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Recruitment, Assessment, and Retention in the Direct Care Workforce for Individuals With Criminal Records: A Comprehensive Model Approach

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Executive Summary

Background

Demographic shifts are creating a heightened need for direct care workers. The U.S. Bureau of Labor Statistics predicts home health aides and personal care aides will continue to be among the fastest-growing occupations. Researchers estimate there will be over 150,000 paid direct care positions unfilled in the next decade and a shortage of almost 350,000 direct care workers in the United States by 2040 (Osterman 2017). Anticipated worker shortages have prompted national conversations about the potential benefits and considerations involved in hiring individuals with criminal records for the direct care workforce. Linking certain individuals with conviction records to entry-level jobs in this industry could help fill critical shortages, connect this population to employment and potential career paths, and ultimately contribute to successful reintegration and increased public safety. The goal of this white paper is to identify strategies for connecting individuals with criminal records who do not pose an unreasonable risk to public safety to long-term employment in the rapidly growing health care sector.

This paper has five key objectives:

- Describe the heightened demand for workers in the health care industry and opportunities for hiring qualified workers with criminal records.
- Review employer concerns, barriers to employment, desistance policy goals, and strategies for incorporating desistance into criminal background check policies.
- Document existing recruitment and retention challenges in the health care sector more broadly, along with additional challenges that individuals with criminal records may face.
- Summarize existing estimates on individuals with criminal records in the health care industry and identify where this group drops out in the background check process.
- Provide strategies to improve recruitment, assessment, and retention of individuals with criminal records in direct care work, including the potential advantages of a collaborative and comprehensive model.

Key Takeaways

- Many individuals with criminal records do not pose an unreasonable risk to the safety of health care staff, patients, or residents. Standardizing criminal record assessments (including the use of accurate and updated information), combined with the selective use of evidence of rehabilitation (based on strong signals of desistance), can help identify this group.
- Several factors influence recruitment and retention of direct care workers, including low pay, irregular hours, physically demanding tasks, injuries on the job, low levels of perceived respect and job satisfaction, and barriers to occupational mobility. A key protective factor for retention is a strong commitment to patients and residents.
- There appears to be a sizable opportunity for recruiting individuals with criminal records for direct care work. In addition to the importance of increasing employment numbers through recruitment, assessment, and long-term retention, a case study in New York also points to the need to secure applicants for direct care work who successfully pass the criminal background check.
- Sixteen policy ideas were identified to improve recruitment, assessments, and retention. Two large-scale and popular employment strategies for individuals with criminal records, Ban the Box and record concealment (i.e., sealing and expungement), are anticipated to have limited effects in the direct care workforce and are excluded from the recommended policies here.

Summary of Recommended Policy Strategies

The table below summarizes the major policy ideas identified for improving recruitment, assessment, and retention practices, along with potential stakeholders that could lead each effort. Prior to implementing these recommendations, employers and policymakers should conduct needs assessments to identify which strategies may be the most effective. This involves collecting and retaining data on worker shortages, applicants and employees with and without criminal records, assessment decisions, employment outcomes (including reviews, promotions, disciplinary reports, and dismissals), and challenges experienced by the direct care workforce.

While any of the strategies could be implemented in isolation or in combination, the final row in the table points to a comprehensive health care employment improvement model to help alleviate the longer-term health care shortage. Most of the proposed strategies could be collaborative, but a key feature of a comprehensive model is that policies are implemented across all three categories (recruitment, assessment, and retention).

Policymakers, employers, community organizations, and researchers can serve as potential stakeholders across the policy strategies, and could each take a leadership role in promoting a collaborative and comprehensive strategy. While three existing models — the Baltimore Population Health Workforce Collaborative (BPHWC), Safer Demand Skills Collaborative (SDSC), and Johns Hopkins Health System — have not yet been rigorously evaluated, they provide a framework for envisioning how coordinated

| Strategy | Lead Roles | Recruitment | Assessment | Retention |
|--|--|-------------|------------|-----------|
| Launch marketing campaigns to reduce stigma and promote direct care work | Policymakers, employers, researchers | X | | |
| Expand existing workforce development programs and develop partnerships between employers and community organizations to create referral pipelines | Policymakers, employers, community organizations | X | | |
| Recruit formerly incarcerated hospice workers and facilitate a pipeline partnership | Policymakers, employers | X | | |
| Consider other human services collaborations to incentivize employment | Policymakers | X | | |
| Promote word-of-mouth referral systems among employees with criminal records | Employers, employees | X | | |
| Review existing resources and best practices for conducting criminal background checks | Employers | | X | |
| Train decision-makers on cleaning and interpreting criminal records | Policymakers, employers | | X | |
| Share criminal records with job applicants to verify accuracy and create a standardized process to encourage formal contestations | Employers | | X | |
| Avoid “blanket bans” (which disqualify everyone with a criminal record) and disqualifying conviction lists; instead, consider using comprehensive and individualized assessments | Employers | | X | |
| Streamline decision processes and enable people to work in temporarily supervised positions before final determination | Employers | | X | |
| Identify strong potential signals of desistance and build evidence of rehabilitation into decision processes | Employers, researchers | | X | |
| Promote, use, and test existing employer incentives (tax credits and the Federal Bonding Program) | Policymakers, employers, community organizations, researchers | | X | |
| Provide ongoing training, career guidance, and mentorship to health care employees with criminal records | Policymakers, employers, community organizations | | | X |
| Provide access to reentry support services, such as treatment programs and transportation | Policymakers, employers, community organizations | | | X |
| Expand job responsibilities and inclusion in medical teams | Policymakers, employers | | | X |
| Implement a comprehensive and collaborative health care employment improvement model | Policymakers, employers, community organizations, funders, researchers | X | X | X |

Note: “Policymakers” could refer to various entities at the national or local level, including organizations concerned about the direct care workforce shortage, government officials and agencies, and direct care workforce committees. The term “community organizations” refers to groups that can serve as intermediaries.

efforts might operate. Each involves multiple stakeholders, aims to develop a pipeline of employee referrals for identified employers, and provides ongoing career guidance, mentorship, and support services after people secure jobs to increase retention. In addition to recruitment and retention components, the SDSC and Johns Hopkins models also include assessment strategies, making them both collaborative and comprehensive. While the SDSC is led by a community organization¹ and the Johns Hopkins approach is employer-initiated, the scope and goals of the two programs are similar in design. Although the BPHWC does not appear to take an active role in assessment interventions, it is an example of a policymaker-led collaborative model.

Future Research

The white paper identifies four research agenda items to strengthen evidence in this area:

(1) Gauge interest in direct care work and recruitment challenges

Discussions with individuals with criminal records and community-based organizations could help generate an estimate of direct care positions that might be filled by recruiting this population and potential “chilling effects” of routine criminal background checks in the health care sector.

(2) Examine employer motivations and expand workplace evidence

Researchers could collect data from employers in the health care industry on their perceptions of prospective employees with criminal records, whether they screen people out informally (e.g., informal

inquiries before the background check) or discourage this group from continuing the application process, and their feedback on tax credits and the Federal Bonding Program as incentives to hire this population. Data sharing agreements with researchers could also contribute to further developing direct care workplace evidence in several areas, including how to best incorporate evidence of rehabilitation into decisions, developing assessments that provide insight into potential workplace crimes, and more comprehensive evaluations of job performance.

(3) Explore retention rates and reasons

People with criminal records who are currently in entry-level or advanced direct care positions, along with those who left the direct care workforce, could provide insight into perceptions of job satisfaction, retention challenges, and best practices.

(4) Test the effectiveness of health care employment models

Building an empirical evidence base using randomized controlled trials is a key next step in this area. Research efforts could include local evaluations involving partnerships between employers, community organizations, and independent researchers; coordinated state-level evaluations through direct care workforce committees; and federal initiatives designed to support, implement, and evaluate multisite programs.

Conclusion

With hundreds of thousands of unfilled direct care jobs predicted in the next two decades (Osterman 2017), implementing select strategies can be a useful starting

¹This is not to imply that the model revolves around the community organization; the SDSC describes itself as an “employer-driven” model based on its programs and features. However, the community organization is still coordinating the effort and taking a leadership role in the collaborations.

point. A piecemeal strategy may be the best approach for some jurisdictions, such as those able to identify specific priority intervention areas through needs assessments. Implementing strategies separately can also enable researchers to build a more rigorous evidence base that can help inform which components would be the most effective in a comprehensive model. However, this approach may not be enough to make a sizable impact in the long run. Health care employment improvement models that are both collaborative and comprehensive require strong partnerships,

and engagement in all three key strategic components — recruitment, assessment, and retention efforts — could require substantial resources and time. As a long-term strategy, comprehensive models have the advantage of systematically addressing multiple parts of the process in a coordinated fashion. This framework has the potential to shift the way policymakers, employers, and community-based organizations envision and implement strategies to reduce shortages in the direct care workforce and employ individuals with criminal records.

I. Introduction

Since 2010, around 10,000 individuals have turned age 65 each day (U.S. Census Bureau 2019). The number of people age 65 and over has increased by almost 50% in the past two decades, from 35 million in 2000 (12% of the population) to 52 million in 2018 (16% of the population) (U.S. Census Bureau 2019). By 2030, when everyone in the baby-boom generation² has reached age 65, almost one in five people in the United States is estimated to be age 65 or over (Cohn and Taylor 2010). Combined with an expected reduction in family caregivers, demographic shifts and longer average life expectancy are creating a heightened urgency for expanded long-term care (Osterman 2017; Redfoot, Feinberg, and Houser 2013).

Health care workforce shortages have been described as a crisis for over two decades (Stone and Wiener 2001), and health care facilities with staff shortages experience heightened levels of omitted or delayed care (Pohlmann 2003). Direct care positions — which involve helping disabled or elderly individuals with routine activities, such as meal preparation, assistance with bathing and dressing, and mobility — will be increasingly vital for sustaining long-term care (ASPE 2011). Common direct care positions include personal care aides, home health aides (HHAs), orderlies, and nursing assistants (including nursing aides and attendants). The U.S. Bureau of Labor Statistics (BLS) estimates this set of direct care positions will gain almost 1.3 million jobs by 2029 (see Appendix A). BLS (2020) also projects that HHAs and personal care aides will be among the fastest growing occupations between 2019 and 2029. Although there is geographic variation in direct care job growth (see Appendix B), Osterman (2017) estimates these trends will result in an overall shortage of over 150,000 paid direct care workers in the United States by the year 2030 and approximately 350,000 by the following decade.

The increased demand for paid direct health care workers has generated conversations about connecting certain individuals with criminal records to this industry (ASPE 2018; Williams et al. 2016). There are well-documented barriers to securing a job for those with a felony or misdemeanor conviction (Pager 2003, 2007; Uggen et al. 2014), and increasing access to the large pool of health care jobs could provide a promising option for those seeking work. Although formerly incarcerated adults face a host of needs and challenges — including obtaining employment (Harding et al. 2019; Visher, Debus-Sherrill, and Yahner 2011; Western 2018) — research also indicates that this group has similar levels of job seeking as adults in the broader population who are pursuing entry-level employment (Schnepel 2017). In addition, the typical educational requirement for entry-level direct care positions —

²Typically defined as people born between 1946 and 1964.

a high school diploma or certificate of General Educational Development (GED) — also aligns with the credential this population most commonly holds.³ Furthermore, transitioning into a new industry more generally does not appear to be a major barrier among unemployed populations. For example, a 2014 survey of unemployed Americans found that among those seeking work, over 85% would be willing to take a new entry-level job in a different field (Hamel, Firth, and Brodie 2014). Identifying qualified individuals with conviction records who do not pose an unacceptable level of risk to public safety — a complicated issue that will be reviewed in the next section — could assist in addressing two critical policy issues: improving employment outcomes for individuals with criminal records and mitigating the shortage of direct care workers.

The goal of this white paper is to develop strategies for recruiting, assessing, and retaining individuals with criminal records in the rapidly growing health care sector. Section II discusses employers’

concerns with hiring formerly incarcerated individuals and criminal background check strategies, including how decision-makers can incorporate desistance research into decision processes. Section III reviews challenges for recruiting and retaining direct care workers in general and for individuals with criminal records in particular. While men are overrepresented in the criminal justice system, female employees have dominated the health care industry, which could present unique recruitment challenges. At the same time, increased efforts to integrate formerly incarcerated adults into the health care field could help to further diversify and expand the direct care workforce. Section IV reviews existing estimates on adults with criminal records in the health care industry, and a health care employment funnel traces where people with records appear to drop out of the criminal background check process. Section V provides a detailed review of strategies designed to improve recruitment, assessment, and retention in the direct care field, followed by a summary of policy recommendations and future research directions in Section VI.

³In a large longitudinal study of adults returning home from prison in three states, around half of the sample held at least a high school education before they entered prison, with 20% increasing their educational attainment while incarcerated (Visher, Debus-Sherrill, and Yahner 2011). Although the majority of direct care workers have completed high school, 19% of home health care workers, 12% of direct care workers in nursing homes, and 9% of those working in direct care positions in residential care homes have less than a high school education (PHI 2019).

II. The Intersection of Criminal Justice and Human Services: Barriers to Employment

Regardless of the severity of the health care worker shortage, not everyone with a criminal record is a good fit for direct care work. In addition to the physical demands of the job and other issues explored in Section III, the patients and residents in hospice and nursing home settings are among the most vulnerable populations in the country, and employers have a vested interest in protecting staff and residents. However, research also indicates that most people eventually age out of crime, maintaining clean records over time can be indicative of desistance, and positive credentials can provide useful information to criminal background check decision-makers. Finding the right balance between employment access and restrictions can enable policymakers to improve both the health care workforce and public safety.

Employer Concerns

Surveys of employers, experimental audit studies (i.e., sending out matched pairs of applicants to apply for jobs and randomizing certain applicant features), and correspondence studies (which use electronic or paper correspondence rather than in-person interactions) routinely indicate a lower willingness to hire individuals with criminal records relative to comparable applicants without records. One major reason employers may be cautious about hiring this group of applicants is an assumption that a criminal record indicates a lack of job readiness and “general employability” (Holzer 1996, 60). Recent studies of two large non-health-care employers found that, compared to the average employee without a conviction record, employees with criminal records had similar or lower rates of turnover and were promoted more quickly, but engaged in more misconduct in certain jobs (Lundquist et al. 2018; Minor et al. 2018; see also Paulk 2016 for descriptive data on health care employment performance). Due to data access restrictions, this research has been limited to particular employment contexts (the military and a temporary contracting agency) that may not generalize more broadly, but these early studies provide promising evidence that employers can hire applicants with prior conviction records and expect similar or stronger performance levels.

In addition, employers commonly point to public safety and future workplace crime concerns. The notion of repetition risk, or the “risk that applicants will, after hiring, engage in harmful conduct” (Sugie et al. 2020, 2), is frequently described as a driving force behind criminal record assessments. For example, the president of the National Small Business Association testified to a congressional committee that screening is “nearly the only tool — that employers have to protect their customers, their employees and themselves from criminal behavior” (Appelbaum 2015). Similarly, in a federal report on criminal background checks conducted by Medicare-certified home health care agencies, the Office of Inspector General (2015, 14) at the U.S. Department of Health and Human Services describes using criminal background checks to “protect the safety of Medicare beneficiaries.”

Although the term “criminal record” is frequently used in the literature and throughout this white paper, it is important to emphasize that it does not describe one homogenous group, and researchers have identified several particularly problematic features of a criminal history. For example, individuals with violent or recent convictions generate more concern and experience higher levels of stigma than those with nonviolent or older convictions (Denver, Pickett, and Bushway 2017; Holzer, Raphael, and Stoll 2007; Pager 2007), and the negative impact is more apparent for felony convictions relative to misdemeanor convictions (Pager 2003, 2007; Uggen et al. 2014). In addition, it is more difficult to mitigate negative perceptions when people have multiple convictions (see Leasure 2019

and Leasure and Anderson 2016 for a comparison). However, even a single criminal conviction is composed of multiple interacting features, including offense type, the age of the record, and the severity of the conviction.⁴ Researchers have documented variations in decision-makers’ perceptions, depending on how the age of the record interacts with other characteristics, including whether the conviction was a felony or misdemeanor (Lageson, Vuolo, and Uggen 2015) and whether the offense type was violent, drug, or property (Kurlychek et al. 2019). Therefore, it can be difficult to identify a single component that consistently drives decisions.

Similarly, concerns about repetition risk may be heightened in certain contexts, including direct care work in the health care industry. In a study that randomized job type and industry (cashier/retail, highway maintenance/construction, and home health aide/health care), conviction type (property or violent), and time since conviction (one year or 10 years), the general public was least inclined to support health care employment for those with recent violent convictions, with half of respondents in support of an employer denying the hypothetical applicant a job (Denver, Pickett, and Bushway 2017). On the other extreme, fewer than 17% of respondents supported denying employment for an applicant with a 10-year-old drug conviction across all three industries.⁵ Some nursing and home health care facilities have been the subject of high-profile media stories after patients or residents have been harmed by employees,⁶ and such negative publicity may further exacerbate adverse reactions to job

⁴The Equal Employment Opportunity Commission (2012) documents multiple problems with using arrest records and urges decision-makers to consider convictions instead.

⁵Support for employment denial was comparable for one-year-old property convictions (36%) and 10-year-old violent convictions (33%) in the health care industry (Denver, Pickett, and Bushway 2017). Full descriptive statistics are available upon request from the authors.

⁶Galantowicz et al. (2009, 1) include several media examples of elder exploitation, abuse, and neglect.

applicants with certain criminal records. Employers' concerns about repetition risk may also extend to the desire to avoid negligent hiring lawsuits, or legal liability from hiring someone that they "should have known" would later inflict damage or harm (Stoll and Bushway 2008; Hickox 2011), even though such lawsuits are rare (Bushway and Kalra 2021). In response to resident, patient, and staff safety concerns, a series of laws and policies have been implemented to screen applicants and assess criminal histories, including several specifically targeting the health care industry.

Overview of Restrictions to Accessing the Health Care Industry

The National Inventory of the Collateral Consequences of Conviction (NICCC),⁷ an online searchable database of legal sanctions and restrictions across the country, depicts an array of barriers pertaining to employment and occupational licensure, housing, education, benefits, and other rights. Restrictions related to accessing jobs are particularly widespread (United States Commission on Civil Rights 2019), and criminal background checks are increasingly common screening tools used in hiring.

When considering employment assessments within the health care industry, a nationwide survey⁸ found that 41 states reported requiring home health care agencies to conduct background checks on prospective employees, with four additional states considering implementing such requirements at the time (Office

of Inspector General 2014). There is also an online database of individuals who are prohibited from participation in federal health care programs⁹ and initiatives to support states in the creation and use of criminal background check programs (ASPE 2018). In an assessment of the implementation of the National Background Check Program, through which the Centers for Medicare & Medicaid Services provides grants to states to create criminal background check systems in the long-term care field, the Office of Inspector General (2019) at the U.S. Department of Health and Human Services found that seven of the 10 states successfully implemented most or all of the program components. Although state policymakers had discretion in expanding the program's disqualifying conviction list¹⁰ and choosing which state databases or registries to use in the decision process, none of the participating states reported a direct care workforce shortage as a result of screening prospective employees through the program (Office of Inspector General 2019). Future evaluations of the impact of implementing this type of program on resident and staff safety and prospective employee outcomes could provide important evidence for policymakers, researchers, and advocates.

Although restrictions have increased in the health care sector over time, there have also been movements to help connect certain individuals with criminal records to the industry. For example, the Office of the Assistant Secretary for Planning and Evaluation (ASPE) has focused on policy efforts related to the direct care

⁷<https://niccc.csgjusticecenter.org/>

⁸The Office of Inspector General (2014) at the U.S. Department of Health and Human Services surveyed all 50 states and the District of Columbia and had a 100% response rate.

⁹The database is available at <https://oig.hhs.gov/exclusions/index.asp>.

¹⁰The program disqualification list includes patient abuse or neglect, health care fraud, theft, offenses involving controlled substances, obstruction of an investigation, and other related offenses; see also 42 U.S.C. § 1320a-7.

workforce, and recently released the report *Linking People With Criminal Records to Employment in the Health Care Sector: 5 Things To Consider*. A central theme of the report is that although not all individuals with criminal records may be suitable for employment in the health care industry, excessive exclusion policies are also harmful. Such efforts also acknowledge that the stigma stemming from criminal records is powerful. Recent evidence suggests that, beyond concerns about repeat criminal behavior, employers are adverse to hiring people with criminal records due to the stigma of criminal justice system involvement (Sugie et al. 2020). Normalizing the inclusion in the health care industry of individuals with criminal records who do not pose an unreasonable risk to safety can reduce the collateral consequences associated with a criminal record and integrate people who have completed (or are completing) formal criminal justice sanctions into mainstream society.

Using Desistance Research in Decision-Making

A major policy challenge is identifying which behaviors employers are seeking to prevent and determining which observable characteristics can predict that behavior.¹¹ Although past behavior is typically regarded as the best predictor of future behavior (Kurlychek et al. 2006), most people eventually desist (i.e., abstain) from crime or criminal justice system involvement. Desistance research points to several factors

that can assist decision-makers who are conducting criminal background checks. This section reviews desistance policy goals and strategies for incorporating theoretical notions of desistance into criminal background check policies.

Policy Goals and Desistance Detection Strategies

For policymakers interested in improving employment outcomes for individuals with criminal records and more fully integrating this population into the labor market, there are two common goals: promoting desistance and identifying persons who desisted. Policymakers often aim to promote desistance through employment opportunities and job skills training. Although the notion that employment reduces recidivism is theoretically intuitive, in practice the relationship is complicated. Rigorous evaluations of employment interventions involving individuals with criminal records typically do not find meaningful recidivism reductions (Visher, Winterfield, and Coggeshall 2005) or only detect effects for certain subgroups (e.g., Barden et al. 2018). In evaluations that randomly assign formerly incarcerated adults to transitional jobs or wraparound reentry services, researchers have identified only limited or short-term changes in employment levels and negligible improvements in earnings (Cook et al. 2015; Redcross et al. 2010). Two prominent randomized controlled trials detected promising but inconsistent (depending on the measure of recidivism and amount of follow-up time) or null recidivism effects

¹¹The language used to describe what criminal background checks are attempting to identify is sometimes broad, and there is often a mismatch between target outcomes and available measures. For example, two registered nurses examining policy solutions for avoiding workplace violence recommended that employers train those conducting interviews on “how to recognize potential troublemakers during employment interviews” (Smith-Pittman and McKoy 1999, 11). In the academic literature, “risk” often refers to the likelihood of recidivism, where recidivism is typically defined as a subsequent arrest within a defined period of time (e.g., three years) after an event of interest (such as a criminal conviction date or release from prison). Recidivism is also sometimes measured as a new conviction or reincarceration. Workplace crime is challenging to examine due to data access limitations, and rather than behavior or crime, researchers routinely use the likelihood of subsequent formal criminal justice system involvement to gauge risk.

(Jacobs 2012; Redcross et al. 2012; Valentine and Redcross 2015). Some studies have also identified reductions in recidivism but not long-term employment, raising questions about whether the underlying mechanism for change is the services accompanying transitional jobs programs rather than the job itself (Bushway and Apel 2012; Zweig, Yahner, and Redcross 2010). Although many formerly incarcerated adults have difficulty forming the long-term and stable connections to jobs that policymakers anticipate through employment interventions, there is evidence that strong local labor markets can reduce returns to prison (Schnepel 2018; Yang 2017). In addition, research indicates employment can reduce the probability of recidivism for some groups or under certain conditions (Apel and Horney 2017; Denver, Siwach, and Bushway 2017; Uggen 2000).

The second policy goal involves identifying people who desisted — those who are on the path to desistance and have a low probability of future criminal justice system contact. Researchers and decision-makers have attempted to sort individuals with criminal records using two approaches: waiting for redemption and searching for signals.

Redemption Research

The first option is to wait, potentially for long periods, to observe a lack of criminal justice system involvement. Researchers have estimated that after an average of approximately seven years have passed since police contact or arrest, people in these groups have probabilities of new criminal justice system events comparable to those of the general population (Kurlychek et al. 2006, 2007) — what some scholars refer to as “an indication of redemption” (e.g., Blumstein and Nakamura 2009). However, the average amount of time also varies by the person’s age and features of the criminal record. For example, Blumstein and Nakamura (2009b) found that those arrested at younger ages and those arrested

for robbery typically had longer “times to redemption” compared to those with burglary or aggravated assault arrests. Bushway, Nieuwbeerta, and Blokland (2011) also found that older individuals need less time on average than their younger counterparts to have comparable hazard rates, but individuals with numerous conviction records may never be statistically comparable to those with clean records.

Waiting multiple years to demonstrate desistance can be problematic for people with conviction records and may not always be necessary. For example, Kurlychek et al. (2012) found evidence in support of an “instantaneous” model of desistance for some people: Rather than following a “gliding path” with continual declines in risk over time, their probability of rearrest immediately dropped after sentencing. A qualitative study similarly found that occupational licensing decision-makers conceptualized desistance as following different patterns. Some license applicants with conviction records were described as having risk levels that changed over time, and others as having an aberrational event or mistake that was not indicative of their propensity to engage in future crime (Denver and Ewald 2018). In other words, some people may not need time to change; they either change immediately, moving from a higher to lower risk level (instantaneous desistance), or the event was a one-time deviation from an otherwise prosocial trajectory and they remain at low risk. In either case, waiting seven years (or more) to confirm that these individuals were not subsequently involved in the criminal justice system can be disadvantageous to employers and harmful for the individuals as job applicants.

Searching for Signals

Signals are another policy option for identifying individuals with low risk. The decisions people make and actions they take, such as successfully completing an employment program, can provide valuable

information to decision-makers about desistance from crime (Bushway and Apel 2012). Signals are considered strong if they are costly (i.e., take time and effort to obtain), relatively uncommon, and obtained voluntarily, rather than mandated by criminal justice or other personnel (Bushway and Apel 2012; Spence 1973). Building signaling into decision strategies can be useful because it “exploits the sorting and selection processes that are at work” (Bushway and Apel 2012, 40).

One potential explanation for the often null or weak findings of employment intervention programs described earlier is that people with criminal records, particularly those in the process of returning home from prison, often encounter multiple emergency needs and may not be actively seeking or prepared for long-term employment. Scholars have documented extensive reentry challenges in addition to employment, including housing, transportation, health, debt, civic engagement, education, and relationship dissolution (see Kirk and Wakefield 2018 for a recent overview). In contrast, concentrating on a group of adults with convictions who were actively applying for work and provisionally hired for jobs in the health care industry, researchers found that those who successfully passed the state-mandated criminal background check experienced meaningful reductions in subsequent arrests relative to their counterparts who did not pass the background check (Denver, Siwach, and Bushway 2017). In addition, many of the provisionally hired applicants engaged in a time-intensive process to demonstrate evidence of rehabilitation, which could be interpreted as a signal of desistance (Denver 2020). Individualized assessments

enable decision-makers to incorporate conviction information and desistance signals into the decision process.

Individualized Assessments

Individualized assessments, which the military has termed “whole person” reviews (Lundquist, Pager, and Strader 2018, 5), aim to incorporate context and circumstances surrounding the crime, person, and job into the decision. The Equal Employment Opportunity Commission (EEOC) (2012) advises¹² employers to avoid blanket bans that exclude people with criminal convictions from employment opportunities and conduct individualized assessments instead. The guidance also aligns with broader movements toward contextualizing criminal records and incorporating people with conviction records into the formal labor market. The following sections review key components of individualized assessments, including relevant criminal record factors, positive credentials that can signal important information about applicants with records, and how both types of information can be integrated into decisions.

Criminal Record Factors

Although risk assessment instruments are widespread in the criminal justice system and used for various supervision and treatment decisions, there are no standard or prominent risk assessment tools for hiring purposes (Siwach and Bushway 2017). Rather than identifying risk thresholds that employers should use in criminal background checks, criminological research typically attempts to estimate when people with criminal records look comparable to those without system involvement (but see DeWitt et al.

¹²The guidance itself is not legally binding, but can be influential for courts and decision-makers (Jacobs 2015). The legality of the federal guidance was recently contested (*State of Texas v. EEOC*, No. 18-10638).

2017).¹³ Traditionally, three components of the criminal record have been influential in the decision process (EEOC 2012; *Green v. Missouri Pacific Railroad*, 549 F.2d 1158 [8th Cir. 1977]):

- **Time since last conviction.** As described earlier, there is an empirical relationship between the amount of time that has passed with a “clean” record and the probability of recidivism. Denver (2017) examined a “10 years since last conviction” decision guideline in the New York state health care sector, and found that individuals cleared to work because of the guideline experienced higher employment and earnings. However, only men experienced declines in recidivism, which suggests there may be different desistance processes at work for men and women (Denver 2017). Although strict threshold guidelines (e.g., 10 years) have limitations and this factor should be viewed in a more interactive (and nondichotomous) way, acknowledging that risk is not static over time and building a temporal component into decisions can have important benefits.
- **Nature and gravity of the offense.** Although incorporating the underlying crime type (and its relationship to the job in question) is a common strategy, criminological research has generally not supported the notion of people “specializing,” or repeatedly committing the same type of crime. As Bushway and Kalra (2021, 16.13) summarize in their review of employer access to and use of conviction records, “there is only a weak correlation between crime types over time within a criminal career.”

Instead, researchers find that people tend to be generalists (MacDonald et al. 2014; Piquero 2000), especially over time (Sullivan et al. 2006). Although excluding certain types of crimes may seem intuitive to decision-makers and the public, in practice such policies may lead to overemphasizing crime type through automatic policies that override other decision criteria, weaken predictions, and even exacerbate racial disparities (Siwach et al. 2017). Even building time since last conviction into disqualification statutes (e.g., a violent conviction in the past 10 years) still restricts the amount of information assessed (Siwach et al. 2017). Such policies can also block a significant proportion of individuals with convictions from accessing a range of entry-level positions within an industry during their prime working years (Denver and Behlendorf n.d.).

- **Nature of the job.** This includes consideration of the job duties/tasks and the environment, including interactions with others, and is typically paired with offense type.

In its review of the empirical literature, the EEOC (2012) also identified the following factors for consideration:

- The circumstances surrounding the crime/offense.
- The number of prior offenses.
- The person’s age at the time of conviction or release from prison.

In addition, conviction patterns, such as whether the frequency and severity of

¹³DeWitt and colleagues (2017, 982, emphasis added) examine a series of subsequent arrest risk thresholds, finding that “many of those *without* criminal histories would not pass this same test” when employing the low risk levels identified in prior research. Table 3 in that paper summarizes the comparisons.

events is declining over time or appears to be escalating,¹⁴ can provide useful information.

More broadly, employers are encouraged to evaluate conviction events — rather than arrest record information — as a best practice. Arrests may not result in a conviction for various reasons (including arrests that do not lead to charges, charges that are later dismissed by prosecutors, diversion programs, or acquittal), and these may appear as “open cases” in criminal background checks (Collateral Consequences Resource Center 2019). The EEOC (2012) guidance also strongly recommends using conviction records because evaluating arrests can have a disparate impact on Black applicants, a protected group under Title VII. Although research finds that the three traditional factors from the Green case influence the public’s support for including or excluding people from employment (e.g., Denver, Pickett, and Bushway 2017), there is a lack of research on which factors predict workplace crime or identify high-performing employees (Bushway and Kalra 2021).

Incorporating Signals of Desistance

Although avoiding criminal justice system involvement over time can provide information about desistance, evidence of rehabilitation and other positive credentials can also be incorporated into decision processes. Examples could include supportive reference letters from prior employers or evidence of program completion (The Legal Aid Society 2017). For decision-makers interested in incorporating evidence of rehabilitation, a standardized two-stage decision

process — a criminal record assessment, followed by an opportunity for applicants to contest proposed denial decisions — could be a viable option (Kurlychek, Bushway, and Denver 2016).

Credentials are viewed as particularly informative when a potentially rehabilitative event occurred after the criminal record and letter writers disclose that they are aware of the applicant’s criminal record and would still recommend the person (Denver and Ewald 2018). In line with signaling theory, information is also viewed as more valuable when program completion is voluntary, rather than mandated (DeWitt and Denver 2020). State-issued credentials such as certificates of relief or rehabilitation have the potential for added legitimacy and could theoretically represent strong signals. McCann and colleagues (2018) identified 14 states that have a state-issued certificate aimed at improving employment or occupational licensure access, though there is wide variation in design and implementation. Even within the same state, those charged with granting the documents may have different perspectives on whether certificates should promote desistance (the first policy goal described earlier) or identify people who desisted (the second goal) (Ewald 2016).

Recent research finds that postconviction certifications that confirm an applicant’s work performance history increased employers’ consideration of hypothetical job applicants (Hunt et al. 2018). Other survey research similarly indicates that members of the public, including those with hiring experience, report a higher willingness to call a job applicant with a criminal record back for an interview when the applicant presents a positive

¹⁴An important caveat is that illegal behavior and criminal justice system involvement are not synonymous. Patterns may therefore be difficult for decision-makers to estimate accurately, although system events could provide a proxy.

credential (DeWitt and Denver 2020).¹⁵ A positive reference letter appears to reduce most of the stigma from a criminal record, regardless of whether the criminal record contained a violent felony (aggravated assault) or a drug felony (cocaine possession with intent to distribute) and irrespective of whether the hypothetical applicant was Black or white (DeWitt and Denver 2020).

There is mixed research on whether state-issued certificates send meaningful signals to decision-makers. In an observational study, Denver (2020) found that presenting a certificate did not appear to meaningfully sway decision-makers during criminal background check assessments. In contrast, in an experimental audit study of Ohio's Certificate of Qualification for Employment (CQE), Leasure and Anderson (2016) observed higher callback rates for applicants with a recent drug felony and CQE compared to identical applicants without the CQE. Furthermore, the favorable responses for the CQE group were almost as high as the group without a criminal record (Leasure and Anderson 2016). However, in a more recent version of the audit study that tested the effect of the CQE for applicants with multiple convictions (which is more comparable to the sample average of 2.4 total convictions observed in Denver 2020), certificates did not have a meaningful impact on employment outcomes (Leasure 2019). A more extensive criminal record may require additional or stronger signals than single conviction records.

Additional Considerations and Empirical Limitations

Taking different key pieces of the criminal conviction record into account in an interactive way rather than focusing on

narrow decision rules can lead to more accurate risk predictions (Siwach et al. 2017). Incorporating evidence of rehabilitation can then serve to move beyond the criminal record and enable an individualized assessment of the whole person. However, a two-stage criminal background check assessment could also pose challenges if adopted and used in a nonstandardized way that is disconnected from signaling theory.

Establishing a causal relationship between evidence of rehabilitation signals and recidivism is methodologically challenging because there are self-selection processes at work when people are signaling desistance. As described earlier, Denver (2020) examined evidence of rehabilitation submissions that are part of a state-mandated criminal background check for direct care positions in the New York state health care sector. The author was able to observe what types of documentation decision-makers received, the final determination, and subsequent arrests, but not the underlying content or quality of the signals (such as written letters or program details) or decision explanations. Although prior employer recommendations and program completion were positively correlated with passing the background check, none of the factors for evidence of rehabilitation were negatively correlated with subsequent arrests (and evidence of achievement was, unexpectedly, positively correlated with recidivism) among those who contested a proposed denial. It is possible that the materials submitted as evidence of rehabilitation did not serve as good indicators of desistance, or that submitting multiple pieces of evidence made it difficult to tease out strong signals (only 9% of the sample submitted just one type of evidence). It is also plausible that

¹⁵DeWitt and Denver (2020) tested involuntary job training, voluntary job training, an occupational license from a different industry, and a supportive reference letter from a previous employer using an experimental vignette. With the exception of involuntary job training, the credentials meaningfully improved the likelihood of a reported callback for an interview compared to applicants with a criminal record but no positive credential.

because the contestation process took time, resources, and effort to complete, it essentially created a homogenous group of testers. In that case, the act of contesting may be the signal (Denver 2020).

When developing guidelines for evidence of rehabilitation, decision-makers should focus on the characteristics of strong signals: They are costly to achieve, relatively rare, and voluntarily obtained (Bushway and Apel 2012). If evaluated in a systematic fashion, evidence of rehabilitation could help to contextualize criminal records

and serve as signals of desistance. There is currently limited empirical support for this policy strategy, but transparent decision rules, detailed documentation, and collaborations with independent researchers can enable decision-makers to test the predictive accuracy of an assessment instrument in a localized employment context, make adjustments over time, and avoid symbolic compliance (Kurlychek et al. 2019). Rather than a one-time implementation, employers should aim to regularly review and continuously improve their criminal background check processes.

III. Recruitment and Retention

Barriers in the Health Care Field

Before considering the potential challenges involved in recruiting and retaining individuals with criminal records in the health care field, it is important to acknowledge the broader difficulties the health care field faces. The current home health care system originated as part of New Deal programs to employ poor women in need of paid work, which has formed a long-lasting stigma (Boris and Klein 2012). As depicted in Appendix A, average wages for entry-level direct care work are notably lower in these positions compared to the overall median annual salary for jobs with similar education requirements. Due to Medicaid reimbursement caps, many agencies are limited in how much they can pay their employees, regardless of supply and demand (Osterman 2017). The hours for home health care work are often irregular, which affects predictability in earnings, and nearly half of direct care workers use public benefits such as food stamps or Medicaid (PHI 2011). Low pay is a commonly reported reason for leaving direct care work (ASPE 2011).

Direct care work can also impose health risks and is a physically demanding job. In addition to high levels of verbal aggression, workplace violence, and sexual harassment (Hanson et al. 2015; Nakaishi et al. 2013; Phillips 2016), direct care workers experience disproportionately high injury rates. For example, nursing assistants have one of the highest incidence rates of musculoskeletal disorders across occupations, which include “sprains or strains resulting from overexertion in lifting” (Bureau of Labor Statistics 2016, 2). Lifting and handling patients is a routine activity for many direct care workers, and lower back pain is regarded as a major contributor to health care staffing shortages (Qin et al. 2014). Currently and formerly incarcerated individuals tend to have heightened physical health problems compared to their never-incarcerated counterparts (Schnittker, Massoglia, and Uggen 2011), and these existing health problems could be further exacerbated by the strenuous nature of direct care jobs.

Perceived job quality and satisfaction are other critical components of job retention. Researchers examining the nationally representative 2007 National Home and Hospice Care Survey and National Home Health Aide Survey identified respondents with low work hours, workplace injuries, and low job satisfaction as among the most likely to intend to leave the job (Stone et al. 2017). The 2007 survey also found that Black workers expressed high levels of intention to leave the job (Stone et al. 2017). Black home care aides reported experiencing higher levels of racial discrimination in their jobs relative to

their white counterparts (Lee, Muslin, and McInerney 2016). As Black individuals disproportionately have felony convictions (Shannon et al. 2017), this may pose additional retention challenges for this population. Another job satisfaction challenge involves occupational mobility limitations and the need to clarify pathways for career advancement to retain employees in this sector (Snyder et al. 2018). Researchers have pointed to low levels of respect for direct care workers, including the reluctance to expand direct care worker duties and discretion in patient care decisions, as a key barrier to retaining employees (Osterman 2017). Annual turnover rates for the direct care workforce vary based on job position, geography, and time period, but are estimated to be around 40%-60% (Osterman 2017; PHI 2015).¹⁶

Despite high rates of turnover, direct care workers typically describe being motivated by a commitment to their clients and often find the work to be rewarding, even among those who report feeling undervalued by others (Osterman 2017). Recent criminology

research similarly points to the importance of job commitment for desistance. Apel and Horney (2017) found that employment meaningfully reduced self-reported crime among a sample of adults who reported feeling a strong level of commitment to their job, but other work characteristics were unrelated. Rather than assigning people with criminal records to work in preselected jobs (as in many program interventions), the researchers recommended pairing prospective employees with jobs that they “themselves choose to work and to which they are more likely to be more strongly committed from the beginning” (Apel and Horney 2017, 30). Connecting with employers that are interested in hiring and training this population is also important (Apel and Horney 2017). Taken together, identifying committed workers and promoting commitment to the job by addressing the underlying challenges surrounding recruitment and retention could serve as a protective factor for both employment retention and desistance maintenance processes.

¹⁶This figure is estimated to be closer to 32% when excluding those who are switching jobs within the health care industry; those in direct care work are noted for having high levels of commitment to the field, even if not to a particular employer (Osterman 2017).

IV. Estimating Employment in Direct Care Work for Individuals With Criminal Records

A recent study estimates 3% of the adult population in the United States has been in prison and around 8% of adults have a felony conviction (Shannon et al. 2017). The two figures are disproportionately high for African American adult males (of whom 15% have been in prison and 33% have a felony conviction) (Shannon et al. 2017). Criminal record repositories conduct more searches for non-criminal-justice purposes — such as employment, licensing, or regulatory checks — than for traditional criminal justice system reasons (Goggins and DeBacco 2018), and private companies regularly produce and disseminate criminal records (Corda and Lageson 2020). Although criminal records are “easier to access than ever before” in some ways (Lageson 2017), there are significant data challenges for researchers interested in the employment status of individuals with criminal records, especially by industry.

There are no current comprehensive figures on individuals with conviction records who are employed (generally or in the health care sector specifically), actively seeking work in entry-level health care positions, or interested in such positions but not currently seeking employment in the health care sector. The only currently available, nationally representative data on unemployment among formerly incarcerated people come from the Bureau of Justice Statistics’ National Former Prisoner Survey (NFPS), conducted in 2008. NFPS data are currently under restricted access (ICPSR study #31441), but Couloute and Kopf (2018) have analyzed these data to estimate the proportion of U.S. adults with criminal records who are in the workforce. The authors found that over 27% of adults under parole supervision were unemployed (i.e., not employed at the time of the survey but actively looking for a job), with around 35% of Black men and close to 44% of Black women reporting unemployment (Couloute and Kopf 2018). The unemployment rate was also higher than the average (close to 32%) for those with less than two years since their release from prison (Couloute and Kopf 2018).

Researchers studying 740 returning, formerly incarcerated persons in Ohio, Illinois, and Texas detected even higher unemployment rates. Visher, Debus-Sherrill, and Yahner (2011) found that while 74% of the men in their sample were actively seeking a job eight months post-release, only 45% were employed at the time. When comparing this sample of returning, formerly incarcerated persons to labor force participation for adults (ages 18-65) with equal to or less than a high school education, there was a sizable gap in employment levels, even though the proportion of people in the labor force was similar across the two

groups (Schnepel 2017). While these findings point to a sizable pool of potential job applicants, the studies did not examine health care sector interest or fit.

One strategy for obtaining industry-specific estimates is to examine a sample of individuals with criminal records and determine the proportion of those workers in the health care industry. For example, Rose (2020) examined approximately 300,000 adults (ages 18-55) under supervision in Washington state between 2007 and 2016. In his expansive sample of individuals with criminal records, only 6% of working individuals were recorded in administrative labor data as being employed in the health care/social assistance sector — the sixth most common major industry type.¹⁷

Alternatively, researchers could compare people with and without criminal records who are employed in the health care sector. One method is asking people to self-report their criminal history and employment experiences.¹⁸ Using a sample of 8,680 people from the National Longitudinal Survey of Youth 1997, Stein (2018) compared people with no more than a high school diploma who were never arrested, arrested once, and arrested multiple times across approximately 20 industries. As Stein (2018, figure 1) depicted, people with prior arrests were much less likely to work in the health care industry relative to the “never arrested” group. This was not true for many of the other industries represented in the survey. A more direct method is to collect administrative criminal record files on existing employees. The U.S. Department of Health and Human Services’ Office of Inspector General (OIG)

has collected criminal conviction record data for different health care personnel populations over time. In a 2011 study, OIG used a stratified random sample of 260 Medicare-certified nursing facilities. After collecting FBI records on everyone employed, the authors determined that 5% of all nursing facility employees had at least one criminal conviction. A few years later, OIG (2015) estimated that approximately 4% of employees in a random sample of Medicare-certified home health agencies had conviction records.

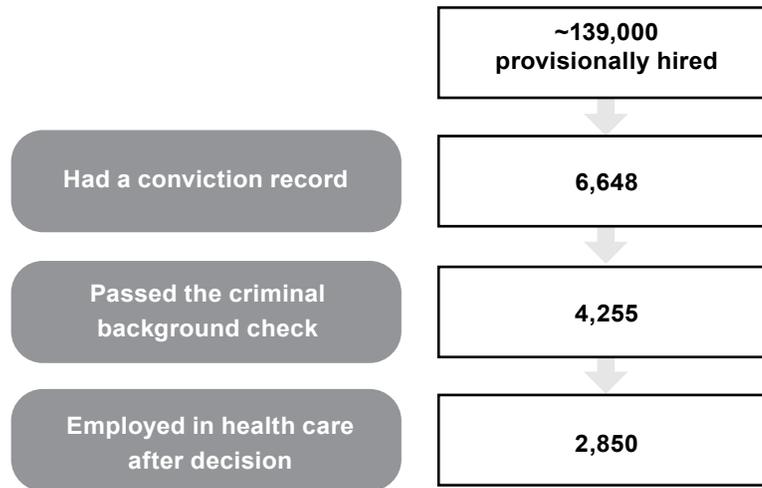
In compiling these different data sources, a key takeaway is that there appears to be a significant opportunity for recruiting individuals with criminal records into the health care field. A nontrivial proportion of released persons convicted of crime report seeking work but being unable to obtain it. Among those with criminal records who are working, the health care industry is not a top employer, and compared to people without criminal records, those with prior arrests have disproportionately low employment rates in this sector. A key component missing from these studies is the role of the criminal background check process for individuals with criminal records who pursue an entry-level job in the health care industry.

A research project conducted in New York — which linked background check decisions, in-state and out-of-state criminal records that the decision maker viewed, and in-state employment data for provisionally hired individuals in the health care sector — is used here as a case study to track the flow of individuals with conviction records as they navigated through a criminal background check

¹⁷The sample employment rate was 28%. Health care/social assistance was less common than construction (16%), manufacturing (13%), waste services (12%), accommodation/food services (12%), and retail trade (11%). Twenty-nine percent of the employed sample was recorded in an “other” category.

¹⁸National surveys of active health care personnel typically ask about credentials, but not criminal histories.

Exhibit 1. Health Care Employment Funnel for Individuals With Criminal Records (NYS DOH)



Sources: Denver et al. (2017) and DeWitt et al. (2017). The conviction sample used here only included individuals with matches in the Department of Labor database (Denver et al. 2017, footnote 3).

process. Although not intended to be representative of all states or facilities, this can help to identify key pieces of the employment funnel for this population, including opportunities for strengthening the connection between individuals with criminal records and direct care jobs.

Case Study: The Health Care Employment Funnel

In 2012, researchers at the State University of New York-Albany partnered with the New York State (NYS) Department of Health (DOH), NYS Division of Criminal Justice Services, and NYS Department of Labor to study DOH's mandated criminal background check process.¹⁹ Since 2006, DOH has been charged with assessing

at the state level whether individuals provisionally hired to work by health care facilities licensed in New York state — including nursing homes, assisted living facilities, home health care agencies, and long-term health care programs — are suitable for employment in unlicensed direct care positions.²⁰ Although the data collected by the researchers did not contain identifiers for specific job positions, the sample was approximately split between licensed home care services agencies and nursing homes. The data consisted of criminal background checks submitted by employers between January 1, 2008, and December 31, 2009.

Exhibit 1 displays a health care industry employment funnel based on the NYS case study. Of approximately 139,000

¹⁹This research was supported by award 2012-MU-MU-0048 from the National Institute of Justice, Office of Justice Programs, U.S. Department of Justice (principal investigators Shawn Bushway and Megan Kurlychek).

²⁰Licensed positions (such as nurses or psychologists) and volunteers are excluded from this assessment.

provisionally hired individuals, over 6,600 had a prior conviction record. With respect to these individuals, there are two key decision points that influence who ultimately ends up working in direct care work:

■ **Criminal background check decisions.**

Among those with conviction records, around 64% passed the criminal background check.²¹ There are very few estimates from other contexts to use as a comparison to this clearance rate.²² Although there was room for improvement in the DOH decision model (Denver 2020; Siwach et al. 2017), the initial decision stage is also a standardized process that researchers can predict with high accuracy, which is considered a best practice (Kurlychek et al. 2019). The clearance rate also appears to have increased in recent years. Between April 2014 and December 2016, DOH received around 96,000 submissions with a criminal record; 80% received a positive determination and were cleared to work (Office of the State Comptroller 2017). Narrowing the scope of applicants denied in the criminal background check stage through assessment criteria is one way to improve overall health care employment levels for this population.

■ **Individual decisions to start the direct care job.** Although approximately 83% of cleared applicants with criminal records were working in the quarter

after passing the criminal background check, only about 67% were working in the health care field (Denver, Siwach, and Bushway 2017).²³ In other words, around 1,400 people with criminal records were never recorded as working for a health care provider in the state after applying for a health care job, receiving a provisional hire from a local employer, and passing the criminal background check. Securing this group is another important part of the process.

The researchers in the NYS study were unable to determine the exact reasons why individuals in this sample did not attach to the health care sector after receiving a criminal background check clearance to work. However, the Department of Labor data suggested that some of those cleared did not end up working at all after the decision, and others transitioned to jobs in other industries (Denver, Siwach, and Bushway 2017). The initial decision process for people with records in this context can take several weeks (Office of the State Comptroller 2017); the delay could tip off the employer that the person has a record, or the person could decide to seek other employment in the meantime. It is also possible some people left the labor force for other reasons or worked out of state. Accepting another job offer is somewhat surprising, given that New York (along with the rest of the country) experienced a recession during the 2008-2009 study period. Although health care/

²¹DOH uses the two-step decision process described in Kurlychek, Bushway, and Denver (2016). An initial decision is based on criminal record information and can lead to a clearance (pass) or initial denial. Everyone receiving an initial denial can contest by providing evidence of rehabilitation. Within the conviction sample, almost half are cleared in the initial decision, about 16% are cleared after successfully contesting, and the remaining 36% are denied in both rounds (Denver, Siwach, and Bushway 2017). Exhibit 1 displays those cleared after both decision rounds. Around 8% of those with convictions were automatically disqualified due to state statutes (Siwach et al. 2017).

²²Paulk (2016, 10) reports that among those provisionally hired with criminal records at Johns Hopkins, 60% were hired. Although 19% were denied based on the criminal record, another 21% were “ruled out for other reasons.”

²³This includes any job with a health care sector code, not only remaining in the same position or facility.

social assistance employment was increasing during this period, other industries with similar education requirements saw reductions in employment growth (Siwach 2017, figure 4).

These estimates are unable to capture several important processes. First, exhibit 1 does not speak to longer-term retention rates among those who began working in these direct care positions. Health care employment levels continued to decline over subsequent quarters in the NYS study context, to around 40% among those cleared to work three years post-decision (Bushway et al. n.d.).²⁴ It is not clear what a reasonable target retention rate would be in this context. In addition, what happened *before* the criminal background check is

outside the scope of the NYS study. It is unclear how many people opted not to apply because they were uninterested in direct care work, were physically unable to perform the job duties, or were deterred because there was a formal criminal background check. It is also possible that local-level employers screened people out informally through verbal inquiries (or based on assumptions of criminal records) in the early stages of the hiring process.

The rest of this white paper focuses on three key areas to improve direct care employment for some individuals with criminal records: recruitment, assessment (which can also include securing those cleared to work), and retention.

²⁴Data extending out several years may also miss important changes, such as people moving out of state or experiencing incarceration. At the national level, Osterman (2017) examined self-reported mobility for home care aides and nursing assistants using the Current Population Survey and found that approximately 82% of those identifying as direct care workers in an earlier (month 1) survey wave were still in the health care industry at the 4-month survey mark. However, that study was unable to differentiate individuals with and without criminal records or consider retention upon starting a job.

V. Strategies To Improve Health Care Employment for Individuals With Criminal Records

There have been several high-profile policy movements to reduce the stigma associated with a criminal record and ease restrictions for accessing employment. For example, the White House spearheaded a Fair Chance Pledge in 2016,²⁵ which encouraged businesses and higher education institutions to pledge to use inclusive and fair hiring and admissions practices. In recent years, over half the states have created or revised laws to regulate and reduce occupational licensing restrictions (Collateral Consequences Resource Center 2020). The bipartisan Clean Slate Initiative coalition promotes legislation to automatically clear criminal records, which is another increasingly popular stigma-remediation strategy.²⁶

The first part of this section reviews two prominent initiatives designed to increase opportunities for individuals with criminal records — Ban the Box and record concealment — and discusses how those policies might operate within the health care field, including anticipated limitations. The second part discusses a set of strategies guided by gaps identified in the health care employment funnel (see exhibit 1 above). The last part of this section reviews example programs that aim to improve recruitment, assessment, or retention processes — and in some cases, all three. After this white paper was drafted, a book written by a chief investment strategist for an employer audience was published (Korzenik 2021) that has many similar points, themes, and recommendations throughout. Although Korzenik does not focus specifically on the health care sector, health care agencies and leadership may find his description of a second chance hiring model (Chapter 4) and advice for initiating organizational change (Chapter 5) particularly helpful.

²⁵<https://obamawhitehouse.archives.gov/the-press-office/2016/04/11/fact-sheet-white-house-launches-fair-chance-business-pledge>

²⁶The initiative (<http://cleanslateinitiative.org/>) is funded and developed in partnership with the U.S. Departments of Labor and Justice. It provides information on policies designed to mitigate criminal record stigma at the local, state, and national levels, and provides training, tools, and resources to develop and maintain new policies.

Limitations of Large-Scale Employment Initiatives

Ban the Box

One of the most visible employment strategies is Ban the Box (BTB). BTB postpones criminal record inquiries from the application stage to a later point in the hiring process. The goal is to enable job applicants to present their qualifications before being ruled out based on their criminal record. The policy is widespread; the federal government, 36 states, and over 150 cities and counties have adopted BTB legislation (Avery and Lu 2020). Although some research indicates BTB laws can increase job access in the public sector (Raphael 2020), studies have found evidence of heightened discrimination against Black applicants when employers are unable to access criminal records upfront (Agan and Starr 2016; Doleac and Hansen 2020). In other words, if employers are seeking but unable to use criminal record information in the early stages of the hiring process to inform their choices, they may make assumptions about which applicants have criminal records. Ideally, hiring managers in sectors like health care — where they know in advance that they will have the opportunity to formally screen applicants before making their final decision — would ignore criminal record information (or the lack of access to such information) in the initial stages of hiring. However, there is a lack of research on how agencies that conduct formal checks screen in earlier decision stages.

Industry-specific analyses can be useful for assessing how BTB might influence health care sector employment in practice. Using a large sample of individuals supervised by the Washington State Department of Corrections, Rose (2020) demonstrates

that relative to the pre-conviction period, average employment in the health care sector drops after people acquire either a misdemeanor or felony. The jobs held by this population shift to the accommodation and food services industry, where there are notably gains for those with felony convictions in particular (Rose 2020). In his discussion of why the BTB law implemented in Seattle did not have a meaningful impact on employment or earnings, the author notes that BTB policies do not prohibit employers from ever conducting criminal background checks (as in the health care sector, where such assessments may be critical). As a result, people with conviction records might engage in “strategic sorting” in job searches to avoid industries that conduct later checks (Rose 2020). Therefore, although BTB may help some people pass an initial job application hurdle, the positive effects might be limited for health care employment.

Sealing and Expungement

Concealment strategies, including sealing and expungement, are also gaining legislative traction but have limitations in practice. Sealing is intended to remove public access to criminal record information while permitting limited access from some government agencies; expungement is designed to destroy the record. Although notably underutilized in practice (Chien 2020), concealment policies can restore rights and improve life outcomes, including increased employment and wages (Prescott and Starr 2020). However, the growth and dissemination of digital criminal records and a decentralized system have restricted the ability of expungement policies to effectively remove criminal records (Lageson 2019, 2020). Researchers also indicate that the effects of sealing may be limited for two additional

reasons. Low-level and older convictions (to which employers typically give less weight in the assessment process) are often the offenses targeted by concealment policies, which would lower the policies' potential effectiveness (Doleac and Lageson 2020). And if implemented on a broad scale, automatic sealing policies could also “leave [employers] guessing, just as Ban the Box did” — potentially harming more applicants than they protect (Doleac and Lageson 2020).

There is also variation in how state and federal laws define and handle expungement (Lageson 2020). At the federal level in the health care field, the term “conviction” is defined broadly (Pelotte 2016). The U.S. Department of Health and Human Services' Office of Inspector General maintains a List of Excluded Individuals and Entities that includes those with expunged records (42 U.S.C. 1320a-7[i]), and anyone hiring a person on that list “may be subject to civil monetary penalties.”²⁷ Therefore, the ability of sealing or expungement strategies to reduce health care employment barriers may fluctuate depending on the job position and facility type. Research on the potential impact of concealment strategies in the direct care workforce would be valuable.

Addressing Gaps in the Health Care Employment Funnel

Efforts to expand health care employment can be divided into three main components: expanding applicant pools through recruitment, increasing clearance rates for individuals who do not pose a public safety risk (along with securing

applicants immediately after they pass the criminal background check), and improving retention rates among those cleared to work in direct care positions.

Expanding Applicant Pools Through Recruitment

Reframing the Stigma of Direct Care Work

Recruitment into direct care health care work can take several forms. One broad strategy involves reframing existing notions of health care jobs to generate more interest among individuals with criminal records. The public has historically viewed direct care as stigmatized work, and common direct care positions pay less than the median annual wage for jobs requiring the same level of education (Torpey 2019). In addition, the field may face new barriers to recruitment in the upcoming years. In the spring of 2020, when this white paper was initially drafted, health care facilities across the country were facing unprecedented public health challenges. The short- and long-term impacts of global health events, including movement across jobs within the health care sector, transitions out of the health care industry entirely, and the potential added stigma and health risks involved in recruiting direct care workers, will be important to monitor. Although outside the scope of the current paper, policymakers may also need to consider special initiatives to counteract negative perceptions of direct care work to make these positions more desirable.

Recruitment interventions for health care jobs among the broader population (not just those with criminal records) have pointed to several promising strategies. A national evaluation of 10 Centers for Medicare & Medicaid Services grantees

²⁷<https://oig.hhs.gov/exclusions/index.asp>

(known as the Demonstration To Improve the Direct Service Community Workforce) found that strategies emphasizing direct care workers as valued employees were especially impactful. For example, RAND evaluators found that marketing campaigns designed to encourage and positively portray working in direct care jobs and strategies to promote employee milestones had a positive effect on recruitment, retention, and job satisfaction (Engberg et al. 2009). Earnings Supplement Programs (ESPs), which supplement earnings for low-income working individuals to promote employment, are another strategy for increasing recruitment among hard-to-employ populations. In his review of four ESPs, Michalopoulos (2005) found the programs improved the likelihood of working and increased earnings. Program effects were especially strong for long-term welfare participants with low levels of education and short work histories, but these effects faded over time (Michalopoulos 2005).

An additional advantage of recruiting individuals with criminal records could involve diversifying the direct care worker population. Direct care positions in the health care industry are dominated by women, in both the home-care setting (where 88% of jobs are held by women) and in facilities such as nursing homes (85%) (Hess and Hegewisch 2019). Similarly, in the New York case study described in Section IV, only around 15% of provisionally hired individuals in the full sample (which contained both people with and without criminal records) were men. A higher percentage — 29% — of the individuals with conviction records in the case study were men. Although an estimated 15%-20% of women have one or more nontraffic arrests by age 23 (Brame et al. 2014), a nontrivial amount, men are heavily overrepresented in the

criminal justice system. Recruiting from this population presents an opportunity for connecting more men to the health care industry, which could potentially help to reduce the broader gender imbalance of the industry over time by challenging assumptions of what direct care workers “look like.” In other words, by normalizing the presence of men in direct care work, this occupation could also be viewed as a more attractive option for unemployed men without criminal records.

Targeted Recruitment Through Correctional Facilities

Along with advertising and marketing campaigns, directly approaching groups of interest could boost recruitment rates. Social networks are important for connecting people to employment opportunities, yet formerly incarcerated individuals typically lack social capital (Hattery and Smith 2010). However, some incarcerated individuals work in hospice units inside prison facilities, and that training and experience could be valuable in a post-release career. As of 2011, 35 states reported providing hospice and end-of-life care services in at least one of their prison facilities (Chari et al. 2016), and researchers recently identified 113 known prison hospice and palliative care programs in the country (Prost et al. 2020). As with broader national trends, the aging incarcerated persons population has continued to expand. A prison-to-employment pipeline could connect employers with prison hospice units to recruit people who have volunteered or worked in these positions before they return to the community.

Studies examining prison hospice units and the incarcerated workers, incarcerated patients, and staff on the inside report that while there is occasionally resistance from correctional officers, there are largely

positive perceptions and experiences from involved groups (Cichowlas and Chen 2009; Cloyes et al. 2017; Wion and Loeb 2016). In-prison programs have already conducted intensive screening processes and typically provide formal education, training, supervised practice, and mentorship in direct care work. In addition to expanding access to such programs, increasing direct care wages in prison, providing formal credentials to signal successful completion of training post-release (including occupational licenses), and creating a direct link to a health care agency post-release could facilitate the recruitment process for individuals who have already expressed an interest in direct care work.

Expanding Health Care Paths in Existing Workforce Development Programs

Another way to create a pipeline for employment is to leverage existing programs that focus on workforce development for individuals with criminal records and create additional paths in those programs specific to health care. This could occur at the federal, state, or local level. For example, Second Chance Act grants from the Bureau of Justice Assistance (U.S. Department of Justice) and the Reentry Employment Opportunities grant program of the Employment and Training Administration (U.S. Department of Labor) provide job training support for individuals with criminal records; these grants could

be targeted to health care work. The U.S. Department of Labor (2020) has reported an interest in expanding its Apprenticeship program — which incorporates job training with hands-on learning experiences — to health care occupations in rural areas and to all types of workers, including individuals with criminal records.²⁸

At the local level, employers could connect with nearby organizations that direct unemployed individuals with criminal records into the workforce. Local nonprofit organizations, sheriffs' departments with reentry units, and state career centers are often flexible in working with employers to find job applicants that fit the employers' needs. Such groups may also be able to connect employers to job fairs for hard-to-employ populations and coordinate free job board postings²⁹ to streamline the process of linking potential workers to health care employers. Several states have Matching Service Registries — which are often managed by nonprofits, but occasionally by the states — to assist in connecting consumers with home health care workers.³⁰ Similarly, local reentry organizations could serve a comparable role to help match health care employers to prospective workers with criminal records.

Assisting Decision-Makers

Although recruitment is essential for drawing new workers into the health

²⁸As another example, the Health Profession Opportunity Grants Program provides grant funding for education and training to enable recipients of Temporary Assistance for Needy Families and other individuals with low incomes to access health care jobs. Although a 2018 evaluation found that less than 4% of program participants had prior criminal records, the evaluators note that screening processes prohibited this population from working in many of the positions (Werner et al. 2018). Implementing some of the strategies recommended here could potentially expand job options for this group.

²⁹As an example, the Boston Goodwill Industries headquarters hosts quarterly job fairs to bring employers and unemployed populations together and works with an organization to provide free job boards to connect individuals with disabilities to employers (<https://www.goodwillmass.org/business-services/job-and-career-fairs.html>).

³⁰<https://phinational.org/advocacy/matching-service-registries/>

care industry, expanding the front end of the health care employment funnel may not be a sufficient strategy on its own. Assessing individuals with criminal records is also a key piece of the hiring process. As described in Section II, health care employers have valid concerns about staff, patient, and resident safety, and they need to balance safety concerns in a way that does not overextend barriers to employment. In addition to the discussion in Section II, there are several existing resources for employers conducting criminal background checks, including NELP and the Safer Foundation's (Williams et al. 2016) free guide and the Equal Employment Opportunity Commission's (2012) guidance for hiring individuals with criminal records.

In some cases, standardized criminal record assessments can increase hiring for individuals with criminal records (Stoll and Bushway 2008). Research suggests that decision-makers using formal and standardized procedures tend to call applicants with misdemeanor criminal records back for an interview more often than their counterparts operating within a discretionary framework (Lageson et al. 2015). As Kurlychek and colleagues (2019, 541) describe, having consistent and formal decision processes "can open employment opportunities to some individuals with a criminal record" while also reducing the likelihood of legal liability for employers. However, criminal background checks are not necessary for every position, and organizations should consider when and why assessments are needed. Policymakers and decision-makers should also use caution with disqualifying conviction lists (Denver and Behlendorf n.d.) and consider using comprehensive assessments instead (Siwach et al. 2017).

Employers can also incorporate positive credentials, including evidence of rehabilitation, into decisions to contextualize a job applicant's criminal record and consider the desistance process. The two-stage decision process described earlier is one method for building in evidence of rehabilitation. In New York, the overall clearance rate increased by over 15 percentage points between the first- and second-stage decisions using this approach (Denver, Siwach, and Bushway 2017). Since states, health care organizations, and job positions may have differing exclusion criteria, employers could consider partnering with local universities or independent research organizations to develop and test assessment processes specific to their needs. Partnering with researchers could also produce important insights into the utility of evidence of rehabilitation, an area that currently has limited empirical evidence.

Criminal Record Accuracy

Another consideration that might arise for criminal background check decision-makers is the information content and quality. Rather than information matching in criminal record databases (e.g., linking name and date of birth), live-scan fingerprint-based criminal background checks can produce more accurate matches. Interpreting criminal record information (or rap sheets) can be challenging, since the records were designed for use within the criminal justice system rather than by employers or the public. Training staff how to read and evaluate this information is an important first step. In addition, the collection and management of criminal record information in the United States is not streamlined or unified, leading to missing and outdated information, errors, and inconsistencies across data sources

(Jacobs 2015; Lageson 2020). As Jacobs (2015) explains, “Our criminal record information systems are not fundamentally flawed, but they are not accurate enough.” Building data checks (or data cleaning) into the process could help to resolve inaccurate information. The cleaning process typically involves a careful review and additional research to make sure the criminal records are accurate, complete, and represented fairly (Kurlychek et al. 2019; Office of the State Comptroller 2017). For example, the New York State Department of Health’s Criminal History Record Check Legal Unit reaches out to local courts to learn about dispositions that are not yet visible in the statewide system and verify contradicting or confusing accounts.

In addition to the federal Fair Credit Reporting Act’s requirements to notify the applicant of the criminal background check and receive the person’s consent when using commercial background checks, employers should also share a copy of the criminal record with the applicant. That enables the person to identify and fix inaccuracies and provide evidence of rehabilitation (Williams et al. 2016). Since the process can take time, agencies might consider supervising employees in a temporary status while the decision is pending, rather than waiting until the background check is complete (Office of the State Comptroller 2017). This could also help to increase job acceptance rates, so prospective employees do not take another job while waiting for results from the criminal background check process. On a broader scale, centralized systems would help to regularly clean and update information. For

example, local governments could structure their databases to ensure consistency across agencies and prevent private companies from readily web scraping and disseminating outdated information (Lageson 2020).

Information and Resources for Employers

Additional resources that might influence the assessment process are also available to employers. A common policy recommendation designed to encourage employers to hire individuals with criminal convictions is the Federal Bonding Program. Originating in the 1960s, the program provides fidelity bond insurance to employers free of charge for up to \$5,000 for the first six months of employment for hard-to-employ populations. The bond covers employee fraud, theft, forgery, larceny, and embezzlement.³¹ Although a promising and intuitive incentive, there are low levels of employer engagement with the program and a lack of evidence for its effectiveness in improving employment outcomes (Bloom 2006; Contract Research Corporation 1975; Holzer, Raphael, and Stoll 2003). The Federal Bonding Program estimates that, over the past 50 years, more than 50,000 individuals (including but not limited to those with criminal histories) have been bonded.³² Although there are numerous available resources, including a state directory of bonding coordinators,³³ employers often appear to be unaware of the bonding program (Martin et al. 2020). The increasing demand for direct care workers provides an opportunity to expand the use of the Federal Bonding Program in the health care industry (potentially as part of a randomized controlled trial),

³¹<https://bonds4jobs.com/wp-content/uploads/2017/06/At-A-Glance.pdf>

³²<https://bonds4jobs.com/about-us>

³³<https://bonds4jobs.com/our-services/directory>

track employer and employee experiences and perceptions, and document program outcomes. Formal government partnerships, in collaboration with researchers, could solidify and expedite this process.

The Work Opportunity Tax Credit (WOTC), a tax credit for employers that hire members of groups that face significant barriers to employment, is another available option to promote the hiring of individuals who have acquired felony convictions in the past year (or who have returned from prison less than a year before the hiring date) (Collins and Donovan 2018). Survey research suggests that tax credit incentives, like bonds, increase employers' reported willingness to hire individuals with criminal records (Albright and Denq 1996). Although there is limited research on the WOTC's use with respect to individuals with eligible felony convictions, the program appears to have mixed effects on targeted groups more broadly, with short-term increases in employment but not long-term gains (Hamersma 2008). Further experimenting with existing incentives may also be useful. For example, researchers at RAND found that employers report being generally willing to hire a job applicant with a nonviolent felony conviction accompanied by a WOTC (59%), and 77% reported a willingness to hire if the dollar amount was increased to 40% of an entry-level position wage with a \$5,000 cap (Hunt et al. 2018). Additional research on decision-maker concerns in the health care industry and perceptions of incentive programs could further inform policy efforts in this area.

Improving Retention Rates

The key areas of focus for retention efforts with direct care workers typically include improved job quality, higher pay, and increased respect. Research indicates that positive perceptions of the

job and of workplace fit, along with social integration into an organization, can play a large role in health care job retention (Holtom and O'Neill 2004). Evidence also indicates that increased wages can contribute to reductions in turnover, and higher wages and improved job quality can both influence self-reported intentions to leave the job (see Osterman 2017 for an overview). In practice, improving workplace culture can be challenging. For example, the Robert Wood Johnson Foundation's Better Jobs Better Care (BJBC) national demonstration project, which funded efforts to improve workplace practices and policies — including management and supervisor training, team building, peer mentoring, and skill development — did not find an impact on job turnover or satisfaction (Kemper et al. 2010). Although local culture may be difficult to change, some researchers advocate for expanding job duties and pay for direct care workers at the national scale and more fully incorporating this group into medical teams, which can increase job satisfaction, improve productivity, and reduce subsequent health care costs for patients (Osterman 2017).

Retaining employees with conviction records in direct care work may be more challenging than retention for the broader direct care workforce population. As described earlier, individuals with conviction records commonly encounter barriers to reentry and may face heightened difficulties in direct care work (such as increased physical health challenges). Programs designed to address these needs — such as providing transportation services, treatment programs, and reintegration support — could help build stability for new employees. Fee waivers and mentorship programs could assist with early career advancement within the health care sector (Snyder et al. 2018), and a mentor or

coach could be incorporated into a hiring model for individuals with criminal records (Paulk 2016). Access to career paths and upward mobility, especially for employees who may leave for higher wages elsewhere, could also contribute to higher retention rates (see Williams et al. 2016, 51, for an example career path).

As individuals with criminal records are recruited, hired, retained, and promoted in larger numbers, employment networks could naturally grow in local communities. Word-of-mouth incentive referral systems designed to draw in applicants with

convictions could be an important source of recruitment for the next wave of direct care workers. Employers who recruit through these systems could generate a reputation for being “record friendly,” creating a continuous pipeline of job applicants.³⁴

Existing Strategies and Models

There are various existing strategies designed to connect people with criminal records to the health care industry. Exhibit 2 highlights the key features of several initiatives and models.

Exhibit 2. Example Programs That Aim To Improve Recruitment, Assessment, or Retention for Individuals With Criminal Records in the Health Care Field

| Program | Key Features/Highlights | Studies/Sources |
|---|--|--|
| Transitions Clinic Network (TCN) | TCN provides medical services to released, formerly incarcerated persons with chronic medical conditions or those who are over age 50. Every patient is paired with a formerly incarcerated community health worker who collaborates with the medical team. <i>Target gap: Recruitment</i> | Shavit et al. (2017) examines outcomes for patients (but not workers) and provides an overview of program components |
| Mount Sinai Health System, Institute for Advanced Medicine: Coming Home Program | This small unit operating within a hospital assists formerly incarcerated individuals with the transition to the community (including counseling and support services) and trains them in health care occupations. Hired staff are open about their criminal history backgrounds. The program also appears to provide additional training for formerly incarcerated staff as needed. <i>Target gap: Recruitment and retention</i> | No known research studies; referenced in Williams et al. (2016) |
| Baltimoreans United in Leadership Development (BUILD), Turnaround Tuesday Program | BUILD is a nonprofit organization that works with individuals with criminal records and has partnerships with over a dozen employers in the Baltimore area, several of which are connected to the health care industry (e.g., Johns Hopkins, Sinai Hospital, University of Maryland Medical System) (see BPHWC below). <i>Target gap: Recruitment and retention</i> | No known research studies; information available online ³⁵ |

³⁴In Massachusetts, for example, where CORI is the acronym for Criminal Offender Record Information, such employers are referred to as “CORI friendly.” Career centers and reentry organizations seek out these employers to connect clients with jobs. Developing a record friendly reputation as an employer can strengthen relationships with these sources and expand applicant pools.

³⁵<https://www.buildiaf.org/turnaround-tuesday/>

Exhibit 2. Example Programs That Aim To Improve Recruitment, Assessment, or Retention for Individuals With Criminal Records in the Health Care Field (Continued)

| Program | Key Features/Highlights | Studies/Sources |
|---|---|---|
| Roseland Community Hospital | The hospital hires employees through a health care career pathway program in partnership with the Safer Foundation. The Safer Foundation identifies promising candidates, and the hospital's human resources team reviews resumes and interviews applicants. <i>Target gap: Recruitment and assessment</i> | No known research studies; referenced in Williams et al. (2016) |
| New Hampshire Health Profession Opportunity Project | This program reviews criminal records on a case-by-case basis. The program covers expungement costs, provides tuition assistance, and includes case management/coaching services to prepare participants for the job search. <i>Target gap: Recruitment and assessment</i> | Descriptive employment outcomes are provided in a report (Administration for Children and Families and Health Profession Opportunity Grants 2015) |
| New York State Department of Health, Criminal History Record Check Legal Unit | There is a two-stage decision process. All provisionally hired applicants undergo a criminal background check. Everyone who receives a proposed denial can contest the accuracy of the criminal record and the initial decision by submitting additional information and evidence of rehabilitation. <i>Target gap: Assessment</i> | Denver et al. (2017) estimate the impact of the final decision on employment and recidivism and Denver (2020) examines whether evidence of rehabilitation is correlated with decisions and recidivism |
| Kaiser Permanente | Recruitment staff use individualized assessments and request additional information for potentially problematic convictions. <i>Target gap: Assessment</i> | No known research studies; Williams et al. (2016) provide a summary |
| Baltimore Population Health Workforce Collaborative (BPHWC) | Through the BPHWC, four large health care systems (including Johns Hopkins) consisting of nine hospitals partnered with community organizations (including BUILD) and skills training providers to recruit, train, hire, and provide ongoing support for residents living in high-poverty areas of Baltimore, Maryland, including those with criminal records. <i>Target gap: Recruitment and retention</i> | No known research studies; information available online (Baltimore Population Health Workforce Collaborative 2016) |
| The Safer Demand Skills Collaborative (SDSC) | This employer-driven program connects health care employers, prospective employees, and funders to provide health care certifications and training; facilitate job placement; provide employer incentives (which could influence the assessment process); and provide ongoing mentorship, support, and reentry services. <i>Target gap: Recruitment, assessment, retention</i> | No known research studies; information available online (Safer Foundation n.d.) |
| Johns Hopkins Health System | Johns Hopkins partners with community organizations for referrals. All conditionally hired applicants undergo a background check that uses individualized assessment criteria. Coaches can be assigned to support the transition. Internal reviews indicate highly screened candidates have higher retention rates than employees without criminal records, and Johns Hopkins rarely terminates employees. (Johns Hopkins is also connected to BPHWC.) <i>Target gap: Recruitment, assessment, and retention</i> | An unpublished study is referenced in Williams et al. (2016) and presentation slides are available online (Paulk 2016) |

Note: This table is a compilation based on summaries and program goals as identified in program materials, rather than providers' accounts. Therefore, the table may miss some components that programs would report. For example, it was not clear if the Roseland program connected employees to retention services through the Safer Foundation; if so, that program would be considered comprehensive. Program skills for training and retention are also differentiated here; the former refers to preparing people to be eligible for the job (recruitment), while the latter refers to advancing skills and careers post-hire (retention).

The first two programs listed utilize community health workers (known as *promotores* in Spanish-speaking communities). Community health workers are known for having a “shared lived experience with the patients they serve,” which can include formerly incarcerated staff working with formerly incarcerated patients (Lloyd, Moses, and Davis 2020, 3). Transitions Clinic Network (TCN) currently supports clinics in 11 states and Puerto Rico and focuses on geographic locations with high rates of incarceration (TCN 2020), while the Mount Sinai program is part of a hospital-based clinic in New York City. There is some preliminary evidence that such programs can decrease reincarceration for technical violations and days incarcerated in the first year, post-release, among formerly incarcerated adults receiving TCN primary health care services (Shavit et al. 2017; Wang et al. 2019), although researchers have not yet examined impacts on the formerly incarcerated employees. It is not clear whether the TCN program employs retention strategies in addition to recruitment, but descriptions of the Mount Sinai program reference training and support for community health workers (Williams et al. 2016).

The third program, Baltimoreans United in Leadership Development (BUILD), is an example of a community organization that serves as an intermediary partner for employers and prospective employees. BUILD provides services to individuals with criminal records and serves as a referral source for local employers, including several health care employers. As part of the Baltimore Population Health Workforce Collaborative (BPHWC), a workforce collaborative discussed below, BUILD also provides programs and services after the person secures a job, to support retention. The Roseland Community Hospital is an example of a group on the other end of that type of relationship — a health care

employer that works with an organization to recruit potential employees with criminal records.

The New Hampshire Health Profession Opportunity Project (a Health Profession Opportunity Grants program that received funding from the U.S. Department of Health and Human Services’ Office of Family Assistance) is a unique larger-scale training program that helps prepare participants for the job search and interview process. Services include expungement assistance for the later assessment process and advice on disclosing and explaining the criminal record. Case managers then match program participants with health care employers in the state. The sixth example also involves a broader, state-level initiative: the New York State Department of Health (NYS DOH) conducts state-mandated criminal background checks after local-level employers have provisionally hired applicants. The NYS DOH uses a two-stage decision process that involves a formal risk assessment stage followed by an individualized assessment stage. The agency sends provisionally hired individuals who receive a proposed denial a copy of their criminal record and a list of evidence of rehabilitation examples and informs them of their ability to contest (Office of the State Comptroller 2017). Kaiser Permanente, a large health care employer, incorporates a similar higher-level review process. Rather than hiring managers conducting the criminal background check assessment, company recruiters review the files and ask applicants for additional contextual detail about the offense(s) (Williams et al. 2016).

The final three programs — BPHWC, Safer Demand Skills Collaborative (SDSC), and hiring practices of the Johns Hopkins Health System — are large-scale initiatives designed to bring together employers, community organizations, and prospective employees. Although rigorous empirical

evidence is still needed to determine whether these approaches are effective for improving the direct care workforce, they can serve as conceptual models for integrating multiple policy strategies. The BPHWC (2016) is a policymaker-led initiative that targets individuals from communities with high poverty rates, including individuals with limited or no work histories or education, criminal histories, and substance use or mental health challenges. The initiative identifies and recruits prospective employees through collaborative relationships between employers and community organizations. Program staff conduct an internal assessment and connect residents to skills training for three main positions: community health workers, peer recovery specialists, and certified nursing assistants. After participants are assessed by employers and secure a job, they continue to receive job coaching and services for at least a year to minimize turnover (BPHWC 2016, Program Workflow Diagram). The program also seeks to provide training and support to current hospital workers in entry-level positions in these communities (those with at least a year of work experience and positive performance reviews) to help develop their health care careers. Although the BPHWC (2016) coordinates efforts and connects organizations for referral and retention services, it does not have a visible role in assessments; instead, individual providers are presumably responsible for that component.

The SDSC, which was developed by the Safer Foundation, one of the oldest and largest nonprofit agencies connecting people with criminal records to employment programs and services, has a more targeted focus on individuals with

prior criminal justice system involvement. In addition to providing upfront training and credentialing to encourage recruitment prospects, the SDSC serves as an intermediary organization to connect prospective employees with employers. For the assessment components, eligible employers are connected to the tax incentive and federal bonding programs discussed in Section V. In addition, Pivotal Staffing LLC, a Safer Foundation subsidiary, can serve in a contractor capacity for interested employers. As the organization describes, contracting with Pivotal Staffing LLC “gives employers the opportunity to make staffing choices without the liability assumed with direct hiring” to further incentivize employers to hire this population.³⁶ After securing a job, individuals receive ongoing support to encourage retention (Safer Foundation n.d.). Although the BPHWC program receives state funding (Health Services Cost Review Commission 2018), the SDSC is designed to incorporate funders as part of the program model. Since the model spans all three components of the health care employment process, it could be considered both a collaborative and comprehensive model. As of 2019, program staff reported placing close to 150 people in a variety of health care positions (Williams 2019).

The Johns Hopkins Health System’s hiring practices provide another example of a collaborative and comprehensive model. Although the Johns Hopkins model is embedded within a large employer (instead of being led by a community organization, as in the SDSC, or by policymakers, as with the BPHWC), the programmatic components are similar. Johns Hopkins partners with homeless shelters and reentry organizations for referrals, uses

³⁶<https://saferfoundation.org/Workforce-Development/Pivotal-Staffing>

an individualized assessment process to screen conditionally hired individuals, and has a mentorship program to encourage retention. Johns Hopkins is also part of the BPHWC, and similar to BUILD, it can be viewed either independently as a model program or as part of a broader

collaborative. As discussed in the following section, collaborative and comprehensive models present implementation challenges, but also provide unique advantages for improving the link between prospective employees with criminal records and health care employers.

VI. Conclusions and Looking Forward

The rise in available health care jobs requiring a high school diploma or equivalent has coincided with broader worker shortages. The proportion of prime-age adults (mid-20s to mid-50s) in the labor force has been in decline for several decades — particularly for men (Krause and Sawhill 2017). This has partially been attributed to the rapid and drastic growth in incarceration since the 1970s (Binder and Bound 2019; Krause and Sawhill 2017). Although labor market trends and projections focus on the civilian, noninstitutionalized population, individuals with criminal records have lower employment prospects and their removal from the formal labor market has substantially contributed to the overall loss of U.S. workers (Schmitt and Warner 2011). Even with recent reductions in incarceration rates, the population facing restrictions — formerly incarcerated individuals or those who have never been incarcerated but have acquired a felony conviction — is anticipated to increase for several decades (Clear and Frost 2013; Shannon et al. 2017).

Policy initiatives to promote the inclusion of individuals with criminal records in the health care sector can serve several important purposes. Employing carefully screened applicants can provide a stable source of income to people traditionally barred from the mainstream workforce, promote desistance, and lead to public safety benefits (ASPE 2018; Denver, Siwach, and Bushway 2017; Williams et al. 2016). As vacancies in direct care positions continue to grow, expanding the pool of qualified job applicants will be critical for mitigating workforce shortages. Addressing such shortages by proactively training, recruiting, and screening higher numbers of job applicants with criminal records and retaining hired employees over the long term can have the added benefit of diversifying the direct care workforce so that, in some cases, workers better reflect the communities they serve (BPHWC 2016).

A substantial portion of discussions surrounding health care employment for individuals with criminal records focuses on the criminal background assessment piece of the hiring process. Barriers to employment, criminal record stigma, and how employers make decisions are important considerations, particularly in industries with elderly and vulnerable patients and residents. However, for alleviating the longer-term shortage of health care workers (Stone and Wiener 2001), other components of the health care employment funnel also need to be highlighted and addressed. As described in Section IV, among those with conviction records who underwent a state-mandated criminal background check in New York, only 43% ended up working in the health care sector in the three months after the background check. This partially reflects processes in place to screen out individuals

believed to pose an unreasonable risk to public safety, but it also includes those who dropped out later in the process, after securing the direct care job. The attrition is particularly noteworthy because it captures individuals who applied for the health care job, received a provisional offer from an employer, and then passed a state-level criminal background check. In other words, this is a group that appeared to be highly motivated to work in the health care industry (Denver, Siwach, and Bushway 2017), and still had low securement and retention rates. Exhibit 1 is also unable to account for people who never applied in the first place, perhaps due to a “chilling effect” or strategic sorting. In other words, if job seekers are aware that there is a formal criminal background check for a particular job, they may choose to avoid that job (Harris and Keller 2005; Rose 2020). Similarly, exhibit 1 cannot account for those who did not apply due to a lack of interest in (or awareness of) direct care work.

Policy Options and the Case for Collaborative and Comprehensive Models

The following policy options, which synthesize previous sections of the white paper, are categorized under recruitment, assessment, and retention strategies. These recommendations for connecting individuals with criminal records to the direct care workforce consider the different stages of the health care employment funnel, the unique needs individuals with criminal records may encounter, and why a collaborative and comprehensive model might be the strongest defense against the direct care workforce shortage.

New initiatives could be implemented in a piecemeal fashion or as part of a comprehensive approach (i.e., addressing recruitment, assessment, and retention all

at once) and could be driven by a particular stakeholder or a broader collaborative effort of multiple stakeholders, depending on the identified gaps and needs. As a first step, it would be useful for employers, policymakers, community organizations, and other groups to conduct a needs assessment to determine what types of intervention are needed. For example, is only one hospital in a jurisdiction struggling to fill direct care positions, or is the issue widespread? Is initial recruitment a major challenge, or are prospective employees with criminal records dropping out at high rates during the assessment phase or after securing the job? To accomplish this type of needs assessment, employers and policymakers are encouraged to collect and retain data on staffing shortages, both applicants and employees with and without criminal records, assessment decisions, employment outcomes (including reviews, promotions, disciplinary reports, and dismissals), and challenges experienced by their direct care workforce. When a broader problem is identified, such as a geographic area with health care worker shortages across hospitals, a collaborative, multiagency approach might produce larger gains.

Strategies To Improve Recruitment and Increase Referrals

Marketing Campaigns To Promote Direct Care Work

- Although direct care workers provide critical support and assistance and are increasingly needed, these jobs have historically been stigmatized and undervalued (Osterman 2017). Marketing campaigns could improve perceptions and increase recruitment (Engberg et al. 2009). Portraying men and diversity across other demographic characteristics could also alter expectations of what direct care workers “look like.”

Employer Partnerships

- Expanding existing workforce development programs and partnering with community agencies that are already providing services to individuals with criminal records (including training and job placement) can be an invaluable resource (Williams et al. 2016). In addition to creating a pipeline for referrals, employers may feel reassured about hiring someone with a criminal record after a community organization has matched and vetted that person as a prospective employee.
- Employers could also partner with correctional agencies to connect formerly incarcerated individuals who worked in hospice or medical units in prison with direct care work post-release. This group of prospective workers has already been assessed and entrusted with caring for an elderly and vulnerable population and has direct care work experience. To further generate interest in these programs, policymakers could increase wages for incarcerated persons, prisons could expand the number of incarcerated adults with access to such programs, and health care employers could streamline the hiring process for this group.
- Other human services collaborations could also enhance recruitment efforts. For example, some people may opt out of formal work to avoid wage garnishments (Haney 2018), and policies to alleviate support payments may incentivize participation in the formal labor market for this group. An initiative in San Francisco paused certain child support requirements and released driver's licenses that the state had suspended for child support

nonpayment to encourage employment in a transitional job-training program (Bloom and Redcross 2019).

Promoting a Long-Term Referral System

- As individuals with criminal records are increasingly hired and retained over time, employers could encourage word-of-mouth referral systems to promote an ongoing pipeline for health care employment.

Considerations for Criminal Background Check Assessments

Resources and Best Practices

- Although many states and health care organizations already have assessment tools in place, there are resources available for those interested in conducting criminal background checks or altering existing practices (ASPE 2018; EEOC 2012; Williams et al. 2016).
- Decision staff should clean and verify the criminal record information they receive and share the information with prospective employees so inaccurate information can be contested and fixed (Kurlychek et al. 2019; Lageson 2020; Office of the State Comptroller 2017). Employers can design a process that systematically encourages this and provides training to decision-makers.
- Comprehensive assessments that consider multiple pieces of the criminal conviction record in an interactive way are recommended over narrow decision rules (Siwach et al. 2017). Although empirical evidence indicates the type of crime is not a strong predictor of future recidivism, the amount of time that has passed since the last conviction provides useful information (Blumstein and Nakamura 2009a; Kurlychek et al. 2006,

2007); still, this should not be reduced to a binary decision rule. The severity of the record, including patterns of repeat and persistent involvement in the criminal justice system and age at the time of the offense, are other useful predictors (Gendreau, Little, and Goggin 1996).

- Long decision waiting periods may discourage prospective employees, and employers might lose these workers to other job opportunities. Streamlining decision processes and prioritizing quick turnaround times could increase the rate of securing employees who pass the criminal background check. Providing temporary, supervised positions while applicants await results could also be beneficial.

Evidence of Rehabilitation and Risk Mitigation Resources

- Evidence of rehabilitation can theoretically provide an opportunity for people to contextualize the criminal record and can serve as a signal of desistance (Bushway and Apel 2012), but decision-makers should focus on the characteristics of strong signals and evaluate the information in a clear and standardized way. In the only known study of evidence of rehabilitation in a direct care employment context, Denver (2020) did not find any categories of evidence that were negatively correlated with subsequent arrest among those

who contested proposed denial decisions (and one type of evidence — achievement documentation — was unexpectedly positively correlated with future arrests). However, that study also found that people who contested had lower average risk levels than those who did not, and that a two-stage decision process could potentially be used as a sorting process to identify people who desisted (Denver 2020). In other words, the act of contesting may be a strong signal. Employers could partner with researchers to identify useful signals of desistance in their decision context.

- Certain protections and benefits are available to employers that hire individuals with criminal records, including the Federal Bonding Program and Work Opportunity Tax Credit. Employers can seek out these resources individually, or programs can be built into a comprehensive model in partnership with an intermediary organization.

Strategies To Increase Retention

- Training and career path programs can help to advance employee skillsets and increase promotions within the health care sector (Paulk 2016; Snyder et al. 2018). Program components that build in coaches or mentors — particularly when administered through an organization that specializes in services for formerly incarcerated persons or criminal-justice-supervised

Hiring Incentive Programs

For additional information on claiming the Work Opportunity Tax Credit:

<https://www.irs.gov/businesses/small-businesses-self-employed/work-opportunity-tax-credit>

For employers interested in learning more about the Federal Bonding Program:

<https://bonds4jobs.com/our-services/employers>

For job seekers interested in learning more about the Federal Bonding Program:

<https://bonds4jobs.com/our-services/job-seekers>

populations — can provide ongoing support to employees with criminal records as they transition to a new job. This could improve retention rates while also providing assurances to employers.

- Similarly, reentry support services could play a useful role in retention, particularly during the initial transition to a new health care job. As an example, the Safer Demand Skills Collaborative (SDSC) provides community-based wraparound services and transportation assistance (a common barrier for this population; see Chamberlain, Boggess, and Powers 2016) to employees with criminal records.
- Expanding roles for direct care workers and inclusion in medical teams could increase job satisfaction and productivity, with potential long-term benefits for patients (Osterman 2017).

Deciding Between Piecemeal and Comprehensive Approaches

Any of the recommended strategies above could be implemented in isolation or in combination with other strategies. The Baltimore Population Health Workforce Collaborative (BPHWC), SDSC, and hiring practices of the Johns Hopkins Health System (all described in Section V) involve collaborative approaches, and the latter two (which include recruitment, assessment, and retention strategies) would also be considered comprehensive models. There is also the potential for flexibility in leadership with such models. The BPHWC is policymaker-driven, the SDSC is led by an intermediary organization, and the Johns Hopkins approach is managed by a large employer.

A collaborative and comprehensive model for improving health care employment is ambitious. It requires resources, time, and

strong partnerships and may be logistically challenging to execute. Components of holistic programs need to be implemented as intended, and it can be difficult to isolate and evaluate which parts of complex models are the most impactful (Willison 2019). Funding may be a barrier, especially for models that include marketing strategies, front-end training to help with job placements, major structural changes in practices, or ongoing back-end services to improve retention. At the state level, Pohlmann (2003) recommends that state departments, community agencies, health care employers, employees, and other stakeholders join or create a direct care workforce committee for coordinating efforts and strategies. A recent review identified 16 states that have formed such committees since 2003, and observed that they have identified several similar challenges in direct care work employment: low compensation levels, a need for increased training, stigma surrounding the job, limited career development, and a need for stronger data systems (Cook 2019). Such committees could help to adapt and direct multipronged strategies and comprehensive model implementation. Federal funding for a multisite pilot study in states with existing direct care workforce committees — including evaluation of process, impact, cost, and benefits — could shape the direction comprehensive models take. In addition to tracking metrics on recruitment, assessment, and retention, evaluators could also consider reintegration and public safety benefits.

For local jurisdictions unable to adopt a comprehensive approach in the near future, the recommendations outlined in Section V can also be useful in a piecemeal fashion, particularly if employers or communities have identified a specific need. In addition, smaller-scale efforts can help to build evidence about which components are the most effective, and under which conditions. However, as part of a longer-term strategy

to reduce shortages in the direct care workforce and employ individuals with criminal records, collaborative and comprehensive models have the clear advantage of systematically addressing multiple components in a coordinated fashion.³⁷ A recent systematic review on employment and training programs for low-income individuals found that while “no single strategy on its own is associated with substantial gains,” combining intervention strategies “can have positive and significant impacts on outcomes for low-income individuals” (Vollmer et al. 2017, 13).

Future Research Directions

As employers, community organizations, and policymakers move forward with implementing recruitment, assessment, and retention strategies, there are several important areas for future research.

Gauge Interest in Direct Care Work and Recruitment Challenges

- Interviews and focus groups with people who have various levels of involvement with the criminal justice system would help to identify employment barriers and interest in applying for direct care jobs. Conversations with those actively seeking work could also be useful for understanding potential “chilling effects” in industries like the health care sector, which routinely conduct criminal background checks.
- Discussions with community-based organizations could also highlight the challenges that these organizations foresee in the referral process and help to provide estimates of potential applicant pools.

Examine Employer Motivations and Expand Workplace Evidence

- Original data collection with direct care employers could provide additional information on how they perceive applicants with conviction records and whether they screen people out informally (e.g., inquiries before the background check) or discourage prospective employees with records from completing the application process. It would also be useful to examine different features of criminal records, such as the implications of being on probation or parole while applying for a health care job.
- A further investigation of the usefulness of employer incentives, including whether variations in how they work would lead to higher uptake rates in practice (Hunt et al. 2018) and whether there are long-term benefits to employing these strategies, would fill an important research and policy gap.
- Creating data-sharing agreements with researchers could also contribute to further developing assessment guidelines and best practices, including how to best incorporate evidence of rehabilitation into decisions. Access to workplace crime data and internal job performance measures would also enable researchers to expand the evidence base on workplace risk and recidivism.

Explore Retention Rates and Reasons

- Collecting data on people with conviction records who are currently in entry-level and upper-level health care positions, or who used to be in the

³⁷ Policymakers could also consider the Pay for Success contracting model to finance new programs (Hawkins et al. 2017).

health care sector — including reported reasons for staying or leaving — could provide insight into the motivations for this type of work, the benefits and challenges they encounter, and retention strategies.

Test the Effectiveness of Health Care Employment Models

- At the local level, employers and community organizations could partner with outside researchers to conduct a needs assessment, design a logic model, and streamline data collection. The research team could document the implementation process, evaluate the approach, and provide recommendations for improving or expanding the model.
- At the state level, direct care workforce committees could play an instrumental role in conducting needs assessments and coordinating the implementation of statewide efforts.
- At the federal level, funding multisite randomized controlled trial evaluations could encourage program adoption, generate a novel evidence base, and inform future efforts.

Some estimates place the direct care worker shortage at almost 350,000 workers by 2040 (Osterman 2017). Advancing towards a collaborative and comprehensive model for improving health care employment by widely recruiting more applicants with criminal records, identifying suitable employees, and retaining these workers over time has the potential to meaningfully mitigate anticipated workforce shortages. In doing so, employers will also be significantly advancing employment opportunities for a large group of people who have been traditionally overlooked and undervalued, but whom researchers have regarded as potential productive members of the health care workforce (Lundquist et al. 2018; Minor et al. 2018).

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Appendix A. Projected Growth Rates and Features of Direct Care Positions

| | Projected Growth Rate (2019-2029) | Employment Change (2019-2029) | Median Annual Pay (2020) | Common Education Requirements |
|---|-----------------------------------|-------------------------------|--------------------------|---|
| Common Entry-Level Direct Care Positions | | | | |
| Home health and personal care aides | 34% | 1,159,500 | \$27,080 | High school diploma or equivalent |
| Orderlies | 5% | 2,500 | \$30,030 | High school diploma or equivalent and on-the-job training |
| Nursing assistants | 8% | 116,900 | \$30,850 | State-approved education program and on-the-job training |
| Other Direct Care Positions | | | | |
| Medical assistants | 19% | 139,200 | \$35,850 | Postsecondary nondegree award |
| Licensed practical and licensed vocational nurses | 9% | 65,700 | \$48,820 | Postsecondary nondegree award |
| Registered nurses | 7% | 221,900 | \$75,330 | Bachelor's degree |

Source: Author compilation from Bureau of Labor Statistics (2021).

Notes: The median annual wage for jobs requiring the same level of education was \$36,100 in 2017 (Torpey 2019). Although combined in the most recent Bureau of Labor Statistics (BLS) data, home health aides and personal care aides/assistants are differentiated by the fact that the former are required to have Medicare certification and over 70 hours of training, while the latter may need to complete a state certification but do not have to fulfill federal requirements (Osterman 2017, Appendix B). Nursing assistants and orderlies are also classified together in the BLS Occupational Outlook Handbook. Orderlies typically transport patients, clean equipment, and stock supplies. Nursing assistants working in Medicare- and Medicaid-certified nursing homes are required to complete federal training programs (PHI 2011).

Appendix B. Occupational Projections by State (2018-2028)

There are geographic variations in projected health care job growth. According to the Long-Term Occupational Projections (2018-2028)³⁸ supported by the U.S. Department of Labor's Employment and Training Administration, 19 states are predicted to have increases in home health aides, personal care aides, or both that exceed the national average in percent change.³⁹

| Home Health Aides | | | Personal Care Aides | | |
|-------------------|---------|----------|---------------------|---------|----------|
| | Change | % Change | | Change | % Change |
| New York | 140,520 | 65.9 | New York | 124,550 | 55.6 |
| Utah | 2,050 | 55.1 | Colorado | 14,780 | 50.7 |
| Maryland | 3,390 | 43.9 | Georgia | 15,660 | 48.2 |
| Colorado | 4,240 | 43.3 | Utah | 4,340 | 46.6 |
| New Hampshire | 230 | 41.1 | Nevada | 1,790 | 43.8 |
| New Jersey | 17,450 | 40.9 | Tennessee | 10,250 | 42.8 |
| Indiana | 5,590 | 39.1 | Maryland | 6,790 | 41.7 |
| Puerto Rico | 840 | 37.8 | Wyoming | 1,000 | 39.5 |
| Arizona | 190 | 37.3 | Kentucky | 6,960 | 38.3 |
| South Carolina | 3,670 | 36.7 | New Mexico | 10,670 | 37.8 |
| United States | 304,800 | 36.6 | Iowa | 4,330 | 36.9 |
| Tennessee | 1,920 | 36.4 | Virginia | 15,800 | 36.9 |
| Delaware | 590 | 35.5 | Texas | 81,340 | 36.8 |
| Georgia | 4,430 | 35.4 | Indiana | 10,760 | 36.7 |
| Nevada | 150 | 34.9 | United States | 880,900 | 36.4 |
| Montana | 580 | 34.5 | South Carolina | 7,760 | 36.3 |
| Wyoming | 220 | 34.4 | Hawaii | 1,790 | 36.1 |
| Hawaii | 1,740 | 33.9 | New Jersey | 5,870 | 36.1 |
| Virginia | 3,250 | 32.1 | Connecticut | 10,310 | 34.9 |

³⁸ Projections Managing Partnership. 2021. "Long-Term Occupational Projections (2018-2028)." Utah Department of Technology Services. <http://www.projectionscentral.com/Projections/LongTerm>. Accessed April 28, 2021.

³⁹Note that Washington does not appear in the data for personal care aides. States with above-average anticipated percent changes include: Arizona, Colorado*, Georgia, Indiana*, Iowa, Kentucky, Maryland*, Nevada, New Hampshire, New Jersey, New Mexico, New York*, Puerto Rico, South Carolina, Tennessee, Texas, Utah*, Virginia, and Wyoming, where an asterisk denotes that both occupations (home health aides and personal care aides) are predicted to be above the national average.

Home Health Aides

Personal Care Aides

| | Change | % Change | | Change | % Change |
|----------------------|--------|----------|----------------------|---------|----------|
| District of Columbia | 1,880 | 30.6 | Oklahoma | 5,390 | 34.8 |
| Ohio | 17,250 | 30.5 | Delaware | 1,820 | 34.3 |
| Kentucky | 850 | 30.4 | Arkansas | 6,340 | 33.9 |
| Oklahoma | 2,200 | 30.0 | Missouri | 20,650 | 33.0 |
| Oregon | 1,660 | 29.2 | Kansas | 7,370 | 32.9 |
| Iowa | 2,250 | 29.0 | California | 185,300 | 32.1 |
| Pennsylvania | 13,390 | 28.8 | Ohio | 14,870 | 32.0 |
| Arkansas | 1,410 | 27.4 | Vermont | 2,350 | 31.9 |
| Nebraska | 940 | 26.9 | Minnesota | 24,750 | 31.6 |
| West Virginia | 550 | 26.3 | Puerto Rico | 2,000 | 31.4 |
| New Mexico | 1,510 | 25.9 | New Hampshire | 2,810 | 31.2 |
| Idaho | 850 | 25.4 | West Virginia | 4,120 | 31.2 |
| Florida | 8,540 | 25.0 | Florida | 11,650 | 29.9 |
| Alabama | 1,330 | 24.8 | Oregon | 7,540 | 28.5 |
| Connecticut | 1,730 | 24.2 | North Carolina | 9,220 | 28.4 |
| Alaska | 260 | 23.9 | North Dakota | 1,770 | 27.0 |
| Vermont | 150 | 23.8 | South Dakota | 800 | 26.8 |
| Minnesota | 5,310 | 23.3 | District of Columbia | 1,430 | 26.7 |
| Michigan | 6,070 | 22.6 | Louisiana | 9,110 | 26.1 |
| Kansas | 530 | 21.5 | Pennsylvania | 31,170 | 26.1 |
| North Dakota | 140 | 21.2 | Arizona | 530 | 25.4 |
| Washington | 13,370 | 21.0 | Montana | 1,340 | 24.1 |
| Missouri | 2,440 | 20.6 | Michigan | 10,510 | 23.9 |
| Massachusetts | 3,720 | 20.1 | Illinois | 12,370 | 22.3 |
| California | 3,500 | 19.0 | Rhode Island | 1,340 | 21.6 |
| Texas | 13,490 | 18.6 | Wisconsin | 14,030 | 21.0 |
| North Carolina | 5,460 | 17.7 | Alabama | 3,300 | 20.7 |
| Louisiana | 1,350 | 16.8 | Idaho | 2,480 | 19.7 |
| South Dakota | 170 | 16.5 | Nebraska | 1,400 | 19.6 |
| Illinois | 5,550 | 16.0 | Massachusetts | 12,430 | 19.5 |
| Rhode Island | 170 | 14.3 | Alaska | 790 | 14.9 |
| Wisconsin | 590 | 11.8 | Maine | 1,620 | 10.1 |
| Mississippi | 320 | 10.1 | Mississippi | 900 | 9.5 |
| Maine | 110 | 6.0 | | | |

Source: Author compilation from Projections Managing Partnership. 2021. "Long-Term Occupational Projections (2018-2028)." Utah Department of Technology Services. <http://www.projectionscentral.com/Projections/LongTerm>.

About the Author

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