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Authors
Williams, Brie A
Stern, Marc F
Mellow, Jeff
et al.

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Aging in Correctional Custody:

Setting a policy agenda for older prisoner health care

Brie A. Williams, MD, MS[1, 2]
Marc F. Stern, MD, MPH[3]
Jeff Mellow, PhD[4]
Meredith Safer, MPH[5]
Robert B. Greifinger, MD[6]

Author Affiliations
[1] Division of Geriatrics, Department of Medicine, University of California, San Francisco, San Francisco, CA
[2] Division of Geriatrics, San Francisco Veterans Affairs Medical Center, San Francisco, CA
[3] School of Public Health, University of Washington, Seattle, WA
[4] Department of Criminal Justice, John Jay College of Criminal Justice, City University of New York, New York, NY
[5] USAID, Liberian Ministry of Health & Social Welfare
[6] Center for Evaluation and Research, John Jay College of Criminal Justice, City University of New York, New York

Corresponding Author
Brie Williams, MD, MS
Division of Geriatrics, University of California, San Francisco
3333 California Street
Suite 380
San Francisco, CA 94117
Phone: 415-514-0720 Fax: 415-514-0702
Email: brie.williams@ucsf.edu

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Abstract

An exponential rise in the number of older prisoners is creating new and costly challenges for the criminal justice system, state economies and communities to which older former prisoners return. We convened a meeting of 29 national experts in correctional health care, academic medicine, nursing and/or civil rights to identify knowledge gaps and to propose a policy agenda to improve the care of older prisoners. The group identified nine priority areas to be addressed including: defining the “older prisoner”, correctional staff training, defining functional impairment in prison, recognition and assessment of dementia, recognizing special needs of older women prisoners, geriatric housing units, issues for older adults upon release, medical early release, and prison-based palliative medicine programs.

Introduction

Among Western nations, mass incarceration is a uniquely American experience.[1] At the U.S. prison population's zenith in 2008, one in every 100 American adults was incarcerated, with an incarceration rate of 756 per 100,000 persons.[2,3] This rate surpasses that of Russia, which has the next highest rate at 629 per 100,000 persons.[3] Perhaps more surprising than the sheer number of Americans who are incarcerated is the changing demographics of the prison population; the most rapidly growing prisoner age groups are middle-aged (45-54 year olds) and older adults (55+ year olds).[4] Between 2000 and 2009, the overall U.S. prison population increased 16.3% while the number of older prisoners (aged 55 or older) increased 79.0%.[5,6]

Through the 8th Amendment to the US constitution (which protects against cruel and unusual punishment), prisoners have a right to timely access to an appropriate level of care for serious medical needs.[7] Yet, healthcare and service providers in the criminal justice system are underprepared to provide cost effective quality care for older adults. Older prisoners disproportionately account for escalating correctional healthcare costs and create new and costly challenges for the criminal justice system. Prison-based healthcare systems increasingly must provide care to older persons with multiple, costly chronic medical conditions, such as diabetes, heart failure, cognitive impairment and end stage liver disease.[8-10] Older prisoners also have higher rates of disability compared to younger prisoners and their costs are approximately 3 times higher.[9,11] In addition, older prisoners may generate high "hidden" costs. For example, prisons built with the intention of housing younger persons may need to be renovated or rebuilt to accommodate an increasing number of older prisoners with disabilities.

Beyond legal and moral arguments for attention to the healthcare needs of older prisoners, there are other benefits to society. More than 95% of prisoners are eventually released to the community.[12] Many of these have chronic medical conditions and rely on expensive emergency services or are hospitalized after release.[13] Earlier identification and attention to age-related disabilities and chronic disease can improve the potential for independent function in the community through the use of community health care resources. Further, prison programs that improve health and cognitive skills or target substance abuse have been associated with decreased recidivism (and re-arrest).[14] In addition, jails and prisons are an important site to deliver needed medical care to vulnerable populations with infectious diseases such as HIV, tuberculosis and Hepatitis C. Thus, given the increasing number and associated costs of older prisoners, our constitutional obligation to provide medical care to prisoners, and the potential benefits to society, it is critical that a policy agenda be set to improve older prisoner healthcare. This policy agenda can be advanced through efforts of public policy makers, correctional administrators, health professions organizations and correctional health care organizations.

In this context, we convened a roundtable meeting in 2011 at John Jay College of Criminal Justice in New York to identify special considerations for the care of older prisoners, to propose a set of priority areas that need to be addressed in a new policy agenda, and – when appropriate – we identified important gaps in knowledge that should be addressed in order to better inform a policy agenda. This meeting was the third in a series of roundtable discussions that brought U.S. private and public-sector correctional health care leaders together with leaders in academic medicine, nursing

and civil rights to discuss topical issues in prison healthcare where there are no existing standards. Discussion focused on the development of action items and/or standards through group consensus. The Jacob & Valeria Langeloth Foundation funded the public–private symposia, with co-funding from private correctional health care vendors and in-kind contributions from John Jay College of Criminal Justice. The first and second symposia (described elsewhere) addressed patient safety and challenges in contracting for correctional health care services.[15,16]

Methods

Participants

We selected participants for the invitational symposium for their experience and/or knowledge about prison healthcare, geriatrics, and/or palliative medicine. A total of 29 national experts (19 men and 10 women) participated, including prison-based providers and/or academic physicians, and prisoner advocates. The group consisted of 9 chief medical officers employed by public or private correctional health care providers; 5 independent medical or psychology/psychiatry experts; 5 academics; 2 prisoner advocates; and 2 foundation officers. There were 14 physicians, 2 psychologists, 1 nurse, and 3 lawyers.

Development of action items to set research and policy agenda

The goal of the symposium was to produce a list of action items that can be pursued to advance a policy agenda to optimize older prisoner health care. Participants, sharing their unique perspective on aging and correctional health care, deliberated until a consensus developed about nine priority areas and related key considerations. Participants then discussed the state of knowledge in each of the nine priority areas and

formulated a list of action items for each priority area.

Results

Priority areas for a policy agenda

Through consensus, roundtable participants identified nine priority areas for a policy agenda related to older prisoners, discussed the current knowledge base in each one and identified important gaps in knowledge that should be addressed to move forward policy. A list of specific action items for each priority area is shown in Table 1.

1. Define the "older prisoner"

While the prison population is rapidly and steadily aging, a consensus as to at what age a prisoner becomes "older" or "geriatric" has not been reached.[17] The National Institute of Corrections and several research studies define older inmates as those that are age 50 years or older.[18] Other research studies and the Bureau of Justice Statistics (BJS) have used 55 years, although starting with the 2007 prison census data the BJS began to report the number of prisoners in age groups 55-59, 60-64 and 65 or older.[19] Operationally, the definition of an older prisoner varies by state with starting ages ranging from 50 to 70 years. In some states, no official age is designated.[4]

The definition of 'older age' among prisoners is further blurred by a common differentiation that is made between an inmate's chronological and physiological age. Although empirical evidence for an "accelerated aging" of prisoners is lacking, many estimate that the average prisoner's physiologic age is 10 -15 years older than their chronologic age.[11,17] This difference is attributed to factors both prior to and during incarceration.[20] In addition to stress factors during incarceration, factors prior to prison include inadequate access to medical care and poor lifestyle habits including substance

abuse. Consequently, while experts generally agree that the phenomenon of a rapidly aging prisoner population needs to be addressed, the lack of standardized and comprehensive data, specifically about health care conditions and the costs associated with older prisoners, poses a problem in the implementation of evidence-based solutions to increase cost-effective, quality care.[17,18]

Therefore, roundtable participants agreed that a consistent, national definition of the “older prisoner” is of paramount importance. A clear age cut-off for defining “older prisoners” would enable researchers to more consistently describe the population across facilities and would enable policy experts to better quantify health care and custodial costs for this high intensity population. Additionally, a consistent definition would facilitate the creation and assessment of guidelines to target screening and interventions in an effort to lower costs while enhancing the quality of care for older prisoners. To be consistent with data cutoffs reported by the Bureau of Justice Statistics, we recommend defining “older” or “geriatric” prisoners as age 55 or older.

Roundtable participants also emphasized that chronological age is important only insofar as it is a surrogate measure of vulnerability and high health care costs, but that it is not always the optimal proxy measure. For instance, a 30 year old quadriplegic may have far more functional impairment than a healthy 68 year old and a 50 year old with a history of traumatic brain injury may have more cognitive deficits than most 65 year old prisoners. For this reason, roundtable participants emphasized the need for a measure of age-related vulnerability that focuses on functional and cognitive status rather than on age alone.

2. Train staff and healthcare providers in aging

According to roundtable participants, the increasing numbers of older prisoners should prompt prisons to offer staff training in the common health conditions and needs of older adults. In 2008, the Institute of Medicine's *Retooling for an Aging America: Building the Health Care Workforce* report found that healthcare and service providers from many professions are underprepared to care for older adults, including those in the criminal justice system.[21] Although few geriatrics training programs exist for non-healthcare providers within correctional systems,[22] both correctional healthcare providers and correctional staff have requested training in geriatrics.[23]

Roundtable participants therefore recommended that existing geriatrics training programs for healthcare providers should be adapted to correctional healthcare settings and more training programs for custody staff should be developed and implemented. In particular, custodial staff (correctional, parole and probation officer) training programs should focus on familiarizing officers with: (1) common normative age-associated conditions (such as vision loss and hearing deficits); (2) common pathologic age-associated physical conditions (such as falls and incontinence); (3) common age-related clinically-diagnosed cognitive conditions (such as dementia and delirium); (4) the challenges that all such conditions can pose in the custodial setting; and (5) ways to identify patients who need rapid assessment by a healthcare provider. As an example, such training could help officers recognize that an older prisoner who seems to be disobeying orders may actually have a hearing impairment, and prompt officers to seek a medical evaluation for the prisoner.

3. Define prison-based functional impairment

In the community, functional impairment, the inability to perform the daily physical tasks which are necessary for independence, is commonly measured by assessing independence in Activities of Daily Living (ADL: bathing, dressing, eating, toileting, transferring). Moderate-level functional impairment in community-dwelling older adults is generally measured using Instrumental Activities of Daily Living (IADL, such as ability to cook, take transportation, shop and do laundry). Many of the tasks that are fundamentally necessary for independence in prison are similar to those in the community - such as the ability to feed oneself, toilet and transfer from bed to chair. In contrast, prisoners may not require the ability to perform some of the IADL tasks that are required of many independent elders in the community (such as shopping or doing laundry). However, in prison there may be other unique tasks that are necessary for independence. One study identified examples of prison-specific daily tasks which may include the ability to get from one's cell to the dining hall on time for meals, the ability to climb on and off one's assigned bunk, the ability to hear orders from staff, or the ability to get down on the floor for alarms.[24]

Roundtable participants underscored the importance of defining those activities of daily living that are necessary for independence in prison. Recognizing that such tasks may differ according to the facility or level of security in which a prisoner is housed, roundtable participants recommended that each facility create a list of the activities necessary for independence in each of their housing units and use these lists as a way to risk stratify older prisoners in need of additional supervision and assistance.

4. Screen for Dementia

In 2000, the World Health Organization (WHO) estimated dementia to be the 11th leading non-fatal burden in the world.[25] In addition to memory loss, symptoms of dementia can include personality changes such as attention deficits, hallucinations, delusions, hypersexual behaviors, agitation and aggression. Yet there are very few studies assessing the prevalence of dementia among prisoners, especially in the U.S. Study prevalence estimates range from 1% to 30% and have been limited by small sample size, selection bias and non-standardized assessment tools.[26-29] Given the aging of the prison population and a high prevalence of common risk factors for dementia among prisoners (such as Traumatic Brain Injury, low educational attainment, and drug and alcohol abuse),[17,30-32] coupled with data from preliminary studies,[10,33] there is good reason to believe that the prevalence of cognitive impairment among older prisoners is high.

The prevalence of dementia in prisoners is critical information that could be used to inform criminal justice health care policies. Dementia is one of the leading contributors to high healthcare costs.[34-36] Additionally, cognitive impairment – especially if unrecognized - could have devastating effects in the criminal justice setting including unwarranted disciplinary actions for events related to poor judgment, victimization, or decreased success complying with complex parole instructions. Cognitive impairment could also be harder to detect in prison given that many daily tasks, such as laundry and cooking, are done for prisoners and still other more complicated tasks such as balancing finances are not necessary at all. For these reasons, roundtable participants

advocated for cognitive screening upon intake for all older prisoners and annually for prisoners who age while incarcerated.

Yet there is little known about which cognitive screening tools are best for use in prisoners. For example, while the Mini-Mental State Examination (MMSE)[37] has been tested in many sub-populations including those of lower socioeconomic status and can be adjusted to account for low educational attainment, the Montreal Cognitive Assessment cognitive screening tool (MoCA)[38] includes more questions related to executive dysfunction, which may be a particularly salient feature to measure in prisoners. Roundtable participants agreed that cognitive screening tools that are used in the community may not perform as well in prisoners for a variety of reasons, including the presence of lower educational attainment and lower literacy in prisoners compared to the general U.S. population. Participants also agreed that there is a dearth of conclusive evidence to suggest which dementia screening tool is best for use in prisoners. As a result, round table participants suggested that a major goal of prison-based health research should be to establish effective cognitive impairment screening tools in the prison population.

Once the optimal cognitive screening tools for prisoners are established, roundtable participants identified many potential strategic uses for screening results. At the individual level, such uses include decisions related to classification and housing assignments, programming, chronic care health treatment and discharge planning/parole supervision. At the system level, such information will be helpful to develop predictors of high cost amongst older prisoners and improve criteria used in release and parole decisions. Future research should also examine potential “adverse

events" of screening, such as stigma or vulnerability associated with being identified as a prisoner with a deficit and the potential for parole denials.

5. Identify the needs of older women prisoners

The proportion of incarcerated women has grown quickly over the past several decades, although the incarceration rate of men (949 per 100,000) still far surpasses that of women (67 per 100,000).[6] At the same time, the incarceration rate for women 55 years of age or older has increased at a faster rate than that for younger women.[39] Currently, women account for 5% of the total prison population aged 55 years or older.[6] Although there are still far fewer women than men prisoners, these demographic trends have important implications for the criminal justice health care system. However, likely because women have historically comprised only a minority of prisoners, and because older women are but a small, if growing, subset of the female prison population, there is a paucity of literature on the health of older women prisoners.[17,39]

What is known is that women in the U.S. on average live longer and report worse self-rated health than men.[40,41] Similarly, one study found that self-rated health was worse among older female prisoners than among older male prisoners.[41] In addition, older age is among the strongest predictors of health care utilization in prison, and women prisoners of all ages have been shown to use health care services more frequently than men.[18,42] Thus the higher rates of diagnoses found in women prisoners of all ages[43] may at least partially reflect increased contact with the health care system.

Roundtable participants agreed that, given the increasing number of older women prisoners, there is a need for expanded research on older women prisoners that

would lead to better guidance on the unique health and social issues that might affect this population.

6. Create uniform policies for geriatric housing units

One of the largest challenges for the criminal justice system is how to adapt prison facilities that were originally designed for younger persons to accommodate an aging population. Often, facilities cannot accommodate wheelchairs or walkers. The Americans with Disabilities Act does not have any requirements for correctional facilities. However, there is a provision that prisoners with disabilities cannot be segregated and cannot be denied access to activities or services.[44,45]

One solution is specialized facilities, often referred to as "geriatric units." Such specialized facilities, which are intended for use only by frail older adults or disabled younger adults, differ by prison but might include, for example, all lower bunk beds, handrails, and ADA-accessible ramps and showers. Such "geriatric" units constitute a large upfront investment, yet proponents argue that by centralizing aging populations, prisoner safety is enhanced and care is easier and less costly to provide.[44] Others argue that moving aging prisoners to a separate facility will remove them from their established prison social networks and make adjustment, once released, more difficult.[11]

Although forcibly separating people because of their disabilities is an ADA violation, clustering older adults in a model similar to that found in long term care facilities (nursing homes) may be appropriate if it is available to prisoners as a choice. However, there are both potential benefits and harms of clustering older prisoners together in housing units. Aggregating older prisoners into living quarters with greater access to assistance, supervision, and healthcare could help to target services and

medical care programs to those prisoners at most risk of adverse health outcomes.[44] In turn, this could decrease cost by streamlining staff, improving chronic disease management, and decreasing hospitalizations.[44] There are also drawbacks to clustering older prisoners. For instance, older prisoners are often regarded as a stabilizing force in general prison population.[46] Additionally, there are many reasons that older prisoners may not want to be segregated by age.[11] For example, they might have to leave friends or family in the general prison population or they might enjoy interacting with younger prisoners. Therefore, roundtable participants agreed that age-clustering can be beneficial in some circumstances, but recommended against policies which ignore prisoner preference.

Roundtable participants called attention to the many physical changes that will be necessary for prisons to make in the years to come. For example, an increasing number of older prisoners will require 24-hour nursing care and more ADA-accessible housing and recreation spaces. Additionally, more prisons will need to develop plans for a continuum of care that runs the gamut from community independent living to assisted living facilities to skilled nursing care. Given the limited numbers of 24-hour care housing units and the high costs associated with such care, roundtable participants also underscored the importance of developing validated criteria for long term care classification. Such classification schema still needs to be developed and validated but might include patient preference, functional and cognitive assessments and/or interdisciplinary assessment. Finally, participants agreed that all new construction should take into account the aging population and consider age-friendly architectural

details such as low beds and toilets, wide doors for wheelchairs and assisted devices, and proximity to the dining hall.

7. Identify release and reentry challenges for older adults

Given high rates of mortality, homelessness, re-incarceration for parole violations and high use of emergency medical services following release,[13,14,47,48] a fundamental goal of any criminal justice policy agenda should be to determine how best to help individuals plan for, and manage, their healthcare needs upon community reentry. For instance, given high rates of multiple comorbidities in older prisoners and high rates of post-release mortality in comparison to younger prisoners,[47,48] specialized services may need to be developed for particularly frail or medically complex older persons upon release.

Post-release transitional healthcare programs have been developed and implemented in several communities and have been particularly successful at enhancing access to medical care and reducing emergency department visits for chronically ill recently released prisoners.[49,50] In addition, studies suggests that self-efficacy for health management among older prisoners is positively correlated with health promoting behaviors (e.g., taking safety precautions, exercising and avoiding smoking)[51] such that self-efficacy might be an important educational component of effective reentry programs. Furthermore, prisoners have the nation's lowest literacy rates.[52] Given the association between low health literacy and mortality among older adults,[53] a focus on health literacy could be another critical component of successful reentry programs. Roundtable participants agreed that more research is needed to

understand the role of transitional programs in improving outcomes for older persons after release with a special focus on those who are cognitively impaired.

8. Improve medical release policies

Medical release policies focus on prisoners whose age and/or health limit the risk they pose to the community. Releasing these prisoners has the potential to save correctional departments substantial amounts of money.[54] At the end of 2009, 15 states and the District of Columbia had provisions for geriatric release.[4] These provisions vary by state and include discretionary parole, inmate furloughs, and medical or compassionate release. However, early release mechanisms are rarely used, eligibility requirements are narrow and vary by state, application procedures may discourage older prisoners and, as a result, few prisoners are granted early release.[4,18,55] For example, Colorado released three prisoners under its policy from 2001 to 2008. As of 2009, Oregon had released no more than two prisoners per year. From 2001 to 2007, Virginia released four inmates.[4]

Roundtable participants agreed with others who have called for the creation of uniform, transparent medical eligibility criteria for compassionate/medical release that reflect the ways that people experience serious medical illness and death, including progressive frailty and dementia.[55] In addition, participants agreed that policy reforms are needed to address procedural barriers that could prevent older prisoners from accessing the application process, such as written requirements (which could have a negative impact on those with low literacy) or systems that require a prisoner to initiate the petition (which could exclude prisoners with dementia).[55] Policy in this in this area should address the barriers to accessing early release when medically appropriate.

9. Enhance prison-based palliative care programs

Because many older adults will develop a serious medical illness and die in prison but will not qualify for early release, there is a great need for enhancement of prison-based palliative care services. While there are several notable, well-established, and successful prison-based Hospice models across the U.S., prison-based palliative care programs that focus on preventive and diagnostic care at the time of diagnosis of a serious medical illness are less prevalent in the correctional healthcare setting.[56] Hospice is care focused on people who are actively dying (usually in the last six months of life). Palliative care – care that is focused on providing guidance and symptom control for seriously ill persons – has a demonstrated ability in the community to improve quality of life while reducing healthcare costs.[57]

In the criminal justice system, research is needed to understand the potential cost-savings and care improvement associated with palliative care. Participants underscored the need for a broader approach to palliative care in the criminal justice system that includes all seriously ill prisoners and not just those nearing the final stages of the dying process. Roundtable participants also agreed that a fundamental tenet of palliative care is healthcare provider-patient trust. Since trust can be a barrier in the prisoner-provider relationship in prison,[56,58] expansion of effective palliative care programs may require independent palliative care contractors. In addition, members underscored the need for a better understanding of prisoners' attitudes and beliefs about hospice and palliative care. The group recommended that palliative care programs be piloted and tested, and that policies should address the barriers to providing quality care for prisoners with advanced serious medical illness.

Even in the absence of a fully-operationalized palliative care program, there is much that prison healthcare systems can do to enhance care for seriously ill prisoners. For instance, many physicians have not had training in pain management or in how to talk to people with life-challenging medical conditions.[59,60] Programs to train providers in these skills have been developed and are widely available. Secondly, many successes of prison-based hospice programs include the effect they have on the institution and hospice prisoner-volunteers, roundtable participants agreed that studies exploring such benefits of hospice and palliative care programs should be encouraged.

Discussion

Increasing numbers of older prisoners coupled with soaring health-related costs and a relative dearth of evidence-based information about the health and healthcare needs of older prisoners necessitates a policy agenda to improve cost-effective quality care for older prisoners. We assembled a group of specialists in prison health care, geriatrics, palliative medicine, mental health, gero-psychiatry, prison administration, prisoner advocacy, and prison health care policy to participate in a roundtable event to identify priority areas, knowledge gaps, and a series of action items to improve the care of older prisoners.

The group's consensus recommendations focused on nine priority areas: defining the term "older" prisoner, correctional staff training, defining functional impairment in prison, recognizing and assessing cognitive impairment and dementia, identifying the special needs of older women prisoners, creating uniform policies for geriatric housing units, identifying challenges for older adults upon release, improving medical early release policies, and enhancing prison-based palliative medicine programs. Some of

these priority areas will require further investigation to identify optimal interventions and solutions to the aging crisis in the criminal justice system. As the criminal justice system works to decrease it burgeoning population, it is important that national and state policy makers work with corrections and community organizations to understand the number of older inmates that are "dual eligible" (Medicare and Medicaid eligible),[61] the impact on county and state services/budget and how gaps in the continuum of care can be addressed. This is especially important in states currently undergoing health reform initiatives. A first step will be to focus on these nine priority areas in order to set the stage for collaboration among healthcare providers, healthcare professional societies, researchers, prison administrators, civil rights advocates, and legislators with the goal of optimizing the health and minimizing the costs associated with our nation's growing population of older prisoners.

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B.A. Williams designed the study, planned and interpreted the analysis, and drafted the article.
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M.F. Stern, J. Mellow, and R.B. Greifinger helped to design the study.
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R.B. Greifinger supervised all aspects of the study design, analysis planning, interpretation and article preparation.

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<u>Table 1</u>. Roundtable Consensus Recommendations

Priority Area	Action Items
Define the "older prisoner"	• Uniform definition of "geriatric" or "older prisoners" should be age 55 or older • Recommendations for "older prisoners" should be extended to prisoners younger than age 55 who have cognitive or functional impairments in Activities of Daily Living .
Train staff and healthcare providers	• Develop, enhance and institute geriatrics training programs for correctional, parole and probation officers
Define prison-based functional impairment	• Create a list of functional requirements that may be necessary in prison • Each housing unit should indicate which of the prison-based functional tasks are necessary for independence in that particular unit • Use list of functional requirements to screen for impairment upon intake for all ages and annually for those 55 or older or for those who are younger that age 55 but have impairment • Screen for sensory impairment (vision, hearing) upon intake for all ages and annually if present and for all persons age 55 or older
Screen for dementia	• Research should focus on establishing the optimal screening tools for cognitive impairment in prisoners • Use optimal cognitive impairment screening tools in the following scenarios: o Upon admission if age 55 or older or with a history of Traumatic Brain Injury o Yearly if present for progression of symptoms o Yearly for all for all persons age 55 or older o For all persons age 45 or older if referred for a disciplinary hearing for the 1st time. • Use screening results to guide decisions about housing, programming, medical treatment and discharge planning • Conduct research to evaluate the adequacy and cost-effectiveness of these recommendations
Identify needs of older women prisoners	• Research should focus on understanding the health issues that may disproportionally and affect older women prisoners
Create uniform policies for geriatric	• Prison geriatric housing units should be available to older

housing units	prisoners but not mandatory • Geriatric housing units must have similar access to programming and health care • Policies should focus on planning for a continuum of care for older prisoners (independent living, assisted living, 24-hour nursing care). • Evidence-based criteria for long term care classification should be developed and validated
Identify release and reentry challenges for older adults	• Transitional services linking former inmates to post-release healthcare should be made available to older persons (and/or medically complex persons) upon release • Those with cognitive impairment should have close supervision upon release • Reentry programs might focus on health literacy and self-efficacy
Improve medical release policies	• Create national medical eligibility criteria for early release • Address procedural barriers that could prevent some prisoners from accessing the application process
Enhance prison-based palliative care programs	• Enhancement of prison-based palliative care services • Even in the absence of a palliative care program, all healthcare providers should be trained in pain management and provider-patient communication