Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.
Review Article

Older Adults Post-Incarceration: Restructuring Long-term Services and Supports in the Time of COVID-19

Nathan A. Boucher DrPHa,b,c,d,*, Courtney H. Van Houtven PhDb,c,d, Walter D. Dawson DPhile,f,g,h

a Sanford School of Public Policy, Duke University, Durham, NC, USA
b School of Medicine, Duke University, Durham, NC, USA
c Durham VA Center of Innovation to Accelerate Discovery and Practice Transformation (ADAPT), Durham VA Health System, Durham, NC, USA
d Duke-Margolis Center for Health Policy, Durham, NC, USA
e Department of Neurology, School of Medicine, Oregon Health & Science University, Portland, OR, USA
f Institute on Aging, College of Urban & Public Affairs, Portland State University, Portland, OR, USA
g Global Brain Health Institute, University of San Francisco, San Francisco, CA, USA
h Trinity College Dublin, Dublin, Ireland

Keywords: Aging COVID-19 prisons

Abstract

Objectives: To describe long-term care services and supports (LTSS) in the United States, note their limitations in serving older adults post-incarceration, and offer potential solutions, with special consideration for the Coronavirus Disease 2019 pandemic.

Design: Narrative review.

Setting and Participants: LTSS for older adults post-incarceration.

Methods: Literature review and policy analysis.

Results: Skilled nursing facilities, nursing homes, assisted living, adult foster homes, and informal care from family and friends compose LTSS for older adults, but their utilization suffers from access and payment complexities, especially for older adults post-incarceration. A combination of public-private partnerships, utilization of health professional trainees, and unique approaches to informal caregiver support, including direct compensation to caregivers, could help older adults reentering our communities following prison.

Conclusions and Implications: Long-standing gaps in US LTSS are revealed by the coronavirus (severe acute respiratory syndrome coronavirus 2) pandemic. Older adults entering our communities from prison are particularly vulnerable and need unique solutions to aging care as they face stigma and access challenges not typically encountered by the general population. Our review and discussion offer guidance to systems, practitioners, and policy makers on how to improve the care of older adults after incarceration.

Published by Elsevier Inc. on behalf of AMDA – The Society for Post-Acute and Long-Term Care Medicine.

The United States imprisons a larger proportion of its population than any other country. With 1,291,000 prisoners in state prisons, 631,000 in local jails, and 226,000 in federal prisons, jails account for approximately 655 imprisoned individuals per 100,000 in the US population. The fastest growing segment of the incarcerated population is older adults who are often living with multiple chronic medical and cognitive challenges. In 2018, 3% of all incarcerated persons in federal and state prisons were 65 and older and 10% were 55 and older. The number of adults 55 and older in state and federal prisons increased by 280% from 1999 to 2016, while the number of younger adults grew by 3%

Gender and race add additional considerations to this issue. Overall, only 7.4% of the incarcerated population is female. Of all sentenced prisoners in 2018, 32.9% were Black, 23.3% were Hispanic, and 30.4% were White non-Hispanic. The US population overall is 12% Black, 18% Hispanic, and 60% White non-Hispanic. Thus, the proportion of incarcerated persons who are Black is 3 times their presence in the US population.

The authors declare no conflicts of interest.

* Address correspondence to Nathan A. Boucher, DrPH, Duke University, 201 Science Dr, Durham, NC 27708, USA.

E-mail address: nathan.boucher@duke.edu (N.A. Boucher).

https://doi.org/10.1016/j.jamda.2020.09.030

1525-8610/Published by Elsevier Inc. on behalf of AMDA – The Society for Post-Acute and Long-Term Care Medicine.
Prison accelerates aging such that the prison population develops chronic illness 10 to 15 years earlier than community counterparts. Incarcerated persons can be considered an “older adult” by age 55. Contributing factors, largely predating sentencing in these disenfranchised populations, are substance use, inadequate preventive care, mental illness, and the additional stress of being incarcerated. More than 600,000 individuals are released from state and federal prisons each year and more than 60,000 of them will be age 50 or older. These released older adults leave prison in worse health than when they arrived and in worse health than community-dwelling persons of the same age. Despite the growing number of older incarcerated individuals and their potential impact on the health of society, little has been done to research optimal approaches to care once they are released.

Firm data on the full extent of health status disparity is scarce, but one Texas study found that incarcerated persons 55 and older used an average of 7.3 prescription medications, which is higher than for nonincarcerated Americans of the same age. Inmates often have their necessary medications stopped once out of the care of the prison system, including 25% of chronically ill state prisoners and more than 36% of all local jail inmates. Regarding neurocognitive disease (such as dementia), the Alzheimer’s Association indicates dementia prevalence in the general population will be increasing from 1.7% in 2009 to 1.9% in 2030 and then 2.6% in 2050. Based on this, inmates with dementia may increase to approximately 127,130 in 2050. Furthermore, according to a recent systematic review, reentry planning for older incarcerated persons is “sparse and the outlook is grim, given that many are released to urban communities characterized by health disparities and inadequate health care resources.” And yet, there is strong evidence that optimal utilization of health-related services is linked to improved health outcomes, lower recidivism (re-incarceration), and improvements in housing, employability, and support provided through families.

Recently released older adults, given high rates of health problems and chronic conditions, may simultaneously face both a great need for access to routine and acute health care, as well as an accelerated need for long-term services and supports (LTSS) for their age. A lack of insurance and potential discrimination may complicate their difficulty in obtaining continuity of care and medication on release. The challenges they face are further exacerbated by the introduction of severe acute respiratory syndrome coronavirus 2 [SARS-CoV-2; or Coronavirus Disease 2019 (COVID-19)] into prisons and the community alike; with confined space and limited health care in prison, and little community support, stigma, and high-risk due to age in the community. We explore these emergent challenges and offer recommendations focused on community-based supports and funding restructuring for older adults that policymakers should consider to better support the LTSS needs of older adults post-incarceration in the United States.

**Coronavirus Disease 2019**

Older inmates and those with multiple chronic illnesses are at particular risk of death or complications from COVID-19. Aging inmates have higher rates of cardiovascular disease, diabetes mellitus, and mental illness compared with nonincarcerated older adults. Further, the incarcerated population is disproportionately made up of individuals of ethnic and racial minority groups and individuals of low socioeconomic status (SES). These same populations also are disproportionately affected by COVID-19 compared with other populations in terms of complications, hospitalizations, and death. In fact, many people in prisons and jails are in relatively poor health, which existed before their sentencing due to poverty and continued due to sometimes substandard prison health services. Harsher sentencing in recent decades has led to an aging prison population in poor health: a constellation of vulnerability in the context of COVID-19.

Infection control is a challenge in prison settings due to confined space and restricted movement, compounded by often suboptimal medical care provision; however, contrary to thinking of prisons as enclosed spaces, staff, vendors, and visitors can introduce the COVID-19 virus to inmates. In addition, inmates themselves often travel to and from prisons for medical and legal activities. Viral exchange between inmates and the wider community is possible. Responses to mitigate this risk, such as confining inmates to their cells, which are often shared, could amount to solitary confinement, a cruel approach that goes above and beyond the original legal sentence. Other responses to reduce the spread of infection include the suspension of prison visitation, limiting visits from legal representatives, and reductions in facility transfers for incarcerated persons.

The number of confirmed cases has continued to rise: by September 8, 2020, at least 121,217 people in prison had tested positive for the illness, a 5% increase from the week before. Early release is another approach to mitigate COVID-19 transmission, but is controversial due to real and perceived risks to communities, such as recidivism or a perception of punishments not being delivered to their fullest. However, large-scale releases have occurred successfully in the past in the United States and internationally, in both adult and youth populations. State and local authorities are determining approaches to early releases, and there is limited systematic testing of prison staff. The Federal Bureau of Corrections has also expanded early release programs by transferring prisoners to home confinement in an attempt to stop the spread of infection; however, without ubiquitous and systematic testing of wardens, staff, or inmates, it is unclear how prisons and jails will mitigate risks in the months ahead.

Recently, the COVID–19 Correctional Facility Emergency Response Act of 2020 was introduced in Congress and proposes to provide transition and reentry support services to individuals released. This combined with the Bureau of Prisons compassionate release guidelines could be further targeted to the aging prisoner. Compassionate release includes the following medical criteria (must meet all) for prisoners: (1) suffering from chronic or serious medical conditions related to the aging process; (2) experiencing deteriorating mental or physical health that substantially diminishes their ability to function in a correctional facility; and (3) experiencing conditions for which conventional treatment promises no substantial improvement to their mental or physical condition. In addition, older decarcerated individuals are far less likely to recommit crimes compared with younger releasees and, in the case of violent offenders, older releases are less likely to recommit crimes.

Released persons should be assessed for LTSS need and ability to access care. Accelerating early release of older persons and/or those living with serious illness could substantially reduce COVID-19 transmission and save lives, but transitions of care are essential either way to optimize outcomes of released vulnerable older adults and adults with serious illness and/or disability. Assessment would include assistance with applications for Medicare, Medicare Advantage (ie, additional social care services), and state Medicaid coverage to bolster their resources for self-care, a transition that should ideally begin before release.

Recently released persons are eligible for the Health Insurance Marketplace provided via the Affordable Care Act, but again, processing these applications before release is critical for older adults between 55 and 65 years of age to allow a seamless transition to the community. With the enhanced access that insurance coverage ensures, the released persons should then be matched with appropriate support.
LTSS to meet their needs. Transition clinics have been successful in matching released persons with chronic disease care, and modifications could be based on this prior evidence for persons with LTSS needs.33,34 The incarcerated population with disabilities and LTSS needs is unable to thrive post-incarceration without help with their chronic conditions and/or assistance to perform daily activities of life.11

We describe the types of LTSS that should be considered in a comprehensive transition plan, including the key public payers that cover LTSS. Although barriers to entry for these services exist for many, criminal records, aging bodies, and deficits in personal networks experienced by our described population (ie, those older adults entering the community following prison) compound those barriers.

**Skilled Nursing Facilities and Nursing Homes**

*Payers: Medicare, Medicaid*

Medicaid is the primary payer of health care and LTSS for individuals newly released from incarceration while on probation and parole. Medicaid programs in several states work directly with correctional agencies on their reentry programs allowing individuals Medicaid coverage on release including LTSS.35 Given the federal entitlement to Medicaid-funded services in nursing homes, nursing facilities are the most likely licensed care setting in which a newly released individual will obtain LTSS. Although these individuals may also be Medicare eligible due to age or disability status (so-called dual eligibles). Medicare coverage of LTSS is limited to just 100 days of post-acute care (eg, following a minimum 3-day hospital stay). As such, Medicaid is the default option for ongoing LTSS. In many states, due to their Medicaid programs reliance and spending on institutional care rather than home and community-based services (HCBS),36 nursing homes may effectively be the only LTSS option available for individuals newly released from incarceration.

**Assisted Living and Adult Foster Homes**

*Payers: Medicaid, Private Pay*

Community-based care settings also provide an important source of care for recently released older adults; however, there are many barriers to wider access to LTSS for former inmates in these settings. Noninstitutional care settings, such as assisted living and adult foster (or group) homes, fall largely outside of federal regulation despite efforts by the Centers for Medicaid and Medicare Services (CMS) to add some regulation of Medicaid-funded HCBS.37 State governments have almost exclusive regulatory oversight for these settings, which differs from nursing facilities where there is considerable joint state and federal jurisdiction.38

Medicaid remains an important and growing payer of HCBS. For example, Medicaid is the payer for as many as 20% of all US assisted living residents and 42% of all US assisted living buildings have a Medicaid contract in place affording them the option to accept Medicaid residents.39 Medicaid access in assisted living varies widely across the states; in Oregon, for example, Medicaid now covers 40% of all assisted living residents’ care, whereas several states provide little or no Medicaid coverage of assisted living.40 With substantial variation by state in the use of Medicaid to partially cover assisted living care costs (eg, via Medicaid waivers), and some assisted living facilities not accepting Medicaid beneficiaries even when their state allows it due to low reimbursement, recently released individuals may be unable to access this source of LTSS.41,42

Private pay residential care is likely out of reach for many newly released individuals, as well, given the high costs: average cost per annum is approximately $48,600. This figure may not fully account for all residential care costs, as this may exclude additional supports and services particularly for individuals with higher acuity.43,44 Many states, however, do offer Medicaid-funded HCBS. Most Medicaid LTSS dollars are now spent on HCBS rather than nursing facilities,45 but the amount varies widely by state. States can offer special Medicaid contracts to provide enhanced levels of care for complex, high-acuity populations such as former prisoners. Accessing this source of care also requires a stable housing situation and often requires an informal caregiver in the home to supplement the care provided formally through Medicaid. Yet, access to stable housing is often difficult for older, formerly incarcerated individuals, who experience the highest rate of housing insecurity of any group.46 The formerly incarcerated are almost 10 times more likely to be homeless than the general US population; this is driven by stigma and public housing authorities’ and private property owners’ discrimination combined with affordable housing shortages.45,47

Relatively small nonmedical residential homes, sometimes referred to as adult foster homes, offer one potential option in the disjointed network of LTSS for older reentering individuals.48 Often, these providers are operating out of their own homes, taking only a few individuals under their care at a time.49 Oversight of this type of care varies, but is largely overseen at the state level except in the case of Department of Veterans Affairs (VA) medical foster homes for veterans.50 Expansion of VA and other state models of this type of homelike care to older or non-veteran populations could be beneficial, but limited in their ability to serve a large population in one geographic area.

In the context of COVID-19, telehealth use has generally increased through a combination of loosened regulation and enhanced reimbursement from payers coupled with the need to provide care at a distance.52 There is some indication that older adults were ready to engage with the telehealth mediums,51 and recent experience during the pandemic has likely increased this. However, decarcerated persons will likely need stable domiciles and other solid supports in their lives (eg, Internet access and devices) before they can take advantage of telehealth.

**Informal Care**

*Payers: Families and Friends, Medicaid Through Home- and Community-based Waivers*

Informal caregiving, usually provided by family and friends, is an unseen aspect of health care delivery in the United States. Like other populations of older adults with LTSS needs, decarcerated persons may only have access to “informal care” for daily assistance, that is, care provided by a family member or friend who is typically unpaid and untrained to respond to a care recipient’s needs.52,53 For example, in 2016, nearly three-quarters of older adults living with a disability (defined as needing help with at least 2 instrumental activities of daily living or activities of daily living) received informal care; just over one-third of them used formal home care.54 Yet, depending on family structure and housing stability of released persons, the arbitrage of these informal sources of care is not well established. There is some indication that care for decarcerated persons commonly is delivered through a loose network of community health workers, case managers, and acquaintances when family is unavailable (Jimenez et al, 2020, under review).55 More data are needed to adequately describe informal caregiving in this population.

Better support of caregivers, who report financial, emotional, and physical strain related to their caregiving role,56,57 can lead to improved home care for older adults, an increasing concern for our aging population. Better care at home for older adults can avoid unnecessary or undesired hospitalizations, may reduce overall health care costs, and align care with individuals’ preferences.58 Programs
Caregiver Support

Caregiver education and supports have been shown to have a positive effect on caregiver well-being as well as the well-being of individuals they care for. Providing education and training tailored specifically to caring for someone post-incarceration could help to reduce caregiver burden among this population. Several states have invested in caregiver training programs and could expand their offerings to include this population. These trainings are often already Web-based, provided remotely, and would be easy to expand during the COVID-19 pandemic. In addition, navigation of existing LTSS resources directed at caregivers may prove helpful; care navigation using both human navigators and online resources is an emerging strategy. Programs focused on supporting caregivers of older adults post-incarceration, specifically, are lacking. Encouraging federal funds (ie, National Institutes of Health) to explore feasibility and efficacy of such programs could go a long way toward meeting the LTSS needs of this underserved group. Learning from state Medicaid waiver programs that allow payments to caregivers could inform a model of care for decarcerated older adults with LTSS needs.

Direct payment to informal caregivers could help. Models for this exist in the VA, where caregivers of qualifying veterans can receive a monthly stipend to compensate them for the direct and indirect costs of caregiving. Another promising remedy is the use of Medicaid HCBS Waiver programs that are consumer-directed. Specifically, in nearly two-thirds of all states, it is possible for Medicaid beneficiaries with home care needs to pay a family member or friend rather than formal home health agencies or individual providers. Although several states pay family caregivers to provide care if the person in need of care is Medicaid eligible, some states, such as Hawaii, also provide financial support to family caregivers regardless of financial need. States that expand Medicaid payment of family caregivers could potentially take advantage of federal matching funds of at least 50 cents per state dollar allocated. These approaches would provide much needed financial support to families and friends of older adults who need LTSS on reentry to the community.

Conclusions

The coronavirus pandemic has revealed long-standing gaps in US LTSS. Older adults returning to our communities from prison are yet another group entering this fractionated and underfunded area of the care continuum who have additional barriers to overcome not faced by the general population.

Skilled nursing facilities, nursing homes, assisted living, adult foster homes, and informal care from family and friends comprise the potential LTSS options but are hampered by access and payment complexities, especially for older adults post-incarceration. A combination of public-private partnerships, utilization of health professional trainees, and unique approaches to informal caregiver support (Figure 1) could improve the chances of successful transition and offer a higher quality of life for this underserved and stigmatized group.

There is an interrelation of correctional-system health, public health, and long-term care services and supports for older adults. Yet, there is a major knowledge gap about older adults who are decarcerated due to a lack of data, including on rates of informal care and LTSS utilization after release. We must first fill this knowledge gap to serve this population better. Between these LTSS components, and along the continuum from prison to community, there are multiple opportunities improve the welfare of this important group of older adults who need LTSS.
