



MAHSO
MARKET AREA HEALTH SYSTEMS OPTIMIZATION

National Planning Strategy

Community Living Centers
Planning Strategy

March 2021



Table of Contents

Executive Summary	3
1. Program Overview	8
1.1 Program Mission	8
2. Current State Overview	11
2.1 Demographic and Programmatic Distribution Analysis	12
2.2 Current VA Program Review and Analysis.....	17
2.3 Commercial and other Federal Provider Trends	37
2.4 Current Program Summary	42
3. Leading Practices.....	43
3.1 Leading Practices Analysis	43
4. Service Planning Framework	51
4.1 Program Priorities	52
4.2 Geographical Service Areas.....	54
4.3 Planning Guidelines	55
5. Future Program Planning	69
5.1 Applying the CLC National Planning Strategy to VA Market Assessments	69
Appendix A: Service-Connected Disability Priority-Based Enrollment System.....	71
Appendix B: Definitions	72
Appendix C: Rural-Urban Commuting Areas Definition.....	77
Appendix D: Commercial Long-Term Care Services Data Profile	78
Appendix E: Leading Practices	84
Appendix F: References.....	91
Appendix G: Interviews	99
Appendix H: Acronym List.....	100



Executive Summary

Introduction and Purpose

The Department of Veterans Affairs (VA) Market Area Health Systems Optimization (MAHSO) effort developed 96 draft market assessments in the 18 VA Veteran Integrated Service Networks (VISNs) to produce opportunities for the design of high-performing integrated delivery networks. This was required by the VA Maintaining Systems and Strengthening Integrated Outside Networks (MISSION) Act of 2018.

These market assessments will culminate with a National Realignment Strategy that will present Veterans Health Administration's (VHA's) plan for the future of VA health care, enabling Veterans to access the right high-quality care in the right location. Recommendations from the market assessments will be finalized and submitted by the Secretary of VA to the presidentially appointed Asset and Infrastructure Review (AIR) Commission for consideration. The AIR Commission will submit its recommendations to the President for review and approval, prior to them sending to Congress for review and approval.

This Community Living Center (CLC) National Planning Strategy establishes a consistent set of guidelines to develop long-term care (LTC) opportunities that inform and support the development of high-performing integrated delivery networks. Using comprehensive VA data, the guidelines can facilitate improved alignment of long-term care capacity and capabilities with the evolving needs of Veterans.

The VHA Chief Strategy Office (CSO), committed to working with offices across the organization to create programs and services that best serve Veterans, developed the CLC National Planning Strategy in consultation with the Geriatric and Extended Care (GEC) Program Office.

CLC Program Overview

VA has a rich history of supporting Veterans across the continuum. As Veterans from past wars and conflicts have aged, VA has worked tirelessly to increase access to a range of supportive extended care and long-term care services. Today, VA long-term care, led by the GEC Program Office, offers a variety of Veteran-centered services that focus on optimizing the health, independence, and well-being of Veterans. VA provides or purchases long-term services and support (LTSS) for eligible Veterans through 14 LTSS programs spanning facility-based settings including Community Living Centers (CLCs), community nursing homes (CNH), State Veterans Homes (SVH), and a range of Home and Community-Based Services (HCBS).

Program Mission

As a component of VA's LTSS spectrum, the primary mission of VA CLCs is to provide accessible short- and long-term care that restores enrolled Veterans to their highest



practicable level of well-being and function as well as supporting Veterans with end-of-life-services. ¹

Programmatic Overview

Long-term care is provided by VA locally across the network with 134 CLCs typically tied to population centers associated with VAMCs. VA LTC programs provided are usually highly individualized based on community health care needs and available LTC resources. Each CLC has a unique approach to balance CLC, CNH, and SVH resources to ensure enrollees needs are met.

Current CLC Services

CLC Short Stay Services (Less than 90 Days)	CLC Long Stay Services (Greater than 90 Days)
<ul style="list-style-type: none">• Rehabilitation• Skilled Nursing Care• Restorative Care• Continuing Care• Mental Health Recovery• Dementia Care• Geriatric Evaluation and Management (GEM)• Hospice and Palliative Care (may exceed 90 days)• Respite Care	<ul style="list-style-type: none">• Dementia Care• Continuing Care• Mental Health Recovery (Chronically Mentally Ill Care)• Spinal Cord Injuries and Disorders

Programmatic Challenges

Over the next decade, VA will face an aging Veteran population with increasingly complex, chronic issues. As the number of Veterans age and greater Veterans are classified at higher priority levels, (indicative of greater health care needs and support), VA's LTSS and CLC services will be challenged. Balancing capacity with future demand while optimizing HCBS and short-stay services are considerable challenges facing VA. To respond, cohorting services that maximize human and infrastructure resources and continued partnering with CNHs and State Veterans Homes (SVH) that meet quality standards will be necessary to provide Veterans the right care and at the right place. Additionally, VA must thoughtfully plan, fund, construct, and activate new programs across the various sites of care in markets that may require expanded or modernized facilities, when Veterans are faced with the need for institutional care.

Resulting Planning Guidelines

Planning guidelines inform products from the market assessment process. The rationale for establishing VA planning guidelines is rooted in the belief that quality or patient safety may be compromised when a service falls below identified measures.



Program Priorities

To respond to the rapidly changing environment and to continue to support Veterans, VA and GEC continue to address key priorities including:

- **Aging Population:** Providing an age-friendly health care system that provides services that support whole health and independence, at home or in residential care.
- **Appropriate Setting of Care:** Balancing HCBS and facility-based LTC services to honor Veterans' preferences and reduce nursing home stays.
- **Geographical Service Alignment:** Aligning services with population demand in both urban and rural settings.
- **Special Population Needs:** Providing models of care that address special population needs while maximizing resources.
- **Access:** Providing localized care to promote Veterans' preferences and family caregiver involvement including focusing on providing CLC services within 30-minute and 60-minute drive time for urban and rural settings, respectively.
- **Evidence-based Facility Design:** Reducing institutional-based CLCs and promote the Small House Model design to provide a more home-like environment for CLC residents.
- **Aging Infrastructure:** Modernizing CLCs across the network to improve environment of care setting.

As a result, planning priorities for CLCs are focused on meeting growing Veteran demand for long-term care and related services in the right location and setting while facing workforce shortages, contending with a need to better geographically align care, and addressing age-specific specialty care needs.

Planning Guidelines

The CLC National Planning Strategy developed quantitative and qualitative planning guidelines across demand, supply, access, quality, and other applicable domains for each service type. As a result, the CLC planning guidelines were developed. Several overall guidelines serve as a platform for planning including:

- Target occupancy rate of 90%
- Minimum bed requirements: A minimum of 16 beds for existing CLC programs and, for new CLCs 48-64, to operate efficiently
- Access/drive time requirements—30-minute and 60-minute drive time standards for urban and rural markets, respectively, tied to Veteran family/support system. In addition, minimum enrollee populations of 30,000 enrollees per new site and 21,000 or 24,000 enrollees within 30- or 60-minute drive times of sites
- To support Veterans outside VA, CNHs must have Medicare Nursing Home Compare rating of 3 stars, or a rating of 2 stars overall with 4 or 5 stars in quality measures. If CNH does not meet VA's quality standards, VA may grant a waiver to the CNH



Key CLC planning guidelines by move type are summarized as follows:

Major Move	Planning Guideline
Open New CLC	<ul style="list-style-type: none">• Demand: Target of 43.2 ADC; Demand meets target population demand• Supply: A minimum of 48-64 beds (3-4 neighborhoods); No existing CLC with 30/60 minutes of potential new CLC and limited quality CNH/SVH availability
Maintain/ Resize CLC	<ul style="list-style-type: none">• Demand: Minimum of 14.4 ADC; Demand meets occupancy rate and population target demand.• Supply: Ability to maintain 16-bed minimum; Limited quality CNH/SVH availability; Community partners do not meet 2.5X VA ADC within Access guidelines• Infrastructure: Existing facility follows Small House Model or facility was built after 1985
Relocate Existing/Modernize Replace CLC	<ul style="list-style-type: none">• Demand: Target of 43.2 ADC; Demand meets occupancy rate and population target demand• Supply: Ability to maintain 16-bed minimum/48-64 beds (3-4 neighborhoods) minimum; No existing CLC with 30/60 minutes of potential new CLC and limited quality CNH/SVH availability• Infrastructure: Existing facility was built prior to 1985; Total Campus FCA >154.9M; Standalone CLC FCA > \$5M
Partner – VA-delivered or CCN/AA/Federal/ CNH/SVHs	<ul style="list-style-type: none">• Demand: Inability to meet target ADC of 14.4 ADC and target occupancy• Supply: Less than 16-bed minimum; Community partners can meet 2.5X VA ADC within Access guidelines• Infrastructure: Existing facility was built prior to 1985; Total Campus FCA >154.9M; Standalone CLC FCA > \$5M• Other: Inability to hire staff/maintain staff

Future Program Planning

The four-step process for revisiting MAHSO draft opportunities, shown below, describes how CLC specific market assessment opportunities will be reviewed and updated, if necessary.

1. Review Phase 1-3 market assessment data and CLC opportunities
2. Apply CLC planning guidelines
3. Update/Create CLC opportunities
4. Review and finalize opportunities with VA Leadership

The CLC National Planning Strategy, created in conjunction with the GEC, is a framework for designing consistent service delivery planning for long-term care services. Based on GEC program priorities, this national planning strategy provides guidance on how CLC programs can respond to varied market demands and trends while optimizing VA resources in a Veteran-centric framework. The resultant guidelines and thresholds will be used to ensure that capital planning is matched to Veteran



demand and a consistent set of recommendations is established to inform and support the development of the National Realignment Strategy. The planning guidelines will also inform future quadrennial market assessments and other long-range planning exercises.



1. Program Overview

VA is committed to providing Veterans world class health care across the continuum. The aging of and unique needs of Veterans coupled with shifting demographics across VA has required the continuum of services provided to address a range of complex, chronic issues. VA provides or purchases Long-term Services and Support (LTSS) for eligible Veterans through 14 LTSS programs spanning facility-based settings including Community Living Centers (CLCs), community nursing homes (CNH), State Veterans Homes (SVH), and a range of Home and Community Based Services (HCBS).¹ As VA continues to fulfill its mission to be a national leader in elder care, it will need to continue to embrace home and community-based care, and other Veteran-centric approaches.

Since the 1960s, VA has been authorized to provide nursing home care to eligible Veterans in various settings, including VA facilities, private nursing facilities contracted by VA, and State Veterans Homes.² In 1990, VA began reassessing the care it provided to aging Veterans and recognized the need to provide a continuum of care rather than discrete care settings. In the landmark 1998 report, “*VA Long Term Care at the Crossroads*,” a shift in LTSS from inpatient facilities to home- and community-based settings was urged.³ This shift was further supported by the Veterans Millennium Health Care and Benefits Act of 1999, which set forth Congressionally-mandated benefits of home and community-based LTSS for all enrolled Veterans along with nursing home benefits for select Veterans.⁴ In 2019, VA instituted the MISSION Act which gives Veterans even greater access to health care in VA facilities and the community. These shifts coincide with the aging of Veterans, skilled workforce shortages, and greater emphasis on patient centeredness.

1.1 Program Mission

VA long-term care, led by the Geriatric and Extended Care (GEC) Program Office, offers a variety of Veteran-centric services that focus on optimizing the health, independence, and well-being of Veterans. VA and GEC strive to honor Veterans’ preferences by increasing the delivery of LTSS in home and community-based settings, and by reducing preventable hospital and nursing home stays and emergency department visits. They also continue to focus on improving care quality and enhancing the experiences of Veterans facing the challenges of aging, disability, or serious illness by supporting optimal care coordination and management, especially when home care is needed or during transitions between care settings.¹

In the next decade, the aging of and complex, chronic health issues of enrolled Veterans, especially Vietnam Era Veterans, will tax VA’s LTSS and CLC capacity. As a component of VA’s LTSS spectrum, the primary mission of VA CLCs is to provide accessible short and long-term care that restores enrolled Veterans to their highest practicable level of well-being and function as well as end-of-life-services.¹



CLC Short-Stay Services (Less than 90 Days)	CLC Long-Stay Services (Greater than 90 Days)
<ul style="list-style-type: none"> • Rehabilitation • Skilled Nursing Care • Restorative Care • Continuing Care • Mental Health Recovery • Dementia Care • Geriatric Evaluation and Management (GEM) • Hospice and Palliative Care (may exceed 90 days) • Respite Care 	<ul style="list-style-type: none"> • Dementia Care • Continuing Care • Mental Health Recovery (Chronically Mentally Ill Care) • Spinal Cord Injuries and Disorders

Opportunity Statement

Given VA’s priority to provide appropriate long-term care for its aging Veteran enrollee population ensuring the right care is found in the right place, creating a national planning strategy that evaluates key influencing factors is crucial. The intent of the CLC National Planning Strategy is to develop planning guidelines for CLC services that support Veterans enrollees along the geriatrics and extended care continuum and ensure sufficient access to CLC services.

Enrollee Veterans who use CLCs and other VA-funded LTSS have individualized needs that influence the choice of the most appropriate and least restrictive care setting. The ability of VA to offer CLC care across the care continuum will vary by market based on existing supply and demand. In some markets, VA may need to invest in infrastructure to fill local care gaps to meet Veterans’ needs and in other markets, it may be advantageous to contract with high-performing community providers. ⁵

Key Factors Influencing Long Term Care Strategy
<ul style="list-style-type: none"> • Geographical Location • Veterans Needs/Preferences • Difficult to Place Special Populations • Family/Caregivers Needs/Preferences • Social Determinants • Legislation/Regulations • Financial Implications • Outcomes • Industry Changes • Skilled Staff workforce • Infrastructure • Technology

The CLC National Planning Strategy will address key areas:

- Clinical and functional needs profile of Veterans using CLCs and other LTSS
- Utilization patterns of Veterans accessing CLC and other LTSS
- Current and future long-term care preferences of Veterans using CLC and other LTSS
- Market-specific restructuring approach to best meet the current and future needs of Veterans



VA Geriatrics and Extended Care Strategic Plan FY 2021-24

This CLC national planning strategy study considers and integrates as applicable the following GEC strategies identified:

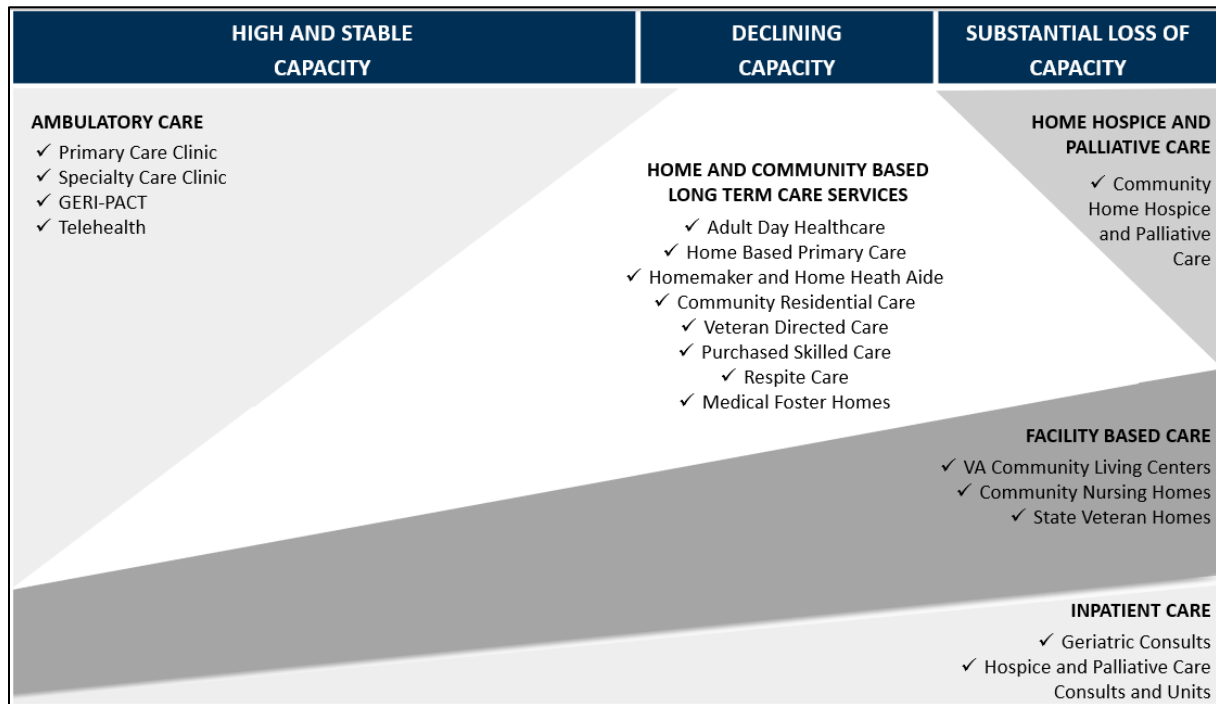
GEC Strategies Identified	
Expand Home and Community-Based Services	Home and community-based services allow Veterans to age in place while reducing costs, improving Veteran outcomes, and honoring Veteran choices
Modernize Systems for Healthy Aging	Streamlining and standardizing processes and resources facilitates a high-reliability approach to optimizing care for aging Veterans enterprise-wide
Modernize and Improve Facility-Based Care	Aligning CLC and SVH beds with demographic trends ensures access to quality institutional care for aging Veterans
Improve Access with Technology	Expanding access and improving clinical care delivery by implementing the latest technology in virtual care
Increase Geriatric Expertise	Expand the workforce with geriatrics and palliative care expertise to meet the growing needs of Veterans
Develop Data Definitions and Processes	Utilize data to improve communications and inform services for aging Veterans



2. Current State Overview

Since the 1990s, Congress has authorized VA to provide a variety of facility-based and home and community-based services to ensure Veterans receive the necessary LTSS in the least restrictive environment.⁶ The GEC Veteran-Centered Framework reflects VA’s continuum of LTSS that supports whole health and independence for aging Veterans.⁵ As Veterans age, early detection and management of age-related health issues are important to promote self-management and identification of community support services to prevent premature institutional care. Home and community-based services help Veterans and their caregivers manage progressing health conditions while remaining as independent as possible within their homes. Veterans receive facility-based LTC in CLCs, CNHs, and SVHs. Enrolled Veterans who are unable to remain in their homes may also receive inpatient hospice/palliative care.

Figure 1: Geriatric and Extended Care Program Office Continuum of Care, 2020



Source: GEC Strategic and Vision, 2020



2.1 Demographic and Programmatic Distribution Analysis

The drivers of VA’s LTSS are different than those of past decades. Although traditional health care drivers such as age, disease incidence, and comorbidities, are still relevant, today’s dynamics include additional influences such as a long-term care cultural shift to Veteran-centered care and home- or community-based care. There is an increased focus on personal preference and lifestyle, family caregiver involvement, increasing dementia and cognitive conditions, technology, geriatric workforce shortages, aging VA facility infrastructure, and escalating costs. As VA plans for its future LTSS needs, it must evaluate and understand the effect of these key drivers.

Key Health Care Drivers/Influences
<ul style="list-style-type: none">• Veteran Characteristics• Veteran Caregiver Preferences• Eligibility• Reliance• Access• Demand• Disease Prevalence• Technology• Quality• Workforce Shortages• Aging Infrastructure• Expenditures/Cost

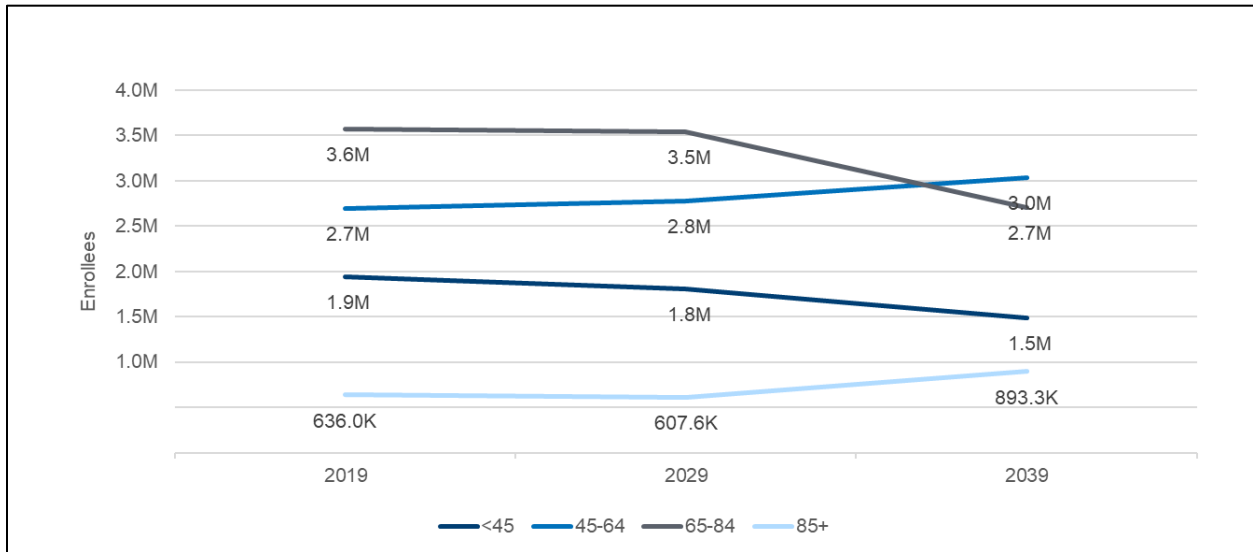
Veteran Characteristics

There were approximately 13.7 million eligible Veterans and just under nine million Veterans enrolled in the VA health care system in 2019. Of this population, the average enrollee was male, 61 years of age, White, and married with dependents. ⁷ The eligible Veteran population is projected to decrease by 14.8% by 2029, and enrollees are estimated to remain relatively stable through 2029 (-1.3%), before decreasing by 7.1% from FY 2029 to FY 2039. ⁸

While the eligible Veteran population is projected to continue to decrease, enrollee growth is projected across certain age categories. As Veterans age, this trend forecasts substantial growth (47%) of enrollees age 85 and older from FY 2029 to FY 2039. Overall, the 85+ enrollee population is projected to increase 40.5% from FY 2019 to FY 2039 from 636,000 to 893,000 enrollees. ⁸ Aging Veteran enrollees will generally need more health care services. National statistics reflect that 47% of men age 65 and older will need long-term care during their lifetime and 42% of all individuals age 85 and older will require long-term care services. ⁹



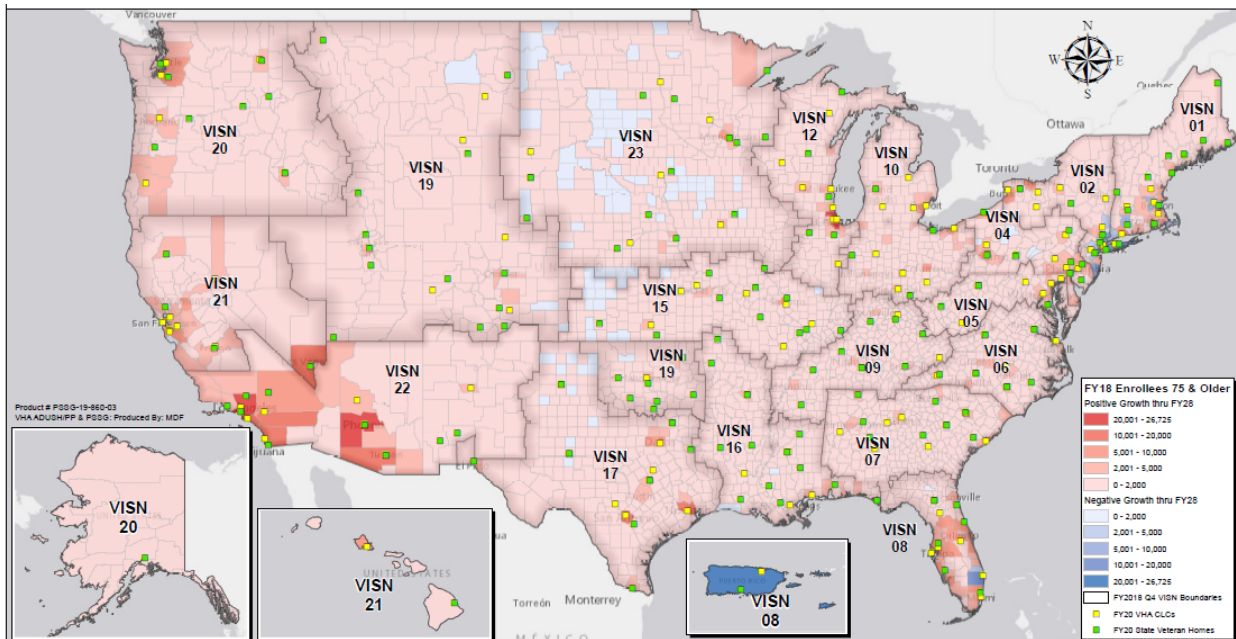
Figure 2: Enrollee Projections by Age



Source: VA Enrollee Health Care Projection Model 2020. VA 2020 EHCPM

The number of Veterans 75 years of age and older is projected to increase nationally and within all VISNs from FY 2018 to FY 2028. This demographic change will affect VA LTSS budget as older enrollees need for HCBS typically increase with age to prevent premature institutional care.

Figure 3: FY 2018 Enrollees by County (75-Year-Old and Older), CLCs, and SVHs



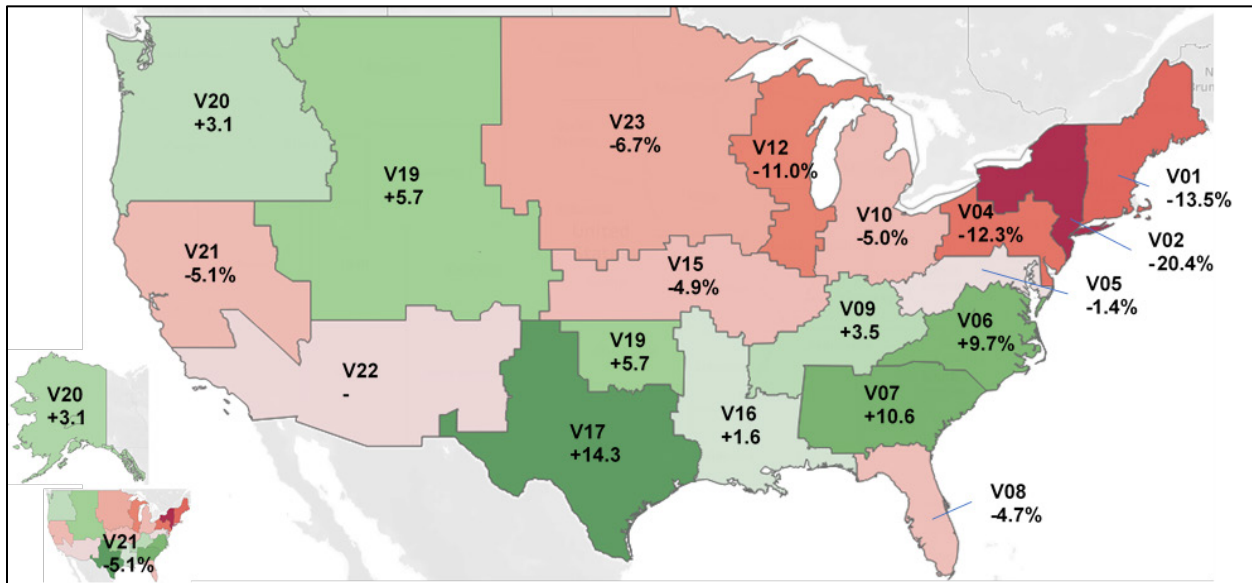
Source: VHA Office of Policy and Planning



In addition to changes in overall population and age distribution, Veteran enrollment is projected to experience a geographic shift by FY 2029. Veterans Integrated System Networks (VISNs) located in the Northeast and some Midwest regions of the US are projected to experience large declines in enrollment, while some VISNs located in the Southern and Southwestern regions are projected to experience growth. Most notably, VISNs 1, 2, and 4 are projected to decrease 13.5%, 20.4%, and 12.3%, respectively, while VISNs 6, 7, and 17 are projected to increase 9.7%, 10.6%, and 14.3%, respectively.

In addition to changes in overall population and age distribution, Veteran enrollment is projected to experience a geographic shift by FY 2029. Veterans Integrated System Networks (VISNs) located in the Northeast and some Midwest regions of the US are projected to experience large declines in enrollment, while some VISNs located in the Southern and Southwestern regions are projected to experience growth. Most notably, VISNs 1, 2, and 4 are projected to decrease 13.5%, 20.4%, and 12.3%, respectively, while VISNs 6, 7, and 17 are projected to increase 9.7%, 10.6%, and 14.3%, respectively.

Figure 4: Fiscal Year 2019-2029 Enrollee Change by VISN (All Ages)

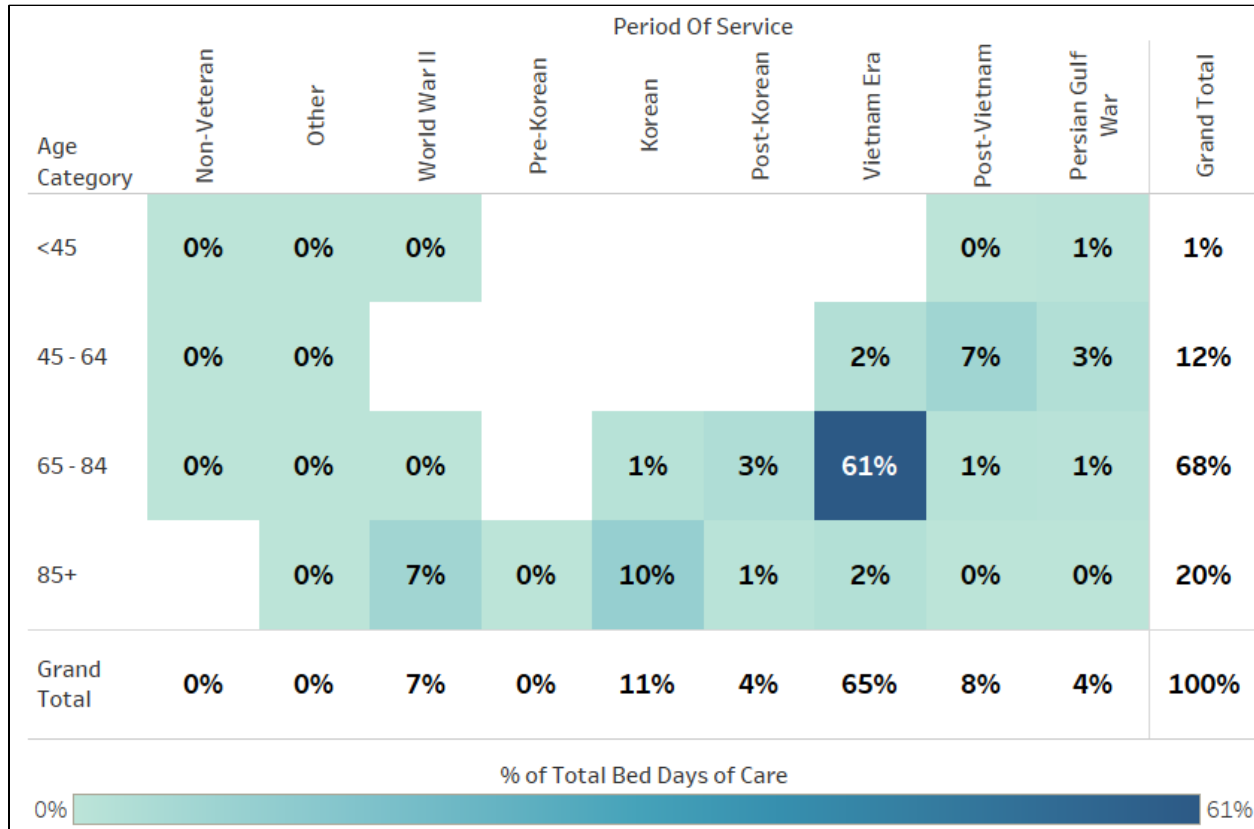


Source: VA Enrollee Health Care Projection Model 2020

During FY 2019, 61% of Veteran CLC Bed Days of Care (BDOC) were associated with enrollees between the age of 65-84 who served in the Vietnam Era. Overall, 83% of BDOC for CLC services were Veterans who served during World War II, Korea, or Vietnam. As Veterans age, this distribution is projected to shift to a greater majority of Vietnam Era Veterans. ¹⁰



Figure 5: Community Living Center Bed Days of Care by Age Category and Service Period



Source: VA CDW Treating Specialty Cube

Eligibility

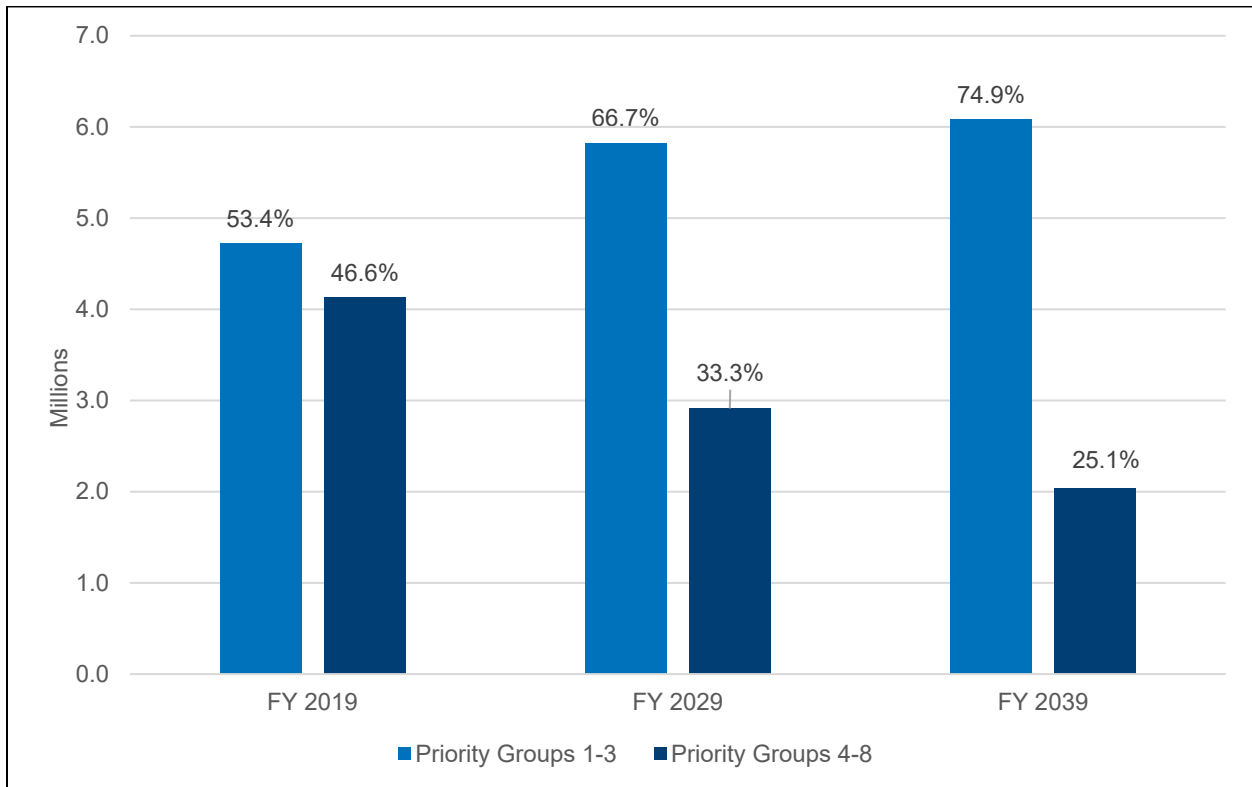
The Veterans’ Health Care Eligibility Reform Act of 1996 (Eligibility Reform Act) opened the Veterans Health Administration (VHA) enrollment to all eligible Veterans and mandated that VA establish a priority-based enrollment system to manage access to care. VA’s policy permits any eligible Veteran to sign up for health care services and potentially receive care from VA. The Service-Connected Disability priority system determines which eligible Veterans can access services and establishes rules for copayment of services and eligibility for additional health services. ¹¹ Refer to Appendix A for additional information on Service-Connected Disability Priority-Based Enrollment System.

VA provides LTSS to a range of enrolled Veterans, irrespective of age. In 1999, the Veterans Millennium Health Care and Benefits Act (Millennium Act) mandated nursing home care benefits for eligible Veterans in need of LTC for a service-connected disability and for Veterans who have a Service-Connected Disability rating of 70% or more. The Millennium Act also requires VA to provide home-based care and adult day health care, to all enrolled Veterans. ⁴ VA is also required to pay for home hospice services for all Veterans who have those needs. ¹



Priority level 1-3 enrollees, who tend to require greater health care services, are projected to increase from 53.4% of the enrollee population in FY 2019 to 74.9% by FY 2039. As enrollees continue to age and transition to higher priority levels, service demand and expenditures for facility-based care, which are not generally covered by private insurance or Medicare, will increase at VA. ⁸

Figure 6: Enrollees by Priority Group for Fiscal Years 2019, 2020, and 2039



Source: VA Enrollee Health Care Projection Model 2020

Key Utilization Drivers

The projected growth of long-term care services is primarily driven by two enrollment dynamics that have a significant effect in both facility and HCBS settings: priority level transitions and the aging of the enrollee population.

Enrollees transitioning into service-connected priorities are driving significant growth in utilization for facility-based LTSS as well as HCBS. In particular, the growth in Priority 1a enrollees (70% service connected or more) is driving significant growth for long-stay facility-based LTSS. VA is legislatively mandated by the Veterans Millennium Health Care and Benefits Act (PL 106-117) to provide continuing nursing home care for enrolled Veterans who have a 70% or greater service-connected disability, as well as those who need such care for a service-connected disability, or who have a rating of total disability based on individual un-employability.



The aging of the enrollee population is also having a significant effect on expenditures and utilization. Unlike other modeled services, reliance on certain LTSS does not decline after Medicare eligibility, due to limited Medicare coverage for long-stay nursing home services and HCBS. Currently World War II and Korean War era enrollees are in the age bands that are the highest users of LTSS. Vietnam War era Veterans will be an increasing driver of LTSS, with most having aged beyond 75 by 2026. CLC short stay, which is used primarily for post-acute care and hospice care, is affected less by aging than the other facility-based care categories.

Long-Term Care Patient Make-up

While facing common LTC challenges and clinical needs including post-acute rehabilitation, dementia, and other post-acute needs, Veteran enrollees are more likely to be diagnosed with multiple chronic health conditions, including those linked to military service. Veterans overall are more likely to be diagnosed with cancer, diabetes, chronic obstructive pulmonary disease (COPD), hearing loss, and Posttraumatic Stress Disorder (PTSD) than the civilian population. Among enrolled Veteran patients, the prevalence of common chronic conditions is more than 50% higher for VA patients compared to Veterans who do not use VA care.¹² Though most mental health conditions are generally equally prevalent in the Veteran and non-Veteran populations, the mix of chronic issues Veterans tend to face together with mental illness can create a particularly complex patient base.¹¹

2.2 Current VA Program Review and Analysis

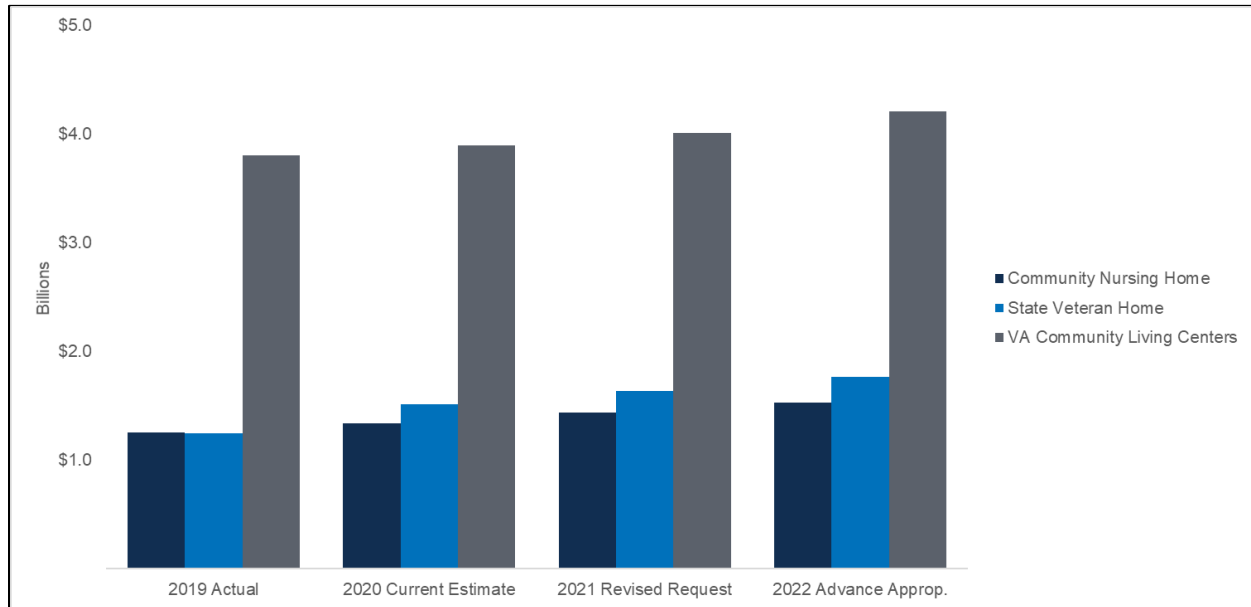
VA provides or pays for facility-based LTSS through three facility-based programs, including CLC, that provide long- and short-stay skilled care, such as ventilator care, rehabilitation after surgery, or for long-term health issues that require 24-hour monitoring.¹³ Eleven home or community-based programs are also provided through VA's LTSS. VA also provides personal care assistance to help Veterans with activities of daily living that enable Veterans to remain living at home, including the Homemaker Home Health Aide, Community Adult Day Health Care, and Respite Care programs.¹³ In addition, geriatric evaluation and consultation services are provided in the inpatient and outpatient setting and Geriatric Patient Aligned Care Team (GeriPACT) integrates and coordinates traditional ambulatory and institution-based health care services with a variety of community-based services.¹⁴



Facility-Based Services	Home and Community-Based Care	Geriatric Ambulatory Services
<ul style="list-style-type: none"> • VA Community Living Centers • Community Nursing Homes • State Veterans Homes 	<ul style="list-style-type: none"> • Home-Based Primary Care • Purchased Skilled Home Nursing Care • Homemaker/Home Health Aide • Community Adult Day Health Care • VA Adult Day Health Care • State Veteran Home Adult Day Health Care • Home Hospice Care • Home Respite Care • Community Residential Care • Medical Foster Homes • Veteran Directed Care 	<ul style="list-style-type: none"> • GeriPACT • Geriatric Evaluation and Consultation • Hospice/Palliative Consults and Care

In FY 2019, total LTSS expenditures were \$9.2 billion. Based on FY 2022 budget appropriations, total LTSS expenditures are projected to increase by 22% to \$11.2 billion. Expenditures for CLC, CNHs, and SHVs, totaled \$6.3 billion while HCBS totaled \$2.9 billion in FY 2019. In FY 2019, 115,723 enrollees received LTC, with 39% long-stay and 61% short-stay. SVHs provided 52.6% of all long-stay services followed by CNH 26.5% and CLC 20.9%. Actual FY 2019 expenditures reflect that CLCs accounted for 60.5% of the budget followed by CNH 19.8% and SVHs 19.7%. FY 2022, LTC and HCBS are projected to increase by 19% (\$7.5 billion) and 19% (\$3.7 billion), respectively. ¹⁵

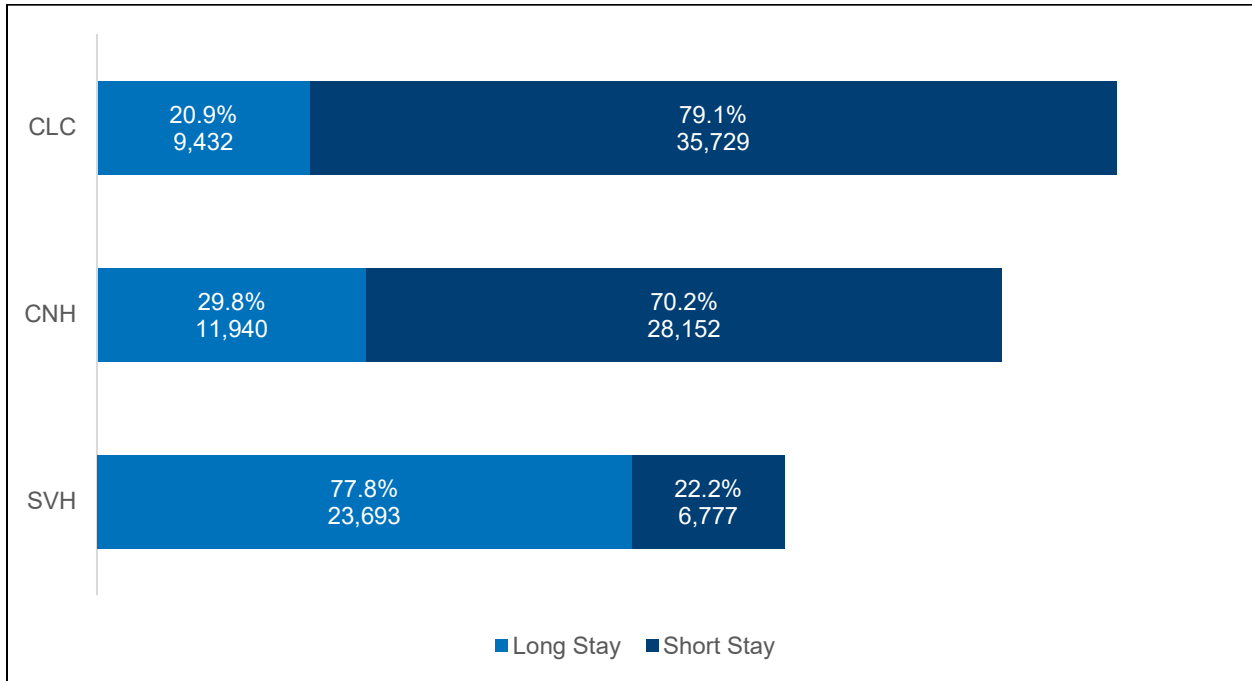
Figure 7: Institutional Obligations



Source: Department of Veterans Affairs FY 2021 Budget Submission, 2020



Figure 8: Patients Treated in 2019



Source: Department of Veterans Affairs FY 2021 Budget Submission, 2020

VA Community Living Centers

In the mid-2000s, VA renamed its nursing home facilities from Nursing Home Care Units to Community Living Centers to evoke a more homelike atmosphere and to acknowledge that CLCs are often the Veteran enrollees’ home. In addition to the name change, VA launched a system-wide program to promote cultural transformation, including a more person-centered approach, more home-like interior design, and more resident choice related to daily schedule of meals, sleep and wake times, and bathing.^{6 1}

CLCs are typically located on or near a VA medical facility campus and are VA-owned and operated. CLCs administer LTC programs with some variability. Short- and long-stay services offered at each CLC vary based on the local service needs. Some CLCs offer specialty services such as specialized dementia units, short-stay wound care, and short-term rehabilitation services.¹³

CLCs at a Glance (FY 2019)
<ul style="list-style-type: none"> • 134 locations • 13,063 operating beds • 8,910 ADC • 98 average CLC bed size • 68.2% overall occupancy

CLC teams provide integrated, interdisciplinary care to address Veterans’ interacting medical, functional, and psychosocial needs. CLC teams are committed to optimizing the Veterans quality of life, achieving the highest level of function or experience dignity and comfort in dying. The environment of care reflects individual preferences and attention to age specific needs in a setting reminiscent of home.¹³



Discharge planning from CLC begins on the day of admission. Discharge planning includes a comprehensive assessment of the Veterans post-discharge support system and safety assessment of their discharge destination. Medication management and education is also addressed as is post-discharge health care planning including nutritional needs, follow-up appointments, transportation needs, and activities for promoting socialization and physical activity.¹³

FY 2019 CLC expenditures were \$3.8 billion. An 11% increase to \$4.2 billion is noted in the FY 2022 budget appropriations. In FY 2019, long-stay and short-stay services accounted for 74% and 26% of care provided in VA CLCs, respectively. A similar service mix is projected for FY 2022. The ADC in FY 2019 was 8,817 and is projected to decrease by 3% (8,541) by FY 2022. Of the 45,161 enrollees who received CLC services in FY 2019, 30% were Priority 1A enrollees, 20% were non-service connected, and 42% were service-connected enrollees. In FY 2022, a 21% increase in service-connected enrollees is projected. A 20% and 24% decrease are projected for Priority 1A and non-service-connected enrollees, respectively.¹⁵

Long-Stay Programs

Through a facility-based program, CLCs provide four long-stay programs for Veterans who require 24-hour skilled medical attention for greater than 90 days.¹⁶ VA offers programs in a home-like environment to meet the LTC needs of Veteran enrollees with chronic dementia and neurocognitive disorders, mental health issues, and spinal cord injuries and disorders (SCI/D).¹⁷ Refer to Appendix B for long-stay program definitions.

Long Stay Programs
<ul style="list-style-type: none">• Dementia Care• Continuing Care• Mental Health Recovery• Spinal Cord Injury/Disorder

VA's long-stay services are similar to services provided within commercial nursing care facilities. The long-stay Dementia Care program is comparable to Memory Care Units or Special Care Units (SCUs) in the commercial setting for individuals who require a higher level of skilled care and supervision that can be provided in the home.^{16 18} Some State Veterans Homes also provide similar services.



Short-Stay Programs

As part of VA’s long-term care transformational change in the mid-2000s, VA shifted its CLC focus from long-term custodial care to short-stay rehabilitative and skilled post-acute care.

VA provides nine short-stay programs with a multidisciplinary team, resource-intensive approach for stays of 90 days or less. These short-stay programs are intended to help Veterans achieve their highest practicable level of well-being, function as independently as possible, and return to their communities. These programs also intend to reduce in-patient length of stays.¹⁶

Short Stay Programs
<ul style="list-style-type: none"> • Skilled Nursing Care • Rehabilitation • Restorative Care • Continuing Care • Mental Health Recovery • Dementia Care • Geriatric Evaluation and Management • Respite Care • Hospice/Palliative Care

During this time, VA also introduced policies to expand access to hospice and palliative care. The Comprehensive End of Life Care initiative of 2009 awarded up to \$1 million per year for three years for the development or renovation of hospice and palliative care units in 54 VAMCs. Forty-three of these 54 units were in CLCs. CLCs are central to the provision of specialized hospice care with an average length of stay in hospice beds of approximately three weeks. Refer to Appendix B for short-stay program definitions.

Community Nursing Homes

CNHs have been providing short- and long-stay LTC to Veteran enrollees for over 50 years.⁴ Similar to VA’s CLC program, CNHs offer a broad range of services including skilled nursing, rehabilitation, respite care, and hospice care. Some CNHs also provide specialty programs such as Alzheimer’s and dementia care. CNHs’ that participate in VA’s LTC must have either a three-star overall rating or a two-star overall rating with four-star or greater quality measures score on the Centers for Medicare and Medicaid (CMS) Nursing Home Compare website.¹⁹

CNHs At a Glance (FY 2018)
<ul style="list-style-type: none"> • 2,445 VA partnerships • 9,808 VA ADC • \$296 VA’s average daily cost • 105.7 national average bed size • 81% national average occupancy

Underperforming facilities require a waiver clarifying as to why that facility is needed and that no other community resources are available.

Community Nursing Homes provide a broad range of nursing home services, including short-stay rehabilitation, skilled nursing care, respite, hospice, and long-term care in community facilities. These nursing homes are available in many communities nationwide, enabling a Veteran to receive care near his/her home and family.

CNH expenditures were \$1.3 billion in FY 2019. In the LTSS FY 2022 budget appropriations, a 22% increase to \$1.5 billion is noted. In FY 2019, long-stay and short-stay services accounted for 80% and 20% of care provided in CNHs, respectively. A



similar service mix is projected for FY 2022. The ADC in FY 2019 was 10,430 and is projected to increase by 15% (12,024) by 2022. Of the 40,092 enrollees who received CNH services in FY 2019, 61% were Priority 1A enrollees, 13% were non-service connected, and 26% were service-connected enrollees. In FY 2022, Priority 1A enrollees will account for 40% of all enrollee residents, a 23% decrease from FY 2019. Non-service-connected enrollees will account for 34%, a 3.1% increase from FY 2019. Service-connected enrollees will account for 27% of all enrollee residents, a 21% increase from FY 2019. ¹⁵

State Veterans Homes

Since the post-Civil War era, states have been providing shelter to homeless and disabled Veterans. SVHs have expanded their services in recent years to meet the complex health care needs of Veterans. SVHs are owned, operated, and managed by state governments and are partially funded by VA. Each state defines its own eligibility and admission requirement for Veterans and VA has no authority over the management or control of any state home. SVHs may apply to VA for grants for purchase, construction, and/or renovation of SVHs, for which VA will pay up to 65% of allowable costs. Following the construction of a new SVH, the state requests VA recognition. VA recognition makes the SVH eligible for per diem payments from VA that is approximately one third of the cost of care. VA pays a higher per diem for certain highly service-connected Veterans and Veterans in need of nursing home care for a VA adjudicated service-connected disability. VA-approved SVHs provide skilled nursing care, Adult Day Health Care (ADHC), and domiciliary services to qualified Veterans. Some SVHs also provide tailored programs such as Alzheimer’s and dementia care. VA requires SVHs be licensed as acute or long-term care facilities by their state. VA’s oversight includes an annual survey to ensure VA regulations are met and that the host state remains eligible for continued per diem payments. ²⁰ Refer to Appendix B for SVH program definitions.

SVHs at a Glance (FY 2018)	
•	149 nursing home sites
•	53 domiciliary facilities
•	3 ADHC programs
•	23,423 ADC
•	\$1.36 billion in obligations

Eligibility and admission criteria for SVHs vary from state to state. Eligible Veterans and certain categories of family members such as non-Veteran spouses and Gold Star parents—parents who have lost their child in active military service or who passed from a service-connected disability—may be eligible for admission to SVHs. ²¹ VA provides SVHs per diem aid for qualifying Veterans. VA’s per diem rate is based on eligibility, need, ability to pay, and service-connected disability rating. ²²

SVHs expenditures were \$1.2 billion in FY 2019. In the FY 2022 budget appropriations, a 42% increase to \$1.8 billion is noted. In FY 2019, long-stay and short-stay services accounted for 94% and 4% of care provided in SVHs, respectively. A similar service mix is projected for FY 2022. The ADC in FY 2019 was 20,072 and is projected to decrease by 1% (19,837) by 2022. Of the 30,479 enrollees who received LTC services in FY 2019, 24% were Priority 1A enrollees, 17% were non-service connected, and 59% were



service-connected enrollees. In FY 2022, Priority 1A enrollees will account for 46% of enrollee residents, an 87% increase from FY 2019. Non-service-connected enrollees will account for 23%, a 35% increase from FY 2019. Service-connected enrollees will account for 31% of all enrollee residents, a 51% increase from FY 2019. ¹⁵

Home and Community-Based Services

The provision of clinically appropriate home and community-based services (HCBS) is an integral component of VA's LTSS program. Purchased skilled home health care (PSHC), homemaker/home health aide services (H/HHA), respite care, home hospice and palliative care services, and other in-home services provide a complementary array of resources necessary to address the short or long-term care needs of enrolled Veterans within their home and community. The Community Residential Care (CRC), Veteran Directed Care (VDC), Medical Foster Home and Adult Day Health Care (ADHC) programs are also part of VA's HCBS programs. ¹

To rebalance LTSS provided to Veterans and reduce reliance on facility-based care, VA has made a concerted effort to increase HCBS utilization. To support this effort, GEC has identified a goal to increase by 25% the number of Veterans who receive HCBS by 2025. ²³ Refer to Appendix B for HBCS definitions.

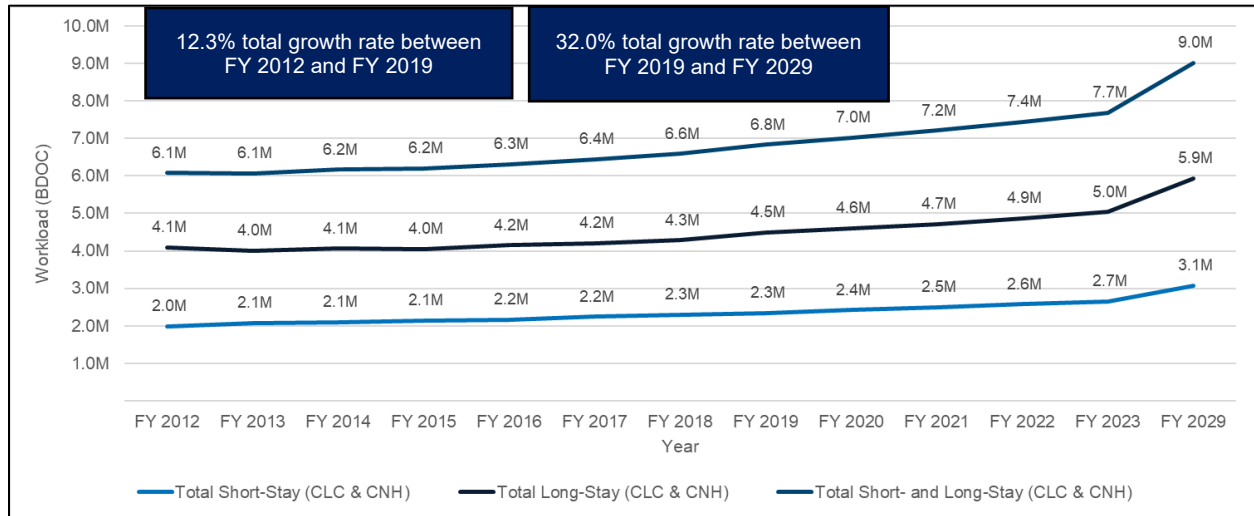
Service Demand and Utilization

Between FY 2012-19, the total BDOC for VA-paid care—CLCs and CNHs—increased by 12.3%. During this time, both short- and long-stay services experienced a growth in BDOC. Short-stay BDOC experienced an increase of 18%, and long-stay services BDOC increased by 9.6%. ⁸

The steady growth of enrolled, aging Veterans is projected to result in a growth of 32.0% in total CLC-CNH BDOC by FY 2029, an increase of around 6,000 additional residents per day. Long-stay services BDOC is projected to increase by 32.3%, close to 4,000 additional residents per day and short-stay services is projected to have a growth of 31.4% (2,000 additional residents per day). Projections are based on analyses of the Veteran enrollee population and drivers of demand for VA health care, including VA policy and guidance from GEC. ⁸



Figure 9: CLC and CNH Total Short- and Long-Stay Bed Days of Care by Fiscal Year



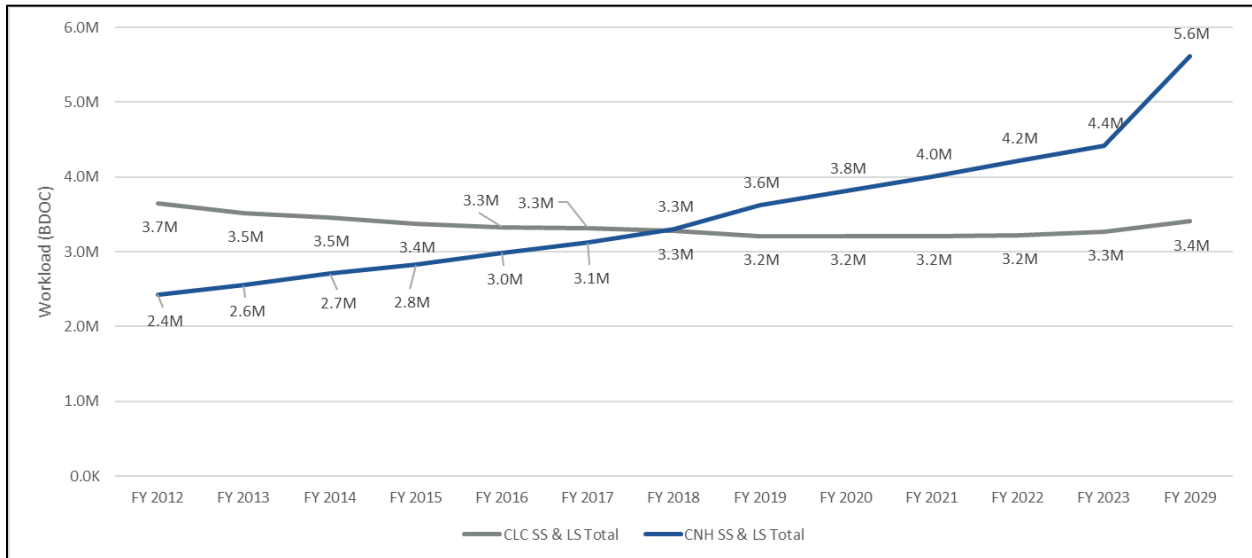
Source: VA Enrollee Health Care Projection Model 2020

VA’s concerted effort to accommodate enrollees’ preferences and reduce CLC utilization, especially long-stay care, over the last several years resulted in a 12.0% decrease in CLC short- and long-stay BDOC from FY 2012 to FY 2019. As a result of VA’s efforts, long-stay services experienced a 14.8% decrease in BDOC compared to short-stay services 6.9% demand decrease. This trend is projected to continue through FY 2029 with CLC long-stay services projected to increase by a slower pace (3.7% increase) compared to short-stay services (9.8% increase).⁸

CNHs experienced 49.0% growth, for both long-and-short-stay BDOC from FY 2012 to FY 2019, an increase of approximately 3,259 additional Veteran residents per day. Historic trends reflect that CNHs long-stay BDOC increased by 43.0% and short-stay services increased by 63.6% during that time. As VA continues to reduce CLC long-stay services, a significant long-stay service shift from CLCs to CNHs is projected through FY 2029. The projected FY 2029 demand for CNH long-stay services and short-stay services are projected to increase similarly at 55.6% and 53.9% respectively.⁸



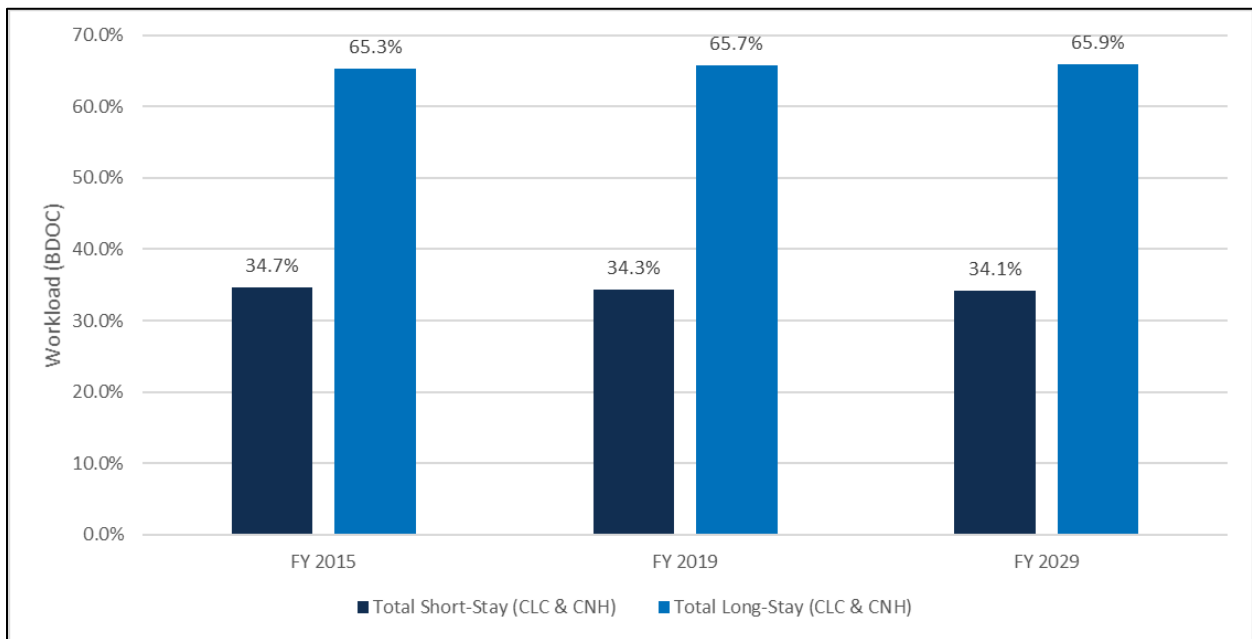
Figure 10: Community Living Center (CLC) and Community Nursing Home (CNH) Historical and Projected Utilization



Source: VA Enrollee Health Care Projection Model 2020

In FY 2015 and FY 2019, the mix of VA long-stay and short-stay services for both CLCs and CNHs remained stable. Long-stay services accounted for approximately 65.7% of all services and short-stay services accounted for approximately 34.3% during that time. VA projects a significant shift in CLC and CNH care by FY 2028. A similar mix is projected for FY 2029, long-stay 65.9% and short-stay 34.1%.⁸

Figure 11: Shifting for Short- vs. Long-Stay

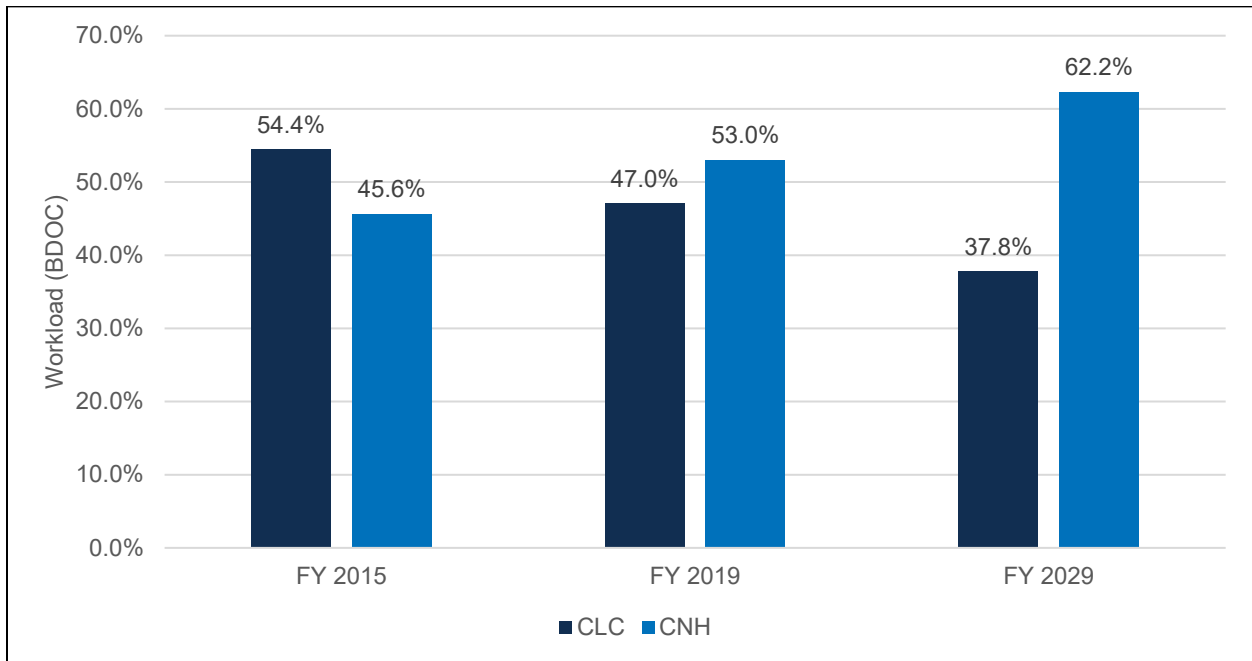


Source: VA Enrollee Health Care Projection Model 2020



Historically, CLCs provided more facility-based services to enrolled Veterans. During fiscal year 2015, CLCs provided 54.4% of all facility-based services compared to CNHs that provided 45.6% of care. The shift to greater CNH use for Veteran facility-based services is evident as CLCs only provided 47.0% of all facility-based services in FY 2019 compared to CNHs providing 53.0%. VA projects a continued shift in CLC to CNH utilization with 62.2% of facility-based services projected to be provided by CNHs and 37.8% of all facility-based services provided by CLCs in FY 2029. ⁸

Figure 12: Increasing Demand for Community Nursing Home (CNH) Services

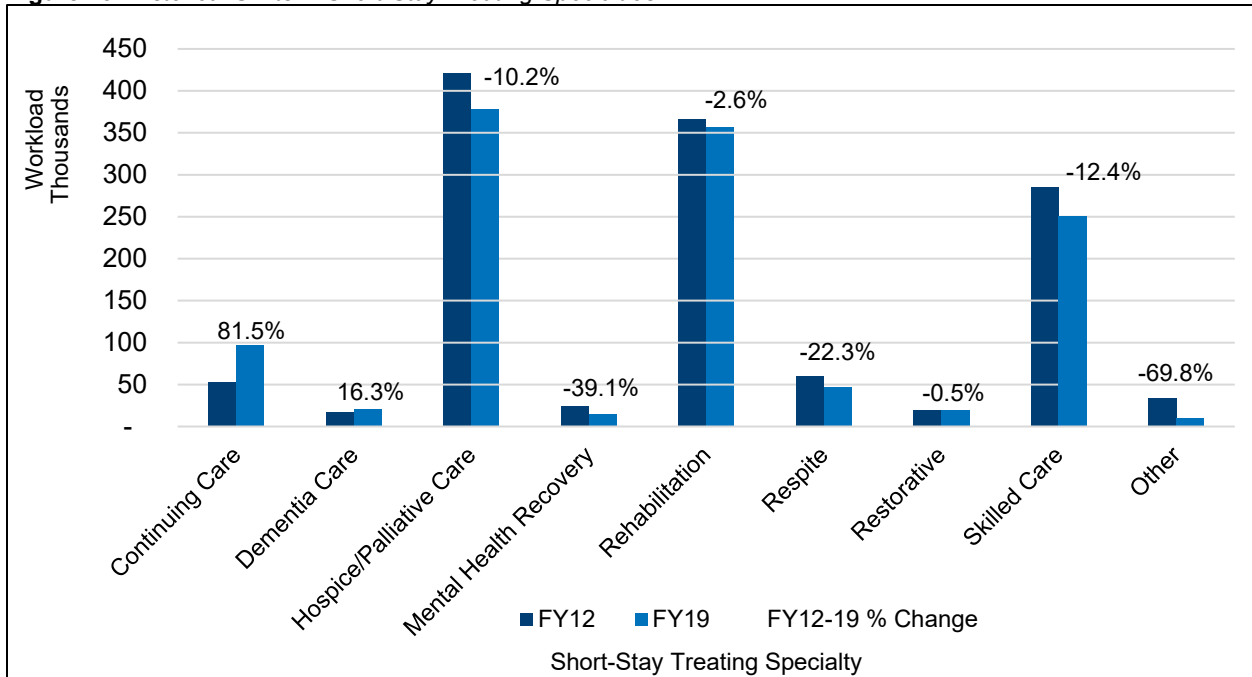


Source: VA Enrollee Health Care Projection Model 2020

VA utilization for CLC short-stay services decreased for most services from FY 2012 through FY 2019. Continuing care and dementia care services were the only two services that experienced growth during that time. Continuing care experienced substantial growth, 81.5%, and dementia care services experienced a 16.3% increase in demand during that time. Mental health recovery and respite care services experienced a significant decrease in demand, 39.1% and 22.3%, respectively. A modest decrease in demand was noted for skilled care, 12.4%, and hospice care, 10.2% decrease during that time. Additionally, other long-term care services experienced a 69.8% decrease from FY 2012 through FY 2019. ⁸



Figure 13: Historical Shifts in Short-Stay Treating Specialties

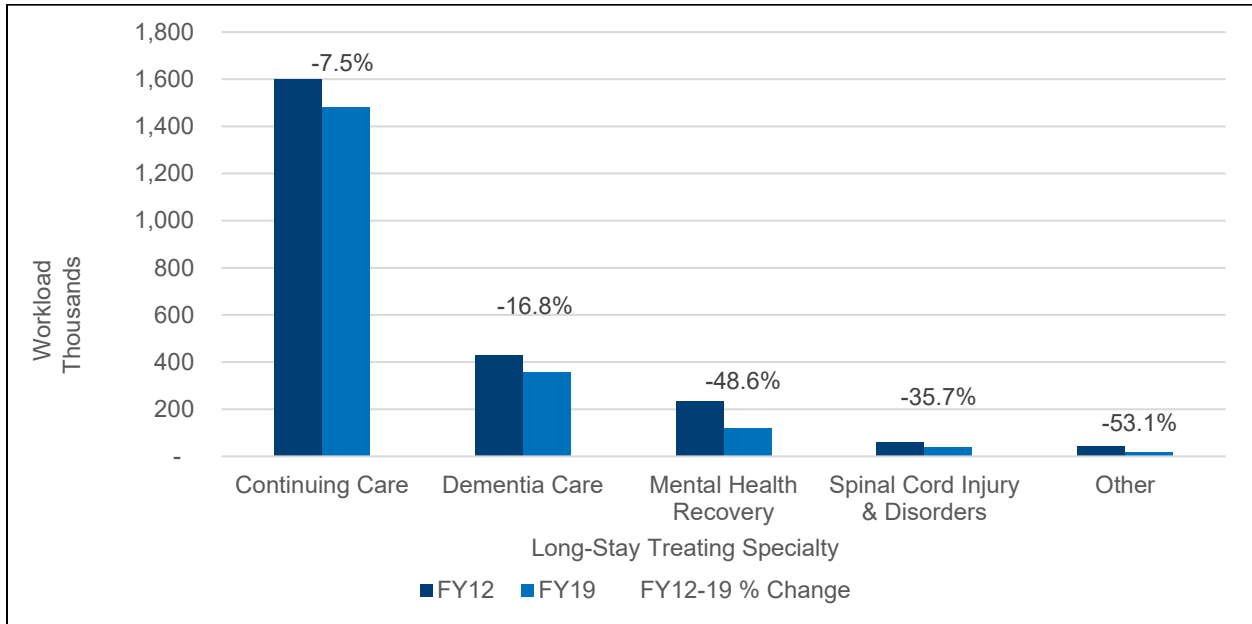


Source: 2020 VA Enrollee Health Care Projection Model

From FY 2012 through FY 2019, VA experienced a decrease in all CLC long-stay services. Most notable trends are for mental health recovery, a 48.6% decrease, and SCI/D, 35.7% decrease. VA data also reflected that there was a 53.1% decrease in other long-stay services. Dementia care and continuing care services experienced a 16.8% and 7.5% decrease, respectively. ⁸



Figure 14: Historical Shifts in Long-Stay Treating Specialties



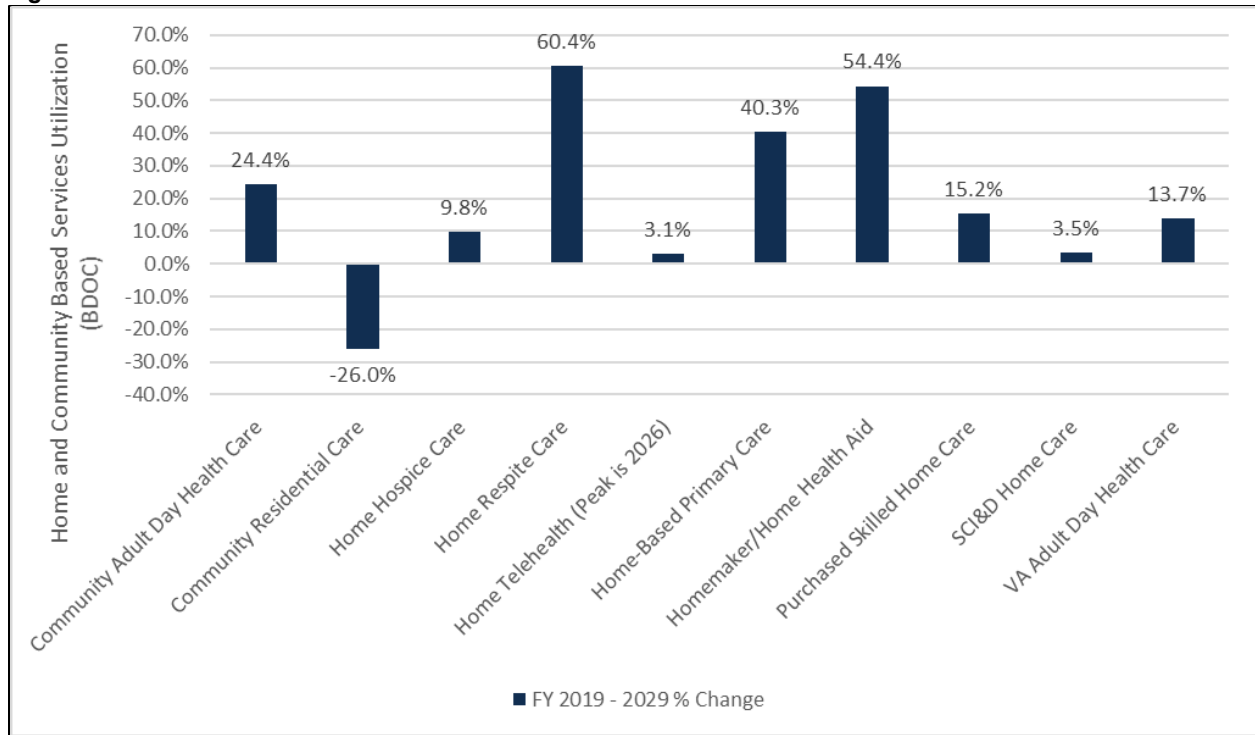
Source: VA 2020 Enrollee Health Care Projection Model

As VA has continued to expand and enhance its HCBS, three programs have experienced growth between FY 2012 through FY 2019. Homemaker/Home Health Aide (H/HHA) programs have experienced the largest growth of 141.2% and substantial growth has also occurred with purchased skilled care (54.9%) and HBPC (28.7%).

VA’s plan to continue to shift long-term care services to HCBS is reflected in its FY 2029 HCBS projections. Four HCBS programs are projected to experience 20% or greater growth from FY 2019 through FY 2029. The greatest growth is projected for Home Respite, 60.4%. The Community ADHC and VA ADHC are both projected to grow, 24.4% and 13.7%, respectively. Additionally, the H/HHA and HBPC programs are also projected to experience an increase in growth, 54.4% and 40.3%, respectively. ⁸



Figure 15: Non-Institutional Care Trends



Source: VA Enrollee Health Care Projection Model 2020

Geographical Distribution

A fundamental objective of VA is to provide LTC to enrollees within their communities to foster personal preference and promote family caregiver involvement. It is important for VA to understand CLCs geographical locations in relationship to enrollee demand. The geographical distribution of eligible and enrolled Veterans is a critical factor in determining health care needs, community relationships, and infrastructure requirements.

This report uses the Rural-Urban Commuting Areas (RUCA) system used by VA to define rurality.²⁴ Refer to Appendix C for Rural-Urban Commuting Areas Definition.

For a high-level understanding of rurality across the organization, this report differentiates the markets by where most enrollees live. Of the 96 markets, 30 markets have more than 50% of their enrollees living in a rural area and are considered rural markets, and 66 markets have greater than or equal to 50% of their enrollees in urban areas and are considered urban markets. The distribution of the 134 CLCs is similar with 100 (74.6%) in urban settings and 34 (25.4%) in rural settings. Of the 96 markets overall, CLCs are in 87 (90.6%) markets, while 9 (9.4%) markets do not have a CLC presence. Five of the markets without a CLC are in an urban setting and four are rural. Demonstrating the larger size of urban CLCs, 10,528 beds (80.6%) are in urban CLCs compared to 2,535 (19.4%) beds in rural CLCs. This equates to an average of 105.3 beds for urban CLCs compared to 74.6 beds for rural CLCs. In addition, urban CLCs



had a slightly higher average occupancy rate (70.9%) than rural CLCs (66.0%) in FY 2019. ²⁵

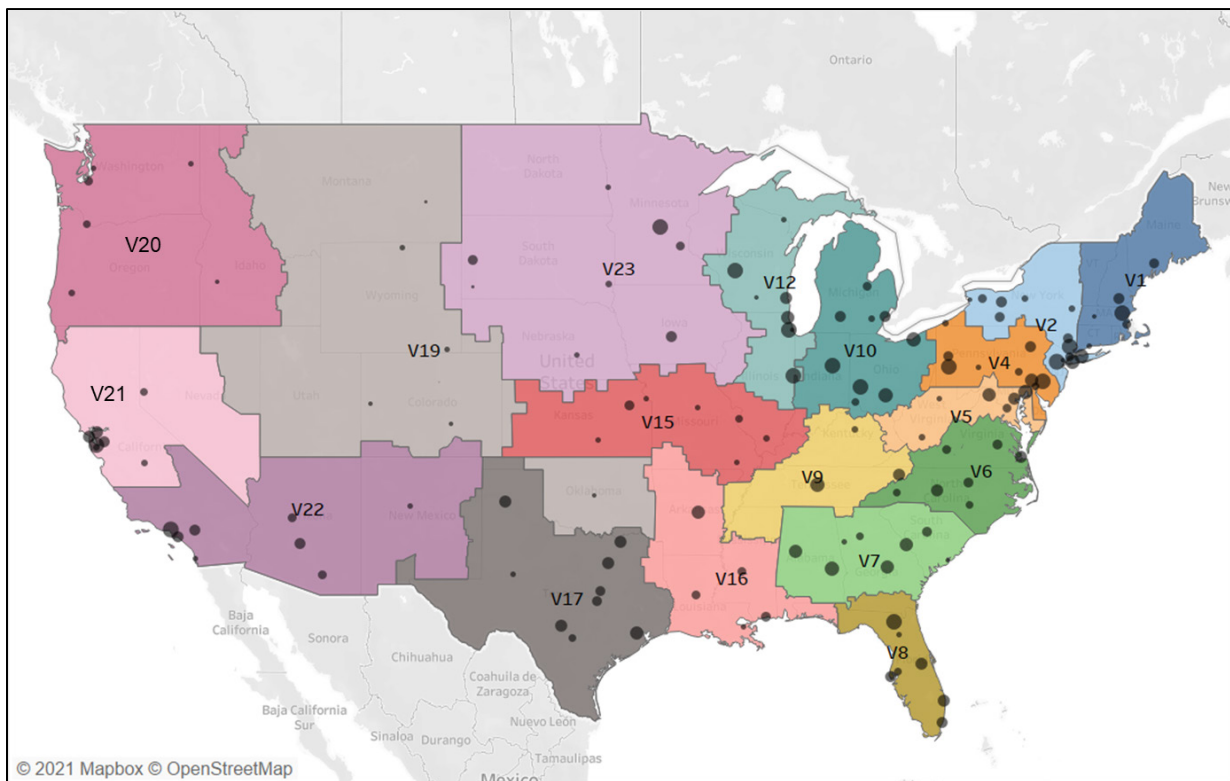
Table 1: CLC Urban-Rural Statistics Totals

Classification	# of Markets	FY 2019 # of CLCs	FY 2019 Total Beds	Average Beds per CLC	FY 2019 Average Daily Census (ADC)	FY 2019 Occupancy
Urban	66	100	10,528	105.3	70.5	66.9%
Rural	30	34	2,535	74.6	52.2	70.0%
Total	96	134	13,063	97.5	65.9	67.6%

Source: VA Geocoded Enrollee File FY 2018Q4, 2020; VA AMIS and Beds/Beds from PTF Cube 2020, 2021

The majority of CLCs are concentrated in the northwest and southeast regions of the U.S. On the west coast, California has 13 CLCs with most of them located in the southern California markets. In Figure 15, the diameter of the circle is proportional to the number of beds at each CLC location.

Figure 15: Community Living Center Locations*



Source: 2018 VISN Shape File, 2020; VA Facility Hierarchy File Fiscal Year 2020Q1, 2020; VA AMIS and Beds/Beds from PTF Cube 2020, 2021

*Continental US CLC locations shown



The projected enrollee changes from FY 2019-29 will affect the geographical distribution of demand. It is projected that by FY 2029, four VISNs will have a greater than 10% decrease in enrollees. VISN 2 is projected to experience a 20.4% decrease in enrollees. Meanwhile, VISNs 7 and 17 are projected to experience a greater than 10% increase in enrollees by FY 2029. VISN 17 is projected to experience a 14.3% growth in enrollees. As part of VA’s strategy to balance LTC services, it will need to address how to prepare for service demand changes to maximize available bed, staffing resources, and infrastructure.

Table 2: CLC Demand Distribution

VISN	FY 2019 Enrollees	FY 2029 Enrollees	FY 2019 29 Enrollee % Change	2019 CLCs	2019 CLC Beds	2019 ADC	2019 Avg. # of CLC Beds	2019 Avg. ADC	2019 Avg. Occupancy
1	340,943	294,756	-13.5%	6	611	453.4	102	56.7	55.7%
2	432,229	343,964	-20.4%	13	1,445	946.7	111	78.9	71.0%
4	401,734	352,372	-12.3%	9	1,014	671.3	113	67.1	59.6%
5	317,612	313,049	-14%	6	586	419.9	98	60.0	61.4%
6	544,434	597,164	9.7%	7	676	409.1	97	58.4	60.5%
7	633,011	699,898	10.6%	8	802	568.0	100	71.0	70.8%
8	741,263	706,423	-4.7%	8	869	598.4	109	74.8	68.9%
9	372,476	385,352	3.5%	3	348	251.3	116	50.3	43.3%
10	667,736	634,037	-5.0%	9	1,124	723.5	125	80.4	64.4%
12	369,608	329,074	-11.0%	8	940	613.0	118	76.6	65.2%
15	327,084	311,167	-4.9%	7	384	207.2	55	25.9	47.2%
16	579,483	588,989	1.6%	5	469	318.1	94	53.0	56.5%
17	595,521	680,748	14.3%	9	911	703.4	101	78.2	77.2%
19	447,756	473,198	5.7%	6	196	166.6	33	27.8	85.0%
20	452,107	466,340	3.1%	6	313	237.8	52	39.6	76.0%
21	466,652	442,714	-5.1%	8	774	602.0	97	75.3	77.8%
22	737,056	722,037	-2.0%	8	946	502.9	118	55.9	47.3%
23	419,922	391,607	-6.7%	8	655	517.6	82	64.7	79.0%

Source: VA Geocoded Enrollee File FY 2018Q4, 2020; Department of Veterans Affairs Base Year 2019 EHCPM, 2020; VA AMIS and Beds/Beds from PTF Cube 2020, 2021

Table 3: Eligible Veterans 65 Years and Older

VISN	FY 2019 Eligible Veterans 65+	FY 2029 Eligible Veterans 65+	FY 2039 Eligible Veterans 65+	FY 2019 29 % Change	FY 2019 39 % Change
1	312,373	219,584	147,301	-29.7%	-52.8%



VISN	FY 2019 Eligible Veterans 65+	FY 2029 Eligible Veterans 65+	FY 2039 Eligible Veterans 65+	FY 2019 29 % Change	FY 2019 39 % Change
2	381,487	236,546	150,976	-38.0%	-60.4%
4	390,153	284,930	203,028	-27.0%	-48.0%
5	212,394	180,891	148,337	-14.8%	-30.2%
6	338,229	342,412	317,876	1.2%	-6.0%
7	389,024	409,042	374,149	5.1%	-3.8%
8	558,572	463,799	354,558	-17.0%	-36.5%
9	265,517	256,641	221,032	-3.3%	-16.8%
10	542,438	440,229	332,436	-18.8%	-38.7%
12	312,485	223,940	158,126	-28.3%	-49.4%
15	253,749	211,414	166,072	-16.7%	-34.6%
16	390,007	358,140	306,791	-8.2%	-21.3%
17	331,326	334,893	320,174	1.1%	-3.4%
19	303,043	271,010	225,984	-10.6%	-25.4%
20	318,801	285,003	227,904	-10.6%	-28.5%
21	374,157	289,037	206,609	-22.7%	-44.8%
22	519,296	406,608	304,811	-21.7%	-41.3%
23	329,042	252,477	187,023	-23.3%	-43.2%
Grand Total	6,522,092	5,466,594	4,353,187	-16.2%	-33.3%

Source: VA Enrollee Health Care Projection Model 2020

Access

Under the MISSION Act, new eligibility criteria for Veterans to receive care in the community became effective June 6, 2019. One key aspect that Community Care eligibility established was new access standards through drive times rather than distance in miles.²⁶ Although the MISSION Act does not specify drive times for LTC, the drive time to a facility-based CLC or CNH is important to Veteran enrollees and family caregivers.

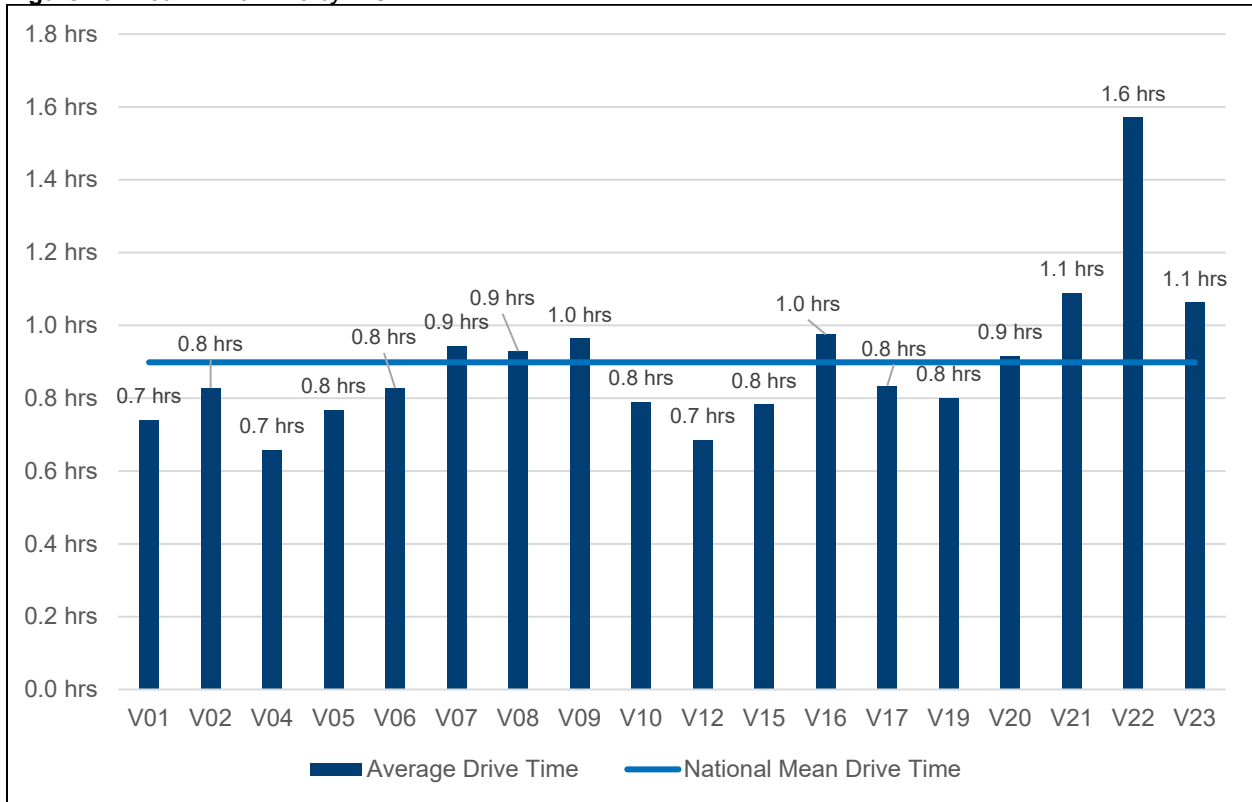
Based on FY 2018 data, the average drive time for CLC services was 48 minutes. Drive time was calculated in minutes from the geometric center of the Veteran’s home county to the latitude and longitude of the treating facility’s coordinates. To normalize drive times and remove outliers, drive times greater than 190 minutes (Medicare Advantage drive time criteria for skilled nursing home care) were removed.²⁷ Veteran drive time averages greater than 190 minutes represented 4.8% of the total dataset.²⁵

Of the 18 VISNs, three have a drive time greater than 60 minutes. VISN 22, Desert Pacific Healthcare Network, has the greatest drive time average at 94 minutes. VISN 22 is considered urban, 82.6% of enrollees live in an urban setting, with eight CLCs located



throughout its markets. Both VISN 21, Sierra Pacific Network, and VISN 23, VA Midwest Health Care Network have an average drive time of 66 minutes. VISN 21 is considered urban, 73.5% of enrollees live in an urban setting, and eight CLCs are located throughout its markets. VISN 23 is considered rural, 57.3% of enrollees live in a rural setting, and eight CLCs are located throughout its markets.

Figure 16: Mean Drive Time by VISN



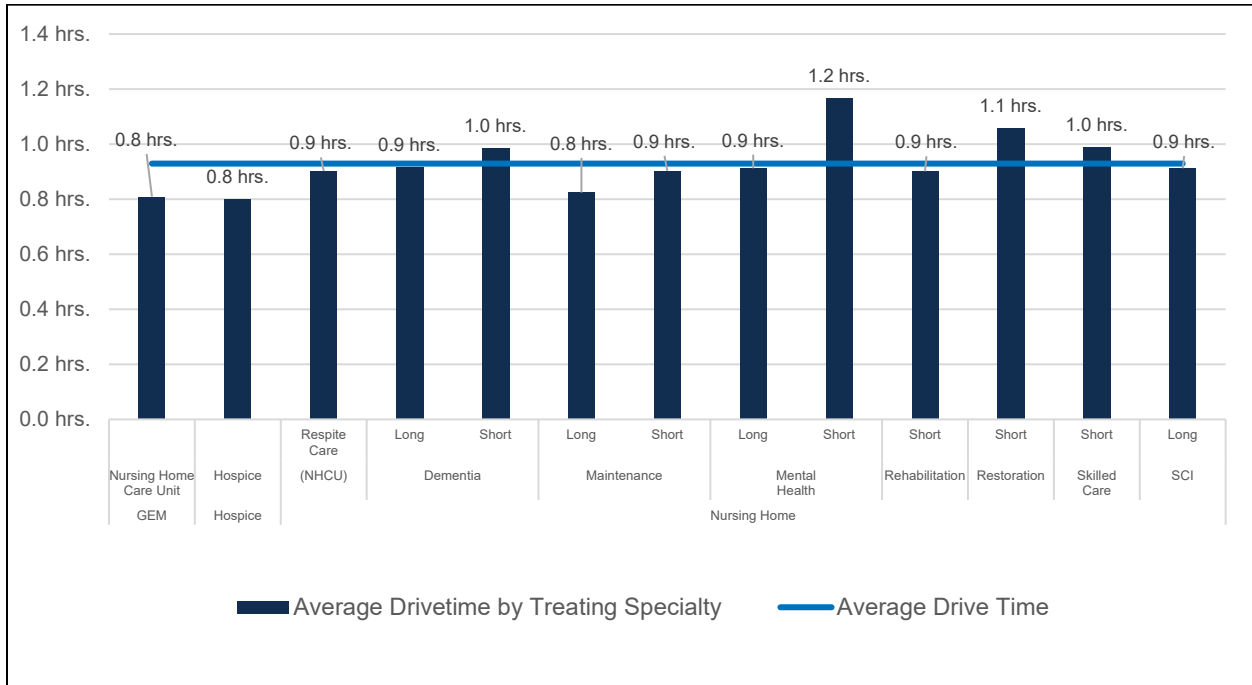
Source: Geocoded Enrollee File FY 2018Q4, 2021

Equally important to VISN drive time is FY 2018 specialty program drive time. The overall average drive time for CLC specialty programs is 54 minutes. Of the 13 programs, short-stay dementia, mental health, restoration, and skilled care programs have an average drive time greater than the overall average:

- Short-stay mental health – 72 minutes
- Short-stay dementia – 60 minutes
- Short-stay restoration – 66 minutes
- Short-stay skilled care – 66 minutes



Figure 17: Drive time by Treating Specialties



Source: Geocoded Enrollee File FY 2018Q4, 2021

Quality

As part of its transparency and accountability efforts, VA publicly released CLC quality ratings in June 2018.²⁸ VA’s CLC quality measures reflect how well a CLC is managing the physical and clinical needs of residents. Similar to the CMS Nursing Home Care Five Star Quality Rating System which compares specific quality measures, VA CLC Compare Overall Star Rating uses the same three CMS factors: (1) unannounced surveys (on-site inspections), (2) staffing, and (3) quality measures. According to Care Compare quality of residents’ care, measures are not benchmarks, thresholds or guidelines, or standards of care. The measures are a snapshot, at a point of time, of the average condition of residents. The measures may consider the special populations that are served by a CLC, which may cause higher rates of certain conditions. The system assigns each nursing home a rating of between one and five stars.²⁹

Data suggests that VA’s CLC programs compare closely with private sector nursing homes, even though VA typically cares for residents with more complex health issues than do community nursing homes.^{28 27} Since FY 2018, VA’s CLC overall star ratings have improved. In FY 2019 third quarter, 39% of all CLCs had a five-star rating, there were no overall one-star CLCs. In FY 2020 third quarter, 55% of all CLCs had a five-star rating, there were no overall one-star CLCs.²⁸

Fourth Mission

VA’s “Fourth Mission” is to “improve the Nation’s preparedness for response to war, terrorism, national emergencies, and natural disasters by developing plans and taking



actions to ensure continued service to Veterans, as well as to support national, state, and local emergency management, public health, safety and homeland security efforts.”

³⁰ The coronavirus (COVID-19) pandemic has demonstrated that natural emergencies occur without warning and may be devastating to communities and the nation.

As part of its COVID-19 time-limited response, VA deployed personnel to support VAMCs and CLCs affected by COVID-19 as well as provide support to SVHs and CNHs. As of December 30, 2020, VA deployed personnel to more than 49 states and territories. Support included direct patient clinical care, testing, education and training. ³⁰ VA also converted some CLCs to acute beds to manage potential acute patient surges. VISN and VAMCs

VA COVID 19 Direct Care Support/Assignments

- State Veterans Home—1,034
- Community Nursing Homes--980
- VAMCs—1,586
- Indian Health Service—206
- Non-VA Hospitals--87

provided infectious control and safety education to SVHs within their geographical areas as part of the Office of Emergency Management (OEM) preventive measures strategies.

³¹

Recognizing the vulnerability of CLC residents, VA also implemented CLC-specific disease prevention and control practices as part of their COVID-19 response. In adherence with CDC guidelines for long-term care facilities, VA implemented infectious control policies to reduce the spread of the infection. Residents under observation were maintained in isolation and visitation was halted. To respond to these challenges, VA Connected Care provided iPads to residents to promote virtual visits with health care providers and family members. ³²

Program Challenges

Four major challenges are faced by CLCs as demand for LTSS continues to increase. Geographical alignment of care (including available community resources) with demand, providing difficult specialty care needs, appropriate utilization of LTSS resources (or rebalancing of services to most appropriate care setting), and workforce shortage.

Geographical Alignment of Care

Aligning long-term care, provided or purchased care, to where Veteran enrollees live is a challenge, especially in rural areas. ³³ Several factors affect long-term care alignment including availability of CLC, CNH, and SVH beds. Geographical maldistribution results from some areas having excess of LTC beds and other areas not having an optimal supply. The effect of COVID-19 pandemic on the commercial long-term industry will also have a major affect on the available CNH beds. An August 2020 survey of nursing home operators conducted by the National Center for Assisted Living revealed that 72% of respondents reported an inability to maintain operations through 2021. ³⁴ VA’s Veterans Equitable Resource Allocation (VERA) long-term care payment system and CNHs Federal contracting requirements also influences geographical alignment of long-term care services. ³²



Special Population Needs

VA is also challenged to meet specialty long-term care needs for Veterans with behavioral issues, dementia, and ventilator-dependent residents. VA, like other large hospital care systems, has difficulty finding appropriate long-term care settings for residents classified as difficult or requiring intensive services. Appropriate placement for residents with dementia/neurocognitive disorders is a nationwide issue. As the RAND Corporation reported in 2017, the U.S. health care system does not have sufficient capacity to care for the growing number of people with Alzheimer’s disease.^{33 35}

Appropriate Utilization of LTSS Resources

Appropriate utilization of all LTSS is a challenge VA has been working to address for many years. VA’s overarching strategy is to move from an institutional model to a comprehensive Veteran-centered LTSS model that rebalances services to align Veteran preferences for care in HCBS programs when feasible. Workforce shortages, geriatric care knowledge deficits, geographical maldistribution of services and clinical staff, payment issues, and meeting care needs of difficult residents have affected VA’s rebalancing effort.³⁶ A standardized approach to ensure the “balance of noninstitutional care programs, program reliability, and equity of resource distribution” was recommended in VA’s 2018 Geriatric and Extended Care in VHA Survey Report.³⁷

Workforce Shortage

Similar to other large health care delivery systems, VA has a national shortage and maldistribution of geriatricians and palliative care specialists, especially in rural and remote locations. By FY 2025, it is projected the shortage of geriatricians in the United States will exceed 26,000.³⁸ VA faces similar challenges when seeking to meet the growing need for long-term care as its population ages.³³ The GEC Program Office has noted that currently 14 out of 18 VISNs reported geriatric shortages.²³

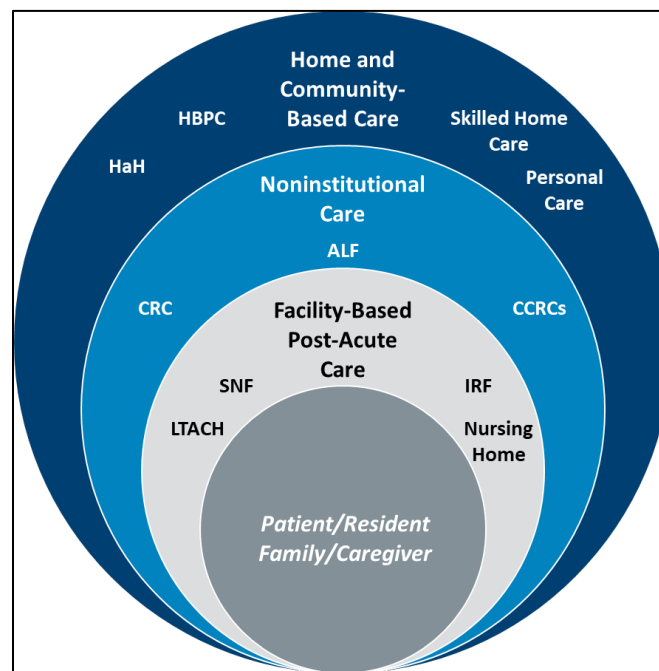
VA is also experiencing a shortage of nursing assistants and home health aides. VA’s 2018 Geriatric and Extended Care in VHA Survey Report noted that 80% of VA CLCs had current vacancies for nursing assistant or health technician positions at the time of the report. These workforce challenges have led to waitlists for some long-term care programs.^{37 39 35}



2.3 Commercial and other Federal Provider Trends

Long-term care is provided by commercial and other Federal providers to civilians with complex long-term care, health-related issues across facility-based, noninstitutional, home and community environments. Facility-based providers are the most well-known sector within the commercial LTC industry, but that is rapidly changing with the expansion of Continuing Care Retirement Communities (CCRC) and community-based services, especially home-based care.

Figure 18: Commercial Long-Term Care Services



Facility-Based Post-Acute Care

The need for and utilization of facility-based post-acute care is largely determined by the incidence of chronic disease and disability. Elderly individuals, by virtue of their high risk of chronic disease and disability, are the primary recipients of facility-based post-acute care. Nursing-home care—primarily skilled nursing and intermediate care facilities—is the most visible form of facility-based LTC.

Long Term Acute Care Hospitals

Long-Term Acute Care Hospitals (LTACHs) admit complex patients with acute post-intensive care needs that require care on an ongoing basis but no longer require intensive care or extensive diagnostic procedures. Because LTACHs serve patients with conditions that require extended complex acute care that cannot be met by a transitional care or skilled nursing facility, they have become an important component of



the long-term care continuum for high complexity conditions such as ventilator dependent patients and patients with multiple medical comorbidities. Many patients are transferred from a LTACH to a skilled nursing or long-term care facility to continue their recovery. ⁴⁰ Refer to Appendix D for LTCH data profile.

Skilled Nursing Facility (SNF)

Medicare-certified Skilled Nursing Facilities (SNFs) provide inpatient skilled nursing and rehabilitation care for patients who are typically transitioning from an acute care setting. Utilizing a multidisciplinary team approach, short-term skilled services focusing on function and restoration, clinical stabilization, or avoidance of complications are provided. Skilled nursing care is provided by licensed professionals such as registered nurses (RNs), and physical (PT), speech (ST), and occupational (OT) therapists. ⁴¹ Refer to Appendix D for SNR data profile.

Inpatient Rehabilitation Facility (IRF)

Inpatient Rehabilitation Facilities (IRFs), provide specialized physical medicine and rehabilitation services to patients that require intensive rehabilitation focused on rehabilitation and associated medical services. The primary focus is to help patients regain independence and return safely to their home. Medicare-certified IRFs can be freestanding facilities or specialized units within acute care hospitals. ^{42 41} Refer to Appendix D for IRF data profile.

Long-Term Care Nursing Home

Long-Term Care Nursing Homes provide a variety of non-skilled, supervised care for residents that are not able to live independently at home. Assistance with activities of daily living (ADLs) and supervision due to aging, complex long-standing health issues or lack of family/caregiver support are the principal reasons individuals are placed in long-term care nursing facilities. Long-term care nursing homes are also certified by the Centers for Medicare and Medicaid Services (CMS). ⁴¹ Refer to Appendix D for LTC nursing home data profile.

Although many nursing home residents do have chronic conditions and need assistance with ADLs, many residents are independent and largely healthy. CMS reports:

- Almost 20% of nursing home residents have no ADL impairment
- 7% have only mild cognitive impairment
- 1% had little or no cognitive impairment and have no ADL impairment
- 15% have significant cognitive impairment requiring assistance with multiple ADLs ⁴³

Noninstitutional Residential Care

Supporting older adults to age in place and meet their unique needs is a core concept of noninstitutional long-term care. Noninstitutional residential care allows residents to maintain their independence with the level of assistance and supervisory support needed to remain safe. Noninstitutional long-term care may be provided in a variety of



residential care settings such as independent living communities, individual community homes, and Assisted Living Facilities (ALFs). Residential care communities may be associated or integrated with continuing care retirement communities, independent housing complexes, or institutional care settings such as skilled nursing homes.

Community Residential Care

Community Residential Care (CRC) is a form of enriched housing that provides health care supervision to residents who because of medical, psychiatric and/or psychosocial limitation are not able to live independently but do not require skilled care provided by nursing homes. ⁴⁴ Refer to Appendix D for CRC data profile.

Assisted Living Facilities

There are approximately 28,900 assisted living communities with nearly 1 million licensed beds in the United States today. The average size of an assisted living community is 33 licensed beds. Some assisted living communities specialize in Alzheimer's, dementia, memory care, and medical conditions such as Parkinson's disease. Fourteen percent have a designated dementia care unit and 8.7% serve adults with dementia. ⁴⁵ Refer to Appendix D for ALF data profile.

Continuing Care Residential Communities (CCRCs)

CCRCs have become a unique residential arrangement that provides a continuum of care, services, and activities in one place as older individuals want to stay in the same place through different phases of their aging process. Also known as life planning communities, CCRCs are a single campus that provides a full continuum of care for residents, so they do not have to make disruptive moves from facility to facility as their health needs change. The continuum of care begins with an independent living area that may consist of rental units, condominiums, or cooperative housing units. As their health status changes, residents may transition to an assisted living, skilled nursing or long-term care nursing home while remaining in the same community. ^{46 47} Refer to Appendix D for CCRC data profile.

Home and Community-Based Care

According to a 2010 AARP survey, when asked about their care preferences, older Americans overwhelmingly articulate a desire to age in place and receive care at home rather than in facility-based settings. The survey found that nearly three quarters of the survey population age 45 and older strongly agreed with the statement, "what I'd really like to do is stay in my current residence for as long as possible." This is echoed in the last stages of life, where Dartmouth Atlas researchers found that more than 80% of patients say that they "wish to avoid hospitalization and intensive care during the terminal phase of life." ⁴⁸

Home and community-based care refers to the spectrum of professional, paraprofessional, and informal services provided in the home to support patients, including caregiving and personal care services, skilled services, home-based primary



care, respite, and hospice. VA provides or pays for similar programs and services through home and community-based care. ^{48 49}

Over the last 20 years, home and community-based care has experienced, and will continue to experience, significant changes. Factors such as the aging population, prevalence of chronic diseases, medical professionals' growing acceptance of home care, medical advancements, and the increasing longevity have contributed to significant growth of the home care business sector. ⁴⁸ According to The Bureau of Labor Statistics, home health care will continue to increase by 54% through 2026. ⁵⁰

Hospital at Home (HaH)

Certain conditions that typically account for a sizeable portion of hospital admissions among older persons can easily be treated in their homes. Hospital at Home (HaH), an innovative approach initially designed in 1995 by Johns Hopkins Schools of Medicine and Public Health, offers an alternative where all critical elements of hospital care are brought to the patient's home: physician and nursing care, medicine, and appropriate diagnostic and therapeutic technologies. ⁵¹

HaH programs have flourished in countries with single-payer health systems, but their use in the U.S. has been limited. Such programs are well established in England, Canada, Israel, and other countries where payment policies encourage the provision of health care services in less costly venues. ⁵² Presently, HaH is in practice or is being developed at numerous sites throughout the country. Both clinical outcomes improvement and reduced cost have been proven in several HaH demonstrations. ⁵¹ In March 2020, CMS announced a similar program, Hospitals Without Walls (HWW), that allowed hospitals to provide services in locations beyond their existing walls. CMS has expanded the HWW and created the Acute Hospital Care At Home program that provides hospitals with unprecedented regulatory flexibility to treat eligible patients in their homes. The program was developed to support models of at-home hospital care throughout the country that have seen prior success in several leading hospital institutions and networks. ⁵³ Refer to Appendix D for HaH data profile.

Home-Based Primary Care (HBPC)

Chronically ill and medically complex individuals have difficulty accessing quality health care than ever before and the number of at-risk patients continues to grow. ⁵⁴ HBPC provides quality, patient-centered care for people underserved in the current health care paradigm where the patient must travel to the provider. The lack of social support and/or financial resources further complicate the situation. These access barriers lead to missed appointments, fragmented care, and poor control of chronic conditions. HBPC, sometimes referred to as the modern-day house call, provides a way for patients with high-cost, complex, and function-limiting conditions to receive comprehensive, longitudinal primary medical and social care in their homes, and thus avoid emergency room visits, acute hospitalization, and institutionalization. ^{55 56} Refer to Appendix D for HBPC data profile.



Skilled Home Health Care

Skilled home health care consists of skilled nursing, physical therapy, occupational therapy, speech therapy, aide services, and medical social work provided to patients in their homes. To be eligible for Medicare's home health benefit, beneficiaries must need part-time (fewer than eight hours per day) or intermittent skilled care to treat their illnesses or injuries and must be unable to leave their homes without considerable effort. ⁴⁹ Refer to Appendix D for skilled home health care data profile.

Personal Care Services

Personal care services (PCS)—personal care functions, nutritional, environmental support—are provided by personal care aides to help older adults remain in their homes and communities rather than live in facility-based settings. ¹ Health care workers provide basic care and help with daily activities, enabling younger and older people with functional and activity limitations.

The bulk of long-term care is provided by direct care workers, such as nursing assistants, home health aides, and personal aides. Formal personnel typically have formal education or vocational training and are compensated for their services. The demand for formal paid caregivers is projected to increase as the population needing care increases. ⁵⁷

A major challenge in home-based care industry is the retention of direct care workers. Low pay structure, lack of or limited fringe benefits, a heavy workload, poor working conditions, lack of appropriate training, little opportunity for professional advancement, and a lack of respect from management are some of the reasons cited for high turnover and vacancy rates. ⁵⁸

Many who provide home health care are not paid professionals but family members, friends, and other lay providers, often referred to as informal caregivers. The largest category of people receiving informal home health care consists of adults with chronic health problems or disabilities, and their providers tend to be middle-aged and often older parents and spouses. Informal caregiving tends to evolve over time, from assistance with instrumental activities of daily living to more intensive forms of caregiving. ⁵⁹ Refer to Appendix D for PCS data profile.

Hospice

Hospice provides comprehensive comfort care, as well as support for the family, for a person with a terminal illness whose doctor believes he or she has six months or less to live if the illness runs its natural course. Hospice is an approach to care, so it is not tied to a specific place. It can be offered in two types of settings—at home or in a facility such as a nursing home, hospital, or even in a separate hospice center. A team of professionals work together to manage symptoms so that a person's last days may be spent with dignity and quality, surrounded by their loved ones. Hospice care is also family-centered – it includes the patient and the family in making decisions. ^{60 61}



Refer to Appendix D for hospice data profile.

Adult Day Health Care

Adult Day Care (ADHC) is a planned program of activities in a professional care setting designed for older adults who require supervised care during the day, or those who are isolated and lonely. Adult day care centers enable seniors to socialize and enjoy planned activities in a group setting, while still receiving needed health services. Services vary between facilities, including the level of care offered.⁶² Regulation of adult day care centers is at the discretion of each state, although the National Adult Day Services Association offers some overall guidelines in its Standards and Guidelines for Adult Day Care.^{63 64 65 66} Refer to Appendix D for ADHC data profile.

2.4 Current Program Summary

VA's continues to invest in Veterans across the LTSS continuum. Ongoing implementation of age-friendly health care strategies that promote Veteran-centered care and preference continue to be cornerstones of VA's commitment to providing the right care in the right setting for Veterans and their family.

As part of its plan to manage the aging Veteran enrollee population and projected increased reliance on VA's long-term care, VA continues to work to make strides to rebalance its long-term care program with an emphasis on greater home and community-based services for Veterans. VA seeks to better align long-term care services across geographies to maximize VA, SVHs and community resources which will help VA meet the projected increased demand for long-term care services without jeopardizing access to care or quality of care.

Furthering services such as telehealth demonstrates VA's desire to increase Veterans' access to services that are timely, convenient, and in the least restrictive environment. VA has also recognized the need to expand and enhance HCBS services that promote Veterans' independence and divert premature or potentially unnecessary facility-based care. These interventions will help to better manage complex health issues, prevent hospitalization, social isolation, and caregiver fatigue, resulting in better health outcomes for Veterans.



3. Leading Practices

3.1 Leading Practices Analysis

Over the next decade, VA will experience an increase in Veterans, particularly Vietnam Era Veterans, who will require LTSS, likely using a combination of facility-based and HCBS services. As noted in VA’s FY 2018-24 Strategic Plan, the first strategic goal is: “Veterans choose VA for easy access, greater choices, and clear information to make informed decisions.”⁵ exploration and consideration of leading long-term care practices and their integration is a next step in optimizing practices and services. VA’s ongoing advancement of LTSS will be influenced by six leading practices. The three most influential leading practices, person-centered care, information sharing, and virtual care are discussed in this section. Refer to Appendix E for additional information on leading practices.

Person-Centered Care

Person-centered care (PCC) is a gold standard and national best practice for providing long-term care services. According to the “*The Key Components for Successful LTSS Integration: Lessons from Five Exemplar Plans*” expert panel,

“Person-centered care’ means that individuals’ values and preferences are elicited and, once expressed, guide all aspects of their health care, supporting their realistic health and life goals. Person-centered care is achieved through a dynamic relationship among individuals, others who are important to them, and all relevant providers. This collaboration informs decision-making to the extent that the individual desires.”⁶⁷

As noted in “How to Practice Person-Centric Care: A Conceptual Framework,” achieving PCC is a continual and ongoing process. The nine universal structural elements are interdependent and must be incorporated to achieve person-centered care.⁶⁸ Deep organizational and operational system changes are required to advance a culture in which different values and beliefs about what constitutes quality, a nurturing environment in which to live, and a positive environment in which to work contribute to the ability to be person-centered while delivering care.

Person Centered Care Universal Structural Elements
<ul style="list-style-type: none"> • Core Values and Philosophy • Relationships and Community • Senior-Management Governance • Leadership • Workforce • Services • Meaningful Life • Environment • Accountability



Recognizing the importance of PCC, the National Quality Forum (NQF) awarded Mountain State Health Alliances (MSHA) their 2020 National Quality Healthcare Award for organizations that provided patient-centered care and achieved better health outcomes at lower per-capita costs. MSHA received the award due to their unique 10 Patient-Centered Care Guiding Principles that illustrated the importance of safe, customized care provided in a transparent manner and openly communicated with the patient, family, and caregivers throughout the course of treatment. ⁶⁹

Figure 19 - Veteran-Centered Care Model



As VA continues to advance its Veteran-centered long-term care model, ongoing integration of PCC evidence-based guidelines and best practices that incorporate person-centeredness in assessment and care planning, care delivery, workforce engagement, quality measurement and assessment and feedback will be critical. Several key aspects are to:

- **Acknowledge the Veteran’s personhood.** Know and respect who the Veteran is, their value and belief system, and integrate their family/caregiver.
- **Incorporate the Veteran’s and consider their families/caregivers’ preferences** while ensuring the Veterans’ complex care issues are addressed and managed according to VHA’s quality health standards.
- Recognize that **health care providers are the support that maintain the Veteran** and structure the environment and interactions within their environment.

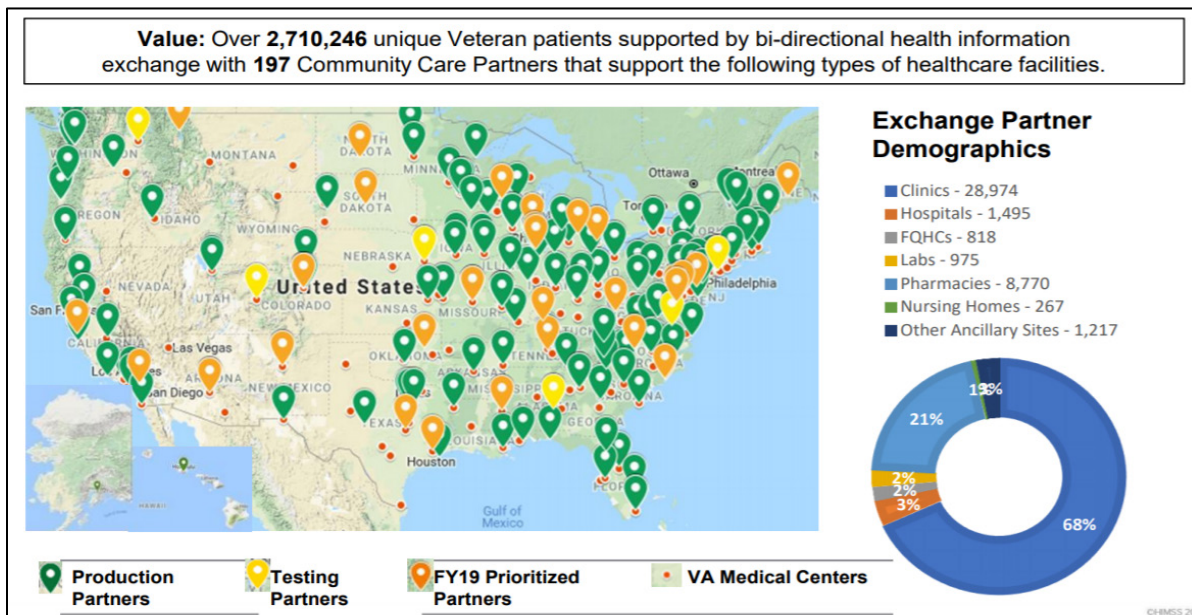


Collaborative Information Sharing/Care Coordination

Coordination of care is one of the most critical components of LTC and typically requires organizing services/activities with numerous health care organizations and providers. Care coordination and information sharing is a complex process that creates some of the most challenging technological issues, especially when a common technology platform to share information does not exist. Often, the lack of collaboration and timely sharing of information among health care organization and providers often results in care being delivered in silos instead of in an integrated team approach. Research has proven that this results in poor continuity of care that affects patients’ health outcomes, especially with medication management and can lead to waste, duplication and gaps in care needs that go unaddressed.⁷⁰

Streamlining information sharing with health care providers is vital to providing quality services as noted in VA’s MISSION Act section 132. As an industry leader in health care technology, VA established the gold standard Veterans Health Information Exchange (VHIE) program to allow information to be shared seamlessly and securely between VA and community care providers through VA Exchange and VA Direct Messaging. This forward-thinking approach has fostered information sharing with VA’s community providers, including long-term care providers. As of 2019, 267 nursing home are part of VA’s Exchange community care partnership and 199 LTC/rehabilitation organizations participate in the Direct Messaging program.⁷¹ Refer to Appendix D.

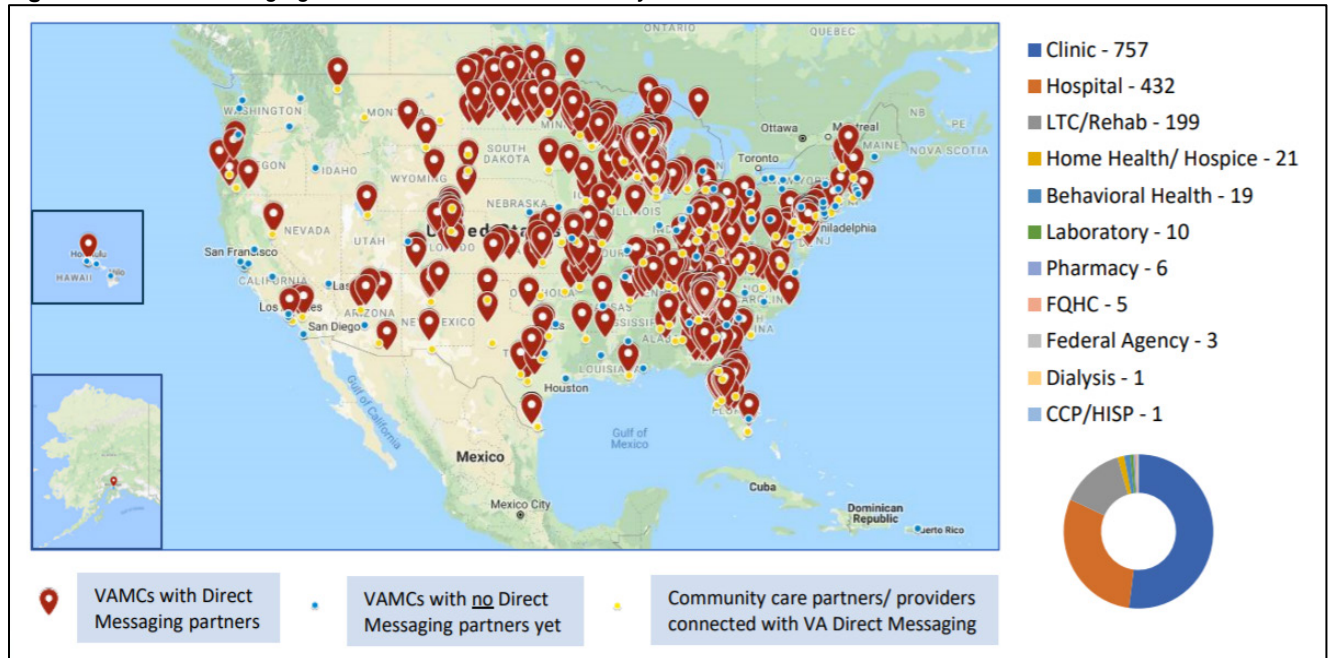
Figure 20: Exchange Community Care Partners



Source: Current VA/Veterans Health Information Exchange (VHIE) Approach to Health Record Integration and Availability, 2019



Figure 21: Direct Messaging: Validated Partners/Community Care Providers



Source: Current VA/Veterans Health Information Exchange (VHIE) Approach to Health Record Integration and Availability, 2019

Virtual Care

Virtual care services help to maintain patient safety in their home, improves access regardless of the patients physical setting and reduces logistical barriers, especially for those living in rural/remote locations or in a community that has limited LTSS services. The significance of virtual care as a leading practice cannot be underscored for residents receiving facility-based services, especially during the COVID-19 pandemic. Since the COVID-19 pandemic began, virtual care has become a primary means of providing safe and effective clinical care.

Virtual Care Services
<ul style="list-style-type: none"> • Telehealth—video conferencing that allows providers and patients to communicate in real-time • Telehealth Consultations—allows professionals to collaborate on cases • Home Telehealth/Remote Patient Monitoring—allows patients to share vital health data that providers can access remotely • Patient Portals—allows patients and providers to communicate asynchronously on non-urgent health care issues • Smart Medical Technology—external smart devices, smart clothing, smart furniture, and implantable that measure and record key data, give the users alerts and feedback, and send data to the clinicians

Logistical planning challenges exist for individuals who live in urban and suburban areas locations requiring geriatric specialists, especially for those who live in rural/remote locations. As the number of individuals requiring LTSS services increases and qualified geriatric staff shortages continues, virtual care is a workable solution to providing access to geriatric specialists/care teams in any location.⁷²



Although virtual care is generally well-accepted by patients and clinicians, challenges remain. Limited access to the Internet or devices such as smartphones, tablets, or computers, and lack of familiarity with technology might be potential barriers for some patients. In addition, virtual visits might not be appropriate for some persons based on level of acuity or necessity to conduct an in-person physical examination or diagnostic testing.⁷³

Telehealth

During a real-time synchronized telemedicine encounter, patients and providers use video conferencing software to hear and see each other. Real-time telemedicine can be used in lieu of a trip to the doctor's office in certain situations. It is beneficial for primary care, urgent care, follow-up visits, and the management of medications and chronic illness. Often, special telehealth-enabled instruments, such as a video otoscope or an electronic stethoscope, are operated by a nurse or technician at the consulting provider's direction to remotely perform a physical examination.⁷⁴

As an industry leader in telehealth, VA has advanced its telehealth, tele-geriatrics and telerehabilitation programs within the last decade. To help rural Veterans with dementia more easily receive specialty care, since 2011, the Interdisciplinary Tele-Geriatrics Program provides remote video consultation to enrolled Veterans with dementia in rural areas. The program helps optimize medication prescribing, provides education, and caregiver support.⁷⁵ VA's Telerehabilitation program also provides needed rehabilitation services to patients to minimize any deterioration in the Veteran's functional status.⁷⁵

Capitalizing on VA Video Connect (VVC), Veterans are able to quickly and easily meet with VA health care providers not only at VA sites of care but also from their homes.²⁸ VA's Accessing Telehealth through Local Areas Station (ATLAS) initiative also facilitates telehealth by ensuring underserved Veterans' have access to VA health care at convenient locations closer to their home. ATLAS reduces logistical challenges such as extended travel time to VA facilities and addresses poor internet connectivity at home which helps to improve access and promote the use of VA VVC.⁷⁶

Teleconsultations

Telemedicine technologies have the potential to improve care by providing a platform for more continuous care, linking primary and specialty care to support management of the needs of complex patients. They can be used for consultations, case discussions and ongoing clinical support to increase the expertise and efficiency of existing clinical staff.



VA's leading geriatric teleconsultation practice, Geriatric Research, Education and Clinical Center (GRECC) Connect/Virtual Geriatrics, utilizes VA's network of geriatric expertise by providing telehealth-based consultative support for rural primary care provider (PCP) teams, older Veterans, and their families. The enterprise-wide initiative helped to improve PCP confidence and skills in geriatric management and increase direct service provision.⁷⁷

VA's Geriatric Teleconsultation Leading Practice

- GRECC Connect is based on a hub-and-spoke model in which urban GRECC hub sites are connected to community-based outpatient clinic (CBOC) and VAMC spokes that primarily serve Veterans in other communities.
- GRECC hub sites offer consultative support from geriatrics specialty team members (for example, geriatricians, nurse practitioners, pharmacists, geriatric neuropsychologists, registered nurses, social workers) to rural PCP in their market area.

GRECC Connect could be expanded enterprise-wide and incorporated into the Clinical Resource Hubs (CRH) at each VISN. CRH's are already available at all VISN's for primary care and mental health. The addition of geriatrics expertise to meet the complex needs of rural, aging Veterans via teleconsultation will promote the reach of limited geriatrics resources.

Smart Medical Technology

With the aging population and overall disease burden, providers need to focus on long-term patient management and close monitoring of patients on an outpatient or home-care basis to maintain health and prevent acute complications. Smart medical technology (smart devices) will have a major effect—not only on people's health but on the overall cost of health care—by monitoring a patient's condition and consistently making continuous adjustments. External smart devices, smart clothing, smart furniture, and implantables that measure and record key data, give the users alerts and feedback, and send data to the patients' clinicians/facility are part of the solution to keeping patients stable and preventing complications.⁷⁸

Health care in the near future is projected to become more predictive instead of reactive with smart devices taking on greater importance and becoming a significant aspect of virtual care.⁷⁹ In a recent study on 85 independently living older adults, Petersen et al. (2015) showed that the time spent out of the home measured by an activity sensor platform is positively correlated with better cognitive function and with an increased rating on the clinical dementia rating scale.⁸⁰

Lifestyle interventions for disease prevention, monitoring of chronic diseases to prevent or slow disease progression and maintaining independency in older adults can already be monitored using smart devices. Smart technology such as intelligent furniture—smart chairs and smart beds—can also be utilized for measuring physiological data at home or in a long-term care facility. For example, a smart bed can monitor the health status



and sleep patterns of an individual. It can also be used to detect a cardiac event while they are on the bed or sleeping. ⁸¹

As more smart devices become available, health care organizations will be able to modify how they use their personnel and facilities. ⁷⁸ The next generation of wearable/implantable devices will combine advanced sensors, microprocessors, and wireless modules to continuously sense and monitor various physiological indicators of patients in an intelligent manner and allowing the data to be combined with health information from other sources. This approach will involve continuous monitoring and integrated care, further reducing the associated risks caused by the disease while making it easier for medical institutions to monitor their patients.

Smart Device Usability
<ul style="list-style-type: none"> • Vital Sign Monitoring • Chronic Disease Management • Cognitive Conditions • Physiological Monitoring • Weight/Energy Monitoring • Gait/Posture Correction • GPS Location (Indoor and Outdoor) • ECG • Virtual Assistants • Robotic Pets

Smart health technology may also help with the health care workforce shortage. For example, using smartphones to collect images of eyes, skin lesions, wounds, infections, medications, or other subjects may be able to help underserved areas cope with a shortage of specialists while reducing the time-to-diagnosis for certain complaints. ⁸²

Virtual assistants use session experience and language-understanding technology to help users complete various tasks, from reminder creation to home automation. For medical institutions, the application of virtual assistants can greatly save workforce and material resources and respond to the needs of all parties more efficiently. ⁸³

VA Elder Care Best Practices

In addition to overall industry leading practices identified, VA has advanced the following Elder Care Best Practices.

<p>This is in collaboration with the Institute of Healthcare Improvement (IHI) and currently available at ~ 20 VAMC's. Age-Friendly Health Systems aim to follow an essential set of evidence-based practices; Cause no harm; and Align with What Matters to the older adult and their family caregivers. Becoming an Age-Friendly Health System entails reliably providing a set of four evidence-based elements of high-quality care, known as the "4Ms," to all older adults in your system: What Matters, Medication, Mentation, and Mobility.</p>
<p>C-TraC- Coordinated Transitional Care Program</p> <p>Between 2010 and 2017, VA C-TraC Pilot sites had enrolled over 4,000 Veterans, reduced rehospitalization rates by 33% and demonstrated an ~\$1,500 per Veteran enrolled.</p>
<p>VIONE - Medication Review and Reduction Program</p> <p>Available at 45 VAMC's has enrolled more than 77,000 Veterans, deprescribed 168,000 medications and yielded more than \$5.8 million in annualized cost avoidance.</p>



BRO - Behavioral Recovery Outreach	
	Program designed to implement behavior modification treatment plans, stabilize distressed behaviors, and provide ongoing behavioral stabilization/consultation as Veterans transition to long-term community placements. Outcomes have been decreased agitation scores, decreased negative behaviors, and decreased rehospitalization rates.
GRECC Connect - Telehealth (Transitioning to Clinical Resource Hub)	
	GRECC Connect VIRTUAL Geriatrics (Veteran Interprofessional Rural Telehealth Linking Geriatrics Expertise for Education and Access) program, (formerly known as GRECC Connect) is a 15-site project that aims to improve access to geriatric care for Veterans in rural areas. Older Veterans living in rural areas often have limited access to geriatric care, and rural providers and staff often lack opportunities to learn about best practices for management of Veterans with geriatrics syndromes. This project links geriatrics specialists from GRECCs (Geriatric Research, Education and Clinical Centers), located in urban tertiary medical centers, with rural areas through clinical video telehealth, electronic consultation, and educational teleconferences to bridge this gap.
Gero-Fit	
	Gerofit is an exercise program now offered at 17 VA locations that promotes health and wellness for Veterans. Participants in the program have demonstrated improved health, mental, physical function, and well-being by participating in group classes like tai chi, dancing, walking, and balance. Some sites have collaborated with Surgery to provide pre-surgical procedure strengthening programs.
Geri-Scholars	
	The VA Geriatric Scholars Program integrates geriatrics into primary care practices through tailored education for professional development. By providing continuing education and professional development on geriatric topics, inter-professional (for example, physicians, nurse practitioners, physician assistants, pharmacists, social workers, psychologists) educational experiences encourage innovation and creativity to promote function and independence in older adults. The program serves Veterans through its efforts to improve quality of care and improve access to health care providers who are knowledgeable about geriatric care. Formats include intensive educational courses, clinical practicum training experiences, on-going coaching and mentoring opportunities and choices among self-directed learning activities.
VCP - Veteran Community Partnership	
	VCPs are available at over 60 VAMC's and are coalitions of Veterans and their caregivers, VA facilities, community health providers, organizations, and agencies working together to foster, seamless access to, and transitions among, the full continuum of care and support services in VA and the community. VCPs increase communication and collaborations among VA and their respective communities; improve coordination of care and services from VA and non-VA partners; offer more opportunities for new enrollments; develop interpersonal and inter-professional contacts and relationships between VA and community organizations; and educate Veterans, families, and health care providers on VA and community resources.

Source: GEC Leadership

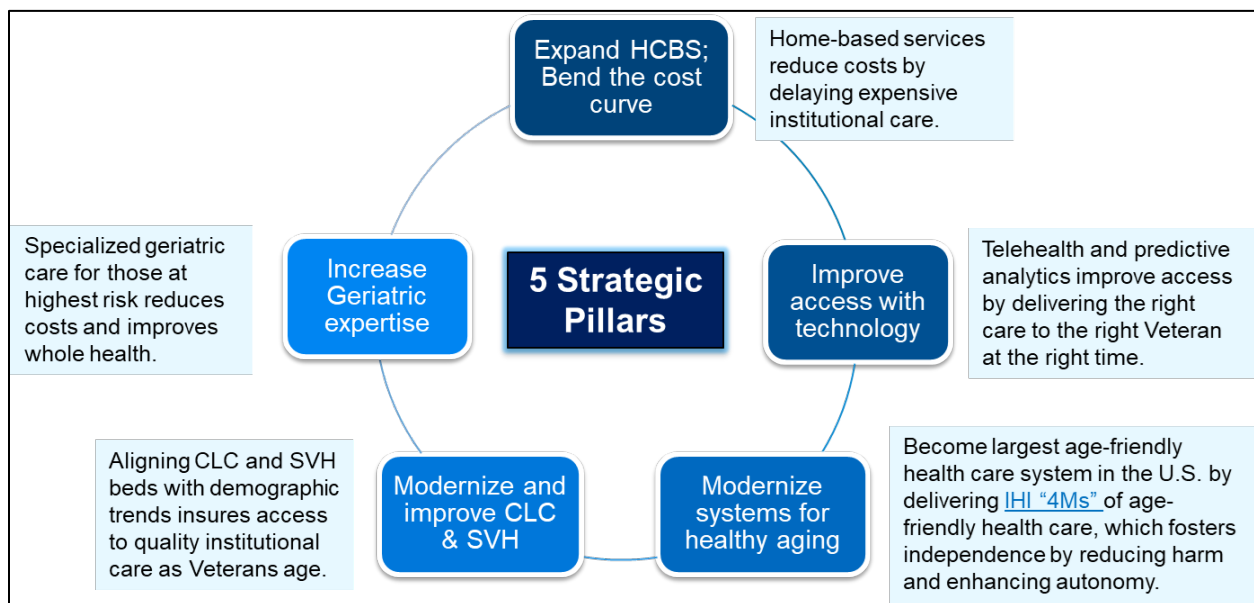


4. Service Planning Framework

While supporting Veterans with their long-term care needs, VA CLCs seek to prevent declines in health, restore Veterans to their highest level of well-being, and provide compassionate care of Veterans during the last stages of their lives. ¹ As such, CLCs and supportive LTSS serve Veterans across a range of LTC needs. Challenges exist, however, that will continue to affect the provision of care for Veterans. The GEC program office articulated that VA’s aging population, maldistribution of facility-based LTC, geriatric workforce shortage, aging infrastructure, and escalating health care cost represent significant challenges to VA providing sustainable LTSS.

GEC’s 2019 strategic plan identifies five strategic pillars, areas of concentration, that promote a flexible structure to meet current and future program priorities. These strategic pillars represent a platform that was utilized to influence the development of CLC planning guidelines and thresholds. ⁵

Figure 22: GEC Strategic Pillars





4.1 Program Priorities

Program priorities include a focus on supporting an aging, complex Veteran population, improving geographical alignment of LTC services with demand, improving access, enhancing Veteran-centric geriatric care models, modernizing aging CLC infrastructure and managing cost.

Supporting an Aging, Complex Veteran Population

Addressing the needs of aging Veterans is a substantial challenge that VA continues to face. While the average enrollee already is roughly 61 years of age as of FY 2019,⁸ VA projects its enrollee population over the age of 65 to progressively age, with an projected 6.5% increase of Veterans 65 or older through 2027, and then see substantial growth (82.9%) from 2027 to 2037 for enrollees age 85 and older. The growth of Veterans age 85 and older after 2029 is projected to generate an 286,000 increase in enrollees within this age category. In addition, as the GEC program office noted, within the next five to 10 years the aging enrollee Veteran together with the projected increase of Priority 1-3 enrollees will tax VA's LTSS program.³² To respond to these challenges, VA plans to modernize and improve current CLC services while leveraging cost effective HCBS.⁵

Geographical Alignment with Projected Demand

Geographical alignment of LTC services to enrollee population is also a top priority for VA. Along with GEC reference to some level of maldistribution of CLC services across the network, Veteran enrollment is projected to experience a geographic shift by FY 2029. VISNs in the Northeast and some Midwest regions of the U.S. are projected to experience large decreases in enrollment, while select VISNs located in the Southern and Southwestern regions are projected to experience growth. As a health care system, VA recognizes the effect of projected demographic distribution shifts and available LTC services provided by CLCs or purchased by VA (CNHs and SVHs) on its human, physical and financial resources. VA seeks to better align CLC services with demographic trends to ensure services are available at CLCs and within the community when and where enrollees need them.³²

Addressing Special Population Needs

The provision of accessible Veteran-centric care models that address high-demand, skilled services is another key factor in the VA strategic plan to modernize and improve CLC services. The steady growth of older enrollees is projected to generate an additional 6,000 CLC/CNH residents per day by FY 2029 with the greatest concentration of growth in long-term, more complex care.⁸ The steady growth of older enrollees is projected to generate an additional 7,000 CLC/CNH residents per day by FY 2028 with the greatest concentration of growth in long-term, more complex care.⁸ Together with the projected growth in Priority 1-3 enrollees, there is a need to better support special population care needs. To respond to Veteran enrollee needs, a priority



for the GEC program office is to regionalize and cohort high-demand and high-skilled specialty services within and across markets:

- Short-stay skilled care such as ventilator care and wound care
- Specialized short-stay rehabilitation
- Short and long-stay dementia
- Short and long-stay mental health ⁸⁴

The intent of this approach is to maximize utilization of scarce geriatric workforce and capitalize on costly infrastructure.

Improving Access

Another important priority articulated by GEC is to provide needed LTC—by a CLC or community partner—within a 30 to 60-minute drive time for urban and rural settings, respectively. The overall average drive time for CLC specialty programs is approximately 48 minutes. ²⁵ Providing both CLC and CNH options for enrollees with a focus on keeping Veterans close to home and to family caregivers together with a range of home and community-based services is targeted at improving access for Veterans. In addition, as part of its modernization and improvement plan, VA is exploring leveraging existing CLCs in urban markets that could provide care to enrollees within a 60-minute drive time for short-stay high-demand, skilled services and the associated special needs populations. VA is also exploring specialty-focused care centers within communities to promote family caregiver access and involvement. Both approaches allow VA to leverage existing CLC infrastructure and maximize scarce geriatric staff. Continued community partnerships with CNHs and SVHs will be an ongoing solution to provide necessary LTC care within the enrollees' community. ⁸⁵

Advancing Evidence-Based Facility Design

VA is dedicated to fostering a safe, quality home environment for enrollees and their family caregiver. The Small House Neighborhood Model, designed to support 14-16 residents with similar health conditions, is a core element of VA's CLC design program. The VA Small House Model aligns with the LTC evidence-based design models that provides a "home-like" atmosphere with private rooms and a kitchen at the heart of each house. Converting aging infrastructure, both stand-alone CLC and hospital-based units, to a Small House Model is a priority for VA with the understanding that it's a financially viable solution when community partnerships are unable to meet the demand. ⁸⁵



Aging Infrastructure and Modernization Cost

Providing contemporary facilities and a safe environment of care for Veterans is paramount for VA. Aging CLC infrastructure is a particular challenge for VA with 52 of the 134 (38.8%) CLC facilities in buildings greater than 50 years old and over 40 in facilities built prior to 1960 (29.9%). VA’s Facilities Condition Assessment (FCA) for standalone CLCs older than 50 years old averages \$14.4 M. The challenge with these aging facilities, even with ongoing maintenance and upkeep, is ensuring patient safety and the best environment of care for Veterans. Given the age and FCA status of many CLC facilities, there appears to be a need to identify ways to modernize the VA CLC footprint.

Table 3: Standalone and Institutional CLC Age and Average FCA

Facility Type	Average Year Built	Average FCA	Average FCA per bed
Institutional	1963	N/A	N/A
Standalone	1979	\$8.4M	\$73,650

Source: CAI Buildings and FCA Condition Gaps Report 9-14-2020

Note: The facility type was determined by analyzing the “Functional Title” and “Current Use” of the Facilities – Building Inventory (Owned) section in the Data Discovery and Findings (DDF). If a facility did not fall into either an Institutional or Standalone facility type, it was not included in the analysis.

4.2 Geographical Service Areas

The provision of LTC across VA’s network is at the local level, with the 134 existing CLCs typically tied to population centers associated with VAMCs. VA’s LTC programs are localized and highly individualized based on community health care culture and available LTC resources. Each CLC has a unique approach to balance CLC, CNH, and SVH resources to ensure enrollees needs are met.

Access guidelines were established with the GEC program office and were based on a localized service concept. Urban and rural access guidelines of 30-minute and 60-minute drive times were established as the guidelines for traditional CLC services, respectively. In addition to the traditional community based CLC services, the GEC program office is also considering the advantages of cohorting specialty focused care within communities. The program office is also exploring the benefits of regional short-stay high-demand, skilled services to enrollees. The intent is that regional CLCs would allow VA to provide the needed services and leverage resources for enrollees within a 60-minute drive time. ⁸⁶



4.3 Planning Guidelines

Planning guidelines and thresholds seek to inform the market assessment process. The rationale for establishing VA planning guidelines and thresholds is rooted in the belief that where a VA service falls below the identified measure, quality, patient safety, or operational efficiency may be compromised. Therefore, a service must be carefully examined to ensure that Veteran needs are appropriately met. Planning guidelines and thresholds focus on a broad range of access, demand, staffing, quality, and facilities/environment of care considerations and are meant to help identify areas where the teams should carefully consider measurable performance indicators. The guidelines and thresholds developed are not meant as standalone decision criteria to be used to make specific recommendations.

When conducting the market assessments, the opportunities developed were standardized across a range of move (or strategic task) types. Those developed included major moves as well as opportunities defined to be addressed during the ordinary course of business. Ultimately, major moves represent the platform which will be vetted with senior VA leadership, the VHA Acting Under Secretary for Health, the Secretary of VA, the Asset and Infrastructure Review (AIR) Commission, and ultimately with Congress.

Planning guidelines derived from these efforts have been designed to assist in the standardization of major market moves and include the following:¹

- **Open** – establish a new site or program in an area with no current CLC services
- **Maintain:**
 - **Maintain** – no major move is recommended
 - **Resize** – maintain services at the current site and size appropriately to accommodate demand and supply
 - **Relocate Program**– maintain services within the same geographic service area but relocate to another VA site
 - **Relocate Facility** – Maintain services within an area but relocate the site within the same county to better place services closer to where Veterans live or to a site that can better fit services
 - **Modernize Facility** – update environment of care, improving or adding new building systems without changing the function of the existing space
 - **Replace Facility** – applicable for standalone programs – maintaining services within the same area in a new facility due to the current facility's inability to modernize efficiently
- **Partner** – Create a partnership where VA providers deliver care in coordination with a partner or where VA transitions care to a partner.
 - **Partner (VA Delivered)** – a partnership in which VA providers deliver care to Veterans in coordination with a partner, such as through a VA hospital within a hospital (HwH) on a partner hospital campus, credentialing VA providers

¹ National Planning Strategy service planning guidelines may not include all major market move types



- within a partner facility, or establishing a VA point of care within a partner space
- **Partner (CCN/AA/Federal)** – Transition care from a VA site and from VA providers to the Community Care Network, an Academic Affiliate, or to Federal providers and facilities; VA provides care coordination but does not deliver clinical care

Overall CLC Planning Guidelines

The table below provides a summary of overall CLC planning guidelines developed collaboratively with GEC leadership with detailed major move guidelines are in the subsequent tables.

Category	Metric(s)	Measurement	Rationale
All CLC Bed Locations	Occupancy Rate	90%	<ul style="list-style-type: none"> • Target occupancy rate, per VA guidelines
Existing CLC Services*	Beds (Total)*	16 beds	<ul style="list-style-type: none"> • Minimum 'target' sustainable program at a VAMC
	Average Daily Census*	14.4	
Hospital-based Unit	Beds per Unit	16 beds	<ul style="list-style-type: none"> • Target minimum beds per in-hospital unit
Small House Model	Beds per Neighborhood	16 beds	<ul style="list-style-type: none"> • Minimum 'target' by neighborhood; based on VA CLC Small House Design Guide
New Off-Site CLC	Beds (Total)	48-64 beds	<ul style="list-style-type: none"> • Minimum sustainable bed numbers to support a new, standalone site • Comprises 3-4 neighborhoods; maintained at target occupancy rate
Access	Drive time Requirements	<ul style="list-style-type: none"> • Urban: 30 minutes • Rural: 60 minutes 	<ul style="list-style-type: none"> • Tied to family/support drive time, not patient • No MISSION Act long-term care drive time standards defined
Cost	Facilities Condition Assessment (FCA) Cost	<ul style="list-style-type: none"> • Total Campus FCA in the top quartile (>\$154.9M) • Standalone CLC > \$5M 	<ul style="list-style-type: none"> • Reflection of cost to modernize; FCA costs (campus, standalone CLC) • Recognizes main hospital locations and standalone facilities with significant challenges that may impede quality and patient safety

* Represents totals for campus (all CLC programs)



Models of Care

As a fundamental element of establishing planning guidelines, cohorting of key services represents an opportunity for VA to organize care, workforce and infrastructure and provide quality care. A number of LTC CLC models of care focus on how care is organized and delivered across a market to best meet enrollees and their family caregiver’s need while maximizing VA CLC resources. These four models of care focus on regionalizing and centralizing high-demand, high-skill services within reasonable drive times.

- CLC Care Center:** Provides high-demand, short-stay services that require highly skilled staff serving larger market areas. Potential services include ventilator care, wound care, rehabilitation, dementia, mental health, and Geriatric Evaluation and Management (GEM). These services typically would be placed in an urban setting capitalizing on the availability of skilled staff. Access service area is ideally set as a 60-minute drive time to accommodate enrollees in both urban and rural settings.
- Specialty-Focused Centers:** Cohorting of residents with short- and long-stay complex specialty care within a market community setting. Potential services may include dementia, mental health recovery and geropsychiatry. These centers can be a subset of a CLC or located within standalone facilities.
- CLC General Services Center:** Provides a full range of short- and long-stay services based on market/community needs, referring more complex patients to specialty centers. These centers could serve as a “new site” in high enrollee population areas.
- Hospital Specialty-Based Services:** Provide short-stay rehabilitation services that typically complement inpatient surgical services. A CLC unit would be located contiguous to or proximate to an acute care setting in an urban area with surgical services, particularly orthopedics, or in support of other post-acute rehabilitative services.

Potential Market Application by Model

Model	Overview	Urban	Rural
CLC Care Center (For example, Hub model)	<ul style="list-style-type: none"> Urban setting that provides services for both urban and rural markets Capitalizes on skilled staff typically located in a dense urban area 	✓	
CLC General Services (For example, Spoke model)	<ul style="list-style-type: none"> Urban and rural markets with limited specialty services, but care for continuum Could serve as ‘new site’ in high enrollee population areas 	✓	✓
Specialty-focused Centers	<ul style="list-style-type: none"> Urban and rural markets with complex care demands Capitalizes on cohorting residents and maximizing staffing resources 	✓	✓



Model	Overview	Urban	Rural
Hospital Specialty-Based Services	<ul style="list-style-type: none"> Urban settings with surgical services, particularly orthopedics 	✓	

* Note that many of these programs/services are currently available, and will help inform VISN/Market strategy with the market assessments

Planning Guidelines Table

The guidelines documented below represent application of broader CLC planning guidelines by move type.

Summary	
Service	Community Living Centers
Geography	Local-based services with regional/VISN-level specialty centers
Prerequisites	Facility-based long-term care is a localized service that is highly dependent on supply and demand for LTC beds across CLC, CNH and SVH facilities and tied substantially to the type of service (for example, short-term rehabilitation, dementia) needs for each individual enrollee

Open		
Planning Domain	Planning Guideline	Rationale
Demand	<ul style="list-style-type: none"> Target occupancy: 90% Target ADC: 43.2 patients per day (based on 48 bed minimum) <ul style="list-style-type: none"> FY 2019 Market LTSS Patient Days >15,768 10-year projected growth rate of Bed Days of Care >25% Target enrollee population in market/sub-market/sector: 30,000 enrollees <ul style="list-style-type: none"> FY 2017 enrollee population age 65 and older >50% (2017 population age 65 and older = 47.8%) 10-year enrollee Priority Level 1-3 projected growth >25% 	<p>To support the establishment of a new CLC site:</p> <ul style="list-style-type: none"> There is projected stability and/or growth of enrollees and established long-term care demand (community care) with projected demand growth in the area of the potential new CLC location The Veteran population in the market are older on average (65+ population greater than national average) and expect significant increases of enrollees aligned to Priority Levels 1-3 during the planning period
Supply	<ul style="list-style-type: none"> Minimum bed requirements for new CLC: 48-64 beds (3-4 neighborhoods) CNH and/or SVH bed availability is limited 	<ul style="list-style-type: none"> VA target occupancy rate of 90% A 48-bed CLC is the minimum number of beds required for a standalone CLC unit to operate efficiently Qualified nursing home partners or beds/needed services are limited or unavailable



Open		
Planning Domain	Planning Guideline	Rationale
Access	<ul style="list-style-type: none"> There are market gaps/challenges noted by leadership to provide long-term care services for Veterans as well as addressing complex, hard to place Veterans and/or need for geropsychiatry services Based on target of 30,000 market/sub-market/sector enrollees: <ul style="list-style-type: none"> Urban market – 21,000 enrollees within 30-minute drive time of site Rural market 24,000 enrollees within 60-minute drive time of site 	<ul style="list-style-type: none"> The location of the new CLC must be tied to a population center The market must not include existing CLC services within a 30 and 60-minute drive time of an urban or rural population center, respectively. Or, the existing CLC does not support expansion/ resizing The target number of enrollees within a 30- or 60-minute drive time tie to the ability to sustain the service (bed numbers/census) based on existing CLCs across the network within applicable drive time guidelines
Quality	<ul style="list-style-type: none"> CNHs do not meet VA quality standards or have not been granted a quality Waiver 	<ul style="list-style-type: none"> CNH must have Medicare Nursing Home Compare rating of 3 stars, or a rating of 2 stars overall with 4 or 5 stars in quality measures. If CNH does not meet VA's quality standards, VA may grant a waiver to the CNH.
Other	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A

Maintain No Change		
Planning Domain	Planning Guideline	Rationale
Demand	<ul style="list-style-type: none"> Target occupancy rate: 90% Minimum ADC: 14.4 (assuming a 16-bed unit) 10-year projected growth rate of Bed Days of Care >25% 10-year enrollee Priority Level 1-3 projected growth >0% 	<p>To maintain an existing CLC:</p> <ul style="list-style-type: none"> There is projected stability and/or growth of enrollees and established demand for the CLC location The Veteran population in the market are older on average (65+ population greater than national average) and expect significant increases of enrollees aligned to Priority Levels 1-3 during the planning period
Supply	<ul style="list-style-type: none"> Ability to maintain at least 16 beds CNH and/or SVH bed availability is limited 	<ul style="list-style-type: none"> VA target occupancy rate of 90% A 16-bed CLC is the minimum number of beds required for an existing CLC unit to operate efficiently Qualified nursing home partners or beds/needed services are limited or unavailable



Maintain No Change		
Planning Domain	Planning Guideline	Rationale
Access	<ul style="list-style-type: none"> There are market gaps/challenges noted by leadership to provide long-term care services for Veterans as well as addressing complex, hard to place Veterans and/or need for geropsychiatry services Based on target of 30,000 market/sub-market/sector enrollees: <ul style="list-style-type: none"> Urban market – 21,000 enrollees within 30-minute drive time of site Rural market – 24,000 enrollees within 60-minute drive time of site 	<ul style="list-style-type: none"> The location of the CLC is tied to a population center The CLC satisfies drive time standards for large proportion of enrollees in the market The target number of enrollees within a 30- or 60-minute drive time tie to the ability to sustain the service (bed numbers/census) based on existing CLCs across the network within applicable drive time guidelines
Quality	<ul style="list-style-type: none"> CNHs do not meet VA quality standards or have not been granted a quality Waiver 	<ul style="list-style-type: none"> CNH must have Medicare Nursing Home Compare rating of 3 stars, or a rating of 2 stars overall with 4 or 5 stars in quality measures. If CNH does not meet VA's quality standards, VA may grant a waiver to the CNH.
Other	<ul style="list-style-type: none"> Existing facility follows the Small House Model; or Existing facility was built after 1985 	<ul style="list-style-type: none"> Facilities that were built post-1985 are generally designed under contemporary planning standards and are presumed to be sustainable for the next 10-20 years

Maintain Resize (increase or decrease capacity)		
Planning Domain	Planning Guideline	Rationale
Demand	<ul style="list-style-type: none"> Target occupancy rate: 90% Minimum ADC: 14.4 (assuming a 16-bed unit) 10-year projected growth rate of Bed Days of Care >25% 10-year enrollee Priority Level 1-3 projected growth >0% 	<p>To support the resizing of an existing CLC:</p> <ul style="list-style-type: none"> Existing location is able to meet target occupancy while maintaining the minimum number of beds (16 bed) <p>To resize the service:</p> <ul style="list-style-type: none"> CLC exceeds the occupancy rate guidelines and exceeds target or projected population; or CLC does not meet the occupancy rate guideline or target and projected enrollee demand



Maintain Resize (increase or decrease capacity)		
Planning Domain	Planning Guideline	Rationale
Supply	<ul style="list-style-type: none"> • Minimum 16-bed unit • Ability to maintain at least 16 beds • CNH and/or SVH bed availability is limited <ul style="list-style-type: none"> ○ To increase capacity, less than 2.5x VA ADC beds at partner site(s) within 30-minute access standard for urban markets ○ To increase capacity, less than 2.5x VA ADC beds at partner site(s) within 60-minute access standard for rural markets 	<ul style="list-style-type: none"> • A 16-bed CLC is the minimum number of beds required for the CLC unit to operate efficiently • Qualified nursing home partners are limited or unavailable
Access	<ul style="list-style-type: none"> • There are market gaps/challenges noted by leadership to provide long-term care services for Veterans as well as addressing complex, hard to place Veterans and/or need for geropsychiatry services • Based on target of 30,000 market/sub-market/sector enrollees: <ul style="list-style-type: none"> ○ Urban market – 21,000 enrollees within 30-minute drive time of site ○ Rural market – 24,000 enrollees within 60-minute drive time of site 	<ul style="list-style-type: none"> • The location of the CLC is tied to a population center • The CLC satisfies drive time standards for large proportion of enrollees in the market • The target number of enrollees within a 30- or 60-minute drive time tie to the ability to sustain the service (bed numbers/census) based on existing CLCs across the network within applicable drive time guidelines
Quality	<ul style="list-style-type: none"> • CNH does not meet VA quality standards or has not been granted a Waiver 	<ul style="list-style-type: none"> • CNH must have Medicare Nursing Home Compare rating of 3 stars, or a rating of 2 stars overall with 4 or 5 stars in quality measures. If CNH does not meet VA's quality standards, VA may grant a waiver to the CNH.
Other	<ul style="list-style-type: none"> • Existing facility follows the Small House Model; or • Existing facility was built after 1985 	<ul style="list-style-type: none"> • Facilities that were built post-1985 are generally designed under contemporary planning standards and are presumed to be sustainable for the next 10-20 years.



Maintain Relocate		
Planning Domain	Planning Guideline	Rationale
Demand	<ul style="list-style-type: none"> • Target Occupancy: 90% • Target ADC: 43.2 patients per day (based on 48 bed minimum) <ul style="list-style-type: none"> ○ FY 2019 Market LTSS Patient Days >15,768 ○ 10-year projected growth rate of Bed Days of Care >25% • Minimum Enrollee Population in Market/Sub-Market/Sector: 30,000 enrollees <ul style="list-style-type: none"> ○ FY 2017 enrollee population age 65 and older >50% (2017 population age 65 and older = 47.8%) • 10-year Enrollee Priority Level 1-3 projected growth >25% 	<p>To support the establishment of a relocated CLC site:</p> <ul style="list-style-type: none"> • The proposed location of the CLC must be better tied to a population center compared to the existing location • There is projected stability and/or growth of enrollees and established long-term care demand (community care) with projected demand growth in the area of the potential new CLC location • The Veteran population in the market are older on average (65+ population greater than national average) and expect significant increases of enrollees aligned to Priority Levels 1-3 during the planning period
Supply	<ul style="list-style-type: none"> • Bed target for relocated standalone CLC: 48-64 beds (based on 3-4 neighborhoods) • Bed target for relocated institutional CLC: 16 beds • CNH and/or SVH bed availability is limited 	<ul style="list-style-type: none"> • VA target occupancy rate of 90% • A 16-bed CLC is the minimum number of beds required for the institutional CLC unit to operate efficiently • A 48-bed CLC is the minimum number of beds required for the standalone CLC unit to operate efficiently • Qualified nursing home partners or beds/needed services are limited or unavailable
Access	<ul style="list-style-type: none"> • There are market gaps/challenges noted by leadership to provide long-term care services for Veterans as well as addressing complex, hard to place Veterans and/or need for geropsychiatry services • Based on target of 30,000 market/sub-market/sector enrollees: <ul style="list-style-type: none"> ○ Urban market – 21,000 enrollees within 30-minute drive time of site ○ Rural market – 24,000 enrollees within 60-minute drive time of site 	<ul style="list-style-type: none"> • The location of the new CLC must be tied to a population center • The market must not include existing CLC services within a 30 and 60-minute drive time of an urban or rural population center, respectively. Or, the existing CLC does not support expansion/ resizing • The target number of enrollees within a 30- or 60-minute drive time tie to the ability to sustain the service (bed numbers/census) based on existing CLCs across the network within applicable drive time guidelines



Maintain Relocate		
Planning Domain	Planning Guideline	Rationale
Quality	<ul style="list-style-type: none"> CNH does not meet VA quality standards or has not been granted a Waiver 	<ul style="list-style-type: none"> CNH must have Medicare Nursing Home Compare rating of 3 stars, or a rating of 2 stars overall with 4 or 5 stars in quality measures. If CNH does not meet VA's quality standards, VA may grant a waiver to the CNH.
Other	<ul style="list-style-type: none"> Existing facility was built prior to 1985 Total Campus FCA in the top quartile (>\$154.9M) Standalone CLC > \$5M 	<ul style="list-style-type: none"> Facilities built prior to 1985 are generally considered to be past useful life and may pose potential safety and environment of care concerns and/or may lack more contemporary space allocations, design, and amenities

Maintain Modernize/Replace		
Planning Domain	Planning Guideline	Rationale
Demand	<ul style="list-style-type: none"> Target Occupancy: 90% Minimum ADC: 43.2 patients per day Target enrollee population in market/sub-market/sector: 30,000 enrollees 	<p>To support the modernization or replacement of a CLC:</p> <ul style="list-style-type: none"> The existing location of the CLC is tied to a population center There is projected stability and/or growth of enrollees and established demand for the new CLC location The Veteran population in the market are older on average (65+ population greater than national average) and expect significant increases of enrollees aligned to Priority Levels 1-3 during the planning period
Supply	<ul style="list-style-type: none"> Ability to maintain at least 16 beds CNH and/or SVH bed availability is limited 	<ul style="list-style-type: none"> Maintain a target occupancy rate of 90% Qualified nursing home partners or beds/needed services are limited or unavailable A 48-bed CLC is the minimum number of beds required for the standalone CLC unit to operate efficiently



Maintain Modernize/Replace		
Planning Domain	Planning Guideline	Rationale
Access	<ul style="list-style-type: none"> • There are market gaps/challenges noted by leadership to provide long-term care services for Veterans as well as addressing complex, hard to place Veterans and/or need for geropsychiatry services • Based on target of 30,000 market/sub-market/sector enrollees: <ul style="list-style-type: none"> ○ Urban market – 21,000 enrollees within 30-minute drive time of site ○ Rural market – 24,000 enrollees within 60-minute drive time of site 	<ul style="list-style-type: none"> • The location of the CLC is tied to a population center • The CLC satisfies drive time standards for large proportion of enrollees in the market • The target number of enrollees within a 30- or 60-minute drive time tie to the ability to sustain the service (bed numbers/census) based on existing CLCs across the network within applicable drive time guidelines
Quality	<ul style="list-style-type: none"> • CNHs do not meet VA quality standards or have not been granted a quality Waiver 	<ul style="list-style-type: none"> • CNH must have Medicare Nursing Home Compare rating of 3 stars, or a rating of 2 stars overall with 4 or 5 stars in quality measures. If CNH does not meet VA's quality standards, VA may grant a waiver to the CNH
Other	<ul style="list-style-type: none"> • Existing facility was built prior to 1985 • Total Campus FCA in the top quartile (>\$154.9M) • Standalone CLC > \$5M 	<ul style="list-style-type: none"> • Facilities built prior to 1985 are generally considered to be past useful life and may pose potential safety and environment of care concerns and/or may lack more contemporary space allocations, design, and amenities



Partner VA Delivered		
Planning Domain	Planning Guideline	Rationale
Demand	<ul style="list-style-type: none"> • Unable to meet ADC<14.4 at a VA CLC • Unable to meet target occupancy: 90% • Target enrollee population <30,000 in market/sub-market/sector • Historical Enrollee Growth: <0% enrollee growth in the market • Projected Enrollee Growth: <0% enrollee growth in the market; or • Demand exceeds the facility leadership's ability to build/resize a CLC to meet demand 	<ul style="list-style-type: none"> • Inability to tie the location of the CLC to a population center • If there is an existing CLC, the existing CLC does not support expansion/ resizing and relocation or replace are not viable opportunities. • There is a projected decrease in the number of Veteran enrollees and established CLC demand in the market
Supply	<ul style="list-style-type: none"> • Limited CLC availability • If there is an existing CLC, inability to resize the existing CLC while maintaining at least 16 beds for an institutional CLC and 48 beds for a standalone CLC • Less than 2.5x VA ADC beds at partner site(s) within 30-minute access standard for urban markets • Less than 2.5x VA ADC beds at partner site(s) within 60-minute access standard for rural markets 	<ul style="list-style-type: none"> • A 16-bed CLC is the minimum number of beds required for the institutional CLC unit to operate efficiently • A 48-bed CLC is the minimum number of beds required for the standalone CLC unit to operate efficiently • Qualified nursing home partners or beds/needed services are limited or unavailable
Access	<ul style="list-style-type: none"> • Potential VA owned/leased location does not meet; or • The current location does not meet; or • The potential relocated location does not meet: <ul style="list-style-type: none"> ○ Urban market – 21,000 enrollees within 30-minute drive time ○ Rural market – 24,000 enrollees within 60-minute drive time 	<ul style="list-style-type: none"> • The target number of enrollees within a 30- or 60-minute drive time tie to the ability to sustain the service (bed numbers/census) based on existing CLCs across the network within applicable drive time guidelines
Quality	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • N/A



Partner VA Delivered		
Planning Domain	Planning Guideline	Rationale
Other	<ul style="list-style-type: none"> Relationship with partners in the area Ability to hire and maintain VA staff 	<ul style="list-style-type: none"> Interested community partners must be identified before exploring a “Partner-VA” opportunity The ability to hire and maintain VA staff

Partner AA / Federal / CCN (Buy) / SVHs		
Planning Domain	Planning Guideline	Rationale
Demand	<ul style="list-style-type: none"> Unable to meet ADC<14.4 at a VA CLC Unable to meet target occupancy: 90% Unable to meet target enrollee population Historical Enrollee Growth: <0% enrollee growth in the market Projected Enrollee Growth: <0% enrollee growth in the market; or Demand exceeds the facility leadership’s ability to build/resize a CLC to meet demand 	<ul style="list-style-type: none"> Inability to tie the location of the CLC to a population center If there is an existing CLC, the existing CLC does not support expansion/ resizing and relocation or replace are not viable opportunities. There is a projected decrease in the number of Veteran enrollees and established CLC demand in the market
Supply	<ul style="list-style-type: none"> Limited CLC availability 2.5x VA ADC beds at partner site(s) within 30-minute access standard for urban markets 2.5x VA ADC beds at partner site(s) within 60-minute access standard for rural markets 	<ul style="list-style-type: none"> Qualified nursing home partners are limited or unavailable
Access	<ul style="list-style-type: none"> Potential VA owned/leased location does not meet; or The current location does not meet; or The potential relocated location does not meet: <ul style="list-style-type: none"> Urban market – 21,000 enrollees within 30-minute drive time Rural market – 24,000 enrollees within 60-minute drive time 	<ul style="list-style-type: none"> The target number of enrollees within a 30- or 60-minute drive time tie to the ability to sustain the service (bed numbers/census) based on existing CLCs across the network within applicable drive time guidelines



Partner AA / Federal / CCN (Buy) / SVHs		
Planning Domain	Planning Guideline	Rationale
Quality	<ul style="list-style-type: none"> Partners such as CNHs must have Medicare Nursing Home Compare rating of 3 stars, or a rating of 2 stars overall with 4 or 5 stars in quality measures. If the CNH does not meet VA's quality standards, VA may grant a waiver to the CNH. 	<ul style="list-style-type: none"> Potential partners must meet or exceed VA quality standards
Other	<ul style="list-style-type: none"> Relationship with partners in the area 	<ul style="list-style-type: none"> Willingness of CNH to accommodate Veteran enrollees

Detailed Planning Guideline Rationale

In collaboration with the GEC program office, CLC planning guidelines were driven by data analysis and academic research. Planning guidelines were informed by the GEC program office strategic and vision plan (dated January 20, 2019), interviews with GEC leadership team, and the EHCPM and Geocoded Enrollee data. ^{5 8 25}

VA will continue to be challenged with meeting growing Veterans' demand for long-term care and related services in the right location and setting, workforce shortages, contending with a need to better geographically align care, and addressing age-specific specialty care needs. The CLC planning guidelines are overall standards VA, VISNs and markets can consider when determining LTC services. CLC geographical area coverage should align with population center demand criteria and established urban and rural access guidelines. The ideal program location for a CLC is within 30-minute urban or 60-minute rural setting of a population center. Location on or near a VAMC campus is preferred to provide enrollees access to outpatient and specialty care services. Availability of community partners, CNHs and SVHs, should also be considered when determining LTC service needs.

Veteran-centric care models that regionalize and/or cohort high-demand and high-skilled specialty services within and across markets should also be considered. Regionalized care centers that provide short-stay intensive care services for a 60-minute drive time population center would help to maximize utilization of scarce geriatric workforce and capitalize on costly infrastructure. Cohorting of specialty-focus care such as dementia and mental health within a 30-minute drive time of a population center would foster the localized care concept and improve family caregiver access.

Specific planning domain guidelines are provided:

- Population and demand were based on EHCPM 2017 and 2019 aging enrollee Veteran population, Service-Connected Disability Priority 1-3 data and reported FY 2019 ADC.



- Geographical alignment of CLC services with a population center was based on localized LTC service best practices, VA current practice, and interviews with the GEC program office. The target population demand is 30,000 for a population center. The resulting guidelines seek to ensure CLC services within markets and optimize travel time for enrollee Veterans.
- Target CLC minimum numbers of beds and neighborhoods were based on design best practices guidelines, VA's Small House Model standards, and interviews with the GEC program office. The target is 48-64 beds, 3-4 neighborhoods. The minimum is 16 beds per neighborhood. The resulting guidelines ensure a safe home-like environment that is operationally cost-effective.
- Target CLC occupancy rate of 90% was based on VA standards and interviews with the GEC program office.
- Cohorting special population needs within and across markets was based on current VA health care models of care and interviews with the GEC program office. The resulting guideline ensures needed services are provided within population centers and resources are leveraged.
- LTC drive times were based on localized service concept as agreed with GEC program office. The ideal program location for a CLC is within 30-minute urban or 60-minute rural setting of a population center. The resulting access guideline promotes access and family caregiver involvement.
- Evidence-based facility design, Small House Model, was based on best practices, VA's Small House Model design guidelines, and interviews with the GEC program office. The resulting guideline promotes the concept of a 'home-like' environment.
- Aging infrastructure and cost to modernize guidelines were based on sustainability, modern health care, and VA's FCA cost estimates.
- Partnership guidelines were based on current VA LTC service models. The resulting guidelines ensure service demand is met, continuation of community partnerships, and improved access for enrollees and family caregivers.



5. Future Program Planning

5.1 Applying the CLC National Planning Strategy to VA Market Assessments

The VA Market Area Health System Optimization (MAHSO) effort completed an assessment of VA markets, facilities, and service lines to produce recommendations for the design of high-performing integrated delivery networks. Select service lines, studied during the market assessments, did not have a standard national strategy or approach to planning and maintaining programs. CLC was identified as a service line requiring further review to define a set of national planning guidelines that would be applicable for use in current (MAHSO) and future planning efforts.

This document, the CLC national planning strategy, fulfills this requirement and establishes the definitive, consistent, planning guidelines to be used for all VA CLC planning efforts moving forward.

The national planning guidelines will be used to ensure the final market assessments apply standard programmatic criteria across the nation, but with full consideration of the range of care archetypes that exist within VA. The guidelines will be useful to VA planners to inform future quadrennial market assessments and other planning exercises.

How will MAHSO apply the CLC National Planning Strategy?

The four-step process for revisiting MAHSO draft opportunities describes how CLC-specific opportunities will be reviewed and updated, if necessary.

1. Review Phase 1-3 Market Assessment Data and CLC Opportunities

The scope of review will include revisiting Phase 1-3 markets, re-assessing all market opportunities using new thresholds and new data as applicable, and potentially developing new opportunities.

2. Apply CLC Planning Guidelines

For each market and applicable draft CLC opportunity, the planner will review market assessment data and apply CLC planning guidelines. The reassessment will include any new data sources in the updated methods described previously. Next, planning guidelines developed here (demand, supply, access, quality, and mission, and other applicable MISSION Act § 203 criteria) will be applied to existing opportunities.

3. Update/Create CLC Opportunities

As needed, existing market optimization or capital opportunities will be revised. In addition, after application of the planning guidelines and thresholds, new CLC opportunities may also be created.



4. Review and Finalize with VA Leadership

Once draft opportunities are revised or developed and are ready for VA Leadership approval, a review with the Chief Strategy Office (CSO), VHA Leadership, and the EIC/Network Directors will move the opportunities towards finalization.

Conclusion

The CLC national planning strategy created in conjunction with the GEC program office is a framework that provides a consistent service delivery planning methodology that describes how CLC services can be delivered across the network. Based on GEC's program priorities, the CLC national planning strategy provides guidance on how CLC programs can respond to varied market demands and trends while optimizing VA resources. Established guidelines can be used to ensure that capital planning is matched to Veteran demand and a consistent set of recommendations is established to inform and support the development of the National Realignment Strategy.



Appendix A: Service-Connected Disability Priority-Based Enrollment System

The Veterans' Health Care Eligibility Reform Act of 1996 (Eligibility Reform Act) was established to open enrollment to all Veterans and mandated that VA establish a priority-based enrollment system to manage access to care. The Service-Connected Disability (SCD) priority-based enrollment system consists of eight (8) health care priority groups that are collapsed into three (3) separate strata. Although all Veterans are eligible to obtain VA health care services, including a basic medical package, this priority system determines which Veterans can access such services and establishes rules for copayment of services and eligibility for additional health services.¹¹

Service Connected Disability Priority Rating Strata

- Priorities 1-3: Service-connected priorities
 - Priority 1: 50% or more disabled
 - Priority 1a: 70% or more disabled
 - Priority 2: 30% or 40% disabled
 - Priority 3: 10% or 20% disabled
- Priority 4: Catastrophically disabled but not service-connected
- Priority 5-8: Nonservice-connected priorities
 - Priority 5, 7 and 8: income-based priorities
- Priority 6: select special eligibility including post 9/11 Era Combat Veterans



Appendix B: Definitions

Community Living Centers Long Stay Programs	
Continuous Care	<ul style="list-style-type: none">• Long-term skilled interventions such as ventilator care, intravenous (IV) therapy, and tube feeding that require skilled staff. Custodial care for assistance with ADLs and IADL
Dementia Care	<ul style="list-style-type: none">• Specialized care for residents with memory or cognitive impairments. Custodial care for assistance with ADLs and IADLs
Mental Health Recovery	<ul style="list-style-type: none">• Specialized care for residents with behavioral health impairments. Custodial care for assistance with ADLs and IADLs
SCI/D	<ul style="list-style-type: none">• Specialized care for residents with spinal cord injury/disorders. Custodial care for assistance with ADLs and IADLs

Community Living Centers Short Stay Programs	
Skilled Nursing Care	<ul style="list-style-type: none">• Time-limited, goal directed care for specific diagnoses or interventions that require the care of a licensed nurse. Skilled nursing interventions include wound care, intravenous therapy, tube feeding, and short-term ventilator care
Rehabilitation	<ul style="list-style-type: none">• Intensive post-acute interventions such as physical therapy (PT), occupational therapy (OT), recreational therapy (RT), and speech-language pathologist (SLP) Common conditions include stroke, amputation, trauma, and neurological diseases
Restorative Care	<ul style="list-style-type: none">• Supportive, low-intensity rehabilitation program, aims to provide a transition from the hospital through short term restorative care prior to discharge to home or community-based setting that is the least restrictive yet most appropriate setting for the Veteran
Continuing Care	<ul style="list-style-type: none">• Short-term care for Veterans that need to be discharged from a hospital and awaiting alternative placement
Mental Health Recovery	<ul style="list-style-type: none">• Time-limited recovery centered care with the purpose of providing evaluation and management, such as medication adjustment, evidence-based psychosocial behavioral interventions for Veterans with exacerbation of medical and/or behavioral symptoms that can be managed in a non-psychiatric inpatient setting
Dementia Care	<ul style="list-style-type: none">• Evaluation to help stabilize symptoms and develop/coordinate a care plan focusing on medication management and behavior modification so the Veteran can return home, typically with home-based care to assist the Veteran and support the family/caregiver



Community Living Centers Short Stay Programs	
Geriatric and Evaluation Management	<ul style="list-style-type: none">• Geriatric evaluation with interdisciplinary team consisting of geriatric specialists to evaluate physical, cognitive, affective, social, financial, environmental, and spiritual components used to create an interdisciplinary plan of care which identifies necessary treatment, rehabilitation, health promotion, and social service interventions
Hospice/Palliative Care	<ul style="list-style-type: none">• Hospice care provides symptom management for Veterans with life-limiting illness that cannot be safely managed in the home.
Respite Care	<ul style="list-style-type: none">• Care for a short time when family/caregivers need a break, need to run errands, or need to go out of town for a few days. Personal care assistance and companion care are the most common respite care services provided

State Veterans Homes Programs	
Nursing Home	<ul style="list-style-type: none">• Provides accommodation of convalescents/other persons who are not acutely ill and not in need of hospital care, but who require skilled nursing care and related medical services
Domiciliary Facility	<ul style="list-style-type: none">• Provides a home to a Veteran, embracing the furnishing of shelter, food, clothing, and other comforts of home, including necessary medical services
Adult Day Health Care	<ul style="list-style-type: none">• Provides a therapeutic outpatient care program that includes one or more of the following services, based on patient care needs: medical services, rehabilitation, therapeutic activities, socialization, and nutrition, services are provided in a congregate/group setting



Home and Community-Based Services	
Home-Based Primary Care	<ul style="list-style-type: none"> A unique model of home health care that is different in target population, process, and outcomes from home care that is available under Federal and state programs such as Medicare and Medicaid. The HBPC model targets persons with complex chronic diseases that worsen over time and provides interdisciplinary care that is longitudinal and comprehensive rather than episodic and single-problem focused. HBPC provides cost effective primary care services in the home and includes palliative care, rehabilitation, disease management, caregiver assistance and support, and coordination of care. The HBPC team consists of: Medical Director, Primary Care Provider (MD, NP, or PA), Nurse, Social Worker, Rehabilitation Therapist, Dietitian, Pharmacist and Mental Health Professional (Psychologist and/or Psychiatrist).
Purchased Skilled Home Care	<ul style="list-style-type: none"> Skilled Home Health Care provides a wide range of services in a Veteran’s home by a variety of skilled disciplines, including nursing, rehabilitation therapists, and medical social workers. Skilled home health agencies can also provide a bath aide on a limited basis. Skilled Home Health Care can be used to provide short-term and intermittent care, longitudinal care to a Veteran with ongoing needs, or caregiver respite. The intent of Skilled Home Health Care is to provide services that will support a Veteran’s ability to remain safely at home. Home Infusion services allows patients who require regular IV treatments to receive this care within the comfort of their own home. Treatment may include antibiotics, parenteral nutrition, cardiac therapies, pain medication, hydration, and so forth. The items covered include, medications, including total parental nutrition (TPN), IV therapy supplies, and any durable medical equipment related to the infusion services.
Homemaker Home Health Aide	<ul style="list-style-type: none"> Provides personal care services to Veterans in their place of residence. H/HHA serves Veterans who require assistance over a long-period of time, Veterans with short-term needs following a procedure, and Veterans whose caregivers need respite.
VA Adult Day Health Care	<ul style="list-style-type: none"> Medical model ADHC program that are operated by VA staff at VA Medical Centers. ADHC participants receive coordinated interdisciplinary interventions from a variety of team members including, but not limited to, nursing, rehabilitation, social work, and nutrition. Recreation and socialization are key components of the experience. For the family caregiver, ADHC can provide a defined period of respite with access to education and support. VA also provides an innovative approach to ADHC through its Mobile ADHC program where VA staff provide ADHC services in the communities located closer to the Veterans (for example, rural areas) through partnerships with Veteran Service groups and others



Home and Community-Based Services	
Community Adult Day Health Care	<ul style="list-style-type: none"> Community Adult Day Health Care provides long-term therapeutic services in a congregate setting. Services may include nursing care, rehabilitation, social services, nutrition, personal care, recreation activities, socialization, and case management. CADHC may be used to provide respite care for a family caregiver.
Home Palliative/Hospice Care	<ul style="list-style-type: none"> Palliative and Hospice Care (Home) is comfort-oriented care that includes supportive services provided by a specialized interdisciplinary team in the Veteran’s place of residence for Veterans with life-limiting illness. VA-purchased routine and continuous in-home hospice care covers hospice diagnosis-related home visits, medications, supplies, biologicals, durable medical equipment, and ancillary services.
Home Respite Care	<ul style="list-style-type: none"> Provides short-term care at home or at an adult day care program when family caregivers need a break
Community Residential Care	<ul style="list-style-type: none"> CRC is a form of enriched housing that provides health care supervision to eligible Veterans not in need of acute hospital care, but are unable to live independently due to medical or psychosocial health conditions and have not suitable family or significant others to provide the needed support and supervision. CRC is referred to by different names in various states and settings and may include medical foster homes, assisted living, personal care homes, family care homes, and psychiatric board and care homes. VA provides case management and oversight to those Veterans living in the CRC program facilities.
Medical Foster Home	<ul style="list-style-type: none"> A unique form of CRC for Veterans who are more medically complex and disabled and who will require interdisciplinary primary care in the home. The MFH program combines VA placement in a personal care home, with no more than three (3) Veterans receiving care, with an interdisciplinary care team of HBPC or Spinal Cord Injury Home Care (SCI/HC). The MFH offers a safe alternative to nursing home placement in a community home that may be a more acceptable care environment to Veterans and those responsible for their care.
Veteran Directed Care	<ul style="list-style-type: none"> Self-directed model of long-term PCS. With the help of trained counselors, Veterans (or a representative) manage a budget to hire caregivers and purchase selected goods and services. The program adheres to government standards on person-centered planning.
Hospital in Home	<ul style="list-style-type: none"> VA’s version of Hospital at Home program. HIH offers Veterans increased choice in how their care is provided. At VHA facilities with a HIH program, Veterans who are evaluated by at least one approved HIH clinical provider, and are determined to be eligible for treatment by HIH care, may be offered an opportunity to choose to be cared for in their home as an alternative to hospitalization. HIH offers intensive time limited home care for specified acute and/or complex chronic



Home and Community-Based Services	
	conditions with the goal of reducing hospital admissions, decreasing length of stay by allowing patients to be discharged earlier from the hospital, reducing the likelihood of readmissions, decreasing risk of adverse events and improving outcomes. There are currently 12 HiH programs operational in VHA.
Program of All-Inclusive Care for the Elderly	<ul style="list-style-type: none">• PACE provides both skilled and personal care services to Veterans who have been assessed by VA staff to need these services delivered in a comprehensive care model. These services are largely delivered through a day center model by a team of professionals made up of a primary care physician, registered nurses, a social worker, health aides, transportation personnel, rehabilitation therapists, dietitians, and recreational/activity personnel.

Geriatric Ambulatory Programs	
Geriatric Patient Aligned Care Team (GeriPACT)	<ul style="list-style-type: none">• The geriatric patient centered medical home model is called GeriPACT, which stands for Geriatric Patient Aligned Care Team. These care teams specialize in providing Geriatric Evaluation and ongoing health care for Veterans with more than one chronic disease and with declining physical abilities and/or challenges with their thinking or memory. The goal is to promote as much independence and quality of life as possible for Veterans with these challenges. GeriPACT combines VA health care services with those offered in the community
Geriatric Evaluation	<ul style="list-style-type: none">• Geriatric Evaluation is a comprehensive evaluation and a developed treatment plan by a team of experts that may include geriatric physicians, nurse practitioners, nurses, social workers, pharmacists, psychologists, physical/occupational/recreational therapists, dietitians and/or other health care providers. The Geriatric Evaluation consists of examination of the Veteran's physical, mental, and psycho-social health status. Current problems identified are evaluated as to their potential to cause future problems. A comprehensive care plan is then developed to include resources and support services to address current and potential problems
Geriatric Consultation	<ul style="list-style-type: none">• Geriatric consultation, both inpatient and outpatient, may be another efficient means to obtain access to a Geriatric Evaluation and other geriatric resources. Consultation is provided by health care professionals trained in geriatrics, and can be provided in person, through Telehealth, by record review, or telephone conference



Appendix C: Rural-Urban Commuting Areas Definition

This report uses the Rural-Urban Commuting Areas (RUCA) system used by VA to define rurality. Developed by the Department of Agriculture (USDA) and the Department of Health and Human Services (HHS) the RUCA system assigns each U.S. Census tract a RUCA code based on population density, urbanization, and daily commuting patterns.²⁴

In MAHSO, enrollees within each county are counted as either urban or rural based on the RUCA code for the tract in which they live. This allows each county to have a “Percent Rural” metric (percent of rural enrollees in county of total county enrollees), which is used throughout MAHSO and this report.

- **Urban Area:** Census tracts with at least 30% of the population residing in an urbanized area as defined by the Census Bureau are defined as urban.
- **Rural Area:** Land areas not defined as urban.
 - **Insular Islands (considered Rural):** the U.S. insular islands, including the U.S. Virgin Islands, Guam, American Samoa, and the Northern Mariana Islands.
 - **Highly Rural Areas (considered Rural):** Sparsely populated areas in which less than 10% of the working population commutes to any community larger than an urbanized cluster, which is typically a town of no more than 2,500 people.



Appendix D: Commercial Long-Term Care Services Data Profile

Long Term Acute Care Hospitals	
Patient Profile	Complex patients with acute post-intensive care needs that require care on an ongoing basis but no longer require intensive care or extensive diagnostic procedures
Clinical Conditions	<ul style="list-style-type: none"> • Prolonged ventilator use/weaning • Ongoing dialysis for renal failure • Intensive respiratory care • Multiple IV medication/transfusions • Complex wound care/burn care
Admission Guidelines	25 days of hospitalization to be eligible for Medicare reimbursement
Key Statistics	
<p>Notable Statistics</p> <ul style="list-style-type: none"> ✓ 380,000 patients treated annually ✓ 398 facilities (August 2020) ✓ Housed with acute facility/ operated independently 	<p>Payors</p> <ul style="list-style-type: none"> ✓ CMS ✓ Commercial
<p>Medicare Utilization 2018</p> <ul style="list-style-type: none"> ✓ ALOS 30 days ✓ 102,000 Stays/92,000 Medicare beneficiaries independently 	<p>Medicare Payment 2018</p> <ul style="list-style-type: none"> ✓ \$42,677 FY 2020 Standard Rate (CMS Long-Term Care Hospital PPS)

Skilled Nursing Facilities			
Patient Profile	Patients with post-acute skilled and rehabilitation needs that require intensive therapy and transitioning from an acute care hospital		
Clinical Conditions	<table border="0"> <tr> <td> <ul style="list-style-type: none"> • Wound Care • IV Therapy • Catheter Care • Hip/Knee Replacement </td> <td> <ul style="list-style-type: none"> • Stroke • Physical Therapy • Vital Signs Monitoring </td> </tr> </table>	<ul style="list-style-type: none"> • Wound Care • IV Therapy • Catheter Care • Hip/Knee Replacement 	<ul style="list-style-type: none"> • Stroke • Physical Therapy • Vital Signs Monitoring
<ul style="list-style-type: none"> • Wound Care • IV Therapy • Catheter Care • Hip/Knee Replacement 	<ul style="list-style-type: none"> • Stroke • Physical Therapy • Vital Signs Monitoring 		
Admission Guidelines	Medicare covers 100 days of SNF care per episode, medically necessary inpatient hospital stay of at least 3 days		
Key Statistics			
<p>Notable Statistics</p> <ul style="list-style-type: none"> ✓ 15,042 facilities nationwide ✓ 60% free-standing ✓ 100 median bed 	<p>Payors</p> <ul style="list-style-type: none"> ✓ CMS ✓ Commercial ✓ Beneficiaries are responsible for \$176 day copay on 21st day of service 		



Skilled Nursing Facilities	
<p>Medicare Utilization 2018</p> <ul style="list-style-type: none"> ✓ ALOS 37 days ✓ 1.5 M Medicare beneficiaries used SNFs at least once ✓ 2.3 M Medicare-covered stays ✓ 41% discharged to community 	<p>Medicare Payment 2018</p> <ul style="list-style-type: none"> ✓ \$487 payment/day ✓ \$18,247 payment/episode

Inpatient Rehabilitation Facility	
Patient Profile	Patients need intensive rehabilitation therapy after an illness, injury, or surgery that requires frequent face-to-face interaction/supervision with a rehabilitation physician
Clinical Conditions	<ul style="list-style-type: none"> • Stroke • Multiple Trauma • Lower Extremity Fracture • Brain injury <ul style="list-style-type: none"> • Amputation • Orthopedic Condition • Cardiac Condition • Neurological Disorders
Admission Guidelines	Preadmission screening process to determine each prospective patient likelihood to benefit significantly from an intensive inpatient rehabilitation program
Key Statistics	
<p>Notable Statistics</p> <ul style="list-style-type: none"> ✓ 1,170 facilities nationwide ✓ Facilities are free-standing or specialized units within ACH ✓ 30 Median Bed 	<p>Payors</p> <ul style="list-style-type: none"> ✓ CMS ✓ Commercial
<p>Medicare Utilization 2018</p> <ul style="list-style-type: none"> ✓ 364,000 Medicare beneficiaries/408,000 stays ✓ 59% of discharges Medicare FFS 	<p>Medicare Payment 2018</p> <ul style="list-style-type: none"> ✓ \$20,734 payment on discharge

Long Term Care Nursing Home	
Resident Profile	Resident unable to live independently at home and require less intensive, long term non-skilled supervised care
Clinical Conditions	<ul style="list-style-type: none"> • Diabetes • Dementia/Cognitive Disorders • Alzheimer <ul style="list-style-type: none"> • Arthritis • Amputation • Increased Risk of Falls
Admission Guidelines	Requires assistance with day-to-day activities and medical supervision
Key Statistics	
<p>Notable Statistics</p> <ul style="list-style-type: none"> ✓ 14,889 facilities nationwide ✓ Less intensive long-term care services primary care service ✓ Most SNFs are dually certified as SNFs and nursing homes 	<p>Payors</p> <ul style="list-style-type: none"> ✓ Medicaid ✓ Private Pay
<p>Payment 2018</p> <ul style="list-style-type: none"> ✓ \$247—Medicaid national average shared room 	<p>Utilization 2018</p> <ul style="list-style-type: none"> ✓ 1.4 million residents



Long Term Care Nursing Home	
<ul style="list-style-type: none"> ✓ \$41.0 billion—Medicaid FY 2018 combined state and Federal funds ✓ Medicare does not pay for nursing home care—residents pay ✓ \$8,000 median price/private room 	<ul style="list-style-type: none"> ✓ National trends—decline in residents

Assisted Living Facilities Community Residential Care	
Resident Profile	Residents have medical conditions, frail, unable to live independently at home and require some supervision and personal assistance
Clinical Conditions	<ul style="list-style-type: none"> <li style="width: 50%;">• Hypertension <li style="width: 50%;">• Arthritis <li style="width: 50%;">• Alzheimer's/Dementia Disease <li style="width: 50%;">• Diabetes <li style="width: 50%;">• Heart Disease <li style="width: 50%;">• Pulmonary Disorders <li style="width: 50%;">• Depression
Admission Guidelines	Requires assistance with day-to-day activities and medical supervision
Key Statistics	
<p style="text-align: center;">Notable Statistics</p> <ul style="list-style-type: none"> ✓ 28,900 facilities nationwide ✓ Includes residential care homes, board and care, adult foster homes ✓ 33 median bed ✓ 28 resident ADC 	<p style="text-align: center;">Payors</p> <ul style="list-style-type: none"> ✓ Private Pay ✓ Medicaid
<p style="text-align: center;">Utilization 2020</p> <ul style="list-style-type: none"> ✓ 800,000 residents annually 	<p style="text-align: center;">Cost 2020</p> <ul style="list-style-type: none"> ✓ \$3,500 median monthly rate

Continuing Care Retirement Communities	
Resident Profile	Residential arrangement that provides a continuum of care, services, and activities in one place as older individuals want to stay in the same place through different phases of their aging process
Clinical Conditions	As their health status changes, residents may transition to an assisted living, skilled nursing or long-term care nursing home while remaining in the same community
Admission Guidelines	Begins with an independent living area that may consist of rental units, condominiums or cooperative housing units
Key Statistics	
<p style="text-align: center;">Notable Statistics</p> <ul style="list-style-type: none"> ✓ 2,000 facilities nationwide ✓ 350,000 residents annually 	<p style="text-align: center;">Payors</p> <ul style="list-style-type: none"> ✓ Private Pay



Continuing Care Retirement Communities	
<ul style="list-style-type: none"> ✓ Extensive/LifeCare ✓ Modified Fee-for Service ✓ Fee-for Service ✓ Rental ✓ Equity/Co-op 	<p style="text-align: center;">Types</p> <p style="text-align: center;">Cost 2020</p> <ul style="list-style-type: none"> ✓ Average initial payment is approximately \$329,000, can top \$1 million within some communities ✓ \$1,500 monthly fee average

Hospital at Home (HaH)	
Patient Profile	Patient’s clinical condition is treatable at home with an anticipated favorable outcome
Clinical Conditions	<ul style="list-style-type: none"> • Congestive Heart Failure • Chronic Obstructive Pulmonary Disease • Volume Depletion/Dehydration • Urinary Tract Infection • Deep Venous Thrombosis/Pulmonary Embolism • Increased Risk of Falls
Admission Guidelines	Patient must have acute care diagnoses. Physician and nursing care, medicine, and appropriate diagnostic and therapeutic technologies brought to the patient’s home
Key Statistics	
Notable Statistics	Payors
<ul style="list-style-type: none"> ✓ Innovative approach initially designed in 1995 by Johns Hopkins Schools of Medicine and Public Health ✓ 6 VAMC participate in HaH demonstrations 	<ul style="list-style-type: none"> ✓ Medicare Advantage ✓ Medicaid
Utilization 2020	Expenditure 2020
<ul style="list-style-type: none"> ✓ Flourish in countries with single-payer health systems, but use in the U.S. has been limited ✓ Clinical outcomes improvement and reduced cost have been proven in several HaH demonstrations 	<ul style="list-style-type: none"> ✓ 19% cost savings compared to similar inpatients episodes

Home Based Services			
Home Based Primary Care	Skilled Home Health Care Personal Care Services		
Patient Profile	Patients require intermittent skilled and personal care services		
Clinical Conditions	<table border="0" style="width: 100%;"> <tr> <td style="vertical-align: top;"> <ul style="list-style-type: none"> • Congestive Heart Failure • Coronary Heart Disease • Chronic Obstructive Pulmonary Disease </td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> • Diabetes • Pressure Ulcers • Dementia </td> </tr> </table>	<ul style="list-style-type: none"> • Congestive Heart Failure • Coronary Heart Disease • Chronic Obstructive Pulmonary Disease 	<ul style="list-style-type: none"> • Diabetes • Pressure Ulcers • Dementia
<ul style="list-style-type: none"> • Congestive Heart Failure • Coronary Heart Disease • Chronic Obstructive Pulmonary Disease 	<ul style="list-style-type: none"> • Diabetes • Pressure Ulcers • Dementia 		
Care Guidelines	Comprehensive, structured care that supports the needs of the patients and facilitates coordination of home health care, outpatient, and community services		



Key Statistics	
<p>Services</p> <ul style="list-style-type: none"> ✓ Home-based Primary Care-physician supervised health team ✓ Skilled Care-nursing and rehabilitation ✓ Personal Care Services—formal and informal caregivers 	<p>Payors</p> <ul style="list-style-type: none"> ✓ Medicare ✓ Medicaid ✓ Commercial ✓ Private Pay
<p>Medicare Skilled Home Health Care Utilization 2018</p> <ul style="list-style-type: none"> ✓ 3.4 million Medicare beneficiaries received skilled home health care ✓ 18 visits per episode ✓ 3.6% reduction in certified providers 	<p>Medicare Expenditure 2018</p> <ul style="list-style-type: none"> ✓ \$17.9 billion expenditures

Hospice	
Patient Profile	Individuals with a terminal illness whose doctor believes has 6 months or less to live if the illness runs its natural course
Clinical Conditions	<ul style="list-style-type: none"> • Physician Services • Nursing Care • Social Worker/Counseling • Hospice Aide/Homemaker Services • Short-term Hospice Inpatient Services • Respite Care • Medication Management • Rehabilitation Services • Spiritual Care • Care Coordination • Bereavement Counseling • Family Caregivers Support
Care Guidelines	Provide comprehensive comfort care for a person at the end of their life, as well as support for the family
Key Statistics	
<p>Settings</p> <ul style="list-style-type: none"> ✓ Home ✓ Hospice Center ✓ Institutional setting 	<p>Payors</p> <ul style="list-style-type: none"> ✓ Medicare ✓ Medicaid ✓ Commercial ✓ Private Pay
<p>Medicare Skilled Home Health Care Utilization 2018</p> <ul style="list-style-type: none"> ✓ 1.5 million Medicare beneficiaries received care ✓ 7% increase hospice days from FY 2017-18 	<p>Medicare Expenditure 2018</p> <ul style="list-style-type: none"> ✓ \$19.2 billion

Adult Day Health Care	
Participant Profile	Older adults who require supervised care during the day or those socially isolated/lonely
Clinical Conditions	<ul style="list-style-type: none"> • Alzheimer’s/Dementia • Stroke • Hypertension • Diabetes • Social Isolation • Inpatient Services
Care Guidelines	Provide comprehensive comfort care for a person at the end of their life, as well as support for the family



Adult Day Health Care	
Key Statistics	
<p>Programs</p> <ul style="list-style-type: none">✓ Social Day Care— enriching seniors' lives through an engaging social community and activities that build upon individual's skills, knowledge, and unique abilities✓ Adult Day Health Care—provides medical services and physical, occupational, and speech therapy to seniors.✓ Alzheimer's/Dementia Day Care—provides social and health services specifically for seniors with cognitive challenges	<p>Payors</p> <ul style="list-style-type: none">✓ Medicare Advantage Plans✓ Medicaid✓ Private Pay
<p>Utilization 2020</p> <ul style="list-style-type: none">✓ 260,000 participants –63% increase from 2002✓ 5,685 programs nationwide✓ 35% increase in services since 2002	<p>Cost 2020</p> <ul style="list-style-type: none">✓ \$75 day—4% increase from 2018 (202)



Appendix E: Leading Practices

Interdisciplinary Care Coordination Leading Practice

Interdisciplinary care coordination (ICC), a long-standing best practice and hallmark of geriatric health care, is more important than ever to advance LTC services given its implications for patient experience, creative solutioning, clinical outcomes, and family/caregiver efficiency. Coordination of LTC services for patients is becoming more complex as care teams must collaboratively address a growing number of needs and services for each patient. Additionally, care teams are growing larger and more specialized, increasing the complexity of coordination among team members and teams. The proliferation of communication technologies is also affecting how and when patients, their family/caregivers and care team interact, shares information and collaboratively addresses needs and emergent opportunities.

According to the Robert Wood Johnson Foundation report *“Lessons Learned from the Field: Promising Interprofessional Collaboration Practices.”*

“Effective interprofessional collaboration...

- *promotes the active participation of each discipline in patient care, where all disciplines are working together and fully engaging patients and those who support them, and leadership on the team adapts based on patient needs.*
- *enhances patient and family-centered goals and values, provides mechanisms for continuous communication among caregivers, and optimizes participation in clinical decision-making within and across disciplines. It fosters respect for the disciplinary contributions of all professionals.”⁸⁷*

ICC is a dynamic process that must include the patient, their family/caregiver and all key clinical providers to understand current state realities at the point of transition to avoid transitional care challenges and ensure the appropriate LTC services are coordinated and managed. Planning and timely response at the point of acute episodes promotes safe, effective, and patient-centered transition from one setting. Proactivity also promotes avoiding the common interdisciplinary care coordination challenges can help to reduce hospital readmission and help improve the health and quality of life for patients.



Interdisciplinary Care Coordination Guidelines

- **Patient First:** Focusing on the patient from her/his unique perspective serves as an equalizer across each team member, in that patients' interests supersede the potentially competing interests of individual team members.
- **Organizational Leadership:** Demonstrate leadership commitment to interprofessional collaboration as an organizational priority through words and actions.
- **Staff Empowerment:** Create a level playing field that enables team members to work at the top of their license, know their roles, and understand the value they contribute.
- **Cultivate effective team communication:** Enabling team members with shared language and tools to promote effective communication.
- **Explore the use of organizational structure to hardwire interprofessional practice:** Have numerous types of practices and supports in place to advance interprofessional collaboration
- **Train different disciplines together so they learn how to work together:** Interprofessional collaboration must be learned.

VA has taken great strides to advance its ICC process as it continues to explore opportunities to engage Veterans, enhance their experience, and ensure their personal preferences are met. To proactively engage more Veterans in Advance Care Planning (ACP), the Central Arkansas Veterans Healthcare System (CAVHS) Geriatric Research Education and Clinical Center (GRECC) established an interactive, group-based ACP program. This Gold Status Best Practice innovative program includes facilitated group meetings that promote and foster open discussions about care preferences, values, and beliefs with care team members, including discussing end-of-life decisions with Veterans', their families/trusted others.

VA Gold Star Best Practice

PLANNING FOR FUTURE MEDICAL DECISION VIA GROUP VISITS

Engages Veterans and their family/caregiver in a vital care LTC planning component—future medical care preferences—that affects interdisciplinary care planning. It also encourages interprofessional relationships and collaboration among care team members.

Telehealth Leading Practice

As an example of industry best practice, the University of Mississippi Medical Center (UMMC) Center for Telehealth has been recognized as a national trailblazer in telehealth by the Federal Health Resources and Services Administration. The Center for Telehealth provides remote, on-site access to caregivers in more than 35 specialties, including urgent care, trauma, mental health, dermatology, cardiology, infectious diseases, and Alzheimer's and dementia care. The Center for Telehealth connects patients and caregivers to Medical Center health care providers remotely, in real time, using video calls and interactive tools. More than 500,000 patient visits in 69 of the



state’s 82 counties have been recorded since the center began with just three sites, expanding to more than 200 sites today, not including the homes of patients. ⁸⁸

Patient Portal/Personal Health Record

A patient portal or personal health record (PHR), a secure online website, provides patients convenient 24-hour access to their personal health information and medical records and allows them to be more actively involved in their health care. Some also offer e-visits and secure communications via text and e-mail to allow patients to communicate with their provider in a safe, HIPAA-compliant environment. ⁸⁹

Patient Portal Personal Health Record
<ul style="list-style-type: none"> • e-Visits • Secure Messaging • Online Scheduling • Access to Medical Results • Medication refill • Reference/Education Material • Self-enter Data

VA, Partners Health, Kaiser Permanente, the Cleveland Clinic, M.D. Anderson Cancer Center, Vanderbilt, and the Mayo Clinic are examples of U.S. health care institutions offering a patient portal. Access to a patient portal can increase engagement in outpatient visits, potentially address unmet clinical needs, and reduce downstream health events that lead to emergency and hospital care, particularly among patients with multiple complex conditions. ⁸⁹

VA’s Award Winning My HealtheVet
<p>VA’s My HealtheVet (MHV) is an award winning PHR that offers numerous functionalities that promote patient engagement and fosters virtual provider-to-patient communications</p>

VA was an early pioneer in providing a PHR tethered to its electronic health record (EHR). The My HealtheVet (MHV) portal enables Veterans to create and maintain a Web-based PHR that provides access to patient health education information and resources, a comprehensive personal health journal, and electronic services, such as prescription refills and secure messaging. The MHV Secure Messaging, a leading clinical communication practice within VA, has proven to be one of VHA’s most used clinical application to foster asynchronous patient-to-provider communication for no-urgent health care and information sharing.

Home-Based Primary Care Leading Practice

More chronically ill and medically complex individuals are having difficulty accessing quality health care than ever before – and the number of at-risk patients continues to increase. ⁹⁰ Chronic medical conditions increase with age often leading to functional impairments that reduce the ability to access medical care. The lack of social support and/or financial resources further complicate the situation. These access barriers lead



to missed appointments, fragmented care, and poor control of chronic conditions. Home-Based Primary Care (HBPC) provides quality, patient-centered care for people underserved in the current health care paradigm where the patient must travel to the provider. HBPC, sometimes referred to as the modern day house call, provides a way for patients with high-cost, complex, and function-limiting conditions to receive comprehensive, longitudinal primary medical and social care in their homes, and thus avoid emergency room visits, acute hospitalization, and institutionalization.^{55 56}

As part of its Independence at Home (IAH) demonstration, the CMS noted,

“Home-based primary care allows health care providers to spend more time with their patients, perform assessments in a patient’s home environment, and assume greater accountability for all aspects of the patient’s care. This focus on timely and appropriate care is designed to improve overall quality of care and quality of life for patients served, while lowering health care costs by forestalling the need for care in institutional settings.”⁵⁶

The Journal of the American Geriatrics Society predicted the extension of the three-year demonstration would serve an additional 15,000 patients and result in an estimated \$40 million in savings for CMS over two years.⁹¹

VA has been a leader in HBPC and has long offered HBPC as a popular option for its medically complex population and has demonstrated cost savings. A study of a VA HBPC program with 11,334 beneficiaries found that patients spent 62% fewer days in the hospital and 88% fewer days in nursing homes when HBPC was offered than when it was not. The overall cost of care per VA patient fell by 24% with HBPC, according to the study, which was delivered to the National Health Policy Forum.⁹¹

Long-Term Care Evidence Based Design Leading Practice

Research-based evidence support that surroundings have a dramatic influence on older people's socialization, mobility, and general health. Such an intense relationship implies a heightened need to innovative designs that encourage positive outcomes. Even small, informed design decisions can have a large effect on residents' quality of life. Small scale home-like facility-based environments of care (EOC) designed for older adults who need long-term care reduces agitation, aggression, and restlessness.^{92 93}

Evidence Based Design
<ul style="list-style-type: none"> • Basic Design Attributes—basic design layouts of households/neighborhoods • Ambience—design interventions that aim to create a pleasant and stimulating environment • Environmental Attributes—design interventions such as lighting, thermal comfort, and use of color, patterns • Assistive Measures to Support Independence— design strategies that enable elders to maintain their independence longer • Environmental Information –design strategies focused on orientation and wayfinding



Leading facility evidence-based design identifies five main categories that support and encourage a better quality of life for long-term care residents. Small groups of residents living in households—also referred to as small houses—with their own space for dining and common activities is inherent in the residential model. Smaller living units provide many opportunities for residents to interact with one another and to engage in self-care skills. ⁹³

Home-like care environments, with personalized rooms and domestic furnishings, are linked to improved emotional wellbeing, social interaction, and physical functionality. Orientation, wayfinding, and elopement environmental features are also part of a supportive resident model. Providing accessible areas, as possible, for the resident to promote self-choice and freedom support avoidance and provides engagement opportunities. This is especially true for outdoor access. Wandering paths may also serve as favorable stimuli, especially since wandering and pacing may be adaptive or appropriate behaviors for cognitively impaired residents seeking avoidance from unfavorable stimuli or seeking favorable ones. ⁹³

Leading Practice Design Attributes

- Ten to 12 residents—residents share a common house or cottage
- Homelike design—incorporate strategies that promote privacy for individuals, provide control over personal space, and potentially thwart intrusion by other residents that may have dementia
- Designated areas—zones for pastimes such as casual conversation, dining, cooking, and watching television
- Single bedroom with bathroom—like traditional family residence
- Domestic furniture—resembles furniture residents would place in their own home
- Assistive measures to support independence—devised to accommodate elderly adults, especially with cognitive and physical limitations
- Fixed assistive devices—throughout environment to prevent falls and injuries
- Residential/therapeutic kitchens—provide open counters low enough for residents to sit and participate in kitchen activities from the adjacent space
- Personalization of rooms—support personal items, pictures, and furniture within the private space of a resident’s bedroom
- Remove medical icons from environment—nursing stations, medication carts, uniforms on caregivers, wall hangings that only provide health information
- Outdoor space—provide access is from the central activity areas where residents can visually see and freely access a safe outdoor patio area
- Multiple households/neighborhoods—can be adjoined and share common support spaces

Nursing staff in long-term care settings work under challenging conditions and experience both physical and emotional stress. Widely studied work stressors in care for elderly residents are time pressure/or work overload, role ambiguity, resident-related stressors, and environmental effects. Research indicates that small house model helps to reduce staff stress and turnover. ⁹⁴



The Leonard Florence Health Centre for the Living located on Admiral’s Hill in Chelsea Massachusetts is a cutting-edge residential center. It was the first “urban” greenhouse project to explore how a small house cluster model can be adapted as a higher density solution while still respecting the smaller social densities of the household model. The center provides a home environment where residents receive individualized level 3-4 nursing care. The complex consists of ten 7,000 square foot condominium-style households, with each house containing ten private bedrooms arranged around a common living room, dining area and open kitchen. The model can be adopted as future special care households which provide the flexibility of use when the long-term care pressures relax in future decades.

As part of its long-term care evolution, VA implemented the VA Small House design in January 2010. Impetus for this significant rewriting of regulations stemmed from a report from The Centers for Medicare and Medicaid HATCh (Holistic Approach to Transformational Change).⁹⁵ The VA model aligns within the industry to the Greenhouse model employed by other long-term care facilities. The concept is that residents live in a “home-like” atmosphere with private rooms with the kitchen at the heart of each unit, as opposed to the older institutional model of a hospital-like nursing homes. The goal is to empower residents, improving the quality of their life.⁹⁵

Small House Model Staff Effects
<ul style="list-style-type: none"> • Smaller units contribute to reduced stress and increased staff satisfaction • Small unit sizes were positively associated with increased supervision and interaction between staff and residents in a special-care unit for residents with dementia • Staff members in group-living units reported greater competence, more knowledge in dealing with dementia, and greater satisfaction than their counterparts in nursing homes • Presence of amenities and environmental supports reduces staff turnover

Small House Models Comparison to Personal Care Homes

Small House Models Comparison		
	Institutional/Facility-Based	Small House Model
Size	20-40 elders for operational group	10-14 elders per household
Care	Based on operational efficiencies first, residents needs second	Resident focused care supports a daily rhythm of elders and responds to their needs first
Supervision/Communication	Relies on paging systems/walkie talkies. Disconnected from households due to physical area	Requires less distance paging, non-auditory communications, more direct and efficient response
Philosophy	Medical model emphasizing provision of clinical services to patients (nourish, protect, shelter).	Quality of Life Model emphasizing purpose, community, family extension and fulfillment
Organization	Traditional staffing –Hierarchy defendant heavily on nursing control	Flattened bureaucracy - Empowerment of direct care staff; nurses visit the house



Small House Models Comparison		
	Institutional/Facility-Based	Small House Model
		to provide skilled services to meet Government Standards.
Quality Decision Making	Decisions made by the organizational leadership in a top down authority structure.	Decisions made by elders or person closest to elders as often as feasible; Care staff plan menus, activities, and house routines.
Outdoor Space	Most often challenging to get to and access is most often prevented due to locked doors	Outdoor secure fenced, shaded, easily located space remains accessible to all household residents
Living Areas	Lounges and dining rooms usually at the end of long corridors often designed to accommodate larger social densities greater than 12 elders (often 20-40	Central hearth with an adjacent open kitchen and dining area, short distance to bedrooms that follow a similar spatial relationship to one's own home
Kitchen	Kitchen Central kitchen disconnected from elders. Food carts, uniformed servers, trays, cafeteria style dishes	Kitchen located in center of household and plays important role in daily lives of elders through meal prep and activities or socialization
Nurses Station	Central control point in most buildings that supervise 2 wards of 20 resident populations. Desk creates a physical barrier and confirms institutional structure of environment	Small charting and supervisors desk built into each household kitchen that acts more like a home desk than a large central control point
Staffing	Rigid hierarchy of staff with top down authority and decision making	Care aides in each house provide direct care, companionship, laundry, housekeeping activities, and meal preparation service
Visitors	Limited ability to participate, awkward family visitation, often shorter visits with less quality time, less privacy, fewer visitations	Participation in meals. "Stay for dinner" philosophy, more casual visitation experience in a home setting



Appendix F: References

1. Geriatrics and Extended Care. *U.S. Department of Veterans Affairs*. April 24, 2020. Available at: https://www.va.gov/GERIATRICS/pages/VA_Community_Living_Centers.asp.
2. 88 U.S.C. § 450. August 19, 1964. <https://uscode.house.gov/statutes/pl/88/450.pdf>.
3. Burris, M.D. JF. VA Responds to the Needs of Aging Veterans. *U.S. Department of Veterans Affairs*. Available at: <https://www.hsrd.research.va.gov/publications/forum/Apr08/Apr08-1.cfm>.
4. H.R.2116 - Veterans Millennium Health Care and Benefits Act. *106th Congress*. November 30, 1999. Available at: <https://www.congress.gov/bill/106th-congress/house-bill/2116/text>.
5. FY 2018 - 2024 Strategic Plan. *U.S. Department of Veterans Affairs*. May 31, 2019. Available at: <https://www.va.gov/oei/docs/VA2018-2024strategicPlan.pdf>.
6. Colello KJ, Viranga Panangala S. Long-Term Care Services for Veterans. *Congressional Research Service*. February 14, 2017. Available at: <https://fas.org/sqp/crs/misc/R44697.pdf>.
7. Wang ZJ, Cidade M, Larsen M, Pearman G, Schimpf M, Dhanireddy P. 2018 Survey of Veteran Enrollees' Health and Use of Health Care. *U.S. Department of Veterans Affairs*. January 9, 2019. Available at: https://www.va.gov/HEALTHPOLICYPLANNING/SOE2018/2018EnrolleeDataFindingsReport_9January2019Final508Compliant.pdf.
8. U.S. Department of Veterans Affairs. *VA Enrollee Health Care Projection Model 2020*. VA 2020 EHCPM.
9. Benz C. Must-Know Statistics About Long-Term Care: 2019 Edition. *MorningStar*. November 25, 2019. Available at: <https://www.morningstar.com/articles/957487/must-know-statistics-about-long-term-care-2019-edition>.
10. VHA. VA CDW Treating Specialty Cube
11. RAND Corporation. Assessment A (Demographics). *U.S. Department of Veterans Affairs*. September 15, 2015. Available at: https://www.va.gov/opa/choiceact/documents/assessments/Assessment_A_Demographics.pdf.
12. Eibner C, Krull H, Brown K, et al. Current and Projected Characteristics and Unique Health Care Needs of the Patient Population Served by the Department of Veterans Affairs. *Rand Health*. May 9, 2016. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5158228/>.
13. Veterans Health Administration. *VHA Handbook 1142.02: Admission Criteria, Service Codes, and Discharge Criteria for Department of Veterans Affairs Community Living Centers*. Washington, DC 2012.



14. Geriatric Patient-Aligned Care Team (GeriPACT). *U.S. Department of Veterans Affairs*. November 2015, 2015. Available at: https://www.va.gov/vhapublications/ViewPublication.asp?pub_ID=3115.
15. FY 2021 Budget Submission. *U.S. Department of Veterans Affairs*. 2020.
16. CRITERIA AND STANDARDS FOR VA COMMUNITY LIVING CENTERS (CLC). *U.S. Department of Veterans Affairs*. August 13, 2008. Available at: https://www.va.gov/vhapublications/Viewpublication.asp?pub_ID=1736.
17. Uniform Geriatrics and Extended Care Services in VA Medical Centers and Clinics. *U.S. Department of Veterans Affairs*. October 11, 2016. Available at: https://www.va.gov/vhapublications/viewpublication.asp?pub_ID=3267.
18. DEMENTIA SYSTEM OF CARE. *U.S. Department of Veterans Affairs*. October 18, 2019. Available at: https://www.va.gov/VHAPUBLICATIOns/ViewPublication.asp?pub_ID=8554.
19. COMMUNITY NURSING HOME PROGRAM. *U.S. Department of Veterans Affairs*. October 1, 2020.
20. State Veterans Homes. *Congressional Research Service*. October 1, 2020. Available at: https://www.everycrsreport.com/files/2020-10-01_IF11656_7030a873411eef09ec45dd13df80aa07863b9dc9.pdf.
21. State Veterans Homes. *U.S. Department of Veterans Affairs*. July 24, 2019. Available at: <https://www.va.gov/COMMUNITYCARE/programs/veterans/statehome/index.asp>.
22. CalVet. *Veterans Homes of California Master Plan 2020*. Available at: <https://www.calvet.ca.gov/Documents/Master%20Plan%202020.pdf>.
23. GEC Mission, Vision, Goals. *U.S. Department of Veterans Affairs*. April 8, 2016. Available at: https://www.va.gov/GERIATRICS/GEC_Mission_Vision_Goals.asp.
24. Rural-Urban Commuting Area Codes. *U.S. Department of Agriculture Economic Research Service*. August 17, 2020. Available at: <https://www.ers.usda.gov/data-products/rural-urban-commuting-area-codes.aspx>.
25. VA Geocoded Enrollee File FY18Q4, 2020; Dept of Veterans Affairs Base Year 2019 VA EHCPM, 2020.
26. Veteran Community Care Eligibility Fact Sheet. *U.S. Department of Veterans Affairs*. August 30, 2019. https://www.va.gov/COMMUNITYCARE/docs/pubfiles/factsheets/VA-FS_CC-Eligibility.pdf.
27. Medicare Health Service Delivery (HSD), 2020.
28. VA Extends Record of Transparency with First-Ever Posting of Annual Nursing Home Ratings. *U.S. Department of Veterans Affairs Office of Public and Intergovernmental Affairs*. June 12, 2018. Available at: <https://www.va.gov/opa/pressrel/pressrelease.cfm?id=4072>.
29. Review of VHA Community Living Centers and Corresponding Stay Ratings. *U.S. Department of Veterans Affairs Office of Inspector General*. February 12, 2020. Available at: <https://www.va.gov/oig/pubs/VAOIG-18-05113-81.pdf>.



30. VA Fourth Mission Summary. *U.S. Department of Veterans Affairs*. March 18, 2021. Available at: <https://www.va.gov/health/coronavirus/statesupport.asp>.
31. VHA Office of Emergency Management. *U.S. Department of Veterans Affairs*. June 22, 2020. Available at: <https://www.va.gov/vhaemergencymanagement/>.
32. GEC Interview Notes. December 18, 2020.
33. Veterans' Use of Long-Term Care Is Increasing, and VA Faces Challenges in Meeting the Demand. GAO. February 2020. Available at: <https://www.gao.gov/assets/710/704690.pdf>.
34. Snelling S. 3 reasons there will be a wave of nursing home closures. *MarketWatch*. November 17, 2020. Available at: <https://www.marketwatch.com/story/3-reasons-there-will-be-a-wave-of-nursing-home-closures-11605221403>.
35. Geriatric Extended Care Meeting. December 4, 2020.
36. Geriatric Extended Care Meeting. October 16, 2020.
37. Department of Veterans Affairs 2018 Geriatric and Extended Care in VHA Survey Report (2019).
38. Institute of Medicine. Supply and Demand in the Health Care Workforce. *Ensuring Quality Cancer Care through the Oncology Workforce: Sustaining Care in the 21st Century: Workshop Summary*. 2009. Available at: <https://www.ncbi.nlm.nih.gov/books/NBK215247/>.
39. Geriatric Extended Care Meeting. November 13, 2020.
40. MedPac. *MedPac Chapter 11*. March 2020. Available at: <http://www.medpac.gov/-documents-reports>.
41. MedPac Report, Chapter 8. *MedPac*. March 2020.
42. MedPac Report, Chapter 8. *MedPac*. June 2019.
43. Facts and Statistics about U.S. Nursing Homes. *Nursing Home Abuse Center*. 2012. Available at: <https://www.nursinghomeabusecenter.org/informative/facts-statistics-nursing-homes/>.
44. Caffrey C, Sengupta M. Variation in Residential Care Community Resident Characteristics, by Size of Community: United States, 2016. *Centers for Disease Control and Prevention*. February 2018. Available at: <https://www.cdc.gov/nchs/data/databriefs/db299.pdf>.
45. Facts & Figures. *National Center for Assisted Living*. Available at: <https://www.ahcancal.org/Assisted-Living/Facts-and-Figures/Pages/default.aspx..>
46. Connolly J. Continuing Care Retirement Communities Explained. *AgeingCare*. Available at: <https://www.ageingcare.com/articles/defining-continuing-care-retirement-communities-104569.htm>.
47. Breeding B. A Closer Look: Examining the CCRC Market in the U.S. *My Life Site*. September 24 2018. Available at: <https://www.mylifesite.net/blog/post/examining-ccrc-market-in-u-s/#:~:text=There%20are%20around%202%2C000%20CCRCs,not%2Dfor%2Dprofit%20organizations>.



48. Landers S, Madigan E, Leff B, et al. The Future of Home Health Care. *Home Health Care Manag Pract*. November 2016. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5052697/>.
49. MedPac Report, Chapter 9. *MedPac*. March 2020.
50. Projections overview and highlights, 2016–26. *U.S. Bureau of Labor Statistics*. January 30, 2018. Available at: <https://www.bls.gov/opub/mlr/2017/article/projections-overview-and-highlights-2016-26.htm>.
51. Which Patients Are Good Candidates for Hospital at Home? *Hospital at Home*. 2012. Available at: <http://www.hospitalathome.org/about-us/candidate.php>.
52. Klein S. "Hospital at Home" Programs Improve Outcomes, Lower Costs But Face Resistance from Providers and Payers. *The Commonwealth Fund*. Available at: <https://www.commonwealthfund.org/publications/newsletter-article/hospital-home-programs-improve-outcomes-lower-costs-face-resistance>.
53. CMS Announces Comprehensive Strategy to Enhance Hospital Capacity Amid COVID-19 Surge. *CMS Newsroom*. November 25, 2020. Available at: <https://www.cms.gov/newsroom/press-releases/cms-announces-comprehensive-strategy-enhance-hospital-capacity-amid-covid-19-surge>.
54. Rothfield N. Changing Health Care Systems and Access to Care for the Chronically Ill. *Institute of Medicine*. 1996. Available at: <https://www.ncbi.nlm.nih.gov/books/NBK45427/>.
55. Schuchman M, Fain M, Cornwell T. The Resurgence of Home-Based Primary Care Models in the United States. *Geriatrics*. September 3, 2018. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6319221/>.
56. Independence at Home Demonstration. *CMS*. Available at: <https://innovation.cms.gov/innovation-models/independence-at-home>.
57. Home Alone Revisited: Family Caregivers Providing Complex Care. *AARP*. April 2019. Available at: <https://www.aarp.org/content/dam/aarp/ppi/2019/04/home-alone-revisited-family-caregivers-providing-complex-care.pdf>.
58. Moss B. Design and Operation of the National Home Health Aide Survey: 2007–2008. *Centers for Disease Control and Prevention*. 2010. Available at: https://www.cdc.gov/nchs/data/series/sr_01/sr01_049.pdf.
59. The People Who Receive and Provide Home Health Care. *National Research Council*. 2010. Available at: <https://www.ncbi.nlm.nih.gov/books/NBK210063/>.
60. What Are Palliative Care and Hospice Care? *NIH National Institute on Aging*. May 17, 2017. Available at: <https://www.nia.nih.gov/health/what-are-palliative-care-and-hospice-care>.
61. MedPac Report, Chapter 12. *MedPac*. 2020.
62. Adult Day Care Services. *HelpGuide*. December 2020. Available at: <https://www.helpguide.org/articles/senior-housing/adult-day-care-services.htm>.



63. What Is Adult Day Care? *National Caregivers Library*. 2019. Available at: <http://www.caregiverslibrary.org/Caregivers-Resources/GRP-Caring-For-Yourself/HSGRP-Support-Systems/What-Is-Adult-Day-Care-Article>.
64. Genworth Cost of Care Survey 2019: Skyrocketing care costs may make the dream of aging at home more challenging. *Cision PR Newswire*. October 16, 2019. Available at: <https://www.prnewswire.com/news-releases/genworth-cost-of-care-survey-2019-skyrocketing-care-costs-may-make-the-dream-of-aging-at-home-more-challenging-300939345.html>.
65. Adult Day Care. *AgingInPlace*. March 2021. Available at: <https://aginginplace.org/adult-day-care/>.
66. Heiser G. Does Medicare Cover Adult Day Care Expenses? *AgingCare*. Available at: <https://www.agingcare.com/articles/medicare-medicaid-adult-day-care-coverage-146635.htm>.
67. Key Components for Successful LTSS Integration: Lessons from Five Exemplar Plans. *Long Term Quality Alliance*. April 2016. Available at: <http://www.ltqa.org/wp-content/themes/LtqaMain/custom/images/LTSS-Integration-Working-Paper.pdf>.
68. Santana M, Manalili K, Jolley R, Zelinsky S, Quan H, Lu M. How to practice person-centred care: A conceptual framework. *Wiley Online Library*. November 17 2017. Available at: <https://doi.org/10.1111/hex.12640>.
69. National Quality Forum Names Mountain States Health Alliance Winner of 2012 National Quality Healthcare Award. *National Quality Forum*. August 20, 2012. Available at: https://www.qualityforum.org/News_And_Resources/Press_Releases/2012/National_Quality_Forum_Names_Mountain_States_Health_Alliance_Winner_of_2012_National_Quality_Healthcare_Award.aspx.
70. Dixon B, Embi P, Haggstrom D. Information technologies that facilitate care coordination: provider and patient perspectives. *Translational Behavioral Medicine*. May 23, 2018. Available at: <https://academic.oup.com/tbm/article/8/3/522/5001944>.
71. Nelson J. Current VA/Veterans Health Information Exchange (VHIE) Approach to Health Record Integration and Availability. *HiMSS*. February 2019. Available at: https://365.himss.org/sites/himss365/files/365/handouts/552335916/handout-13_1230_ISED11_VA%20-%20VHIE%20Approach%20to%20Health%20Integration%20and%20Availability.pdf.
72. Department of Veterans Affairs Geriatric Research, Education and Clinical Centers: Translating Aging Research into Clinical Geriatrics. *Journal of the American Geriatrics Society*. June 15, 2012. Available at: <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1532-5415.2012.04004.x>.
73. Trends in the Use of Telehealth During the Emergence of the COVID-19 Pandemic — United States, January–March 2020. *CDC Morbidity and Mortality Weekly Report (MMWR)*. October 30, 2020. Available at: [Trends in the Use of](#)



[Telehealth During the Emergence of the COVID-19 Pandemic — United States, January–March 2020.](#)

74. The Two Forms of Telemedicine: Synchronous vs. Asynchronous. *CureATR*. September 10, 2019. Available at: <https://blog.cureatr.com/two-forms-telemedicine-synchronous-vs-asynchronous>.
75. Enterprise-Wide Initiatives. *U.S. Department of Veterans Affairs*. Available at: https://www.ruralhealth.va.gov/providers/Enterprise_Wide_Initiatives.asp.
76. Connected Care. *U.S. Department of Veterans Affairs*. Available at: <https://connectedcare.va.gov/>.
77. Pimentel
CB,GM,BSR,BKS,BEH,CTV,CECS,DS,ESE,GKK,GPC,HJL,LHD,MAD,RMI,TSM,VR. GRECC Connect: Geriatrics Telehealth to Empower Health Care Providers and Improve Management of Older Veterans in Rural Communities. *U.S. Department of Veterans Affairs*. October 1, 2019. Available at: <https://www.hsrd.research.va.gov/research/citations/abstract.cfm?Identifier=127476>.
78. Smaller, smarter, healthier. *MIT Technology Review Insights*. 2019. Available at: https://www.medtronic.com/content/dam/medtronic-com/global/transforming-healthcare/documents/smaller-smarter-healthier-smart-devices-revolutionize-chronic-care_paper_mit_mi_corpmark.pdf.
79. Sardis B. What Wearable Technologies are Important for the Elderly, and Why? *Tech for Aging*. September 1, 2018. Available at: <https://techforaging.com/wearable-technology-seniors/>.
80. Time Out-of-Home and Cognitive, Physical, and Emotional Wellbeing of Older Adults: A Longitudinal Mixed Effects Model. *PLOS ONE*. October 5, 2015. Available at: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0139643>.
81. Majumder S, Aghayi E, Noferesti M, et al. Smart Homes for Elderly Healthcare—Recent Advances and Research Challenges. *MDPI*. 2017. Available at: <https://www.mdpi.com/1424-8220/17/11/2496/htm>.
82. Bresnick J. Top 12 Ways Artificial Intelligence Will Impact Healthcare. *Health IT Analytics*. April 30, 2018. Available at: <https://healthitanalytics.com/news/top-12-ways-artificial-intelligence-will-impact-healthcare>.
83. Tlan S, Yang W, Le Grange JM, Wang P, Huang W, Ye Z. Smart healthcare: making medical care more intelligent. *ScienceDirect*. September 2019. Available at: <https://www.sciencedirect.com/science/article/pii/S2414644719300508>.
84. GEC Interview Notes. January 15, 2015.
85. GEC Interview Notes. February 9, 2021.
86. GEC Interview Notes. February 9, 2021.
87. Tomasik, SM, FACHE J, Fleming C. Lessons from the Field: Promising Interprofessional Collaboration Practices. *Robert Wood Johnson Foundation*. 2015. Available at:



- https://aohp.org/aohp/Portals/0/Documents/ToolsForYourWork/free_publications/InterprofessionalCollaborationLessons%203-15.pdf.
88. Cummins R. UMMC Earns National Telehealth Center of Excellence Designation. *University of Mississippi News*. October 6, 2017. Available at: <https://news.olemiss.edu/ummc-earns-national-telehealth-center-excellence-designation/>.
 89. North F, Crane S, Chaudhry R, et al. Impact of patient portal secure messages and electronic visits on adult primary care office visits. *National Library of Medicine*. March 2014. Available at: <https://pubmed.ncbi.nlm.nih.gov/24350803/>.
 90. Manning F, Barondess J. Changing Health Care Systems and Rheumatic Disease. *Committee on Changing Health Care Systems and Rheumatic Disease*. 1996. Available at: <https://www.ncbi.nlm.nih.gov/books/NBK45426/>.
 91. Home-based primary care: a path to high-quality, low-cost care. *Home Centered Care Institute*. 2018. Available at: <https://www.hccinstitute.org/app/uploads/2018/10/HCCI-Path-To-High-Quality-Low-Cost-Care-Whitepaper.pdf?x87753>.
 92. Evidence-based design in long-term care. *i Advance Senior Care*. September 16, 2013. Available at: <https://www.iadvanceseniorcare.com/evidence-based-design-in-long-term-care/>.
 93. Day K, Carreon D, Stump C. The Therapeutic Design of Environments for People With Dementia: A Review of the Empirical Research. *The Gerontologist*. August 1, 2000. Available at: <https://academic.oup.com/gerontologist/article/40/4/397/641845>.
 94. Pekkarinen L, Sinervo T, Perala ML, Elovainio M. Work Stressors and the Quality of Life in Long-Term Care Units. *The Gerontologist*. October 2004. Available at: <https://academic.oup.com/gerontologist/article/44/5/633/798707>.
 95. Small House (SH) Model Design Guide March 2019. *U.S. Department of Veterans Affairs*. March 2019. Available at: <https://www.cfm.va.gov/til/dGuide/dgSHModel.pdf>.
 96. Office of Inspector General. Management Challenge 6: Ensuring Quality in Nursing Home, Hospice, and Home- and Community-Based Care. *Reports & Publications*. July 21, 2020. Available at: <https://oig.hhs.gov/reports-and-publications/top-challenges/2015/challenge06.asp>.
 97. Veterans Health Administration. *VHA Handbook 1141.02*. District of Columbia 2009.
 98. United States Government Accountability Office. *VA Health Care Veterans' Use of Long-Term Care Is Increasing, and VA Faces Challenges in Meeting the Demand*. D.C. 2020.
 99. Stiefel M NK. A Guide to Measuring the Triple Aim: Population Health, Experience of Care



100. Centers for Medicare and Medicaid Services. Medicare Spending Per Beneficiary (MSPB) Measure. *www.qualitynet.org*. August 05, 2020.
<https://www.qualitynet.org/inpatient/measures/mspb/methodology>.
101. Sawgrass Partners LMLM. Developing Successful Hospital Partnerships. *Sawgrass Partners LLC*. May 2013.
<http://sawgrasspartners.com/pdf/SawgrassPartnersWhitePaper-DevelopingSuccessfulHospitalPartnerships-MikeLogan.pdf>.
102. Theresa Dreyer M. *Care Transitions: Best Practices and Evidence-Based*. Ann Arbor, MI 2014.
103. Veterans Health Administration. *VHA Handbook 1140.01*. Washington, DC 2014.
104. Veterans Health Administration. *VHA Handbook 1142.01*. Washington, DC 2008.
105. VHA Office of Policy and Planning
106. VetPop2018: A Brief Description. *U.S. Department of Veterans Affairs*. Available at:
https://www.va.gov/vetdata/docs/Demographics/New_Vetpop_Model/VP_18_A_Brief_Description.pdf.
107. Department of Veterans Affairs Health Policy Planning, n.d.
108. GEC Program Office, 2021. Centers for Medicare and Medicaid Services, 2019.
109. Geriatric Extended Care Meeting. 2020.
110. Community Nursing Home Program. *U.S. Department of Veterans Affairs*. October 1, 2020.
111. Criteria and Standards for VA Community Living Centers (CLC). *U.S. Department of Veterans Affairs*. August 13, 2008. Available at:
https://www.va.gov/vhapublications/Viewpublication.asp?pub_ID=1736.
112. Dementia System of Care. *U.S. Department of Veterans Affairs*. October 18, 2019. Available at:
https://www.va.gov/VHAPUBLICATIOns/ViewPublication.asp?pub_ID=8554.
113. Geriatric Patient-Aligned Care Team (GeriPACT). *U.S. Department of Veterans Affairs*. November 2015, 2015. Available at:
https://www.va.gov/vhapublications/ViewPublication.asp?pub_ID=3115.
114. Uniform Geriatrics and Extended Care Services in VA Medical Centers and Clinics. *U.S. Department of Veterans Affairs*. October 11, 2016. Available at:
https://www.va.gov/vhapublications/viewpublication.asp?pub_ID=3267.
115. Baker M. Reinventing the Elder Care Environment. *Payette*. August 27, 2019. Available at: <https://www.payette.com/design-ideas/the-small-house-model-and-its-influence-on-the-design-of-chelsea-soldiers-home/>.



Appendix G: Interviews

Interview Participants	Meeting Date
Office of Geriatric and Extended Care Interview	October 16, 2020
Office of Geriatric and Extended Care Interview	October 30, 2020
Office of Geriatric and Extended Care Interview	November 13, 2020
Office of Geriatric and Extended Care Interview	December 4, 2020
Office of Geriatric and Extended Care Interview	December 18, 2020
Office of Geriatric and Extended Care Interview	January 15, 2021
Office of Geriatric and Extended Care Interview	January 29, 2021
Office of Geriatric and Extended Care Interview	February 12, 2021
Office of Geriatric and Extended Care Interview	February 23, 2021
Office of Geriatric and Extended Care Interview	March 4, 2021
Office of Geriatric and Extended Care Interview	March 9, 2021
Office of Geriatric and Extended Care Interview	March 15, 2021



Appendix H: Acronym List

Acronym	Definition
AARP	American Association of Retired People
ACD	Advanced Care Planning
ADC	Average Daily Census
ADHC	Adult Day Health Care
ADLs	Activities of Daily Living
ALF	Assisted Living Facilities
ALOS	Average Length of Stay
BDOC	Bed Days of Care
CAVHS	Central Arkansas Veterans Healthcare System
CCRC	Continuing Care Retirement Communities
CEMP	Comprehensive Emergency Management Program
CDC	Centers for Disease Control and Prevention
CLCs	Community Living Centers
CMS	Centers for Medicare and Medicaid Services
CNH	Community Nursing Home
COVID-19	Coronavirus Disease 2019
CRC	Community Residential Care
EHCPM	Enrollee Health Care Projection Model
HER	Electronic Health Record
EOC	Environment of Care
FY	Fiscal Year
GEC	Geriatric and Extended Care
GHP	Green House Project
GRECC	The Geriatric Research, Education, and Clinical Centers
HATch	Holistic Approach to Transformational Change
HaH	Hospital at Home
HBPC	Home Based Primary Care
HCBS	Home and Community-Based Services
HHS	Department of Health and Human Services
H/HHA	Homemaker/Home Health Aide
HIPAA	Health Insurance Portability and Accountability Act
IAH	Independence at Home
ICC	Interdisciplinary Care Coordination
IRF	Inpatient Rehabilitation Facilities
LTACHs	Long Term Acute Care Hospitals
LTC	Long-Term Care
LTSS	Long-Term Services and Support
MAHSO	Market Area Health System Optimization
MISSION Act	Maintaining Internal Systems and Strengthening Integrated Outside Network Act
MedPAC	Medicare Payment Advisory Commission



Acronym	Definition
MHV	My HealthVet
MSHA	Mountain State Health Alliance
n.d.	No Date
NQF	National Quality Forum
OEM	Office of Emergency Management
OT	Occupational Therapist
PACT	Patient Aligned Care Teams
PCC	Person-Centered Care
PCP	Primary Care Provider
PCS	Patient Care Services
PHR	Personal Health Record
PPS	Prospective Payment System
RN	Registered Nurse
RUCA	Rural-Urban Commuting Area
PT	Physical Therapist
NPS	National Planning Strategy
SCUs	Special Care Units
SMEs	Subject Matter Experts
SNF	Skilled Nursing Facility
ST	Speech Therapist
SVHs	State Veterans Homes
UMMC	University of Mississippi Medica Center
USDA	Department of Agriculture
VA	Department of Veterans Affairs
VAMC	VA Medical Center
VERA	Veterans Equitable Resource Allocation
VHA	Veterans Health Administration
VHIE	Veterans Health Information Exchange
VVC	VA Video Connect