

All over the Map: A Systematic Literature Review and State Policy Scan of Medicaid Buy-In Programs for Working Individuals with Disabilities

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Abstract: While supports for people with disabilities have increased, significant healthcare and financial barriers persist. State-administered Medicaid Buy-In programs for working people with disabilities, distinct from broader buy-in discussions that have emerged as some states consider expanding access to health insurance, are intended to incentivize employment and protect against a loss of Long-Term Services and Supports. Loss of these services would be detrimental to a person's ability to access daily living and workforce participation supporting services. This paper explores identified drivers of and barriers to participation, outcomes, and the current state of programs that are currently in place. Authors conducted a systematic literature search to identify evidence published in peer-review journals. Additionally, a policy scan using information from government sources for the 45 state-administered buy-in programs was completed. The results indicate that state Medicaid Buy-In programs vary dramatically in their construction and presentation, with eligibility and administration information or lack thereof having the potential to significantly affect a person's decision making around benefit enrollment and employment. Findings are discussed in the context of additional recent state and federal policy efforts to improve outcomes around employment, income, and asset generation for people with disabilities.

All over the Map: A Systematic Literature Review and State Policy Scan of Medicaid Buy-in Programs for Working Individuals with Disabilities

Medicaid provides important healthcare access for working individuals with disabilities who qualify for long-term supports and services (LTSS), which can assist with daily living activities such as cooking, hygiene, and transportation. According to a 2018 Congressional Revenue Service report (Colello, 2018), total Medicaid LTSS spending was \$154.4 billion in 2016, making Medicaid the largest single payer of LTSS in the United States. For many, these services are otherwise unobtainable through other means (e.g. Medicare, the commercial insurance market or employer-based insurance). The median cost for home-based LTSS was recently estimated at \$45,800 annually (Reaves & Musumeci, 2015). Medicaid income and asset limits can lead to a loss of LTSS and act as a work disincentive for individuals with disabilities, leading people to potentially need to choose between not working, forgoing LTSS, or working in lower paying positions in order to maintain eligibility.

Despite continuing technological innovations and program interventions, the U.S. labor force participation rate for people with a disability was 20.8 percent in 2019, compared to 68.7 percent of people without a disability (Bureau of Labor Statistics, 2018). Baker, Linden, LaForce, Rutledge, & Goughnour (2018) identified barriers to employment such as employer perspectives, perceived costs of accommodations, and misalignments between education and skills with job qualifications. Henry et al. (2006) identified daily activity limitations, stigma, lacking public transportation options, and an inadequate job market. Finally, the structure of public assistance programs and coverage individuals may receive from their health insurance (or not) for services critical to daily community living (Hall & Fox, 2004).

To increase earnings potential for individuals with disabilities without the risk of losing access to Medicaid and LTSS services, Congress permitted states to create Medicaid Buy-In (MBI) programs through passage of the Balanced Budget Act of 1997 (BBA) (Public Law 105-33) and the Ticket to Work and Work Incentives Improvement Act of 1999 (TTW) (Public Law 106-79). BBA included a provision that granted states the option to permit working people with disabilities to “buy into” Medicaid (Section 4733). TTW then identified the broad parameters from which MBI programs would stem. Together, these laws enabled states to offer MBI programs for working people with disabilities to incentivize work and protect against a loss of LTSS benefits. Notably, MBI programs for working people with disabilities are distinct from broader Medicaid Buy-In discussions that have emerged recently as states consider expanding access to health insurance.

In addition, TTW and the Centers for Medicare & Medicaid Services (CMS) authorized and administered the Medicaid Infrastructure Grant (MIG) to track effectiveness and improve MBI program data collection. Nearly \$289 million of federal MIG funds were awarded to states between 2001 and 2009 to support the design, establishment, and operation of state infrastructures to support working individuals with disabilities (Kehn, Croake, & Schimmel, 2010).

MBI Program Implementation

Early enrollment in MBI programs was consistent with state program projections. One case study identified approximately 13,000 individuals enrolled in nine of 19 states with an MBI program created under TTW and BBA (Folkemer, Jensen, Silverstein, & Straw, 2002). Most participants had prior experience with other disability-related public programs at the time of enrollment (Black & Ireys, 2006), however, the lack of consumer knowledge about MBI

program for people with disabilities who work was a significant inhibitor for enrollment numbers (Neri, Wong, & Harrington, 2013). Program features such as income limits and premium thresholds were highly variable from state to state (Folkemer et al., 2002). Even ostensibly similar features, such as the common 250% federal poverty line (FPL) income threshold, disguised significant differences between states due to different disregards.

By 2005, thirty states had implemented MBI programs for working people with disabilities (Henry et al., 2006). Alongside the growing number of state MBI programs, participation increased with available enrollment figures exceeding 192,000 (Kehn & Schimmel, 2013). State participation varied as widely as eligibility requirements, ranging from fewer than fifty enrollees to over 20,000, with states reporting that outreach and marketing efforts influenced enrollment. Today, forty-five states offer an MBI program option.

MBI Program Features

Flexible program design and implementation standards allow states to expand Medicaid eligibility as they see fit within their budget frameworks and policy goals. State MBI programs for working people with disabilities often share common program features and eligibility requirements which can include income and asset limits, work and income verification, cost-sharing such as premiums and co-pays, and grace periods. Eligibility for MBI programs depends on income and asset limitations, which have varied greatly from state to state (Ireys, Gimm, & Liu, 2009; Hall, 2015). States present, count, and consider income and assets differently, but generally adhere to some percentage of the federal poverty line (FPL) between 200 and 400, subject to standard SSI exclusions.

Grace periods, also known as work interruption protections, are varying lengths of time when an individual can remain enrolled in an MBI program without working for wages. Grace

periods can be an important protection for people with disabilities who generally experience greater employment instability. An evaluation of the Kansas MBI program revealed that the second most common employment status for MBI participants was “off work due to medical leave” (Gavin, McCoy-Roth, & Gidugo, 2011). However, the extent of these gains depends strongly on duration as a 1- to 6-month grace period is associated with a \$975 increase in earnings and a 37% higher employment rate compared to a 6- to 12-month grace period (Ireys, Gimm, & Liu, 2006). This is a stronger effect than that identified for other policy design features like work verification rules or income limits (Gimm, Davis, Andrews, Ireys & Liu, 2008).

Work and income verification occur when individuals apply for MBI programs and then most commonly on an annual basis upon program renewal. However, ongoing reporting requirements vary as some states require a submission of the previous year’s tax return forms, others require the enrolling individual to receive an employer’s signature. One state (Kentucky) requires MBI program participants to notify their office of initial application of any changes in income within ten days. Program enrollees are typically required to “buy-in” through a cost sharing mechanism such as premiums and/or copayments.

With a number of considerations and components surrounding MBI program eligibility and administration, the authors were interested to examine MBI programs for working people with disabilities through two primary questions: what drivers of participation and outcomes have been identified in these programs, and what is the state of the programs that are currently in place?

Methods

More than twenty years since Congress passed the BBA and TTW legislation, the authors conducted both (1) a systematic review of the peer-reviewed literature and (2) a policy scan of

publicly available information from state government websites to inform a comprehensive understanding of state and national trends and impacts of MBI programs for working individuals with disabilities. Each procedure and corresponding results are presented below.

Procedure

1. Systematic Review

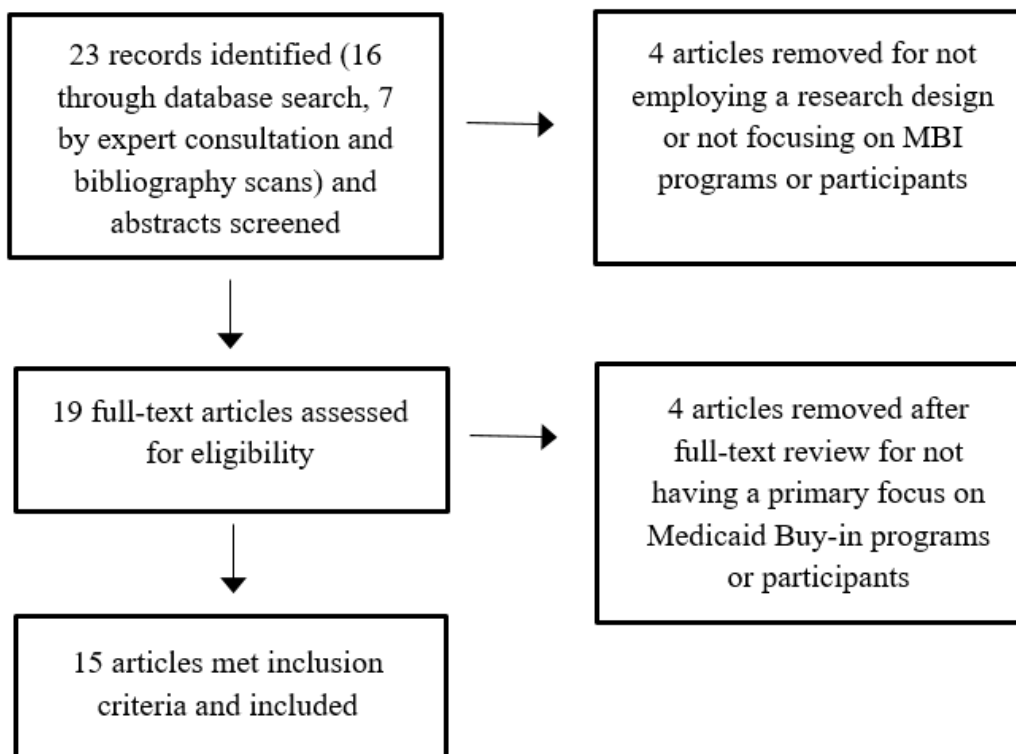
A comprehensive, systematic search of articles on MBI programs for working people with disabilities was conducted to identify evidence and findings since the passage of TTW and BBA related to improved participant employment or health outcomes, healthcare costs, program enrollment and utilization, or impacts of how MBI program components are established and administered. This search included the following:

- Computer searches of ProQuest and Academic Search Complete using the following terms: “disability,” “employment,” and “Medicaid Buy-In.” Search terms were linked by “and” to capture studies that included all three search terms.
- Contact with key experts to identify additional studies and contextualize the literature search and coding approach included the Centene National Disability Advisory Council, authors of articles identified through the literature search, practitioners and policy advocates, and individuals with lived experience participating in MBI programs.
- Bibliography scans of articles found during the online search or expert consultation.

Articles were included if they met all of the following criteria: 1) published in a peer-review journal between 1997 and 2019; 2) employed a research design of either an empirical analysis of primary data collected or quantitative study of available secondary data; 3) were published in English; and, 4) focused on Medicaid Buy-In programs or participants in relation to employment or health outcomes for people with disabilities. Based on this criteria, 16 articles

were identified for inclusion through the electronic search, and an additional seven articles were identified through scanning bibliographies and expert consultation, yielding a total of 23. A review of the abstracts resulted in the removal of four articles that did not meet eligibility criteria. The remaining 19 full text articles were reviewed for inclusion. Of them, four articles did not meet criteria for eligibility, resulting in a final 15 articles that were included in the systematic review. See Figure 1 for an overview of the procedure.

Figure 1: Review Procedure Diagram



To establish interrater reliability for coding the articles, four coauthors (SH, WL, MR, DF) reviewed five journal articles independently to check for consistency across their coding. Only one discrepancy was identified and subsequently resolved due to an article using both primary and secondary data, yielding an IRR score of 96% (24/25 items consistently coded). The

remaining articles were then reviewed and coded (SH, WL, MR) (See Appendix A for the articles that met inclusion criteria).

2. State Policy Scan

The authors also conducted a national state scan of MBI programs using publicly available information retrieved from state websites such as the Department of Health, Social Services, Medicaid, or specific MBI program websites. This work follows separate efforts that utilized private data collection and survey methods to review and compare publicly available information from government sources on state specific MBI program eligibility criteria and components (Sulewski, Gilmore, & Foley (2006); Musumeci, Paradise, Reaves, & Claypool (2014); Hall, 2015; Musumeci, Chidambaram, and O'Malley Watts, 2019). A brief summary of how results of these recent efforts compare is included in the discussion section.

Four authors (SH, WL, MR, DF) reviewed publicly available information retrieved from state Departments of Health, Medicaid, and MBI-specific program websites. This was completed through Google searches and searching within government websites for keywords such as “Medicaid Buy-In,” “Medicaid” and “disabilities,” and “disabilities and working.” Information specific to income limits, asset limits, cost-sharing through co-pays and premiums, work verification requirements, and grace periods was identified and categorized. Measures were thematically coded, and univariate analysis was conducted on all quantifiable fields.

For states that are recognized as having MBI programs but did not have information readily available on their websites ($n = 5$), data from Summit Independent Living (Montana) and the World Institute on Disability (Arizona, California, Michigan, and New Jersey), was incorporated. Summit Independent Living and the Disability Benefits 101 pages receive government funding support, suggesting these are likely as reliable a source of accurate

information as a page hosted on a state department of health website. In total, the World Institute on Disability provides state specific MBI program information for nine states, nearly half of which were states where no information from a direct government source was found.

Results

Systematic Review

Geographic Spread

Of the identified articles from the systematic review, 11 (73%) analyzed data or samples from individual states and the remaining four (n=4, 27%) analyzed national data. Most (n=9, 60%) of the 11 state-specific articles focused on Kansas and Massachusetts. The remaining two state-specific articles contained studies conducted in Washington and California.

Years of Publication and Journals

Almost half of the articles (n=7, 47%) were published between 2008 and 2013, followed by five articles (n=5, 33%) that were published between 2004 and 2007, and three articles (n=3, 20%) that were published between 2014 and 2019. No articles were published between 1997 and 2003, and no more than two articles were published in any single year. Articles were published in nine separate journals. Over one-third (n=6, 40%) of the articles were published in the *Journal of Disability Policy Studies*, two articles (n=2, 13%) were published in the *Disability and Health Journal*, and the remaining articles (n=7, 47%) were published in seven other unique journals. Journals included in the review broadly cover health, healthcare, policy, and public health, with some focusing more narrowly on disability, managed care, policy, and vocational, occupational, and psychiatric rehabilitation.

Focus Areas

Article focus varied across a number of topics relevant to MBI programs: six (n=6, 40%)

focused on participant characteristics, including types of daily limitation activities, service utilization and costs of coverage (Hall, Kurth, & Moore, 2007; Hall, Chapman, & Kurth, 2013; Hall, Fox, & Fall, 2010; Gettens, Hoffman, & Henry, 2016; Henry, Banks, Clark, & Himmelstein, 2007; Neri, Wong & Harrington, 2013), followed by five (n=5, 33%) which focused on employment decisions and outcomes as well as barriers to MBI program participation (Hall & Fox, 2004; Henry et al., 2006; Liu, Ireys, & Thornton, 2008; Schimmel, Liu, & Croake, 2012; Shah, Mancuso, He, & Kozak, 2012). Two (n=2, 13%) articles centered on the implementation and administration of Medicaid Buy-In across states (Ireys, Gimm, & Gilbert, 2009; Sulewski, Gilmore, & Foley, 2006).

Of the two remaining articles, one (n=1, 7%) explored health outcomes and quality of life (Hall, Kurth & Averett, 2016) and one (n=1, 7%) article explored Massachusetts Medicaid Buy-In as an option for children with disabilities and daily activity limitations where Medicaid covered services provide significant support but income limits on their families make them ineligible (Hirschi et al., 2019).

Research Designs and Data Sources

Twelve articles (80%) employed a quantitative study design, followed by three articles (n=3, 20%) that used a qualitative research design. Approximately half of the articles (n=7, 47%) analyzed secondary data, followed by six studies (n=40%) which generated new primary data. The two (n=2, 13%) remaining studies both generated new primary data and incorporated secondary data into their analyses. Of the 15 articles, eight (n=8, 53%) utilized interviews or survey data such as a 50-state survey of state health agency directors (Sulewski, Gilmore, & Foley, 2006), the Health Reform Monitoring Survey (Hall, Shartzler, Kurth, & Thomas, 2018), and the MassHealth Employment and Disability Survey (MHEDS) (Henry et al., 2006; Henry et

al., 2007). Five (n=5, 33%) included an analytic study of MBI using government administrative or health data, while Hall, Kurth, and Moore (2007) and Hall, Fox, and Fall (2010) (n=2, 13%) utilized participant surveys and healthcare claims data in their analyses. Two studies (Sulewski, Gilmore, & Foley, 2006; Neri, Wong, & Harrington, 2013) analyzed samples of county government employees or state Medicaid agency administrators.

Study Outcomes

Six (n=6, 40%) studies presented opportunities for improvement in efficiency, typically around increasing access, availability of services, and improved communication and information sharing between agencies and potentially eligible individuals. Studies looked at health conditions and needs for services beyond typical access to LTSS in support of employment and found demand for wraparound programs (Gettens, Hoffman, & Henry, 2016), dental care access and oral health (Hall, Chapman, & Kurth, 2013), or personal assistant services in the workplace (WPAS), which are available but used by less than one percent of California MBI participants (Neri, Wong, & Harrington, 2013). Additionally, Hall, Kurth, and Moore (2007) looked at Medicare Part D access for MBI participants and identified gaps in participant knowledge regarding plan options and difficulty obtaining medication. Issues with medication access and information was a barrier echoed by Hall and Fox (2004), as well.

Neri, Wong, and Harrington (2013) found that personal assistant services and county staff are generally under informed regarding MBI eligibility and enrollment requirements. To improve communications and collaboration across agencies, a survey of Medicaid agencies found moderate collaboration between Medicaid with disability or employment agencies but need for increased engagement between parties (Sulewski, Filmore, & Foley, 2006). MBI eligible

individuals expressed another barrier of care providers discouraging them from securing or increasing their employment and broader access to services (Hall & Fox, 2004).

Five (n=5, 33%) studies generated insights for better understanding MBI program participants and participation patterns such as how age, types of disabling conditions, and activity limitations might impact employment outcomes. Hall, Fox, and Fall (2010) found in comparing eligible, non MBI participating individuals and enrolled individuals in Kansas that participants tended to be older in age and significantly more likely to have multiple disabilities. Younger MBI participants were found to have higher incomes than older participants working and receiving SSDI (Liu, Ireys, & Thornton, 2008). Schimmel, Liu, and Croake (2012) found that younger participants with psychiatric disabilities are more likely to be employed but with lower earnings than young program participants with other disabilities.

Four (n=4, 27%) studies generated findings regarding MBI program effectiveness. Ireys, Gimm, and Liu (2009) found states had mixed results expanding healthcare coverage and promoting work, and that administrative program components have significant effects on employment and/or earnings. Hall, Kurth, and Averett (2016) examined program eligibility and found that MBI participants who could accumulate assets above the typical \$2,000 limit for Medicaid had better health and quality of life. Shah et al. (2012) found that Washington's MBI program encourages work, increases earnings, and decreases utilization of other social safety net programs such as SNAP. While the Washington state MBI program had higher flexibility and longer grace periods than many other states, state data showed that 84 percent of MBI participants were employed compared to 65 percent of their matched counterparts (Shah et al., 2012), suggesting that allowing people with disabilities to purchase comprehensive, affordable coverage encourages work and can reduce reliance on other benefits.

Notably, all 15 articles (100%) presented policy recommendations or policy implications in relation to the study findings. Specifically, researchers discussed increasing the federal government's involvement in addressing barriers to applying and maintaining eligibility for MBI, how MBI participation could result in reduced participation in other government programs due to increased earnings for participants, overlaps between specific services, policies, or programs (e.g. Medicare Part D, 1619(b) programs, the Affordable Care Act, oral health care, wraparound insurance, attendant services, etc.) and positive effects of MBI program participation on state budgets (Hall, Fox, & Fall, 2010; Shah et al., 2012).

2. State Scan

Forty-five (n=45) states are known to have MBI programs for working individuals with disabilities. Alabama, Florida, Hawaii, Oklahoma, and Tennessee currently do not. 40 (89%) of the states with known MBI programs had information on government websites regarding enrollment or eligibility. The extent, ease of locating, and verification of the accuracy of the information provided, however, varied significantly. Five states (n=5, 11%, Arizona, California, Michigan, Montana, and New Jersey) without government hosted websites for their MBI programs have provided funding to non-profit organizations to administer MBI information pages.

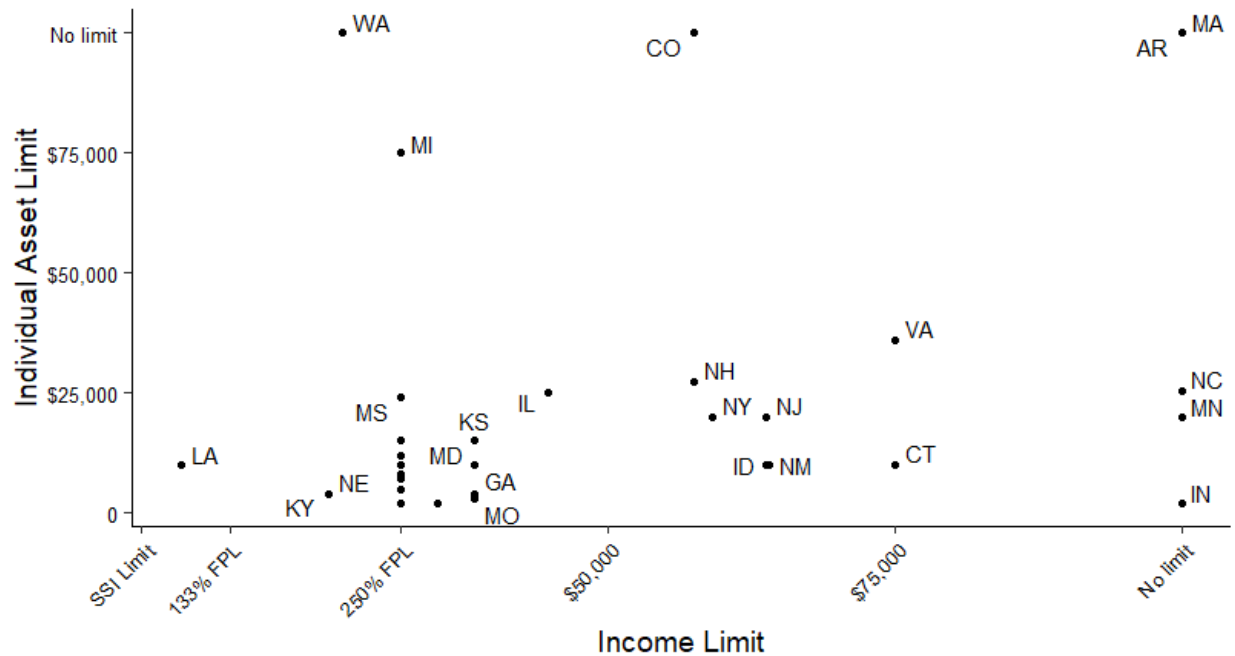
The state scan found income limits in 40 (89%) states with MBI programs. These ranged from \$12,760 to \$75,000 annually with a median income limit of \$31,900. A majority of states employ income limits at 250 percent of the FPL. Five states (Arkansas, Indiana, Massachusetts, Minnesota, and North Carolina) do not identify participant income limits. At least 39 of 45 states (87%) with MBI programs impose asset limits based on publicly available information. We observed variation in earned and unearned income distinctions and that limits typically reflect

“adjusted” income as a percent of the Federal Poverty Level. Four states (n=4, 9%) (Arkansas, Colorado, Massachusetts, and Washington) do not impose asset limits on participants.

Massachusetts and Wyoming (n =2, 4%) did not have publicly available information on asset limits available on state government websites. Six states published only individual asset limits and did not reference additional thresholds for couples.

Individual asset limits range from \$2,000 to \$75,000, with a median asset limit of \$10,000. The asset limits for couples or families range from \$3,000 to \$40,855, with a median asset limit of \$15,000. In addition to the dollar amount limitation of counted assets, variation exists between states in what they consider to be countable assets. For example, some states count vehicles as assets, some exempt one vehicle, and others do not count any owned vehicles toward their limits. Some provide even more specific guidelines. Rhode Island does not count a vehicle as an asset if it is an ‘approved item necessary for an individual to remain employed’ such as a wheelchair accessible van. Six states (n=6, 13%) do not increase asset limits beyond the standard SSI limit (\$2,000 for individuals and \$3,000 for couples) at initial registration. Virginia allows for an increase in assets up to \$36,044 once the participant enrolls in the buy-in program and establishes a Work Incentive (WIN) checking or savings account. Figure 2 demonstrates the wide range of income and asset limits across state MBI programs.

Figure 2. State income and asset limits for MBI program eligibility



Information regarding state MBI program premium triggers and cost-sharing amounts was found in 38 states (84%). States assess premiums for their MBI programs either on a sliding scale or as a fixed amount. Four states (New York, South Carolina, Vermont, and Virginia) explicitly stated that they do not assess premiums for MBI program participation, with rationales ranging from using co-pays instead as a cost-sharing mechanism (New Mexico), high administrative costs relative to the amount collected (Vermont), and an ongoing moratorium on assessment or collection (New York). The trigger for premiums range from any income received to earning above 200% of the FPL. Seven states charge a premium at any income level (California, Minnesota, Montana, North Dakota, Pennsylvania, West Virginia, and Wyoming). Including these states, the median income level at which participants are responsible for cost-sharing premiums is approximately 117% FPL. Premium information was not readily available on three state websites (Arkansas, Nebraska, and South Dakota) and information regarding co-payments was systematically not observable.

Twenty-one (n=21, 47%) states published information regarding grace periods, with six (n=6, 13%) having none at all. Of the 15 (33%) states that offer grace periods, the length offered ranges from “until the next month” (Wyoming) to two years (Michigan), with a median of 180 calendar days. Work or income verification is a foundational element of accessing SSI/SSDI eligibility as well as Medicaid. 24 (53%) states had identifiable work or income verification requirements for their MBI programs. Verification mechanisms vary from no additional administrative requirements and annual renewal to mandatory reporting of any change in income or employment.

Discussion

State MBI programs can vary dramatically, with program elements having the potential to significantly affect decision making around benefit enrollment, employment, retirement, and income and asset generation. A common theme was the need for increased communication and collaboration across agencies, stakeholders, and participants. Difficult to find, inconsistent, or inadequate publicly available information can create a confusing application environment for potential beneficiaries. Findings generally suggested positive benefits resulting from MBI programs in terms of employment and earnings. Despite significant turbulence in national and state healthcare policy and politics over the past five years, state programs have not undergone significant changes. While some states have taken steps to make their programs more accessible, the majority still have in place various features that limit meaningful earnings and asset increases for individuals who rely on Medicaid for critical services.

The state scan methods reflect how a working individual with a disability may begin to explore the feasibility of enrolling in an MBI program. With many different exclusions, even simply determining eligibility is complicated presents an important barrier. Furthermore, data

and program guidance were frequently obscured, hard to navigate, unclear, or even contradictory. If the goal of MBI programs is to incentivize work, significant progress can be made providing clear, consistent information. The prospect of increased earnings and a benefits cliff leading to the loss of supports and services (SSI/SSDI, Medicaid, SNAP, housing, etc.) factors into decision-making. The “arduous process” of establishing eligibility “coupled with the complexity of and differences in the regulations governing the programs can make those who secure benefits hesitate to engage in activities they believe could risk benefits” (Henry et al., 2006, p. 108).

The state scan identified how credible sources can report inconsistent information. For example, a non-governmental source recently reported Indiana’s income limit as 350% of the FPL, the Kaiser Family Foundation presents it as \$2,014/month as of 2018, and a government source suggests 350% as an income amount related to premiums, not as an eligibility requirement and indicated no income limit in Indiana’s MBI program. Notably, the expiration of the MIG in 2011 brought an end to any widely publicly available enrollment data, making analysis of enrollment trends challenging. A 2011 review found more than two dozen reports published between 2001 and 2010 (Gavin, McCoy-Roth & Gidugu, 2011). Additional federal programs that supported beneficiaries in navigating a complex web of program components, such as Work Incentives Planning and Assistance (WIPA), have also ended. Without enrollment data, it is difficult to measure how federal or state policy changes have impacted MBI program participation or outcomes. Even still, our scan and synthesis suggest that there is compelling evidence that could inform MBI programs and policies.

With nearly all states having adopted an MBI program as of 2019, separate efforts post-Affordable Care Act have sought to describe key program feature differences by state

(Musumeci et al., 2014; Hall, 2015; Musumeci, Chidambaram, & O'Malley Watts, 2019). These utilize results from surveys distributed to program administrators to provide general data on income limits, premium thresholds, and asset limits. Hall (2015) collected additional information at much greater detail, capturing nuances like unearned income exclusions and asset definitions across states.

Notably, how information about MBI programs is collected matters, as various efforts to capture program eligibility requirements have yielded different results, even when accounting for potential program and policy changes over time. For income limits, only 23 state findings are in agreement between the four unique policy scans. In the other 22 scenarios, there does not appear to be a clear pattern or cause for the differences. Similarly, only 20 states show full agreement in premium trigger levels, 26 states show full agreement in individual asset levels, and 18 states are aligned in identified family asset levels. Notably, the two scans occurring closest in time (Musumeci et al., 2014; Hall, 2015) did not show higher rates of concordance than when compared to more recent findings of this scan or Musumeci, Chidambaram, and O'Malley Watts (2019). This comparison indicates not only participant but provider, policymaker, and government confusion and lack of information around the availability and specifics of state MBI programs.

Findings that people with different types of disabilities (e.g. physical, developmental, psychiatric) can have significant variability in employment and earnings outcomes and also in how they participate in and benefit from MBI programs (Henry et al., 2006; Henry et al., 2007) offer important information for policymakers, healthcare providers, and other stakeholders. Similarly, understanding the participation and outcomes of younger MBI program enrollees (Schimmel, Liu, and Croake, 2012) provides opportunities for further updated inquiry and study

as to program barriers and opportunities.

That states have so much variation risks putting a barrier on individuals with a disability to freely choose where they live and pursue career opportunities. The impact of lack of publicly available information may have significant effects as “even when people understand program regulations and may want to work or work more, people with disabilities might choose to restrict work participation and/or earnings” out of concern that stress or fatigue may exacerbate or worsen symptoms (Henry et al., 2006, 114).

While the lack of data at the state or national level on Medicaid Buy-In program participation limits what analysis is possible on program trends and connections between MBI, earnings and assets, and health outcomes, notable work has been done that looks at service utilization or barriers by individuals participating in a buy-in program. For example, Gettens, Hoffman, & Henry (2016) found that the average wraparound expenditures were \$427 per member per month for individuals enrolled in the Medicaid buy-in program.

Finally, the state scan and systematic literature review point to emerging discussions stemming from the Affordable Care Act and broader Medicaid Eligibility at how states may use alternate means beyond Medicaid Buy-In Programs for improving access and outcomes for working people with disabilities. States that expanded Medicaid found increased employment rates for people with disabilities (Hall et al., 2017; 2018) and a 3% decline in SSI applications (Soni, Burns, Dague, & Simon, 2017). In exploring the Medicaid expansion as a potential employment incentive for people with disabilities, Hall and colleagues found Medicaid expansion can act as a work incentive program for people with disabilities with the potential for increased employment and thus, increased tax revenues for states (Hall et al., 2018).

Considering the number of states which have not expanded Medicaid under the

Affordable Care Act (presently 14 states) and the shortcomings of exchange plans surrounding community based LTSS services, policymakers may continue to need to use means such as MBI programs for working people with disabilities to remove barriers and disincentives from work and encourage income and asset generation while not threatening the loss of critical services for daily living. At minimum, states should address the benefit cliff for LTSS access and services head on, increasing income and asset limits to levels comparable to where individuals could pay on the private or commercial market for home and community based services (as mentioned earlier estimated in 2015 to cost individuals more than \$45,000 annually) while still not only maintaining their desired quality of life but with increased prospects of advancement in their careers and financial security.

Limitations

The systematic literature review focuses on articles published in peer-reviewed scholarly journals. While the authors were most interested in study designs and evidence generated from this body of work, missing may be some descriptive analysis and insights from gray literature, particularly reports published during the earlier years of program implementation and MIG funding. Additionally, three-fourths of articles focused on an individual state, the majority of which examined Massachusetts and Kansas with two additional articles focused on California or Washington. This limits the ability to draw conclusions regarding MBI programs more broadly. In addition, as the state scan utilized publicly available information, information produced from state websites should not be considered a perfect representation of current policy. Organizations and individuals interested in state-specific policies around MBI programs should refer to program websites and are commonly encouraged to contact local Department of Social Service (DSS) offices.

Future Research

“The only way to advance the issues faced by individuals with disabilities is by increasing public and policymaker understanding of how policies and programs support or prevent people from reaching their full potential.” -- Charlie Carr, Centene National Disability Advisory Council, Former Commissioner of Massachusetts Rehabilitation Commission

Additional research could examine when a state expanded its Medicaid program under the Affordable Care Act and any associated, observable changes in MBI program rules, administration, and participation. Similarly, as Medicaid has shifted to Managed Care, future work could compare states that ‘carve-out’ the MBI program for workers with disabilities from managed care. Opportunities for additional research warrant confirming and expanding on publicly available information in partnership with state agencies and health plans in the states which have MBI programs. Researchers, advocates, and policymakers could collaborate to establish a rating system of how state MBI programs achieve their intended goals. Spatial analysis would suggest geographic trends and barriers around program participation and outcomes. Finally, understanding how other countries support employment and health for individuals with disabilities could inform future efforts in the U.S.

Conclusion

“Eligibility can be so confusing and complicated it presents an obstacle for providers and government alike to communicate clearly, never mind promote Medicaid buy-in for working people with disabilities.” – Kimberly Lackey, Director of Public Policy and Advocacy, Paraguard

MBI programs are just one part of a much larger conversation around employment, earnings, and assets as social determinants of health for people with disabilities. The ability of MBI programs to successfully allow working individuals with disabilities to enhance their employment,

earnings, and assets without losing their eligibility for critical health care benefits and services “may depend on the extent to which other barriers to employment have been identified and addressed” (Henry et al., 2006, p. 108). Even still, the importance of simultaneously ensuring services and coverage to individuals while encouraging income and asset generation cannot be overstated. In addition to implementing various program components that encourage participation, states can make significant progress by providing clear and consistent information to working people with disabilities and those who want to work. Our scan and synthesis suggest that there are compelling examples to inform state MBI program approaches to best support individuals with disabilities who want to increase their financial security without jeopardizing access to critical healthcare coverage. Policies affecting eligibility for Medicaid benefits for people with disabilities should continue to be analyzed for states with and without MBI. Modernizing and strengthening these policies can have a positive impact on employment outcomes and quality of life for people with disabilities.

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Appendix A

Peer-Reviewed Articles Included in the Review

Title	Author(s) & Year	Journal
1. Expenditures and Use of Wraparound Health Insurance for Employed People with Disabilities	Gettens, Hoffman, & Henry (2016)	Disability and Health Journal
2. Poor Oral Health as an Obstacle to Employment for Medicaid Beneficiaries with Disabilities	Hall, Chapman, & Kurth (2013)	Journal of Public Health Dentistry
3. What Providers and Medicaid Policymakers Need to Know About Barriers to Employment for People with Disabilities	Hall & Fox (2004)	Journal of Health & Social Policy
4. The Kansas Medicaid Buy-In: Factors Influencing Enrollment and Health Care Utilization	Hall, Fox, & Fall (2010)	Disability and Health Journal
5. Asset Building: One Way the ACA May Improve Health and	Hall, Kurth, & Averett (2016)	Journal of Disability Policy Studies

Title	Author(s) & Year	Journal
Employment Outcomes for People with Disabilities		
6. Transition to Medicare Part D: An Early Snapshot of Barriers Experienced by Younger Dual Eligibles with Disabilities	Hall, Kurth, & Moore (2007)	American Journal of Managed Care
7. Mobility Limitations Negatively Impact Work Outcomes Among Medicaid Enrollees with Disabilities	Henry, Banks, Clark, & Himmelstein (2007)	Journal of Occupational Rehabilitation
8. Disabling Conditions and Work Outcomes Among Enrollees in a Medicaid Buy-In Program	Henry, Hooven, Hashemi, Banks, Clark, & Himmelstein (2006)	Journal of Vocational Rehabilitation
9. Access to Care among Children with Disabilities Enrolled in the MassHealth CommonHealth Buy-In Program	Hirschi, Walter, Wilson, Jankovsky, Dworetzky, Comeau, & Bachman (2019)	Journal of Child Health Care

Title	Author(s) & Year	Journal
10. The Effects of State Policy Decisions on the Employment and Earnings of Medicaid Buy-In Participants in 2006	Ireys, Gimm, & Liu (2009)	Journal of Disability Policy Studies
11. Participants in the Medicaid Buy-In Program, 2000-2004	Liu, Ireys, & Thornton, (2008)	Journal of Disability Policy Studies
12. Barriers to Use of Workplace Personal Assistance Services to Support Employment in California	Neri, Wong, & Harrington, (2013)	Journal of Disability Policy Studies
13. Employment Experiences of Young Medicaid Buy-In Participants with Psychiatric Disabilities	Schimmel, Liu, & Croake (2012)	Psychiatric Rehabilitation Journal
14. Evaluation of the Medicaid Buy-In Program in Washington State: Outcomes for Workers with Disabilities Who Purchase Medicaid Coverage	Shah, Mancuso, He, & Kozak (2012)	Journal of Disability Policy Studies

Title	Author(s) & Year	Journal
15. Medicaid and Employment of People with Disabilities	Sulewski, Gilmore, & Foley (2006)	Journal of Disability Policy Studies
