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FORUM

translating research into quality healthcare for Veterans

VA



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Health Services Research & Development Service

Commentary

How VA Has Advanced the Care of Aging Veterans and What Lies Ahead

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Welcome to the Fall issue of HSR&D's FORUM, which focuses on aging Veterans. On behalf of the Office of Geriatrics and Extended Care, we are pleased to offer comment and issues for thought for VA researchers in the field of aging, and those whose research touches the lives of Veterans aging with chronic conditions.

The Office of Geriatrics and Extended Care (GEC) is responsible for the oversight and monitoring of institutional and non-institutional care programs for aging Veterans. VHA provides a spectrum of services to aging Veterans unparalleled in the community. A multitude of GEC programs are available to aging Veterans in most VA facilities around the country; these services range from outpatient geriatric evaluations and adult day care services to home care and institutional care options.

The number of aging Veterans continues to rise as Vietnam-era Veterans are now reaching Medicare-eligibility age. Almost 9 million Veterans are enrolled in VA for health care and 47 percent of those are over 65 years of age. Those Veterans will age into their advanced years with complex medical, cognitive, and psychological issues.

In the early 1970s, VA faced a similar crisis as aging WWII Veterans streamed into the system seeking care in their later years. About the same time, the science of gerontology began to emerge, revealing the aging process and management of frail older persons to be a

unique area of inquiry. The National Institute on Aging was established in 1974, and shortly thereafter VHA established the Geriatric Research, Education and Clinical Center (GRECC) Program. GRECCs were designed to be geriatric centers of excellence that would give visible focus to VA's commitment to aging Veterans and that would create a critical mass of experts to lead the way in quality research, enhanced education, and clinical innovation in the care and treatment of older Veterans.¹ VA strategically located GRECC Centers, enabling them to partner with academic institutions that were emerging as geriatric research centers, in line with VA's pre-existing relationships with academic medical centers nationwide. The first 10 GRECCs opened between 1975 and 1980, and 11 more opened between 1980 and 1985; an additional 13 GRECCs opened between 1985 and 2000. Over time, some of the GRECCs consolidated efforts or closed, and at present 20 GRECCs are in operation throughout the United States.

The influence of the GRECC program on the advancement of aging research, geriatric training, and clinical care for Veterans has been substantial over the past 44 years. Advances in the biology of aging, including mechanisms underlying dementia, heart disease, renal disease, metabolic syndrome, osteoporosis, and rehabilitation medicine can be directly attributed to GRECCs.² Development of clinical care models addressing transitional care, hospice and palliative care, dementia care, and physical

activity/exercise for healthy aging have been demonstrated in GRECCs and exported to VHA and the public for years. GRECC educators have built one of the largest initiatives to train a geriatric workforce for the future as part of their mandate to provide education to health care trainees in the unique care needs of older adults. GeriScholars is a VA GEC program that provides training and support for VA employees to strengthen their skills in meeting the needs of older adults; this program has provided training experiences for over 5,800 VA employees across the spectrum of health care disciplines.

VHA faces a number of challenges in the next decade, including a growing number of aging Veterans who have dealt with physical and psychological issues dating back to their service years. The Veterans with the highest levels of service-related disabilities are known as Priority 1a, and this number is expected to increase from 500,000 to over 1 million in the next 10 years. VHA is required to provide or pay for nursing home care for this group if it is needed. This challenge will be compounded by the decrease in numbers of a specifically trained and geriatric certified workforce across all disciplines of care.

GEC has successfully launched many programs designed to provide assistance to honor Veterans' preferences to remain at home in their advanced years. Home-based primary care sends the resources to Veterans' homes to deliver needed services. Adult day

Continued on next page

DIRECTOR'S LETTER



In his later years, Mark Twain advised “If you can’t get to 70 by a comfortable road, don’t go.” Comfortable journey or not, more and more Americans will live to 70 and beyond, and the critical question for American health care is how we will provide and pay for their health care needs. This problem is accelerated for VA, where the median age of the Veteran population is substantially older than that of the general population (64 years old vs. 44 years old)¹ due to the large number of Vietnam and Korea Veterans served by VA. That figure alone—half of our patients are already 65 or older—highlights the importance of research on the health needs of older Veterans.

Equally compelling is the cost of care, which rises steadily with age. No single item is more expensive to VA than long-term care (i.e., nursing homes), which has risen to \$6 billion a year. Even though VA provides nursing home care only to certain eligibility categories, within the next 5 years more than one million Veterans may be eligible for nursing home care.² We need continued research on non-institutional alternatives for caring for older Veterans, including foster homes, technology-assisted services, and home-based primary care.

Second, patient-centered approaches to care are critically important as people accumulate more health problems and as their years of remaining life decrease. Aggressive glucose control that makes sense in a 30-year-old diabetic may be dangerous in an 80-year-old with heart failure and mild cognitive impairment. This is also an area where VA has contributed important research, identifying specific opportunities to reduce the burden of low value care on older

Veterans.³ Nowhere is a personalized approach more important than at the end of life, where many patients may value maintaining quality of life more than extending their life. Here too VA has been a leader, both in the widescale provision of palliative care and in research documenting the benefits of palliative care for Veterans.

A final area where VA can lead in research on older patients is on the role of caregivers. The MISSION Act has expanded the number of caregivers eligible for some VA services, and HSR&D has established the Elizabeth Dole Center of Excellence for Veteran and Caregiver Research to facilitate research on innovation, implementation, and evaluation of best practices in supporting caregivers. Rigorous studies are needed to identify the best ways to train and support caregivers so that this new investment yields the hoped-for returns for the Veterans being cared for.

Just as we can’t personally escape the effects of aging, neither VA nor the United States can avoid the implications of an aging population on their health care systems. We will need the help of all the researchers we can get if we are going to meet this challenge.

David Atkins, MD, MPH, Director, HSR&D

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care programs allow for socialization and also meet health care needs. Medical Foster Homes let Veterans live with families in their homes and provide a welcome alternative to nursing home placement. Homemaker and home health aide programs allow Veterans to receive needed personal care at home, and the new Veteran-Directed Care Program allows them to hire family members to meet personal caregiving needs. These programs, together with GRECC initiatives emphasizing exercise, nutrition, and cognitive and social stimulation have demonstrated success in delaying or eliminating the need for institutional care. VHA’s nursing homes, known as Community Living Centers (CLCs), have recently entered the public reporting sphere with CLC Compare, similar to CMS’ Nursing Home Compare. Since initial reporting began last year, quality ratings have significantly improved and as of the last reporting period, almost all VA CLCs have

improved in readiness and quality measures that exceed average levels for nursing homes in the community.

Finally, VHA is also working hard to reach Veterans living in rural areas who do not have easy access to VA or other health care services and who prefer to age in place. These challenges arise at the same time VA is modernizing and developing integrated clinical service lines as part of the effort to become a high-reliability organization. Electronic health record modernization will also help address these challenges by accelerating advances in care outcomes using telehealth technology.

While we’ve come a long way in the past 40 years, there is still a long way to go. The environment is ripe for continued investigations into biological mechanisms associated with aging and chronic illness, as well as preventive strategies and targeted interventions to improve functional health and

overall well-being. The changes underway in modernizing VA systems and services allow investigators to look ahead to advancing how, when, and where VA health care is received; these changes will also permit investigators to measure the effectiveness of programs and models of care designed to honor Veterans’ preferences in their later years. The Office of Geriatrics and Extended Care looks forward to working with our research colleagues as we meet our mission “To care for him who shall have borne the battle and for his widow and his orphan.”

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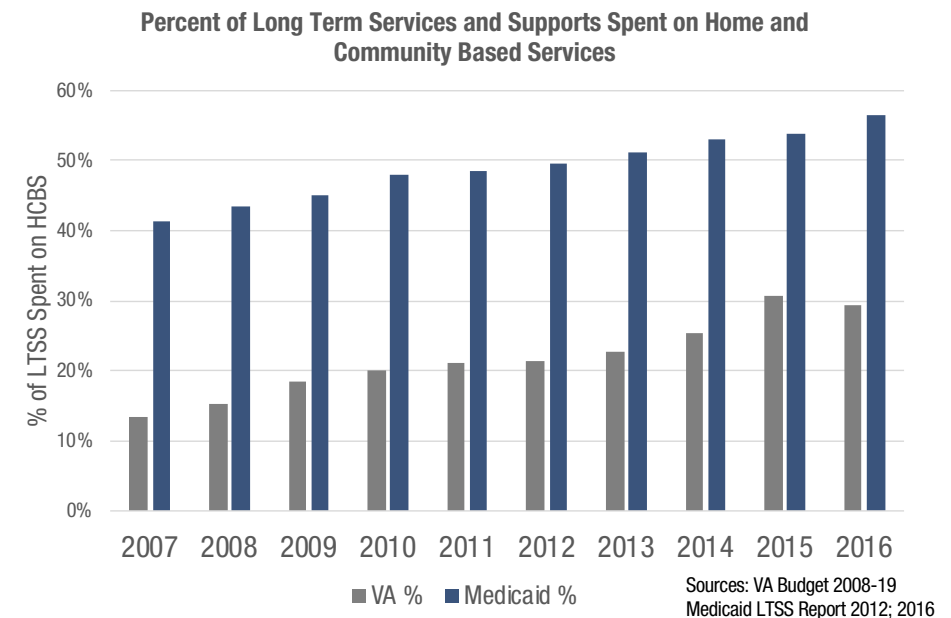
Center Crosses Boundaries to Promote Better Care for Aging Veterans

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As highlighted in Dr. Shaughnessy's commentary, the Office of Geriatrics and Extended Care (GEC) provides a wide array of services to meet the needs of Veterans with functional limitations from aging, disability, and disease. The breadth of GEC programming and the heterogeneity of Veterans served creates many opportunities for research. Most importantly, the VA system has a support infrastructure that facilitates asking (and answering) critical questions that otherwise could not be considered.

VA's geriatric service has always emphasized managing complex Veterans with multimorbidity, cognitive impairments, and functional deficits. However, the older Veteran population is changing. With the aging of Vietnam Veterans, there is an increased prevalence of serious mental illness, which is superimposed onto the existing complexities of aging. This trend is occurring in the context of fewer social supports for the older Veteran population, and creates challenges for traditional GEC programs. This shift also creates opportunities to develop, test, and implement innovative modifications that meet the needs of Veterans and their caregivers.

Veterans have been clear on one aspect of care; they prefer to remain at home, if possible. To support this, Congress included the suite of VA created home and community based services (HCBS) in the Millennium Act of 1999. However, a recent VA Evidence Synthesis Program systematic review found that only a handful of high quality studies exists that demonstrate the ability of HCBS to prevent or delay nursing home placement. As the MISSION Act expands support for Veterans and caregivers in the community, there is substantial opportunity to improve the evidence base supporting HCBS in VA, as well as identifying the Veterans who would most benefit.



When Veterans are unable to reside in the community, facility-based care (long term care) provides necessary home support as well as medical support, activities, and socialization. VA provides or purchases more than 7 million bed days of care in community nursing homes and is projecting a 25 percent increase in the next decade. The nursing facility setting has unique challenges inside and outside of VA. These facilities serve a highly vulnerable population, are under significant financial pressure, and experience a high degree of staff turnover; all these factors greatly complicate the delivery of quality care to aging Veterans. Community nursing homes are highly regulated, with mandatory inspections, reporting, and oversight. In addition, data on patients' experiences in Community Living Centers and VA purchased Community Nursing Homes are summarized in a publicly reported quality report, which is available on www.AccessToCare.va.gov. As a large purchaser of facility-based care, VA is in a unique position to negotiate care based on proximity, quality, and cost.

Working in collaboration with GEC, the HSR&D-funded Center of Innovation in Long Term Services (COIN-LTSS) has built a research portfolio focused on helping Veterans overcome the challenges of age, disability, and disease. In addition to the LTSS research portfolio, the COIN-LTSS has built relationships with programs focused on older Veterans with multimorbidity, homelessness, food insecurity, and suicide risk. The center has completed research projects focused on HCBS, including collaborations with the Veterans Benefit Administration. More recently, the COIN-LTSS has collaborated with the Veteran Experience Center to provide data support with the VA Choose Home initiative. To support this infrastructure, we have close collaborators in the GEC Data and Analysis Center.

The investigators within the COIN-LTSS have a particular expertise in pragmatic trials in nursing homes. The COIN-LTSS served as home to the Long Term Care CREATE, which included a pragmatic trial of the INTERACT intervention. The LTC CREATE

Feedback Reports Expected to Improve Implementation of the Life-Sustaining Treatment Decisions Initiative in VA Long-term Care Settings

In January 2017, the National Center for Ethics in Health Care (NCEHC) updated guidance for initiating and documenting conversations and decisions made by seriously ill Veterans regarding preferences for care, specifically life-sustaining treatments.¹ NCEHC designed the Life-Sustaining Treatment Decisions Initiative (LSTDI) to ensure that Veterans' goals, values, and preferences for life-sustaining treatments are elicited and documented in the electronic medical record using the life-sustaining treatment template. Goals of care conversations (GoCC) help guide proactive conversations about options and Veterans' preferences for life-sustaining treatments such as artificial nutrition, ventilator support, and cardiopulmonary resuscitation; clinicians conduct GoCCs prior to a life-limiting or life-threatening event.

The Implementing Goals of Care Conversations with Veterans in VA Long-Term Care Settings Quality Enhancement Research Initiative (LTC QUERI program) supports the implementation of the LSTDI in Community Living Centers (CLCs) and Home-Based Primary Care (HBPC) in three VHA VISNs.² The LTC QUERI program chose these care settings because Veterans using these services are often seriously ill and thus appropriate for a GoCC and documented LST preferences.

As part of our work, we send regular feedback reports to CLC and HBPC sites in VISNs 4, 10, and 19. These reports show the number of newly admitted Veterans who have a documented GoCC and who have completed Life-Sustaining Treatment (LST) documentation with their provider. These Veteran-level data are extracted from the VHA's Corporate Data Warehouse (CDW). Prior to finalizing the feedback reports, we conducted an iterative user-centered design process to create and refine the content and format of the reports. Monthly production of our feedback reports is now automated using SQL code to extract data from CDW; SAS code for data management and analysis; and code written in R programming language to produce reports in pdf format.

Our iterative design process led to several changes following distribution of the reports in July 2017. These changes included increasing the frequency of reports from quarterly to monthly, showing separate data for short-stay vs. long-stay Veterans in CLCs, and updating language to be consistent with what is being used in the field regarding LSTs.

The feedback reports are sent to a designated site champion or champions who are asked to distribute the reports more widely, based on their preferences and local knowledge. Site champions are leaders within these care settings, whether formal or informal, who agree to serve as liaisons for our work.

The monthly feedback reports are currently sent to 28 CLCs and HBPC programs. Site champions at 16 of the programs/CLCs share the reports; that is, the champions provide an electronic or hard copy to CLC or HBPC staff, leadership, LSTDI advisory boards and coordinators, and/or others in their facility. The other sites are either in the beginning stages of sharing reports or have stated that they are not sharing widely due to late adoption of the LSTDI, lack of prescribing providers available to complete GoCC, or have other site-specific reasons for not sharing.

Between July 2018 and April 2019, 3,434 documented GoCC and LST orders have been recorded at the CLC and HBPC programs in which we are engaged. Of these conversations, 2,283 (67 percent) occurred in the CLC and 1,151 (33 percent) occurred in HBPC.

We expect that our feedback reports will result in more completed LSTDI templates at our participating sites compared with a matched sample of non-participating CLC and HBPC programs. Our analysis will focus on Veterans who are newly admitted to a CLC or HBPC. We plan to begin this analysis in April 2020, which will allow us to examine outcomes of the feedback reports over a two-year period.

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Key Points

- The National Center for Ethics in Health Care (NCEHC) recently updated its guidance for initiating and documenting conversations and decisions made by seriously ill Veterans regarding preferences for care, and specifically for life-sustaining treatments.
- Goals of care conversations (GoCC) help guide proactive conversations about options and Veterans' preferences for life-sustaining treatments such as artificial nutrition, ventilator support, and cardiopulmonary resuscitation.
- The authors are partnering with the NCEHC to develop approaches to enhance successful implementation of GoCC and their documentation across the system.

Lessons learned from the LTC QUERI program are regularly communicated to the NCEHC through monthly teleconferences. These lessons have helped to inform the national roll out of the LSTDI. We are currently partnering with the NCEHC to develop approaches to enhance successful implementation of GoCC and their documentation across the system.

Please see example CLC feedback reports next page.

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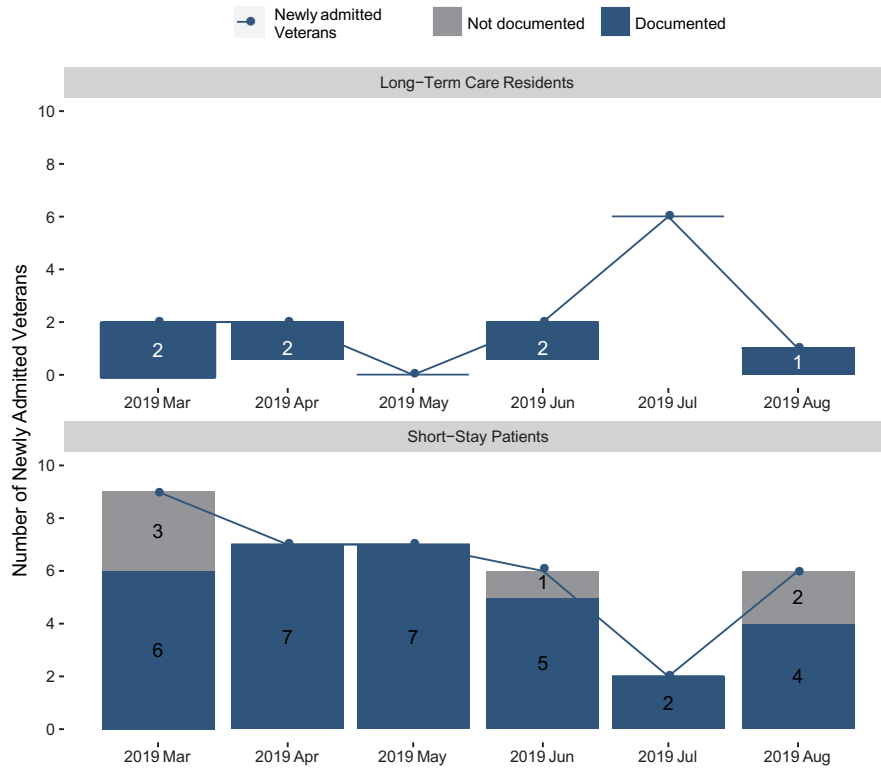
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Example CLC Feedback Reports

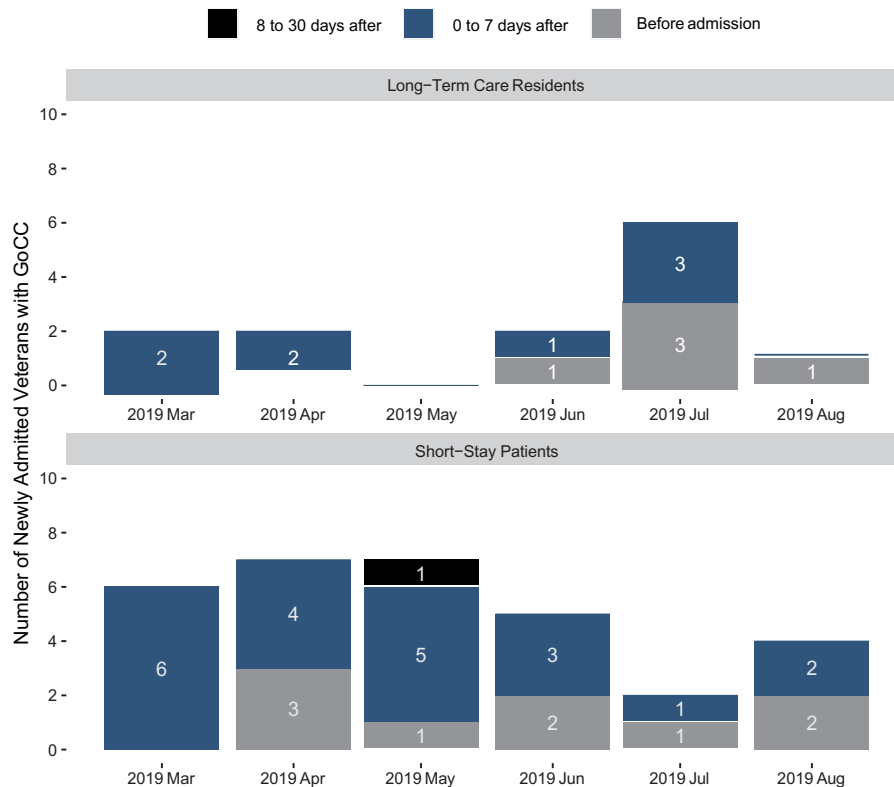
How many total newly admitted Veterans have a completed LST template?

Example VAMC CLC Mar 2019 – Aug 2019



For patients/residents with a completed LST template, when was the conversation documented?

Example VAMC CLC Mar 2019 – Aug 2019



Study Finds More Intensive Blood Pressure Treatment Does Not Benefit Long-term Nursing Home Residents With or Without Dementia

Dementia with hypertension is the most common combination of two chronic conditions in U.S. nursing home (NH) residents, affecting 27 percent of residents.¹ Despite the high co-occurrence of these conditions, data is lacking to guide antihypertensive treatment intensity in this group, and there are potential benefit-harm tradeoffs. Antihypertensive medication treatment is effective in preventing cardiovascular complications, but may cause or worsen adverse events such as incontinence, syncope, and falling. In addition, antihypertensive drug administration may be stressful or a burden to patients and their caregivers. High quality evidence to guide decisions about intensity of antihypertensive treatment is scarce in this population because hypertension clinical trials do not include individuals with severe comorbid illness, disability, or limited life expectancy. In the absence of controlled trials, observational studies using large representative cohorts may help characterize patterns of antihypertensive treatment intensity in NH residents with dementia and hypertension, and provide insights into the benefits and harms of more intensive antihypertensive treatment in this population.

Recent studies of ours, supported by VA's Office of Geriatrics and Extended Care Data Analysis Center (GECDAC), The Donaghy Foundation, and the National Institute on Aging examine the associations between blood pressure treatment and outcomes in long-term residents of VA Community Living Centers (CLCs) and non-Veteran long-term residents of U.S. nursing homes. In one study, we used a cohort of long-term residents of VA CLCs to describe the frequency of antihypertensive de-intensification during scenarios suggesting hypertension overtreatment and to examine the association between antihypertensive de-intensification and subsequent falls.² We identified 2,212 older Veterans (≥ 65 years) who resided in

132 VA CLCs from FY2010 through FY2015, who were treated for hypertension, had a fall, and had a recent low blood pressure reading. We then identified episodes of anti-hypertensive de-intensification, defined as discontinuation of one or more first-line hypertension medications without substitution within seven days of the date of measurement of low blood pressure. We found that among these Veterans, just 11 percent underwent antihypertensive de-intensification. In addition, several hypothesized predictive factors (e.g., end-of-life status, physical function impairment, and dementia diagnosis) were not associated with the likelihood of de-intensification. Finally, antihypertensive medication de-intensification was associated with reduced likelihood of falling again in the next 30 days, suggesting that antihypertensive overtreatment contributed to falling.

In a second study, we examined the association between intensive antihypertensive treatment and 6-month outcomes among 255,670 U.S. Medicare-enrolled long-term NH residents with hypertension in 2013.³ Of these, nearly half had dementia and moderate or severe cognitive impairment. At baseline, 54.4 percent, 34.3 percent, and 11.4 percent received 1, 2, and ≥ 3 antihypertensive medications, respectively. In this study, higher intensity of antihypertensive treatment was associated with slightly higher rates of hospitalization (difference per additional medication (diff) 0.24 percent; 95 percent confidence interval (CI) 0.03 - 0.45 percent) and cardiovascular hospitalization (diff 0.30 percent; 95 percent CI 0.21 - 0.39 percent) and slightly lower rates of activities of daily living (ADL) decline (decline of ≥ 2 points on a 28-point scale) (diff -0.46 percent; 95 percent CI -0.67 - -0.25 percent). There was no significant difference in mortality (diff -0.05 percent; 95 percent CI -0.23 -

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Key Points

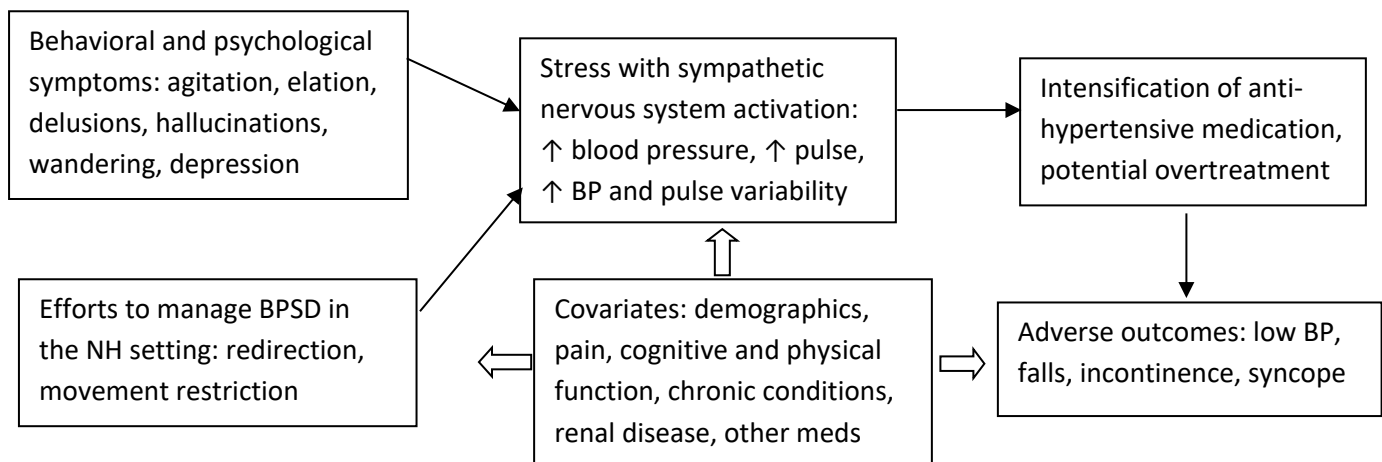
- The authors recently studied associations between blood pressure treatment and outcomes in long-term residents of VA Community Living Centers and non-Veteran long-term residents of U.S. nursing homes.
- The authors found that long-term nursing home residents with high blood pressure with and without dementia do not experience significant benefits from more intensive treatment.
- Observational research methodology as well as pragmatic clinical trials are needed to define the tradeoffs of antihypertensive treatment in older adults with cognitive or physical impairment.

0.13 percent). These associations held true whether or not the residents had dementia. Overall, one additional antihypertensive drug in each of 400 long-term NH residents with hypertension was associated with a tradeoff of approximately one greater hospitalization and two fewer episodes of 2-point ADL decline over 180 days. A 2-point ADL decline is equal to declining from requiring "extensive assistance" to "total dependence" in two ADLs. These findings suggest that long-term nursing home residents with high blood pressure with and without dementia do not experience significant benefits from more intensive treatment.

In future studies we propose to explore the possibility that behavioral and psychological symptoms in dementia (BPSD) (e.g., agitation) adversely affect blood pressure readings of NH

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Figure 1. Proposed Relationship between BPSD, Blood Pressure, and Hypertension Treatment and Outcomes



residents with dementia, thereby complicating the management and treatment of hypertension in this group. BPSD is common in NH residents with dementia, affecting at least 80 percent of patients. By causing distress and sympathetic nervous system activation, BPSD likely increases blood pressure and blood pressure measurement variability (Figure 1). In addition, efforts by NH staff to manage BPSD (e.g., redirection or restriction of resident movement), and/or to obtain blood pressure measurements, might increase stress and raise observed blood pressure. NH clinicians thus must make prescribing decisions based on situational (i.e., not at-rest) blood pressure measurements, and may intensify antihypertensive treatment of patients with dementia with unlikely benefit and possible harm. To our knowledge, this question has not been previously examined.

Of note, all of these studies are observational studies where antihypertensive prescribing decisions are not randomly assigned, and are related to resident clinical and other parameters. Given the known biases present in observational studies of patients with serious

illness, state-of-the-art observational research methodology as well as pragmatic clinical trials are needed to define the tradeoffs of antihypertensive treatment in older adults with cognitive or physical impairment. In addition, predictive analytics might be utilized to identify sub-populations that might benefit from more or less aggressive anti-hypertensive treatment. These approaches can produce knowledge that can inform prescribing decisions for Veterans and other NH residents with dementia and hypertension, and support avoidance of overtreatment of high blood pressure in this high risk group.

To help providers make prescribing decisions in this population, it is worth revisiting current treatment guidelines. The Eighth Joint National Committee on Hypertension recommends treating hypertension in adults 60 years old or older to a target of <150/90, with increasing intensity in daily dosage or number of drugs until the goal blood pressure is reached. Additional guidelines propose less intensive treatment goals in patients with comorbid conditions such as Alzheimer's disease or limited life expectancy. Since each

first-line antihypertensive pharmacologic class can cause adverse effects such as diuresis, orthostasis, falling, metabolic changes, and constipation, clinicians should always prescribe these drugs with caution and be alert to the possibility that a patient's symptoms may be adverse drug effects. In addition, these medications are reasonable targets for de-intensification in NH residents with dementia for whom deprescribing is consistent with their goals of care.

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Caregiver Survey Reveals Opportunities to Leverage Family Caregivers as a Clinical Resource

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In the United States, family caregivers form the backbone of the long-term care system, with an estimated 5 million individuals providing often unpaid care for aging and disabled Veterans.¹ VA provides the only national, comprehensive support program for family caregivers in the country. In 2010, Congress authorized the Program of Comprehensive Assistance for Family Caregivers (PCAFC) for family caregivers of Veterans who served post-9/11 and were injured during their time of service. This program provides a monthly stipend, education and training, mental health care, respite care, and other services.¹ Evidence suggests that PCAFC caregivers help Veterans access high-value care; navigate the health care system; advocate for Veteran needs; and provide a bridge between home and clinical care.² The 2018 MISSION Act expanded eligibility for PCAFC to include

caregivers of Veterans who served in pre-9/11 eras. However, little is known about this potentially eligible group of family caregivers.

Methods and Results

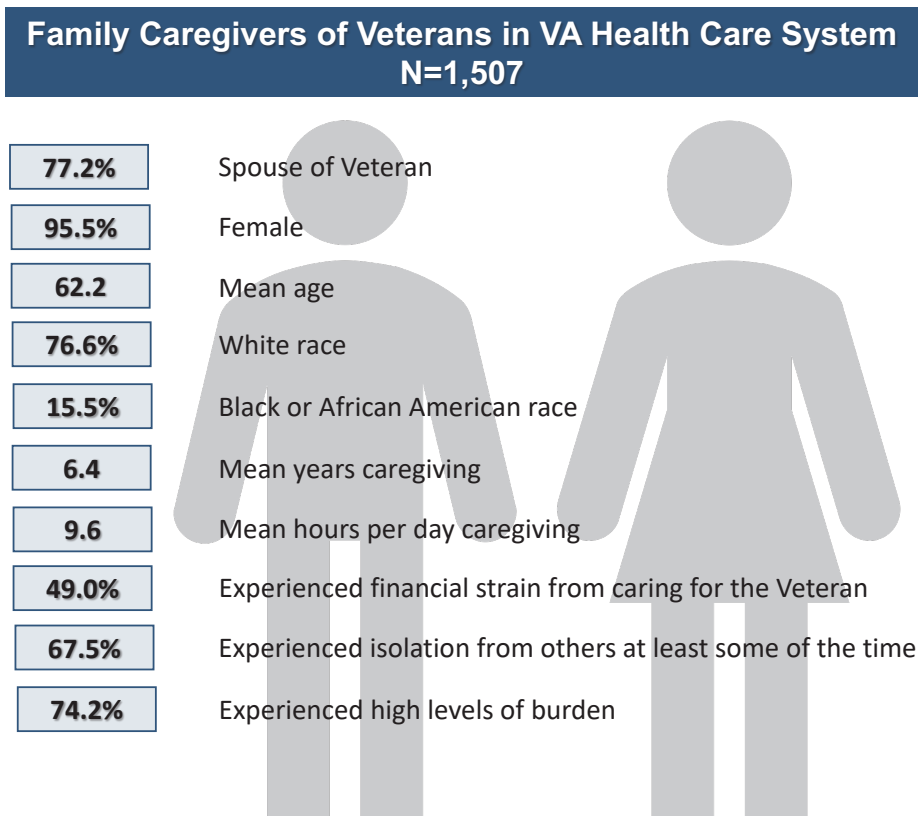
As part of an ongoing evaluation of the VA Caregiver Support Program,ⁱ 1,507 caregivers of pre-9/11 era VA users participated in a survey about their demographics, health status, caregiving tasks, caregiver burden, and experiences with VA. Figure 1 describes the characteristics of these caregivers.

Two-thirds of respondents reported that Veteran care recipients experienced total impairment in activities of daily living—meaning that they could not independently perform 8 out of 13 activities of daily living (e.g. bathing, dressing, grocery shopping). The top five Veteran health problems requiring

Key Points

- An ongoing evaluation of the VA Caregiver Support Program found that two-thirds of respondents reported that Veteran care recipients experienced total impairment in activities of daily living.
- Respondents provide high intensity care on most days of the week and report high prevalence of distress and burden.
- On average, survey participants rated the quality of Veterans' health care at VA as 8.1 out of 10 in the past 10 months.
- Results suggest that the VA health care system may be missing the opportunity to leverage family caregivers as a clinical resource.

Figure 1. Characteristics of Family Caregivers of Pre-9/11 Veterans



a caregiver were, in rank order: depression, other physical illness or injury, anxiety, posttraumatic stress disorder, and Alzheimer's disease or dementia. Respondents reported providing high intensity care on most days of the week (mean 6.7 days) and during many hours of the day (mean 9.6 hours/day). Respondents reported long duration of caregiving—over six years on average.

Prevalence of distress and burden among caregivers was also high. The average Center for Epidemiologic Studies Depression Scale (CES-D) score was 11.5; a score ≥ 8 indicates probable depression. The mean Zarit burden score was 21.8; a score ≥ 16 suggests clinically significant subjective burden. A large proportion of respondents also reported high levels of financial distress and feelings of social isolation (Figure 1).

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Caregivers also evaluated their experiences with the VA healthcare system. On average, survey participants rated the quality of their Veterans' health care at VA in the last three months as 8.1 out of 10, where 0 indicates the worst and 10 the best possible care; 35 percent rated the health care their Veteran received at VA as the "best possible" (e.g. a score of "10"). When asked about health care received in the last six months, 51 percent of caregiver respondents believed that the Veterans' health care teams understood what mattered most in terms of the care provided to their Veteran, while 43 percent stated that the health care team never talked to them about community or home-based services to support the Veteran.

Implications for the MISSION Act

Survey respondents were primarily wives providing care to their Vietnam-era Veteran husbands who had substantial functional and cognitive impairment and heavy mental health burden. The vast majority of caregivers experienced significant mental health distress, financial strain, and burden related to caregiving. Rates of depressive symptoms are particularly concerning; 57 percent of our survey respondents versus 19 percent

of pre-9/11 caregivers surveyed by RAND reported symptoms of probable depression.¹ These findings suggest family caregivers who are potentially eligible for PCAFC through the MISSION Act are an especially distressed population in need of emotional support, respite care services, and training in disease education and clinical skills to help manage the emotional and physical aspects of caregiving. Preliminary evidence suggests that PCAFC may reduce negative effects of caregiving on the caregiver.³ The MISSION Act also mandates that PCAFC offer new services, e.g. financial planning; thus, the expansion of PCAFC and additional features are highly relevant to caregivers of pre-9/11 Veterans.

Despite respondents' favorable rating of VA quality of care, a large proportion of caregivers reported that the Veterans' health care teams do not adequately engage them or provide referrals for community-based supports and services. As members of the health care team that bridge clinical and home care, caregivers might improve quality of care for Veterans; and our results suggest that the VA health care system may be missing the opportunity to leverage family caregivers as a clinical resource. The Elizabeth Dole Foundation's

Campaign for Inclusive Care has partnered with VA and identified provider education as one potential strategy to integrate caregivers into the care team. As part of the impetus around the MISSION Act, VA could expand efforts to educate providers about family caregivers as a clinical resource and inform them of the high distress caregivers experience while caring for Veterans.

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- i. Notes: Courtney Van Houtven, PhD, is the Project Director of the VA Caregiver Support Program Partnered Evaluation Center. The analysis was funded by the VA Caregiver Support Program, Health Services Research and Development (HSR&D) and QUERI (Quality Enhancement Research Initiative) (PEC 14-272) and supported by the Durham Center of Innovation for Health Services Research in Primary Care (CIN 13-410).

Multidisciplinary Center Builds Evidence to Keep Veterans at Home While Engaging and Supporting Caregivers

Luci K. Leykum, MD, MBA, MSc, South Texas Veterans Health Care System, San Antonio, Texas, and the Dole Center of Excellence Team

The Elizabeth Dole Center of Excellence for Veteran and Caregiver Research was created in October 2018 as part of the VA Choose Home Initiative. The goal of Choose Home is to allow Veterans to remain in their homes rather than institutional care. The Center expands VA capacity to deliver integrated, Veteran and caregiver-partnered, data-driven approaches to care. Named in honor of Senator Elizabeth Dole in recognition of her significant efforts to highlight the needs of caregivers, the Center is funded through the VA Health Services Research and Development service for five years. Senator Dole’s work to shine a spotlight on the needs of caregivers culminated in the “Hidden Heroes” RAND report demonstrating the extent of caregiving in this country.

The Dole Center of Excellence Team is a virtual one, comprised of a multidisciplinary group of researchers and clinicians from across the country, many of whom are Veterans, caregivers, and survivors themselves. Our four primary sites include Miami, Palo Alto, Salt Lake City, and San Antonio, in collaboration with the Geriatrics and Extended Care Data Analytics Center (GECDAC). The four sites include Geriatric Research,

Education, and Clinical Centers; our investigators are also members of two VA HSR&D Centers of Innovation. The Dole Center offers a fellowship program that supports fellows at each of the four sites; the fellows program is open to all health professions, and is overseen by Dr. Sandra Sanchez-Reilly.

Center activities are organized around three cores: innovation, outcomes and implementation, and data and policy. The figure below shows the organization of the Center team.

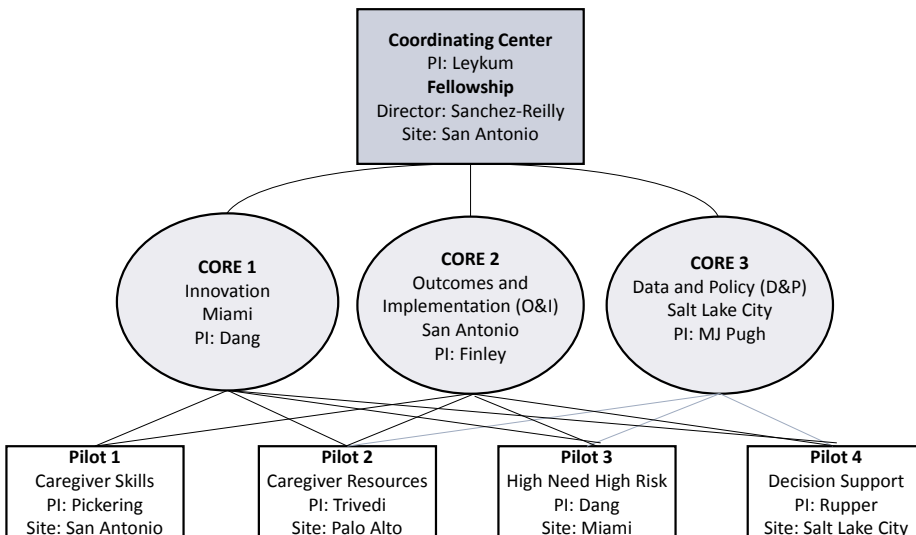
The innovation core, overseen by Dr. Stuti Dang in Miami, is comprised of four pilot projects. The San Antonio pilot led by Dr. Carolyn Pickering will evaluate the impact of a hands-on caregiver skills training program. In Miami, a refined primary care model tailored to the needs of high-need, high-risk Veterans who do not need home-based primary care is being evaluated by Dr. Stuti Dang. Palo Alto investigators Dr. Ranak Trivedi and colleagues will examine Veteran and caregiver use of community resources through assessing barriers to use, particularly for specific Veteran

and caregiver groups, and evaluating the impact of integrating resource linkages into caregiver-Veteran support programs. Finally, Dr. Rand Rupper in Salt Lake City is leading an evaluation of integrating dynamic assessment of functional status into decision support at the point of care.

The outcomes and implementation core, overseen by Dr. Erin Finley in San Antonio, has two sets of activities. The first is to partner with Veterans, caregivers, and stakeholders to develop a group of harmonized outcome measures that are most meaningful to these groups. The team has conducted an environmental scan of currently used assessment tools, convening focus groups and interviews to evaluate potential measures. Our preliminary findings suggest that caregivers would like to see measures related to resource helpfulness and ease of system navigation, particularly with regard to their ability to connect with community resources. The second activity of this core is conducting an ongoing evaluation of the pilot projects based on the “replicating effective programs” model to obtain information that would support widespread implementation of successful practices.

Finally, the data and policy core, overseen by Dr. Mary Jo Pugh in Salt Lake City, is conducting a data analytics project to determine what types of non-institutional care are most effective in preventing institutionalization for different Veteran populations. The analytic team is coordinating with the GECDAC and with Dr. Jim Rudolph, Director of HSR&D’s Long Term Support Services Center of Innovation, to ensure that our findings are aligned with other work in this area.

Continued on next page



Our study team will then integrate findings across these research activities to develop a set of recommendations and tools for operational partners and policy makers. At the end of five years, we hope to have produced knowledge that helps keep Veterans at home, and that engages and supports caregivers.

Our research kickoff meeting held in January 2019 included VA researchers Dr. Nina Sperber from Durham, Dr. Alison Hamilton from Los Angeles, and Dr. Jim Rudolph from Providence, Dr. Tom Edes from Geriatrics

and Extended Care, Dr. Ben Kligler from the Office of Patient Centered Care and Cultural Transformation, and Drs. Orna Intrator and Bruce Kinosian from the Geriatrics and Extended Care Data Analytics Center, allowing us to refine our research plans to best align with other work being conducted across VA. While operating a virtual center across multiple sites has its administrative challenges, working with this outstanding research team has been a wonderful experience for all of us. The opportunity to partner with Veterans and caregivers on our

research program adds to the meaning of our work.

Our team has been fortunate to work closely with the Veterans Experience Office, under the tremendous leadership of Dr. Lynda Davis, and with Dr. Amy Kilbourne, Director of the Quality Enhancement Research Initiative in HSR&D. We are appreciative of the support from both of these leaders. We also thank Dr. George Fitzelle, who has been an incredibly helpful partner in his Scientific Portfolio Manager role.

Innovation Update

EQUIPPED for Medication Safety in VA Emergency Departments

Camille P. Vaughan, MD, MS, Birmingham/Atlanta VA GRECC, Atlanta, Georgia, Zach Burningham, PhD, MPH, Salt Lake City VA IDEAS COIN Center, Salt Lake City, Utah, and George L. Jackson, PhD, MHA, Durham VA COIN, Durham, North Carolina

EQUIPPED (Enhancing Quality of Prescribing Practices for Older Adults in the Emergency Department) is a quality improvement program associated with improved prescribing toward older adults who are discharged from the ED.¹ The program was initiated within the Atlanta VAHCS and has been implemented in twelve VA EDs. EQUIPPED involves education, clinical decision support, and provider audit and feedback. The provider feedback component is typically delivered at least once in person by a local EQUIPPED champion, representing a clinical colleague (ED physician or advanced practice provider, geriatrician, pharmacist) with knowledge of principles of safe prescribing toward older adults. This implementation strategy using an academic detailing approach has been successful at multiple sites, with most EQUIPPED implementation sites demonstrating significantly fewer potentially inappropriate medications prescribed each month.² However, incorporating academic detailing is time and personnel intensive. With the advent of clinical dashboards, which leverage VA's robust clinical informatics infrastructure, centralized mechanisms of provider feedback may be more efficient and have similar impact on provider behavior change and prescribing safety.

The EQUIPPED team received 2018 HSR&D funding to evaluate two implementation strategies to determine the most effective strategy for broader EQUIPPED dissemination. Eight VA medical centers have been randomized to implement either 'traditional' EQUIPPED, which involves in-person academic detailing, or 'dashboard' EQUIPPED, where prescribing feedback is provided using a near real-time interactive dashboard supported by VA's Corporate Data Warehouse and developed by the Salt Lake City VA IDEAS COIN center. Both methods for prescribing feedback will highlight potentially inappropriate medications according to the American Geriatrics Society Beers Criteria[®], recommend alternative medication choices, and include peer benchmarking.³ All sites will receive implementation support from EQUIPPED leads based in the Birmingham/Atlanta GRECC. Formative evaluation of EQUIPPED implementation will be led by investigators at the Durham VA COIN based upon the Organizational Theory of Implementation Effectiveness.

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included development data on the Bright Spots program and Medical Foster Home; these data have subsequently been utilized by our GEC colleagues to advocate for operationalization of the programs. Another LTC CREATE project, Community Discharge, led to the development of a CMS NH Compare measure. Investigators within the COIN-LTSS are internationally recognized for antimicrobial stewardship within the nursing facility including measurement of antibiotic resistance, procedures to improve adherence to the evidence base, and improving vaccination outcomes.

GEC and the COIN-LTSS are participating organizations in the Embedded Pragmatic Alzheimer's Disease Clinical Trials Collaboratory, an NIA-funded initiative that brings together research, industry, and VA with a focus on pragmatic trials in nursing facilities. Brown University School of

Public Health recently completed one such pragmatic trial, randomizing nursing homes to high dose vs. regular dose influenza vaccination. Importantly, this trial was a win-win-win: nursing facilities received discounted influenza vaccine, residents were vaccinated at higher rates, staff received workplace vaccinations, and the study generated knowledge of the value of high dose influenza vaccination to protect nursing facility residents from influenza and its associated outcomes. The trial utilized existing nursing home data and claims to analyze resident level outcomes.

The COIN-LTSS is a unique place for research—it provides a base for those with a passion for caring for functionally impaired Veterans. COIN-LTSS researchers are uniquely skilled in the measurement of LTSS outcomes, and have a strong history of working together to implement change.

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