APPENDIX: POTENTIAL BENEFITS AND COSTS OF AN EMPLOYMENT AND ELIGIBILITY SERVICE SYSTEM

In this appendix, we analyze the likely long-run benefits and costs of replacing the current gateway to SSDI with an employment/eligibility (EES) service from the perspectives of workers, employers, the federal government, state and local governments, service providers, and the general public. We also briefly consider transition costs.

Workers

The first goal of the EES system would be to increase the economic security of workers when a medical event occurs. For the workers who enter SSDI, the economic benefits of successful early intervention are typically many times greater than the savings that accrue to the government (Ben-Shalom 2015). That is because government benefits replace only a share of their past earnings. These workers are typically well attached to the labor force, but have low or modest wages and skills, and are employed by firms that do not offer private disability insurance (PDI). EESs are less likely to benefit those with very low skills and only minimal attachment to the labor force, and those who already have private coverage. The positive impacts of EESs on the employment and income of those who become eligible for work supports are not expected to have detrimental effects on others. Other benefits and cost to workers are harder to establish. Substantial evidence indicates that continuation of work has positive health benefits (Waddell et al. 2008), but not all workers find work fulfilling.

Employers

The intent of the proposal is to make it more attractive for employers to retain workers after medical events occur and, at a minimum, make it no less attractive to hire workers at relatively high risk for medical events. Hence, the proposal does not recommend mandates, fees, or other provisions that would increase the cost of employing workers. In fact, the expectation is that an EES system will help employers by allowing them to retain workers without investing a great deal in work supports and by providing free technical assistance, including help with meeting the requirements of the Americans with Disabilities Act (ADA) and other laws.

Federal Government

The net financial benefit to the federal government consists of three components: gross savings to existing programs minus expenditures for work supports plus increases in tax revenues. Savings to existing programs are potentially very high, particularly to SSDI and Medicare, but also SSI and Medicaid (considering the federal share only), though we cannot offer predictions with a high level of certitude. We do, however, illustrate the potential magnitude using readily available information: it is quite likely that the long-term net savings to the federal government, for all programs, would be $25 billion or more per year.

Gross Program Savings

We are unable to reliably predict the size of the reduction in the number of annual entrants into SSDI or, in the long-run, the number of beneficiaries. There are important reasons to think the reduction could be quite large, in percentage terms. First, the documented impacts of introducing early intervention in other contexts have been very large. For instance, Wickizer et al. (2011) found that
Washington State’s Centers for Occupational Health and Education (COHE) system reduced by 21 percent the number of workers’ compensation (WC) claimants receiving cash benefits 12 months after filing.¹ Hullegie and Koning (2014, Table 5) estimate that the 2002 Dutch reforms reduced the receipt of disability benefits by workers ages 40 to 58 who experienced an unscheduled hospitalization by 84 percent for men and 61 percent for women in the third year after the hospitalization, and by about 50 percent for younger workers of both sexes. Although such figures are not directly applicable to what we can expect from an EES system in the U.S, they demonstrate that savings could be considerable.

Additionally, a very large share of SSDI allowances involve cases that are difficult to adjudicate; about one third are allowed by the disability determination services (DDSs) on the basis of vocational factors and about 35 percent only after appeal to SSA.² We also know that, in the past, more than 20 percent of new SSDI entrants have returned to work, although not necessarily at the SGA level (Liu and Stapleton 2011) and that more would have engaged in SGA had their benefits been denied (Maestas et al. 2013; French and Song 2014). With more timely assistance, many of these entrants might not have entered SSDI. Finally, part of the impact on SSDI entry will come from reduced moral hazard—some workers who know they are likely to be required to undertake a work-test rather than be fast-tracked to SSDI will decide to not pursue SSDI entry because they have no desire to work in the first place.

For illustration purposes, we assume a 15 percent reduction in SSDI entrants of all ages—a percentage that is plausible, given the above facts. In the long run, an impact of this size would reduce gross annual program expenditures for the SSDI, Medicare, SSI, and Medicaid benefits of SSDI beneficiaries by 15 percent, or about $32 billion based on total expenditure levels in 2012, including $20 billion for SSDI.³

**Net Program Savings**

Additional costs for work supports would offset a substantial share of the gross savings. Annual costs depend on the number of clients given supports and the additional amount spent per client. Suppose that to achieve a 15 percent reduction in the number of entrants the EESs provided work supports for four times that many workers at an additional cost of $10,000 per worker. That is equivalent to $40,000 per worker deterred from entering SSDI, or about 1.5 times the maximum amount that SSA offered to pay Ticket-to-Work providers for successfully helping an SSDI beneficiary give up benefits

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¹ Most WC claimants return to work relatively quickly and would not qualify for SSDI—the cited estimates are for the relatively severe WC cases that have a high likelihood of qualifying for SSDI.

² These percentages are based on disabled worker applications filed in 2007, the most recent annual applicant cohort for which only a very small share of cases are pending final decisions (SSA 2014, Table 64).

³ The total reduction is based on Riley and Rupp (2015). They estimated calendar year 2002 federal expenditures of $20,949 per SSDI-only beneficiary and $23,573 per concurrent beneficiary on the combination of SSDI, SSI, Medicare and Medicaid, both in 2012 dollars (Table 4). Weighting by the percentage of beneficiaries in each group, we obtain mean federal expenditures of $21,361 for every SSDI beneficiary. We inflate this figure by the ratio of the Riley and Rupp estimate of the PV of mean expenditures for the 2012 cohort of SSDI and SSI entrants ($332,021) to the corresponding value for 2,000 entrants ($292,401; both in 2012 dollars, from Table 6) to obtain an estimate of $24,254 per 2012 SSDI beneficiary in 2012. Multiplication of this figure by the estimated 8.7 million beneficiaries in the average month of 2012 yields $211 billion. The beneficiary estimate is the average of the December 2011 and 2012 values reported in SSA (2014, Table 27). The SSDI reduction is 15 percent of SSDI benefits paid in 2012, from SSA (2012, Table 4).
for 36 months in 2012 ($25,884), and about 2.7 times the amount SSA pays per allowed payment claim from state VR agencies for beneficiaries who achieve nine months of SGA-level employment following receipt of VR services.\textsuperscript{4} Based on 15 percent of the number of SSDI entrants eventually expected from the 2.9 million applicants in 2012, work supports would be provided to about 710,000 applicants—over twice the number of VR applicants who started receiving services in 2012.\textsuperscript{5} The total cost would be about $7 billion (in 2012 dollars)—more than twice the amount of annual federal and state expenditures on VR services.\textsuperscript{6} Under these assumptions, if an EES system had been in place and achieved long-run gross benefit savings of $32 billion in 2012, the net benefit savings for 2012 would have been $25 billion before consideration of added tax revenues.

\textbf{Administrative Costs}

The above analysis excludes additional administrative costs. A large share of EES administrative costs would eventually be re-allocated administrative funds from the current SSDI gateway and from other programs that would support the new gateway. All DDS funding would be re-allocated to this purpose, as well as a considerable share of the administrative costs for federal employees who manage the current gateway. Further, administrative cost savings might be achieved because the system would be built around a fundamentally sound concept of disability rather than on one that is outdated. For instance, the vocational assessments (an administrative cost) would eventually be replaced by work tests—the costs of which are already captured above. Similarly, the number of appeals may decrease because a decision to provide work supports rather than conditionally award SSDI benefits will be less problematic for clients than the current decision to deny benefits. Increases or decreases in administrative costs are likely to be small relative to net benefit savings. Based on estimated SSDI administrative costs in 2012 (including post-award administration), a 10 percent change in either direction would be approximately $300 million.\textsuperscript{7}

\textbf{Revenues}

The federal government will realize additional revenues to whatever extent the increased earnings of workers receiving work supports does not displace the earnings of other workers. The potential amounts are not large relative to potential benefit savings, but it seems likely that they would more than offset any additional administrative costs. These workers and their employers will be contributing more to the SSDI, Old Age and Survivors' Insurance (OASI), and Medicare Trust Funds via payroll taxes, although they will also be increasing OASI liabilities for their future benefits. The workers will also pay more federal income taxes (FIT). To illustrate the magnitude of the potential additional revenues annually, consider the following hypothetical. If 15 percent of the 8.7 million SSDI beneficiaries on the rolls in the average month of 2012 earned, on average, twice the annualized non-

\textsuperscript{4} In FY 2014, the average payment per VR claim was $14,997; \url{http://www.ssa.gov/work/claimsprocessing.html}. Accessed June 11, 2015.

\textsuperscript{5} We expect that 900,000 of the 2012 disabled worker applications will eventually be awarded, based on the 40.9 percent award rate for the 2007 applicants as of the end of 2012. VR agencies served 323,287 applicants under an individualize plan for employment from the 2012 VR applicant cohort (RSA 2014, Figure 3).

\textsuperscript{6} In 2012, RSA grants to state VR agencies totaled $2.9 billion, matched by state funds of approximately $0.7 billion (RSA 2012).

\textsuperscript{7} This is based on an estimate that DI administrative costs in 2012 were equal to 2.3 percent of program costs, or $3.1 billion (SSA 2011, Tables 4 and 9).
blind 2012 SGA amount ($24,960), they and their employers would have contributed $0.6 billion to the SSDI Trust Fund, $3.4 billion to the OASI Trust Fund, and $0.9 billion to the Medicare Trust Fund. Assuming single filing status with a single exemption and use of the standard deduction, they would also have paid $1.3 billion in FIT on their earnings. Excluding the OASI contribution, which is offset by a new liability, total additional revenues would have been $2.8 billion in 2012. The revenue increase would be smaller to the extent that these workers would have had earnings under current law.

State And Local Governments

Our proposal does not call for increased state or local financing, but does call for the involvement of state and local governments in EESs. States should see some gains in income and sales tax revenues because of the increases in the earnings and consumption of clients who stay in the labor force. EESs may affect the use of state and local programs by workers and their families, which, in turn, may affect state and local finances, positively or negatively.

Service Providers

We expect service providers—PDI and WC carriers; disability management vendors; providers of health, disability and employment services; and others—to experience increases in demand for their services, and some will have to adapt to changes in the nature of those demands or how they are financed. Like any significant change in a large federal program, this one would offer opportunities to entrepreneurial organizations and be problematic for those unable to adapt. We also recommend federal payments to PDI and WC carriers that would increase incentives to provide work supports and offset the costs of new regulations.

General Public

We believe voters will generally support a nationwide system to protect the economic security of workers who experience medical events, and that they are willing to pay for an efficiently designed program that is administered with integrity. There is growing evidence that the design of the current program undermines rather than enhances the productive capacity of such workers, and lacks administrative integrity because of the persistent shortcomings of the disability determination process (see Section II). If the EES system succeeds, it will strengthen public support for the system. Further, taxpayers will benefit to whatever extent net savings to the federal government result in more expenditures for valued government activities or lower taxes.

Transition Costs

In Section V, we present a proposal for a transition from the current SSDI gateway to an EES system. The transition will take time and will involve considerable transitional costs to reorganize some government offices, finance the necessary learning, and design and build infrastructure. These costs will be impacted by how rapidly policymakers choose to proceed. We would expect an effort that creates a new multi-agency office, supports an extensive grant program, supports interaction with a variety of stakeholders, and starts to build the infrastructure to support an EES system, to have budgets of $1 or $2 billion per year. Although small relative to anticipated future savings, these are substantial sums, given that federal savings will not start to accrue until some future year. Policymakers have the option of starting smaller, by supporting a less ambitious grant program, then scaling up as the evidence on effectiveness, benefits, and costs builds, but that approach will take much longer and
ultimately may prove more costly because it will delay the accrual of future savings under the new system.
REFERENCES


