



University of
Massachusetts
Medical School

Massachusetts Veterans' Long-Term Care and Housing Master Plan Commission



**Caring for Veterans Today,
Tomorrow and Beyond:
Anticipating Veterans' Needs
for Long-Term Care Services,
Supports and Housing**

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Executive Summary

Known to be a leading state for Veterans' services, Massachusetts is positioned to set the standard as the national forerunner for anticipating and meeting the long-term care (LTC) needs of Veterans as they age over the next 20-50 years and continue to be affected by the effects of military service and war.

Chapter 62, Section 32 of the Massachusetts (MA) *Act Relative to Veterans' Allowances, Labor, Outreach, and Recognition* (VALOR Act II) establishes a long-term care and housing master plan commission charged to study, evaluate, and make recommendations regarding the future needs surrounding the housing and residential care demands of Veterans, Veterans' spouses, and Veterans' dependents.

At the request of the MA Legislature's Joint Committee on Veterans and Federal Affairs and the MA Executive Office of Health and Human Services, the University of Massachusetts Medical School (UMMS) was asked to support the MA Veterans' Long-Term Care and Housing Master Plan Commission of the MA Joint Committee for Veterans and Federal Affairs. UMMS formed a team comprised of staff from its health care consulting division, Commonwealth Medicine, and the Graduate School of Nursing (GSN) to respond to this request.

For 10 months, the UMMS team visited state Veterans' Homes and domiciliary units, transitional and supportive housing facilities, along with Veterans Administration (VA) and other long-term care facilities. This summary report details the team's findings and expands upon a 2013 report produced by the Massachusetts Institute of Technology (MIT) Department of Urban Studies and Planning, entitled *The Current and Future Long-Term Care Needs of Massachusetts' Veterans* (Glasmeier et al.).

Our report is divided into the following three parts and will serve as an evidence-based guide for the Commonwealth to plan for the long-term care services, supports and housing needs of MA Veterans.

Part I. Research

A history of military service is an important determinant of current and future health risks. Experiences and exposures during deployment(s), the effect of military service on lifestyle, and selection factors of those who choose to join the military can all have an impact for years to come. The implications and difference between those who may have been conscripted (e.g., Vietnam Era Veterans and earlier) versus those who have volunteered (recent wars) may also be significant. There are additional factors in Massachusetts that also impact the health status of those who have served.

- Massachusetts (MA) is home to slightly less than 400,000 Veterans, the youngest of whom are most likely to be Reserve and National Guard soldiers returning to civilian lives without the military culture of unit cohesion and peer support of the shared experiences for a common mission. This calculation does not include out-of-state college student Veterans who may ultimately choose to stay in MA to live following graduation.
- Fewer than 25 percent of all MA Veterans seek health care through the Veterans Health Administration (VA).
 - Of those MA Veterans who have sought care through the VA, 11,954 MA Veterans have 69 percent or greater service connected disability (SCD).
 - A total of 64,849 MA Veterans receive VA Financial Support through pensions and/or disability compensation.

- With the deaths of the World War II and Korean Era Veterans, we anticipate between 200,000 and 250,000 Veterans will be living in MA by 2040. However, they are likely to experience significantly greater and earlier onset of health issues and increased need for supports, services, and housing than those from earlier eras.
- By 2040, the percent of MA women Veterans will increase to at least 39 percent of the total. It could be even higher based on the late 2015 ruling allowing women to enter almost all occupational specialties in the combat units.
- In the general population, people are living longer; this has implications for Veterans.
 - Twenty percent (27.3 million) of Americans will be older than 65 in 2029.
 - In 2030, the typical Medicare beneficiary is more likely to be obese (47 percent), disabled and with multiple chronic conditions.
 - The growing numbers of older adults and the uncertainty of their level of disability puts Medicare sustainability at risk.
- Veterans are equally vulnerable to the same health risks faced by the civilian non-Veteran population, further complicated by the additional burden of service connected risks, diseases and disabilities. This makes Veterans even more susceptible to the economic implications of the high costs of medical services and the likelihood of possibly needing long-term care (LTC) services, supports, and housing at a younger age and for longer periods of time. In addition:
 - Veterans age chronologically faster than their non-veteran counterparts.
 - One in three Americans dies with dementia; two-thirds of whom are women.
 - Individuals with dementia are more likely to require institutional care.
 - Veterans who experienced traumatic brain injuries (TBI) are at increased risk for dementia.
 - For Veterans, Agent Orange exposure coupled with post-traumatic stress disorder (PTSD) increases the rate of dementia.
 - Vietnam Veterans' exposure to Agent Orange puts them at increased risk for over 18 disabling conditions that may be fatal. A March 2016 task force was commissioned by the Institute of Medicine to look into expansion of additional presumptive diseases, which may be caused by such exposures.
 - It has taken 50 years to identify 18+ presumptive diseases from the Vietnam Conflict and we continue to learn of other disease associations related to all eras. For example:
 - A 2016 VA announcement identifies one in 10 Veterans as having Hepatitis C Virus (HCV) and one in five Vietnam Veterans as afflicted with HCV.
 - A 2015 report reveals seven to nine disabling, possibly fatal conditions have been associated with Gulf War Veterans' exposures.
 - A 2015 announcement identifies the association of 11 disabling and potentially fatal conditions from exposure to contaminated water between 1953 and 1987 at Camp Lejeune, North Carolina (NC).

- Veterans may have a 60 percent greater risk of developing Lou Gehrig's disease [Amyotrophic Lateral Sclerosis (ALS)] than a civilian. The VA presumes ALS diagnosed in any Veteran who served 90 days or more of continuous military service is related to their service.
- Current military service members will be middle aged in 2035. Not only will they likely experience some of the same issues we see in Vietnam Veterans, but like Veterans of other wars, they will experience yet unidentified concerns from exposures and other causes.
- While we do not understand the full consequences of the illnesses or disability for the current wars in Iraq and Afghanistan, we do know these unknowns will all be complicated by the signature wounds from these wars: Post Traumatic Stress Disorder (PTSD) (18.5 percent), Traumatic Brain Injury (TBI) (19.5 percent), amputations, spinal cord injuries and polytrauma.
- As they age, Veterans will experience cognitive and physical deficits such that they can no longer be cared for at home and many will need specialized care and may eventually reside in nursing facilities. The United States (US) Department of Health and Human Services (DHHS) predicts 30 percent of the Veterans who deployed to Iraq and Afghanistan will require LTC placement in 20-30 years.
- Veterans are at a high risk of homelessness, and overall there is evidence of an aging trend among homeless adults in the US. The median age of homeless single adults increased from 35 years in 1990 to 50 years in 2010. Aging homeless Veterans represent a growing vulnerable population with important implications.
 - While homelessness at every age is associated with increased health vulnerabilities, older homeless adults face additional risks further compounded by the associated risks of military service.
 - Starting at around age 50, homeless persons have chronic conditions equal to or higher than housed peers 15 to 20 years older with three to four times the mortality rate of the general population.
 - According to the 2015 Annual Homeless Assessment Report to Congress Point in Time (PIT) count, there were 1,133 homeless Veterans in MA, which is down only slightly from 1,264 in 2014. In 2015, MA had the second lowest rate of unsheltered Veterans in the US, 2.8 percent (32) compared to 2.4 percent (30) unsheltered Veterans in 2014.

Part II. Various Models of Long-Term Services and Supports

There are those who assume that Veterans are like anyone else who ages. Providing Veterans with additional attention, special services or funding support, especially in this time of limited resources and multiple competing demands, is often called into question. It is important for non-Veterans to appreciate the increased risk of disease and disability of Veterans, and to understand the lifelong impact that military culture has on those who have served.

For example, recognizing that transitioning to institutional care is never easy, Dr. Twylla Kirchen of Texas Women's University studied this transition in 2013 specifically for Veterans.

- Her premise was that Veterans' military culture has imbued each Veteran with meaningful rituals and beliefs that if supported, will be shared with others when in a supportive system fostering a sense of connection.

- She found that military culture permeated interviews with residents of a State Veterans' Home and identified specific individual and environmental factors that are valued by older Veterans transitioning to LTC. The key factors identified were "being understood" and "feeling connected" to the facility when they sought admission to a State Home.
- Residents described the camaraderie in the military continued in the facility, such as enjoying dining family-style with other soldiers, sailors, and airmen as part of their military tradition.
- Kirchen's findings support the cohorting of individuals at similar cognitive levels and perhaps of similar ages and eras. She identified that Veterans benefit from a "client-centered, military-focused approach using meaningful activities in a social, home-like setting to facilitate a sense of well-being and quality of life."
 - Many of the concerns expressed by these state home residents are addressed in the progressive design of best practices and philosophical underpinnings, coupled with more homelike facility designs and supportive and long-term housing models of the civilian and VA communities discussed in Parts II and III.

Since the 1990's, there has been a paradigm shift in the philosophical underpinnings and facility design for long-term care services and supports and housing.

- More home- and community-based services and supports have developed to support elders to age in place in their own homes and communities.
- The numbers of civilian adult day health care programs, assisted living facilities and retirement communities are growing.
- Both civilian and VA services are developing new long-term care communities and facilities that are based on new philosophies and designs according to the Green House Project™ – shifting dramatically from the traditional medical model of care delivery to a more dynamic person-centered model of care in a home-like environment.

Survey results from members of AARP, and Medicare and Medicaid utilization trends, demonstrate a preference and choice of many to stay in their homes and communities as long as possible.

- While home and community care options are generally assumed to be less expensive than long-term care facilities, for many, successful living in the community is completely dependent on a caregiver, availability of services, and the ability to have the services financed through some mechanism.
- Like civilians, Veterans may want to stay in their homes/communities as they age.
 - Availability/access to these types of services can be a particular challenge for those living in small towns and rural areas.
 - Younger Veterans may also lack the most basic logistical supports, such as owning a home, available caregivers, and a supportive community. They also tend to have lower incomes.
 - Many Veterans return "changed" and may lose their family supports and former friends and colleagues upon return or as time passes. In the more extreme cases, they become homeless or at risk for homelessness. Also, those Veterans who struggle the most with readjustment are also the ones at increased risk for dementia.

VA Sponsored Care, Services and Housing

The VA provides many excellent services across the aging and need continuum for eligible Veterans. The operative word is *eligible*, which means predominantly those with greater than 69 percent Service Connected Disability (SCD), which in MA is less than 3.5 percent of Veterans. Others receive services based on tiers that may qualify them for a selected level of available services. While this leaves the majority of MA Veterans receiving care outside of the VA system, the VA is committed to providing a range of community supports (e.g., home-based primary care and adult day health care). It should also be appreciated that the VA is very progressive in terms of the best practices for services and housing; replacing VA LTC facilities and philosophy of care with state-of-the-art Green House™ Homes for those in need of long-term health care and housing allows Veterans to live with autonomy, dignity and a sense of well-being.

State Veterans' Homes

The Commonwealth has two State Veterans' Homes (SVH) in Chelsea and Holyoke. The MIT report and the UMMS team's multiple visits to these SVHs recognize the excellent, high quality care coupled with patient and family satisfaction, however both facilities are in great need of modernization and updating to current standards of best practices. Both campuses also provide domiciliary housing.

Within this section is a discussion of state home studies conducted by Colorado and Connecticut over the last decade, which were prompted by public outcry over issues seen in the housing and long-term care of Veterans in the state facilities. These studies have helped to inform this report.

- Each state empaneled an investigative Commission to investigate issues through thoughtful examination of their problems, of current best practices for state-level Veterans' care, and governance to support these innovations.
- What has been identified in both example states is a need for statewide coordination of governance, in order to provide consistency in practices, and a common set of standards for assessing, managing, improving, and transforming care.
- Legislatively-driven reforms in governance, management, funding and other dimensions of publicly-supported care for Veterans resulted.

Similarly, MA may benefit from a coordinated executive-level vision for services both at the State Veterans Homes and in future settings where the state has responsibility for Veterans' LTC. Future plans should consider re-thinking the current self-pay model, assessing the role of public/private partnerships as in Colorado, and making program changes that would facilitate greater access to federal dollars.

- Eleven states were reviewed by the UMMS team to determine their fee structure for the Veteran resident.
 - Other than MA, Tennessee, and Texas, the state homes use a means test for determination of the cost per resident. For those homes charging a flat rate per day, clearly MA is charging a significantly lower daily rate at \$30.00 to reside in one of the two Veterans' Homes. Texas charges the next lowest daily rate of \$56.00 and Tennessee's daily rate is \$126.39. A means test is also applied at new small house concept facilities built in TX and TN.
- Of those SVHs visited that had domiciliary units, some questioned the appropriateness of the domiciliary units being managed by LTC administration.

- We learned that domiciliary units have a substantial contingent of residents who do not want to live outside of a protected, sheltered setting, or have health needs that prevent independent living. Explanations for this are partially explained in the research discussed in Part II.
- The leadership of facilities report that these Veterans are able to live relatively normal lives and manage quite well, some even holding down outside jobs, as long as they live in a protected setting.
- As these folks age, they will clearly require continued supportive housing and possibly require skilled nursing care.
- These domiciliary facilities, rather than transitional housing, are indeed their home and their community.
- The Commonwealth needs to consider Veterans' ongoing needs for services, supports and housing.

Part III. A Home for every MA Veteran: Options for Consideration

Massachusetts is well known for providing exemplary services for Veterans. Given this status, it is important to plan for best practices to support present and future LTC needs of aging Veterans.

Based on the best practice models of care, masterplans for MA Veterans' long-term care services, supports or housing should avoid subscribing to a prior philosophy or facility design for elder care services that is not at least contemporary with civilian and federal VA standards of practice. For example, in any new facilities built, leased or bought (e.g., purchase of an existing wing(s) in existing homes or the purchase of unoccupied nursing homes), construction of new facilities must take into consideration the cost of renovations and upgrades, as needed, to meet new and future standards of best practices.

There are two main operative approaches that can be adopted, in whole or in combination, to address how MA should ensure that Veterans' needs are addressed in the future. One approach is to **purchase/partner** (buy). The other is to **provide** (make) future services, supports and housing for MA Veterans to age in place. This includes the availability of a continuum of needed care services to allow Veterans to:

- Remain in their community, or
- Receive care and services within the state home campus model.

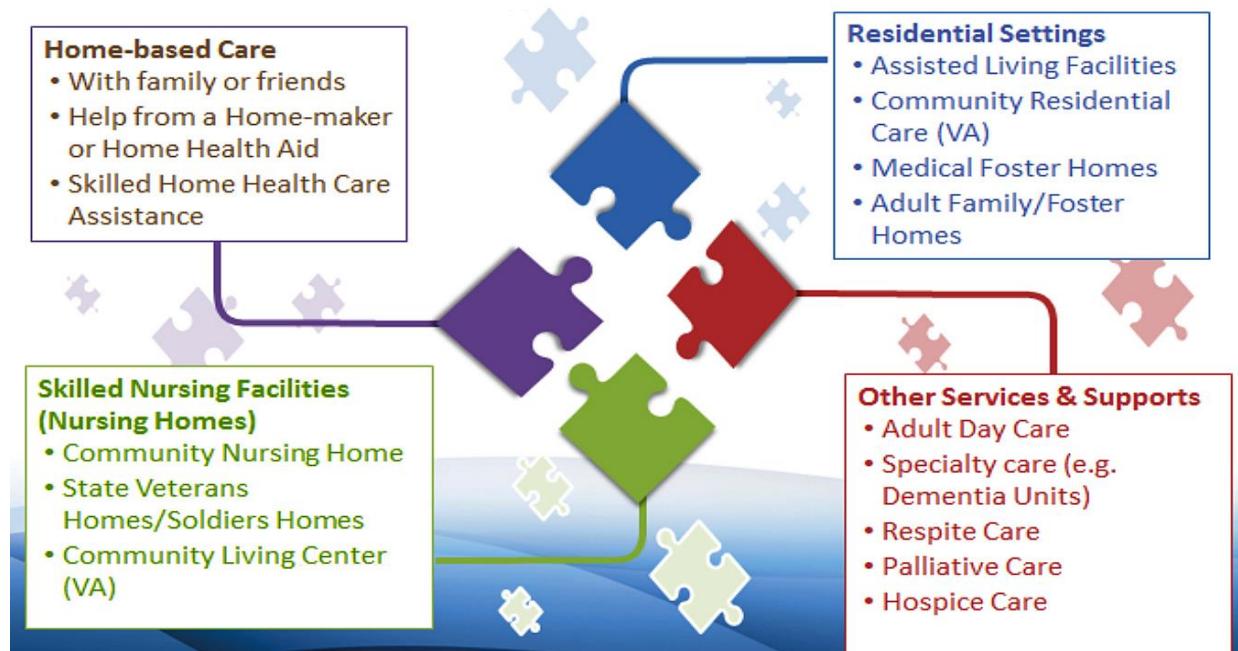
In **Purchase/Partner**, the Commonwealth may seek to establish a public-private relationship with entities that provide services to Veterans. Within this model, the state must develop contracts with private organizations; state controls are limited to those developed through the contracting systems and processes, which would need to be carefully crafted to ensure the highest quality of (military) culturally competent care within best practice models. The State could partner with community-based organizations for reserved placements in adult day health programs, apartments in assisted living facilities, or beds in established nursing homes.

With the **Provide** option, the Commonwealth may seek to expand what it **provides** within its publicly operated facilities, e.g., the current Soldiers' Homes, along with the group residential homes model utilized by DDS.

There are pros and cons for each approach. In a typical design, the three considerations of cost, access, and quality are often balanced. It is important to keep a fourth consideration for Veterans in mind. That the design of the service, supports or housing must be provided within a context of understanding the military culture created by the military creeds. The creeds are statements that set the tone of life in the services and provide a value structure by which Veterans learned to live and work.

The services considered must also be supportive along the continuum of care. These are discussed in more detail in Part III and are summarized in the chart below.

Continuum of Care



To recap in brief, the Commonwealth can:

- Privatize all services, supports and housing.
- Request proposals for public/private partnerships to develop and offer all or parts of the anticipated services, supports and housing.
- Decide to State-manage all Veterans' services, supports and housing.
- Choose combinations of these options.

In terms of State managed or public/partner Veterans' Services, supports and housing, the Commonwealth can:

- Continue the state home "campus" model of the VA and other states.
- Consider developing one or two more all service Veteran campuses to improve geographical distribution.

- Consider a conceptual framework for public/private partnerships to develop the MA State Home campuses (two or more) as *Supportive Living Communities of Excellence for Veterans* to address the continuum of care options for Veterans, including, but not limited to home-based care and medical services, Adult Day Health Care, supportive housing, and long-term care housing — all modeled after best practices and small house/neighborhood concepts.

There are also a number of options from the CO and CT experiences that are potentially applicable to MA including:

- Implementing a central governing Board/governance structure over both campuses.
- Maintaining Community Boards at each of the facilities.
- Incorporating a mechanism for gaining input into the State Board from facility stakeholders, including residents and family members; e.g., representation on the State Board from the Community Boards.
- Creating a leadership position within state government that is tasked specifically with policy development, administrative oversight, coordination and collaboration with the VA and other organizations in the state who are serving Veterans. The successful candidate for this leadership position, and the staff that support it, should have “strong background and experience” in nursing home management. And of course, experience with military culture.
- Insurance of transparency and accountability through several means, including:
 - Public meetings of the governance bodies, publication of their meeting agendas and minutes.
 - Adoption, adherence to, training around, and publication of results from, measures and metrics that reflect best practices in the field.
- Assessing each resident a pro-rated amount based on their pensions, but not other assets.
- Planning for increased numbers of secure units and beds.
- Planning for flexibility to meet the changing demographics and need of Veterans over the next 20-50 years.

For all of the options, we encourage:

- Priority hiring of Veterans and their family members as employees whenever possible.
- Providing services with a sensitivity and appreciation of the military culture.
- Maximizing the potential to participate in other federal and state service funding mechanisms when appropriate and, as a result, addressing related building design, staffing, and documentation requirements.
- Options along the full continuum of care to embrace a variety of housing options, supports and services to accommodate Veterans’ needs, preferences, and national standards of excellence, quality, safety and best practices.

Report Background and Purpose

Regarded as a leading state for Veterans' services, Massachusetts (MA) is poised to set the standard as the national forerunner for anticipating and meeting the long-term care (LTC) needs of Veterans as they age over the next 20-50 years and continue to be affected by the effects of military service and war.

Chapter 62, Section 32 of the Massachusetts (MA) *Act Relative to Veterans' Allowances, Labor, Outreach, and Recognition* (VALOR Act II) establishes a long-term care (LTC) and housing master plan commission charged to study, evaluate, and make recommendations regarding the future needs surrounding the housing and residential care demands of Veterans, Veterans' spouses, and Veterans' dependents.

In June 2013, the Commonwealth commissioned the Massachusetts Institute of Technology (MIT) Department of Urban Studies and Planning to examine the present and future long-term care of the State's Veteran population. Based on their findings, they made recommendations in the October 31, 2013 report entitled *The Current and Future Long-Term Care Needs of Massachusetts' Veterans* (Glasmeier et al.).

Accordingly, at the request of the MA Legislature's Joint Committee on Veterans and Federal Affairs, John Polanowicz, then Secretary of the MA Executive Office of Health and Human Services, asked the University of Massachusetts Medical School (UMMS) to support the MA Veterans' Long-Term Care and Housing Master Plan Commission to follow up on the recommendations of the MIT report. UMMS formed a team comprised of staff from Commonwealth Medicine (CWM) and the Graduate School of Nursing (GSN) to respond to this request. As the health care consulting division of UMMS, Commonwealth Medicine is dedicated to improving public health through public university/state agency collaboration. The UMMS team researched the subject and identified what other states are doing to meet the long-term care and housing needs of Veterans, conducted a literature search to discover evidence-based best practices that meet these needs, and prepared this summary report of their findings.

Focusing on Veterans' health risks, best practices, and options for care and services, this report - *Caring for Veterans Today, Tomorrow and Beyond: Anticipating Veterans' Needs for Long-Term Care Services, Supports and Housing* - addresses and expands upon selected recommendations in the 2013 MIT Report. It serves as an evidence-based guide for the Commonwealth to plan for the long-term care services, supports, and housing needs of Veterans over the next 20-50 years. The report is divided into three parts:

Part I. Research

Projecting Health Care Needs of Veterans: Across the Spectrum of Age

Part II. Various Models

Projected Need/Options for Housing and Long-Term Services and Supports

Part III. Options for Consideration

A Home for Every MA Veteran

Part I. Research

Projecting Health Care Needs of Veterans: Across the Spectrum of Age

It is impossible to project/propose a long-term plan for the care and housing for our state Veterans without thoroughly reviewing the available research predictions/projections regarding Veteran specific anticipated health issues and needs. Based on that foundational information, the best practices to meet these needs are presented. We offer the growing body of evidence supporting the projections for Veterans' unique health, housing and support needs as they converge with those of the aging United States (US) population in general.

We cannot ignore the literature predicting onset and severity of health issues affecting the entire US population that are likely to compound the care requirements for Veterans. Considerable current research and publications about health and aging issues suggest a bleak outlook for Vietnam Veterans and those of the Gulf War (1991). The growing collection of findings from similar studies of Iraq and Afghanistan Veterans are equally compelling and concerning. This foundational knowledge is essential to inform our best projections for appropriate services, supports and best practices for housing options to meet Veterans' unique needs.

The first section of Part I presents the projections regarding the aging of America in general along with the additional health risks and issues faced by Veterans. The second section addresses the health issues and risks from wars/eras/conflicts/exposures. Section 3 discusses the implications of the health issues and risks for Veterans from military service, wars and exposures. Section 4 discusses the future demographics of Veterans in the Commonwealth, and Section 5 discusses military culture.

Section 1 – Literature Review/Research Relative to the Aging of Americans as a Backdrop for Understanding Current and Projected Health Issues of Veterans

Overview

The number of Americans over the age of 65 will almost double by 2030 (Gaudette et al., 2015) and will double by 2040 from the number in 2002 (USGAO, 2002). Over 27 million Americans (20 percent of the population) will be older than 65 in 2029 (Colby & Ortman, 2014). These numbers and the uncertainty of the level of disability, puts Medicare sustainability at risk (Gaudette, 2015). Costs will be significantly higher in 2030 due to a population which is expected to be much less healthy than previous generations. In 2030, 47 percent of Medicare beneficiaries are more likely to be obese, disabled and with more chronic conditions (Gaudette, 2015). It is anticipated that 7 percent of the population will be extremely obese (body mass index/BMI >40), double the percentage in 2010. Obesity increases the risk for chronic diseases such as heart disease, cancer, stroke, diabetes, dementia and arthritis (CDC, 2015). Post-Traumatic Stress Disorder (PTSD) may be an added risk factor for obesity for male Veterans (Vieweg et al., 2007).

While the media has kept the general American population apprised of some of the more dramatic health and well-being issues of Veterans who have faced combat in Korea, Vietnam, Iraq and Afghanistan, we must also keep in mind the recently identified sequelae from military service in general [e.g. amyotrophic lateral sclerosis (ALS) (IOM, 2006, USDVA, Ionizing radiation, updated 2015)] and the disturbing recent release of the health concerns facing Marine Veterans and their families from 34 years of exposure to the contaminated water at Camp Lejeune, NC (Enews VA, December 17, 2015], and the fact that one in 10 US Veterans is infected with Hepatitis C Virus (HCV), a rate five times greater than the infection rate of the general population, with one in five Veterans from the Vietnam era infected with

the virus (hcvets.com, nd). A Department of Veterans Affairs, February 24, 2016, memorandum announced that “Effective immediately, for the rest of FY 2016, all Veterans with HCV may receive treatment within VA facilities without regard to stage of liver disease.”

A significant number of our current Veterans are at risk for highly unique health and housing needs, very different from those who served prior to Korea and those who have never served.

The unique health issues and needs noted above compound expected ill health and aging issues faced by the non-Veteran population.

Nor do our responsibilities end with what is currently known to be true for our current military service members and Veterans.

History cannot be denied and we must recognize that there will be yet unknown, additional conflicts, exposures and perhaps even wars to be fought by those few who are brave enough to raise their right hand and pledge their willingness to sacrifice their lives so others may live in freedom. Appreciating that it has taken almost 50 years to identify the presumptive diseases related to exposure to Agent Orange, we must also assume that over time we will learn of additional health implications from experiences and exposures from the Gulf War and the wars in Iraq and Afghanistan, and perhaps even more health implications from exposures in Vietnam.

While Medicare will struggle to support the health care needs of increasing numbers of elders, the Department of Veterans Affairs (VA) is also struggling to meet unprecedented demand. Veterans are demanding more services from the VA than ever before. Veterans’ health care and benefit requirements continue to increase decades after conflicts end, posing a significant long-term challenge for VA. The demand for benefits and services from Veterans of all eras continues to increase and Veterans’ demand for benefits has exceeded VA’s capacity to meet it (McDonald, 2016). These increased demands for VA health care come from:

- More than 10 years of war.
- Agent Orange-related disability claims.
- An unlimited claims appeal process.
- Demographic shifts.
- Increased medical issues claimed.

In addition, the VA is now serving a population that is older, has more chronic conditions, and is less able to afford care in the private sector (McDonald, 2016).

McDonald reported to the House of Representatives in his VA Budget Hearing that the number of Vietnam Veterans receiving disability compensation has not yet peaked and he anticipates a similar trend for Gulf War Era Veterans, only 26 percent of whom have been awarded disability compensation (2016). Many of the VA resources focus on those with a 70 percent or greater service-connected disability (SCD) rating, representing approximately 11,954 Veterans in MA (USDVA Vetdata MA State, 2014). Another 38,654 have SCDs evaluated as being between 10 percent and 69 percent. Thus, there are approximately 290,000 MA Veterans potentially needing some level of state-supported services that either have less than 10 percent service-connected disability or were never evaluated and rated. We

A significant number of our current Veterans are at risk for highly unique health and housing needs, very different from those who served prior to Korea and those who have never served. In MA, less than 25 percent of Veterans receive their health care from the VA.

also know that in MA specifically, less than 25 percent of Veterans receive their health care from the VA (USDVA, State summary, 2014).

Based on the high rate of Veterans who aren't eligible or haven't enrolled in the VA system (75 percent of Veterans in MA), health professions education programs throughout the country are now increasingly integrating information specific to the Veteran population into their curricula. Thus, we can assume that as more health care providers are educated about the presumptive diseases related to their Veteran patients' military service and the potential for benefits or compensation, more and more Veterans are likely to seek VA benefits. There is a risk that the VA may experience a sharply increased demand for services, fueled by the increased claims for prostate cancer, Type II diabetes, and the other diseases of Veterans (discussed later in Part I), when they learn from their health care providers about the possible association of their diseases with military service, war experiences, and exposures. States should anticipate increased responsibility for filling these anticipated gaps in care, services, and support.

Armed with what we currently know, the Commonwealth must anticipate and provide for the long-term care needs for services, supports and housing for Veterans now, for the next 20-50 years, and beyond.

Section 2 – Health Issues and Risks from Wars/Eras/Conflicts/Exposures

This section introduces, in chronological order, the wars/conflicts/exposures associated with the largest percentages of the gravest projections/predictions for Veteran health issues. If known, at the end of each era, the number of Veterans in MA from that era is bolded.

The authors share this section to honor, and in grateful appreciation for, the 16 million Americans who served during WW II, and to ensure that those who follow will be equally honored, respected and well cared for as they age and as their needs may dictate. Since the majority of World War II Veterans have passed on, and they represent a small and declining proportion of the Veterans needing service, we begin with the health risks for the remaining Korean War Era Veterans and beyond.

Korean War

It is estimated that 5.7 million Veterans served in the Korean War (1950-1951) and 2.2 million are still alive. These Veterans were at risk for cold injuries and exposure to ionizing radiation. The cold-related conditions include skin cancer in frostbite scars, arthritis, fallen arches, stiff toes and cold sensitization, which places them at increased risk of developing diabetes and peripheral vascular disease, potentially requiring amputations as they age. Exposure to ionizing radiation may result in certain cancers and other related health conditions (USDVA, Korea, n.d.). This generation shares many similarities with World War II Veterans (some served in both) and their numbers decrease daily. According to data reported in the Glasmeier et al., 2013 report, **MA had 49,000 Korean War Veterans (US Census Bureau, 2009-2011), between 80 and 100 years of age.**

Vietnam Era

Nine million military personnel served on active duty during the conflict in Vietnam (1964 - 1975); the youngest of whom today would be in their mid to late 60s. (National Vietnam Veterans Foundation, 2016). In addition to battlefield injuries, Post-Traumatic Stress Disorder (PTSD), and the currently known rate of 20 percent of Vietnam Veterans with HCV (USDVA, 2016), the VA currently recognizes at least 18 diseases/conditions presumed to be associated with exposure to Agent Orange (USDVA, 2015). Most recently, there has been a finding that the association of Agent Orange exposure with PTSD significantly increased a Veteran's risk for dementia (Barnes, 2015). As of a March 17, 2016, announcement, the Institute of Medicine has been asked to review and update, again, the number of presumptive diseases

associated with exposure to Agent Orange (Philpott, 2016). **MA has 125,000 Vietnam Veterans (Glasmeier et al, 2013).**

Table 1. Diseases linked to Agent Orange & Herbicides – Vietnam (USDVA, 2015) and those serving in the de-militarized zone of Korea (April 1, 1968 and August 31, 1971) [Philpott, 2016]

Chronic B Cell Leukemias	Type II Diabetes	Some Soft Tissue Sarcomas
Lung & other Respiratory Cancers	Ischemic Heart Disease	Prostate Cancer
Multiple Myeloma	Parkinson's Disease	Hodgkin's Disease
Non-Hodgkin's Lymphoma	AL Amyloidosis	Children with birth defects
Agent Orange + PTSD Increases Risk of Dementia (new 2015)		

Camp Lejeune, North Carolina

As of a January 5, 2016, announcement, the VA has determined that 15 medical conditions are linked to service at Marine Corps Base Camp Lejeune, NC, from 1953 to 1987 due to exposure to water contaminated with industrial solvents such as benzene and other chemicals. This contamination has caused death, illness, and life-altering conditions among men, women, and children. Table 2 represents the diseases now considered to have the presumption of service connection (USDVA, Public Health, 2016).

Table 2. Known diseases presumed to be service connected from exposures at Camp Lejeune (USDVA, Public Health, 2016)

Kidney Cancer	Hepatic Steatosis	Non-Hodgkin Lymphoma
Leukemia	Breast Cancer	Scleroderma
Lung Cancer	Miscarriages	Myelodysplastic Syndromes
Esophageal Cancer	Female Infertility	Multiple Myeloma
Bladder Cancer	Renal Toxicity	Neurobehavioral Effects

Recent determinations expand eligibility to Reserve and National Guard members who served at Camp Lejeune for any length of time during that period (USDVA, December 17, 2015). Veterans with these diseases are eligible for disability compensation. **Thus far, we are unable to find any information related to the total number of Marine Veterans in MA, nor how many Marines were of the age range that may have been exposed.**

Gulf War

While research publications continue to reveal additional findings related to health issues of Vietnam Veterans, investigators are also learning more about the impact of the Gulf War (1991) on our younger Veterans. Approximately 700,000 service members deployed to the Middle East following the August 1990 invasion of Kuwait by Saddam Hussein. A January 2016 publication reveals the findings from a multi-site, multi-national study of the effects of toxicant exposures from that war (White et al., 2016). *Gulf War and Health, Volume 10: Update of Health Effects of Serving in the Gulf War* released in early 2016 reveals that Gulf War Veterans' exposures included chemical exposures to: organophosphates, carbamates and other pesticides, sarin/cyclosarin chemical nerve agents, anthrax vaccine, depleted uranium munitions, chemical resistant coatings, and pyridostigmine bromide medications used as prophylaxis against chemical warfare attacks, along with the Kuwaiti oil well fire emissions and the high temperatures experienced by troops in the region. Of those who deployed, 25 percent to 32 percent

suffer from Gulf War Illness (GWI) symptoms that can include fatigue, headaches, cognitive dysfunction and memory loss, widespread pain, including musculoskeletal pain; along with respiratory, gastrointestinal and dermatologic complaints (IOM Gulf War, 2016). Additional disorders identified as associated with these exposures are depicted in Table 3.

Table 3. Diseases found to be associated with the 1991 Gulf War (IOM, Gulf War 2016; White et al., 2016)

Amyotrophic Lateral Sclerosis (ALS) Lou Gehrig's Disease and earlier age of onset	Brain Cancer	Seizures
	Neuritis and Neuralgia	Migraine Headaches
	Gulf War Illness	
Multiple Sclerosis (MS)*	Parkinson's Disease (PD)*	Stroke

*Studies continuing

Rates of PTSD (3 percent to 6 percent) and other psychiatric disorders were much lower among 1991 Gulf War Veterans than found in Veterans of other wars (White et al., 2016).

Based on 2009 data, MA has approximately 45,000 Gulf War and the Gulf War on Terror (GWOT) Era Veterans (Glasmeier et al, 2013). We also know there have been additional deployments of MA military units and soldiers since 2009.

Iraq and Afghanistan: Gulf War on Terror

Since 9/11, 2.5 million military members have deployed to Iraq and/or Afghanistan as part of the Gulf War on Terror (GWOT) (US Census, 2011). Many have deployed more than once, and some as many as five or more times. For example, based on the numbers of bonuses requested upon return from deployment, the approximate number of deployments for MA Veterans is reflected in Table 4 (MA Office of the Treasurer and Receiver General, personal communication 2-5-16).

Table 4. Number of deployments based on voluntary requests for MA Welcome Home Bonuses

# Deployments	# Deployed
One	28,984
Two	6,686
Three	2,468
Four	851
Five	311
Six	137
Seven	65
Eight	35
Nine	21
Ten	10
Eleven	5
Twelve	1

For GWOT Veterans, war-associated medical costs are expected to increase exponentially with time. There are a number of differences between them and the Veterans from previous wars (Geiling et al, 2012):

- Many have survived who would have been killed in previous wars.
- Improvised explosive devices (IEDs) have resulted in multiple traumas, e.g., multiple amputations, traumatic brain injury (TBI), severe facial trauma and blindness – all of which may require years of rehabilitation.
- The average age of Iraq/Afghanistan War Veterans was 25-29 years of age with a life expectancy of at least 50 years, impacting service delivery systems to 2035 and beyond (Geiling et al, 2012).

Given the ongoing and increasing recognition of the health issues related to service in Vietnam over the past 50 years, coupled with the 2015 release of diseases and conditions associated with the Camp Lejeune water contamination of 28-62 years ago, we do not yet know the extent of other diseases and health concerns that will ultimately be deemed associated with the GWOT. Those of which we are currently aware are discussed below.

According to testimony given during the hearing before the Committee on Veteran's Affairs, US House of Representatives 110th Congress, and First Session in 2007 on the costs of the GWOT war:

- 20 percent have suffered brain trauma and or spinal injuries.
- 20 percent have suffered other major injuries such as amputations, blindness, partial blindness or deafness, and serious burns.

The strain of extended deployments, the stop-loss policy, horrific ground warfare and uncertainty regarding discharge and leave have taken their toll on soldiers' mental health:

- 36 percent have been diagnosed with a mental health condition (including PTSD, acute depression, substance abuse and other conditions).

"The signature wounds from the wars will be:

1. traumatic brain injury
2. post-traumatic stress disorder
3. amputations
4. spinal cord injuries

and PTSD will be the most controversial and most expensive." (Sullivan, 12-23-06).

As stated previously, based on 2009 data, MA has approximately 45,000 Gulf War and GWOT Era Veterans (Glasmeier et al, 2013). However, we know there have been additional deployments of MA military units and soldiers since 2009.

Section 3 – Implications of the Health Issues and Risks for Veterans from Military Service, Wars and Exposures

War is known to be one of the most horrific of all traumatic experiences, resulting in short-term stressors and often long-term psychopathology – post-traumatic stress disorder being the most publicized (Solomon, Helvitz & Zerach, 2009); combat contributes to early physiological aging processes, morbidity (Creasy et al., 1999) and mortality (Boscarino, 2007).

Post-Traumatic Stress Disorder (PTSD)

PTSD is a disabling condition common among military personnel and Veterans diagnosed in nearly one-fifth of Veterans from ongoing operations in Iraq and Afghanistan (Tanielian & Jaycox (eds), 2008). Risk factors for PTSD in military populations include war zone exposure, being wounded, younger age when deployed, less education, greater exposure to childhood trauma, and less social support during and after deployment (Xue et al, 2015). Ten percent of Gulf War Veterans who experienced combat have PTSD (Kang et al, 2003). Forty years after the Vietnam War, 11 percent of Vietnam Veterans continue to report PTSD symptoms that impair functioning (Marmar, Schlenger, Henn-Hasse, et al., 2015). War Veterans with PTSD also have extensive functional impairments such as unemployment and income disparities (Savoca and Rosenheck, 2000); family and relationship difficulties (Riggs et al., 1998); aggressive behavior (McFall et al., 1999); and poor quality of life (Buckley et al, 2004). Those who believe combat to be the worst stressor of their lives are more likely to have lifetime PTSD, delayed symptom onset of PTSD, unresolved symptoms, and to be unemployed, fired, divorced and physically abusive to their spouses, than men who reported other types of trauma as their worst experience (Prigerson, Maciejewski, & Rosenheck, 2001). Twenty-three percent of Vietnam Veterans with PTSD (compared with 4 percent among those without PTSD) reported being unemployed; when assessed 15 or more years after service, 33 percent (compared with 16 percent) reported perpetrating serious interpersonal violence in the past year, and 40 percent (compared with 10 percent) reported low well-being (Zatzick et al, 1997). If left untreated, military-related PTSD often follows a chronic course, resulting in lifelong dysfunction (Tennant et al, 1986, Steenkamp et al, 2015). Unquestionably there are many PTSD victims still actively serving in the military who have not reached out for benefits, and others who have yet to be diagnosed.

Veterans with PTSD have a lower quality of life and more medical problems than those without PTSD (Geiling et al., 2012). Co-morbidities of PTSD may include obesity, depression, anxiety, cardiovascular disease, diabetes, smoking behaviors, substance abuse, (Kulka, et al 1990; Hoge et al, 2007; Geiling et al., 2012) and increased dementia (Geiling et al., 2012). Yaffe et al., found in a cohort study of Veterans that those with PTSD were almost twice as likely to develop dementia as those not diagnosed with PTSD (2010).

Late-Onset Stress Symptomatology (LOSS)

VA Boston researchers are studying the effects of early combat exposure later in life. Late-Onset Stress Symptomatology (LOSS) is the development of increased thoughts, reliving experiences, and the emotional responses to combat experiences. Associated with LOSS are clinically significant distress and a search for meaning and growth as Veterans age and face other losses (Kaiser, Wachen, Potter, Moye, & Davison, 2015). This research supports the option for Veterans to be able to socialize with those who have the shared experience as they reach the end of their lives.

Co-morbidities of PTSD may include obesity, depression, anxiety, cardiovascular disease, diabetes, smoking behaviors, substance abuse, and increased dementia.

Traumatic Brain Injury (TBI)

TBI is a signature injury of the wars in Iraq and Afghanistan from the significant use of IED by the enemy. A recently published VA study with MA Veterans found signs of early aging in the brains of Iraq and Afghanistan war Veterans caught near roadside bomb explosions. This included those who did not feel anything from the blast (Trotter et al, 2015). Early on, Levin et al. identified chronic executive and attentional difficulties among TBI blast survivors (2010). A subsequent small study of the brains of Veterans from Iraq and Afghanistan who were injured by IEDs and later died of other causes show an unusual “honeycomb” pattern of broken and swollen nerve fibers in the portion of the brain that controls executive function (plan, organize and complete tasks, including working memory, reasoning, flexibility, problem solving, planning and execution). These brain changes differ from brain damage resulting from motor vehicle accidents, drug overdoses, and impact sports (Ryu et al., 2014).

In addition, MA researchers identified TBI from wartime exposure as showing brain changes that are different from non-combat exposure and suggesting faster aging of the brain with potentially significantly earlier onset of Alzheimer’s disease (AD) (McKee and Robinson, 2014; Schofield et al, 1997) and greater risk for AD (McKee and Robinson, 2014). Earlier findings by Wang et al. suggested patients with TBI are at increased risk for dementia (2012) and that even mild TBI increases dementia risk in those aged 65 years and older (Johnson and Stewart, 2015). Additional studies also connected a single moderate to severe TBI with AD (Fleminger et al, 2003; Plassman et al., 2000), Parkinson’s disease (Bower et al, 2003), and ALS (Chen et al, 2007, Schmidt et al 2010). A frequent association between mild TBI and PTSD was also identified (Hoge et al., 2008).

Dementia

In Section 2, we discuss the likely impact of TBI, PTSD plus Agent Orange on the onset and severity of dementia in Veterans. This is added on top of the relative rate of AD and other dementias in the general population. As many as 5.1 million Americans may have AD and as many as half a million Americans have young onset or early onset prior to age 65 (VA Caregiver Support, 2015).

Dementia carries a large social cost for the US population as a whole, and associated financial risk for households, especially during the last five years of life (Kelley et al., 2015). Caregiving for someone with Alzheimer’s disease is physically, emotionally and financially challenging (VA Caregiver Support, 2015). The impact on caregivers will continue to grow as our population ages (Alzheimer’s Association, 2016). Approximately two-thirds of Veteran caregivers are women, 34 percent are age 65 or older, and 41 percent have a household income of \$50,000 or less (VA Caregiver Support, 2015). While currently there may be approximately a caregiver-availability-to-patient ratio of 7:1; in the coming years it will decrease to 3:1 (Pat DeLeon, personal communication, 2014). Thirty-five percent of the population over the age of 65 will eventually need a nursing home (Caregiver Organization, 2015, DHHS, 2015). Women Veterans suffer increased cognitive decline over non-Veteran women. Once again, when we consider the additional health burdens of Veterans onto the known statistics related to the general aging population, the outlook is grim.

TBI from wartime exposure
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We can estimate at least
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Researchers found that Medicare patients with dementia had greater total costs and out-of-pocket costs for end-of-life care than Medicare patients with heart disease, cancer, or other conditions. Families of patients with dementia also had to pay a greater proportion of family assets for end-of-life care than families of patients without dementia. This places a large financial burden on families, and these burdens are particularly pronounced among the demographic groups that are least prepared for financial risk (Kelley, 2015).

Conservatively multiplying the number of MA Veterans from the Gulf War and the Wars in Iraq and Afghanistan (45,000) by the US Department of Health and Human Services (US DHHS) projection that 35 percent of Veterans will eventually need institutional care, we can estimate at least 15,750 of MA Veterans will need institutional care at some point as they age. This calculation does not consider the potential earlier onset and increased numbers resulting from military service experiences and exposures. Additionally, we know that many Veterans most severely affected by PTSD may be alienated from their families and friends (thus no access to informal caregivers), and impoverished, with many requiring permanent supportive housing related to their disability.

We can estimate at least
15,750 of MA Veterans will
need institutional care at
some point as they age.

Amyotrophic Lateral Sclerosis (ALS) Lou Gehrig's Disease

ALS is one of the most feared and dreaded diseases faced by western civilization. Mental capacity is fully retained while the person watches their body and physical abilities deteriorate. There is no cure and relatively little can be done to slow the process. In the past decade, the VA has presumed ALS diagnosed in all Veterans who had 90 days or more continuous active military service is related to their service, although ALS is not specifically related to radiation exposure or Agent Orange (USDVA, Ionizing radiation, updated 2015). While not specific to combat or deployments, Gulf War Veterans' chances of developing ALS are as much as two times higher than those of the general population or of Veterans who served during the same era but were not deployed to the Persian Gulf during the 1990-1991 conflict. Military service prior to the Gulf War is associated with a 1.5-fold increased risk of developing the disorder (IOM, 2006). The total impact of the most recent wars in Iraq and Afghanistan on an increased rate of ALS and other illnesses is yet to be determined.

Women Veterans: Increasing numbers and unique health needs

Historically, 400,000 women served during WW II; 120,000 served during the Korean conflict; and 265,000 served during the Vietnam era (America's Women Veterans, 2011; Women in Military Service, 2015). Thirty-two percent of women Veterans are enrolled in the VA (Yano et al., 2011). Recent findings from the National Women's Health Initiative (WHI) found that women Veterans had a significantly higher risk for all-cause mortality than their non-Veteran counterparts in the study (Weitlauf et al., 2015.)

While the total number of Veterans is expected to decrease in the coming years as our last Veterans from WW II and Korea have passed or are reaching the end of their lives, the percentage of women Veterans in the US and in MA over the age of 65 will increase from approximately 24 percent in 2015 to 39 percent in 2040. This estimate was determined prior to the late 2015 decision to open up the previously limited combat roles to women (US GAO, 2015), thus the percentage is likely to be higher in 2040. For the GWOT, 15 percent of the active forces are women. Upon return from deployments, women Veterans are more likely to experience depression and adjustment and musculoskeletal disorders than men (Haskell et al., 2011).

Decisions made by women who join the military can impact their health and health care needs as they age. Women who join the military may be seeking adventure, and in later life this experience may provide them with a sense of self-efficacy. This may decrease the likelihood that they marry and/or have children. However, these decisions may result in fewer social supports and lead to increased social isolation, which can indicate that their health care needs may increase as they age (Reiber & LaCroix, 2016). For example, in a 1999 study of women using the VA, women in all age groups were more likely than men to be unmarried. Of those older than 65, 70 percent were more likely unmarried, nearly half lived alone, and 15 percent to 19 percent reported having no one to bring them to medical appointments (Cotton, Skinner, & Sullivan, 2000; Frayne et al., 2006).

Comparisons between male and female Veterans as reported in the 2013 Women Veteran Profile showed the largest cohort of female Veterans served during GWOT and peacetime periods, while the largest living cohort of male Veterans served during the Vietnam Era. The median age of male Veterans was 64 years, while the median age of female Veterans was 49 years. Female Veterans were less likely to be insured and more likely to have no earnings or income and live in poverty. Female Veterans tend to get married at a younger age than non-Veteran women. Male and female Veterans are more likely to be divorced than non-Veterans (USDVA Women Veteran Profile, 2013).

Like their male counterparts, women Veterans have had occupational exposures and repetitive physical and psychological stress (Reiber and LaCroix, 2016); they experience a higher rate of military sexual trauma (MST) than their male counterparts. [National Survey of Women Veterans 2008-2009; Der-Martirosian, Cordasco, & Washington, 2013].

Of the 161,808 women enrolled in the 22-year Women's Health Initiative prospective study, close to 4,000 are women Veterans, predominantly from the eras of WW II, Korea, and Vietnam, and only 32 percent were enrolled in Veterans Health Administration. Studied in terms of their health at age 65 and beyond, researchers found that 70 percent of the women Veterans (compared to non-Veterans) have three or more chronic co-morbidities, including hypertension, osteoporosis, arthritis, depression, chronic lung disease, cancer and PTSD (Bastian, Hayes, Haskell, Atkins et al., 2016) and a 13 percent higher all-cause mortality compared with non-Veterans (Weitlauf, Washington, & Stefanik (2016).

LaCroix et al. studied women's survival to the age of 80 without disease and disability, as well as indicators of optimal aging to 80 years and beyond between Veterans and non-Veterans in the WHI. They found that women Veterans aged 80 and older reported significantly lower perceived health, physical function, life satisfaction, social support, quality of life and purpose in life scores, and were more likely to live in a residential facility where there are special services for older people (2016). They had more cognitive decline over an eight-year period (Padula et al., 2016), and were less likely to be overweight or obese, slightly less likely to be depressed (LaCroix et al., 2016), had a 20 percent higher risk of hip fracture (Lafleur et al., 2016), and a 20 percent higher level of pain interference (Patel et al., 2016). Knowing the high rates of pain disorders in younger Veterans from GWOT, pain and the associated disabling symptoms will need to be addressed as they age. The probability of dying prior to age 80 years was significantly higher for Veteran women (LaCroix et al., 2016).

The largest cohort of female Veterans served during GWOT and peacetime. Female Veterans are less likely to be insured and more likely to have no earnings or income and live in poverty.

Women Vietnam Veterans and those from more recent eras have a greater prevalence of MST, hazardous alcohol use, and PTSD than those of earlier eras. (Hoggatt, Williams, Der-Martirosian, Yano & Washington, 2015; Washington, Bean-Mayberry, et al., 2013). **There are currently 26,000 women Veterans in MA (USDVA, VetPop 2014).**

Homelessness

Homelessness is a major public health problem that disproportionately affects Veterans (Perl, 2013). Older Veterans are twice as likely to be homeless than older non-Veterans. Almost half of homeless Veterans are over the age of 51 (41 percent are 51-61 years; 8.6 percent are 62+ years) (United States Department of Veterans Affairs [VA], 2009). Homeless Veterans have high rates of chronic disease, psychiatric disorders, and substance abuse (O'Toole, Conde-Martel, Gibbon, Hanusa, & Fine, 2003). They tend to use limited preventative/primary care services, often seek care in emergency departments, and require acute hospitalization (O'Toole, Conde-Martel, Gibbon, Hanusa, & Fine, 2003).

Federal and state Veteran initiatives have focused on homelessness in recent years. In 2009, President Obama and the VA developed a federal strategic plan to end Veterans' homelessness. These initiatives sought to address the causes of homelessness among Veterans. These include poverty, lack of access to reasonably priced housing, alienation from friends and family, substance use, and mental health issues that have developed or worsened because of service-related experiences. Between the 2010 and 2015 Point-in-Time (PIT) counts, Veteran homelessness decreased 36 percent.

According to the 2015 Annual Homeless Assessment Report to Congress PIT count, there were 1,133 homeless Veterans in MA, which is down only slightly from 1,264 in 2014. In 2015, MA had the second lowest rate of unsheltered Veterans in the US, 2.8 percent (32) compared to 2.4 percent (30) unsheltered Veterans in 2014.

There is evidence of an aging trend among homeless adults in the US, including Veterans (Sermons & Henry, 2010). The median age of homeless single adults increased from 35 years in 1990 to 50 years in 2010 (Culhane, Metraux, Byrne, Steno, & Bainbridge, 2013). In 2010, there were roughly 44,000 older homeless adults and it is estimated that this population will increase by 33 percent in 2020, and by 2050 more than double to 95,000 (Sermons & Henry, 2010).

While homelessness at every age is associated with increased health vulnerabilities, older homeless adults face additional risks. Starting at around age 50, homeless persons have chronic conditions equal to or higher than housed peers 15 to 20 years older, including geriatric conditions typically limited to the elderly (Brown, Kiely, Bharel, & Mitchell, 2013). Furthermore, older homeless adults have three to four times the mortality rate of the general population due to unmet physical, mental health, and substance abuse treatment needs (O'Connell, 2005). Age 50 is most often used to define older age among the homeless (Brown et al., 2013).

Aging homeless Veterans represent a growing vulnerable population with important implications for addressing geriatric conditions and end-of life issues, and designing the built environment and care systems necessary to provide quality services.

In 2015, there were 1,133 homeless Veterans in MA. Homeless veterans have high rates of chronic disease, psychiatric disorders, and substance abuse.

Aging homeless Veterans represent a growing vulnerable population with important implications for addressing geriatric conditions and end-of life issues, and designing the built environment and care systems necessary to provide quality services. While there has been some progress in providing housing and services for homeless and at-risk Veterans, challenges remain.

Various systems providing resources and support to homeless and at-risk Veterans continue to operate in isolation of one another. Better collaboration and integration between VA and community-based health care, social services, and housing programs is necessary to enable Veterans to age in place for as long as possible. This will also help avoid nursing home placement, which will promote independence and well-being, as well as lower costs.

In April 2013, the MA Interagency Council on Housing and Homelessness released the MA Integrated Plan to Prevent and End Homelessness among Veterans. The Plan had a compelling vision: all MA Veterans will have a stable place to call home. The Steering Committee organized its goals within a Four Pillar framework of (1) Housing, (2) Prevention, (3) Intervention, and (4) Partnerships.

The specific goals addressed by the plan include:

- Goal 1: Veterans who become homeless are rehoused and stabilized
- Goal 2: Veterans most at risk of homelessness remain housed
- Goal 3: Veterans have increased access to benefits and resources
- Goal 4: Federal, state, and community resources are aligned and integrated to support Veterans

The types of housing available to homeless Veterans are quite varied and only limited by the creativity of the organization providing the housing and the available resources, grants and partnerships to support. From visits to State Veterans Homes (SVH) that have domiciliary units, literature searches, and other site visits, it is clear there are many approaches to providing housing for Veterans in need.

Through grants and partnerships, the type of housing and supports provided vary:

- Some offer shared living with multiple Veterans sharing a large room and common bathroom with a cafeteria and game room, to private rooms with a shared bath between two rooms, to single rooms with private baths, efficiency apartments to one and two bedroom apartments for individuals and families.
- Some facilities may only provide a room and serve as more of a boarding house, while others offer small apartments to support normality and to promote independence within a protected environment.
- Some homes have limitations to the length of time a Veteran can stay; others realize that some Veterans may never be able to become independent or move elsewhere and the home will provide needed “home-based” services up to and including home health aides and medical services through partnerships with the community.

For example, the Pleasant Street Apartments in Beverly, MA, offer fully furnished efficiency apartments for 32 Veterans with support services on site throughout the week and a resident support person who is available on nights, holidays and week-ends. While the goal is for the Veteran to eventually be able to live independently, there is no limitation on length of stay. The Turner House Living Center for Veterans, Inc., in Williamstown, MA, offers transitional housing for nine homeless Veterans, most of whom come from temporary shelters, and detoxification and rehabilitation centers. Their goal is to offer shelter, food, and other necessities for up to two years to help Veterans deal with the issues and problems causing their homeless state.

A SVH in Ohio provides private rooms with a shared bath, full support services, business center, recreation room, game room, library, living room area, and a full cafeteria. It also has a room specifically designed for those who wish to purchase beer and smoke (OHSVH, Sandusky). The domiciliary was bright, clean and nicely furnished with plants, an aquarium, and gym. The average length of stay is nine years. Staff reported the primary reasons residents leave is they "find a woman" or their behavior is too disruptive for them to stay.

A February 2016 article discusses the contracting for an abandoned nursing home in Wilmington, DE, that has received federally funded Housing and Urban Development and VA Supportive Housing (HUD-VASH) vouchers to provide subsidized, permanent housing specifically targeting Veterans. Once renovated, it will have 51 apartments (40 for Veterans; the others will rent at market rate), conference rooms, and 10 office spaces for community groups. They report a waiting list of Veterans to fill it. This particular partnership is particularly interesting because the vouchers are usually awarded to Veterans to use on a permanent basis for private apartments or homes. In this case, the vouchers are tied to and stay with a specific housing project. The Delaware Center for Homeless Veterans believes that the ability to develop the camaraderie Veterans had in the military is the missing link for keeping once homeless Veterans housed (Wilson, 2016). Clearly there are Veterans who, with the appropriate temporary support from shelter services, can get back on their feet and successfully live independently. We learned from visits to domiciliary facilities around the country, however, that there seems to be a substantial contingent of Veterans who do not want to live outside of a protected, sheltered setting or that their health needs (physical and/or mental) are such that they cannot live independently. This protected setting allows them to live and manage quite well, with some holding down a full time job.

There are Veterans for whom we have significant concern. Not only will they age-in-place in their respective locations facing the usual "ills" of the aging process, they also carry with them the associated risks of military service and the era(s) in which they have served. Many will require at least the same level of protected care with perhaps increasing needs along the continuum of age and health decline. We can assume they will need to continue to live in, at the very least, protected care, if not require skilled nursing care at some point.

Additional types of housing options for formerly homeless and Veterans at risk for homelessness are discussed in Parts II and III of this report.

By 2040, there will be fewer than 250,000 Veterans in MA; with a higher percentage of women. However, both men and women Veterans may likely have significantly greater needs for support, services, and housing than those of previous eras.

Section 4 – The Commonwealth’s Veteran Population Now and in the Future

We know that there are currently about 380,000 Veterans in MA and it is predicted that by the year 2040, there will be less than 250,000 remaining. These estimates are based on 2011 data (Glasmeier, 2013), with the assumption that we had fought our last war.

From the data in Parts I and II of this report, we should anticipate that these remaining Veterans will include a higher percentage of women, and that both the men and women may likely have significantly greater needs for support, services, and housing than those of previous eras. It is also highly likely that those serving in the military will continue to be needed, recruited, and may be sent into harm’s way to fight new threats. In turn, these Veterans may be affected by yet unknown types of injuries and exposures. The number and percentage of women Veterans may also increase with the recent (2015) ruling to permit women to enter almost all occupational specialties in the combat units.

The MA Veterans force from recent engagements is comprised predominantly of Reservists and National Guardsmen.

Unlike many other states with large components of active duty military supported by large military bases and facilities, the MA Veterans’ force from recent engagements is comprised predominantly of Reservists and National Guardsmen who return from mobilization to their communities throughout the Commonwealth. With this wide dispersion, they do not enjoy the support and protection of a co-located cohort of their fellow soldiers, nor the services, military health care, and companionship of fellow military service members upon return to their communities and jobs. Their families experience the disruption associated with deployment to combat, yet do not have many of the supports available to active duty military families when facing similar fears and challenges.

We must also keep in mind pressure on the Department of Defense (DOD) to cut costs leading to a proposed downsizing of the Army. This would mean continued and perhaps increasing numbers of deployments of Reserve and National Guard Forces to support contingency operations (National Commission on the Future of the Army, 2016).

While Veterans in the Commonwealth are dispersed throughout the state, 45 percent of MA Veterans live in Middlesex, Worcester, and Essex Counties. Further detail as to percentages, ages, and genders by counties can be found in the MIT Report (Glasmeier et al., 2013), which is helpful to the Commission as they consider access to the State Homes and other services, support and housing needs.

Once these soldiers return from active duty to their Reserve status, access to supports, services, and Veteran health care becomes much more challenging for a number of reasons:

- distance from available services.
- lack of knowledge of available services.
- lack of awareness of possible benefits related to their service.
- obstacles faced by a VA stretched by the multiple competing demands for their services, benefits, and evaluation services.

While Veterans’ Service Officers (VSO) are appointed to serve every town in the Commonwealth, some are more experienced at meeting the needs of their constituents and negotiating the challenges of the VA system than others.

Section 5 – What is Special about Veterans and Military Culture?

There are those who assume that Veterans are like anyone else who ages, not needing any special attention or funding support, especially in this time of multiple competing demands for limited resources. They ask: Why can't Veterans compete for the same limited services and supports of other citizens? Why are Veterans different?

Indeed, Veterans are subjected to the same social, economic, situational and environmental stressors of the general population and deserve the same high quality supports, services and best practices in housing options as their non-Veteran counterparts. However, the first four sections of Part I provide solid, current evidence supporting the many ways Veterans are different than non-Veterans. Veterans carry the additional burden of unique physical, emotional, social, and environmental needs that create a distinct, unique culture of occupational socialization that cannot be ignored.

First, Veterans raised their right hand and swore to defend America against enemies foreign and domestic and were willing to risk their lives to ensure freedom for the rest of us. Second, our country, through the proclamation of President Abraham Lincoln, promised soldiers and/or their families who are negatively affected by service the support and, if needed, care for life. What other population has made this commitment and to what other population have we made this promise?

Veterans are distinguished by their training and their service to the country and adopt a culture shared only with those in the profession of soldiering. Kirchen defines military culture as “the manner in which military experiences shape an individual’s worldview” (Kirchen, 2013, p. 2). Because of military training, experiences and combat, the physical challenges, exposures, mental angst and disabilities are unique from the civilian population (Katz, 2012). These include demands that may include killing, being the target of killing, caring for those who are wounded, and witnessing death and horrific injuries. In addition to exposures to Agent Orange, radiation, depleted uranium, burning chemicals, munitions, and contaminated water; some soldiers have been subjected and exposed to torture, while others now live a tortured life due to flashbacks and ruminations of what they have done, seen and experienced - behaviors that in a different time, place and of a different motivation would have sentenced them to a life behind bars.

Veterans carry the additional burden of unique physical, emotional, social, and environmental needs that create a distinct, unique culture of occupational socialization that cannot be ignored.

Regardless of their childhood, upbringing, or social class, Veterans share a common bond of sense of duty to country and to each other. This unites them in action from the start. Most thrive on routine, punctuality, professionalism, cleanliness, and a strong sense of looking out for their “buddies” at all costs. Many lost their buddies; many blame themselves. Veterans revisit military experiences with other Veterans (who will understand) (Adler and Castro, 2013; Kirchen, 2013), and will seek out other Veterans to discuss their military experiences (Sorrel and Durham, 2011) – a world view rarely understood by civilians, including civilian health care professionals and caregivers (Adler and Castro, 2013; Kirchen, 2013). A 2014 study by Smith and True provides further insight into military culture and the challenges of transition back to a civilian culture after deployment.

Given that the younger MA Veterans (45,000) are predominantly Reserve and National Guard personnel, a number of whom have experienced repeated deployments in support of the GWOT (Table 4), the findings from Smith and True studying soldier identity versus post-war civilian identity are particularly pertinent to this report. The researchers analyzed the physical and psychological struggles of combat

soldiers from Iraq and Afghanistan (mostly Guard and Reserve soldiers, 1/6 of whom were women) re-entering civilian life. A number of the participants had experienced multiple deployments to the high-stress environment of Iraq and Afghanistan with 25 percent describing their readjustment to civilian life as “very” difficult. The authors asked them to compare the assimilation and integration to military culture with expectations of them as civilians. Their description of the military ethos included priorities of: obedience, regimentation and collectivism along with military control, unit cohesion, stoicism, emotional control, disassociation (subsuming oneself into the identity of the group), strict rules of behavior, and pride in the medals they earned. These values instilled throughout their military experiences were highly valued self-identifiers and yet were viewed as relatively meaningless and not appreciated or conforming to civilian life in general (Smith & True, 2014).

Deployed soldiers have lived in an environment where all their basic necessities are provided, including a place to sleep, uniforms, meals, transportation, and a consistent paycheck – all in a setting in which most decisions were made for them so they could completely focus on their mission as a soldier, a unit member, and their loyalty for one another (Smith & True, 2014). Once home, they may become overwhelmed at personal and family responsibilities, including normal experiences in the non-Veteran world such as making food choices, needing to grocery shop, planning for three meals a day, going to the bank or post office, and being responsible for a place to live, paying for it, and constantly being faced with decisions. They struggle with self-determination, self-advocacy, autonomy, and freedom of action (Smith & True, 2014).

In addition, participants noted that they often feel detached and as if they no longer have anything in common with those who have not faced similar experiences. These feelings are all the more reinforced by those they love reminding them that they “have changed” (Smith & True, 2014). Some Veterans feel that it’s not worth the time and energy to discuss their experiences with those who weren’t there. They believe civilians are misinformed and often judgmental. Collectively these factors cause Veterans significant mental distress and they may seek “refuge” by volunteering to deploy again. The authors found that the greater the commitment to the soldier identity, the more difficult the transition. They also found that the identify conflict was worse for those who were forced out of the military due to injuries and other conditions and those in the Reserves and National Guard (Smith & True, 2014).

This was explained by the fact that those remaining on active duty continue to live the military culture, basic necessities continue to be provided, and the soldier continues to be surrounded by those of similar ilk (Smith & True, 2014). The firmly ingrained military culture and the challenges of divorcing oneself from it may further explain why those who never fully adjust back to civilian life may need permanent supportive housing to thrive - possibly for the rest of their lives. It also may explain Veterans’ appreciation and comfort being surrounded by others who have shared the same experiences as they age. For those with dementia, it may provide the needed connection with opportunities to reconnect with their life.

Transitioning our Veterans to the best option for their specific preferences and needs for support and housing must be considered as we project the Commonwealth’s direction in planning for how best to meet these needs and preferences.

The Impact of Military Exposure and Culture on Transitions to Long-Term Care Services, Support and Housing

We must anticipate and plan for the support services and housing for our Veterans, recognizing that many may require some level of assistance at some point as they age. For Veterans, this will most likely be needed at a younger age than their non-Veteran counterparts. Simultaneously, we must keep in mind that there are those who will need continuous, supportive housing and services from a young age due to the effects of their military experiences.

The following parts of the report will consider services for both 1) those living independently, but likely to need assistance as they age and 2) those requiring supportive living environments for optimal functioning and productivity throughout their lives. There are a variety of designations of options for long-term care services in both the civilian and Veteran community: home-based care, adult day health care, residential care, skilled nursing care, and other options that are discussed in Part II.

Transitioning our Veterans to the best option for their specific preferences and needs for support and housing must be considered as we project the Commonwealth's direction in planning for how best to meet these needs and preferences. As has been discussed, successful transitioning is dependent upon the resident incorporating his or her cultural heritage into the new environment (Hersch et al., 2012).

Recognizing that transitioning to institutional care is never easy, Kirchen (2013) studied this transition specifically for Veterans in *Adaptation of Veterans to Long-Term Care: The Impact of Military Culture*. Her premise was that Veterans' military culture has imbued each Veteran with meaningful rituals and beliefs that if supported, will be shared with others when in a supportive system fostering a sense of connection. Indeed, she found that military culture permeated interviews with residents of a State Home. Kirchen identified specific individual and environmental factors that are valued by older Veterans transitioning to LTC. The key factors identified were "being understood" and "feeling connected" to the facility when they sought admission to a State Home (2013, p. 21). Residents described the camaraderie in the military continued in the facility, such as enjoying dining family-style with other soldiers, sailors, and airmen as part of their military tradition. The concerns they expressed included staff members' lack of understanding of military culture, the need for privacy, consistent access to the outside and nature, staff support of individual routines of residents (choices and control over daily routines), involvement, participation, and ability to contribute (2013, p. 44). One of the interviewees described how with each stripe (increasing in military rank) he was responsible for more men and that now he feels responsible for looking after the men around him in the home (Kirchen, 2013).

Kirchen's findings support the cohorting of individuals at similar cognitive levels and perhaps of similar ages and eras. She identified that Veterans benefit from a "client-centered, military-focused approach using meaningful activities in a social, home-like setting to facilitate a sense of well-being and quality of life" (Kirchen, 2013). Many of the concerns expressed are addressed in the progressive design of best practices of philosophical underpinnings, coupled with more homelike facility designs and supportive and long-term housing models discussed in Parts II and III.

Part II. Various Models

Projected Need/Options for Long-Term Care Services, Supports and Housing

Much of current thinking about needs and options for long-term support services and housing for the Veteran population has leveraged research and models from the larger society. This section will provide an overview of these options from the standpoint of the general population, then compare and contrast with the challenges and needs of Veterans.

David Stevens, executive director of the MA Association of Councils on Aging, reports that by December 31, 2016, the Commonwealth will have more residents who are at least 60 years old than residents who are 20 or younger.

There is going to be a sea change in terms of service, response and needs in many towns... local services vary from town to town. The Massachusetts Association of Councils on Aging advocates a regional approach, but many communities only provide senior services to their own residents... We can't service everyone with the current dollars we have. Communities are going to have to recognize that they're going to need to put additional resources into senior services. I hope that legislators and municipal leaders recognize the importance of getting ahead of this issue and being proactive (Tuoti, 1-25-2016).

Section 1 – Trends Influencing Long-term Care Options in the General Aging Population

In just 14 years, by 2030, one in five people will be aged 65 or older and by 2040, there will be 28 million baby boomers over the age of 80; three times as many as in 2000 (Housing, 2014). The US Department of Health and Human Services (US DHHS) estimates that nearly 70 percent of people who reach the age of 65 will ultimately need a form of long-term care (LTC) and 37 percent will need care in an institutional facility at some point in their lives with an average stay of one year (2013). The following paragraphs highlight some of the issues and challenges faced by an aging population and set a context for services to be considered for aging Veterans.

Long-term care services and supports are costly, adding to the pressures on financially stretched older adults (US DHHS, 2012). As we age, the likelihood of disability increases. Seven percent of those 50-54 years old who earn an annual income of \$60,000 have some sort of disability, while those who earn less than \$30,000 are 33 percent more likely to have a disability (Housing, 2014). By age 85, more than two-thirds of elders have a disability regardless of race/ethnicity, income, or housing status (Housing, 2014).

The interaction of disability and finances puts elders at high risk. According to the US Department of Housing and Urban Development (HUD), half of the country's homeless are now over the age of 50 and that number will double to approximately 95,000 by 2050, many of whom may be homeless for the first time (2016; Sermons and Henry, 2010; Zielinski, 2-10-16). Their homeless state follows a series of events – such as job loss, illness, and/or family crises that leave them without the means to pay for housing (Zielinski, 2016).

Furthermore, an AARP (formerly the American Association of Retired Persons) survey found that 73 percent of responders strongly agreed they wanted to stay at home for as long as possible (Keenan, 2010a). While many of these adults live with a spouse, partner, or other family member, 20 percent of those aged 50-64 and 35 percent of those 80 and older live alone (Keenan 2010b). Dr. Pat Deleon, former Chief of Staff to former Senator Inouye (D-HI), noted that in the coming years the number of potential caregivers will decrease from 7:1 to 3:1 (personal communication, 2014).

Aging in place, defined as “the ability to live in one’s own home and community safely, independently, and comfortably, regardless of age, income or ability level” is attractive for many people (CDC, 2013). Research finds that older households—and particularly homeowners—prefer to remain in their homes (Keenan 2010a; CDC 2013), but this assumes the availability of a caregiver as their condition declines. While keeping people in their homes is the focus of Medicaid and other programs (Scott, 2012), this requires the ability to provide services and other supports required to meet a person’s changing needs over time. Once illnesses and disabilities begin to affect an individual’s ability to perform the activities of daily living and to function independently, home and community-based services are usually considered as the first option. These include home-based services with family or friends serving as caregivers. Services may also include help from a homemaker or home health aide, possibly adult day health care for socialization and health care monitoring, and as higher level skills are needed, skilled home health care assistance will be required. Some communities and insurance plans offer home visits by registered nurses, nurse practitioners and sometimes physicians, although these services may be limited.

As previously noted, with the rapid growth of those 50 and older, the number of people living with disabilities is increasing as well. Falls are the number one cause of injury, and of injury related deaths among adults aged 65 and over (NCOA 2015); they can also result in costly hospitalizations. Assessment of elders’ homes for safety concerns to prevent falls is a fundamental and primary screening activity to determine the feasibility of aging in place and home based care as an option. A 2014 Harvard University study reports that the current housing stock does a poor job accommodating physical and cognitive challenges. Options may be expensive renovations or relocating to more accessible housing (Housing, 2014).

There are five features that make homes more accessible and safe.

They include:

- single floor living.
- accessible electrical controls.
- no step entries.
- extra-wide doors and hallways.
- lever style door and faucet handles.

Housing in the northeast scored the lowest on features for accessibility compared with the rest of the country.

There are regional variations in the type of housing in which elders live. Housing in the northeast scored the lowest on all of these features compared with the rest of the country. Compared with a national average of 5 percent, 14 percent of those 50 and over in the northeast live in units within multifamily buildings of two to three stories without elevators (Housing, 2014) and more than 40 percent of the homes have stairs and no bedroom/bath on the first floor (Span, 2015; Harvard University Joint Center for Housing Studies (JCHS) tabulations of HUD, 2011 American Housing Survey).

Additional challenges to community living include insufficient supports and services, lack of transportation and safe pedestrian walkways. The majority of elders live in suburban or rural areas where shopping, access to services, family, and friends is difficult without a car and the ability to drive. The AARP study found one in five elders occasionally or regularly missed activities in which they had wanted to participate because of limited or no ability to drive (Keenan, 2010b). Elders in urban settings may have better access to transportation, but are still at risk for isolation. There may be no transportation to where they wish to go; they may not have family or friends nearby to transport them; and/or it may not be safe, convenient, or affordable for them to travel alone on public transportation (Housing, 2014).

Section 2 – Trends Influencing Long-term Care Options Available to Veteran Populations

Our current younger Veterans, like those of the other wars, will live at least 50 more years, and will be middle aged in 2035. Not only will they likely experience health issues similar to the general population, they will face the additional issues we now see in Vietnam Veterans, as well as yet undiagnosed conditions from the exposures and experiences of the recent Gulf Wars. These yet to be identified health issues will be complicated by what we do know about the co-morbidities recent Veterans currently endure, such as PTSD, TBI and polytrauma (Geiling et al, 2012) as discussed in Part I of this report. It has taken 40-50 years to recognize the current 18+ diseases resulting from exposure to Agent Orange in Vietnam (USDVA: Agent Orange, 2015) and on the de-militarized zone of Korea (Philpott, 2016). While projecting the long-term actual costs of care is difficult, there is agreement that, indeed, these costs will certainly be high (Stiglitz & Bilmes, 2008; Casualties of War, 2007; Tanielian & Jaycox, 2008; Congressional Budget Office, 2010; Kilmer et al., 2011).

While the UMMS team's attempt at regional Listening Tours to identify the long-term care preferences of MA Veterans did not yield many attendees, we do know that AARP survey results, and Medicare and Medicaid utilization trends, demonstrate a preference and choice of many to stay in their homes and communities as long as possible. While home and community care options are generally assumed to be less expensive than long-term care facilities, for some, successfully living in the community is completely dependent on availability of services and the ability to have the services financed through some mechanism. We can assume many Veterans may want to stay in their homes/communities as they age, and plan accordingly for home-based care and services throughout the Commonwealth; keeping in mind that availability/access to these types of services can be a particular challenge for those living in rural areas.

Feasibility for Aging in Place for Veterans

Recognizing the challenges to aging in place for the general population, particularly in the northeast, we should proceed with caution in assuming the feasibility of aging in place for all Veterans. We know many younger Veterans may lack the most basic logistical supports, such as owning a home, available caregivers, and a supportive community; and they also tend to have lower incomes. In particular, this would be true for those who have had difficulty assimilating back to a community following their military experience. As discussed previously, many Veterans return “changed” and may lose their family supports and former friends and colleagues upon return or as time passes; in the more extreme cases, they become homeless or at risk for homelessness. Also, those Veterans who struggle the most with readjustment are also the ones at increased risk for dementia. Thus, the assumptions of the civilian findings for home- and community-based care preferences may not apply.

Caregivers, while increasingly scarce in the general population, may be even less available for the increasing number of women Veterans, many of whom have never married or had children. Male and female Veterans may be estranged from their families and communities, especially those Veterans suffering from PTSD. Lastly, it is also important to consider the known stress of the caregiver burden, which may be even more demanding when layering on the additional unique needs of Veterans as they age, including earlier onset and increased rates of dementia.

Keeping these challenges in mind, we can now look at the options for support services and housing to meet the projected needs of Veterans as they age. We begin with a few basic facts about the Veterans Health Administration (VA) as the primary funder for Veterans' Services. Then we review the trends and best practices of VA support services and housing for long-term care in general as well as what we know about VA services and housing in the Commonwealth.

The VA's mission is "to honor and to serve, for life, those who have served this country." The VA's commitment is the provision of evidence-based care, a continuum of care from prevention to treatment, and to long-term care (LTC) services based on a Veteran's needs at a given point in time (Karlin, Zeiss and Burris, 2010). Throughout this document, we are using VA as the overall term for health and other services and benefits offered by the organization.

Eligibility for VA services is complex. Among other criteria, eligibility is based on the Veteran's percentage of SCD and into which of the eight priority groups the Veteran falls. Section 101 of HR 2116 requires the Veteran's Health Administration (VA) to provide nursing home care to all Veterans with SCD rated at 70 percent or higher.

The Basic State Home Per Diem Rates per Veteran for Fiscal Year (FY) 2016 are:

- Adult Day Health Care: \$82.54, per day.
- Domiciliary: \$44.72, per day.
- Nursing Homes: \$103.61, per day.

Reimbursement for a bed in a community-based nursing home is more complex, and addressed under the section entitled VA Community Nursing Home Program.

Apart from the structure of eligibility and reimbursement systems, there are cultural dimensions that figure into appropriate care for veterans. Care options, including facilities and support services for Veterans, must consider the war eras of their participants. Each era/generation has their own unique culture related to the military they knew and experienced from the time they served, including the music, food, and activities they enjoy. For Veterans with dementia, appreciating their age and era is even more important in facilitating their orientation and ability to relate to an environment they struggle to grasp, ever searching for their lost minds and lives of the past. Specifically, predictions suggest that our younger Veterans (Iraq and Afghanistan Eras) will need specialized care and may eventually reside in nursing facilities after they reach 65 years of age. These Veterans will experience cognitive and physical deficits such that they can no longer be cared for at home (Sorrell and Durham, 2011). The US DHHS predicts 330,000 service members will reside in LTC in the future (2013). As presented in Section 4, Part I, based on calculations and percentages, as many as 13,300 MA Veterans may need LTC as they age. Clearly, the Commonwealth cannot provide long-term care "beds" for that number of Veterans as independent public facilities and will need to consider a variety of options, including home- and community-based services (HCBS) to meet the needs and preferences of Veterans.

As many as 13,300 MA Veterans may need long-term care services as they age. The Commonwealth will need to consider a variety of options, including home and community-based services, to meet the needs and preferences of Veterans.

Section 3 – Contemporary VA Initiatives Looking Towards the Future

In the 1990s, the VA began the trend to move from solely inpatient, hospital-based services to incorporating community-based outpatient care (Karlin, Zeiss, Burris, 2010) into their service offerings. More recently, the VA held a conference of international and nationally recognized experts on aging to address the: 1) changing demographics of Veterans, 2) needs of aging Veterans, 3) gaps in continuity of care, 4) challenges of caring for injured Veterans from the Gulf Wars, 5) limited number of geriatric clinicians, and 6) need for innovative models of care.

The VA's strategic plan consisted of four main goals:

1. Commitment to patient-centered care
2. Provide a uniform level of services across all sites
3. Achievement of an appropriately educated and equipped geriatric workforce
4. A focus on performance and continuous improvement (US Department of Veterans Affairs, 2008)

In MA, the VA provides services through the following health care systems/medical centers:

- **VA Central Western MA Healthcare System:** Includes the Northampton VA Medical Center and five community-based outpatient clinics (CBOC) in Fitchburg, Greenfield, Pittsfield, Springfield, and Worcester.
- **VA Boston Healthcare System:** Includes the Jamaica Plain campus, the West Roxbury campus, the Brockton campus, and five CBOCs in Boston (Causeway Street), Framingham, Lowell, Plymouth, and Quincy.
- **Bedford VA Medical Center** (Edith Nourse Rogers Memorial Veterans Hospital) and three CBOCs in Gloucester, Haverhill, and Lynn.

VA Community-based Outpatient Clinics (CBOC). Each CBOC provides primary care services, which include responsibility for care management, patient education, pharmaceutical reconciliation, integration of community services and providers, and continuity of care as the patients move from general to specialty care, inpatient to outpatient and vice versa. Many of these clinics have integrated behavioral health treatment (Karlin, Zeiss and Burris, 2010). The CBOCs reflect the trend over the past 30 years of the VA to promote non-institutional care and service access to reduce hospitalizations.

The 17 MA CBOCs are located in (Mass.gov 2016):

Boston	Hyannis	Pittsfield
Fitchburg	Lowell	Plymouth
Framingham	Martha's Vineyard	Quincy
Gloucester	Nantucket	Springfield
Greenfield	New Bedford	Worcester
Haverhill	North Shore (Lynn)	

Veterans living on the borders may access CBOCs in Middletown, RI, and Newport, VT, as well as services in NY.

VA Home-Based Primary Care (HBPC) Program. More recently, the VA has focused on the continuum of care model supporting independence of Veterans with increasing functional declines co-occurring with increasingly complex healthcare needs. The HBPC program promotes optimum health and independence in the home by offering comprehensive longitudinal primary care by interprofessional teams who will visit patients in their homes when clinic visits are no longer feasible for the Veteran. The HBPC differs from Medicare covered home care in that HBPC focuses on individuals with multiple chronic diseases, and is comprehensive and longitudinal compared with Medicare's model of a single, short-term temporary condition limited by an episodic event (Edes, 2010; HBPC, 2007).

HBPC is available through all three MA VA medical centers/systems:

- Boston
- Bedford
- Central Western MA

According to the website, HBPC services are only available to Veterans Monday-Friday, 8am-5:30pm. Visits are limited to once a week. All team members are included in the visits, including physicians. Services can be episodic or for longitudinal care. The team will also assess and support the caregiver and will coordinate service delivery with other health care providers within and outside the VA. Their service areas are usually 30 miles or 30 minutes' drive from VA services in Brockton or Worcester, for example. In Jamaica Plain, they must live within 15 miles or a 30-minute drive from the VA (VA Boston, 2015).

VA Readjustment Centers (Vet Centers). The VA also offers readjustment counseling centers (known as Vet Centers). The six MA Vet Centers are located in:

- Boston
- Brockton
- Lowell
- Fairhaven
- West Springfield
- Worcester

Veteran Directed Home Care, Residential and Other Initiatives. Beginning in 2008, the VA began to purchase community nursing home and home hospice care, skilled home nursing, adult daycare, and homemaker and home health aide services. Veterans could obtain care using resources provided by the VA's Veteran directed home care (Hojlo, 2010).

As of 2010, the VA was not authorized to pay for assisted living or PACE (Program of All-Inclusive Care for the Elderly) services, however, they are able to assist Veterans to identify community providers for these services and Veterans can use their VA benefits (compensation, pension, and aid and attendance benefits). The VA has sponsored several pilot projects for assisted living services for Veterans living in rural areas and those with TBIs, including efforts to make PACE services available to Veterans who are provided a budget by the VA for these services (Veteran-Directed Home and Community-Based Services Program). The VA also provides various services to family members and caregivers of Veterans. These services include respite, counseling, training and support (Karin, Zeiss and Burris, 2010). These non-institutional services are relatively innovative and include the previously addressed HBPC purchased skilled home care, adult day healthcare, homemaker and home health aide services, home respite care, home hospice care, and community residential care (Karin, Zeiss and Burris, 2010).

VA Residential Settings. VA residential settings include community residential care, medical foster homes, adult family/foster homes, and assisted living facilities, although assisted living is not currently supported by VA subsidies, except in special cases. VA sponsored/supported services and housing include transitional and permanent supportive housing for Veterans who are homeless or at risk for homelessness.

VA Community Residential Care (CRC). The VA Community Residential Care (CRC) program is for Veterans who have no family to provide care, do not need hospital or nursing home care, but cannot live alone because of medical or psychiatric conditions. This type of care takes place in a number of settings, including assisted living facilities, personal care homes, family care homes, group living homes, and psychiatric community residential care homes. These places – about 1,300 of them across the country – are inspected and approved by VA medical center staff, but are chosen by the Veteran. Veterans pay for their rent from VA compensation, VA pension, Social Security or other retirement or income sources (USDVA, CRC, 2016).

VA Medical Foster Home. The VA Medical Foster Home program was established as a home alternative to nursing home care by finding individuals in the community who will take the Veteran into their home (Edes, 2010). Medical foster homes have a trained caregiver on duty 24 hours a day, seven days a week to help the Veteran carry out activities of daily living, such as bathing and getting dressed. While living in a medical foster home, Veterans receive HBPC services. (USDVA, Geriatrics-Medical Foster Home, 2016). We were unable to find any reference to this model in MA.

Higher quality, relatively financially sound nursing homes were less likely to apply to serve Veterans because of the administrative burden and the less attractive per diem rates.

VA Adult Family Homes (also called Adult Foster Homes). These are private homes where several residents (six or fewer) rent rooms. The homes have shared common spaces, and Veterans might share a bedroom and bathroom with another person. There is a trained caregiver on duty 24 hours a day, seven days a week. This person can help the Veteran with activities of daily living (e.g., bathing and getting dressed). The VA may also be able to provide a health professional (e.g., a nurse) to come to the adult family home and give the Veteran extra care. The VA does not pay for the Veteran's rent, which usually includes basic services. However, the VA may pay for some of the extra services, such as nurse visits, that a Veteran may need in an Adult Family Home (USDVA, Geriatrics Adult Family Homes, 2016). The UMMS team was unable to identify any VA adult family homes in MA.

VA Community Nursing Home Program. A community nursing home is a place where Veterans can live full time and receive skilled nursing care any time of day or night. This program is specifically to allow Veterans who require care to receive it in their own communities, close to their families, while meeting the VA-established enrollment and eligibility requirements.

Veterans seeking long-term care can receive care through the VA's nursing home system or through external VA contracts with community nursing homes. Each VA Health Care Facility has a budget for and negotiates with community nursing homes within their service area for Veterans to be cared for in non-VA facilities (Johnson, 2007). The Evaluating VA Costs (EVC) Study of 2003 found preference is for the community sites to be used for short-term stays of six months or less as more of a post-acute care placement preparing the individual to return to the community, rather than the VA's post-acute and LTC facilities (Hendricks et al, 2003). Rates are negotiated through the VA's per diem system, which generally reflects percentage increases above local Medicaid or Medicare rates for services (Johnson, 2007). Long-

stay VA per diem rates are typically higher than local Medicaid rates (Johnson, 2007). The EVC study estimated that skilled nursing care would cost approximately 20 percent more in the community setting compared with care in the VA system (2003). They found that the VA medical centers were more likely to place the less intensive patients in the community settings due to the concern of some Veterans' eligibility for lifetime nursing care, leading to unmanageable costs and the difficulty of placing certain categories of patients, for example quadriplegics, in community settings (Hendricks, 2003). It should also be noted that at the time of the EVC study, VAs were supplementing care of Veterans in community settings with VA physical and other therapy services with VA staff, without which costs would be even higher (2003).

Over the years, a number of studies were performed to evaluate and compare caring for Veterans in community-based settings versus VA settings. Using the Centers for Medicare and Medicaid Services (CMS) Minimum Data Set, Johnson et al. compared community nursing homes where Veterans received their care with facilities that did not care for Veterans. They found that Veterans were being placed in community nursing homes with a lower quality of care than those community nursing homes that did not care for Veterans (2007). They also found that those nursing homes that had a higher percentage of Veterans were more likely to have higher quality than those that served small percentages of Veterans. The authors explained that the higher quality, relatively financially sound, nursing homes were less likely to apply to serve Veterans because of the administrative burden and the less attractive per diem rates. In addition, Laberge et al., found that for-profit community homes with Veterans were significantly less likely than SVHs to meet (CMS) staffing standards (2008).

These findings should be considered as the Commission considers the community-based options for MA Veterans.

VA Adult Day Health Care. Adult day health care (ADHC) offers Veterans a day program for nursing oversight, social activities, peer support, companionship, and recreation. Designed for Veterans who need skilled services, case management and help with activities of daily living, it can be combined with other home and community-based services. ADHC is also available for Veterans who are isolated or their caregiver is experiencing burden. Health services from nurses, therapists, social workers, and others may also be available. ADHC may be provided at VA medical centers, SVHs, or community organizations (USDVA Adult Day Health, 2016). A spring 2015 review by the UMMS team found only two State Veteran's Homes in the country that offered Adult Day Healthcare, serving a total of 86 Veterans.

Hospice and Palliative Care (HPC) in the VA System, and Community Initiatives. A recent National Public Radio segment reports that every year for the next five years, half a million Veterans will need end-of-life care (NPR, 2015). The VA's palliative care initiatives have improved access to hospice and palliative care for Veterans through the establishment of new inpatient units, community partnerships, and enhanced training and leadership development. In 2003, the initiative started out with training and staffing of hospice and palliative care units, with interdisciplinary palliative care teams (overseen by the national program office) within the 155 VA medical centers, including central data collection initiatives and improved outcomes. The hospice and palliative care (HPC) program has transformed the culture of care through policy, practice, and legislative changes (Shreve, 2010). From 2009-2011, the VA implemented the comprehensive end of life (EOL) care [CELC] initiative. The VA is a provider and

A 2015 National Public Radio segment reports that every year for the next five years, half a million Veterans will need end-of-life care.

purchaser of palliative care (Shreve, 2010).

Christine McMichael, Executive Director of the Hospice and Palliative Care Federation of MA, a member of the Commission, has implemented this model in MA, providing Veteran-specific education and support to staff at community-based facilities (Hospice and Palliative Care Federation of MA Veterans Partnership, n.d.). Established in 2004, the MA Hospice-Veteran Partnership (MHVP) is a coalition of VA facilities, community hospice programs, veteran services and community organizations collaborating to ensure high quality, culturally sensitive care at the end of life is provided to Veterans and their families. MHVP helps community providers understand the complex needs of Veterans at the end of life. MHVP provides leadership, technical assistance and program development to improve Veterans' access to hospice and palliative care across all sites and levels of care so that the Veteran is able to receive hospice care at the time and place of need. Educating the wider caregiving community is vital, since 75 percent of health care is provided to Veterans outside the VA health care system. While the end of life is rarely easy, Veterans may have even more complex needs, especially combat soldiers who may be coping with unresolved grief or survivor guilt, having witnessed traumatic deaths and injuries that may color how they come to terms with their own death (Hospice, n.d.).

HPC partnerships with HBPC community services. Increasingly, palliative care is being delivered through the VA's HBPC teams. HBPC provides comprehensive, longitudinal home care to over 2,100 seriously ill Veterans in their homes each day (Shreve, 2010). Because 21 percent of Veterans in this program die under the care of HPC, the VA national policy supports concurrent services from home hospice agencies (Shreve, 2010).

Comprehensive End of Life Care (CELC). To build and sustain this national initiative, the HPC program placed a program manager and clinical champion in each of the 21 VA geographic regions nationwide, called Veterans Integrated Service Networks (VISNs) with palliative care team coordinators in each of the 153 VA medical centers. There are three data collection centers: 1) Performance Reporting and Outcomes Measurement to Improve the Standard of Care at End-of-life (PROMISE) Center (Philadelphia VA), 2) the QI Resource Center (Greater LA VA), and 3) the Implementation Center (VA- NY Harbor HCS). The PROMISE center provides quarterly reports to the VISNs, with results broken down by facility, and comparison with national benchmark scores (Shreve, 2010).

VA Community Living Centers (formerly called Nursing Homes). The VA provides longer term care institutional services through Community Living Centers (CLC) (new name and philosophy) for their VA skilled nursing facilities and through reimbursements to selected community nursing homes (as discussed in the previous section), and State Veterans' Homes.

Unlike nursing homes in the past, a CLC resembles "home" as much as possible. Gone are the vivid images held by many like the picture on the right of an elder in a hall sleeping, with regimented schedules to manage the heavy workloads of limited staff. This picture represents what society dreads and thinks of with traditional nursing homes.

VA guidelines for new CLC construction embrace the current best practice in the civilian sector, which is a model consisting of small homes for 10 or 12 residents with private bedrooms and baths, their own front door, doorbell, living rooms, kitchens, dens and dining areas to replace traditional nurse's stations and long corridors (Hojlo, 2010), and the ability to easily access the outdoors.



The new CLC facilities being constructed by the VA are very progressive and fully subscribe to the Green House Model™ (see Appendix A for discussion regarding the transformation of nursing home care). The philosophy behind this new model of care began with the Holistic Approach to Transformational Change (HATCh) which transforms care practices to include improved daily programming and personalized activities that address the increasing number of young 20-40 year old Veterans admitted with complex combat-related injuries. This approach also incorporates consistent assignments of the same staff to the same resident for continuity and relationship development. This philosophy also empowers direct-care staff with the autonomy to self-schedule, and expands shifts to meet the needs of residents (Hojlo, 2010).

This is a major paradigm shift in approaching long-term care needs now and in the future. More details are discussed in Appendix A regarding national best practices in the civilian community.

Depending on the reference, the VA has 132 – 139 CLCs. Most are located on or near the campuses of VA medical centers. The mission of CLCs is to: restore each Veteran to his or her highest level of well-being, prevent declines in health, and provide comfort at the end of life (MyArmyBenefits, n.d.). As of 2010, the CLCs were being transformed to incorporate elements of innovative private sector models such as The Eden Alternative, Green Houses™ and the Pioneer Network. Following the design and philosophy of the Green House™ model (see Appendix A), CLCs resemble a home-like environment as much as possible. CLCs include:

- Personalized living space with private rooms and bath.
- Home-like common space with hearth and fireplace.
- Open country kitchen where each meal is prepared.
- Flexible dietary mealtimes and care choices.
- Pets are allowed to visit and may be permitted to live in the CLC.

The Green House™ provides for consistent staff for each resident. To reduce staff turnover, they provide flexible work schedules and expansion of staff responsibilities and autonomy. Veterans may stay for a short time, for rehabilitation or, in some instances, for the rest of their life. It is a place where Veterans can receive nursing home level of care, which includes help with activities of daily living (e.g., bathing and getting dressed) and skilled nursing and medical care (USDVA CLC, 2016).

Visited by UMMS team members, the VA CLC in Danville, Illinois, features homes that are fully detached (see photos next page) similar to a description of the plans for a new State Veteran's Home in Cleveland, TN. Other Green House™, small house models preserve the entire GH concept and philosophy of care and management, however, the homes may be connected to each other and to the community area (for example, those described in the Rhode Island (RI) and New Hampshire (NH) State Home Master Plans).

The mission of Community Living Centers (CLC) is to restore each Veteran to his or her highest level of well-being and to prevent declines in health and comfort at the end of life.



Photos courtesy of Ann.Wagle@va.gov, Guide, Green House Project, VA Illiana, Danville, IL, which features the fully detached homes.

Those built on limited property are designed with multiple levels and referred to as Urban or Stacked Green Houses™ such as the Leonard Florence Center for Living in Chelsea, MA.



Regardless of the exterior configuration, the interiors and floor plans are very similar for both detached homes and multi-level facilities.

Eligibility for the VA CLCs is based on a Veteran's enrollment in the VA health system, the need for nursing home care, for Veterans who have a 70 percent or greater service-connected disability, and for Veterans with a rating of total disability unable to be employed. VA-provided nursing home care for all other honorably discharged Veterans is based on available resources. Eligibility for Veterans without service-connected disabilities is highly dependent upon their household income – countable income after medical expenses can generally not exceed the maximum annual rate of a Veterans pension payable to a Veteran in need of regular aid and attendance (\$21,466 for a Veteran without dependents and \$25,448 for a Veteran with one dependent). Veterans must be medically and psychiatrically stable, e.g., not be acutely ill, have sufficient functional deficits to require inpatient nursing home care, and determined by an appropriate medical provider to need institutional nursing home care (MyArmyBenefits, nd).

VA long-term care facilities in MA are located in Brockton, Bedford, and Northampton and offer varying services and specialties of care.

Section 4 – State Veterans’ Homes (SVH)

As of 2010, the majority of VA supported nursing home beds existed in the system of SVHs, with 146 SVH facilities in 50 states and Puerto Rico providing nursing home care to approximately 24,850 Veterans. Of these, 53 SVHs provide domiciliary care to approximately 5,865 Veterans. Currently, two SVHs offer adult day health care to a total 86 Veterans. Along with the need for assisted living type facilities for Veterans, the literature and the homes we visited also identified the need for more onsite adult day health services for Veterans living in the community (National Association for State Veterans Homes, 2015).

While SVHs are owned and operated by the state, the VA provides up to 65 percent of new construction costs for SVHs and pays a per diem to the state for every Veteran residing in the state home. To participate in the SVH program, VA must formally recognize and certify a facility as a SVH. VA surveys all facilities each year to make sure they continue to meet VA standards. SVHs also have to pass state licensure requirements and can determine their own admissions criteria, costs to Veterans, blend of services, and status relative to healthcare accreditation groups and the Centers for Medicare and Medicaid Services (Shay and Yoshikawa, 2010). The major difference between VA LTC and Medicaid-funded nursing homes is the requirement for the estate recovery provisions (Kinosian, Stallard and Wieland, 2007). Some SVHs may admit non-Veteran spouses and gold star parents, while others may admit only Veterans. The cost to the Veteran varies by state (see Table 5) and the VA does not pay for care for non-Veterans.

In a 2007 Congressional Hearing, John Rowan, National President, Vietnam Veterans of America, shared the value of state homes:

State homes play an important role in remaining the only VA-sponsored setting that provides ongoing, rather than rehabilitative or restorative, long-term care. VA's mental health programs—some of the finest in the nation—as well as significant advances in pharmaceuticals continue to serve and allow many Veterans to recover. However, what are in fact increasing waiting times for mental health programs and the lack of treatment options often contribute to incarceration and homelessness for the most vulnerable of these Veterans. Sadly, we hear increasing numbers of stories of Veterans of Iraq and Afghanistan whose inability to deal with readjustment post-deployment have lead them to the streets or even suicide. In addition, VA should be augmenting its nursing home beds and community resources for long-term care, particularly at the State Veterans' homes (Hearing, 2007).

MA State Veterans’ Homes. The Commonwealth has two SVHs. Details about the homes were covered in the MIT Report, which noted that the SVHs will continue to be vital in terms of options for aging Veterans (Glasmeier, 2013). While the MA SVHs currently offer exemplary LTC for Veterans, the facilities have aged and are in need of significant renovation and/or reconstruction.

Both Holyoke SVH and Chelsea SVH are in need of renovations or rebuilding to make them contemporary with national standards. Any recent renovation and maintenance have primarily been in response to issues arising and/or those identified in surveys. The open bay and multiple person rooms along with community bathrooms on each unit are among the needs to be addressed.



Holyoke SVH Established 1952

Mostly semiprivate and some 3, 4, & 5 occupant rooms Capacity 272 with wait list



Chelsea SVH LTC Facility Built 1949

Primarily open bay living with limited private/semiprivate rooms Capacity 150 with wait list

When visiting SVHs around the country, we observed that none were as old as Chelsea SVH. However many states had preserved at least one or more of their historical buildings. For some, this allowed them to receive additional funding for the historical aspects of the renovations/rebuilding on the campus. Like MA SVHs, most were built on various amounts of acreage offering a campus perspective and the opportunity for consolidation of a variety of types of services and housing developed by the state as well as the VA. The property on which these SVHs were originally constructed is beautiful and sometimes prime property. For example, the SVH in NH has a panoramic view of the hills in the area and a lovely pond on the property where the residents can fish and enjoy the wildlife; the Rhode Island SVH campus has its own ocean beach and offers boating expeditions for the residents. The SVHs in MA are both located on property with beautiful panoramic views. Chelsea has the Boston Harbor view from the solariums on each level of the home. Holyoke has the panoramic view of surrounding land and hills. Unfortunately neither Chelsea nor Holyoke is easily accessed by public transportation, and their acreage will most likely require a vertical or stacked urban Green House™ design rather than the individual home design.

Section 5 – Evolving Views of Governance in State-Owned and Regulated Veterans’ Housing and Long-term Care

As is the case with any long-established public- or publically-chartered institutions, there are, periodically at the state level (Colorado General Assembly, 2006), cycles of innovation around care and service delivery for Veterans living in their institutions. These may be driven by advances in care models, technology, changes in funding, or research about efficacy. This can be seen in the new, evidence-based approaches to long-term care service models from various states, outlined above.

In order to support these innovations, states periodically have cause to reconsider the governance structures surrounding their Veterans’ facilities. In some cases, governance innovation is driven by public awareness of issues in these facilities (Connecticut General Assembly, 2015; Colorado General Assembly, 2006).

In other cases, innovation may be driven by awareness that the institutional governance models that have served the state well in the past may not be sufficient to meet the current and future needs of the Veterans for whom they are responsible.

This section briefly addresses studies conducted by two states in the past decade, Colorado and Connecticut. Each empaneled investigative Commissions, driven by public outcry over issues seen in the housing and long-term care of Veterans in their state facilities. These in turn led to legislatively-driven reforms in governance, management, funding and other dimensions of publicly-supported care for Veterans. Regardless of the forces driving these reforms, in each state it led to thoughtful examination of their problems, of current best practices for state-level Veterans' care, and governance to support these innovations. Whether the earlier (Colorado, 2006) work influenced the later (Connecticut, 2015) effort is not known. However, they reached comparable conclusions, and their recommendations are worth reviewing as MA looks at what is needed to support future innovation in Veterans' care.

Colorado

In 2005, the Colorado State Assembly created a "State and Veterans Home Commission." This followed events of 2002, in which state and federal regulators had cited the Fitzsimons State Veterans Nursing Home "for violations related to infection control practices and resident quality of care." (Colorado, 2006, pg. 1) Further investigation revealed problems with census, financial issues, hiring and retention of employees. Accordingly, a private consulting firm was engaged to manage the facility and an oversight Commission was established.

After monitoring the facility for a period of time, the Commission recommended that a public/private partnership model be implemented for all the SVHs, and a statewide Commission be empaneled to evaluate and make recommendations for all the SVHs.

Their charter included:

- Management.
- State agency oversight.
- Creating an independent nursing home administrator authority.
- An oversight board for all state facilities.
- Individual boards for each facility under the statewide board.
- Review of funding mechanisms.
- Coordination of various funding and licensing agencies.

In 2006, the Commission made the following recommendations:

1. Maintain a central staff within the state's Department of Human Services, that would have "strong background and experience" in nursing home management.
2. Create a permanent Board of Commissioners over the homes.
3. Maintain Community Advisory Boards at each of the homes.
4. Continue using consulting contractors at each of the homes, that would be able to provide objectivity and outside expertise.
5. Create funding mechanisms, including providing additional funding, that would "accelerate maintenance, renovation and new construction at the facilities, as well as providing additional resources for operation of the homes."
6. Seek federal matching funds under the Veterans Administration's State Home Construction Grant Program (65:35 federal: state match).
7. Seek Medicaid certification as a source of additional funding for the homes.
8. Seek flexibility under state personnel rules to facilitate recruitment of nurses and nursing home administrators to fill their vacancies.

(Colorado General Assembly, 2006)

Connecticut

The State of Connecticut operates a single Veterans' nursing facility in Rocky Hill. It was the first SVH in the country, established in 1864. It provides a variety of services, including domiciliary capacity for 488 persons, and a 125-bed long-term care facility. In addition, there are a number of other services on the campus, including a residential substance use treatment program.

In 2014, following reports of health and safety issues at the facility, the legislature formed a Commission to investigate the care, management, and governance at the facility. The report (Connecticut General Assembly, 2015) detailed the context, issues and options across the various services offered at the facility. They found, for example, that the census at the domiciliary facility had declined, in part because of more aggressive federal efforts to address Veterans' homelessness. The Commission recommended that the state transition domiciliary care into a program of transitional housing and permanent, supportive housing.

The assessment of the long-term care facility found that state cutbacks had reduced direct care staffing levels by 22 percent in the facility, and although the reduced staffing levels met minimum care standards, the cuts were associated with issues in the facility. These included an increased rate of falls and medication errors from 2013-2014.

In the Commission's analysis of "overarching issues" (CT, 2015:69), they identified leadership as the biggest issue. They defined this in terms of a lack of follow-up on "advice provided on how to transform its buildings and/or programs," lack of coordination with the VA and local nonprofit groups concerned with the same populations, and the Department of Veterans Services was seen as "isolated."

Among the recommendations was to form a closer working relationship with the VA in Connecticut, and to work more closely with community stakeholders.

The Commission also cited "minimal external accountability of the Home," noting that the Board of Trustees, required to meet quarterly, had not met between December 2010 and September 2012. Further, their report observed that the Board had not met its statutory responsibility for overseeing performance of the Veterans' Home, including issuing annual reports. The board had not produced one since 2007.

The Commission recommended a variety of reforms, including filling vacancies, stricter accountability of Board Members, and that an independent Chairperson, other than the DVA Commissioner, be appointed by the Governor. The Commission also sought greater public transparency, publicly posting meeting notices, minutes and reports.

What has been identified in both example states is a need for statewide coordination of governance, in order to provide consistency in practices, and a common set of standards for assessing, managing, improving, and transforming care.

Similarly, MA may benefit from a coordinated executive-level vision for services both at the State Homes and in future settings where the state has responsibility for Veterans' LTC. Future plans should consider re-thinking the current self-pay model, assessing the role of public/private partnerships as in Colorado, and making program changes that would facilitate greater access to federal dollars.

Section 6 – Fee Structure Comparisons with Other States

Other states were called by the UMMS team to determine their fee structure to the Veteran resident. Other than MA, Tennessee, and Texas, the State Homes in Table 5 use a means test for determination of the cost per resident. For those homes charging a flat rate per day, clearly MA is charging a significantly lower daily rate to reside in one of the two Veteran's Homes. All but one of the SVHs in Texas charges a straight fee of \$56.00 per day. A recently completed facility in Texas, designed as the small house model, applies a means test for the cost per day for the Veteran. This home is run by a private company and did not return our calls for more information. Most of the homes that means test only consider the Veteran's pensions (e.g., VA, SSI, other) in the calculation so as not to impoverish the spouse.

Table 5. Comparison of Eligibility for State's Veterans Homes

STATE	MEANS TESTED YES	MEANS TESTED NO	FEE TO VETERAN
MA		✓	\$30/day
CA	✓		Percent of income and level of care.
CO	✓		Set up with Medicaid if cannot meet fee structure for private pay. Fees range from 4K to 8K /month out of pocket.
CT	✓		
ME	✓		Veteran pays all but the VA per diem of \$102.38. If > than 70 percent SCD, Veteran pays nothing.
NH	✓		They will take up to 90 percent of the Veteran's monthly income including SS, annuities, and pensions.
OH	✓		Cost is \$550/day. Take a percentage of the Veteran's monthly income.
RI	✓		Veteran funds up to a certain proportion of their pension. Assets that may be included in calculations would be rental property income of a Veteran, but not properties per se.
TN	Not clear	✓	\$126.39/day Veteran; \$230.00 spouse
TX		✓	\$56/day (*except Small House Home in Tyler is means tested). Spouses eligible at \$146/day.
UT	✓		\$66/day if Veteran has the means.

Of those SVHs we visited that had domiciliary units, some questioned the appropriateness of the domiciliary units being managed by LTC administration. We learned that domiciliary units have a substantial contingent of residents who do not want to live outside of a protected, sheltered setting, or have health needs that prevent independent living, yet they are able to live relatively normal lives and manage quite well, including holding outside jobs, as long as they live in a protected setting. These folks will age and thus will need to continue to live in supportive housing and possibly require skilled nursing care eventually. These facilities, rather than serving as transitional housing, are indeed their home and their community.

Part III. A Home for every MA Veteran: Options for Consideration

The right care at the right time in the right place:

Adding years to their life...

Life to their years.

Before considering options for long-term care services, supports and housing suggested in Part II for MA Veterans, we return to the original charge to the project team from the Legislature's Joint Committee on Veterans and Federal Affairs. We also provide context with some general elements, logistics, and national trends.



Recap of the Charge

Known to be a leading state for Veterans' services, MA is well positioned to set the standard, once again, as the leader for anticipating and preparing to meet Veterans' LTC needs over the next 20-50 years as they age and continue to be affected by the effects of military service and war. In late 2013, John Polanowicz, then Secretary of the MA Executive Office of Health and Human Services, asked UMMS, through a partnership between CWM and the GSN, to support the MA Veterans' Long-Term Care and Housing Master Plan Commission. For 10 months, the UMMS team visited SVHs and domiciliary units, transitional and supportive housing facilities, along with VA and civilian LTC facilities. The team held several listening tours and attended the annual conference of the National Association of State Veterans Homes, while simultaneously searching the literature for evidence-based best practices for meeting the long-term care and housing needs of Veterans. Progress has been shared through several venues, including a regional Veterans consortium, the Women Veterans Annual Conference, Commission meetings, and presentation to the Legislature's Joint Committee on Veterans and Federal Affairs.

Part I of this report discussed the current research projecting the impact of military service on Veterans' health status, aging processes and anticipated future health and housing needs. Part II described evolving best practices of civilian and VA models of care and housing for the aging population over the next 20-50 years, including governance and funding. Here in Part III, we present options for the Commission's consideration to best support the various anticipated needs and desires of MA Veterans.

When independence is not possible or feasible for the Veteran, environments and services that are sensitive to and appreciative of the military culture should be available, affordable, safe, and accessible while allowing for meaningful social connectedness. For some Veterans, this will mean aging in place in their homes or other community settings with services. For others who do not have a home or a community to which they feel connected, as well as those who may eventually exhaust the available resources and supports to sustain them safely, other options for housing and supports are offered. The question for the Commonwealth is whether we should "make, buy" (Berlowitz et al., 2005) or partner to care for "him who has borne the battle...?" (Abraham Lincoln, 2nd Inaugural, 1865).

Section 1 – Purchase, Partner or Provide for Optimal Long-Term Care Housing

What's the Best Approach for MA Veterans?



Operative Approaches

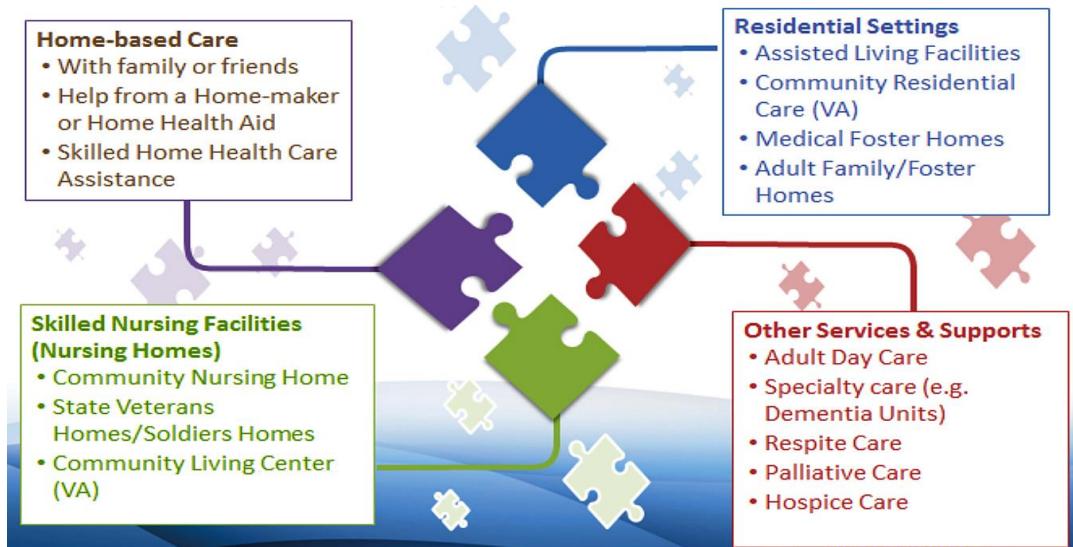
There are two main approaches that can be adopted, in whole or in combination, to address how MA should ensure that Veterans' needs are addressed in the future. Regardless of the approach taken, clear and consistent performance standards and quality outcomes should be included in all contracts.

The Commonwealth may seek to either **Purchase/Partner** (buy) or **Provide** (make) services to Veterans. In Purchase/Partner, the Commonwealth seeks to establish a public-private relationship with entities that provide services to Veterans. Within this model, the state must develop contracts with private organizations, and the state controls are limited to those developed through the contracting systems and processes. Commonly, most discussion surrounds rates of reimbursement for services provided. The State needs to focus more on quality outcome measures and performance standards if we are to ensure that our Veterans receive the care they truly need. The State could partner with community-based organizations for reserved placements in adult day health programs, or apartments in assisted living facilities, or beds in establishing nursing homes.

The Commonwealth may seek to expand what it **Provides** within its publicly operated facilities, e.g., the current Soldiers' Homes or group residential homes, based upon a model operated by the Department of Development Services.

There are pros and cons for each approach. In a typical design, the three considerations of cost, access, and quality are often balanced. It is important to keep a fourth consideration for Veterans in mind: whatever the service, support or housing being designed, it must be provided within a context of understanding the military culture created by the military creeds (statements that set the tone of life in the services and provide a value structure by which Veterans learned to live and work).

Continuum of Care



Massachusetts's population of veterans will be best served if we keep in mind that people need a continuum of care. We address that continuum herein. For all of the options below, we encourage:

- Priority hiring of Veterans and their family members as employees whenever possible.
- Providing services with a sensitivity and appreciation of the military culture.
- Maximizing the potential to participate in other federal and state service funding mechanisms when appropriate and, as a result, addressing related building design, staffing, and documentation requirements.

Home-Based Care

The VA offers limited "Home-Based Primary Care" in MA through its 17 Community-based Outpatient Clinics (described in Part II, Section 3). "Home-Based Primary Care" is set up as a medical model and doesn't address the social needs of a Veteran. Conversely, some 45,000 elders are receiving home-based care with community social supports through the Executive Office of Elder Affairs programs across the state. Some 1,200 of those being served indicate some past military experience. It is unknown if it's the Veterans or their spouses receiving the service. Individuals do not have to be Medicaid-eligible to receive these services, and many are served on a cost-sharing basis.

Residential Settings

Again, the VA has a number of programs that address this area, but none operate in Massachusetts. We could adopt a successful model from the Department of Developmental Services (DDS) and seek to construct a number of multi-bedroom units across key areas of Massachusetts. The DDS model is based upon a single level home, reflective of the preferences and personalities of the people who live there. Staff provides support with skills of daily living to maintain independence and build on individual strengths. The promotion of wellness and attention to medical needs are also integral components. The resources needed to be included in the home are the supports and opportunities for Veterans to enjoy everyday community experiences and pursue interests and activities guided by personal choice.

Skilled Nursing Facilities

We can learn from the experiences of VA initiatives. For example, nursing home beds/placements are one of the most common “purchases” for VA services at the federal level.

Option:

- Similar to the VA, the state could buy nursing home beds through contracts with willing facilities throughout the state. See Appendix B for an example of the contract negotiated between the VA and community-based nursing homes.

The VA’s model of purchasing care (buying placements) within community-based nursing facilities provides options for Veterans who want to remain in a community that has no Veteran-specific services or facilities available, assuming the availability of a bed and a willingness of the facility to contract to care for the Veteran(s) is in place.

- The number of nursing homes designated by the VA to receive reimbursement for Veterans’ care is limited, so a nursing home of choice for Veterans or their families may not be available.
- Due to low VA reimbursements only a small number of homes partner with the VA.
- The literature and SVH visits tell us that most Veterans who are temporarily placed in civilian facilities that are contracted to provide beds for Veterans are very anxious for a bed to open up in the SVH (or VA facility if they are eligible), so they can move.
- It may be more economical for the VA to move the Veteran out of the civilian facility bed to a federal or state LTC facility as soon as possible.
- Finally, one of the ways that the VA has been able to reduce the cost for civilian beds is by bringing in VA services for portions of Veterans’ care, for example, physical therapy and occupational therapy. This assumes there is a VA facility nearby to provide the services.

MA could partner with community-based nursing homes with unoccupied wing(s) to cohort and coordinate Veteran specific care with shared services with the partnered homes for economy of scale.

The best trained mental health professionals and care givers may be challenged by the behaviors exhibited by some Veterans. As a result of these behaviors, not all Veterans may be welcomed in all communities, civilian elder care programs, or skilled nursing facilities. An example of this was shared by one of the Commission members at a 2016 Commission meeting.

Public/private partnerships may be a feasible option. MA could partner with community-based nursing homes with unoccupied wing(s) to cohort and coordinate Veteran specific care with shared services with the partnered homes for economy of scale. MA could consider making the contract contingent upon the Veterans’ wing(s) having state sponsored funding, administration, and the ability to renovate the designated wing(s) to best practices through matched 65 percent funding from the VA and staffed by state-hired, Veteran specific trained personnel to care for Veterans only. This model supports care and services offered in the community, addressing the importance of military culture, although there may be limits in this model’s ability to cohort Veterans based on level of function, medical needs, cognitive ability and/or gender specific preferences, and to serve family members.

Public/Private Partnership for Veteran Nursing Home Care/Skilled Nursing Options

- As civilian nursing homes around the state are closing, the state, through public/private partnerships, could partner to develop them as regional state homes according to contemporary and future standards as established by the VA for new construction of CLCs following the Green House™ home model. Depending on needs, rooms/beds could be available to spouses/partners as well as open to the civilian community as space may be available. The plan could be designed with Medicare/Medicaid eligibility in mind to allow for flexibility in funding and capability as needed.
- The state could partner with high quality, Veteran-friendly, civilian nursing homes throughout the Commonwealth with capacity and an interest to develop a Veteran-attentive wing(s) based on the Green House™ concept.
 - The state would provide oversight to the administration, and Veteran specific training of all the staff to ensure a culture of sensitivity to the unique needs and values of Veterans.
 - Veteran hiring would be encouraged.
 - Common services could be shared with the home facility for economies of scale.
- More than 260 Green House™ (GH) homes are either open or under development in 32 states (RWJ, 2015). As the GH concept grows in number and geography in civilian communities throughout the Commonwealth in the coming years, partnerships could be developed to manage or lease one or more of the houses in these Green House neighborhoods to be dedicated to Veterans.
- Currently in Chelsea, MA, there is one GH urban facility servicing residents in 10 “homes,” and another in Westwood, MA. A third GH facility is in construction in Longmeadow, in Western MA.

A distinct benefit of Green Houses™ is the flexibility of each separate home's ability to respond to various specific health needs of residents.

A distinct benefit of Green Houses™ is the flexibility of each separate home's ability to respond to various specific health needs of residents. This will be important as we strive to anticipate and meet Veterans' evolving and specialty care needs over the next 50 years. For examples, an ALS technologically enhanced home, a home for patients with multiple sclerosis, and gender specific homes for women who choose not to live in a co-residential setting may all be needed. This model also allows for Veterans to be placed in cohorts by era, levels of care, social ability, security risk, respite care, and/or palliative and hospice care. Each small home of 10 to 12 can be easily configured to accommodate the needs of the prevailing groups. The UMMS team witnessed this at the Leonard Florence Center for Living, a civilian GH facility in Chelsea, MA. Since our first visit in spring 2015 and again in February 2016, the facility is converting a general LTC 10 room home into a second ALS unit due to demand. Similarly, as the number of women Veterans in need of services increases, small homes previously occupied by males can be adapted to accommodate women, and other homes can be converted to co-ed. As the number of people with dementia increases, small homes provide a means to progressively accommodate this shift.

Research on civilian GH demonstrates their cost efficiency as well as their high quality and satisfaction ratings. For example, the initial cost for 10 GH for 112 elders is \$9.2 million, versus \$12 million for a traditional 140-bed nursing home (Kane, Lum, Cutler et al., 2007). In addition, some GH's in the VA system have been built on VA Medical Center campuses, which allow them some economies of scale that would be less likely to be available in the civilian sector.

Without identifying GH as such, the findings from Kirchen support the concept of current best practices for a smaller home concept for LTC for Veterans. In her interviews with residents of a SVH, she found that they preferred a private room large enough to have personal belongings from home including, for example, their own bed and recliner (as appropriate). In addition, she found that common areas resembling a home appearance were needed as much as possible

(2013). Brereton et al., found that residents had a better quality of life in their final days in pleasing, home-like environments (2012). Facilities should encourage visitation and welcome families and friends to participate in and sponsor picnics and other activities. It is also important for residents to be able to communicate with those at their cognitive level. Pets should be allowed to visit; perhaps the facility may have therapy pets, such as dogs, fish, or birds. Kirchen also suggests that staff understand the importance for Veteran residents to be able to continue to perform meaningful activities to give back to the facility and community, and staff need to make sure there are opportunities for the residents to serve others as they did their country (Kirchen, 2013). Residents enjoy being able to garden and help care for plants, flowers and vegetables, if available. As with civilian facilities, the goal is that Veterans do not lose the hope and opportunity for continued personal growth (Katz, 2012).

We have learned through visits to other state homes, VA green houses and the Leonard Florence Center for Living (the Chelsea, MA, GH model) that people are willing to travel for good, appropriate care and quality of life for their loved ones. Families tell us that distance to travel is a small tradeoff for the reassurance that their loved ones are comfortable and well cared for and in safe environments that promote living life as fully as one's capacity allows, in spite of their infirmities. We anticipate that, even with local options available, Veterans will often still choose a high quality Veteran facility regardless of the distance from home and family. Residents with ALS and Multiple Sclerosis come from as far as Georgia and New York to the Leonard Florence Center in Chelsea, MA, for the services they provide.

Residents with ALS and
Multiple Sclerosis come
from as far as Georgia
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Leonard Florence Center
Green House model in
Chelsea, MA, for the
services they provide.

MA State Veterans Homes – Chelsea and Holyoke Campuses Options

- The Commission could recommend that the state continue the current SVH model and consider one or two more SVHs to offer more geographic access. A popular model for other states is to co-locate state homes on the same campuses as the VA Medical Centers. However with 45 percent of Veterans in Middlesex, Worcester and Essex counties, where VA land is tight, perhaps with the recent downsizing of MA state residential Department of Developmental Services (DDS) facilities and other properties, the Commonwealth may have suitable land available. A site on or close to the Cape to capture the large number of Veterans currently living in that area could be considered. The current homes are in need of significant capital upgrades to meet national standards. The Commission may need to weigh rebuilding the current model against a model where more services are available statewide.

- The Commonwealth could develop and reconfigure the campuses of the State Veteran's Homes to be *Supportive Living Communities of Excellence for Veterans* as a possible strategy to embrace a variety of housing options, supports and services to accommodate Veterans' needs, preferences, and national standards of excellence, quality and safety.
 - Through a request for public/private partnership proposals (RFP), the campuses could be developed as thriving communities serving Veterans across the continuum of care. Developers and others well versed in appropriate design and financing options could be requested to submit offers that provide high quality care that follow best practices. Proposals, for example, could incorporate models of skilled care and long-term care, adult day health care services, permanent supportive housing, and possibly, transitional housing and child care facilities co-located as well. Quality contemporary facilities on our state campuses could make them highly desirable to Veterans and civilians alike. Proposals should consider priority for placement in the homes for Veterans and spouses as available. Those of financial means could be welcomed on a space available basis and be expected to provide appropriate financial support for their placement.
 - There are many VA community-based partnerships being established to house those who are homeless or at risk for homelessness. The campus approach could also address the need for permanent supportive/assisted living (lite) housing (in place of domiciliary housing) for those who need supportive services. Mental health counseling and case management services could be available and required as appropriate, as well as other services to sustain independence to such levels as residents can tolerate. Envisioned as supported and monitored independent living opportunities for those who cannot function optimally when not in a supportive environment, these facilities would offer Veterans (and their families) the opportunity to live in a small home environment with others, live independently in small efficiencies or apartments similar to the Pleasant Street Apartments in Beverly, or other creative options identified by the RFP responders. An expectation for those accepted into the housing would be that they would work to their ability - be that at outside jobs, volunteering on the campus, or trained for paid positions on campus that support the entire campus community (e.g., laundry, maintenance, landscape, kitchen, transportation). A portion of pensions and income would be assessed for residency.
 - As an example, we can look at the military retirement communities that offer the continuum of care (independent living, assisted living, and skilled nursing facilities) sponsored by the various Services (Army, Air Force, and Navy). Clearly it is not a preference for all military retirees but it is desirable for many. These communities will accept non-military service members and spouses based on a space available basis, many of whom enjoy the military culture inculcated into the fabric of the facilities.
 - The Commission could recommend closing the MA State Homes. The properties could be sold using the proceeds and current annual state funding to purchase services and housing through the civilian private sector.

Governance Considerations for State- or State-Chartered Institutions

The experience of Colorado and Connecticut, as discussed in Part II of this Report, demonstrates that unless there is independent oversight, accountability, public transparency, coordination and collaboration with federal and nonprofit entities serving the same population, adequate staffing and training—state Veterans’ residential facilities may not be meeting their missions.

In MA, separate boards provide oversight for each of the State Homes. While the purpose of the MA Joint Commission was not to study the two State Homes but rather to make recommendations for future models of community-based services, it was observed that these two facilities were proceeding on independent tracks and would benefit from the support of a consistent, executive-level vision and leadership around the challenges they face.

Among the factors that differentiate MA from the two example states is that our State Homes have not been the subject of public outcry over the quality of care. At the same time, our facilities have many of the same risk factors seen in the other states, including challenges with optimally accessing available funding sources, lack of staffing, and problems with aging infrastructure.

Among the options from those two states that are potentially applicable to MA are:

- Creating an overarching State Board for current and future state-run or state-chartered residential facilities, to include experts in long-term care, chaired by an independent chairperson chosen by the Governor.
- Maintaining Community Boards at each of the facilities.
- Incorporating a mechanism for gaining input into the State Board from facility stakeholders, including residents and family members; e.g., representation on the State Board from the Community Boards.
- Creating a leadership position within state government that is tasked specifically with policy development, administrative oversight, coordination and collaboration with the VA and other organizations in the state who are serving Veterans. The successful candidate for this leadership position, and the staff that support it, should have “strong background and experience” in nursing home management. And of course, experience with military culture.
- Ensure transparency and accountability through several means, including:
 - Public meetings of the governance bodies, publication of their meeting agendas and minutes.
 - Adoption, adherence to, training around, and publication of results from, measures and metrics that reflect best practices in the field.

Broad considerations regarding the campuses include:

- A central governing Board/governance structure over both campuses.
- Assessing each resident a pro-rated amount based on their pensions, but not other assets.
- Planning for increased numbers of secure units and beds. All SVHs visited identified the growing need for more units to care for the increasing number of dementia patients, who inherently need additional support, oversight and protection.

Other Services and Supports

- A spring 2015 review found only two State Veteran's Homes (SVH) across the country that offered Adult Day Health Care (ADHC), serving a total of 86 Veterans. All of the SVHs visited by the team, including Chelsea and Holyoke, expressed strong interest in offering ADHC programs on their campuses. From a reimbursement perspective, the VA reimburses \$82.54 per day for ADHC and not much more than that for 24-hour care in nursing homes (\$103.61). In addition to being a valuable asset to the Veterans for transitioning from home to a nursing facility, and an opportunity to share some common services, the state homes recognized ADHC as a possible benefit to the financial bottom line.
- As mentioned in Part II, there are other home- and community-based services that may be desirable to develop a continuum of care and safety net for Veterans that need services in concert with what is available from the VA.

Adult Day Health Care and other Home- and Community-based Services Options

- Contract to "purchase" spaces/placements within established civilian Adult Day Health Programs.
- Adult Day Health Programs could be developed through public/private "partnerships" co-located or in close vicinity to CBOCs in the State. CBOCs are geographically dispersed.
- "Provide" Adult Day Health Care Programs on the two MA SVH campuses.

Section 2 – Summary

Veteran status has been proven to be an important determinant of future health risks.

As Veterans age, they may need specialized care. Veterans experience cognitive and physical deficits at higher rates than the civilian population. Military experience, traditions and culture require unique approaches to address these needs.

The state needs to address the present and plan for the future needs of the men and women and their families who have served our country and the Commonwealth. Based on the best practice models of care, new facilities and services should be designed to address the unique needs of this population that has selflessly given so much. The Commonwealth is poised to lead the nation in recognizing the collective health issues current Veterans face as they age and plan for services, supports and housing to meet these health and housing needs.

Massachusetts must adopt a philosophy of caring for our Veterans' preferences and needs across a continuum of care. Development of Communities of Excellence for MA Soldiers Homes campuses, while a necessary part of the continuum, leaves many without the care they need to stay within their own home and community. Over the past several decades, a network of social service agencies across the state has been developed to assist our aging population. It is time to infuse that network with additional long-term services and the necessary education to support our Veterans.

We end this section with the following paragraphs as representative of what we have sought to convey in terms of the "wounds of wars" and the camaraderie experienced and often desired as Veterans age – seeking to find meaning and resolution to the sacrifices and behaviors required to serve his or her country.

Some Veterans admit that they feel those with the visible injuries are better off (than those with no visible injuries) as people can see the visible evidence of their sacrifices. On January 26, 2016, Dan Stark testified to the MA Joint Committee on Veteran's and Federal Affairs on behalf of the Disabled Veterans Association and his constituents that for some, military service has "broken your body or broken your soul." This profound statement illustrates the complexity of caring for Veterans.

Joe Galloway was the UPI reporter who "blundered into" the La Drang Valley battle of 1965, the first major battle of the Vietnam War. He was awarded a Bronze Star with Valor for his actions during the battle. He was the only civilian in the Vietnam War to receive that award. Joe Galloway and Lieutenant General Moore (US Army, Ret.) co-wrote "We Were Soldiers Once...and Young," a 1998 best seller that also became a motion picture. Galloway wrote about the Vietnam War:

"On behalf of a country that too easily forgets the true cost of war...and who pays that price... I now know why men who have been to war yearn to reunite. Not to tell stories or look at old pictures. Not to laugh or weep. Comrades gather because they long to be with the men who once acted their best.....men who suffered and sacrificed.....who were stripped raw.....right down to their humanity" (2004).



Appendix A

CULTURE CHANGE AND THE PARADIGM SHIFT IN LONG-TERM CARE

Nursing Homes versus Skilled Nursing Facilities

Before further discussion of institutional facilities for the elderly and infirm, it is important to differentiate between nursing homes and skilled nursing facilities, although the terms are often used interchangeably. Nursing homes are often run by charitable organizations and may not provide the full spectrum of care that is provided in a skilled nursing facility. Nursing homes provide custodial care for daily activities like getting in and out of bed, meals, bathing, dressing and using the bathroom. It may include care that most people do themselves, like using eye drops, oxygen, and taking care of colostomy or bladder catheters. If custodial care is the only care needed with no requirement for skilled health care professionals, it is not covered by Medicare. While nursing homes may have certified professional health care workers on staff like nurses and doctors, they are not covered by Medicare or Medicaid because they are not certified and not regulated by the national government. Skilled nursing facilities must meet very strict criteria in order to receive Medicaid or Medicare reimbursement. Nursing homes are licensed and inspected by state oversight agencies. The UMMS team was unable to get an accurate count of nursing home vs. skilled nursing facility designations in MA. It seems that the terms are used interchangeably more often than not.

A national movement for a culture change transformation of older adult services has been percolating since the 1990s. The new direction focuses on de-institutionalization when possible, moving away from the hospital model towards a person-directed system, and practices where the voices of elders and those working with them are considered and respected. Core person-directed values are choice, dignity, respect, self-determination and purposeful living. This transformation supports the creation of both long- and short-term living environments, as well as community-based settings where both older adults and their caregivers are able to express choice and practice self-determination in meaningful ways at every level of daily life (Pioneer Network, nd).

Pioneer Network™ Changing the culture of aging in the 21st century

<https://www.pioneer-network.net/>

The Pioneer Network supports models where elders live in open, diverse, caring communities. Their efforts seek changes in governmental policy and regulation; change in the individual's and society's attitudes toward aging and elders; change in elders' attitudes towards themselves and their aging; and change in the attitudes and behavior of caregivers toward those for whom they care.

The Eden Alternative™ <http://www.edenalt.org/>

Started in 1991 by Dr. William Thomas, the Eden Alternative seeks to make a difference in people's lives by love, caring and living together as family, including changing the culture of care wherever home may be with heart, training, and support. They believe in creating home, identity and connectedness, security, autonomy, empowerment, meaning, growth, and joy. They reach out to nursing homes to help them change their culture and environment. Many assisted living communities were founded on similar principles. A number of the State Veterans Homes market their institution as following the philosophy of the Eden Alternative.

Green House Project ™ <http://www.aplaceformom.com/blog/green-house-project-next-big-thing-in-long-term-care/>

The Green House Project: Caring Homes for Meaningful Lives™ (n.d.)
<http://www.thegreenhouseproject.org/>. Retrieved February 14, 2016.

Expanding on the Eden Alternative, Dr. William Thomas designed this model to move long-term care beyond institutional nursing home towards living with autonomy, dignity and well-being. While he created the Eden Alternative as an effort to “de-institutionalize” and enliven the long-term care environment, since 2003, his 21st-century Green House Project has been creating specially-designed homes in which elders can live with dignity, comfort and companionship.

From their website: THE GREEN HOUSE® Project offers a model for long-term care designed to look and feel like a real home. Over the last decade Green House homes have set a new standard for quality care with a model that is both proven and practical.

5 Ways the Green House Project is Different from Traditional Senior Housing

1. **Intimacy**: Instead of a traditional nursing home, a Green House Project community consists of clusters of smaller homes with six to 10 senior residents.
2. **Autonomy**: Seniors have their own private room and bathroom; further, they are free from scheduling and able to access social and shared areas of the house at any time, making it truly feel like home.
3. **Warmth**: This is one of the core values of the Green House Project. A warm living situation consists of a layout that encourages social activity, as well as furnishings and décor that provide comfort.
4. **Smart Technology**: Green Houses take advantage of smart technology, such as adaptive devices, computers, pagers, and ceiling lifts.
5. **Green Living**: In this case, “green” means living within the natural world. Green House homes let in plenty of sunlight, and include plants, garden areas, and outdoor access.

The Green House model is rooted in a philosophy of person-directed, relationship-based care based on the three core values of *Real home, Meaningful Life, and Empowered Staff*. Individual houses, designed for 10-12 elders, foster the same feeling and experience you get from living in a real home. The model embraces elderhood as an opportunity for continued growth and development and seeks to create the opportunity for elders to experience continued meaning in their lives, while maintaining the autonomy and choice they would experience in their own homes. The innovative organizational structure in the Green House model is based upon the conviction that we need a new framework around which to organize the experience of those who protect, sustain, and nurture our elders. Cross-training of certified nursing assistants as universal workers creates an opportunity for the maximum resources to be placed closest to the elders. A highly skilled team of clinicians provides the necessary support and services for the elders to maintain their highest level of function, without centering their lives around medical treatment.

Green House homes are regulated and reimbursed like other skilled nursing facilities, and cost about the same to operate with improved outcomes and quality of life for residents, their families and staff.

The Green House model has been shown to deliver significant improvement in care and in elder, family, and staff satisfaction. As the nation approaches the impending “age wave,” the Green House model and small home nursing homes are the future of elder care.

Today there are hundreds of Green House homes open or in development in the majority of states. Our evidence-based model has been proven — through independent research — to be effective, feasible and sustainable. Our technical assistance is a big reason why The Green House Project has become a preferred partner in helping organizations meet demands of the changing long-term care market.

There are two open Green House homes in Massachusetts in Chelsea and Westwood. A third is in development in Longmeadow.

Green House homes are regulated and reimbursed like other skilled nursing facilities, and cost about the same to operate with improved outcomes and quality of life for residents, their families and staff.

Information below from: The Green House™ Project: A proven prescription for success (February 10, 2016). Slides presented at Green House conference at the Leonard Florence Center for Living.

Operating Costs

- Comparable in costs to traditional nursing homes
- Occupancy increases:
 - GH homes average 96 percent
 - National average 85 percent and falling
- Private pay occupancy increases:
 - GH homes increased private pay days by 24 percent
 - Nationally, NHs lost 8 percent private pay days in same period
- Private pay rates increase with private rooms
- Short-term Medicare, HMO occupancy increases with all private rooms

Financial Implications of the GREEN HOUSE Model. From Seniors Housing & Care Journal, 2011 Volume 19 Number 1

Licensing

- 80 percent licensed as skilled nursing
- 18 percent licensed as assisted living
- 2 percent licensed as adult family care
- 90 percent non-profit
- 10 percent for profit

Occupancy

- Average 98.1 percent
- Private pay rates/premium — \$178-\$495/day

Development costs

- Variables:
 - *Where* are you building? Alaska, New York, versus Alabama for example
 - *What* are you building?
 - Amount SF (10 vs 12 elders)
 - Urban vs single family
 - LEED certification?
 - FFE/Finishes
 - Range: \$166 - \$505/sf

Residents and Family Satisfaction

- Improved quality of resident life
- Improved quality of care
- Improved family satisfaction

Engagement & Quality of Care

- Higher direct care time
- Increased engagement with elders
- Improved care outcomes

Staff

- Improved staff satisfaction
- Less job-related stress

System outcomes

- Pressure Ulcers: In-house acquired pressure ulcers -GH homes 0 percent, traditional units 4.2 percent
- Hospitalizations: 30 percent to 75 percent fewer hospitalizations than national average
- Estimated system savings: \$10K per elder per

Alzheimer's and Dementia care outcomes in GH

- Lower levels of depression
- Less likely to be hospitalized
- Fewer incidents of elder behavior affecting others
- Reduced use of anti-psychotic or anti-anxiety

Education & Training

- Tools
- Resources

Project Management /Consultation

- Regulatory
- Architecture & Design
- Leadership/Team Development

The Green House™ Project: A proven prescription for success (February 10, 2016). Slides presented at Green House conference at the Leonard Florence Center for Living.

Appendix B

VHA COMMUNITY NURSING HOME PROVIDER AGREEMENT

Source: American Health Care Association. (No date). Retrieved February 16, 2016.

http://www.ahcancal.org/facility_operations/Documents/VACivilianNHProviderAgreement.pdf

A Community Nursing Home (CNH) Provider Agreement is formed when VA agrees to place a patient in the nursing home that meets all terms and conditions described in the following and the nursing home agrees to accept the veteran. All terms and conditions of this agreement shall apply during such time as a veteran remains in that nursing home at the expense of VA. Provider Agreements are shared among VA facilities, as needed for patient placement. Provider Agreements will require an annual renewal at which time the rate schedule may be adjusted.

This document is self-contained, as authorized by Pub. L. 108-170. Additional provisions, typically found in VA contract formats, do not apply to these agreements.

SECTION A - CRITERIA

The following criteria will be agreed to by the CNH Provider for the agreement to be in effect:

A.1 MEET THE CENTERS FOR MEDICARE & MEDICAID SERVICES (CMS) REQUIREMENTS FOR LONG-TERM CARE FACILITIES

The Community Nursing Home will meet the requirements that an institution must meet in order to qualify to participate as a SNF in the Medicare program, and/or as a nursing facility in the Medicaid program. Certification requirements detailed in CFR Title 42(4) Part 483 serve as the basis for survey activities for the purpose of determining whether a facility meets the requirements for participation in Medicare and Medicaid.

A.2 PROVIDE QUALITY CARE AS MEASURED BY CMS SURVEY INSTRUMENTS

The Community Nursing Home will demonstrate that it complies with the Centers for Medicare and Medicaid (CMS) mandated regulatory requirements for patient health, life safety code and quality of care. VA will utilize current CMS quality measures and state survey statement of deficiencies in determining acceptable quality of care compliance with this agreement.

A.3 ALLOW VA REVIEW OF FACILITY AND PATIENT CARE MONITORING

The VA, at its sole option, will monitor the professional care and administrative management of services provided to VA beneficiaries under this agreement, through one or any combination of the following methods; reviews of state agencies' reports, on-site review of the nursing home by VA staff, and/or on-site monitoring of VA patients. It is agreed that the nursing home shall provide VA with copies of all state agency reports and quality measures and cooperate fully with VA's quality improvement-quality assurance program functions relating to this agreement, including VA's on-site inspection and monitoring. All medical records concerning the veteran's care in the nursing home will be readily accessible to VA. Upon discharge or death of the patient, medical records will be retained by the nursing home for a period of at least three years following termination of care.

A.4 APPLICABLE FEDERAL LAWS ON EMPLOYMENT AND HIRING

Provider will comply with all applicable Federal laws concerning employment and hiring practices including the Fair Labor Standards Act, National Labor Relations Act, the Civil Rights Acts, the Age Discrimination in Employment Act of 1967, the Rehabilitation Act of 1973, the Vocational Rehabilitation Act of 1973, Worker Adjustment and Retraining Notification Act, Sarbanes-Oxley Act of 2002, Occupational Safety and Health Act of 1970, Immigration Reform and Control Act of 1986, Consolidated Omnibus Reconciliation Act, the Family and Medical Leave Act, the Americans with Disabilities Act, the Uniformed Services Employment and Reemployment Rights Act, the Immigration and Nationality Act, the Consumer Credit Protection Act, the Employee Polygraph Protection Act, and the Employee Retirement Income Security Act.

A.5 SECURITY OF VETERAN INFORMATION

CNHs are covered entities under the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and thus must comply with all HIPAA privacy and security regulations.

SECTION B – RATE STRUCTURE AND REIMBURSEMENT

B.1 RATE DETERMINATION

VA per diem rates are based on the Medicare prospective payment rates (PPS) for skilled nursing facilities (SNFs). The rates are updated annually using the 53-group RUG-III case mix classification system. The VA rate schedule combines the RUG-53 groups into 8 categories and uses a geographic wage index adjustment. The VA rates apply to all costs (routine, ancillary, and medication) of covered SNF services.

SNF services covered in the per diem include:

- Semiprivate Room
- Meals
- Nursing Care
- Rehabilitation Therapy (including physical, speech and occupational therapy)
- Respiratory Therapy
- Medical and Nursing Supplies (including items such as urological and colostomy supplies)
- Oral and Injectable Medications
- Most Items of Durable Medical Equipment (including ventilators)
- X-Rays
- Routine Laboratory Tests
- Routine Physician Visits

Routine Laboratory Tests are:

- CBC
- Chem Panels
- PSA
- Urinalysis
- Protime/INR
- Glucose
- Liver Panel
- Lipid Panel
- TSH

There are certain exclusions that may require special per diem rates. These services include:

- TPN, IV therapy and chemotherapy, including solutions. NOTE: The pump, tubing and related medical supplies should be included in the per diem rate.
- Specialized medical equipment, such as air fluidized beds.
- Transportation, including ambulance transportation.
- Certain extraordinary high cost items that are currently included in the Medicare SNF PPS rate, such as certain outpatient surgical procedures, custom prosthetics and orthotics.
- Specialized care for SNF residents with AIDS
- High drug costs
- Bariatric care equipment, including, but not limited to specialized beds, bathing and lifting equipment.

The per diem rate will apply throughout the one-year term of this agreement, unless a new rate scheduled is published by VA. The VA must be notified of any changes in care that move the patient to a new care level on the rate schedule. VA authorization is required prior to the care level rate change becoming effective.

High drug cost is defined as oral medication costs, priced at the average wholesale price (AWP) plus a 3 percent transaction fee/prescription, which exceed \$60.00/day for a period of 30 days. In these cases, VA will make provision by supplying the medication or making additional payment. VA must receive advance notification of high cost drug cases for authorization.

B.2 REIMBURSEMENT

All payments by the VA to the provider will be made by electronic funds transfer. Invoices shall be submitted promptly to the authorizing facility by the 15th calendar day following the end of the month in which services were rendered. All invoices must include the full name and address of the nursing home and shall reflect the patient's name, social security number, number of days billed, level of care category, and per diem rate. Failure to include this information may result in delayed payments.

Payments made by VA under this agreement constitute the total cost of nursing home care. No additional charges will be billed to Medicare Part B, either by the nursing home or any third party furnishing services or supplies required for such care, unless and until specific prior authorization in writing is obtained from the VA facility authorizing placement. Except for the billing of personal comfort

items as defined in the Center for Medicare and Medicaid Services Skilled Nursing Facility Manual (Publication 12), there will also be no additional charges billed to the beneficiary or his/her family. The provider will not solicit contributions, donations, or gifts from patients or family members.

SECTION C – ADMISSION AUTHORIZATION

Authorizations for nursing home care will be accomplished on VA Form 10-7078, Authorization and Invoice for Medical and Hospital Services. Each authorization validity period will be from the initial effective date to disposition. Any extension to the original authorization validity period, regardless of the number of days, requires a new VA Form 10-7078. When appropriate, a copy of VA Form 10-1000, Discharge Summary, and other pertinent documents will be forwarded to the nursing home so that they are available when the patient arrives. A nursing home retains the right to refuse to accept any patient when it is anticipated that the services required would exceed the scope of the provider's ability to meet the medical needs of the veteran.

SECTION D – REHOSPITALIZATION

Veterans receiving care under this agreement, who begin to require acute hospital care, will be readmitted to an appropriate VA facility, as determined and authorized by the VA. When such admission is not feasible because of the nature of the emergency, it is agreed that hospitalization in a non-Federal facility may be accomplished provided VA authorization is obtained. VA authorization must be obtained as soon as possible and not to exceed 72 hours of admission to the non-Federal facility. If hospitalization of a non-emergency nature is required, it is agreed that readmission to a VA facility will be accomplished as soon as the patient's condition is sufficiently stabilized to permit admission to VA.

SECTION E – BED HOLD ARRANGEMENTS

If a veteran is re-hospitalized from the community nursing home, the nursing home and VA facility will arrange to hold a bed in reserve, when such a decision is in the best interest of the patient and the VA. The number of covered bed hold days will not exceed 2 days per episode of hospitalization.

Bed hold for therapeutic leave days must be part of a therapeutic plan and approved by the VA, and limited to 2 days per month. Exceptions may be approved by the VA facility director or designee.

Reimbursement for all bed holds will be 70% of the prevailing case mix rate.

SECTION F – DEATH OF VA BENEFICIARY

In the event a VA beneficiary receiving nursing home care under this agreement dies, the nursing home will promptly notify the VA office authorizing admission and immediately assemble, inventory, and safeguard the patient's personal effects pending further guidance by VA.

SECTION G – TERMINATION OF SERVICES

VA reserves the right to remove any or all VA residents from the nursing home at any time, when it is determined to be in the best interest of VA or the patients and after VA has discussed issues of concern with CNH staff, the Veteran, and his/her family or guardian(s) as appropriate. In those cases of serious deficiencies affecting the health or safety of veterans, or in cases of continued uncorrected deficiencies, VHA will take one or more of the following actions:

1. Increase VA staffing monitoring until the state survey agency clears the deficiency.
2. Suspend placement of veterans to the nursing home.
3. Remove or transfer veterans under the agreement from the nursing home.
4. Not renew the agreement.
5. Terminate the agreement.

VA and the nursing home may choose to end the agreement by mutual consent. This may be accomplished in 14 days, provided satisfactory placements have been found for Veterans at the nursing home. To the extent that this agreement is terminated, VA will be liable only for payment for services rendered prior to the effective date of termination.

SECTION H – DISPUTE RESOLUTION

CNH Providers will notify the CNH Coordinator of any disputes regarding level of care, covered services, or other agreement issues within another 5 business days of being noted by CNH staff. Any disputes unable to be resolved between the CNH provider and the VA CNH Coordinator will be referred to the VA Medical Center Director or designee within an additional 5 business days. If the Medical Center Director or designee resolution is not satisfactory for the CNH provider, they may appeal that decision within 5 days to the VA Office of Geriatrics and Extended Care (114) in VA Central Office for a final resolution. VA will notify the CNH of the final decision within 3 business days of when the appeal was received.

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