.64	0.55	0.63
Female	0.44	0.46	0.45	0.47	0.48	0.47	0.50	0.47	0.52	0.47	0.50	0.48
White	0.85	0.87	0.86	0.87	0.84	0.86	0.86	0.86	0.83	0.85	0.82	0.85
Post High School	0.30	0.46	0.42	0.53	0.43	0.57	0.45	0.57	0.51	0.58	0.49	0.60
Married	0.58	0.74	0.60	0.74	0.59	0.73	0.58	0.72	0.54	0.70	0.53	0.70
Work Part-Time	0.20	0.11	0.19	0.11	0.22	0.11	0.22	0.11	0.21	0.10	0.20	0.09
Work Part Year	0.54	0.19	0.53	0.20	0.50	0.19	0.49	0.18	0.49	0.16	0.47	0.15
Employer Size*	2.14	2.31	2.13	2.31	2.09	2.25	2.18	2.31	2.14	2.31	2.21	2.33
Union Membership	0.03	0.05	0.02	0.05	0.02	0.04	0.02	0.04	0.02	0.04	0.02	0.04
Work-Limiting Health Condition x State Unemployment Rate	0.05	—	0.07	—	0.06	—	0.05	—	0.04	—	0.04	—
Observations	1,149	25,755	1,152	26,470	1,209	26,411	1,101	24,111	1,093	25,779	1,139	27,309

Note: Each listed year refers to the calendar year for which the number of weeks worked is reported, with the survey year of the corresponding March CPS in parentheses; for instance, data in Columns 1 and 2 are data from the 1990 March CPS, which asked about the number of weeks worked in calendar year 1989. For each year, the sample is limited to observations for which all listed variables are non-missing. * Employer size categories are fewer than 24 employees, 25–99 employees, and 100 or more employees, with slightly more than half of all observations falling into the final category.

Source: Author's calculations from March Current Population Survey.

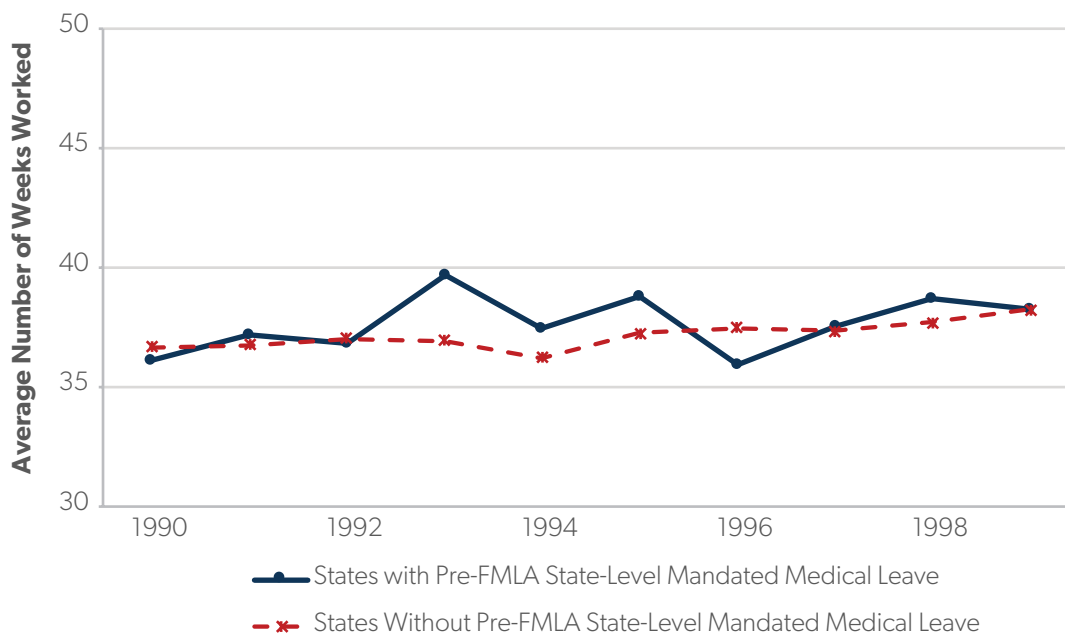
Figure 1. Employment of Individuals Not Reporting a Work-Limiting Health Problem, 1990–99



Note: Years on the horizontal axis refer to calendar years for which the number of weeks worked is reported. States with pre-FMLA state-level mandated medical leave are listed in Table 1.

Source: Author’s calculations from March Current Population Survey.

Figure 2. Employment of Individuals Reporting a Work-Limiting Health Problem, 1990–99



Note: Years on the horizontal axis refer to calendar years for which the number of weeks worked is reported. States with pre-FMLA state-level mandated medical leave are listed in Table 1.

Source: Author’s calculations from March Current Population Survey.

be studied within a regression framework using the standard differences-in-differences approach reflected in Equation 1:

$$\begin{aligned}
 y_{ijt} = & x_{ij}' \cdot \pi_t + \delta \text{HEALTHCOND}_i \\
 & + \alpha_t \text{HEALTHCOND}_i \\
 & + \eta (\text{HEALTHCOND}_i \cdot \text{INNOV}_j) \\
 & + \beta_t (\text{HEALTHCOND}_i \cdot \text{INNOV}_j), \quad (1)
 \end{aligned}$$

where y is the number of weeks worked per year; i indexes individuals, j indexes states, and t indexes years; x includes a constant and a set of individual characteristics with potentially time-varying effects π_t ; HEALTHCOND is a dummy variable equal to one for individuals reporting a work-limiting health condition, with main effect δ and potentially time-varying effects α_t ; and INNOV is a dummy variable equal to one for states in which mandated medical leave under the FMLA was an innovation (states other than those in Table 1). The key terms in Equation 1 are interactions of HEALTHCOND and INNOV , with main effect η and potentially time-varying effects β_t . Equation 2 adds main effect θ and potentially time-varying effects γ_t of INNOV ; in this specification the state and state-year interactions that may be included in estimating Equation 1 can no longer be estimated.

$$\begin{aligned}
 y_{ijt} = & x_{ij}' \cdot \pi_t + \delta \text{HEALTHCOND}_i \\
 & + \alpha_t \text{HEALTHCOND}_i + \theta \text{INNOV}_j \\
 & + \gamma_t \text{INNOV}_j \\
 & + \eta (\text{HEALTHCOND}_i \cdot \text{INNOV}_j) \\
 & + \beta_t (\text{HEALTHCOND}_i \cdot \text{INNOV}_j), \quad (2)
 \end{aligned}$$

In the results reported below, all the time-varying effects in Equations 1 and 2 are measured over the 1990s ($1990 \leq t \leq 1999$), with the effects for 1989 normalized to zero and with years referring to calendar years for which the number of weeks worked per year is reported.³⁷ (Because x includes a constant, all regressions include year effects.)

The central coefficients of interest in Equations 1 and 2 are the β_t coefficients, which, for $t \geq 1993$ (the year of the FMLA's enactment), measure time-varying effects on individuals reporting versus not reporting

a work-limiting health condition in states without versus with pre-FMLA state-level mandated medical leave. For $t < 1993$, the β_t coefficients provide pretreatment specification checks.

The individual characteristics in x include age, sex, race, educational attainment, marital status, part-time and part-year work status, union membership, and the interaction of reporting a work-limiting health condition and the unemployment rate in individual i 's state. The inclusion of the interaction of reporting a work-limiting health condition and the state unemployment rate controls for the possibility that individuals reporting such conditions may face especially poor employment prospects when the general unemployment rate is high.

Basic Regression Results. Columns 1 and 2 of Table 5 report the results of the basic specifications in Equations 1 and 2. As noted above, the specification in Equation 2 allows estimation of the effects of INNOV but not state and state-year effects. These and all regressions in Table 5 include controls for employer size.

As suggested by Figures 1 and 2, Columns 1 and 2 of Table 5 show that the β_t coefficient estimates on $\text{HEALTHCOND} \times \text{INNOV}$ are negative at the time of the FMLA's enactment (although for 1994, unlike 1993 and 1995, neither estimate is significantly different from zero). In both columns, the coefficient estimates on $\text{HEALTHCOND} \times \text{INNOV}$ in the final pretreatment year, 1992, are also negative, although smaller in magnitude and only marginally different from zero. Column 3 of Table 5 reports the results of repeating the regression reported in Column 1 on the subsample of individuals age 40 to 58; for this sample, the 1993 and 1995 results again show negative coefficient estimates on $\text{HEALTHCOND} \times \text{INNOV}$ that are significantly different from zero, and the results additionally show the absence of any pretreatment trend in the coefficient estimates on $\text{HEALTHCOND} \times \text{INNOV}$ in 1992.

As noted earlier, a few state laws mandate the payment of short-term disability benefits to employees whose medical leave is occasioned by qualifying health conditions. Such laws, which date back decades, exist

in California, Hawaii, New Jersey, New York, and Rhode Island.³⁸ Observations from these five states are omitted from the regressions reported in Columns 4 and 5 of Table 5, which are otherwise identical to the regressions reported in Columns 1 and 3 of Table 5. Omitting these observations does not alter the results.

The FMLA's enactment was close in time to the 1990 enactment date and 1992 effective date of the Americans with Disabilities Act (ADA) of 1990; like the FMLA, the ADA was an innovation relative to pre-existing law in some states but not others.³⁹ Observations from states in which the ADA was an innovation are omitted from the regressions reported in Columns 6 and 7 of Table 5, which are otherwise identical to the regressions reported in Columns 1 and 3 of Table 5. Observations from such states represent approximately two-thirds of the sample. The coefficient estimates on *HEALTHCOND* \times *INNOV* in 1993, 1994, and 1995 are similar to those in Columns 1 and 3, although in Column 6 they are no longer significantly different from zero.

Potential Outlier-State Effects. One question raised by the analysis thus far is whether the effects in Table 5 could be driven by the experience of a particular state in the group of states with pre-FMLA state-level mandated medical leave—rather than the experiences of the group as a whole—relative to the experiences of states without pre-FMLA state-level mandated medical leave. Thus, Columns 1–5 of Table A1 report the results of repeating the regression in Column 1 of Table 5 for five different groups of observations, each time omitting observations from a state with pre-FMLA state-level mandated medical leave. As Table A1 shows, the β_t coefficient estimates on *HEALTHCOND* \times *INNOV* in 1993, 1994, and 1995 remain fairly similar to those in Column 1 of Table 5. Column 6 of Table A1 reports the results of the regression in Column 1 of Table 5 omitting observations from Vermont, in which mandated medical leave was in effect for only a short period before the FMLA's enactment. As Column 6 of Table A1 shows, omitting observations from Vermont has no effect on the results.

Employer Size. In the years surrounding the FMLA's enactment, mandated medical leave was more likely to be de facto paid at larger employers than at smaller ones, as discussed previously. In an attempt to focus on the experiences of larger employers, Columns 1–3 of Table A2 repeat the regressions in Columns 1–3 of Table 5 omitting observations from small (under 25 employees) and medium-sized (25 to 99 employees) employers.⁴⁰ Observations from the largest employers make up approximately half the original samples in Columns 1–3 of Table 5. The β_t coefficient estimates on *HEALTHCOND* \times *INNOV* in Columns 1–3 of Table A2 are similar to those in Columns 1–3 of Table 5 for 1993 but in the reduced sample of Table A2 are not significantly different from zero. The coefficient estimates on *HEALTHCOND* \times *INNOV* are much smaller in Columns 1 and 2 of Table A2 than in Columns 1 and 2 of Table 5 for 1995. The coefficient estimate on *HEALTHCOND* \times *INNOV* in Column 3 of Table A2 is similar to that in Column 3 of Table 5 for 1995 but in the reduced sample of Table A2 is not significantly different from zero. Overall, there is an absence of evidence of significant employment effects of the enactment of mandated medical leave among individuals employed by employers with 100 or more employees.

Columns 4–6 of Table A2 explore the effects of adding observations for which the March CPS employer size variable is missing, often because the individual was not employed; such observations are omitted from Figures 1 and 2 and from the regressions discussed until this point. The regressions reported in Columns 4–6 of Table A2 repeat the regressions in Columns 1–3 of Table 5 with the addition of observations for which employer size is missing; employer size obviously can no longer be included as a control. The new regressions provide limited evidence of negative employment effects of mandated medical leave. It is possible that changes in the likelihood of being employed at all—not reflected in the results reported in Table 5—alter the estimated employment effects of mandated medical leave; it is also possible that the inability to control for employer size in Table A2 biases the results reported there.

Table 5. Basic Regression Results

	(1) Age 21–58	(2) Age 21–58	(3) Age 40–58	(4) Age 21–58	(5) Age 40–58	(6) Age 21–58	(7) Age 40–58
<i>HEALTHCOND</i> x <i>INNOV</i> : Main Effect	1.739 (1.145)	1.736 (1.094)	1.101 (1.166)	2.553** (1.003)	1.588 (1.278)	0.810 (1.566)	2.695*** (0.959)
<i>HEALTHCOND</i> x <i>INNOV</i> : 1990	-0.111 (1.693)	-0.099 (1.657)	0.296 (1.314)	-1.691 (1.387)	0.019 (1.512)	1.432 (2.147)	-0.001 (0.899)
<i>HEALTHCOND</i> x <i>INNOV</i> : 1991	-1.227 (1.791)	-1.149 (1.727)	0.546 (2.108)	-2.366 (1.681)	-0.160 (2.404)	0.779 (2.276)	-0.112 (1.667)
<i>HEALTHCOND</i> x <i>INNOV</i> : 1992	-2.285* (1.319)	-2.278* (1.281)	-0.571 (1.334)	-3.305** (1.472)	-1.207 (1.457)	-0.935 (1.814)	-2.390 (1.575)
<i>HEALTHCOND</i> x <i>INNOV</i> : 1993	-2.893** (1.220)	-2.923** (1.165)	-2.621** (1.253)	-4.049*** (0.767)	-3.465*** (1.210)	-1.912 (1.719)	-3.875*** (1.480)
<i>HEALTHCOND</i> x <i>INNOV</i> : 1994	-1.505 (1.881)	-1.534 (1.845)	-1.683 (1.336)	-2.543 (2.434)	-2.302 (1.875)	-0.711 (2.363)	-2.204 (1.560)
<i>HEALTHCOND</i> x <i>INNOV</i> : 1995	-2.779** (1.227)	-2.813** (1.169)	-3.685*** (0.958)	-3.855** (1.503)	-4.334*** (1.000)	-2.614 (1.878)	-5.158*** (1.064)
<i>HEALTHCOND</i> x <i>INNOV</i> : 1996	1.327 (1.092)	1.309 (1.023)	1.594 (1.384)	0.125 (0.959)	0.236 (0.988)	1.674 (1.498)	1.069 (1.794)
<i>HEALTHCOND</i> x <i>INNOV</i> : 1997	-2.253 (1.889)	-2.247 (1.859)	0.657 (1.691)	-2.454 (2.352)	1.012 (1.713)	-0.395 (2.445)	-0.607 (2.655)
<i>HEALTHCOND</i> x <i>INNOV</i> : 1998	-1.513 (1.814)	-1.513 (1.739)	-1.402 (1.403)	-2.762 (1.864)	-2.141 (1.465)	-0.456 (2.999)	-3.965** (1.569)
<i>HEALTHCOND</i> x <i>INNOV</i> : 1999	-2.012 (1.650)	-1.994 (1.659)	-1.386 (1.745)	-2.907* (1.760)	-2.250 (1.933)	-1.115 (1.768)	-2.869* (1.559)
<i>INNOV</i> : Main Effect		-0.113 (0.144)					
<i>INNOV</i> : 1990		-0.143 (0.190)					
<i>INNOV</i> : 1991		-0.170 (0.250)					
<i>INNOV</i> : 1992		0.104 (0.215)					
<i>INNOV</i> : 1993		-0.070 (0.123)					
<i>INNOV</i> : 1994		-0.127 (0.192)					
<i>INNOV</i> : 1995		-0.120 (0.210)					

(continued on the next page)

Table 5. Basic Regression Results (continued)

	(1) Age 21–58	(2) Age 21–58	(3) Age 40–58	(4) Age 21–58	(5) Age 40–58	(6) Age 21–58	(7) Age 40–58
<i>INNOV</i> : 1996		–0.134 (0.223)					
<i>INNOV</i> : 1997		0.053 (0.176)					
<i>INNOV</i> : 1998		0.291 (0.177)					
<i>INNOV</i> : 1999		–0.059 (0.160)					
Includes Year Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Includes State and State-Year Interaction Effects	Yes	No	Yes	Yes	Yes	Yes	Yes
<i>N</i>	692,057	692,057	300,428	544,112	237,249	208,134	91,203

Note: All regressions include year-specific controls for age, sex, race, educational attainment, marital status, part-time and part-year work status, union membership, the interaction of *HEALTHCOND* and the state unemployment rate, and employer size. Other controls are as indicated in the table. Age samples are listed in column headings. Columns 1 and 3–7 present linear regression results for the specification in Equation 1 (coefficient estimates on *HEALTHCOND* are not reported); Column 2 presents linear regression results for the specification in Equation 2 (coefficient estimates on *HEALTHCOND* are not reported). Robust standard errors clustered on state-health condition interactions are in parentheses below coefficient estimates. The results in Columns 4–5 are for a sample that omits observations from states with mandated payment of short-term disability benefits (California, Hawaii, New Jersey, New York, and Rhode Island). The results in Columns 6–7 are for a sample that omits observations from states in which the Americans with Disabilities Act of 1990 was an innovation. (See the appendix.) *Significant at the 0.10 level. **Significant at the 0.05 level. ***Significant at the 0.01 level.
Source: Author.

Conclusion

Well before the enactment of mandated medical leave—which may be de facto paid by virtue of employer-provided short-term disability benefits—at the federal level, Wisconsin pioneered such leave in “landmark” state legislation in the late 1980s.⁴¹ Other states followed suit, providing employees with an entitlement to medical leave prior to the enactment of mandated medical leave at the federal level in 1993. Some state laws may have provided a “model” for federal approaches much as, today, state-level laws that require one to two weeks of “sick pay” are matched by pending federal proposals.⁴²

This analysis draws on pre-FMLA state-law variation to explore mandated medical leave’s effects on

employment outcomes for individuals reporting versus not reporting a work-limiting health condition. Among individuals reporting versus not reporting such a condition, the empirical evidence described above is most consistent with little difference in such outcomes after mandated medical leave under the FMLA went into effect in states without versus with pre-FMLA state-level mandated medical leave. As suggested by Figures 1 and 2, several specifications reported above indicated that immediately following the FMLA’s enactment, employment declined in states without versus with pre-FMLA state-level mandated medical leave for individuals reporting versus not reporting a work-limiting health condition; however, in most specifications using the full sample of employees age 21 to 58, a negative employment

effect for those reporting versus not reporting a work-limiting health condition was also apparent in 1992, the year prior to the FMLA's enactment. Greater evidence of negative employment effects of mandated medical leave came from the sample of older employees age 40 to 58.

Although the data overall offer limited evidence of significant employment effects of mandated medical leave, Table 2 and analogous state-level data presented above make clear that such limited evidence of employment effects of mandated medical leave around the time of the FMLA's enactment does not reflect a lack of usage of this important employee benefit.

Acknowledgments

My thinking on mandated medical leave has benefited greatly from workshops at Duke University, Harvard University, the University of Pennsylvania, the University of Pittsburgh, the University of Southern California, the University of Virginia, Yale University, the National Bureau of Economic Research Summer Institute, and the American Law and Economics Association Annual Meeting. I am also extremely grateful to Louis Kaplow and Christopher Ruhm for detailed comments. For truly outstanding research assistance, I thank Michael Cohen, Katerina Linos, Kenneth Moon, Daniel Klaff, and Eric Sublett.

Appendix

Table A1. Robustness of Employment Results to Omitting Observations from Individual States with Pre-FMLA Mandated Medical Leave

	(1) Omitting Observations from Connecticut: Age 21–58	(2) Omitting Observations from DC: Age 21–58	(3) Omitting Observations from Maine: Age 21–58	(4) Omitting Observations from Rhode Island: Age 21–58	(5) Omitting Observations from Wisconsin: Age 21–58	(6) Omitting Observations from Vermont: Age 21–58
<i>HEALTHCOND</i> x <i>INNOV</i> : Main Effect	1.471 (1.279)	0.971 (1.029)	1.397 (1.392)	2.742*** (0.977)	2.261 (1.574)	1.748 (1.146)
<i>HEALTHCOND</i> x <i>INNOV</i> : 1990	0.853 (1.632)	0.741 (1.718)	-0.219 (2.246)	-1.696 (1.353)	-0.439 (2.410)	-0.091 (1.694)
<i>HEALTHCOND</i> x <i>INNOV</i> : 1991	-0.265 (1.731)	-0.154 (1.651)	-1.268 (2.363)	-2.644 (1.727)	-2.118 (2.393)	-1.241 (1.792)
<i>HEALTHCOND</i> x <i>INNOV</i> : 1992	-2.015 (1.481)	-1.381 (1.144)	-1.815 (1.560)	-3.260** (1.295)	-3.173* (1.683)	-2.283* (1.321)
<i>HEALTHCOND</i> x <i>INNOV</i> : 1993	-2.477* (1.367)	-2.249* (1.247)	-2.970* (1.532)	-4.122*** (0.723)	-2.636 (1.762)	-2.903** (1.223)
<i>HEALTHCOND</i> x <i>INNOV</i> : 1994	-0.716 (1.918)	-0.028 (1.451)	-1.647 (2.446)	-2.395 (2.132)	-3.208 (2.185)	-1.521 (1.877)
<i>HEALTHCOND</i> x <i>INNOV</i> : 1995	-2.954** (1.402)	-2.063* (1.215)	-1.950 (1.214)	-3.665*** (1.198)	-3.348** (1.665)	-2.784** (1.227)
<i>HEALTHCOND</i> x <i>INNOV</i> : 1996	2.058** (1.011)	1.610 (1.241)	1.104 (1.365)	0.334 (0.838)	1.430 (1.561)	1.314 (1.095)
<i>HEALTHCOND</i> x <i>INNOV</i> : 1997	-1.070 (1.681)	-1.703 (1.952)	-1.984 (2.511)	-2.464 (2.228)	-4.581*** (1.320)	-2.280 (1.880)
<i>HEALTHCOND</i> x <i>INNOV</i> : 1998	-1.618 (2.113)	-0.244 (1.742)	-0.405 (2.038)	-2.779 (1.708)	-2.565 (2.250)	-1.541 (1.809)
<i>HEALTHCOND</i> x <i>INNOV</i> : 1999	-1.445 (1.754)	-0.759 (1.387)	-3.115* (1.820)	-3.041* (1.760)	-1.792 (2.339)	-2.066 (1.645)
Includes Year Effects	Yes	Yes	Yes	Yes	Yes	Yes

(continued on the next page)

Table A1. Robustness of Employment Results to Omitting Observations from Individual States with Pre-FMLA Mandated Medical Leave (continued)

	(1) Omitting Observations from Connecticut: Age 21–58	(2) Omitting Observations from DC: Age 21–58	(3) Omitting Observations from Maine: Age 21–58	(4) Omitting Observations from Rhode Island: Age 21–58	(5) Omitting Observations from Wisconsin: Age 21–58	(6) Omitting Observations from Vermont: Age 21–58
Includes State and State-Year Interaction Effects	Yes	Yes	Yes	Yes	Yes	Yes
<i>N</i>	685,319	685,844	685,029	685,758	681,920	685,693

Note: All regressions include year-specific controls for age, sex, race, educational attainment, marital status, part-time and part-year work status, union membership, the interaction of *HEALTHCOND* and the state unemployment rate, and employer size. Other controls are as indicated in the table. Age samples are listed in column headings. Each column presents linear regression results for the specification in Equation 1 (coefficient estimates on *HEALTHCOND* are not reported) omitting observations from the indicated state. Robust standard errors clustered on state-health condition interactions are in parentheses below coefficient estimates. *Significant at the 0.10 level. **Significant at the 0.05 level. ***Significant at the 0.01 level.

Source: Author.

PAID LEAVE FOR ILLNESS, MEDICAL NEEDS, AND DISABILITIES

Table A2. The Role of Employer Size

	(1) Age 21–58	(2) Age 21–58	(3) Age 40–58	(4) Age 21–58	(5) Age 21–58	(6) Age 40–58
<i>HEALTHCOND</i> x <i>INNOV</i> : Main Effect	1.495 (1.893)	1.492 (1.886)	0.047 (2.272)	0.542 (1.064)	0.618 (1.104)	0.910** (0.360)
<i>HEALTHCOND</i> x <i>INNOV</i> : 1990	-0.405 (2.992)	-0.388 (3.012)	1.155 (1.941)	0.020 (1.073)	-0.192 (1.049)	0.108 (0.846)
<i>HEALTHCOND</i> x <i>INNOV</i> : 1991	0.237 (2.821)	0.367 (2.940)	3.039 (3.194)	-0.842 (1.255)	-0.916 (1.216)	-0.793 (0.898)
<i>HEALTHCOND</i> x <i>INNOV</i> : 1992	-1.791 (2.472)	-1.813 (2.555)	-1.707 (2.269)	-1.999* (1.135)	-2.198* (1.280)	-1.387*** (0.491)
<i>HEALTHCOND</i> x <i>INNOV</i> : 1993	-3.243 (2.254)	-3.219 (2.293)	-1.872 (1.967)	-2.003 (1.308)	-2.271* (1.287)	-2.740*** (0.774)
<i>HEALTHCOND</i> x <i>INNOV</i> : 1994	-0.706 (3.197)	-0.726 (3.205)	0.719 (1.858)	0.506 (1.399)	0.079 (1.544)	0.655 (0.804)
<i>HEALTHCOND</i> x <i>INNOV</i> : 1995	-0.689 (1.841)	-0.722 (1.847)	-2.368 (1.766)	-0.344 (1.170)	-0.492 (1.230)	-0.539 (1.042)
<i>HEALTHCOND</i> x <i>INNOV</i> : 1996	2.240 (2.341)	2.193 (2.402)	2.699 (2.332)	1.698 (1.211)	1.491 (1.242)	1.075 (0.729)
<i>HEALTHCOND</i> x <i>INNOV</i> : 1997	-2.305 (2.349)	-2.330 (2.333)	0.767 (1.733)	-0.359 (1.575)	-0.499 (1.647)	0.549 (0.757)
<i>HEALTHCOND</i> x <i>INNOV</i> : 1998	-0.681 (2.913)	-0.630 (2.862)	0.885 (3.047)	-0.258 (1.799)	-0.295 (1.952)	-0.582 (1.067)
<i>HEALTHCOND</i> x <i>INNOV</i> : 1999	-1.920 (2.700)	-1.903 (2.819)	0.956 (3.319)	-2.756* (1.453)	-2.825* (1.535)	-2.763*** (1.012)
<i>INNOV</i> : Main Effect		0.048 (0.106)			-0.437* (0.236)	
<i>INNOV</i> : 1990		-0.201 (0.192)			-0.207 0.390	
<i>INNOV</i> : 1991		-0.318 (0.248)			-0.289 0.354	
<i>INNOV</i> : 1992		0.001 (0.265)			0.220 0.517	
<i>INNOV</i> : 1993		-0.193** (0.098)			0.071 0.437	
<i>INNOV</i> : 1994		-0.242* (0.125)			-0.134 0.489	

(continued on the next page)

Table A2. The Role of Employer Size (continued)

	(1) Age 21–58	(2) Age 21–58	(3) Age 40–58	(4) Age 21–58	(5) Age 21–58	(6) Age 40–58
<i>INNOV</i> : 1995		–0.450** (0.199)			–0.118 0.305	
<i>INNOV</i> : 1996		–0.407** (0.203)			–0.349 0.386	
<i>INNOV</i> : 1997		–0.074 (0.171)			0.046 0.417	
<i>INNOV</i> : 1998		0.139 (0.213)			0.323 0.320	
<i>INNOV</i> : 1999		–0.177 (0.114)			0.069 0.314	
Includes Year Effects	Yes	Yes	Yes	Yes	Yes	Yes
Includes State and State-Year Interaction Effects	Yes	No	Yes	Yes	No	Yes
<i>N</i>	398,680	398,680	174,912	818,986	818,986	361,290

Note: All regressions include year-specific controls for age, sex, race, educational attainment, marital status, part-time and part-year work status, union membership, the interaction of *HEALTHCOND* and the state unemployment rate, and employer size. Other controls are as indicated in the table. Age samples are listed in column headings. Each column presents linear regression results for the specification in Equation 1 (coefficient estimates on *HEALTHCOND* are not reported) omitting observations from the indicated state. Robust standard errors clustered on state-health condition interactions are in parentheses below coefficient estimates. *Significant at the 0.10 level. **Significant at the 0.05 level. ***Significant at the 0.01 level.

Source: Author.

Notes

1. James T. Bond et al., “Beyond the Parental Leave Debate: The Impact of Laws in Four States,” Families and Work Institute, 1991; and Christopher J. Ruhm, “Policy Watch: The Family and Medical Leave Act,” *Journal of Economic Perspectives* 11 (1997): 175–86.
2. See US Social Security, “Temporary Disability Insurance Program Description and Legislative History,” <https://www.ssa.gov/policy/docs/statcomps/supplement/2016/tempdisability.html>.
3. See the “Mandated Medical Leave: Brief Background” section of this chapter for details.
4. On the importance of paid versus unpaid family and medical leave, see, for instance, AEI-Brookings Working Group on Paid Family Leave, *Paid Family and Medical Leave: An Issue Whose Time Has Come*, ed. Aparna Mathur and Isabel V. Sawhill, American Enterprise Institute, June 6, 2017, <https://www.aei.org/research-products/report/paid-family-and-medical-leave-an-issue-whose-time-has-come/>.
5. Charles L. Baum II, “The Effects of State Maternity Leave Legislation and the 1993 Family and Medical Leave Act on Employment and Wages,” *Labour Economics* 10 (2003): 573–96; Francine D. Blau and Lawrence M. Kahn, “Female Labor Supply: Why Is the United States Falling Behind?,” *American Economic Review Papers and Proceedings* 103 (2013): 251–56; Wen-Jui Han, Christopher J. Ruhm, and Jane Waldfogel, “Parental Leave Policies and Parents’ Employment and Leave-Taking,” *Journal of Policy Analysis and Management* 28 (2009): 29–54; and Claudia Olivetti and Barbara Petrongolo, “The Economic Consequences of Family Policies: Lessons from a Century of Legislation in High-Income Countries,” *Journal of Economic Perspectives* 31 (2017): 205–30.
6. As already noted, mandated medical leave laws require a specified number of weeks of leave from work annually—12 weeks is common—in connection with employees’ serious health conditions. By contrast, paid sick leave laws in the United States provide for short paid leave periods of one to two weeks annually for a much broader set of ailments and are examined in, for example, Jenna Stearns and Corey White, “Can Paid Sick Leave Mandates Reduce Leave-Taking?,” *Labour Economics* 51 (2018): 227–46; and Stefan Pichler and Nicolas R. Ziebarth, “Sick Leave and Medical Leave in the United States: A Categorization and Recent Trends,” in *Paid Leave for Illness, Medical Needs, and Disabilities: Issues and Answers*, American Enterprise Institute, November 2020. The focus of this chapter is mandated medical leave for serious health conditions.
7. See the “Theoretical Analysis of the Employment Effects of Mandated Medical Leave” section of this chapter for further discussion.
8. Jonathan Gruber, “The Incidence of Mandated Maternity Benefits,” *American Economic Review* 84 (1994): 622–41.
9. The Family and Medical Leave Act’s (FMLA) leave requirement provides that “any eligible employee who takes leave . . . shall be entitled, on return from such leave—(A) to be restored by the employer to the position of employment held by the employee when the leave commenced; or (B) to be restored to an equivalent position with equivalent employment benefits, pay, and other terms and conditions of employment.”
10. The partial exception of Maine is discussed further in the “Data” section of this chapter.
11. *Collins v. NTN-Bower Corp.*, 272 F. 3d 1006 (7th Cir. 2001).
12. *Sieger v. Wisconsin Personnel Commission*, 512 N.W. 2d 220 (Wisc. 1994).
13. *Uema v. Nippon Express Hawaii*, 26 F. Supp. 2d 1241 (D. Hawaii 1998).
14. *Mascioli v. Arby’s Restaurant Group, Inc.*, 610 F. Supp. 2d 419 (W.D. Pa. 2009).
15. *Harrison v. Children’s National Medical Center*, 678 A.2d 572 (D.C. 1996).
16. For expositional ease, this chapter uses the term “state” to embrace the District of Columbia, where the case of *Harrison v. Children’s National Medical Center* was decided.
17. Helen Levy, “Employer-Sponsored Disability Insurance: Where Are the Gaps in Coverage?,” National Bureau of Economic Research, March 2004, <https://www.nber.org/papers/w10382>.
18. Mandated medical leave may be legally required to be paid rather than unpaid because of provisions in California, Hawaii, New Jersey, New York, and Rhode Island that make short-term disability benefits mandatory, as discussed further in the “Empirical Results”

section of this chapter.

19. Lawrence H. Summers, “Some Simple Economics of Mandated Benefits,” *American Economic Review Papers and Proceedings* 79 (1989): 177–83.
20. Gruber, “The Incidence of Mandated Maternity Benefits.”
21. Summers, “Some Simple Economics of Mandated Benefits.”
22. Christine Jolls, “Accommodation Mandates,” *Stanford Law Review* 53 (2000): 223–306.
23. David Cantor et al., *Balancing the Needs of Families and Employers: The Family and Medical Leave Surveys 2000 Update*, Westat, 2001.
24. For background on disability discrimination law at the federal and state levels, see Christine Jolls, “Identifying the Effects of the Americans with Disabilities Act Using State-Law Variation: Preliminary Evidence on Educational Participation Effects,” *American Economic Review Papers and Proceedings* 94 (2004): 447–53; for case law on depression, hepatitis C, seizure disorders, and back disorders as disabilities under disability discrimination law, see American Bar Association, “Employment: ADA,” *Mental and Physical Disability Law Reporter* 20, no. 5 (1996): 499–522.
25. Richard A. Posner, “The Efficiency and the Efficacy of Title VII,” *University of Pennsylvania Law Review* 136 (1987): 513–21.
26. Although an accounting office or large retail outlet with no women is likely to look suspicious in relation to the qualified population, an accounting office or large retail outlet with no employees with a particular health problem may have no such employees simply as a matter of chance, given the relatively small proportion of these individuals in the population.
27. With respect to retention, the situation may be different under the robust forms of universal employment protection that exist in many European countries; in the German context, for example, economists have examined the effects of varying levels of wage replacement for employees on leave because of health problems in a setting in which all employees enjoy strong legal entitlements to their positions. See Patrick A. Puhani and Katja Sonderhof, “The Effects of a Sick Pay Reform on Absence and on Health-Related Outcomes,” *Journal of Health Economics* 29 (2010): 285–302; Nicolas R. Ziebarth and Martin Karlsson, “A Natural Experiment on Sick Pay Cuts, Sickness Absence, and Labor Costs,” *Journal of Public Economics* 94 (2010): 1108–22; and Nicolas R. Ziebarth and Martin Karlsson, “The Effects of Expanding the Generosity of the Statutory Sickness Insurance System,” *Journal of Applied Econometrics* 29 (2014): 208–30.
28. Jolls, “Accommodation Mandates.”
29. Omitting Maine from the empirical analysis does not significantly alter the estimated employment effects of mandated medical leave (Table A1, Column 3).
30. Vermont, which enacted mandated medical leave on June 17, 1992, shortly before the FMLA’s enactment on February 5, 1993, is not included in the group of states with pre-FMLA state-level mandated medical leave because of the short period in which its mandate was in effect prior to the FMLA’s enactment. Omitting Vermont entirely from the empirical analysis, rather than categorizing it as a state without pre-FMLA state-level mandated medical leave, does not alter the estimated employment effects of mandated medical leave (Table A1, Column 6).
31. Bond et al., “Beyond the Parental Leave Debate.”
32. The introduction to an FMLA study conducted for the Department of Labor just after the FMLA’s enactment, for instance, offers extended discussion of the issue of family leave with almost no mention of medical leave. See Commission on Family and Medical Leave, *A Workable Balance: Report to Congress on Family and Medical Leave Policies*, April 30, 1996, https://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1002&context=key_workplace. Similarly, the core public focus surrounding the state-level provisions in Table 1 was family leave; a *Washington Post* article reporting on the impending family and medical leave law in the District of Columbia, for instance, was headlined “Mayor Says He’ll Sign Bill Providing Unpaid Family Leave to Workers in D.C.,” while a member of the task force that shepherded Connecticut’s family and medical leave law proclaimed in the *New York Times* that the law was a way to “reaffirm as a nation that the family and the well-being of our children” are “of broad social concern.” Thomas Bell, “Mayor Says He’ll Sign Bill Providing Unpaid Family Leave to Workers in D.C.,” *Washington Post*, July 18, 1990, <https://www.washingtonpost.com/archive/politics/1990/07/18/mayor-says-hell-sign-bill-providing-unpaid-family-leave-to-workers-in-dc/ab2067a7-86c3-4d14-b5fb-c486104a6c69/>; and Elizabeth B. Rubin, “Business Needs a Family Policy,” *New York Times*, July 31, 1988, <https://www.nytimes.com/1988/07/31/business/business-needs-a-family-policy.html>.

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com/1988/07/31/business/business-forum-employee-benefits-for-the-1990-s-business-needs-a-family-policy.html.

33. US Department of Labor, Bureau of Labor Statistics, “Employee Benefits in Medium and Large Private Establishments, 1993,” November 1994, <https://www.bls.gov/ncs/ebs/sp/ebb0024.pdf>; and US Department of Labor, Bureau of Labor Statistics, “Employee Benefits in Small Private Establishments, 1992,” May 1994, <https://www.bls.gov/ncs/ebs/sp/ebb0026.pdf>. In this period, the Bureau of Labor Statistics used the term “accident and sickness insurance” to refer to employer-provided short-term disability benefits. See Levy, “Employer-Sponsored Disability Insurance.”

34. From survey year 1990 to survey year 1993 in the March Current Population Survey (CPS), the work-limiting health conditions question asked, “Does anyone in this household have a health problem or disability which prevents them from working or which limits the kind or amount of work they can do?” On surveys from March 1994 to March 2001 (observation years 1993 to 2000), the question asked, “(Do you/Does anyone in the household) have a health problem or disability which prevents (you/them) from working or which limits the kind or amount of work (you/they) can do?”

35. See, for instance, Brent Kreider and John Pepper, “Inferring Disability Status from Corrupt Data,” *Journal of Applied Econometrics* 23 (2008): 329–49.

36. On labor force attachment of the age 21 to 58 group, see, for example, Daron Acemoglu and Joshua D. Angrist, “Consequences of Employment Protection? The Case of the Americans with Disabilities Act,” *Journal of Political Economy* 109 (2001): 915–57.

37. Thus, for instance, data for $t = 1989$ are from the 1990 March CPS.

38. See US Social Security, “Temporary Disability Insurance Program Description and Legislative History.”

39. On the innovativeness of the Americans with Disabilities Act (ADA) across the 50 states, see Jolls, “Identifying the Effects of the Americans with Disabilities Act Using State-Law Variation.” Across this group, the ADA was an innovation in Alabama, Alaska, Arkansas, California, Connecticut, Florida, Georgia, Hawaii, Illinois, Indiana, Kansas, Kentucky, Maine, Maryland, Michigan, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New York, North Dakota, Ohio, Oklahoma, South Carolina, South Dakota, Tennessee, Texas, Utah, and West Virginia. Meanwhile, with the District of Columbia, disability discrimination law in effect there at the time of the FMLA’s enactment made it an “unlawful discriminatory practice” for an employer “to fail or refuse to hire, or to discharge, any individual; or otherwise to discriminate against any individual” because of the individual’s “bodily or mental disablement which may be the result of injury, illness or congenital condition for which reasonable accommodation can be made.” The presence of “reasonable accommodation” along with nondiscrimination aspects in the District of Columbia law places the District of Columbia outside the group of states in which the ADA was an innovation.

40. Correspondingly, employer size is omitted as a control because all remaining observations reflect the largest March CPS employer size category of 100 or more employees.

41. Judy Burnick, “State’s Family Leave System Works; Don’t Destroy It,” *Wisconsin State Journal*, December 24, 1995; and Pichler and Ziebarth, “Sick Leave and Medical Leave in the United States.”

42. Scott Lautenschlager, “Wisconsin Is National Leader in Family Leave,” *Wisconsin State Journal*, September 25, 1992.

What Can We Learn from State Temporary Disability Insurance Programs?

Yonatan Ben-Shalom

Each year, millions of workers experience an injury or illness that challenges their ability to work.¹ More than two million apply for Social Security Disability Insurance (SSDI) benefits. About a third of those receive awards, and 24 months later they are enrolled in Medicare.² Once on the rolls, few SSDI awardees ever exit for work,³ and many denied applicants never return to work.⁴ This means that workers who experience an injury or illness that puts them in high risk of prolonged work disability are also at high risk of a substantial reduction in standards of living for them and their families—and possibly a further worsening of their health due to the health consequences of job loss.⁵

Although certain federal programs provide support to some workers after they exit the workforce, there is little federal support to help these workers remain in the workforce instead. One reason for the lack of timely federal support to such workers is the fragmentation of public-sector responsibilities.⁶ For example, the Social Security Administration (SSA), which operates the federal SSDI program, and the Centers for Medicare & Medicaid Services, which operates Medicare (for which SSDI beneficiaries qualify after a two-year waiting period), do not have a statutory authority to invest in prevention of work disability.⁷ Programs funded by the US Department of Labor (DOL) may incidentally provide support to workers struggling with medical problems but generally do not focus specifically on helping such workers retain their jobs or find new employment.⁸

Compared to the federal government, states have additional tools they *could*, but typically do not, use to support workers with new health problems.⁹ For example, state health agencies could modify Medicaid benefit programs and regulate health insurers and health care delivery organizations to better promote evidence-based job-retention practices among medical providers. State departments operating vocational rehabilitation programs funded by the US Department of Education and DOL-funded employment and training programs could better coordinate their efforts across agency boundaries. States also have workers' compensation agencies that either operate or regulate workers' compensation programs, which pay for both cash benefits and medical care to workers with on-the-job medical conditions.

Although many states have tried to ensure delivery of high-quality care to workers' compensation claimants, these efforts typically do not extend to workers with off-the-job conditions. Finally, states run unemployment insurance programs that provide benefits to qualified workers who are unemployed. However, under current regulations, such workers should be able to work and are required to be looking for work to qualify for benefits, thus excluding those who cannot work due to a health condition, even if temporary.¹⁰

Five states—California, Hawaii, New Jersey, New York, and Rhode Island—are unique, having offered or mandated some form of temporary disability insurance (TDI) to eligible workers for decades. These programs offer wage replacement, for a limited duration, to workers who cannot work due to off-the-job

medical conditions. The programs differ in how they are funded and administered and in their generosity and duration of benefits. In general, they provide claimants neither direct job protection nor proactive programs to help them return to work. Still, the wage replacement benefit provides an important income support that gives time for workers to recover and incentivizes them to return to work because it is substantially lower than the base-period wage is. Workers with off-the-job medical conditions in states without TDI may have access to employer-sponsored or private short-term disability insurance, but only a minority of workers are covered by such insurance, and there is substantial variation in access and coverage across occupational groups.¹¹

Although the five state TDI programs have been around for decades, to my knowledge no research has been done on their effectiveness in improving outcomes for workers and the implications for other state and federal programs. Still, the little we do know about TDI claimants and their outcomes, and lessons learned from other social insurance programs, seems important as we consider new options for medical leave policies. In the remainder of the chapter, I (1) provide background information on the five state TDI programs, (2) discuss what studies of other social insurance programs suggest for how TDI affects labor force participation, (3) summarize recent research findings based on analyses of TDI data in California and Rhode Island, (4) consider future research options to address important unanswered questions, and (5) discuss policy implications.

TDI Programs in the US

Table 1 provides an overview of the TDI programs in California, Hawaii, New Jersey, New York, and Rhode Island. All TDI programs were established several decades ago, starting with Rhode Island in 1942.¹² In general, the state TDI programs cover all private-sector employees, except for contractors; some state employees in California and New Jersey are also covered. States either administer their TDI programs directly (California, New Jersey, and Rhode

Island) or regulate insurance coverage that employers must provide to their employees (Hawaii and New York). Depending on the state, TDI is financed entirely through employee payroll deductions or some combination of employer and employee contributions. The typical maximum duration of benefits is 26 weeks, with California's maximum of 52 weeks a clear outlier.

There is considerable variation across the five states in the wage replacement rates and the maximum possible weekly benefit, with the latter for 2019 as low as \$170 in New York and as high as \$1,252 in California.¹³ Only California and Rhode Island offer a partial return-to-work option, which allows workers to receive partial benefits if they initially return to work only part-time. None of the TDI programs provide direct job protection.¹⁴ However, the federal Family and Medical Leave Act (FMLA) of 1993 and state laws in California and Rhode Island provide job protection to certain workers with medical conditions for up to 12 weeks.¹⁵

Potential Effects of TDI on Labor Force Participation

In theory, introducing TDI in a state (or nationwide) could either reduce or increase long-run labor force participation. TDI would reduce labor force participation in the long run if, on balance, it leads more workers onto permanent disability programs such as SSDI. In contrast, TDI would increase labor force participation in the long run if, on balance, more workers who otherwise would have gone on permanent disability go on TDI and return to work. To my knowledge, no one has empirically studied how state TDI programs affect labor force participation—at least not specifically for the disability component of TDI. It is therefore useful to consider what we know from studying other social insurance programs, including long-term disability programs, sick leave benefits, and maternity leave programs.

Many studies have documented the labor supply disincentives of SSDI and other long-term disability programs. These studies have typically focused on the

Table 1. Features of State TDI Programs in the US, 2019

	California	Hawaii	New Jersey	New York	Rhode Island
Program Name	State Disability Insurance	Temporary Disability Insurance	Temporary Disability Insurance	Disability Benefits	Temporary Disability Insurance
Year Established	1946	1969	1948	1949	1942
Coverage	All private-sector employees, with certain exceptions, and a portion of state employees	All private-sector employees, with certain exceptions	All employees, except federal government employees, out-of-state employees, and contractors	All private-sector employees, with certain exceptions	All private-sector employees, with certain exceptions
Administration	State-administered, public insurance, with carve-out for approved private insurance plans	State-regulated, private insurance (authorized private insurance plan or approved self-insurance plan)	State-administered, public insurance, with carve-out for approved private insurance plans	State-regulated, private insurance (authorized private insurance plan or approved self-insurance plan)	State-administered, public insurance
Responsible State Agency	Labor and Workforce Development Agency	Department of Labor and Industrial Relations	Department of Labor and Workforce Development	Workers' Compensation Board	Department of Labor and Training
Financing	Employee payroll deductions (1.00 percent on first \$118,371 in wages)	Employer pays cost or equally shares cost with employees (up to 0.50 percent of weekly wages or weekly \$5.44 maximum)	Employer and worker contributions (0.17 percent on the first \$34,400)	Employer pays cost or shares cost with employees (0.50 percent of weekly wages, up to weekly \$0.60 maximum)	Employee payroll deductions (1.10 percent on the first \$71,000 in wages)
Waiting Period	7 days	7 days	7 days	7 days	7 days
Maximum Duration	52 weeks	26 weeks	26 weeks	26 weeks	30 weeks
Replacement Rate	55 percent	58 percent	67 percent	50 percent	60 percent
Weekly Minimum	\$50	\$1	\$1	\$1	\$98
Weekly Maximum	\$1,252	\$632	\$650	\$170	\$867
Eligibility	At least \$300 in wages in base year	At least 14 weeks of employment at 20 hours or more; at least \$400 in wages in the 52 weeks preceding the claim	At least 20 weeks earning \$172 or more per week, or combined earnings of \$8,600	Currently employed or unemployed for less than four weeks	At least \$2,100 in wages in one of base-period quarters, and total base-period wages of at least \$4,200 and at least 1.5 times the highest quarter earnings
Partial Return-to-Work Option	Yes	No	No	No	Yes

(continued on the next page)

Table 1. Features of State TDI Programs in the US, 2019 (continued)

	California	Hawaii	New Jersey	New York	Rhode Island
Job Protection	No; some workers covered by Family and Medical Leave Act or California Family Rights Act	No; some workers covered by Family and Medical Leave Act	No; some workers covered by Family and Medical Leave Act or Rhode Island Parental and Family Medical Leave Act	No; some workers covered by Family and Medical Leave Act	No; some workers covered by Family and Medical Leave Act

Source: Table based on information on state temporary disability insurance websites for 2019; US Department of Labor, “Stay at Work/Return to Work Research & RETAIN Demonstration Projects,” 2018, <https://www.dol.gov/odep/topics/Stay-at-Work-Return-to-Work.htm>; and A Better Balance, “Overview of Temporary Disability Insurance Laws in the United States,” September 21, 2016, <https://www.abetterbalance.org/wp-content/uploads/2016/11/TDIchart.pdf>.

effects of receiving benefits or experiencing changes in the generosity of benefits. For example, Eric French and Jae Song found that receiving SSDI benefits reduces labor force participation by 26 percentage points three years after a disability determination decision,¹⁶ David Autor and Mark Duggan found that expanding the medical eligibility criteria for the veterans disability compensation program substantially reduced labor force participation among Vietnam-era veterans,¹⁷ and Jonathan Gruber found that a benefit increase of 36 percent in Canada’s disability insurance program led to a 11.5 percent increase in nonemployment.¹⁸

TDI is quite different from SSDI and other long-term disability insurance programs in at least four important aspects. First, SSDI eligibility criteria discourage return to substantial work; beneficiaries lose their entire cash benefit if their earnings exceed SSA’s relatively low substantial gainful activity amount.¹⁹ Although TDI benefits may discourage return to work in the short run, their duration is limited, and in California and Rhode Island, the partial return-to-work option allows workers to receive partial benefits if they initially return to work only part-time.

Second, the eligibility criteria and claims determination process are much less stringent for TDI than those for SSDI and other long-term disability insurance programs. This means that TDI claimants, on average, have much less severe conditions and typically stronger connections to the labor force. Third, TDI benefits are temporary, and thus their long-term

expected value is much lower than a potentially long stream of annual benefits provided by a long-term disability program (which, for SSDI, also offers medical insurance coverage via Medicare, albeit after a two-year waiting period).

Fourth, most TDI claimants can reasonably assume they will be able to return to their pre-disability job once they recover. Although none of the TDI programs offer job protection, the FMLA and some state laws in the same spirit—and to some degree the Americans with Disability Act—offer job protection to many workers for at least part of the maximum TDI duration. Thus, although many more workers would generally qualify for TDI benefits than for SSDI and other long-term disability benefits, receiving TDI benefits should have a much smaller effect on an individual’s labor supply, compared to long-term disability insurance programs. Furthermore, access to TDI benefits while unable to work may *improve* employment outcomes in the long run if time away from work assists with recovery.

In this context, findings from studies that estimated the impacts of new or modified sick leave and maternity leave laws may provide more information about TDI impacts than studies of long-term disability insurance such as SSDI may provide. Until recently, analyses of paid sick leave have primarily been conducted in countries other than the US. Examples of such studies include those by Magnus Henrekson and Mats Persson and by Per Johansson and Mårten Palme, who examined changes in

sick leave compensation in Sweden and found that increases in the generosity of benefits led to sizable increases in the aggregate number of sick days (and vice versa).²⁰ Others have found similar results in Italy and Germany.²¹ More recently, however, Stefan Pichler and Nicolas Ziebarth studied the effect of introducing sick pay mandates in four states and nine cities in the US and found little evidence that these mandates affected employment or wages.²²

Another set of papers has examined how maternity leave laws affect labor supply in the US and primarily in California. For example, Maya Rossin-Slater and colleagues examined California's first-in-the-nation paid family leave program, implemented in 2004. They found that the California program increased overall use of maternity leave from an average of three weeks to six weeks. Furthermore, the program increased both usual weekly work hours and wage incomes for mothers of young children (age 1 to 3).²³ Other examples include Tanya Byker, who analyzed maternal leave policies in California and New Jersey and found similar results, and Michael Baker and Kevin Milligan's study in Canada.²⁴ In contrast, a recent paper by Martha Bailey and colleagues found that, among new mothers, taking up paid family leave in California led to reduced employment and lower annual wages six to 10 years after giving birth.²⁵

What Do We Know from Analysis of TDI Data in California and Rhode Island?

Although five states have had TDI programs for decades, I am not aware of any research that has focused on how they affect labor supply and other outcomes for workers who experience injury or illness.²⁶ Thus, two recent studies of TDI data in Rhode Island and California provide a preliminary look into the characteristics of non-maternity TDI benefit claimants, the duration of their benefits, and the relationship between the two.²⁷ These two studies were descriptive and did not examine the causal effect of TDI on outcomes for workers.

In their analyses, among other things, Annette Bourbonniere and David Mann examined

participation in Rhode Island's Partial Return to Work Program, whereas Frank Neuhauser and colleagues compared California TDI claimants who exhaust their 52 weeks of benefits to new SSDI awardees nationwide. The latter comparison is important because a worker who has not worked for at least 12 months due to a disability is at high risk of SSDI entry.²⁸ Neuhauser and colleagues also provided summary statistics on California TDI claimants who received benefits for up to three months, which may be informative given that recently enacted paid family and medical leave laws provide up to 12 weeks of paid leave for covered workers with serious health conditions.²⁹

TDI Claimant Characteristics. Table 2 shows the characteristics of non-maternity TDI claimants in California and Rhode Island as reported by Neuhauser and colleagues and Bourbonniere and Mann, respectively.³⁰ The numbers for California and Rhode Island are not directly comparable because the former study restricted the analysis to age 16 to 64, while the latter study included both these ages and those age 65 and older. However, less than 3 percent of TDI claimants in Rhode Island were older than age 64.

For the age 16–64 population, the annual average number of non-maternity TDI claims is almost three times larger as a proportion of the population in Rhode Island than in California. The age 16–64 population of California is approximately 35 times as large as the population in Rhode Island (24.3 million versus 687,000, respectively). In comparison, the average number of TDI claimants age 16–64 in California (365,918) is just 12 times the number in Rhode Island (30,430).

Two reasons likely contribute to this difference. First, California has a carve-out for approved alternative disability insurance plans employers offer, meaning some workers in California will use their employer's insurance plan rather than TDI when they experience injury or illness. Second, the age profile in Rhode Island is somewhat older than that of California. In 2010, the median age in California was 34.9, compared to 38.9 in Rhode Island,³¹ meaning workers in California are, on average, less likely to experience an off-the-job injury or illness that would lead them to

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Table 2. Characteristics of Non-Maternity TDI Claimants in California and Rhode Island

	California	Rhode Island
Claim Years	2007–13	2011–14
Total Number (Thousands)	2,561.4	125.6
Annual Average	365,918	31,404
Annual Average, Age 16–64	365,918	30,430
Percentage of State’s Age 16–64 Population*	1.5	4.4
Average Duration (Days)	117	72
Received Benefits for 30 or More Weeks (Percentage)	22.1	2.8
Received Benefits for 52 Weeks (Percentage)	12.5	—
Female (Percentage)	55.1	63.5
Age (Percentage)**		
16–24	5.9	3.5
25–34	18.1	21.8
35–44	24.4	18.1
45–54	30.9	26.1
55–64	20.7	27.4
65+	—	2.8
Invalid Age	—	0.3
Primary Diagnosis (Percentage)***		
Central and Peripheral Nervous System	2.7	3.0
Heart and Circulatory	2.2	4.7
Musculoskeletal and Connective Tissue (Not Back)	15.3	16.1
Intervertebral Disc Disorders	5.0	8.1
Other Back Disease	5.0	1.1
Depression and Affective Disorders	5.5	8.0
Other Mental Disorders	7.8	7.7
Other Illnesses****	36.7	32.1
Sprains and Strains (Back)	4.1	5.3
Sprains and Strains (Not Back)	4.6	4.1
Other Injuries	11.1	9.7

Note: *The average size of the age 16–64 civilian noninstitutionalized population was approximately 24,349,286 and 686,750 in California and Rhode Island, respectively. **Frank Neuhauser, Yonatan Ben-Shalom, and David Stapleton restricted their data to claimants age 16–64; Annette Bourbonniere and David Mann used age 16 and older, with no upper limit. ***Numbers for Rhode Island are adjusted relative to Bourbonniere and Mann so that they represent only non-maternity cases. ****“Other Illnesses” includes cancer and various malignancies, which Bourbonniere and Mann reported separately.

Source: Author’s calculations based on population estimates from the US Bureau of Labor Statistics; Frank Neuhauser, Yonatan Ben-Shalom, and David Stapleton, “Early Identification of Potential SSDI Entrants in California: The Predictive Value of State Disability Insurance and Workers’ Compensation Claims,” *Journal of Occupational Rehabilitation* 28, no. 4 (2018): Table 2; and Annette M. Bourbonniere and David R. Mann, “Benefit Duration and Return to Work Outcomes in Short Term Disability Insurance Programs: Evidence from Rhode Island’s Temporary Disability Insurance Program,” *Journal of Occupational Rehabilitation* 28, no. 4 (2018): Tables 2 and 3.

claim TDI. Still, TDI take-up could be higher in Rhode Island than in California, independently of the factors mentioned, but data beyond the universe of TDI claimants are needed to address that question.

With TDI claimant characteristics, two differences between California and Rhode Island stand out. First, the average claim duration is much higher in California than in Rhode Island (117 versus 72 days, respectively); this is expected given the much longer maximum duration of benefits in California. Second, the share of female claimants is higher in Rhode Island than in California (63.5 versus 55.1). The distribution of primary diagnoses is remarkably similar between the two states, with about 15 percent in the non-back musculoskeletal and connective tissue illnesses category, another 10 percent or so with intervertebral disc disorders and other back diseases, 13 to 16 percent with mental disorders, and about 9 percent with back and non-back sprains and strains.

A notable limitation of these data is the lack of richer socioeconomic and demographic information about TDI claimants. For example, it would be interesting to know their highest level of educational attainment and access to employer-provided benefits to better understand what these statistics might imply for other states considering new TDI-like benefits. However, the data for both California and Rhode Island TDI claimants are based on a limited set of data elements collected for administrative purposes.

TDI Benefit Exhaustion in California Versus Rhode Island. Despite the longer period of recovery theoretically available to workers in California, many more workers in California receive benefits for the full 52 weeks (12.5 percent) than do workers who exhaust their 30 weeks of benefits in Rhode Island (2.8 percent). Several features that differ between the two programs may explain this difference but have yet to be examined in-depth.

First, although the replacement rate is lower in California than in Rhode Island (55 versus 60 percent, respectively), the maximum possible benefit is more than 40 percent higher in California, which creates a stronger incentive to stay on the rolls in California. Second, although both states allow workers to receive

partial benefits if they initially return to work only part-time, Rhode Island's Partial Return to Work Program is better advertised to workers and, according to Bourbonniere and Mann, was used by two-thirds of TDI claimants in 2011–14.³² (Neuhauser and colleagues did not examine participation in California's partial return-to-work option.)³³

Third, as Bourbonniere and Mann describe in detail, the Rhode Island TDI program enforces strict limits on the maximum number of weeks allowed for specific diagnoses, and “claims that approach the limits of the expected disability duration may be reviewed by the medical unit and referred for an impartial examination.”³⁴ In contrast, although California also has duration control measures in place, requesting an extension of benefits beyond the initial estimated recovery date is relatively easy to complete.³⁵

Characteristics of TDI Benefit Exhausters. In theory, researchers could match state TDI records directly to SSA administrative data to identify TDI claimants who transition to SSDI. Analysis of these matched data could reveal how often TDI claimants go on SSDI, their characteristics, and their share in the total number of state residents who go on SSDI. For example, in California, where TDI benefit exhausters typically receive benefits for 12 months, many will presumably qualify for SSDI benefits when they apply. While attempting to address these important questions for California, Neuhauser and colleagues hoped to match between California's TDI records and SSA administrative data, but ultimately they could not secure the required state and federal approvals to do so.³⁶ Instead of a direct match, the authors compared the characteristics of TDI benefit exhausters in California to those of workers entering SSDI from all states to examine the similarities and differences between the two groups.

As shown in Table 3, the 12.5 percent of TDI claimants in California who exhaust their benefits were evenly split between males and females, and more than 60 percent of them were age 45 to 64. They were most often diagnosed with non-back musculoskeletal and connective tissue illnesses (16.2 percent), intervertebral disc disorders (11.1 percent), and mental disorders

Table 3. Characteristics of California’s Non-Maternity TDI Benefit Exhausters and SSDI Awardees Nationwide

	California TDI Benefit Exhausters	SSDI Awardees Nationwide
Years of Data	2007–13	2010
Number of Claims or Awards	45,894 (Annual Average)	1,026,988
Female (Percentage)	49.6	45.9
Age (Percentage)		
16–34	15.3	12.1
35–44	22.4	15.5
45–54	34.0	33.1
55–64*	28.3	39.2
Primary Diagnosis (Percentage)		
Central and Peripheral Nervous System	4.4	7.5
Heart and Circulatory	3.4	10.5
Musculoskeletal and Connective Tissue (Not Back)	16.2	32.5
Intervertebral Disc Disorders	11.1	—
Other Back Disease	7.9	—
Depression and Affective Disorders	8.1	11.2
Other Mental Disorders	8.0	10.2
Other Illnesses	23.2	24.3
Injuries**	17.8	3.8

Note: *The SSDI data include about 6,000 awardees (less than 1 percent) age 65 or older. **For California, injuries include sprains and strains (back and non-back) and all other injuries.

Source: Frank Neuhauser, Yonatan Ben-Shalom, and David Stapleton, “Early Identification of Potential SSDI Entrants in California: The Predictive Value of State Disability Insurance and Workers’ Compensation Claims,” *Journal of Occupational Rehabilitation* 28, no. 4 (2018): Table 2.

(8.1 percent with depression and affective disorders and another 8.0 percent with other mental disorders).

The diagnostic characteristics of California’s benefit exhausters were quite similar to those of SSDI awardees nationwide in 2010, which was in the middle of the analysis period: 35.2 percent of California’s TDI benefit exhausters had musculoskeletal illnesses of some kind, compared to 32.5 percent of SSDI awardees with musculoskeletal disease as their primary impairment, and 16.1 percent of California’s TDI benefit exhausters had a mental disorder of some kind, compared to 21.4 percent of SSDI awardees with a psychiatric primary impairment.

In contrast, injuries were much more prevalent among TDI benefit exhausters than SSDI awardees: Only 3.8 percent of SSDI awardees had an injury as their primary impairment, compared to 17.8 percent among TDI exhausters. SSDI awardees are also notably older than TDI benefit exhausters are: 39.2 percent of SSDI awardees are age 55 to 64, compared to 28.3 percent of TDI benefit exhausters. This difference might partially be because a TDI claimant would need to be out of work for at least a year before he or she could qualify for SSDI. It could also be that some younger TDI benefit exhausters never receive SSDI awards and that some older SSDI awardees

were not long-term TDI claimants immediately before SSDI application.³⁷

Overall, the similarity in characteristics between California's benefit exhausters and SSDI awardees suggests considerable overlap between the two groups. Furthermore, the annual number of TDI claims lasting at least 12 months—approximately 46,000—amounts to 60 percent of the 77,000 SSDI disabled worker awards for California residents in 2010.³⁸ In addition to TDI benefit exhausters, other potential sources for considerable numbers of SSDI awardees from California include recipients of non-TDI disability insurance benefits (for example, private-sector employees of firms offering approved alternative insurance plans) and long-term workers' compensation claimants.³⁹ However, some workers with TDI claims of 12 months may not enter SSDI because they do not apply or because SSA determines they are not eligible for medical or work history reasons. Finally, some workers who enter SSDI may have never entered TDI, or their TDI claim ended before 12 months.

In Rhode Island, Bourbonniere and Mann found, using a regression model, that the probability of exhausting benefits increased with household income and when certain types of qualified health providers treated the injury or illness.⁴⁰ According to their model, workers with household income greater than four times the federal poverty level were, on average, 2.6 percentage points more likely to exhaust benefits than were those in poor households. Workers who saw neurologists were, on average, 2.7 percentage points more likely to exhaust their benefits relative to the surgery reference group. Those who saw psychiatry and human behavior specialists were 1.8 percentage points more likely to exhaust benefits relative to the surgery reference group. When accounting for the specialty of the treating physician, diagnosis categories had relatively weak associations with benefit exhaustion, except for cancer and various malignancies, which were associated with a 1.5 percentage point increase in benefit exhaustion relative to the comparison group (sprains and strains other than back).

Characteristics of TDI Claimants Receiving up to Three Months of Benefits. Information on TDI claimants with benefit durations of up to three months can help us understand the potential composition of workers who would benefit from newly enacted paid family and medical leave laws that provide up to 12 weeks of paid leave for covered workers with serious health conditions. Specifically, Connecticut, Massachusetts, Oregon, and Washington have recently enacted such laws providing up to 12 weeks (or up to 20 weeks in Massachusetts) of paid leave for covered workers with serious health conditions.⁴¹ Neuhauser and colleagues provide summary statistics for California TDI claimants who receive benefits for up to three months (not shown).⁴²

For 2007–13, this group of claimants makes up 64 percent of all non-maternity claimants in California's TDI program. In comparison to claimants with longer benefit durations, those who receive benefits for up to three months are less likely to suffer from musculoskeletal or mental conditions, and, on average, they are more likely to be female and under age 45. These statistics suggest that a substantial minority of workers, especially those with musculoskeletal or mental conditions, may need some form of supports beyond the 12 weeks specified in recently enacted paid leave laws. Alternatively, states may want to consider options for helping more workers return to work within 12 weeks of their initial absence.

Future Research Options

Despite five states having TDI programs for decades, we know little about their effects on outcomes for workers or their implications for SSDI, other social insurance and welfare programs, and private disability insurance. As mentioned earlier, introducing TDI in a state (or nationwide) could either reduce or increase long-run labor force participation depending on whether, on balance, TDI leads more or fewer workers onto permanent disability programs such as SSDI—currently the primary safety net for workers with long-term disabilities.

Studies of other social insurance programs, including long-term disability programs, sick leave benefits, and maternity leave programs, suggest that introducing TDI where it previously did not exist would likely lead to some short-term reduction in labor force participation due to workers claiming benefits that were not previously available to them. However, we do not know what the magnitude of that short-term reduction would be, what might be the long-term implications for worker outcomes, or how different program features might affect outcomes.

In what follows, I briefly consider the feasibility of several research options that could begin to address some unanswered important questions about TDI. The list below is far from comprehensive. For example, it does not address how introducing TDI might affect the market for private short-term disability plans or what types of employers choose to offer private short-term disability insurance to their employees even when a publicly administered TDI program is available in their state. Still, it offers some ideas for researchers and policymakers interested in a better understanding of how TDI may affect important outcomes, what program features might make a difference, and what might lead to variation across and within states in program take-up and outcomes.

What Are Short- and Long-Term Effects of TDI on Labor Force Participation and SSDI Entry?

To retrospectively study the effects of the *introduction* of TDI programs on labor force participation and SSDI entry, one would need state-level labor force data preceding the introduction of these programs. To my knowledge, such data are not publicly available, except perhaps Current Population Survey (CPS) data from 1962 onward, which could be useful to study the introduction of TDI in Hawaii in 1969. SSA administrative data on SSDI could also be useful for analysis of Hawaii's TDI program; all other TDI programs preceded the introduction of SSDI in 1956. SSA's Continuous Work History Sample (CWHS), parts of which begin as early as 1937, might offer the most promising data to examine the effects of TDI in states other than Hawaii. The CWHS includes quarterly wage and salary information for workers

covered by the Social Security Act, but access to these data are highly restricted.⁴³

How Do TDI Features Affect Benefit Duration and Other Outcomes? Presumably, the effects of TDI features—such as the wage replacement rate, weekly maximum benefit, or a partial return-to-work option—could be estimated for states that instituted actual changes to TDI features over the years. We would first need to know what changed and when—information that does not appear to be readily available but presumably could be identified by talking to program staff or carefully reviewing relevant legislation and documentation. If we can identify such changes, we could use TDI claims to estimate their impact on claimants using modeling techniques such as interrupted time series.⁴⁴ We could also use other data sources (e.g., state wage records, CPS data, or SSA administrative data) to examine impacts on labor force participation and SSDI entry, potentially using a difference-in-differences design.⁴⁵

Could Other Features Help Improve Return-to-Work Outcomes for TDI Claimants?

Currently, the TDI states do little, if anything, to proactively help claimants return to work. This is different from workers' compensation and private disability insurance programs, many of which have implemented various early intervention programs aimed at helping workers return to work quickly following injury or illness.

A prominent example in workers' compensation is Washington state's Centers of Occupational Health & Education (COHE) program. COHE has demonstrated that providing a tightly defined set of timely, evidence-based, relatively simple services to workers' compensation claimants can dramatically reduce long-term work disability.⁴⁶ It is a primary model for DOL's Retaining Employment and Talent After Injury/Illness (RETAIN) demonstration. Of the five TDI states, only California has received a RETAIN pilot grant. Experimenting with COHE-like models in other TDI states could help build the evidence base for what might improve return-to-work outcomes for workers with nonoccupational conditions.

Which TDI Claimants Apply for and Are Awarded SSDI? In theory, one could analyze TDI data matched to SSDI administrative records to observe actual transitions from TDI to SSDI; a major challenge to doing this is the insurmountable privacy and security requirements from states and SSA. A more feasible though less satisfying analysis would be to analyze SSA administrative data—potentially the public-use version of the Disability Analysis File—to better understand how TDI exhausters compare to SSDI awardees;⁴⁷ in theory, this could be done for all five TDI states. While this would not provide direct information on transitions from TDI to SSDI, it would help better understand the similarities and differences between TDI exhausters and SSDI awardees in specific states.

Why Do TDI Take-Up Rates Vary Across States (and Geographic Regions in States)? As mentioned earlier, the TDI take-up rate appears to be much higher in Rhode Island than in California. Data beyond the universe of TDI claimants is needed to understand the reasons for this. For example, state administrative data provide information on all workers, including those who claim TDI can provide a more comprehensive picture on who claims TDI and why. For a large state such as California, the state administrative data could also shed light on within-state geographic variation in take-up rates, claimant characteristics, and benefit duration.

Who Would Claim TDI If Introduced in Other States? In theory, the California and Rhode Island data could help develop a predictive model that could then be used to project the potential size and composition of TDI claimants in current non-TDI states. As noted earlier, the TDI claims data are limited in the socioeconomic and demographic information for claimants. Merging the TDI claims data with other data from unemployment insurance wage records and other sources of information could help build a stronger predictive model for these purposes. The Rhode Island DataHUB, a statewide longitudinal data system established in 2009, integrates and links data from various agencies and organizations in Rhode

Island and could help develop such a model. Doing something similar using California data would be a larger challenge given the difficulties Neuhauser and colleagues encountered in trying to access TDI claims data for their analyses.⁴⁸

Discussion

Four TDI programs began in the 1940s and the fifth in 1969, but no other states have introduced TDI since then. I am not aware of any published research on the reasons for this. One possibility is that the introduction of SSDI in 1956 reduced interest in TDI for states where it did not already exist, thinking that SSDI would provide an adequate safety net for the same target population and there would be little political support for new payroll taxes on workers, employers, or both. The enactment of the Pregnancy Discrimination Act in 1978 implied that TDI programs should cover maternity leave as well, which may have deterred new states from considering TDI.

Interest in paid leave for workers with medical conditions has renewed over the past decade. Starting with Connecticut in 2011, several states have initiated paid sick leave.⁴⁹ While paid sick leave covers a broader range of conditions than TDI does and fully replaces wages, it typically covers just the first week of absence.⁵⁰ More recently, Connecticut, Massachusetts, Oregon, and Washington have enacted paid family and medical leave laws that provide up to 12 weeks (and up to 20 weeks in Massachusetts) of paid leave for covered workers with serious health conditions.⁵¹

Paid medical leave of up to 12 weeks could have different labor market effects than the long-standing TDI programs, which offer up to 26 weeks or more of leave. Intuitively, the shorter maximum durations the new legislation offers should result in fewer days away from work, on average. Indeed, as shown in Table 2, the average duration of TDI benefits in Rhode Island (72 days) is about 60 percent of that in California (117 days). And the percentage receiving at least 30 weeks of benefits is much lower in Rhode Island than in California (2.8 percent versus 22.1 percent, respectively). However, the shorter duration would

also mean less time to recover, which might be needed for certain serious health conditions.⁵² Differences in factors beyond the maximum duration, such as the wage replacement rate and maximum benefit caps, could also lead to differences in outcomes between the older TDI programs and the new 12-week medical leave programs. Unfortunately, as mentioned earlier, we know little on how these factors affect outcomes for TDI claimants.

From a societal perspective, we ultimately want the benefits of existing and new TDI programs to outweigh their costs, broadly defined. Even if a TDI program is cost neutral, in the sense that its tax revenues are sufficient to cover benefits paid and administrative costs, the nature of its effects on labor force participation and other outcomes can tip the balance for societal net benefits—the combined net benefits for workers, employers, and taxpayers. TDI programs could provide a net benefit to society, especially if they help more workers stay in the labor force in the long run, thereby increasing tax revenues and reducing governmental expenditures such as SSDI benefits.

However, if TDI ultimately induces more exits from the labor force and serves as a path onto SSDI, the net benefit to society would likely be negative. It is hard to imagine a situation in which the benefits of receiving TDI for 12 or even 52 weeks outweigh the costs of receiving SSDI (and subsequently Medicare) for many years following an early exit from the workforce. Hence, understanding the long-term effects of TDI on labor force participation and related outcomes is crucial to our ability to assess the value of TDI to US society.

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Notes

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6. Ben-Shalom, Christian, and Stapleton, “Reducing Job Loss Among Workers with New Health Problems.”
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13. In all five states, if a temporary disability insurance (TDI) claimant is also receiving SSDI, the SSDI benefit is reduced so that the sum of TDI and SSDI is less than 80 percent of the SSDI wage base.
14. A Better Balance, “Overview of Temporary Disability Insurance Laws in the United States,” September 21, 2016, <https://www.abetterbalance.org/wp-content/uploads/2016/11/TDIchart.pdf>.
15. The FMLA, the California Family Rights Act (CFRA), and the Rhode Island Parental and Medical Leave Act (RIPMLA) cover most employees of employers with 50 or more employees; length-of-service requirements need to be met by employees requesting covered leave. According to DOL, “Nearly 60 percent of employees meet all criteria for coverage and eligibility” under the FMLA, and qualified workers may take TDI and FMLA leave concurrently. The family leave laws in New Jersey, New York, and Hawaii do not cover employees’ own health conditions. The federal Americans with Disability Act (ADA) and California’s Fair Employment and Housing Act (FEHA) provide a somewhat different set of protections to employees of employers with five or more employees, with no length-of-service requirements. For example, the ADA and FEHA may protect leave beyond 12 weeks if that leave is considered as a reasonable accommodation given the worker’s disability. See US Department of Labor, “FMLA Is Working,” 2013, https://www.dol.gov/whd/fmla/survey/FMLA_Survey_factsheet.pdf; and US Department of Labor, “What’s the Difference? Paid Sick Leave, FMLA, and Paid Family and Medical Leave,” September 2016, <https://www.dol.gov/sites/dolgov/files/OASP/legacy/files/PaidLeaveFinalRuleComparison.pdf>.
16. Eric French and Jae Song, “The Effect of Disability Insurance Receipt on Labor Supply,” *American Economic Journal: Economic Policy* 6, no. 2 (2014): 291–337.
17. David H. Autor and Mark G. Duggan, “Distinguishing Income from Substitution Effects in Disability Insurance,” *American Economic Review* 97, no. 2 (2007): 119–24.
18. Jonathan Gruber, “Disability Insurance Benefits and Labor Supply,” *Journal of Political Economy* 108, no. 6 (2000): 1162–83.
19. The substantial gainful activity amount was \$1,220 per month for non-blind individuals in 2019. This amounts to \$14,640 annually—only slightly above the federal poverty level of \$13,300 for an individual in 2019. In contrast to SSDI, veterans disability compensation benefits are not reduced for work. See, for example, Robert R. Weathers and Jeffrey Hemmeter, “The Impact of Changing Financial Work Incentives on the Earnings of Social Security Disability Insurance (SSDI) Beneficiaries,” *Journal of Policy Analysis and Management* 30, no. 4 (2011): 708–28.
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21. Maria De Paola, Vincenzo Scoppa, and Valeria Pupo, “Absenteeism in the Italian Public Sector: The Effects of Changes in Sick Leave Policy,” *Journal of Labor Economics* 32, no. 2 (2014): 337–60; and Nicolas R. Ziebarth and Martin Karlsson, “A Natural Experiment on Sick Pay Cuts, Sickness Absence, and Labor Costs,” *Journal of Public Economics* 94, no. 11–12 (2010): 1108–22.
22. The sick pay mandates studied by Stefan Pichler and Nicholas R. Ziebarth typically allowed employees to earn one hour of paid sick leave per workweek, up to seven days per year. Stefan Pichler and Nicolas R. Ziebarth, “Labor Market Effects of US Sick Pay Mandates,” *Journal of Human Resources* (2018): 0117-8514R2.
23. Maya Rossin-Slater, Christopher J. Ruhm, and Jane Waldfogel, “The Effects of California’s Paid Family Leave Program on Mothers’ Leave-Taking and Subsequent Labor Market Outcomes,” *Journal of Policy Analysis and Management* 32, no. 2 (2013): 224–45.
24. Tanya S. Byker, “Paid Parental Leave Laws in the United States: Does Short-Duration Leave Affect Women’s Labor-Force Attachment?,” *American Economic Review* 106, no. 5 (2016): 242–46; and Michael Baker and Kevin Milligan, “How Does Job-Protected Maternity Leave Affect Mothers’ Employment?,” *Journal of Labor Economics* 26, no. 4 (2008): 655–91.
25. In the short run (first five years after giving birth), employment and earnings increased almost back to pre-leave levels for new mothers. Martha Bailey et al., “The Long-Term Effects of California’s 2004 Paid Family Leave Act on Women’s Careers: Evidence from

U.S. Tax Data,” National Bureau of Economic Research, October 2019, <https://www.nber.org/papers/w26416.pdf>.

26. As mentioned earlier, some studies have examined the impacts of the maternal leave components of TDI, which were introduced in 1978 following the enactment of the Pregnancy Discrimination Act (Pub. L. No. 95-555), but none of those studies examined outcomes for workers claiming TDI benefits due to injury or illness.

27. These studies were part of a special section titled “Opportunities for Early Intervention to Avoid Prolonged Work Disability” in the *Journal of Occupational Rehabilitation*. For an introduction to that special section, see Yonatan Ben-Shalom and Jody Schimmel Hyde, “Opportunities for Early Intervention to Avoid Prolonged Work Disability: Introduction to the Special Section,” *Journal of Occupational Rehabilitation* 28, no. 4 (2018): 569–73. See also Annette M. Bourbonniere and David R. Mann, “Benefit Duration and Return to Work Outcomes in Short Term Disability Insurance Programs: Evidence from Rhode Island’s Temporary Disability Insurance Program,” *Journal of Occupational Rehabilitation* 28, no. 4 (2018): 597–609; and Frank Neuhauser, Yonatan Ben-Shalom, and David Stapleton, “Early Identification of Potential SSDI Entrants in California: The Predictive Value of State Disability Insurance and Workers’ Compensation Claims,” *Journal of Occupational Rehabilitation* 28, no. 4 (2018): 574–83.

28. To be eligible for SSDI benefits, a person has to (1) have a medically determinable impairment that lasts or is expected to last at least 12 months or is expected to result in death, (2) be unable to engage in “substantial gainful activity,” which in 2019 meant unsubsidized earnings above \$1,220 per month for non-blind individuals and \$2,040 per month for blind individuals, and (3) be disability insured, which means having a sufficient work history (or Social Security credits) as defined by SSA. See Social Security Administration, *Annual Statistical Report on the Social Security Disability Insurance Program*.

29. National Partnership for Women & Families, “State Paid Family and Medical Leave Insurance Laws,” 2019, <https://www.nationalpartnership.org/our-work/resources/economic-justice/paid-leave/state-paid-family-leave-laws.pdf>.

30. Neuhauser, Ben-Shalom, and Stapleton, “Early Identification of Potential SSDI Entrants in California”; and Bourbonniere and Mann, “Benefit Duration and Return to Work Outcomes in Short Term Disability Insurance Programs.”

31. US Census Bureau, “Community Facts: Median Age by Sex, 2006–2010 American Community Survey 5-Year Estimates,” 2019, <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>.

32. Bourbonniere and Mann, “Benefit Duration and Return to Work Outcomes in Short Term Disability Insurance Programs.”

33. Neuhauser, Ben-Shalom, and Stapleton, “Early Identification of Potential SSDI Entrants in California.”

34. Bourbonniere and Mann, “Benefit Duration and Return to Work Outcomes in Short Term Disability Insurance Programs.”

35. State of California, Employment Development Department, “Physician/Practitioner’s Guide to Disability Insurance,” 2018, https://www.edd.ca.gov/pdf_pub_ctr/de2548.pdf.

36. Neuhauser, Ben-Shalom, and Stapleton, “Early Identification of Potential SSDI Entrants in California.”

37. Neuhauser, Ben-Shalom, and Stapleton, “Early Identification of Potential SSDI Entrants in California.”

38. Social Security Administration, *Annual Statistical Report on the Social Security Disability Insurance Program*, 2011, 2011.

39. Neuhauser, Ben-Shalom, and Stapleton, “Early Identification of Potential SSDI Entrants in California.”

40. Bourbonniere and Mann, “Benefit Duration and Return to Work Outcomes in Short Term Disability Insurance Programs.”

41. These laws typically define a “serious health condition” as “an illness, injury, impairment, or physical or mental condition that involves (A) inpatient care in a hospital, hospice, nursing home or residential medical care facility; or (B) continuing treatment, including outpatient treatment, by a health care provider.” See, for example, An Act Concerning Paid Family and Medical Leave, Public Act No. 19-25. See also National Partnership for Women & Families, “State Paid Family and Medical Leave Insurance Laws.”

42. Neuhauser, Ben-Shalom, and Stapleton, “Early Identification of Potential SSDI Entrants in California,” Table 2.

43. Creston Smith, “The Social Security Administration’s Continuous Work History Sample,” *Social Security Bulletin* 52, no. 10 (1989): 20–28.

44. See, for example, James Lopez Bernal, Steven Cummins, and Antonio Gasparrini, “Interrupted Time Series Regression for the Evaluation of Public Health Interventions: A Tutorial,” *International Journal of Epidemiology* 46, no. 1 (2017): 348–55.

45. Gruber, “Disability Insurance Benefits and Labor Supply”; and Rossin-Slater, Ruhm, and Waldfogel, “The Effects of California’s Paid Family Leave Program on Mothers’ Leave-Taking and Subsequent Labor Market Outcomes.”

46. Thomas M. Wickizer et al., “Improving Quality, Preventing Disability and Reducing Costs in Workers’ Compensation Healthcare:

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A Population-Based Intervention Study,” *Medical Care* (2011): 1105–11.

47. Social Security Administration, “Disability Analysis File Public Use File,” https://www.ssa.gov/disabilityresearch/daf_puf.html#overview.

48. Neuhauser, Ben-Shalom, and Stapleton, “Early Identification of Potential SSDI Entrants in California.”

49. National Conference of State Legislatures, “Paid Sick Leave,” May 29, 2018, <http://www.ncsl.org/research/labor-and-employment/paid-sick-leave.aspx>.

50. A Better Balance, “Overview of Paid Sick Time Laws in the United States,” June 5, 2019, <https://www.abetterbalance.org/paid-sick-time-laws?export>.

51. National Partnership for Women & Families, “State Paid Family and Medical Leave Insurance Laws.”

52. Notably, the claim-based statistics in Table 2 pertain only to the duration of benefits; the claims data by themselves do not tell us if the claimant indeed returned to work. Access to unemployment insurance wage records could provide more reliable information about return-to-work and other outcomes.

Integrating Employer-Sponsored Disability Plans with the Social Security Disability Insurance Program

Andrew G. Biggs

Disability coverage, whether short or long term, protects an individual and his or her household against the loss of wages due to an inability to work. The United States has provided long-term disability benefits since 1956 through the Social Security Disability Insurance (SSDI) program, though the program has changed substantially since then. Roughly one-third of private employers provide short-term coverage. Additionally, many employers provide long-term disability coverage, though generally as an integrated secondary payer to Social Security.

Employer-sponsored short-term disability coverage has expanded modestly over the past several decades. However, during that time, the SSDI program has experienced expanded beneficiary rolls and declining financial health.¹ This led to a congressional reallocation of tax revenues in 2016 from Social Security's retirement program to forestall the insolvency of the SSDI trust fund. More broadly, some analysts are concerned that the loosening of SSDI eligibility rules coupled with stagnating wages for less-skilled employees have prompted disability applications from certain individuals who otherwise could remain in the workforce.

But employer-sponsored disability insurance may also affect the Social Security disability beneficiary rolls, albeit in ways that are not yet well understood. Short-term disability insurance provided by employers, especially if coupled with return-to-work programs, may indirectly benefit Social Security's finances

by reducing the number of employees who file for SSDI benefits. On the other hand, long-term employer disability policies are generally integrated with SSDI, meaning the employer policy's payouts are reduced by the amount of SSDI benefits the employee receives. This creates incentives for employers to facilitate SSDI application and approval by employees, which in turn may increase SSDI's costs.

In addition, several proposals have been made to address the increasing Social Security disability benefit rolls that rely on expanding private short-term disability coverage and more closely integrating private disability coverage with the long-term benefits provided by Social Security.

Employer-Sponsored Disability Coverage

Disability insurance is designed to replace wages lost when an employee cannot work due to illness, injury, or other related causes. Disability insurance policies are generally divided between short-term plans that ordinarily cover up to about six months of disability and long-term plans that provide for permanent disability and often coordinate with the SSDI program.

The main data source used throughout this chapter for employer-sponsored disability plans is the Bureau of Labor Statistics (BLS) National Compensation Survey (NCS), an establishment survey that gathers data on the availability, provisions, and employer

costs of a range of employee benefits.² Notably, the NCS covers only the private sector and state and local government. Federal employment is not included, so discussion of federal employees is limited.

One might expect that access to employer-provided disability plans would be greater in state and local government than in the private sector, given that benefits are generally a larger share of compensation in the public sector than among private employers. This is true for long-term disability insurance, in which 38 percent of state and local government employees are offered long-term plans versus only 32 percent of private-sector employees (Table 1). In part, however, this reflects that some state and local government employees are not covered by SSDI and thus receive benefits via a different government-provided plan. Only 26 percent of state and local government employees are offered short-term disability protections versus 42 percent in private-sector jobs. It is not clear whether this distinction reflects differences in disability protection or whether other benefits in state and local government, such as paid leave, might make up the difference.

Federal employees do not have a specific short-term disability benefit. They instead rely on a combination of sick leave, accrued paid leave, workers' compensation benefits, and a voluntary leave transfer program, in which other federal employees donate unused leave to a common pool, until such time as they may apply for long-term disability benefits paid by the Federal Employees Retirement System. Providing long-term disability via retirement plans is also common in state and local government. In some cases in which public employees are not covered by Social Security, long-term benefits provided by the retirement plan constitute effectively the full disability benefit an employee receives.

Coverage by employer-sponsored disability insurance plans has increased in the private sector. In 1999, 36 percent of all employees participated in a short-term disability plan, and 25 percent participated in a long-term plan. By 2019, 41 percent of private-sector workers were covered by a short-term plan, and 32 percent had long-term coverage. By limiting the sample to medium and large establishments, we

Table 1. Access to Employer-Sponsored Disability Plans

	Short Term	Long Term
Private Sector	41 Percent	32 Percent
State and Local Government	26 Percent	38 Percent

Source: US Bureau of Labor Statistics, "National Compensation Survey," <https://www.bls.gov/ncs/>.

can produce estimates going back to 1988. BLS defines medium-sized establishments as having between 100 and 499 employees, while large establishments have 500 or more employees. Note that BLS defines an establishment as "the physical location of a certain economic activity—for example, a factory, mine, store, or office," meaning that an establishment may be a subunit of a larger firm.³

In 1988, 46 percent of employees working at medium and large establishments participated in a short-term disability policy, while 42 percent participated in long-term policy. By 2019, participation in short-term disability policies had risen to 53 percent of employees at medium and large establishments, but long-term disability policy participation had risen to only 43 percent. As discussed below, this likely is due to SSDI's role in providing long-term disability benefits.

Short-term disability coverage is substantially higher in union jobs, with 66 percent of union employees having access to short-term insurance versus only 40 percent of nonunion employees. Coverage by a long-term disability plan is much more similar, with 40 percent of union employees having long-term coverage versus 37 percent of nonunion workers.

Access similarly differs by full- or part-time work status. In 2019, 51 percent of full-time workers were offered short-term disability protection, and 44 percent had access to long-term disability programs. For part-time workers, access was 17 percent for short-term disability insurance and 4 percent for long-term disability.

Tables 2 and 3 show the availability of short- and long-term disability insurance coverage by industry and occupation. As these tables show, the availability

Table 2. Access to Short- and Long-Term Disability Coverage, Private-Sector Workers by Industry, 2019

Industry	Short Term	Long Term
All Workers	42 Percent	34 Percent
Construction	29 Percent	16 Percent
Manufacturing	65 Percent	48 Percent
Trade, Transportation, and Utilities	43 Percent	24 Percent
Wholesale Trade	55 Percent	45 Percent
Retail Trade	35 Percent	12 Percent
Transportation and Warehousing	53 Percent	33 Percent
Utilities	49 Percent	88 Percent
Information	77 Percent	70 Percent
Finance and Insurance	77 Percent	78 Percent
Financial Activities	66 Percent	66 Percent
Credit Intermediation	77 Percent	84 Percent
Insurance Carriers	75 Percent	71 Percent
Real Estate and Rental and Leasing	35 Percent	34 Percent
Professional, Scientific, and Technical Services	57 Percent	57 Percent
Professional and Business Services	41 Percent	40 Percent
Administrative and Support and Waste Management and Remediation Services	19 Percent	14 Percent
Education and Health Services	39 Percent	42 Percent
Educational Services	42 Percent	55 Percent
Junior Colleges, Colleges, Universities, and Professional Schools	54 Percent	80 Percent
Health Care and Social Assistance	38 Percent	40 Percent
Leisure and Hospitality	20 Percent	5 Percent
Accommodation and Food Services	19 Percent	3 Percent
Other Services (Except Public Administration)	27 Percent	18 Percent
Good Producing	53 Percent	38 Percent
Service Producing	40 Percent	33 Percent

Source: US Bureau of Labor Statistics, "National Compensation Survey," <https://www.bls.gov/ncs/>.

of coverage varies widely. By industry, the availability of short-term disability coverage varies from a high of 77 percent in financial industries including information, finance and insurance, and credit intermediation to a low of 19 percent in not only accommodation

and food services but also administrative and support and waste management and remediation services. Gaps are even wider for long-term coverage, in which 80 percent of establishments in higher education offer long-term coverage while only 3 percent of

Table 3. Access to Short- and Long-Term Disability Coverage, Private-Sector Workers by Occupation, 2019

Occupation	Short Term	Long Term
All Workers	42 Percent	34 Percent
Management, Business, and Financial Occupations	66 Percent	64 Percent
Management, Professional, and Related Occupations	58 Percent	59 Percent
Professional and Related Occupations	53 Percent	57 Percent
Service Occupations	24 Percent	12 Percent
Protective Service Occupations	25 Percent	10 Percent
Sales and Related Occupations	34 Percent	19 Percent
Sales and Office Occupations	41 Percent	32 Percent
Office and Administrative Support Occupations	46 Percent	40 Percent
Construction, Extraction, Farming, Fishing, and Forestry Occupations	29 Percent	17 Percent
Natural Resources, Construction, and Maintenance Occupations	35 Percent	24 Percent
Installation, Maintenance, and Repair Occupations	41 Percent	32 Percent
Production Occupations	52 Percent	34 Percent
Production, Transportation, and Material Moving Occupations	48 Percent	30 Percent
Transportation and Material Moving Occupations	44 Percent	26 Percent

Source: US Bureau of Labor Statistics, "National Compensation Survey," <https://www.bls.gov/ncs/>.

establishments in accommodation and food services offer long-term coverage. That said, as will be discussed in following sections, SSDI plays an important role in providing long-term disability coverage, particularly for lower-wage employees.

Differences in access to short- and long-term disability coverage are somewhat less stark when viewed by occupation (Table 3). Access to short-term disability coverage ranges from a high of 66 percent in management, business, and financial occupations to a low of 24 percent in service occupations. Differences are again greater when looking at long-term disability coverage. Access is as low as 10 percent for protective service occupations and as high as 64 percent for management, business, and financial occupations.

Employee contributions to short-term disability plans are relatively uncommon, with only 15 percent of employees required to contribute to such plans. However, contribution requirements are more common among the bottom quartile of earners

(29 percent) than among the top quartile (11 percent). Part-time workers are much more likely to be required to contribute than are full-time employees (42 versus 12 percent, respectively). There is little difference between union (11 percent) and nonunion (16 percent) employees.

In the NCS, 74 percent of short-term disability plans offer a benefit calculated as a fixed percentage of annual earnings, while 19 percent of plans use a variable percentage of earnings. The remainder offer either a flat dollar amount (5 percent) or a varying dollar amount (2 percent). Fixed percentage of earnings formulas are more common among lower-wage workers, in which 83 percent of plans pay benefits on that basis for the bottom quartile of earners versus 61 percent for the top quartile. Among higher earners, variable percentage of earnings replacements are more common.

Nearly all short-term disability plans (94 percent) provide benefits of a fixed duration. Short-term

Table 4. Distribution of Replacement Rates, Short-Term Disability Plans in the Private Sector

Less Than 50 Percent	50 Percent	51 to 59 Percent	60 Percent	61 to 69 Percent	Greater Than 69 Percent
1 Percent	23 Percent	2 Percent	43 Percent	17 Percent	13 Percent

Note: Replacement rates represent disability benefits as a percentage of the employee's prior salary.
Source: US Bureau of Labor Statistics, "National Compensation Survey," <https://www.bls.gov/ncs/>.

disability plans generally provide a benefit equal to around 60 percent of annual earnings, with a mean replacement rate of 61.7 percent and a median of 60.0 percent (Table 4). Around one-quarter of short-term plans provide a replacement rate of 50 percent, while 30 percent of plans provide a replacement of 61 percent or more of annual earnings. There is relatively little difference in mean replacement rates by earnings levels, with the bottom quartile receiving an average replacement rate of 59.2 percent and the top quartile receiving a mean of 64.6 percent. Replacement rates also cluster around 60 percent for full- and part-time and union and nonunion employees.

About three-quarters (76 percent) of short-term plans have a maximum benefit. The median plan with a maximum offers up to \$637 per week (or \$33,124 annually). Ten percent of plans pay a maximum of \$170 per week or less, while another 10 percent pay maximum weekly benefits in excess of \$2,500. Higher-earning employees generally are more likely to be subject to a maximum benefit provision, but they also are offered a higher median maximum (\$1,000) than are lower-earning workers (a median of \$600 for the bottom two quartiles).

Few (5 percent) long-term disability plans require an employee contribution. Contributions are somewhat higher among the bottom quartile of employees (7 percent) than the highest (4 percent), but differences are small by earnings and full- or part-time status or union versus nonunion employees.

Most long-term disability plans (95 percent) pay benefits as a flat percentage of employee earnings, with 3 percent paying a variable replacement rate and 2 percent providing a flat dollar benefit.

Most long-term disability programs (62 percent) offer a benefit equal to 60 percent of annual earnings.

Only 10 percent of plans offer replacement rates above 60 percent, while 28 percent of plans offer replacement rates lower than 60 percent. The mean and median replacement rates are 57.6 percent and 60.0 percent, respectively. Replacement rates do not differ substantially by earnings level, full-time, or union status.

Ninety-two percent of employees participating in long-term plans are subject to a maximum monthly benefit. The median maximum benefit is \$10,000. In the bottom earnings quartile, the typical cap is set at \$7,500, though this is unlikely to be a binding constraint for such employees. Full-time employees typically have higher maximum benefits than do part-time employees (\$10,000 versus \$7,000), though it is not clear if this difference lies in specific provisions of such plans addressing part-time employment or whether part-time employees tend to work for employers with lower caps for all employees.

Interactions Between Long-Term Disability Insurance and Social Security Disability Benefits

In addition to employer-sponsored disability plans, nearly all US employees are covered by the SSDI program, which is funded by a payroll tax of 1.8 percent split between employers and employees and levied on wages up to a maximum taxable wage of \$137,700 for 2020. The principle exceptions are the approximately 28 percent of state and local government employees who are not covered by Social Security and who instead rely on a retirement plan sponsored by their employer.⁴ Noncoverage of certain state and local

Table 5. Stylized Replacement Rates for Long-Term Disability Benefits by Hourly Earnings Percentile

	10th	25th	50th	75th	90th
Hourly Earnings	\$10.28	\$13.18	\$19.87	\$31.55	\$47.78
Annualized Earnings	\$21,382	\$27,414	\$41,330	\$65,624	\$99,382
Estimated SSDI	\$13,072	\$15,002	\$19,455	\$27,083	\$32,146
SSDI Replacement Rate	61 Percent	55 Percent	47 Percent	41 Percent	32 Percent
Estimated Private Benefit (at 60 Percent Replacement of Prior Earnings)	\$12,829	\$16,449	\$24,798	\$39,374	\$59,629
Residual Private Benefit	\$0	\$1,447	\$5,343	\$12,292	\$27,483

Note: Assumes annual earnings are hourly earnings (2,080 hours per year) and that private long-term disability benefits replace 60 percent of annual earnings.

Source: Author's calculations.

government employees helps explain the higher incidence of employer-sponsored long-term disability coverage in the state and local sector.

Social Security does not offer short-term disability benefits. Rather, benefits are premised on

the inability to engage in any substantial gainful activity (SGA) by reason of any medically determinable physical or mental impairment(s) which can be expected to result in death or which has lasted or can be expected to last for a continuous period of not less than 12 months.⁵

The qualification process for SSDI benefits can be lengthy, lasting a year or more, and it is unusual for an individual to shift directly from employment to the benefit rolls. Thus, there is generally a significant gap in income provision between the time a disabled individual leaves employment and the moment SSDI benefits begin.

Unlike private disability plans, which most commonly replace a flat percentage of prior earnings, Social Security pays benefits based on a progressive replacement of average monthly earnings. The benefit formula for 2019 replaces 90 percent of monthly earnings of less than \$960, 32 percent of monthly earnings between \$926 and \$5,583, and 15 percent of monthly earnings from \$5,583 up to the Social Security taxable

maximum of \$132,900.⁶ Annually, these figures are \$11,112 and \$66,996, indicating high replacement rates for low-wage employees but declining replacement rates as earnings increase.

Social Security calculates disability benefits based on the highest 35 years of earnings, and these past earnings are indexed for the growth of economy-wide average wages.⁷ However, for illustrative purposes, I calculate the annual SSDI benefit that would be payable at various percentiles of the hourly wage distributed reported by the BLS. I assume that employees at each NCS hourly earnings percentile work full-time at 2,080 hours per year. Based on those annual earnings, SSDI provides replacement rates ranging from 61 percent for an employee at the 10th percentile of the hourly earnings distribution to 32 percent for an employee at the 90th percentile (Table 5). At first glance, it appears the progressive formula attached to SSDI benefits could help offset the lower incidence of employer-sponsored coverage among low-wage employees.

However, in most cases, employers' long-term disability insurance plans require that beneficiaries also apply for SSDI benefits. If the employee's Social Security application is accepted, the employee's employer-provided benefits are reduced. While private plans may differ, the offset of private benefits against SSDI benefits in general appears to be dollar

for dollar, such that the disabled employee receives the greater of the two benefits but not both.

I illustrate this in Table 5 under the assumption that employer-sponsored long-term disability benefits replace 60 percent of prior earnings. For the lowest-wage workers, Social Security provides a higher replacement rate than private coverage does, so the net benefit from private coverage is zero. The residual private disability benefit increases with earnings as the Social Security replacement rate declines, such that private long-term disability coverage can be a valuable benefit to higher-paid employees. For an employee at the 90th percentile of the earnings distribution, access to employer-sponsored long-term disability insurance can nearly double his or her annual benefit once disabled.

Integrating private disability insurance with Social Security benefits creates differing incentives that can affect the likelihood of an employee progressing onto the SSDI benefit rolls. When an employee claims short-term disability benefits, the employer has an incentive to provide rehabilitation, accommodations, or other means for the employee to return to work rather than progressing to long-term disability benefits. Such return-to-work programs can indirectly benefit Social Security by reducing the number of incoming beneficiaries.

For instance, Brian Gifford and Skylar Parry find that introducing a return-to-work program lowers the average duration of short-term disability claims by 7 to 18 percent, depending on the employer's baseline duration of claims.⁸ Employers with the longest claims benefit the most from return-to-work policies. If so, these employers may provide a secondary financial benefit to the SSDI program, as application for SSDI benefits presumably follows short-term disability.

However, once an employee has progressed to long-term disability employer-sponsored coverage, employers and insurers have an incentive to facilitate beneficiaries' access to SSDI benefits, since SSDI benefits are generally offset dollar for dollar against the long-term disability benefits the employer provides. A private employer or insurer cannot directly affect an employee's likelihood of being approved for SSDI,

which applies the same rules regardless of whether an applicant currently receives private employer disability benefits.

However, employers or insurers can indirectly facilitate SSDI applications and make approval more likely, such as through gathering medical information or providing an attorney who specializes in the SSDI application process. For instance, the private insurer Unum offers a claimant advocacy program that includes "helping you find appropriate legal representation; obtaining medical and vocational evidence; and reimbursing pre-approved case management expenses."⁹ A Government Accountability Office study found that SSDI applicants with legal representation were three times as likely to be approved as those who lacked representation.¹⁰ While some of this effect may be due to selection whereby better-qualified applicants find it easier to obtain a lawyer, it nevertheless remains likely that the representation and other services provided by disability insurers increase the rate at which disabled employees can qualify for SSDI.

Unfortunately, little data are available to gauge how the incentives embedded in long-term employer-provided disability insurance may affect entrance to the SSDI rolls. Household surveys such as the Current Population Survey do not indicate whether an employee is offered disability insurance at work, nor do they contain sufficient panel data to track whether new SSDI beneficiaries had such protections at their prior jobs. The Social Security Administration obviously has data on individuals receiving SSDI benefits, but not on whether those beneficiaries receive private long-term benefits. Likewise, employers and insurers have data on employees receiving private disability coverage, but not on employees who do not.

Nevertheless, insurers may be the most promising route for future research. For instance, some disability insurers may not apply a Social Security benefit offset under every policy they offer. Likewise, insurers may be able to compare SSDI application and acceptance rates over time following policy changes such as a Social Security benefit offset or the introduction of programs to aid employees in applying for SSDI.

Proposals to Reform the Social Security Disability Insurance Program

The SSDI program has faced increased enrollment over the past several decades, leading to financial pressures on the plan and, in 2016, the enactment of legislation to forestall insolvency of the SSDI trust fund by reallocating resources from the Social Security Old-Age, Survivors, and Disability Insurance program. Alongside those financial pressures are concerns that incentives embedded in the SSDI program have pulled less-skilled workers from the labor force. These issues are discussed in more detail in Jack Smalligan and Chantel Boyens' chapter.¹¹ I here review several proposals to reform SSDI that rely on private disability coverage.

Autor and Duggan propose that employers be mandated to provide short-term private disability insurance that covers up to the first two years of disability.¹² This policy would extend short-term coverage to all workers, commencing at most 90 days after the onset of a disability. After two years of benefits, the disabled employee would shift to SSDI coverage.

But the Autor-Duggan proposal would also require that, in addition to providing wage replacement, the temporary disability policy would include vocational rehabilitation and workplace accommodating provisions to facilitate the employee's return to work. Providing return-to-work policies is important for the Autor-Duggan proposal: While mandating universal short-term disability coverage would presumably increase the number of employees claiming such benefits, providing immediate return-to-work programs would likely reduce the number of employees who go on to claim SSDI benefits, from which they are unlikely to return to work. Under current policy, in which many employees without short-term coverage do not receive return-to-work assistance, by the time they have applied for SSDI benefits, their skills and contacts to the workforce have eroded.

One obstacle to enacting the Autor-Duggan proposal is the mandate that employers offer short-term disability coverage. Republican policymakers resist such mandates, while the Supreme Court's ruling regarding the Affordable Care Act's penalties for

being uninsured raises further questions. Congress' more typical approach is to work through tax credits or other incentives. Employer costs for disability coverage already are tax deductible, meaning that an incentive-based policy would likely need to go further to encourage voluntary participation, particularly by smaller firms, where the fixed monetary and manpower costs of such a program may be high.

Jason Fichtner and Jason Seligman argue for recasting the Social Security disability system by allowing for temporary and partial disability awards.¹³ They propose establishing pilot programs in the Social Security Administration (SSA) to test the granting of partial disability benefits. One approach would pay a benefit set at 50 percent of the current formula rate to most applicants within certain classes of severe cases, specifically those currently covered under SSA's Compassionate Allowances rules. A second approach modeled after the Veterans Affairs disability program would offer benefits in increments of 10 percent, allowing for greater variation in payments. These gradations could be based on a measure of residual functional capacity that the SSA already calculates as part of the application process.

Over the first 12 months of the Fichtner-Seligman proposal, the employer-sponsored plan would pay disability benefits, and the employer itself would continue to contribute toward health coverage and retirement. At 12 months, the benefit provider would conduct a disability review. Should the disabling condition be judged to remain, benefits would continue, and the insurer would be gathered and forwarded to the SSA for review. At the 24-month mark, Social Security would conduct its own review to determine whether a long-term partial or full disability benefit should be awarded. Experience rating of employer premiums during the two-year initial period of disability would provide incentives for employers to return employees to the workforce, if possible.

As pilot programs, the policies Fichtner and Seligman proposed appear worth pursuing, if only as a way to increase policymakers' knowledge of how Social Security and private disability protections interact. Their proposal to grant temporary and partial disability benefits could move outcomes in either direction.

On one hand, SSDI is offered only to eligible workers who suffer from a severe and long-term disability, meaning that Fichtner and Seligman's proposal could potentially broaden the benefit rolls. And yet, Social Security already offers benefits to individuals who are only partially disabled: The SSDI program's eligibility criteria require that a participant be capable of working full-time if he or she had worked full-time before applying for SSDI. This implies that an applicant who could work part-time but not full-time would be treated as fully disabled and granted benefits. Fichtner and Seligman's proposal could offer such an applicant a partial disability benefit, freeing him or her to work part-time while reducing costs to the SSDI program.

Richard Burkhauser and Mary Daly argue for structuring Social Security disability protections more similarly to how the state-run workers' compensation programs function.¹⁴ Under these proposals, employer payroll taxes would be experience rated, with higher premiums charged to employers that shift more employees to the SSDI program. Firms would also be granted lower premiums if they offer short-term disability protections, in return for the return-to-work programs that short-term policies generally include. Overall, experience rating would provide employers with stronger incentives for workplace accommodations and supported work. Burkhauser and Daly's proposal builds on disability reforms in the Netherlands, where policymakers responded to high disability rates by imposing experience rating on employers and requiring employees filing disability claims to participate in return-to-work programs.

Both economic logic and some evidence suggest that experience rating of SSDI employer payroll taxes could improve outcomes for disabled employees. Nynke De Groot and Pierre Koning exploit a 2003 change in Dutch disability policy in which small firms were exempted from experience rating.¹⁵ They conclude that removing experience rating for small firms increased the inflow of beneficiaries to the Dutch disability program from small firms by 7 percent and reduced the outflow of disability beneficiaries back to work by 12 percent. The authors also noted other areas in which firms appear to respond to incentives created by the experience rating policy.

Likewise, Seth Seabury and colleagues examine experience rating for workers' compensation insurance, focusing on California firms that self-insure and thus have the strongest form of experience rating.¹⁶ Relative to firms that do not self-insure and are subject to more attenuated experience rating, injured employees at self-insured firms are 7 percent more likely to return to work in the first year following an accident and 3 to 4 percent more likely to be at work five years following an accident. Similarly, Richard Burkhauser, Maximilian Schmeiser, and Robert Weathers find that employers are more likely to offer workplace accommodations to employees who are injured on the job, where experience rating of workers' compensation claims can cause the employer's premiums to rise.¹⁷

Christopher Bruce and Frank Atkins find that introducing experience-rated workers' compensation premiums in the Canadian timber industry led to increased safety measures by employers.¹⁸ Burkhauser and Daly surmise that applying experience rating to SSDI payroll taxes could similarly increase workplace accommodations for general disabilities.

One concern regarding experience rating is whether employers would seek to avoid employees who are more likely to claim SSDI benefits in the future. Such effects are possible across a range of current policies, including legal prohibitions on discrimination by age, gender, or disability. Research on the employment effects of such policies is unclear.

In the Netherlands, adverse selection appears to take place at the firm level, where employers of less disability-prone employees are more likely to self-insure.¹⁹ There does not appear to be conclusive evidence regarding adverse selection in the hiring of disability-prone employees in the Netherlands since experience rating was implemented. However, the Netherlands' overall employment-to-population ratio has risen since disability reforms were implemented in the early 2000s, which does provide evidence that disability-prone individuals were not shut out of the employment market.

One approach to explore these risks might be an SSA trial of experience rating via a pilot program using various policy options and controls. Likewise,

adverse selection may be offset by Burkhauser and Daly's proposal to offer tax credits to employers that offer short-term disability policies, which include return-to-work programs.

The goal of all three proposals is better coordination between short-term disability coverage provided by employers and long-term benefits provided by Social Security. Short-term coverage emphasizes processing benefit claims quickly while including return-to-work elements. Social Security disability is slower to process claims and does relatively little to proactively promote a beneficiary's return to work, although Social Security rules do allow beneficiaries to earn up to \$1,220 per month (the SGA limit) before benefits are discontinued. Nevertheless, improved short-term disability coverage could aid in keeping individuals employed, with accommodations if necessary, and thus reduce the share of short-term disabled individuals who continue to the Social Security long-term SSDI rolls.

All three proposals are worth exploring. However, I wish to add an additional set of more general observations. First, the recent strong labor market in the period leading up to the onset of the COVID-19 virus has for the first time in decades substantially boosted the employment of Americans with self-reported work-limiting disabilities. Data from the Current Population Survey report that in 1988, 31.0 percent of Americans age 30 to 49 with self-reported work-limiting disabilities reported being at work. Despite passage of the Americans with Disabilities Act in 1990, employment was steadily cut more than in half to only 14.7 percent in 2012. By 2019, employment of Americans with work-limiting disabilities had risen to 27.0 percent, when no major disability-related policy changes were enacted but demand for less-skilled employees increased significantly. This increase of over 700,000 disabled individuals with jobs surely contributed to the decline in new SSDI applications experienced in recent years.²⁰

Second, few of those newly employed disabled Americans came from the SSDI beneficiary rolls. In 2012, when the employment rate of disabled Americans was at its lowest level, 38,000 SSDI beneficiaries had their benefits terminated due to a return to work.

In 2018, the most recent year for which data are available, 54,000 SSDI beneficiaries left the rolls for work, out of a total of 1.38 million beneficiaries leaving the SSDI for all reasons, most prominently death or conversion to Social Security retirement benefits at the normal retirement age.

The policy lesson may be to focus on policies that keep Americans with disabilities able to work rather than attempting to formulate policies to bring SSDI beneficiaries back to the workforce. The current US labor market is strong, and that strength cannot be maintained indefinitely. But policies that increase employer demand for employees with disabilities could help mimic the effects of the current tight labor market. And employer-sponsored disability insurance can play a role by providing return-to-work policies including medical rehabilitative services and workplace accommodations. Some employers currently offer such services merely out of a need to attract and retain employees when employees are scarce.

The *New York Times*, with a headline reading "In a Tight Labor Market, a Disability May Not Be a Barrier," reported on employers contacting individuals with disabilities and other hard-to-employ groups.²¹ Widening the reach of employer disability insurance protections could help maintain these programs even after the current economic expansion slows. Nevertheless, other policies to increase demand for employees with disabilities would likely be necessary to maintain the progress made in recent years.

Conclusions

Disability protections in the US are split between employers and the federal government, with many employers providing short-term disability coverage, while the SSDI program covers most of the costs of long-term disability.

Employer-sponsored short-term plans have stronger case management and return-to-work elements than SSDI does, but long-term employer disability coverage contains embedded incentives to shift disabled employees to Social Security where possible. Disability insurers provide various services to

facilitate successful applications for SSDI benefits. These interactions have not been well explored to date, partly due to a lack of appropriate data.

Moreover, the majority of US workers lack either short- or long-term coverage, particularly lower-wage employees who are most likely to end up on the long-term SSDI rolls. However, return-to-work policies may not be cost-effective for employers of less-skilled employees who can easily be replaced. This might justify incentives for employers to offer short-term disability coverage, which with strong return-to-work components could benefit both employees and the finances of the long-term SSDI program.

Several proposals have been made to address rising SSDI beneficiary rolls by expanding private short-term disability protection and associated return-to-work

policies. Some include experience rating of employer payroll taxes to create incentives to establish policies to help employees with disabilities remain on the job. Another proposal would establish experiments with temporary or partial SSDI payments, which the program does not currently offer. All are worth exploring, given both the financial and human costs of rising SSDI beneficiary rolls.

However, the dramatic recent progress in the employment rate of individuals with self-reported work-limiting disabilities points toward broader policy solutions that maintain high employer demand for such employees. Expanding private short-term disability insurance could increase access to return-to-work policies, but broader measures to maintain employer demand for Americans with disabilities will likely remain necessary.

Notes

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Appendix: Data Sources

Chantel Boyens and Jack Smalligan

Many national surveys collect data on overall sick and medical leave usage. While these data are most useful in understanding sick leave policy, the surveys are a valuable resource for studying longer-duration medical leave. This appendix provides a brief summary of many of the data sources. Other researchers have also reviewed many of these data sources, including Amy Batchelor¹ and Kathleen Mullen and Stephanie Rennane.²

National surveys with data on medical leave include:

- **National Health Interview Survey.** The National Center for Health Statistics conducts the National Health Interview Survey (NHIS) annually. It measures the amount of health-related leave taken and whether the leave was paid or unpaid. NHIS captures a combination of sick leave, medical leave, and short-term disability leave.³ For respondents in the labor force, the NHIS asks the number of work-loss days the worker experienced. For all respondents, the NHIS asks the number of days in bed the individual experienced.
- **Medical Expenditure Panel Survey.** The Agency for Healthcare Research and Quality (AHRQ) conducts the Medical Expenditure Panel Survey (MEPS), which builds on the NHIS data with five interviews over a two-year period using respondents from the original NHIS interview. MEPS collects data on paid and unpaid leave. MEPS reports the number of “disability days” the respondent experienced, which AHRQ states

assesses the impact of any physical illness, injury, or mental or emotional problem on

household members’ attendance at work or school. These questions specify how many days of work or school were missed, for what health condition they were missed, and how many days were missed because of someone else’s illness, injury, or health care needs.⁴

- **Panel Study of Income Dynamics.** The University of Michigan conducts the Panel Study of Income Dynamics (PSID), which collects data on sick and medical leave, including the frequency with which a worker has needed to take three or more weeks of leave.⁵ While the PSID has a much longer follow-up period than MEPS does, it does not measure whether workers have access to paid leave.
- **Health and Retirement Study.** The Health and Retirement Study (HRS) asks participants the number of days they missed work because of their health and whether they earn paid sick leave.⁶ While HRS is limited to workers age 50 and over, it provides for a longer longitudinal panel than the MEPS does and has not been used extensively to analyze sick and medical leave.
- **National Health and Aging Trend Study.** The National Health and Aging Trend Study has data on sick and medical leave but is focused only on individuals over age 65.⁷
- **American Time Use Survey.** The American Time Use Survey (ATUS) provides the most detailed data on use of paid and unpaid leave at a single point in time, though leave data are available only periodically.⁸ The leave and job

flexibilities module for the ATUS survey covering 2017–18 provides richer data than the annual ATUS survey does and is financed by the Department of Labor Women’s Bureau.⁹

- **Department of Labor Surveys.** The Department of Labor periodically surveys employers and employees on use of leave covered by the Family and Medical Leave Act, with the last report by Abt Associates covering 2012.¹⁰ The most recent survey was administered by Abt Associates from August 2016 until August 2019, and the results are to be released in 2020.¹¹
- **American Working Conditions Survey.** The American Working Conditions Survey (AWCS), part of the RAND American Life Panel, uses a nationally representative internet panel and a three-year follow-up and has data on health-related work absences, including paid and unpaid sick leave and working while sick.
- **Commonwealth Fund Biennial Health Insurance Survey.** The Commonwealth Fund Biennial Health Insurance Survey, a national survey of Americans age 19 to 64, asks about health-related leave but does not distinguish between own medical leave and leave to care for an ill family member.
- **Bureau of Labor Statistics and International Foundation of Employee Benefit Plans Surveys.** Data on the number of workers with access to formal paid sick and temporary disability leave benefits are most readily available from the Bureau of Labor Statistics’ National Compensation Survey of employers. The International Foundation of Employee Benefit Plans also surveys employers and publishes data on the characteristics of employer-provided benefits.¹² Both data sources are useful to understand how many workers are covered by formal employer plans but cannot shed light on the amount of the benefits employees use. Isabel Sawhill, Sarah Nzau, and Katherine Guyot’s

recent paper compared the coverage rates shown in the National Compensation Survey with coverage reported by workers in ATUS.¹³

- **Additional Surveys.** Additional sources with some data include the Annual Social and Economic Supplement to the Current Population Survey, the National Study of the Changing Workforce, and the Survey of Income and Program Participation. Ann Bartel and colleagues recently summarized what can be learned from these data sources.¹⁴

Data on private and state programs include:

- **Data on Employer-Provided Benefits.** Some of the richest sources of administrative data exist in privately held databases. These data have been rarely used to better understand a publicly provided medical leave benefit. One of the largest and most frequently cited private databases is the IBM MarketScan Research Databases (formerly Truven MarketScan). The Integrated Benefits Institute (IBI) is another resource. IBI has assembled data for the IBI Benchmarking Analytics tool that pools six million claims from 15 disability insurers and 65,000 employer policies.¹⁵
- **Data on State Programs.** States that already provide paid medical leave benefits are another source of data. These states include long-standing programs in California, New Jersey, New York, and Rhode Island, where paid parental and caregiving leave were added to existing temporary disability insurance programs. These programs provide disability benefits more comparable to private short-term disability insurance—benefit durations of 26 weeks or more. Washington state now has a program providing 12 weeks of paid medical leave that began issuing benefits on January 1, 2020, and will be an important source of data in the future. The state data have many limitations since not all states track the same data in the same way. In

addition, many of the states with long-standing programs maintain the program data on old computer systems that are not easily accessed. A recent National Partnership for Women & Families report provides a useful summary of claims, including some breakdowns by age, gender, claim type, and duration.¹⁶

Disability prevalence and usage include:

- **Self-Reported Disability.** The prevalence of self-reported disability is usually measured through two approaches in the Current Population Survey (CPS). Many disability researchers rely on a six-question sequence to identify a disability. These questions ask about specific daily activities, such as walking or hearing. The six-question sequence follows international practices, and the US Census Bureau began using it in 2008. US Census also uses a single work activity limitation question—a question asked since 1981 that is more useful to look at

long-term trends. Richard Burkhauser, Andrew Houtenville, and Jennifer Tennant provide a useful analysis of how each approach captures only a portion of people with health limitations, and they show how the overlap between the approaches is not large.¹⁷

- **Trends.** Data on trends in the Social Security Disability Insurance and Supplemental Security Income programs are available from the Annual Statistical Report on the Social Security Disability Insurance Program,¹⁸ the Annual Statistical Supplement,¹⁹ and the Social Security Administration Office of the Chief Actuary.²⁰
- **Workers' Compensation Programs.** The National Academy of Social Insurance publishes an annual report on the state workers' compensation programs that is more comprehensive than anything the Department of Labor produces.²¹

Notes

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