An Inventory of VHA Emergency Departments’ Resources and Processes for Caring for Women

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BACKGROUND: More women are using Veterans’ Health Administration (VHA) Emergency Departments (EDs), yet VHA ED capacities to meet the needs of women are unknown.

OBJECTIVE: We assessed VHA ED resources and processes for conditions specific to, or more common in, women Veterans.

DESIGN/SUBJECTS: Cross-sectional questionnaire of the census of VHA ED directors

MAIN MEASURES: Resources and processes in place for gynecologic, obstetric, sexual assault and mental health care, as well as patient privacy features, stratified by ED characteristics.

KEY RESULTS: All 120 VHA EDs completed the questionnaire. Approximately nine out of ten EDs reported having gynecologic examination tables within their EDs, 24/7 access to specula, and Gonorrhea/Chlamydia DNA probes. All EDs reported 24/7 access to pregnancy testing. Fewer than two-fifths of EDs reported having radiologist review of pelvic ultrasound images available 24/7; one-third reported having emergent consultations from gynecologists available 24/7. Written transfer policies specific to gynecologic and obstetric emergencies were reported as available in fewer than half of EDs. Most EDs reported having emergency contraception 24/7; however, only approximately half reported having Rho(D) Immunoglobulin available 24/7. Templated triage notes and standing orders relevant to gynecologic conditions were reported as uncommon. Consistent with VHA policy, most EDs reported obtaining care for victims of sexual assault by transferring them to another institution. Most EDs reported having some access to private medical and mental health rooms. Resources and processes were found to be more available in EDs with more encounters by women, more ED staffed beds, and that were located in more complex facilities in metropolitan areas.

CONCLUSIONS: Although most VHA EDs have resources and processes needed for delivering emergency care to women Veterans, some gaps exist. Studies in non-VA EDs are required for comparison. Creative solutions are needed to ensure that women presenting to VHA EDs receive efficient, timely, and consistently high-quality care.

KEY WORDS: veterans’ health; women’s health; emergency medicine; organization of care.

INTRODUCTION

The number of women Veterans using Veterans’ Health Administration (VHA) services has doubled over the past decade and is expected to continue growing. Concordantly, the number of women using VHA emergency departments (EDs) has also increased. In Fiscal Year (FY) 2010, women Veterans made nearly 102,000 VHA ED visits, which is 9% of all visits and a 3% increase over the prior year.1

Women Veterans may have different emergency care needs, and therefore require different resources and processes of care. Nearly 40% of women using VHA services are aged 45 or less and therefore may present with gynecologic or obstetric emergencies.2 Women VHA users also have higher rates of diagnosed mental illness compared to male VHA users, and may have a particular need for gender-sensitive and gender-appropriate mental health services in the context of their ED care.2 In addition, women are also more likely than men to be victims of sexual assault and present for medical attention after being assaulted.3 Further, if a woman sustained military-related sexual assault, as nearly one in four women who use VHA
services do, she may be especially sensitive to the need for physical privacy.

Although their numbers are growing, women are still a minority of VHA ED patients, and therefore women-specific ED services may be less available or more difficult to coordinate. Assessments of VHA capacity to deliver emergency care to women have been limited to a single study, conducted over 10 years ago, which focused solely on ED availability of women’s care specialists (e.g., gynecology). Therefore, as a foundation for VHA planning and potential quality improvement efforts, a comprehensive assessment of the resources and processes used by VHA EDs was needed. The VHA Offices of Women’s Health Services and Emergency Services cosponsored the conduct of a national inventory of emergency services for women (ESW). This paper reports on the ESW findings on resources and processes in place in VHA EDs for gynecologic, obstetric, sexual assault and mental health care, as well as privacy, and assesses for their differences by facility and ED characteristics. We hypothesized that smaller EDs and those with fewer encounters by women would have less access to female-specific equipment, supplies and medications. We further hypothesized that EDs in less complex facilities and non-metropolitan communities would have less access to gynecology consultations, female-specific laboratory and radiologic services, and be more likely to have written transfer policies in place.

**METHODS**

**Questionnaire Development**

In an iterative process, with a panel of experts in emergency medicine, gynecology, mental health, and health services research, we developed a list of VHA resources and processes that could potentially affect the quality of care delivered to women presenting to VHA EDs. Of these, we identified those about which ED directors would be likely to have first-hand knowledge. Table 1 shows the final list of topics and measures. In consultation with a survey expert, two investigators (KMC, LCZ) drafted preliminary questions for each topic. We re-engaged our panel of experts to review the candidate questions and revised them based on their comments. The draft instrument was then pre-tested with three emergency medicine boarded physicians who were not part of our panel and are, or have been, VHA ED directors. With this pre-testing, we assessed each question for its content appropriateness and feasibility, as well as clarity of question wording and response categories, revising as needed. The final questionnaire is available online (Appendix).

**Table 1. Survey Topics and Measures**

| Topics                                      | Measures                        |
|---------------------------------------------|---------------------------------|
| Equipment                                   | Gyn Exam Tables                 |
| (e.g., Number? Perceived sufficiency?)      | Light Sources                   |
| Supplies                                    | Regular Specula                 |
| (e.g., Available?                          | LXL Specula                     |
| If so, 24/7? Stocked in ED?                | S/XS Specula                    |
| ED? Not stocked in ED?                      | Lighted Specula                 |
| ED, time to arrival in ED?                  | GC/Chl probes                   |
| emergent consultation                       | Vaginitis probes                |
| availability, use of                       | Gynecological Exam Kit          |
| transfer policies and                      | Obstetric (Delivery) Kit        |
| expedited acceptance agreements            | XL Patient Gowns                |
| (e.g., Consultations available? If so,      |                                |
| 24/7?)                                      |                                |
| Patient transfer policies and agreements    |                                |
| (e.g., Transfer policies in place or being   |                                |
| drafted?                                    |                                |
| written expedited                         |                                |
| acceptance agreements in place?)           |                                |
| availability/use of                        |                                |
| standing orders/or                        |                                |
| order sets (e.g., currently in use? Planned?)|                                |
| Nurse triage notes                         |                                |
| (e.g., Templates available? If so, used     |                                |
| frequently/infrequently If not              |                                |
| available, planned?)                       |                                |

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The questionnaire was administered as a mandated activity by the VHA Office of the Deputy Under Secretary for Health for Operations and Management (DUSHOM). Therefore, the project was determined to be a nonresearch operations activity by the Institutional Review Board of the VA Greater Los Angeles Healthcare System. On May 24th, 2011, DUSHOM sent the questionnaire in an Adobe Acrobat® Portable Document Format (PDF) to all VHA Veterans' Integrated Service Networks (VISNs), with instructions to have all ED directors in their regions complete it by June 13th, 2011. The VISNs forwarded this e-mail to facility directors, with instructions to have all ED directors complete it by June 30th, 2011.

Data Analysis

We analyzed responses using STATA 11.0. In addition to descriptive statistics, we stratified responses by number of ED encounters by women, ED size, facility complexity, and community characteristics. We did not perform multivariate analysis with these characteristics due to their high inter-correlation. We obtained number of Fiscal Year 2010 encounters by women for each ED from VHA’s National Patient Care Database. As a proxy for ED size, we used number of staffed ED beds obtained from VHA's 2010 Survey of Emergency Departments. VHA classifies facilities into five complexity levels (1a, 1b, 1c, 2, and 3), with level 1 being the most complex, and level 3 the least, based on the patient population (e.g., number and risk characteristics); clinical services complexity (e.g., level of intensive care); and education and research activities (e.g., resident slots and research funding). We obtained these designations from VHA’s Office of Productivity, Efficiency, and Staffing. We combined 1a, 1b, and 1c facilities for our analyses. Community characteristics (i.e., located in a large metropolitan, small metropolitan or non-metropolitan area) were obtained from the 2009–2010 Area Resource File.

RESULTS

We received completed questionnaires from 100 % of EDs. Their characteristics are shown in Table 2. The ED director either personally completed, or designated another person

| Topics | Measures |
|--------|----------|
| Use of Computerized Note Templates (e.g., Available? If so, used frequently/infrequently? If not available, planned?) | Chest Pain, Mental Health Complaints, Abdominal Pain, Congestive Heart Failure, Cerebrovascular Accident, Vaginal Bleeding, Vaginal Discharge, Interpersonal Violence, Chest Pain/Acute Coronary System, Community Acquired Pneumonia, Cerebrovascular Accident, Urinary Tract Infection, Pelvic/Lower Abdominal Pain, Pelvic Inflammatory Disease, Evidence collection kit |
| Use of Clinician Order Sets (e.g., Available? If so, used frequently/infrequently? If not available, planned?) | Use clinician note template, Written evaluation/treatment protocol, Have access to a sexual assault evidence collection kit, Have formal agreements for providing mental health follow-up care |
| Resources for Caring for Acute Sexual Assault Victims (e.g., Available, if so, 24/7?) | Transfer of care to another institution, Consultation for rape crisis center, Use clinician note template, Written evaluation/treatment protocol, Have access to a sexual assault evidence collection kit, Have formal agreements for providing mental health follow-up care |
| Arrangements and Communication Mechanisms for Follow-up Care (e.g., Mechanisms available and perceived sufficiency) | Primary Care, Womens Health Clinic, Mental Health Care, OB/GYN care, Other Medical/Surgical Specialties |

Table 2. Veterans’ Health Administration (VHA) Emergency Department (ED) Characteristics

| No of FY 2010 Encounters | n (%) |
|--------------------------|-------|
| < 12,000                 | 37 (31) |
| 12,000–18,000            | 44 (37) |
| 18,001 or more           | 39 (33) |

| No. of FY 2010 Encounters By Women | n (%) |
|------------------------------------|-------|
| < 1,000                            | 46 (38) |
| 1,000–1,999                        | 48 (40) |
| 2,000 or more                      | 26 (22) |

| No. of Staffed Beds | n (%) |
|---------------------|-------|
| < 110               | 45 (38) |
| 10–14               | 38 (32) |
| 15 or more          | 34 (29) |

| Facility Complexity Level | n (%) |
|--------------------------|-------|
| 1                        | 70 (58) |
| 2                        | 34 (28) |
| 3                        | 16 (13) |

| Community                | n (%) |
|--------------------------|-------|
| Urban - Large Metropolitan Area | 15 (13) |
| Urban - Small Metropolitan Area | 51 (43) |
| Urban - Non-Metropolitan Area  | 54 (45) |
| Rural                     | 0     |

n= 120 except for No. of Staffed Beds, where data was available for 117 VHA EDs
(e.g., ED Nurse Manager, Women Veterans Program Manager) to complete it and then concurred with or edited responses.

**Resources and Processes for Gynecologic and Obstetric Care**

Table 3 shows resources and processes for gynecologic and obstetric care reported as available at all times (24/7). Most, but not all, VHA EDs reported having the equipment and supplies to care for patients with gynecologic and obstetric complaints. Approximately nine out of ten EDs reported having a gynecologic examination table and nearly all reported either stocking specula or having them available from a centralized supply source 24/7. Approximately nine out of ten EDs also have large/extra-large and small/extra-small specula available 24/7. Most EDs reported having DNA probes for Chlamydia and Gonorrhea; however, DNA probes for detecting vaginal yeast, trichomonas, and bacterial vaginosis were reported as less commonly available.

Laboratory testing for gynecologic and obstetric conditions were also reported as available in most, but not all, EDs. Pregnancy testing was available at all times in all EDs, either with urine or serum testing. However, point-of-care testing for pregnancy was reported as uncommon, with fewer than one out of ten VHA EDs having it available. Approximately nine out of ten EDs reported having serum quantitative Beta Human Chorionic Gonadotropin (β-HCG) and Rh-factor screening available 24/7.

Radiologic testing and specialty consultations, however, were reported as much less available. Fewer than half of VHA EDs have radiologic testing capabilities for gynecologic emergencies 24/7. Although 86 EDs (72 %) have pelvic ultrasound available, with radiologist review, at least some of the time, fewer than two-fifths have this available 24/7. An additional 3 % of EDs reported having ultrasound available 24/7 without radiologist review. Two-thirds of the EDs reported having emergent consultations from gynecologists available at least some of the time; however, just over one-third reported having them available 24/7. Fewer than half of EDs reported having obstetric consultation available with one-fifth having them 24/7. In comparison, urology, cardiology and neurosurgery consultations were reported as available in 98 %, 95 % and 78 % of EDs, respectively.

Written transfer policies specific to gynecologic and obstetric emergencies were reported as available in fewer than half of EDs. Written transfer policies specific to gynecologic emergencies were less available in EDs without 24/7 gynecology consultations. Of the 78 EDs without 24/7 gynecology consultation, 49 (63 %) of the 78 EDs reported not having them in place (not shown in table).

Regarding medications, most VHA EDs reported having the ability to provide emergency contraception 24/7. Only approximately half reported having Rh(D) Immunoglobulin available 24/7.

Resources and processes to support nursing care for gynecologic conditions were not commonly available. One-third of EDs reported having designated spaces for documenting last menstrual period within their nurse triage note templates, and fewer than one in ten have specialized nurse triage note templates for vaginal bleeding or discharge. Two-fifths of EDs reported having standing orders for urine pregnancy testing. In comparison, standing orders for the use of electrocardiogram are used in 88 %, and for finger-stick glucose testing in 75 %, of EDs. Fewer than one in ten EDs reported having standing order sets for vaginal bleeding, while 79 % use them for chest pain and 48 % for signs of stroke.

**Table 3. Gynecologic and Obstetric Care Resources and Processes Available at All Times (24/7)**

| Supplies                                      | n (%) |
|-----------------------------------------------|-------|
| Equipment                                     |       |
| Gynecologic Examination Tables                | 106 (88) |
| Non-Hand Held Focused Light                   | 105 (88) |
| Specula                                       | 117 (98) |
| Extra-Large Specula                           | 107 (89) |
| Extra-Small Specula                           | 104 (87) |
| Chlamydia/Gonorrhea DNA Probes                | 115 (96) |
| Vaginitis DNA Probes                          | 77 (64) |
| Obstetric Delivery Kits                        | 74 (62) |
| Pre-packaged Gynecologic Examination Kits     | 39 (33) |
| Laboratory                                    |       |
| Testing                                       |       |
| Pregnancy Testing (Urine and/or Serum)         | 120 (100) |
| Point of Care (in ED) Urine Pregnancy          | 9 (8) |
| Beta Human Chorionic Gonadotropin (β-HCG)     | 109 (91) |
| Rh Factor Screening                            | 112 (93) |
| Radiologic                                    |       |
| Testing                                       |       |
| Pelvic Ultrasound With Radiologist Reading    | 47 (39) |
| Consultations                                 |       |
| Emergent Gynecologic Consultations            | 42 (35) |
| Emergent Obstetric Consultations              | 21 (18) |
| Medications                                    |       |
| Emergency Contraction                          | 109 (91) |
| RhD Immunoglobulin                             | 66 (53) |
| Transfer                                      |       |
| Policies                                      |       |
| Transfer Policies Specific to Gynecologic Emergencies | 56 (47) |
| Expedited Acceptance Agreements for Gynecologic Emergencies | 42 (38) |
| Transfer Policies Specific to Obstetric Emergencies | 56 (41) |
| Expedited Acceptance Agreements for Obstetric Emergencies | 41 (37) |
| Nursing Care                                  |       |
| Designated Space for Last Menstrual Period Documentation | 39 (33) |
| Specialized Nurse Triage Note Templates For Vaginal Bleeding | 10 (9) |
| Standing Orders for Pregnancy Testing         | 48 (40) |
| Standing Order Sets for Vaginal Bleeding       | 11 (9) |

**Resources and Processes for Sexual Assault Care**

Most VHA EDs reported having processes in place for transferring victims of acute sexual assault to another institution for evaluation and/or treatment (Table 3). Of the ten EDs that did not, seven reported having a formal arrangement or contract for obtaining consultation from a rape crisis center, a sexual assault nurse examiner (SANE)
Emergency Department Layout
Most, but not all, EDs reported having some access to private medical and mental health rooms. Ninety-five percent of the EDs have at least one private room; however, 13% reported having only one or two. Of the 106 EDs that have gynecologic examination tables, all but two have at least one private gynecologic examination room. For mental health treatment, 69% reported having private rooms in their psychiatric treatment area or a separate area for women receiving psychiatric evaluation and treatment.

Comparisons by ED Characteristics
Table 4 shows selected items related to our hypotheses that smaller EDs and those with fewer encounters by women and smaller in physical size would have less access to equipment, supplies and medications for female-specific conditions. Analyses in general, confirmed these hypotheses. However, some of the EDs with more than 2000 ED encounters by women and more than 15 beds lacked some items needed for caring for women, such as having a gynecologic examination room within the ED and 24/7 access to emergency contraception and Rho(D) immunoglobulin.

Analyses also confirmed our hypotheses that EDs in less complex facilities and non-metropolitan communities had less access to laboratory and radiologic services, as well as gynecologic consultations. They were not more likely to have written transfer policies in place (Table 5). 24/7 available at all times.

DISCUSSION
In summary, our inventory of VHA EDs revealed that most have access to resources and processes needed for delivering emergency care to women Veterans. However, as hypothesized, EDs with lower demand for female-specific services (i.e., fewer encounters by women) and EDs that are smaller and located in less complex facilities in non-metropolitan areas are more likely to lack such resources and processes. We nonetheless also identified some higher-demand, larger EDs, and EDs in complex metropolitan VAs, with potentially important gaps.

Overall, we found that many VHA EDs have gaps when compared to the resources recommended by a 2007 American College of Emergency Physicians (ACEP) policy statement.10 With respect to obstetrics and gynecology, ACEP recommends that all EDs should have gynecologic examination tables; specula of various sizes; emergency obstetric instruments and supplies; sexual assault evidence kits (as appropriate); qualitative and quantitative pregnancy testing; blood cross-matching capabilities (which includes Rh Factor); Chlamydia testing (DNA probe versus culture not specified); Rho(D) immunoglobulin; oral contraceptives; and “emergency ultrasound services for the diagnosis of obstetric/gynecologic… conditions.” ACEP also asserts that “The ED should be designed to protect, to the maximum extent reasonably possible … the right of the patient to visual and auditory privacy.” Further, the hospital “must provide to the ED a list of appropriate ‘on-call’ specialists who are required to respond to assist in the care of emergency patients within reasonable established time limits.” Currently, to our knowledge, no other national ED inventories have been conducted against which we could compare our VHA results. This gap in knowledge of how U.S. emergency care is organized and delivered warrants further study. More research related to the costs and feasibility of achieving the ACEP standards with varying facility and community characteristics, as well as the quality and outcomes of care they afford, is also needed.

Absence of ED equipment and supplies for emergency gynecologic care may potentially result in care delays and sub-optimal outcomes. Having gynecologic examination supplies stocked in the ED decreases the likelihood of delays secondary to waiting for supplies. Where supplies and expertise are not available, women may need to be transferred to neighboring facilities to receive needed care. EDs without gynecologic examination tables may use those in nearby primary care or women’s clinics, but this may mean that the patient leaves the monitored ED area to complete the examination and access to these areas may be more difficult, or not available, after hours. Pelvic ultrasound is also a key component in evaluating a pregnant woman presenting with abdominal pain or vaginal bleeding.11 Therefore, any ED without pelvic ultrasound access should transfer to other facilities all pregnant women Veterans with abdominal pain or vaginal bleeding. Similarly, any woman with a suspected gynecologic emergency presenting to an ED without available specialty consultations may need to be transferred to another facility with this capability. The time it takes to transfer these women, and
Table 4. Selected Emergency Department (ED) Resources and Processes by Number of FY 2010 ED Encounters and Number of Staffed Beds

| Equipment/Supplies                                                                                      | By Number of ED Encounters | By Number of Staffed Beds |
|--------------------------------------------------------------------------------------------------------|-----------------------------|---------------------------|
|                                                                                                       | < 1,000 (n=46)              | 1,000–2,000 (n=48)       | > 2,000 (n=26)             | < 10 (n=45) | 10–14 (n=38) | 15+ (n=34) |
| At Least One Gynecologic Examination Table                                                            | 37 (80)                     | 45 (94)                   | 24 (92)                    | 38 (84)     | 33 (87)     | 32 (94)    |
| 24/7 Access to Specula                                                                                | 43 (93)                     | 48 (100)                  | 26 (100)                   | 43 (96)     | 37 (97)     | 34 (100)   |
| 24/7 Access to Extra-Large Specula                                                                     | 37 (80)                     | 44 (92)                   | 26 (100)                   | 38 (84)     | 34 (89)     | 33 (97)    |
| 24/7 Access to Chlamydia/Gonnorhea DNA Probes                                                        | 45 (98)                     | 44 (92)                   | 26 (100)                   | 45 (100)    | 36 (95)     | 31 (91)    |
| Medications                                                                                           |                             |                           |                           |             |             |             |
| Emergency Contraception                                                                               | 22 (79)                     | 35 (95)                   | 18 (86)                    | 18 (75)     | 24 (83)     | 29 (100)   |
| Rho(D) Immunoglobulin                                                                                  | 18 (39)                     | 28 (61)                   | 15 (65)                    | 14 (33)     | 25 (71)     | 21 (62)    |
| ED Layout                                                                                             |                             |                           |                           |             |             |             |
| At Least One Private Room                                                                             | 42 (91)                     | 47 (98)                   | 25 (96)                    | 42 (93)     | 36 (95)     | 34 (100)   |
| Psychiatric Private Room or Separate Space for Women                                                  | 34 (74)                     | 39 (81)                   | 23 (88)                    | 35 (78)     | 32 (84)     | 28 (82)    |
| Laboratory & Radiologic Services                                                                     |                             |                           |                           |             |             |             |
| Beta Human Chorionic Gonadotropin (β-HCG) 24/7                                                       | 43 (93)                     | 41 (85)                   | 25 (96)                    | 42 (93)     | 32 (84)     | 32 (94)    |
| Pelvic Ultrasound with Radiologist Read 24/7                                                          | 12 (26)                     | 21 (44)                   | 14 (54)                    | 13 (29)     | 17 (45)     | 19 (56)    |
| Consultations                                                                                         |                             |                           |                           |             |             |             |
| Gynecology Consultations 24/7                                                                         | 12 (26)                     | 15 (31)                   | 15 (58)                    | 7 (16)      | 15 (39)     | 19 (56)    |
| Obstetrics Consultations 24/7                                                                         | 9 (20)                      | 8 (17)                    | 8 (31)                     | 12 (27)     | 10 (26)     | 6 (18)     |
| Transfer policies                                                                                      |                             |                           |                           |             |             |             |
| Transfer Policies/Expedited Acceptance Agreements Specific to Gynecologic Conditions                  | 19 (41)                     | 18 (38)                   | 19 (73)                    | 18 (40)     | 17 (45)     | 20 (59)    |
| Transfer Policies/Expedited Acceptance Agreements Specific to Obstetric Conditions                    | 20 (43)                     | 19 (40)                   | 17 (65)                    | 20 (44)     | 17 (45)     | 19 (56)    |

24/7 available at all times

arrange for the transfer where expedited acceptance agreements are not in place, will extend the time to treatment of time-sensitive conditions. While national VA policy references the need to effectively treat women Veterans under emergent conditions,12–14 more specific guidelines may be needed so that consistent resources and processes are available across VHA EDs, and/or, if these resources or processes are not available, expedited arrangements are in place to provide women Veterans with the timely care they need.

Table 5. Selected Resources and Processes by Complexity Level and Community Characteristics

| Equipment/Supplies                                                                                      | By Complexity Level n (%) | By Community Characteristics n (%) |
|                                                                                                       | Level 3 (n=16)             | Level 2 (n=34)                  | Level 1* (n=70)             | Non-Metropolitan (n=15) | Small Metropolitan (n=51) | Large Metropolitan (n=54) |
|                                                                                                       |                             |                               |                            |                          |                           |                           |
| At Least One Gynecologic Examination Table                                                            | 12 (75)                     | 29 (85)                      | 65 (93)                    | 11 (73)                 | 47 (92)                   | 48 (89)                   |
| 24/7 Access to Specula                                                                                | 16 (100)                    | 31 (91)                      | 70 (100)                   | 15 (100)                | 49 (96)                   | 53 (98)                   |
| 24/7 Access to Extra-Large Specula                                                                    | 15 (94)                     | 24 (71)                      | 68 (97)                    | 12 (80)                 | 43 (84)                   | 52 (96)                   |
| 24/7 Access to Chlamydia/Gonnorhea DNA Probes                                                        | 66 (94)                     | 33 (97)                      | 16 (100)                   | 15 (100)                | 50 (98)                   | 50 (93)                   |
| Medications                                                                                           |                             |                               |                            |                          |                           |                           |
| Emergency Contraception                                                                               | 14 (88)                     | 31 (91)                      | 64 (91)                    | 14 (93)                 | 43 (84)                   | 52 (96)                   |
| Rho(D) Immunoglobulin                                                                                  | 6 (38)                      | 15 (44)                      | 45 (64)                    | 6 (40)                  | 23 (45)                   | 37 (69)                   |
| ED Layout                                                                                             | 15 (94)                     | 31 (91)                      | 68 (97)                    | 14 (93)                 | 49 (96)                   | 51 (94)                   |
| At Least One Private Room                                                                             | 9 (56)                      | 21 (62)                      | 48 (69)                    | 11 (73)                 | 35 (69)                   | 32 (59)                   |
| Laboratory & Radiologic Services                                                                     |                             |                               |                            |                          |                           |                           |
| Beta Human Chorionic Gonadotropin (β-HCG) 24/7                                                        | 16 (100)                    | 29 (85)                      | 64 (91)                    | 13 (87)                 | 46 (90)                   | 50 (93)                   |
| Pelvic Ultrasound with Radiologist Read 24/7                                                          | 5 (56)                      | 7 (33)                       | 35 (63)                    | 6 (47)                  | 14 (47)                   | 27 (60)                   |
| Consultations                                                                                         |                             |                               |                            |                          |                           |                           |
| Gynecology Consultations 24/7                                                                         | 1 (6)                       | 2 (6)                        | 39 (56)                    | 2 (13)                  | 13 (25)                   | 27 (50)                   |
| Obstetrics Consultations 24/7                                                                         | 1 (6)                       | 1 (3)                        | 23 (33)                    | 3 (13)                  | 8 (15)                    | 15 (28)                   |
| Transfer Policies                                                                                      |                             |                               |                            |                          |                           |                           |
| Transfer Policies Specific to Gynecologic Conditions                                                 | 4 (25)                      | 13 (38)                      | 39 (55)                    | 4 (26)                  | 25 (49)                   | 27 (50)                   |
| Expedited Acceptance Agreements for Gynecologic Conditions                                            | 5 (31)                      | 8 (24)                       | 29 (41)                    | 3 (20)                  | 21 (41)                   | 18 (33)                   |
| Transfer Policies Specific to Obstetric Conditions                                                   | 4 (25)                      | 14 (41)                      | 38 (54)                    | 3 (20)                  | 26 (51)                   | 27 (50)                   |
| Expedited Acceptance Agreements for Obstetric Conditions                                              | 5 (31)                      | 8 (24)                       | 28 (40)                    | 3 (20)                  | 20 (39)                   | 18 (33)                   |

*Combines levels 1a, 1b, 1c
Although all VHAs contract with other facilities for obstetric care, women may present to VHA EDs with pregnancy-related emergencies. Some of these emergencies, such as miscarriages and ectopic pregnancies, may occur without the patient having previous knowledge of the pregnancy. The ED needs to have a mechanism for women who have Rh-negative blood type to receive Rh Immunoglobulin within 48 h. In the event that Rh Immunoglobulin is not administered when indicated, a woman’s future pregnancies may be negatively affected. Although uncommon, women may present to VHA EDs later in pregnancy as well, and VHA EDs need to be prepared for these situations, at least with policies and procedures for rapid transfer to facilities that do deliver obstetric care.

Almost all VHA EDs report adherence with VHA’s directive on caring for acute sexual assault victims, stating that all EDs must “have plans in place to appropriately manage the medical and psychological assessment, treatment, and collection of evidence from male and female Veterans who are victims of alleged acute sexual assault.” However, 41% of VHA EDs reported not having the capacity to arrange for mental health follow-up within 24 h, which is also part of this policy. The importance of urgent follow-up mental health care for sexual assault victims has been well-documented.

Our findings must be interpreted in light of several limitations. First, the data are facility-reported without independent verification of accuracy. If responses reflect social desirability, we posit that gaps may be broader than reported. Second, our measures of ED structure and processes vary with respect to levels of evidence linking them to care quality. For example, although there is evidence about the importance of follow-up for medical and psychiatric care for sexual assault victims, we do not know how having a gynecologic examination table within the ED, rather than in a nearby clinic, impacts care quality. Thirdly, we were unable to find a similar inventory of resources and processes for non-VA EDs, and therefore we do not know how our findings compare to community EDs. An investigation of community ED adherence to ACEP recommendations is needed. Finally, all resources and processes can only impact the care of patients to the extent to which they are actually used and used appropriately. One of the most significant factors impacting the care of women for these conditions is the knowledge and skills of the ED providers, and the gender-sensitivity with which they deliver care, neither of which were captured in our inventory approach. All of these limitations should be addressed in future investigations.

Over the past decade, VHA has devoted considerable effort to improving the care it provides to women Veterans. However, this inventory revealed that gaps remain with respect to resources and processes for their emergency care. Exploration of facilitators and barriers to addressing these gaps, such as logistical considerations, is needed. Despite their growing numbers, women Veterans still represent a relatively small proportion of the overall patient population and therefore providing them with efficient, timely, and consistently high-quality care is an organizational challenge. Future work should seek creative solutions to this challenge to further the goal of VHA achieving standards of gender equity across all services delivered.
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