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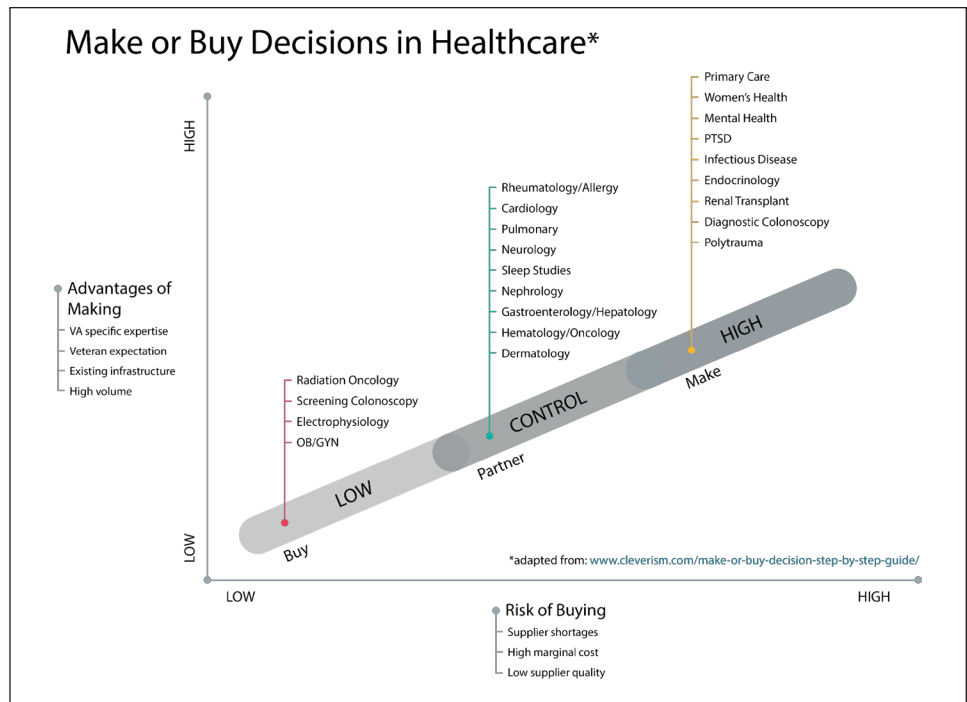
Commentary

Specialty Medical Care and the MISSION Act: A Make or Buy Decision

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In our daily lives, we are constantly presented with “make or buy” decisions. Many are easy and require little thought, like buying a shirt instead of designing and sewing it ourselves. Others, like lawn care, may involve a threshold in which we are willing to do the work ourselves, until it exceeds our skills or capacity. As with all such decisions, we make a strategic choice between producing an item or service internally, or buying it externally from another source.

Healthcare systems are faced with the same dilemma. Key factors in the decision include balancing the advantages of making or providing the service (e.g., lower cost, higher quality, patient-specific needs) with buying or outsourcing advantages (e.g., low volume, unique technical needs, patient convenience). Historically VHA has navigated this balance and made reasonable trade-offs. Expansion of primary care and mental health at every medical center and community-based outpatient clinic was an investment in making a service available everywhere. Regionalization of organ transplantation, cardiac procedures, and polytrauma centers were thoughtful decisions that supported specialized expertise to provide the necessary service and maintain high quality with a trade-off of requiring some Veterans to travel greater distances. Community care for obstetrics and radiation oncology were thoughtful buy decisions. As a former Chief of Medicine, make or buy decisions occurred daily with recruitment and retention of physicians, negotiating clinic space, and following the ever-changing rules for community care.



Partnering

An important middle-ground of partnering exists in make or buy decisions, especially when it involves a large organization like VHA with regional variations in supply and demand. VHA has a long history of partnering with academic medical centers in training healthcare professionals, and in providing Veterans with access to world-class expertise, especially in highly specialized medical care that would not be possible without the partnership. Close partnerships with the Department of Defense, Indian Health Service, and local providers and healthcare systems have proven beneficial for Veterans' access to care.

Opportunity to Support Make or Buy Decisions

The Veterans' CHOICE and MISSION Acts have created a new opportunity for VHA to evaluate past make or buy decisions and propose new models to advance access to care from both the subjective patient perspective and objective costs and wait times.¹ This opportunity also requires careful attention to the quality of care provided so it can be measured, maintained, and even improved.

The MISSION Act has the potential to facilitate both make and buy decisions for VHA; provisions to increase funding will help accomplish both. On the “make” side, the Act enhances capacity

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DIRECTOR'S LETTER



Prior to reforms of the 1990s, the VA health system was largely a hospital-based system dominated by specialty care. The emergence of a strong primary care system has not lessened the importance of specialty care to Veterans, many of whom have complex illnesses.

Providing consistent access to specialists, however, has been a persistent challenge. In

the latest Survey of Health Experiences of Patients (SHEP) in VA, Veterans using specialty care rated their clinicians highly but only half reported that they “always” could access care when they needed it. As a result, only 53 percent reported they were “very satisfied” with specialty care. The problems with access are familiar—many Veterans live far from the larger VA medical centers where many specialists are based, yet the volume of patients may not justify specialists at smaller facilities. With new access standards under the MISSION Act, any Veteran who lives more than 60 minutes from needed specialty care will be eligible to seek care in the community. This standard will place additional pressure on VA to solve problems in specialty access lest facilities start to lose specialty patients and the associated research and training programs built around them.

Over the past decade, VA has instituted many innovations to try to improve access to specialists, and HSR&D researchers have been involved in helping evaluate them. Strategies include making it easier for patients to access specialty care remotely through synchronous telehealth; e-consults to allow primary care providers to get advice from specialists without requiring an in-person consult; and training up the skills of generalist providers through structured programs of education, case learning, and

consultation (the Specialty Care Access Networks–Extension for Community Healthcare Outcomes [SCAN-ECHO], and mini-residencies). Research has confirmed that video telehealth can deliver comparable results and satisfaction in areas such as mental health and it is expanding rapidly in other specialties, especially areas where frequent follow-up is more important than face-to-face visits—for example, sleep apnea management and cardiac rehab. E-consults have also grown rapidly with generally high satisfaction, whereas SCAN-ECHO has proven harder to scale.^{1,2} While clinicians found it an effective training format, many found it hard to fit the regular virtual sessions into their busy schedules.

It will be hard to maintain a robust VA health system without strong specialty care. Moreover, as the experience of Medicare-eligible Veterans suggests, the coordination, quality, and outcomes of care can decline when patients divide their care between VA and community providers.³ Health services research will be critical for evaluating and refining programs that will improve access to and efficiency of specialty care while maintaining the quality of that care.

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through provisions to recruit and retain healthcare professionals. Strengthening and building new academic affiliations can improve recruitment through debt reduction and scholarships, professional growth opportunities, and optimizing visa waiver programs. Another provision removes barriers to telemedicine by shifting excess capacity in one region to another. It also supports the sharing of highly specialized expertise to a larger proportion of Veterans across VA healthcare systems. VHA has already accomplished improved access to telemedicine through tele-ICU networks, tele-stroke, tele-dermatology, and recently tele-hospitalists. Electronic consults also provide an innovative solution to shift demand to locations where supply is higher and obviate the need to buy the service. Some medical specialties are more amenable to e-consults, particularly those that are mostly cognitive. Infectious disease, hematology, and endocrinology services currently provide over 10 percent of their consults

in VA through e-consults, whereas specialties that depend more on the physical exam during an in-person visit (e.g., dermatology, neurology, cardiology) employ e-consults for less than 5 percent of visits.

On the “buy” side, a key provision authorizes local provider agreements. Those who provide care in a VA within a community of inter-related healthcare systems know best what expertise and capacity is available and where. Third party administrators, through no fault of their own, are challenged to foster these relationships in a community and coordinate care. Building these relationships is mutually beneficial for community and VA providers, but most importantly, these relationships benefit our patients. Provider and patient education, advanced scheduling systems, and improved health information exchange will also facilitate the buy side of the decision.

Underserved VA Medical Facilities

The provision to establish criteria to designate VHA facilities as underserved is analogous to medically underserved designations made by the Department of Health and Human Services. Criteria will need to include ratios of providers to Veterans, specialties provided, local community resources, and wait time metrics. Care will be needed to ensure resources are not used simply to reward poor past performance, but instead create cost-effective solutions to complex access issues, especially in rural areas.

Pitfalls

Although not all pitfalls can be predicted, there are several considerations that can impact make or buy decisions. For example, highly technical, low volume services (e.g., obstetrics, radiation oncology) will likely remain in the buy category; provider agreements and local collaboration can

Could Specialty Care Access be VA's Achilles Heel?

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Why Specialty Care Could Serve as a Model of Access

In any given year, 50 percent of Veterans receiving care within VA require specialty care services. While there have been major initiatives to bolster the availability of primary care and mental health services, little effort has been placed on re-envisioning how specialty care medicine can increase its services. Expansion of community-based outpatient clinics has improved primary care access, but it has likely exacerbated challenges for VA to provide seamless specialty care services for these patients. At the time of primary care expansion, the assumption was that Veterans would continue to receive VA specialty care services at medical centers, typically located in urban environments. However, there is now a mandate to provide Veterans with care closer to home regardless of the need, whether it is primary or specialty care. A coordinated effort is urgently needed to conceptualize delivery of specialty care that is patient centered and meets the needs of Veterans. The time for this effort is now.

Defining Goals

In the context of the MISSION Act, how to deliver specialty care services has become an important question that requires reflection beyond the current care delivery models. "Make vs buy" discussions often focus on the time needed to receive specialty services at a unit cost. As a result, VA focuses on filling the demand without accounting for the urgency of the demand that is needed to meet the specific clinical context. Currently proposed access benchmarks continue to reflect the belief that acting within ever shortening predefined timeframes will drive high quality access and satisfy the needs of patients. That construct is a fallacy because fixed timeframes do not necessarily align with

patient preferences, the clinical context, or availability of resources.

VA needs to more effectively organize its approach to delivering care to satisfy the healthcare needs of Veterans, whether that care is delivered within VA or community settings. In that context, high quality access should be measured based on the ability of the health system to deliver services that will achieve desirable health outcomes for patients. From a patient perspective, access to services will need to accommodate the natural ebb and flow of changes within a patient's clinical condition. Applied as a function of timeliness of care, high quality access could be measured in minutes, hours, days, months, or potentially years.

Facing Challenges

Specialty care encompasses more than 20 different clinical services that each require a specialized knowledge base, infrastructure, supply chain, scheduling, administrative and clinical staff. Because these assets are relatively scarce, specialty care services are typically concentrated within larger urban medical center-based facilities that have sufficient patient volume to justify support for these dedicated services. For example, in most primary care settings, the loss of a physician will lead to a decrease in the number of patients seen in clinic and overall productivity. However, in specialty care services, the loss of a single physician could eliminate some services altogether. Many specialty care services are also procedure-based; these services require sufficient volume to maintain quality as well as staff and IT support to coordinate multiple services (e.g., primary care, radiology, anesthesia), maintain infrastructure, and sequence care appropriately for patients who may live significant distances from the medical center.

Community based outpatient clinics (CBOCs) are not only geographically distant but also culturally distinct, as many specialty care clinicians share joint university appointments and place significant value on the research and educational missions of VA in addition to care delivery. From the patient perspective, although primary care is now closer to their homes, there has not been a similar transformation in specialty care medicine. In contrast to the billions of dollars committed to the reorganization of primary care within VA, support provided to redesigning the delivery of specialty care services has been negligible.

Finding Solutions

Common across VHA is the desire to deliver highly effective and quality care to achieve favorable health outcomes—regardless of the type of service. VA needs to develop a conceptual model of specialty care access, starting with defining high quality access that is not fixed on arbitrary timelines. A model would need to include population-based approaches and take responsibility for the entire anticipated episode of care. Outcomes would be patient centered but incorporate value as an explicit measure, facilitating discussion about make vs. buy decisions. As part of a learning health system, VA could empirically study and evaluate theory driven approaches to the delivery of specialty care services, including the utility of telehealth and other technology-based approaches to care. For example, many specialty services focus on cognitive rather than procedural knowledge, such as the case with common chronic comorbidities (e.g., diabetes). In principle, these services do not require in-person visits and can be provided via various telehealth modalities.

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An Evaluation of the Telemental Health Hub Expansion

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Telemental Health (TMH) is well suited to serve the needs of the 2.9 million rural Veterans currently enrolled in VA care. Randomized controlled trials have demonstrated the equivalence in outcomes of care for TMH versus in-person VA mental healthcare.^{1,2} In fact, VA began using interactive video to expand access to mental health care for Veterans in 1968, when three VA hospitals in Nebraska partnered with the University of Nebraska to develop VA's first telemental health program.³

VA's TMH program has grown significantly in recent years, with over 3.34 million TMH encounters occurring between Fiscal Years 2002 and 2018. In an effort to increase access to mental health care for rural Veterans, the Office of Rural Health partnered with the Office of Mental Health and Suicide Prevention to support the establishment of 11 TMH hubs in Veterans Integrated Service Networks (VISNs) 1, 2, 4, 7, 10, 17, 19, 20, 21, 22, and 23. Launched in 2016, these hubs fill critical gaps in mental health staffing coverage. In this article, we report on the first formal national evaluation of the impact of the TMH hubs.

Using the RE-AIM (reach, effectiveness, adoption, implementation, maintenance) framework, our evaluation team sought to measure the impact of the 2016 TMH expansion funding on TMH activity. We further sought to contextualize this expansion activity by examining all TMH care, in-person mental health care, and primary care between 2016 and 2018. We measured **reach** by quantifying the number of encounters and unique Veterans served by each of the TMH hubs. We contrasted demographic traits of these Veterans with all Veterans receiving mental health care and all Veterans in active primary care. In ongoing work, we are quantifying the **adoption** of TMH by describing the number and types of consults placed for TMH hub services. We are also identifying the **effectiveness** of TMH hubs

by examining the impact of TMH hub exposure on 1) mental health diagnostic rates, 2) the quality of mental health care (as measured by VA performance metrics), and 3) the incidence of adverse events.

To conduct the evaluation, we identified 1) all TMH encounters, 2) all in-person mental health encounters, and 3) all primary care encounters between June 2016 and October 2018. We identified TMH activity using the Central Data Warehouse (CDW) outpatient table based on any mental health primary stop code (500 series) and a TMH related secondary stop code (136, 137, 179, 644, 645, 648, 679, 692, 693, 690). For each encounter, up to two stop codes may be recorded to document workload at the 'hub' site and the 'spoke' site. This data was de-duplicated accordingly, with a unique encounter defined as unique by patient, date, site, primary stop code, secondary stop code, and clinic location name. TMH encounters were designated as 'expansion hub TMH' encounters if the hub site coded encounter occurred at a TMH hub expansion site. We also identified all in-person mental health care encounters and all primary care encounters during the same period and merged Veteran demographics from CDW with these encounter files.

Our analysis found that TMH hub expansion funding correlated with an increasing volume of TMH encounters across all VISNs targeted for expansion. From June 1, 2016, to September 30, 2018, hub sites experienced 226,328 TMH encounters reaching 44,945 unique Veterans. Furthermore, TMH encounters per fiscal year quarter at hub sites doubled from 16,719 encounters in 2016 Q4 to 34,759 encounters in 2018 Q4. As expansion funding began, there was substantial heterogeneity in baseline TMH hub activity across VISNs; the largest VISN had 4,988 unique TMH encounters during 2016 Q4, while the smallest had only 110 encounters.

Key Points

- From June 1, 2016, to September 30, 2018, VA's 11 Telemental Health (TMH) hub sites logged 226,328 encounters reaching 44,945 unique Veterans. TMH encounters per fiscal year quarter at hub sites doubled from 16,719 encounters in 2016 Q4 to 34,759 encounters in 2018 Q4.
- TMH increases access to mental health services for rural Veterans compared with in-person mental health—49.8 percent of TMH encounters nationally are with rural Veterans, while only 29 percent of in-person mental health encounters are with rural Veterans.
- Across the 11 TMH hub sites, funded by the Office of Rural Health, activity varied dramatically across the participating VISNs, ranging from a 31 percent increase to an 811 percent increase in TMH encounters per VISN.

However, TMH activity increased at all of the VISNs between 2016 Q4 and 2018 Q4 (ranging from a 31 percent increase to an 811 percent increase in encounters per VISN). Differences in TMH hub activity by VISN at baseline and during follow-up varied due to differences in the proposed scope, size, funding, and purpose of each hub.

The TMH hub expansion program sought to increase access to mental health care for Veterans in underserved communities, especially Veterans in rural areas. Multiple findings from our evaluation indicate the program succeeded in this goal. TMH hub expansion encounters were more likely to involve Veterans at sites different than the hub site;

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55 percent of TMH hub expansion encounters were to either a non-affiliated community based outpatient clinic (CBOC) spoke site or a Veteran home, compared to only 29 percent of non-hub expansion TMH activity. The TMH hub sites increased access to care for both rural Veterans and women Veterans. We found 46.5 percent of Veterans with a TMH hub encounter were rural (compared to 29.1 percent of Veterans with an in-person MH encounter) and 14.5 percent of Veterans with a TMH hub expansion encounter were female (compared to 12.2 percent of Veterans with an in-person MH encounter).

Our evaluation found evidence that the TMH hub expansion funding correlated with a substantial increase in TMH encounters,

especially at CBOCs not affiliated with the hub site VAMC. TMH hub expansion also increased access to mental health care for rural Veterans and to a lesser extent for women Veterans. Future work will examine the impact on detection of psychiatric disorders and quality of mental health care.

The VA MISSION “ACT” of 2018 requires VA to expand access to care in the community. However, it is unknown to what extent mental health care delivered in the community is comparable to VA delivered mental health care in terms of timeliness, Veteran satisfaction, and quality. As VA continues to expand community care options to increase access to care for Veterans, future work should monitor VA

versus community care across these domains. Secondary data analysis of current VA data cannot answer this question, so ongoing primary data collection will be required.

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TMH HUB EXPANSION

The Office of Rural Health and the Office of Mental Health and Suicide Prevention partnered to support the establishment of 11 Telemental Health (TMH) Hubs in 2016

Between 6/1/2016 – 9/30/2018

226,328

TMH encounters
at Hub sites reaching

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Veterans

Doubling of TMH encounters
per quarter at hub sites



16,719
encounters in
2016Q4

34,759
encounters in
2018Q4

TMH Hub activity **increased** at all funded Hub sites,
ranging from **31% to 811%** increase in TMH encounters



49.8% of TMH
encounters with
RURAL Veterans



29.0% of in-person
MH encounters with
RURAL Veterans



14.5% of TMH
encounters with
FEMALE Veterans



12.2% of in-person
MH encounters with
FEMALE Veterans

Evaluating Mobile Tele dermatology to Enhance Veterans' Access to Skin Care

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Expert skin care from board-certified dermatologists is a limited resource in VA. Veterans can experience long waits for a new or follow-up appointment in a VA dermatology clinic for which they may travel long distances, particularly if they reside in rural areas. To improve access to dermatologic care, VA has developed a national store-and-forward telehealth (SFT) tele dermatology program, overseen by the Office of Connected Care (OCC). SFT tele dermatology is usually consultative, allowing a primary care provider (PCP) to order a tele dermatology imaging consult that is processed by a trained imager at the primary care clinic; the imager manually transfers history from the PCP along with captured digital skin images to a new tele dermatology reading consult request for review by a remotely located dermatologist, all via VA’s electronic health record (EHR). In the EHR, the dermatologist provides a diagnostic impression and management recommendations to the PCP, who is then responsible for implementing them.

VA’s tele dermatology program has proven successful in those facilities that have adopted it.¹ However, for all of tele dermatology’s growth and clear benefits for increasing access to expert dermatologic care in VA, adoption of consultative SFT tele dermatology in VA has been uneven. One barrier to adoption may be that tele dermatology workflow depends on primary care clinics where the process can disrupt workflow and increase workload for primary care staff, thus discouraging adoption.

Mobile Tele dermatology App Solutions

To address this barrier and thus broaden tele dermatology usage in VA, OCC has developed two mobile apps. The first, *VA Telederm*, is designed to replicate and interchangeably interact with the existing consultative tele dermatology workflow in

the current EHR so that PCPs and imagers can use either the app or the EHR to initiate and process tele dermatology consults. Importantly, *VA Telederm* streamlines the existing process. Rather than requiring an imager to manually transfer the PCP’s clinical history to the imager’s consult request to the dermatology reader, *VA Telederm* does so automatically. The app also enables imagers to capture images with the mobile device’s camera, and directly upload them to the EHR, thus eliminating the current requirements of uploading images at VA workstations and then deleting images from the camera afterward. As a result, this app both enhances patient privacy and the fidelity of clinical history transfer, and reduces the primary care staff’s work in submitting tele dermatology consults.

The second app, *My VA Images*, is a patient-facing app which allows established dermatology clinic patients to follow-up with their dermatologists remotely using their own mobile devices. OCC has designed *My VA Images* to interact with *Patient Viewer*, an app available for VA clinicians to manage patient care. By reducing the need for some patients to follow-up in person, this direct-to-patient tele dermatology pathway minimizes the travel time and distance required for Veterans to obtain skin care, and may further improve timeliness and reliability of their follow-ups. Secondary benefits may include increased access to in-person dermatology clinics as appointment slots formerly used for these types of patients are freed.

Testing the Promise of Mobile Tele dermatology

Although the emergence of mobile tele dermatology capability in VA is an exciting development, it is important to validate its promise and to identify areas for improvement. With the recent signing of the 2018 MISSION Act into law, the need to collect metrics demonstrating reach and effectiveness of

Key Points

- VA’s Office of Connected Care has developed two mobile tele dermatology apps to improve Veterans’ access to dermatologic expertise.
- The VA Telederm app streamlines the tele dermatology process for primary care staff.
- The My VA Images app allows dermatology clinic patients to follow-up remotely with their dermatologists.
- An HSR&D-funded study of the implementation and impact of these apps will contribute significantly to the telehealth literature.

telehealth has gained further visibility. The Act broadly attempts to address the issue of Veterans’ access to care in multiple areas. Importantly for the operation of VA telehealth and telemedicine, the Act affirms VA’s ability to deliver care by telehealth across state lines. The Act also requires VA to report on the effectiveness of telemedicine, including Veterans’ and VA providers’ satisfaction with telemedicine, as well as telemedicine’s impact on access to health care, productivity, wait times, usage, in-person clinics, and cost savings. The law’s reporting requirements signal both a new level of recognition of telehealth as well as a future where telehealth will be held accountable to demonstrate concrete outcomes for its stakeholders.

The Health Services Research and Development (HSR&D) study, “Tele dermatology mobile apps: implementation and impact on Veterans’ access to dermatology,” is one attempt to measure both process and outcomes rigorously for one particular telehealth

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initiative. The intent is to validate VA's mobile tele dermatology apps' effectiveness in improving access to care. This study may also yield valuable lessons to optimize implementation of other mobile telehealth initiatives. The work has been a partnership between OCC and a research team comprised of VA investigators at San Francisco and Providence, and HSR&D's Durham and Boston Centers of Innovation.

To assess implementation, the research team planned a formative evaluation across three pilot sites, including both interview-based data gathering and online questionnaires to assess Organizational Readiness for Change,² the implementation process, and sustainability. Research on interventions dependent on leading-edge technology can be challenged by technical difficulties; this has proven true in this study. *VA Telederm* was the first app to enter field testing, but the app was not functional at two of three pilot sites for technical reasons, which limited the formative evaluation. Ultimately, technical issues outside the control of the research team and operational partner have postponed the study of this app. The apps used for the patient-facing process are emerging from development only recently after delays and are anticipated to commence field testing and formative evaluation soon.

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For some specialty care procedures, VA is already testing, in non-systematic fashions, different approaches to non-invasive procedures that are performed by technical staff near patients' homes and interpreted by specialty care clinicians at distant medical centers. Models about how to manage

To rigorously assess the impact of these tele dermatology apps on various measures of access such as consult completion times and distance traveled, the research team is planning a randomized national study of the apps. Several operational considerations affected the research design. First, because use of mobile devices is not yet common in VA health care and because the patient-facing pathway is novel to VA, concern existed that simultaneous release of these apps to all intervention sites might prove challenging for OCC and for many facilities to implement. Second, as noted above, considerable heterogeneity exists since some VA facilities are extremely active adopters of tele dermatology, while others are not.

Consequently, the research team has designed a stepped-wedge cluster-randomized trial to permit sequential release of the apps to groups of 7 facilities every 3 months, with sites awaiting intervention serving as controls.³ OCC will introduce *VA Telederm* to facilities where tele dermatology constitutes between 0 to 9 percent of total dermatology encounters, whereas *My VA Images* will be introduced to facilities where tele dermatology is ≥ 9 percent of all dermatology encounters. The research will evaluate multiple measures of access to achieve a comprehensive and accurate evaluation of each app's impact. These measures include consult and

procedures such as echocardiography or pulmonary function testing optimally could compare strategies that maximize patient experiences including embedding technicians within or close to primary care settings, using mobile units that bring equipment and staff to CBOC's, or outsourcing these procedures to the community.

appointment completion times, the number of tele dermatology encounters, the percentage of dermatology encounters using each app, and the nominal travel distance avoided. Unique to the *My VA Images* app, outcome measures will also include the proportion of new patient visits in a dermatology clinic, the timeliness of patient follow-up, and the no-show rate.

At present there is a dearth of systematic studies, particularly randomized clinical trials that measure and validate the worth of digital telehealth technology. The VA Tele dermatology Mobile App study, due to its size and rigor, has the potential to make an important early contribution to the tele dermatology and telehealth literature, and may serve as a model for future studies assessing outcomes and implementation of mobile telehealth.

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Conclusions

Specialty care services provide an invaluable contribution to overall Veteran well-being. VA needs to commit to finding effective and value-based approaches to specialty care services. To continue to neglect this important part of healthcare delivery may serve to endanger more than Veterans' health, but the well-being of VHA altogether.

Care Quality in VA versus Medicare

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In response to concerns over poor Veteran access to VA healthcare, Congress passed the Veterans Access, Choice and Accountability (Choice) Act in 2014. The Choice Act allowed VA-enrolled Veterans to bypass VA entirely and obtain healthcare from the private sector if:

- 1) the Veteran had to wait more than 30 days for an appointment;
- 2) the Veteran lived more than 40 miles from the closest VA; or
- 3) the Veteran faced geographic hardship in accessing VA care.

The Choice Act allocated \$10 billion over three years for Veterans to access private sector care.

In June 2018, Congress passed the VA Maintaining Internal Systems and Strengthening Integrated Outside Networks (MISSION) Act. The MISSION Act further expanded the ability of Veterans to seek care in the private sector, including waiving the 30-day and 40-mile criteria for accessing non-VA care and allowing Veterans who used VA in the past two years to access walk-in community clinics. While not yet funded, analysts estimate the MISSION Act will cost \$52 billion over five years. To put this figure in context, Congress appropriated \$68 billion to the Veterans Health Administration in 2017. With the passage of these acts, an increasing number of Veterans will receive care in the private sector instead of from VA.

As VA shifts from a system that directly provides most of its care to a system that also pays for and coordinates care, the question remains as to the quality implications of such an approach. One way this question can be answered is by evaluating care practices in VA versus Medicare. Medicare providers practice in the private sector; thus, as VA shifts to purchasing care, many Veterans will see these providers in the community, either through VA-paid mechanisms or due to their status as Medicare beneficiaries. More than 90 percent of Veterans 65 and older are enrolled in

Medicare. In this study, we leveraged data from this dually-enrolled population to understand differences in care quality in VA versus Medicare.

Using data from FY 2010-2014, we studied end-of-life care quality for a cohort of Veterans who died from cancer. The American Society of Clinical Oncology (ASCO) recommends a reduction in medically-intensive service in the last weeks of life for cancer patients; the National Academy of Medicine notes such care is at odds with the focus on quality-of-life that should be the priority at this stage of illness. We focused on cancer for two reasons. First, while prognosticating death is never easy, the pattern of functional decline prior to death for persons dying of cancer is much stronger and more consistent than is the case with many other common causes of mortality. It should thus be clearer to providers that intensive care for these patients would be burdensome. Second, there are well-established quality metrics created and supported by oncology specialty societies pertaining to care provided in the weeks prior to death. Thus, there is both agreement within the oncology community about what constitutes intensive care as well as indications from oncology societies that they believe near-term death can be anticipated for patients dying of cancer.

Our study evaluated a cohort of 87,251 Veterans aged 66 or older who died from cancer and were continuously enrolled in fee-for-service Medicare for one year prior to death. The Veterans in our cohort could have opted to receive care through VA, Medicare, or both. We allocated Veterans to a system (VA or Medicare) based on where they received the majority of their medical/surgical care in the six months prior to the last thirty days of life (the period for which outcomes were evaluated).

Using ASCO and National Quality Forum (NQF) metrics, we evaluated quality of care as the proportion of patients who experienced the following: two or more emergency department

Key Points

- VA is shifting from a system that provides direct care to Veterans to a system that pays for and coordinates care for Veterans. The quality implications of this shift merit further research.
- This article discusses the lead author discusses research on end-of-life care quality for a cohort of Veterans who died from cancer. Investigators found that VA-reliant Veterans receive higher-quality end-of-life care than Medicare-reliant Veterans.

(ED) visits, chemotherapy, a hospital admission, an ICU stay, and death in the hospital. We also evaluated the number of days spent in the hospital. Poor-quality care was indicated by higher proportions of patients with these experiences. Care was evaluated using VA, fee-basis, and Medicare administrative data. Fee-basis care was allocated to VA, as in the pre-Choice Act time frame of our analysis, non-emergency fee-basis care had to be authorized by VA before being provided. In addition to adjusting for comorbidities that could affect receipt of intensive services, we adjusted for variables previously shown to influence Veterans' reliance on Medicare versus VA: enrollment priority, service-connected disability, distance from VA, race, age, and rurality.

In adjusted analyses, we found Medicare-reliant Veterans were significantly more likely to receive poor-quality, high-intensity care than were VA-reliant Veterans. In their last month of life, Medicare-reliant Veterans were more likely to have the following: chemotherapy, a hospital admission, admission to the ICU, more days spent in the hospital, and death in the hospital. However, these Veterans were significantly less likely than VA-reliant patients to have multiple ED visits in the last month of life.

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Our work indicates VA-reliant Veterans receive higher-quality end-of-life care than Medicare-reliant Veterans. This begs the question as to why. There are major organizational and financial dissimilarities between VA and Medicare. Financially, VA is a non-revenue generating system with salaried providers. In traditional Medicare, on the other hand, providers are paid more when they provide more services. Thus, Medicare providers have financial incentives to provide more care, even at the end-of-life, that VA providers do not face. Organizationally, VA is an integrated system that largely delivers care. Medicare is simply a payer of services and is a reimbursement mechanism for a diverse and non-integrated set of providers nationwide. VA has strong operational support for palliative care services, which may help circumvent unnecessary medical treatment at the end-of-life.

To investigate this, we evaluated the relationship between palliative care and medically intensive care using VA data only (palliative care data are not available in Medicare datasets). We examined whether facilities with high levels of palliative care penetration had higher-quality, less-intensive

end-of-life care. Our models found no significant relationship between palliative care and end-of-life cancer quality metrics. Thus, higher-intensity end-of-life care may be driven by financial incentives, which are present in fee-for-service Medicare but not in VA's integrated system.

Our results have important implications for the future of VA care. As congressional funding shifts VA into being less of a direct provider and more of a purchaser of care, Veterans facing end of life may experience more aggressive care than accepted quality indicators would recommend. Our study also adds to the substantial body of literature showing that across multiple metrics and health conditions, VA provides care that is of similar or higher quality than that provided by non-VA providers.

Our work indicates that care coordination will be increasingly important in order to avoid poor-quality care. Coordination efforts will be required of both VA and Medicare providers; in our cohort, the majority of Veterans received services from both systems rather than relying on one system or another for their care. To avoid putting VA-

reliant Veterans at risk of receiving lower-quality care in the private sector, VA should continue to develop formal coordination and quality monitoring programs to guard against purchasing overly intensive end-of-life care. VA should also work with the Centers for Medicare & Medicaid Services (CMS) to ensure CMS is aware of the need for their providers to also be informed of the care Veterans are receiving in VA. As Veterans receive more care through the private sector, it is imperative that providers in both systems be made aware of the care received in as close to real-time as possible, to avoid overuse of intensive services, poly-pharmacy problems, and duplication of services.

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Innovation Update

Using the PTSD Coach App in Primary Care

Eric Kuhn, PhD, VA National Center for PTSD and HSR&D Center for Innovation to Implementation, Palo Alto, California, and Kyle Possemato, PhD, VA Center for Integrated Healthcare, Syracuse, New York

Post-traumatic stress disorder (PTSD) is common in Veterans seen in VA primary care. However, evidence-based PTSD interventions appropriate for this setting are lacking. Therefore, primary care practitioners typically refer Veterans to specialty mental health care so they can receive evidence-based treatments. Unfortunately, many Veterans decline such referrals or fail to follow through on them, resulting in a care gap for these Veterans. Digital health technology could help address this unmet need. In 2011, VA's National Center for PTSD (NCPTSD) developed PTSD Coach, a self-management mobile app with content informed by evidence-based psychotherapies that offers psycho-education, symptom monitoring, coping skills, and links to social support and professional resources.¹ Since then, the PTSD Coach app has been downloaded 425,000 plus times in over 100 countries and has shown encouraging results in several studies.² Recognizing that added clinician support to such self-management programs can increase their utilization and effectiveness, we developed Clinician-Supported PTSD Coach (CS PTSD Coach). Tailored to the primary care setting, this intervention combines the PTSD Coach app with four 30-minute sessions (in-person or by phone) of clinician support delivered over eight weeks.³ Pilot data suggest that CS PTSD Coach leads to improvement in PTSD symptoms and increased acceptance of mental health care.⁴ Given this promise, our team of researchers from the VA Palo Alto's NCPTSD and HSR&D Center for Innovation to Implementation (Ci2i), along with VISN 2's Center for Integrated Healthcare, are conducting an HSR&D-funded, multi-site randomized controlled trial investigating the impact of CS PTSD Coach on PTSD severity and engagement in mental health care. To date, 113 participants have been randomized to either CS PTSD Coach or treatment as usual (i.e., primary care mental health integrated care). While outcomes are not yet available, this project has the potential to improve the quality of care for Veterans with PTSD presenting in VA primary care by establishing the effectiveness of an innovative and highly scalable PTSD intervention.

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VA's Maternity Care Coordinator Telephone Care Program: A Model for Coordinating VA Specialty Care in the Community

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The MISSION Act of 2018 and the preceding Access, Choice and Accountability Act of 2014 require that the Veterans Health Administration (VA), under pre-specified conditions, pay for Veterans to receive care from non-VA providers. While enhancing the range of care options available to Veterans, these new arrangements also present a multitude of challenges due to the complexity of coordinating Veterans' care needs across healthcare systems.¹

For women Veterans, however, the dual use of VA and non-VA healthcare is not new, nor is the need for coordinating their care across healthcare systems. As a numerical minority, gender-specific specialty services for women are often not available within VA.² In such cases, VA pays for women Veterans to receive this care from non-VA providers. A prime example is VA maternity care, a benefit that has been available since 1996, but is provided almost entirely by non-VA providers.³

Although pregnant Veterans receive their maternity care from non-VA providers, they continue to use VA providers for treatment of their mental and non-obstetric physical health conditions. In our care coordination needs assessment, we found that among 244 pregnant Veterans, 41 percent had pre-pregnancy chronic physical conditions and 34 percent experienced mental health problem(s).³ Therefore, concurrent use of VA and non-VA services is common among pregnant Veterans, and care coordination is critical for ensuring that pregnant Veterans get the time-sensitive care they need.

To address these coordination needs, VA established a national maternity care coordination policy in 2012, which requires that each pregnant Veteran using VA maternity benefits be assigned a maternity care coordinator (MCC). VA developed the MCC Telephone Care Program (MCC-TCP) to provide

support for MCCs in delivering effective care management for pregnant and post-partum Veterans using VA maternity care benefits.³

MCC-TCP consists of eight scheduled telephone calls with Veterans, covering 12 topics, as summarized in Figure 1 below. Some topics are covered with every Veteran, and others are covered only if appropriate for the Veteran's needs (e.g., smoking cessation). Some topics are covered once (at the pregnancy stage when they are appropriate), and others are repeated across calls. During all telephone calls, MCCs address questions related to VA maternity care benefits and coordination of care for chronic illnesses. Between scheduled telephone calls, the MCC is available to the Veteran as needed and makes additional (unscheduled) telephone calls to follow-up on problems identified during the scheduled calls. MCCs utilize checklists to guide each call, templates to document the calls, and electronic logs to track the calls and care coordination tasks.

To implement and spread MCC-TCP, we constructed a manual with checklists and sample scripts for each call, conducted live interactive training sessions to educate the MCCs on program components, and recorded a 10-session internet-based education series (available "on demand") covering foundational maternity care coordination knowledge (e.g., overview of testing during pregnancy). To assist MCCs in determining local variations in their VA's resources and processes related to maternity care, we provided MCCs with a "Resources and Processes Workbook."

We formatively evaluated MCC-TCP by tracking Veteran participation, as well as MCC perceptions captured through surveys, implementation meeting field notes, and MCC time logs. We used the results of the formative evaluation to make improvements to the

Key Points

- VA maternity care is almost entirely provided by non-VA providers and, as such, presents challenges to coordinating the care of pregnant Veterans across healthcare systems.
- VA's national maternity care coordination policy assigns a maternity care coordinator (MCC) to each pregnant Veteran.
- A new Telephone Care Program provides support to the MCCs and enhances the coordination of maternity care.

program. For example, based on feedback from the evaluations, we developed both the Resources and Processes Workbook and the foundational knowledge educational series; we also made extensive modifications to the call checklists, logs, and sample scripts.

The formative evaluation of barriers to implementation also revealed that the MCCs felt they lacked adequate time to coordinate pregnant Veterans' care optimally. Time logs showed that MCCs spent 150 minutes on average per pregnant Veteran. MCCs spent over one-third (38 percent) of this time making the phone calls (including leaving messages), while MCCs spent 23 percent of this time reviewing charts in preparation for calls, 27 percent documenting calls, and 12 percent performing other care coordination activities. Many MCCs delivered MCC-TCP while performing collateral clinical duties and reported they had inadequate time for their MCC role. MCCs also reported frustration with the amount of time they spent attempting to reach Veterans by phone, sometimes unsuccessfully. During our implementation

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evaluation period, MCCs completed 60 percent of attempted scheduled calls. For the remaining scheduled calls, MCCs either could not reach the Veteran or the Veteran was not available. MCCs generally make multiple attempts to reach Veterans for each scheduled call. Despite these challenges, MCCs reported that they perceived MCC-TCP as being highly valuable for coordinating pregnant Veterans' care.

MCC-TCP provides a model for coordinating care for all Veterans, male and female, who are simultaneously receiving VA and non-VA care. Development and implementation of MCC-TCP offers important insights relevant

to future endeavors. First, care coordination can be time-intensive, and caution should be taken to provide coordinators with adequate time to perform this work. The efficiency, and potentially the effectiveness, of these coordination tasks would likely be greatly enhanced with investments in developing and testing asynchronous communication technologies, such as mobile health applications, rather than continuing to rely exclusively on telephone calls. Finally, it is hard to overstate the extent of variations across VA sites in the resources and processes relevant to providing and coordinating care. The extent to which care coordination programs can be flexible to accommodate these variations is key

to their implementation and sustainability.

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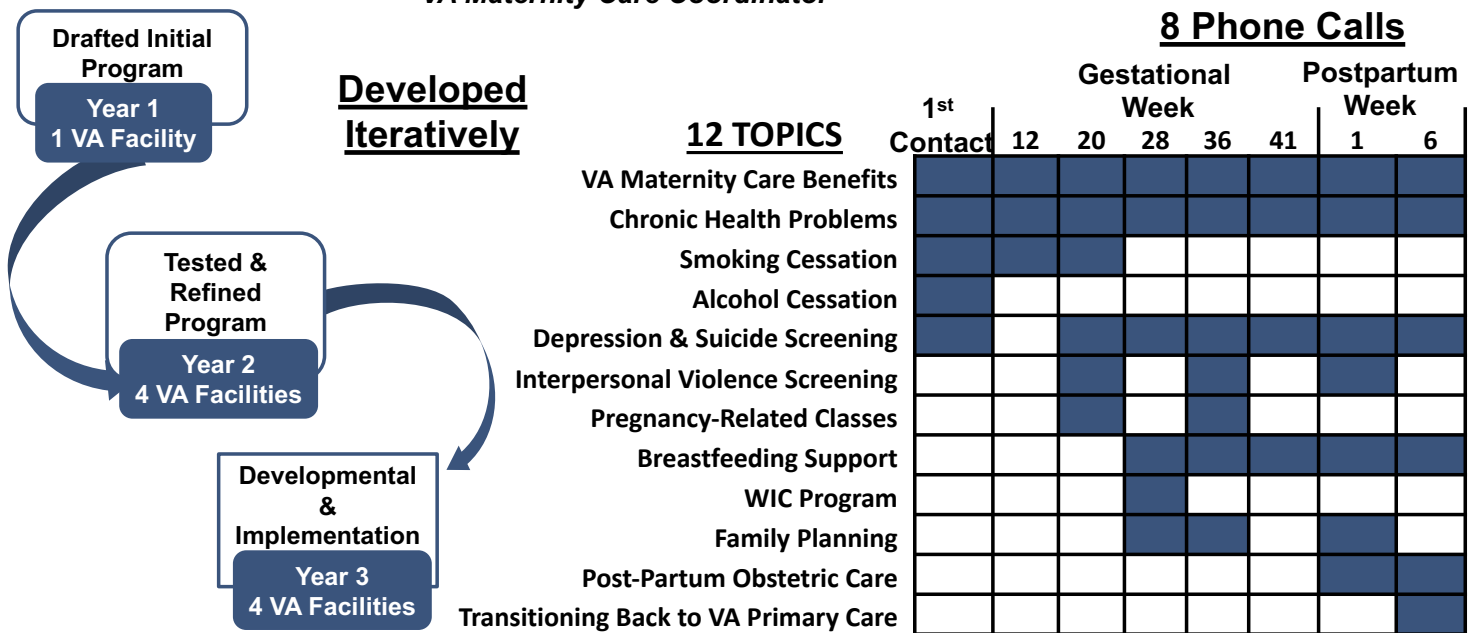
Figure 1: VA Maternity Care Coordinator Telephone Care Program

VA MATERNITY CARE COORDINATOR TELEPHONE CARE PROGRAM

"I love connecting with these women and providing them the resources they need. They are truly appreciative of all we are able to do for them."



VA Maternity Care Coordinator



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ensure excellent care. Each specialty will need to determine what services they can provide based upon the expertise and capacity available and what should be bought. One-time procedures may be more easily outsourced (e.g., screening colonoscopy), but not ones that require ongoing relationships with a physician (e.g., colon cancer surveillance for inflammatory bowel disease). A few provisions, such as mobile deployment teams to help facilities struggling with access, will be piloted and evaluated to ensure they are practical and effective. Coverage of “walk-in” visits to eligible non-VA clinics or Federally Qualified Health Clinics will offer improved access, especially for low acuity conditions, but two-way sharing of medical records will be critical to ensure continuity of care.

Quality of care will be an ongoing challenge. For many conditions and specialties, it is difficult enough to measure quality within a healthcare

system, but even harder to assess care provided by another system. Robust sharing through electronic health record portals will be required not only to prevent information loss and adverse events, but also to include quality metrics as part of the ongoing relationship.

Ultimately, specialty medicine services will need to address make or buy decisions locally, but with guidance from national expertise, partnered evaluations, and investigator-initiated research. Leveraging the talent and commitment of VHA clinical leaders, administrators, and researchers will not only improve access to care for Veterans, but move VHA along the path to becoming a Learning Healthcare System.

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