

U.S. Department of Veterans Affairs: Aging Veterans Health Policy Model

HSR&D investigators, working with VHA policy and operations groups, and National Institute on Aging (NIA) investigators, combined VHA data on enrolled veteran demographics and health care use with similar data from the NLTCs and other federal survey to create a LTC projection model, validate the projections prospectively with data from CMS on nursing home use, and coordinate data collection with NIA in order to update the model for all veterans, both enrolled and non-enrolled.

Lead Agency:

U.S. Department of Veterans Affairs (VA),

Agency Mission:

"To care for him who shall have borne the battle and for his widow and his orphan."

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General Description:

Aging Veterans Health Policy Model

The VA Aging Policy Model has been a collaboration between VA's Health Services Research and Development Service (HSR&D), the Assistant Deputy Under Secretary for Health Policy and Planning, the VA's Office of the Actuary, and the Office of Geriatrics and Extended Care; and investigators from the University of Pennsylvania, Duke University, and the University of Michigan. The group undertook to revise VA's original long term care planning model in 2003, using data from the National Long Term Care Survey (NLTCs) and other federal surveys, including linking the NLTCs to the VA enrollment file. These investigators then used Center for Medicare and Medicaid Services (CMS) data on national nursing home (NH) use (the "Minimum Data Set" or MDS), matched with VHA's enrollment file, to determine the actual number of veterans in NHs. Adjusting for methodologic differences, the LTC planning model accurately predicted total NH use among enrolled veterans. This was confirmed by using a subsequent round of the NLTCs (in 2004) to validate the projections based on the prior round.

These investigators combined all health care use by veterans in the NLTCs from CMS and VHA data files from 1994-2004, in order to estimate an updated model based on combined health care and LTC use in 1994-2002, with validation of use for 2003-2004.

Concurrently, these investigators used sophisticated regression techniques (CART) to map disability questions from the National Health Interview Survey to the US Census detailed survey, in order to create county-level estimates of the prevalence of A disability among veterans.

These investigators coordinated the 2004-2005 rounds of the VHA Survey Of Enrollees (SOE) and the NLTCs in order to a) validate the SOE, b) extend enrolled veteran disability estimates to the Veterans Integrated Service Network (VISN) and market levels, and c) to comprehensively survey all veterans, to determine differences in disability between enrolled and non-enrolled veterans, and the role of enrollment in altering those differences. This coordination involved using same functional status question set in both surveys, and altering the NLTCs screening procedure so that every participant received the screen in 2004, and every participant was queried on veteran status. For the 3,727 veterans in the 2004 survey, it would have cost \$5.6 M for VHA to have replicated the direct data collection, using per capita survey costs for the NLTCs. The modifications to the NLTCs provide the first comprehensive examination of functional and cognitive changes in an aging veteran population, how those changes segregate among enrollees and non-enrolled veterans, and the change over time in disability levels among the two groups. In contrast to the conventional finding of declining disability, which is true for all veterans, among enrolled veterans disability prevalence increased between 1999 and 2004, with relatively more disabled veterans continuing to enroll in VHA through 2004.

Future work includes validating the county-level disability projections, finishing updating the LTC projection model using the combined 2004 data, extending the projection validation to 2007 NH data, and re-surveying the NLTCs panel to determine continued enrollment and disability trends.

This research is exceptional in its breadth of topic, data, and participants over time. Investigators from outside and within VA worked with VA research, operations, and policy staff to leverage a variety of Federal data resources from the Census, the National Center for Health Statistics, VHA, and NIA to create a long term care planning model for both institutional and home and community based care in 2003, using data from 1999 and 2000 surveys, and linking the NIA survey directly to VHA data. This same group then coordinated the 2004/2005 rounds of VHA and NIA surveys in order to correct data gaps found in the first model, as well as to comprehensively characterize the entire veteran population, not just those who are enrolled in VHA. This process provided a test of the accuracy of the VHA survey of enrollees, finding that the VHA methodology resulted in a significant undercount of high-level impairments relative to the direct interviews of the NLTCs. By comprehensively surveying the entire veteran population, from a panel of male Medicare beneficiaries surveyed in 1999 and again in 2004, the study demonstrated a strong trend of increasing disability among enrolled veterans that continued to be driven by more disabled new enrollees in every age group > 65 years of age. This coordinated survey found VHA with prevalences of functional disability and cognitive impairment from 1.5-2 times those found in the general veteran population, depending upon region, with significant regional variation in the concentration of disability and impairment. The

investigators then used data from CMS to identify every veteran in a NH in 2003 and 2004, confirming the accuracy of the model's NH projections.

The new data are being used to update the current long term care model, and improve its precision in projecting specific home and community care services at a regional level. Future developments include embedding the VHA long term care demand model within the general US long term care supply, in order to incorporate enrollment decisions of disabled, aged veterans in VHA.

This work has demonstrated that VA is not experiencing the decline in functional disability found in the general population and the general veteran population, because of adverse enrollment: a significant exception to prior planning assumptions, and an exception to the major finding in aging demography of the past 30 years. The earlier model was used to determine the target for VHA's supply of home and community based services, resulting in a planned tripling of such services for aged veterans. The updated model will help target those investments to regions with greater demand, and distinguish the portion of total demand met by VHA and other payors for home and community based care. Characterization of cognitive and functional differences between the general elderly population that uses long term care and those of enrolled veterans suggests that current VHA programs support veterans with greater levels of disability in the community than their non-veteran counterparts. Those comparisons also suggest the need for more creative programs to continue transitioning institutionalized veterans to supportive community settings.

Excellence: ***What makes this project exceptional?***

Working across agencies and groups

Significance: ***How is this research relevant to older person, populations and/or an aging society?***

Demonstrated increased needs for home and community-based care (HCBC) services, and effectiveness of current services

Effectiveness: ***What is the impact and/or application of this research to older persons?***

Resulted in tripling of HCBC services provided by VHA in setting to reliance targets.

Innovativeness: ***Why is this research exciting or newsworthy?***

Overturms conventional assumptions about future needs, puts VA on a realistic planning path and highlights opportunities to leverage resources to areas of greatest need (both programmatically and geographically).