Gender Differences in Performance Measures
VHA 2008–2011

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EXECUTIVE SUMMARY
Recent studies of gender disparity in VHA care show that VHA outperforms private and public sector health care in most quality performance measures for men and women. However, gender disparities persist, both within VHA and private sector health care, and more work is needed to reduce and eliminate performance gaps at all sites of VHA care nationwide. As a recognized leader in provision of high-quality health care, VA has stepped up to address gender disparity, a problem that affects health care nationwide.

In FY 2008, VA launched a concerted Women’s Health improvement initiative, focusing providers’ attention on gender disparity data. In FY 2011, VA included Gender Disparity Improvement as a performance measure in the Network Director Performance Plans, which concentrated management attention on systems to continuously reduce gender disparity. During 2008–2011, VA saw significant improvement in gender disparity for many measures, including Hypertension in Ischemic Heart Disease, LDL <100 in Ischemic Heart Disease, A1C Done in Diabetes, LDL <100 in Diabetes, Retinal Exam in Diabetes, LDL measured in Diabetes, Nephropathy Screening in Diabetes, Pneumococcal Vaccine, Influenza Vaccine, Colorectal Cancer Screening, Depression Screening, PTSD Screening, and Alcohol Misuse Screening. However, gender gaps persist for the following measures: LDL <100 in Ischemic Heart Disease, HbA1C >9 or not done in Diabetes, LDL <100 in Diabetes, and Influenza Vaccine.

This report also reviews outcomes of the 2011 Network Director’s Performance Plan requirement that each VISN choose one of six performance measures and initiate a network-wide improvement plan. Only some VISNs were able to improve gender disparity in performance for their chosen measures. The report analyzes best practices among those VISNs that were successful, finding that these VISNs consistently included patient engagement and education, support and involvement of leadership, collaboration between programs (women’s health, primary care, and health promotion disease prevention) and systems redesign.
BACKGROUND
The number of women Veterans using VHA services has doubled in the past decade (159,630 in FY 2000 to 292,921 in FY 2009) requiring VHA to ramp up services for women Veterans and to assure that women Veterans receive equitable, high quality comprehensive health care.

The 2008 Report of the Under Secretary for Health Workgroup on Provision of Primary Care to Women Veterans found that only 33% of VA health care facilities offered fully comprehensive primary care to women Veterans. It also noted that primary care delivery to women was fragmented over multiple sites and multiple providers and that there were significant differences in quality outcomes on gender-neutral measures in women compared to men. In addition, the workgroup found insufficient numbers of clinicians in VHA with specific training and experience in women’s health issues. One recommendation was to achieve gender equity in provision of clinical care.

Given the growth in women Veterans using the VHA and gaps in care, there is a need to provide high quality, equitable care and to ramp up services and facilities to meet the unique needs of women Veterans. There is also a need to measure the quality of care by gender.

In an effort to measure the quality of care provided to women Veterans, since 2006, the VA office of Informatics & Analytics (formerly Quality and Performance) has analyzed all External Peer Review Data (EPRP) by gender and published the quarterly Gender Report on their website. Since 2006 a number of gaps have been identified in the quality of care for men and women, including disparities in measures for screening, prevention, and chronic disease management. These gender differences are not unique to VA, and some have been documented in care received in non-VA settings. In fact, performance on Healthcare Effectiveness Data and Information Set (HEDIS) measures for both men and women in VA exceeds the private sector for many measures (Figure 1).

2 Report of the Under Secretary for Health Workgroup on Provision of Primary Care to Women Veterans. Women Veterans Health Strategic Health Care Group, Office of Public Health and Environmental Hazards, Veterans Health Administration, Dept. of Veterans Affairs.
3 Keyhani S, Scobie J, Hebert P, McLaughlin MA. Sex Differences Gender Disparities in Blood Pressure Control and Cardiovascular Care in a National Sample of Ambulatory Care Visits. Hypertension. 2008; 51: 1149-1155. Published online before print February 7, 2008.
VHA RESPONSE TO GAPS IN QUALITY OF CARE
Since 2008, VHA has implemented national policy to reduce and eliminate gaps in the quality of care for women Veterans. Comprehensive primary care (defined as complete primary care from one trained, proficient and interested primary care provider that includes care for acute and chronic illness as well as gender specific care) has been implemented throughout the VHA health care system. Primary care of women has been measured using the Women’s Assessment Tool for Comprehensive Health (WATCH) as a self assessment at all VHA facilities, accompanied by site visits to women’s health programs at 21
facilities in FY 2011. One hundred forty-four full-time Women Veteran Program Managers have been installed in medical centers across the VHA.

Online reports are published and updated quarterly that compare clinical measures for males and females and highlight gaps in performance so that facility and Network leaders can monitor and improve performance.

Special analyses of both clinical quality and patient satisfaction data for males and females are conducted that examine the effects of age, health status, mental health, and rural/urban settings (factors which, along with gender, may create barriers to receiving appropriate health care services).

Additionally, requirements to promote equitable care and demonstrate improvement in clinical measures for women Veterans have been included in the Network Director Performance Plan (Executive Career Field [ECF] Plan) for FY 2011 and FY 2012.

**National Trends 2008–2011**

Clinical quality performance measures reviewed in this report include the following:

**Ischemic Heart Disease (IHD)**

- HTN:BP <140/90
- IHD:LDL measured
- IHD:LDL <100

**Diabetes Mellitus (DM)**

- DM:HBA1C done
- DM:HBA1C >9 or not done
- DM:LDL measured
- DM:LDL <100
- DM:BP <140/90
- DM: Retinal Exam
- DM: Nephropathy Screening
Prevention Measures

- Pneumococcal Pneumonia vaccine, over age 65
- BMI Body Mass Index (BMI) screening for obesity
- Colorectal Cancer Screening Colorectal cancer screening, aged 50 to 75
- Influenza Immunization Flu vaccine, ages 50–64
- Influenza Immunization 65+ Flu vaccine ages 65 and older

Tobacco Use

- Smoking Cessation Cessation medications recommended and discussed
- Smoking Advice Advice to quit
- Smoking Referral Offered referral to smoking cessation clinic

Behavioral Health

- Depression Depression screen
- PTSD Post traumatic stress disorder screen
- Alcohol Alcohol misuse screen

The following charts show national trends in gender disparities as measured by External Peer Review (EPRP data) from 2008–2011.

Fig. 2–HTN:BP <140/90

Proportion of men and women Veterans in EPRP samples who have a diagnosis of hypertension and most recent blood pressure recording less than 140/90 within each year.
Fig. 3–IHD: LDL measured

Proportion of men and women Veterans in EPRP samples with a diagnosis of acute myocardial infarction (AMI), coronary artery bypass graft surgery (CABG), percutaneous coronary intervention (PCI) (inpatient or outpatient), or with ischemic vascular disease (IVD) who have had an LDL cholesterol blood test performed in each year.

Fig. 4–IHD: LDL <100

Proportion of men and women Veterans in EPRP samples with a diagnosis of Ischemic Heart Disease (IHD) who have had an LDL cholesterol blood test performed and who had an LDL cholesterol <100 on the most recent test in each year.
Fig. 5–DM:HBA1C done

Proportion of men and women Veterans in EPRP samples with a diagnosis of Diabetes Mellitus (DM) who had an HbA1c blood test performed in each year.

Fig. 6–DM:HBA1C >9 or not done

Proportion of men and women Veterans in EPRP samples with a diagnosis of Diabetes Mellitus (DM) who had HbA1c result greater than 9 or did not have HbA1c performed in each year.
Fig. 7–DM: LDL measured

Proportion of men and women Veterans in EPRP samples with a diagnosis of Diabetes Mellitus (DM) who had an LDL cholesterol blood test performed in each year.

Fig. 8–DM: LDL <100

Proportion of men and women Veterans in EPRP samples with a diagnosis of Diabetes Mellitus (DM) who had an LDL cholesterol blood test performed and had LDL cholesterol less than 100 on the most recent test in each year.
Fig. 9–DM:BP <140/90

Proportion of men and women Veterans in EPRP samples with a diagnosis of Diabetes Mellitus (DM) who had a most recent blood pressure recording of <140/90 in each year.

Fig. 10–DM: Retinal Exam

Proportion of men and women Veterans in EPRP samples with a diagnosis of diabetes mellitus (DM) who had a retinal exam by an Eye Care Specialist, timely, as indicated by disease, in each year.
Fig. 11–DM: Nephropathy Screening

Proportion of men and women Veterans in EPRP samples with a diagnosis of diabetes mellitus (DM) who had a nephropathy screening test or documented evidence of nephropathy in each year.

Fig. 12–Pneumococcal Immunization >65

Proportion of men and women Veterans older than 65 in EPRP samples who received the pneumococcal immunization in each year.
Fig. 13–BMI

Proportion of men and women Veterans in EPRP samples who were screened for obesity in each year. Scores for the measure BMI-Screened for Obesity were not posted for FY 08 and FY 09.

Fig. 14–Colorectal Cancer Screening

Proportion of men and women in EPRP samples who received appropriate colorectal cancer screening in each year. Scores for the measure Colorectal Cancer Screening 50-75 were not posted for FY 08.
Fig. 15–Influenza Immunization 50–65

Proportion of men and women Veterans, aged 50-64, in EPRP samples who received influenza immunizations between August 1, 2008 and March 31, 2011 in accordance with defined VHA policy. Data for 2010 not reported.

Fig. 16–Influenza Immunization 65+

Proportion of men and women Veterans, aged 65 and older, in EPRP samples who received influenza immunizations between August 1, 2008 and March 31, 2011 in accordance with defined VHA policy. Data for 2010 not reported.
Fig. 17–Smoking Cessation

Proportion of men and women Veterans in EPRP samples using tobacco who were offered medication to assist with cessation within each year.

Fig. 18–Smoking Advice

Proportion of men and women Veterans in EPRP samples using tobacco who were provided with brief counseling within each year.
Fig. 19–Smoking Referral

Proportion of men and women Veterans in EPRP samples using tobacco who were offered a referral to a tobacco cessation specialty program to assist with cessation within each year.

Fig. 20–Depression

Proportion of men and women Veterans in EPRP samples screened annually for depression.
Fig. 21–PTSD

Proportion of men and women Veterans in EPRP samples screened annually for PTSD.

Fig. 22–Alcohol

Proportion of eligible men and women Veterans in EPRP samples screened annually for alcohol misuse.
The Gender Disparity Measure in the Network Director’s Performance Plan FY 2011
In FY 2011, a Gender Disparity measure was created to communicate the expectation that facilities and VISNs will work toward the elimination of gender-based disparities in care. Data on gender disparities measured in the Network Director’s Executive Career Field (ECF) Plan came from:

- Office of Quality and Performance (OQP) gender reports/EPRP data
  - The usual random sample of “established users” of the VHA system composed mostly of men, but with a small proportion of women (5%)
  - A special large augmented sample containing about 30,000 women that improves capacity to compare quality for men and women
  - When drilling down to facility level, the number of women remains small and caution is warranted
- Survey of Healthcare Experiences of Patients (SHEP) patient satisfaction data

Measures — Women’s Health Choices
Six measures with existing gender disparities were included. Each VISN was required to choose one of the following measures:

- Ischemic Heart Disease (IHD) LDL <100
- Diabetes Mellitus (DM) LDL <100
- HbA1C > 9 or not done (DM)
- Flu vaccine age 50–64
- Flu vaccine >65
- SHEP Communication about Medication

Reporting Structure
VISNs were first required to choose a measure and identify the existing gender disparity for that measure. Then they had to specify the target that would be used to gauge success. Next a VISN-wide process for performance improvement had to be developed and described. VISNs were requested to demonstrate a VISN-wide implementation process. VISNs were asked to show measureable improvement on their selected performance measure and to show the narrowing of the gender gap. If unable to show measureable improvement, VISNs were asked to provide a clear explanation for failure to meet their goal. VISN reporting was requested through quarterly milestones:

- Quarter 1 Develop plan in coordination with the WH program office
- Quarter 2 Communicate the plan within the VISN
- Quarter 3 Provide progress report
- Quarter 4 Provide outcomes

The VISN Directors were ultimately responsible for their chosen measure. Women’s health teams were tasked with providing input on the different components including:

- Selection of performance measure
- Goal development
- Process planning and implementation
- Working with Quality teams at each site
### Table 1

<table>
<thead>
<tr>
<th>ECF Measure</th>
<th>Number of VISNs That Chose Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>IHD LDL &lt; 100</td>
<td>7</td>
</tr>
<tr>
<td>DM LDL &lt; 100</td>
<td>7</td>
</tr>
<tr>
<td>HbA1C &gt; 9 or not done</td>
<td>3</td>
</tr>
<tr>
<td>Flu vaccine age 50–64</td>
<td>2</td>
</tr>
<tr>
<td>Flu vaccine &gt;65</td>
<td>0</td>
</tr>
<tr>
<td>SHEP Communication about medication</td>
<td>2</td>
</tr>
</tbody>
</table>

The majority of VISNs chose either IHD LDL <100 (7 VISNs) or DM LDL <100 (7 VISNs). Three VISNs chose the measure HbA1C>9 or not done, while two VISNs chose Flu Vaccine Ages 50–64. The final two VISNs chose SHEP Communication about Medication. No VISN chose the measure, Flu Vaccine >65.
Of the VISNs that chose the measure IHD18HN (LDL <100 for IHD), the majority saw an increase in gender disparity; only two VISNs lessened the gap from FY 2010 to FY 2011.
Fig. 25–2011 Gender Disparity for VISNs that chose DM:LDL <100

![2011 Gender Disparity for VISNs that chose DM: LDL <100](image)

Fig. 26–Change in Disparity 2010–2011 for VISNs that chose DM:LDL<100

Of the seven VISNs that chose DMG25H (LDL <100 in DM), the majority (six VISNs) decreased the gap from FY 2010 to FY 2011. One VISN experienced an increase in disparity from FY 2010 to FY 2011.
**Fig. 27–2011 Gender Disparity for VISNs that chose DM:HBA1C>9 or Not Done**

For the measure DMG23H (HBA1C >9 or not done), two of the three VISNs experienced an increase in gender disparity from FY 2010 to FY 2011. In contrast, VISN “C” experienced a lower score for women than men, creating a disparity in the opposite direction.

**Fig. 28–Change in Disparity 2010–2011 for VISNs that chose DM:HBA1C <9 or not done**
For the measure P22H (influenza ages 50–64) both VISNs that chose this measure succeeded in reducing the disparity from FY 2010 to FY 2011. One of the VISNs experienced a positive disparity of .77.
Table 2

<table>
<thead>
<tr>
<th>FY 2010 Inpatient SHEP Survey (October 2009 through September 2010)</th>
<th>Communication About Medication</th>
<th>Question 16. Before giving you any new medicine, how often did hospital staff tell you what the medicine was for?</th>
<th>Question 17. Before giving you any new medicine, how often did hospital staff describe possible side effects in a way you could understand?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Score</td>
<td>Score</td>
<td>Score</td>
</tr>
<tr>
<td>Network</td>
<td>Overall</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>National</td>
<td>78</td>
<td>78</td>
<td>71</td>
</tr>
<tr>
<td>A</td>
<td>75</td>
<td>75</td>
<td>69</td>
</tr>
<tr>
<td>B</td>
<td>84</td>
<td>84</td>
<td>73</td>
</tr>
</tbody>
</table>

Please note that results are presented for fewer than 30 respondents at a location, and these results should be used for informational and tracking purposes only. Results are weighted to reflect the numbers of patients at different locations and respondent characteristics (i.e., age, gender).

VHA Office of Quality and Performance (Office of Analytics and Business Intelligence)
Performance Management Patient Experiences Special Reports
For FY 2010, the gender disparity for the performance measure Communication about Medication for the first VISN was -6 and for the second VISN -11. The gap for Question 16 was +3 for the first VISN and +1 for the second. The disparity for Question 17 was -15 and -23. SHEP scores for FY 2011 are discussed in the Office of Analytics and Business Intelligence Report, Comparing the Care of Men and Women Veterans in the Department of Veterans Affairs, which is attached.

VISN BEST PRACTICES
VISN performance measures were tracked and evaluated based on improvement in performance and reduction in gender disparities. Best practices for each measure were selected through review of the ECF Plans for the VISNs showing the most improvement.

VISN with most improvement: Influenza immunizations ages 50–64
- Historical entry in clinical reminders captured vaccines given outside VA
- Multiple vaccine delivery systems offered Veterans choices
- PC Clinic appointments
- Walk-in Flu Vaccine Clinics
- Mobile van to rural areas
- Use of posters to emphasize importance of vaccinations
• PACT teamlets encouraged Veterans on pre-appointment phone calls, as well as in-person during visits.
• Collaborated with Health Promotion Disease Prevention (HPDP) Program

**VISN with most improvement: IHD LDL <100**
- Developed 100% panel report
- Worked closely with leadership
- Measures falling below OQP standards shared with Network Director/Chief Medical Officer/Health Care Systems Leadership
- WVPMs scrubbed list to ensure all diagnoses of IHD were accurate
- The Women’s Health Program, HPDP coordinators, and Primary Care worked in collaboration

**VISN with most improvement: DM LDL <100**
- Developed view alert for provider to prompt follow up and treatment of LDL
- Lab trailer designed to address treatment guidance for provider
- Provider education on measure
- Letters from Deputy CMO to all target diabetic women
- Engaged systems redesign
- VISTA/CPRS report formulated indicating:
  - When a female with diabetes was seen in clinic
  - Whether that patient had an LDL >100
  - Whether any action or treatment was performed
  - Which of those did not have any action performed (e.g., medication adjustment)

**VISN with most improvement: HBA1C >9 or Not Done**
- A progress note in CPRS with appropriate follow-up developed for each member of HBA1C >9 cohort
- Developed individualized care plan including one or more of the following:
  - Appointment with provider
  - Review and adjustment of medication as necessary
  - Referral to CCHT or focused clinic (endocrine, diabetic, etc.)
  - Referral to group or individual education
  - Use of diabetic care management protocol

**Communication about medications**
- Focus groups
- WVPMs visited women inpatients
- Women’s handout card/reminders were given to women inpatients to foster discussions
- Plan communicated:
  - VISN Executive Leadership Committee (ELC) discussion with all facilities present
  - Multiple discussions with VISN QA Chief and VISN Director
CONCLUSION
During 2008–2011 with increased reporting of gender disparities in Performance Measures in VHA at the national and local level, and further attention brought by a Gender Disparity Measure in the Network Directors Performance Plan, there have been significant improvements in gender disparity for many measures. Those that have improved include Hypertension in Ischemic Heart Disease, LDL < 100 in Ischemic Heart Disease, A1C Done in Diabetes, LDL < 100 in Diabetes, Retinal Exam in Diabetes, LDL measured in Diabetes, Nephropathy Screening in Diabetes, Pneumococcal Vaccine, Influenza Vaccine, Colorectal Cancer Screening, Depression Screening, PTSD Screening, and Alcohol Misuse Screening. Though these measures have improved, gender gaps still exist for the following measures: LDL < 100 in Ischemic Heart Disease, HbA1C >9 or not done in Diabetes, LDL < 100 in Diabetes, and Influenza Vaccine.

In FY 2011, the Network Director’s Performance Plan required VISNs to choose LDL <100 in Ischemic Heart Disease, LDL <100 in Diabetes, HBA1C >9 or not done, Flu vaccine, or SHEP communication about medication and initiate network-wide improvement plans. Despite this effort, only some of the VISNs were able to improve performance for their chosen measure, and of the four performance measures the national disparities improved only in DM LDL <100 and Flu vaccine. SHEP scores are discussed in the Office of Analytics and Business Intelligence report, *Comparing the Care of Men and Women Veterans in the Department of Veterans Affairs*.

Analysis of best practices among the VISNs who were successful in reducing their gender gaps showed a few processes that seemed to reliably lead to improvement. The most successful initiatives consistently included education, support and involvement of leadership, collaboration between programs (women’s health, primary care, and health promotion disease prevention) and systems redesign. Development of disease registries, use of the existing view alert and reminder systems, and required actions for patients falling outside of targets proved to be particularly useful. In all cases, success was dependent on a multidimensional intervention aimed at patients, providers, and systems of care.

Several important factors must be considered in analysis of the gender gap. First, EPRP sample sizes are small for some measures, making tracking difficult at the local level. Further augmenting the sample size for women Veterans, or moving to a 100-percent sample for Performance Measuring, may improve usefulness of the Gender Report at the facility and VISN level. Second, in spite of numerous process improvements, change on some measures will take time and may not have been evident in data within one fiscal year. Additionally, in FY 2012 VA replaced the LDL-C <100 measure with one that promoted the use of moderate dose statins, thereby no longer requiring adherence to the LDL-C cut point of 100.

**Flu Vaccine >65**
No VISNs chose this measure
In re-analysis of FY 2011 data, taking use of moderate dose statins into account, the Office of Analytics and Business Intelligence Report found that the gender disparity in the LDL measures will be reduced.

Overall improvement in the provision of comprehensive primary care to women Veterans, attention to reporting of all VHA data by gender, and the inclusion of a disparity measure in the Network Director’s Performance Plan have had an impact on gender disparities. Gender disparities in VHA care are improving, but some still persist. Continued attention to the provision of equitable high quality health care to women Veterans remains crucial. Additionally, research to improve understanding of the causes of gender disparity in VHA health care will help focus systems and process improvements to eliminate gender disparity.

REFERENCES


*Comparing the Care of Men and Women Veterans in the Department of Veterans Affairs, VA Office of Analytics and Business Intelligence*. Department of Veterans Affairs. Washington, DC. March 12, 2012.


VHA Office of Quality and Performance (Office of Analytics and Business Intelligence)—Performance Management Gender Reporting, October 6, 2011. [http://vaww.oqp.med.va.gov/programs/pm/pmGenderReporting.aspx](http://vaww.oqp.med.va.gov/programs/pm/pmGenderReporting.aspx)

VHA Office of Quality and Performance (Office of Analytics and Business Intelligence)—Performance Management Patient Experiences Special Reports