SUMMARY

INNOVATIVE APPROACHES AT GULF WAR VETERAN CLINICAL PROGRAMS

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Study Introduction. Gulf War veterans are important new users of VA services with unique medical problems. This project was designed to test innovative approaches with Gulf War veteran clinical programs at two large VA medical centers (in VISN 20, Portland VAMC and Puget Sound VAMC). These clinical programs, which offered primary care and case management services within an interdisciplinary primary care clinic, were tailored to meet the medical problems reported by some Gulf War veterans. The desired outcome was to correct problems in veteran's satisfaction with VA services as reported in previous studies.

Objectives.

- 1. Assess and describe sources of dissatisfaction among Gulf War veterans who report problems with VA services they have received.
- 2. Examine whether satisfaction with VA services among Gulf War veterans is associated with demographic characteristics and levels of medical comorbidity and physical and psychological functioning.
- 3. Compare patient satisfaction, and physical and psychological functioning in Gulf War veterans who receive care from targeted clinical programs versus Gulf War veterans who receive care from other clinical sites in the two VA medical centers.
- 4. Evaluate the impact of carefully designed outpatient clinical programs on mean levels of physical and psychological functioning and satisfaction with VA care using selected Gulf War veterans receiving care at the two urban VA medical centers.
- 5. Compare utilization of VA clinical services between Gulf War veterans in the targeted clinical program versus those who receive conventional VA care.
- 6. Evaluate the operating costs of the targeted clinical programs.

Methods. The study design included two components. Component 1 was a prospective cohort study of all Gulf War veterans who received any VA services at either of the two participating medical centers during a twelve month period prior to implementation of the targeted clinical programs. Cohorts at each center (Portland and Puget Sound) were assessed at three time points during the course of the project (at months 4, 14, and 21). The targeted clinical programs for Gulf War veterans were implemented at month 6, following the first data collection. The members of the cohort were sub-divided into two groups: patients who received services in the new targeted clinical programs (special care) and those who did not receive services from the new programs (customary care).

The second component of the study compared <u>all</u> Gulf War veterans who used the new clinics to <u>all</u> Gulf War veterans who did not use the new clinics. Thus, Component 2 examined both patients who had used VA services prior to program implementation and

patients who began using VA services after implementation. All of the members of the cohort used for Component 1 were included in Component 2. Essentially, Component 2 examined a larger number of patients than were enrolled in the cohort. As for Component 1, data collection for Component 2 was conducted at months 4, 14 and 21. The additional patients used in Component 2 were identified from patient logs maintained by the clinics at both sites. Because the new users of VA services were not identified prior to program implementation, baseline data were not collected for them. However, questionnaire data (including verification of SW Asian service) on these veterans were collected at months 14 and 21.

Patient data was surveyed using standardized questionnaires including the SF-36V, a comorbidity index previously developed in the VA, and the VA National Ambulatory Care Customer Satisfaction Survey. Cost and utilization data was collected using VISTA and DSS sources and the facilities' cost data report.

Results. From the VISTA files for FY1998, 622 patients were identified at the Portland VAMC who had received clinical services, had Gulf War as VA period of service, and had Gulf War theater or combat service confirmed by DoD. This group comprised the initial Portland patient sample.

For the Puget Sound site, the VISTA database of patients receiving services in FY1998 included 1729 patients who had Gulf War combat or theater service verified by DOD records. Response rates were good for the mailed questionnaires in the three time periods.

Patients returning questionnaires were representative of the larger population of VA patients at the two sites. Demographic characteristics of patients differed between the Portland and Puget Sound facilities, and there also were differences between the clinic and control populations at each site. Gulf War veterans receiving care at these sites tended to be under 40 years of age, male, Caucasian, and to have education beyond high school. Puget Sound patients tended to be slightly older, more likely to be non-Caucasian, and less likely to be employed full-time. Portland patients receiving care in the Gulf War clinic were more likely than controls to be married and less likely to have education beyond high school. Seattle patients from the Gulf War clinic were less likely to be married and less likely to be employed full-time than the control group patients. Dissatisfaction with the VA compensation and pension (C&P) process among veterans who had applied was widespread.

For both the clinic and controls, Portland patients tended to report reduced health status, particularly for the vitality and general health perception scales from the SF36V. At both times 1 and time 2, clinic group respondents did not have significantly different health status scores than control respondents. At time 3, mean health status scores were higher in clinic respondents for all the SF36V scales except the pain and mental health scales. These differences were greatest for the physical functioning, social functioning, and role-physical scales but did not reach statistical significance. More than half of participating Gulf War veterans reported the same four types of health problems at both facilities.

Portland Gulf War clinic patients had similar or slightly lower utilization and costs than a non-random sample of veterans seen in other VA clinics. At Puget Sound clinics in Seattle and American Lake, Gulf War clinic patients had significantly and consistently

higher utilization and costs when compared with a non-random sample of non-Gulf War clinic patients.

Most veterans reported that they would not use VA facility if free care was available closer to home, which would be more convenient for their work and schooling schedule. Veterans also reported that Prescriptions wait times too long. Finally, more than half of veterans who said they had needed medical help or advice right away in the past year felt that their problem should have been handled sooner.

Conclusions.

- This study provides insight into the clinical status, health care experiences, and satisfaction of Gulf War veterans at two large VA medical centers.
- The Puget Sound Gulf War Veterans' clinical approach was that aggressive
 intervention should encompass a comprehensive, integrated treatment strategy. Such
 interventions involve higher initial costs, which may be offset by decrements in
 management costs and diminished total expenditures resulting from decreased
 disability and enhanced function over time.
- The two clinical care programs based on different care models attracted distinctly different patient populations. Thus, a mental health case management model at Puget Sound program attracted veterans with significant psychological distress. A primary care delivery model at Portland attracted veterans with less severe health status impairments. Both programs served populations that were substantially impaired when compared to community norms of patients of a similar age range.
- Portland Gulf War clinic patients had higher satisfaction with their VA medical care than control patients. This suggests that dedicated Gulf War veterans' clinics can improve perceptions of VA care for this group. Further studies are required to determine how durable and generalizable this finding is.
- The Puget Sound mental-health case management model required relatively greater medical care resources compared to the Portland primary care delivery model. Thus, an integrated primary care model can enhance efficiency in the VA system.

Exportability To Other VAMCs

This study suggests that clinics dedicated to the care of Gulf War veterans can improve perceptions of VA care among this group. Moreover, the study identified a clear need for such programs at other VAMCs that can respond to the health care needs those veterans with substantial impairment. Both mental health case management model and primary care delivery model were useful for helping this group, and therefore could be applicable at other sites. The Portland primary care model clinic had slightly lower utilization and costs of care compared to controls, suggesting that an integrated primary care model can enhance efficiency in the VA system.

The detailed Portland & Puget Sound Demonstration Project Report is available on-line. For additional information contact Dr. David H. Hickam, MD, M.P.H. at VAMC Portland 3710 SW U.S. Veteran's Road, Portland, Oregon 97207.