COMMENTARY

Age-Friendly Health Systems and Meeting the Principles of High Reliability Organizations in the VHA

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Background: The Veterans Health Administration (VHA) is the largest integrated health care system in the US, providing care to more than 9 million enrolled veterans. In February 2019, the VHA identified key actionable steps to become a high reliability organization (HRO), transforming how employees think about patient safety and care quality. The VHA is also working toward becoming the largest age-friendly health system in the US to be recognized by the Institute for Healthcare Improvement for its commitment to providing care guided by the 4Ms (what matters, medication, mentation, and mobility), causing no harm, and aligning care with what matters to older veterans.
Observations: In this article, we describe how the Age-Friendly Health Systems (AFHS) movement supports the culture shift observed in HROs. AFHS use the 4Ms as a framework to be implemented in every care setting. The 4Ms are used in conjunction with the 3 pillars (leadership commitment, culture of safety, and continuous process improvement) and 5 principles (sensitivity to operations, reluctance to simplify, preoccupation with failure, deference to clinical expertise, and commitment to resilience) that guide an HRO. We also share an HRO case study that is representative of many Community Living Centers involved in AFHS.
Conclusions: AFHS empower VHA teams to honor veterans' care preferences and values, supporting their independence, dignity, and quality of life across care settings. The adoption of AFHS brings evidence-based practices to the point of care by addressing common pitfalls in the care of older adults, drawing attention to, and calling for action on inappropriate medication use, physical inactivity, and assessment of the vulnerable brain. The 4Ms also serve as a framework to continuously improve care and cause zero harm, reinforcing HRO pillars and principles across the VHA and ensuring that older adults reliably receive the evidence-based, high-quality care they deserve.

The Veterans Health Administration (VHA) is the largest integrated health care system in the US, providing care to more than 9 million enrolled veterans at 1298 facilities.[1] In February 2019, the VHA identified key action steps to become a high reliability organization (HRO), transforming how employees think about patient safety and care quality.[2] The VHA is also working toward becoming the largest age-friendly health system in the US to be recognized by the Institute for Healthcare Improvement (IHI) for its commitment to providing care guided by the 4Ms (what matters, medication, mentation, and mobility), causing no harm, and aligning care with what matters to older veterans.[3] In this article, we describe how the Age-Friendly Health Systems (AFHS) movement supports the culture shift observed in HROs.

AGE-FRIENDLY VETERAN CARE

By 2060, the US population of adults aged ≥ 65 years is projected to increase to about 95 million.[3] In the VHA, nearly half of veteran enrollees are aged ≥ 65 years, necessitating evidence-based models of care, such as the 4Ms, to meet their complex care needs.[3] Historically, the VHA has been a leader in caring for older adults, recognizing the value of age-friendly care for veterans.[4] In 1975, the VHA established the Geriatric Research, Education, and Clinical Centers (GRECCs) to serve as catalysts for developing, implementing, and refining enduring models of geriatric care.[4] For 5 decades, GRECCs have driven innovations related to the 4Ms.

The VHA is well positioned to be a leader in the AFHS movement, building on decades of GRECC innovations and geriatric programs that align with the 4Ms and providing specialized geriatric training for health care professionals to expand age-friendly care to new settings and health systems.[4] The AFHS movement organizes the 4Ms into a simple framework for front-line staff, and the VHA has recently begun tracking 4Ms care in the electronic health record (EHR) to facilitate evaluation and continuous improvement.

AFHS use the 4Ms as a framework to be implemented in every care setting, from the emergency department to inpatient units, outpatient settings, and postacute and

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TABLE VHA AFHS Implementation Strategies to Support High Reliability Organization Principles[3,9]

Principles	Implementation strategies
Leadership commitment: supporting implementation, leadership development, and collaboration	• Building a coalition of leaders across all levels of the organization • Creating a national steering committee for bottom-up and top-down communication • Facilitating mentorship and peer-to-peer coaching
Fostering a culture of safety	• Building trust and accountability by ensuring staff feel comfortable reporting adverse events and near misses • Continuously identifying opportunities for improvement
Developing process for tracking data for continuous learning and quality improvement	• Reviewing data or conducting chart reviews to identify gaps in 4Ms care • Creating an electronic health record template for standardized 4Ms documentation • Building a national dashboard to support frontline quality improvement efforts
Providing ongoing guidance and learning opportunities to support implementation	• Leading a national action community and facilitating group coaching calls • Developing staff education materials • Offering patient and caregiver educational resources
Implementing and sustaining interventions to monitor and learn from safety and reliability outcomes	• Reinforcing patient-centered care by assessing and acting on what matters, including shared decision making regarding care priorities and goals, discussing what matters to each veteran with team members, and documenting the information in the electronic health record • Facilitating interdisciplinary team efforts and shared responsibility to assess and act on the 4Ms • Encouraging veteran, family, and caregiver feedback and buy-in • Providing resources on change management and communication

Abbreviations: AFHS, Age-Friendly Health Systems; VHA, Veterans Health Administration; 4Ms, what matters, medication, mentation, and mobility.

long-term care. By assessing and acting on each M and practicing the 4Ms collectively, all members of the care team work to improve health outcomes and prevent avoidable harm.[5]

The 4Ms

What matters, is the driver of this person-centered approach. Any member of the care team may initiate a what matters conversation with the older adult to understand their personal values, health goals, and care preferences. When compared with usual care, care aligned with the older adult's health priorities has been shown to decrease the use of high-risk medications and reduce treatment burden.[6] The VHA has adopted Whole Health principles of care and the Patient Priorities Care approach to identify and support what matters to veterans.[7,8]

Addressing polypharmacy and identifying and deprescribing potentially inappropriate medications are essential in preventing adverse drug events, drug-drug interactions, and medication nonadherence.[9] In the VHA, VIONE (Vital, Important, Optional, Not indicated, Every medication has an indication) is a rapidly expanding medication deprescribing program that exemplifies HRO principles.[9] VIONE provides medication management that supports shared decision making, reducing risk and improving patient safety and quality of life.[9] As of June 2023, > 600,000 unique veterans have benefited from VIONE, with an average of 2.2 medications deprescribed per patient with an annual cost avoidance of > $100 million.[10]

Assessing and acting on mentation includes preventing, identifying, and managing depression and dementia in outpatient settings and delirium in hospital and long-term care settings.[5] There are many tools and clinical reminders available in the EHR so that interdisciplinary teams can document changes to mentation and identify opportunities for continuous improvement.

Closely aligned with mentation is mobility, with evidence suggesting that regular physical activity reduces the risk of falls (preventing associated complications), maintains physical functioning, and lowers the risk of cognitive impairment and depression.[5] Ensuring early, frequent, and safe mobility helps patients achieve better health outcomes and prevent injury.[5] Mobility programs within the VHA include the STRIDE program for the inpatient setting and Gerofit for outpatient settings.[11,12]

HRO Principles

An HRO is a complex environment of care that experiences fewer than anticipated accidents or adverse events by (1) establishing trust among leaders and staff by balancing individual accountability with systems thinking; (2) empowering staff to lead continuous process improvements; and (3) creating an environment where employees feel safe to report harm or near misses, focusing on the reasons errors occur.[13] The work of AFHS incorporates HRO principles with an emphasis on 3 elements. First, it involves interactive systems and processes needed to support 4Ms care across care settings. Second, AFHS acknowledge the complexity of age-friendly work and deference to the expertise of interdisciplinary team members. Finally, AFHS are committed to resilience by overcoming failures and challenges to implementation and long-term sustainment as a standard of practice.

CASE STUDY

The names and details in this case have been modified to protect patient privacy. It is representative of many Community Living Centers (CLCs) involved in AFHS that work to create a safe, person-centered environment for veterans.

In a CLC team workroom, 2 nurses were discussing a long-term care resident. The nurses approached the attending physician and explained that they were worried about Sgt Johnson, who seemed depressed and sometimes combative. They had noticed a change in his behavior when they helped him clean up after an episode of incontinence and were concerned that he would try to get out of bed on his own and fall. The attending physician thanked them for sharing their concerns. Sgt Johnson was a retired Army veteran who had a long, decorated military career. His chronic health conditions had led to muscle weakness, and he fell and broke a hip before this admission. He had an uneventful hip replacement but was showing signs of depression due to his limited mobility, loss of independence, and inability to live at home without additional support.

The attending physician knocked on the door of his room, sat down next to the bed, and asked, "How are you feeling today?" Sgt Johnson tersely replied, "About the same." The physician asked, "Sgt Johnson, what matters most to you related to your recovery? What is important to you?" Sgt Johnson responded, "Feeling like a man!" The doctor replied, "So what makes you feel 'not like a man'?" The Sgt replied, "Having to be cleaned up by the nurses and not being able to use the toilet on my own." The physician surmised that his decline in physical functioning had a connection to his worsening depression and combativeness and said to the Sgt, "Let's get the team together and work out a plan to get you strong enough to use a bedside commode by yourself. Let's make that the first goal in our plan to get you back to using the toilet independently. Can you work with us on that?" He smiled and said, "Sir, yes Sir!"

At the weekly interdisciplinary team meeting, the team discussed Sgt Johnson's wishes and the nurses' safety concerns. The physician reported to the team what mattered to the veteran. The nurses arranged for a bedside commode and supplies to be placed in his room, encouraged and assisted him, and provided a privacy screen. The physical therapist continued to support his mobility needs, concentrating on transfers, small steps like standing and turning with a walker to get in position to use the bedside commode, and later the bathroom toilet. The psychologist addressed what matters to Sgt Johnson and his mentation, health goals, and coping strategies. The social worker provided support and counseling for the veteran and his family. The pharmacist checked his medications to be sure that none were affecting his gastrointestinal tract and his ability to move safely and do what matters to him. Knowing what mattered to Sgt Johnson was the driver of the interdisciplinary care plan to provide 4Ms care.

The team worked collaboratively with the veteran to develop and set attainable goals around toileting and regaining his dignity. This improved his overall recovery. As Sgt Johnson became more independent, his mood gradually improved and he began to participate in other activities and interact with other residents on the unit, and he did not experience any falls. By

addressing the 4Ms, the interdisciplinary team coordinated efforts to provide high-quality, person-centered care. They built trust with the veteran, shared accountability, and followed HRO principles to keep the veteran safe.

BECOMING AN AGE-FRIENDLY HRO

Becoming an HRO is a dynamic, ever-changing process to maintain high standards, improve care quality, and cause no harm. There are 3 pillars and 5 principles that guide an HRO. The pillars are critical areas of focus and include leadership commitment, culture of safety, and continuous process improvement.[14] The first of 5 HRO principles is sensitivity to operations. This is defined as an awareness of how processes and systems impact the entire organization, the downstream impact.[15] Focusing on the 4Ms helps develop the capability of front-line staff to provide high-quality care for older adults while ensuring that processes are in place to support the work. The 4Ms provide an efficient way to organize interdisciplinary team meetings, provide warm handoffs using Situation-Background-Assessment-Recommendation, and standardize documentation. Involvement in the AFHS movement improves communication, care quality, and patient and staff satisfaction to meet this HRO principle.[15]

The second HRO principle, reluctance to simplify, ensures that direct care staff and leaders delve further into issues to find solutions.[15] AFHS use the Plan-Do-Study-Act cycle to put the 4Ms into practice; this cycle helps teams test small increments of change, study their performance, and act to ensure that all 4Ms are being practiced as a set. AFHS teams are encouraged to review at least 3 months of data after implementation of the 4Ms, working to find solutions if there are gaps or issues identified.

The third principle, preoccupation with failure, refers to shared attentiveness—being prepared for the unexpected and learning from mistakes.[15] The entire AFHS team shares responsibility for providing 4Ms care, where staff are empowered to report any safety concerns or close calls. The fourth principle of deference to expertise includes listening to staff who have the most knowledge for the task at hand, which aligns with the collaborative interdisciplinary teamwork of age-friendly teams.[15]

The final HRO principle, commitment to resilience, includes continuous learning, interdisciplinary team training, and sharing of lessons learned.[15] Although IHI offers 2 levels of AFHS recognition, teams are continuously learning to improve and sustain care beyond level 2, Committed to Care Excellence recognition.[16]

The Table shows the VHA's AFHS implementation strategies and the HRO principles adapted from the Joint Commission's High Reliability Health Care Maturity Model and the IHI's Framework for Safe, Reliable, and Effective Care. The VHA is developing a national dashboard to capture age-friendly processes and health outcome measures that address patient safety and care quality.

CONCLUSIONS

AFHS empowers VHA teams to honor veterans' care preferences and values, supporting their independence, dignity, and quality of life across care settings. The adoption of AFHS brings evidence-based practices to the point of care by addressing common pitfalls in the care of older adults, drawing attention to, and calling for action on inappropriate medication use, physical inactivity, and assessment of the vulnerable brain. The 4Ms also serve as a framework to continuously improve care and cause zero harm, reinforcing HRO pillars and principles across the VHA, and ensuring that older adults reliably receive the evidence-based, high-quality care they deserve.

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prescribing information for specific drugs or drug combinations—including indications, contraindications, warnings, and adverse effects—before administering pharmacologic therapy to patients.

Ethics and consent

The names and details in this case have been modified to protect patient privacy.

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