



Published in final edited form as:

*Womens Health Issues*. 2017 ; 27(2): 214–220. doi:10.1016/j.whi.2016.11.005.

## CHALLENGES WITH IMPLEMENTING A PATIENT-CENTERED MEDICAL HOME MODEL FOR WOMEN VETERANS

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### Abstract

**Background**—The Veterans Health Administration (VA) Patient Aligned Care Team (PACT) initiative aims to ensure that all patients receive care consistent with medical home principles. Women veterans' unique care needs and minority status within the VA pose challenges to delivery of equitable, comprehensive primary care for this population. Currently little is known about whether and/or how PACT should be tailored to better meet women veteran needs.

**Methods**—In 2014, we conducted semi-structured interviews with 73 primary care providers and staff to examine facilitators and barriers encountered in providing PACT-principled care to women veterans. Respondents were located in 8 VA medical centers in 8 different states across the U.S.

**Results**—Respondents perceived PACT as improving continuity of care for patients and as increasing ability of nursing staff to practice at the top of their license. However, implementation of core medical home features and team huddles was inconsistent and varied both within and across medical centers. Short staffing, inclusion of part-time providers on teams, balancing

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performance requirements for continuity and same-day access, and space constraints were identified as ongoing barriers to PACT implementation. Challenges unique to care of women veterans included higher prevalence of psychosocial needs, the need for specialized training of primary care personnel, and short staffing due to additional sharing of primary care support staff with specialist providers.

**Conclusion**—Providers and staff face unique challenges in delivering comprehensive primary care to women veterans that may require special policy, practice, and management action if benefits of PACT are to be fully realized for this population.

### Keywords

primary care redesign; veterans; qualitative research; women's health

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## INTRODUCTION

Women veterans currently comprise only 7–9% of Veterans Health Administration (VA) health care users (Frayne et al., 2010). However, their numbers are expected to increase rapidly over the next decade (Frayne et al., 2014). To accommodate this growth and ensure provision of equitable, high quality care, VA policy recommends that all women veterans receive comprehensive primary care (i.e., general primary care and gender-specific care) from a designated women's health primary care provider (DWHP) in a single visit (Veterans Health Administration, 2010). Comprehensive primary care models have been associated with higher patient satisfaction and quality of care (Bean-Mayberry et al., 2003). Women veterans receiving care from DWHPs also tend to report better experiences of care than those seen by non-DWHPs (Bastian et al., 2014).

Over the last decade, VA recommendations for care of women veterans have successfully reduced historical gender disparities in care, particularly with regards to screening for mental health conditions such as depression and post-traumatic stress disorder (Whitehead, Czamogorski, Wright, Hayes, & Haskell, 2014). However, in many VA care settings, low numbers of women veterans make it difficult for providers to remain proficient in gender-specific care and pose other logistical and fiscal barriers to delivery of care that is sensitive to women veterans' military experiences and healthcare needs (Bergman, Frankel, Hamilton, & Yano, 2015; Yano et al., 2011). As the VA moves forward with efforts to redesign primary care under its Patient Aligned Care Team (PACT) medical home initiative, research is needed on how changes introduced as a result of PACT may affect the ability of providers and staff to deliver comprehensive care to women veterans.

### Women veterans and the patient-centered medical home

The VA began implementing PACT as its patient-centered medical home model in 2010. Consistent with other medical home models, PACT relies on primary care teams to provide comprehensive, coordinated, and patient-centered care (Rosland et al., 2013). Under PACT, primary care providers (PCPs) and staff are organized into "teamlets" responsible for all major patient care activities for a dedicated panel of patients (Veterans Health Administration, 2014). Ideally, these teamlets are comprised of a 1.0 full-time equivalent

(FTE) PCP supported by 3.0 FTE staff: a registered nurse (RN) care manager, a clinical associate such as a licensed practical nurse (LPN) or health technician, and an administrative associate such as a clerk or medical support assistant.

When fully staffed and implemented as intended, PACT has been associated with higher quality of care, increased patient satisfaction, and lower emergency department use (Helfrich et al., 2014; Nelson et al., 2014). In practice, however, challenges to implementation remain (Tuepker et al., 2014). Of particular concern is whether and how PACT should be adapted for special patient populations based on criteria such as health condition or complexity of care needs (Yano, Haskell, & Hayes, 2014). Evidence from the broader medical home literature suggests that such adaptations may be critical for achieving positive outcomes among patients with complex care needs (Hollingsworth et al., 2011; Huang & Rosenthal, 2014).

The VA PACT model did not initially include any accommodations for special populations, raising questions about whether it would be equally effective at improving patient satisfaction and care outcomes for all veterans. Research into how the PACT model can be tailored to meet the needs of special populations is underway (Fix et al., 2014; O'Toole, Johnson, Borgia, & Rose, 2015). However, fit between PACT priorities and provision of comprehensive primary care for women veterans has not been assessed. The current study addresses this gap by drawing on qualitative interviews with providers and staff in VA primary care and women's health clinics to examine experiences of providers and staff caring for women veterans. Of specific interest are barriers encountered in providing care and PACT adaptations that may be needed to better meet women veterans' needs.

## METHODS

### Design, Setting, and Sample

Data for this study are drawn from the evaluation of the "Implementation of VA Women's Health Patient Aligned Care Teams (WH-PACT)" initiative. WH-PACT is a cluster randomized controlled trial of an evidence-based quality improvement approach to tailoring PACT to the needs of women veterans (Yano et al., 2016). The current study utilizes semi-structured interviews with primary care providers and staff in general primary care and women's health clinics in 8 VA medical centers (VAMCs). These VAMCs represent a range of VA-approved clinic models for how comprehensive primary care for women veterans can be delivered (Yano et al., 2014). In all VAMCs, at least some women veteran patients received care in a mixed-gender primary care clinic. In 7 of 8 VAMCs, women veterans also received care in a separate clinic space.

Interviews were conducted between July and December 2014, in the fourth year of PACT implementation and in the first year (baseline) of the WH-PACT evaluation. To be eligible for inclusion in the study, providers and staff needed to be part of a PACT teamlet with at least one woman veteran on their patient panel. Initial contact lists were drawn from the Primary Care Management Module in the VA Corporate Data Warehouse. A quota sampling approach (Robinson, 2014) was then used to select individuals from each of the following five strata at each VAMC: PCPs 0.5 FTE; PCPs 0.5 FTE; RN care managers; clinical

associates (e.g. LPN or health tech); and administrative associates. Full-time and part-time providers were assigned to separate strata based on prior evidence suggesting differing effects of employment status on provider work experiences and patient outcomes under PACT (Mechaber et al., 2008; Panattoni, Stone, Chung, & Tai-Seale, 2015; Rosland et al., 2015). Not all VAMCs utilized clinical and administrative associates, resulting in 0 interviews in these strata at those VAMCs.

A total of 97 individuals were invited to participate and 73 were interviewed (response rate = 75%; average of 9–10 respondents per VAMC). The primary reason for not participating was lack of time, often explicitly attributed to short staffing. Interviews were completed with 30 PCPs, 26 RN care managers, 6 clinical associates, and 11 administrative associates. The majority of respondents (84%) were women; approximately 30% were racial/ethnic minorities. All interviews were conducted by phone by at least one trained interviewer following a semi-structured interview guide.

On average, interviews lasted between 45–60 minutes. Interview questions focused on provider and staff experiences with PACT, implementation of core medical home features, and facilitators and barriers to providing care for women veteran patients. Specific core medical home features examined are described in Table 2, and include practices such as *panel management* (proactively identifying patients' unmet care needs and providing appropriate outreach and follow-up), *schedule scrubbing* (reviewing providers' schedule to determine whether patients' needs can be met without a face-to-face visit), *health coaching* (patient-centered approach to facilitating behavior change in patients using techniques such as goal-setting), and *shared medical appointments or group visits* (patients with similar chronic conditions seen as a group for health education, peer support, and preventive care related to that condition). While not a core medical home feature, we also assessed the extent to which primary care personnel participated in *daily teamlet huddles*, a practice heavily promoted by the VA in implementing PACT due to its positive effects on team functioning (Gale et al., 2015). With respondents' permission, the majority of interviews (95%; n=69) were recorded. For the remaining interviews (n=4), interview notes were used in place of a recording. All procedures were reviewed and approved by the VA and UCLA Institutional Review Boards.

## Data Analysis

All recordings and interview notes were transcribed and imported into the qualitative software Atlas.ti 7.0 for analysis. An initial codebook was developed based on the interview guide as well as independent open coding of three transcripts by two researchers. Initial codes were applied to a subset of interviews (one per teamlet role). Coding was compared for consistency and as appropriate, the codebook was revised to clarify construct definitions or better highlight critical themes (Miles & Huberman, 1994). All transcripts were independently coded by at least two members of a three-person research team. Memos were used to highlight dissenting or unusual observations. Any coding discrepancies were discussed until consensus was achieved on best coding. The current study focuses on findings in the following interview domains: (1) Teamlet structure; (2) Teamlet roles and responsibilities; (3) Use of core medical home features; (4) Daily teamlet huddles; (5)

Interactions with the medical neighborhood; (6) Barriers to PACT implementation; and (7) Other issues specific to women's health. Codes associated with these interview domains were analyzed to identify differences by VAMC and, when appropriate, by clinic type (general primary care or women's health clinic). Preliminary results were presented to key stakeholders within the 8 VAMCs and served as an additional validity check.

## RESULTS

### Teamlet structure and staffing

In all 8 VAMCs, providers and RN care managers were assigned to a dedicated panel of patients. In VAMCs that had not engaged in this practice prior to PACT, this change was viewed as positively affecting team functioning and continuity of care. In all 8 VAMCs, teamlets also reported at least some sharing of support staff across providers. In many teamlets, sharing of support staff was attributed to the presence of multiple part-time providers that collectively comprised a single FTE. In 3 of 8 VAMCs, sharing of support staff by primary care providers also occurred because support staff not directly involved in providing primary care (e.g., RNs in administrative positions) were counted towards the 3:1 staffing ratios. Respondents at these VAMCs felt this practice contributed to understaffing of primary care clinics and negatively affected their ability to provide patient-centered primary care. As one RN explained, *"It takes away from care because a lot of the nurses [in administrative positions] who are not really participating in a RN role are counted in with the nursing staff. [But] if you would ask them to come do something they couldn't do it."*

In the 7 VAMCs with teamlets providing comprehensive primary care for women veterans in a separate clinic space, primary care support staff were also shared with specialists such as gynecologists and/or other co-located members of the broader medical neighborhood. The sharing of primary care support staff with specialists was unique to women's health teamlets and perceived as detrimental to delivery of PACT-principled care. One RN noted, *"We are the support staff for primary care, mental health, and gynecology services... We're happy to do it [but] it becomes difficult to make sure that everybody is seen on time and that everybody gets what they need..."*

### Teamlet roles and responsibilities

Primary care and women's health clinics in all VAMCs varied in how they utilized support staff such as RNs, clinical associates, and administrative associates. In some clinics, administrative associates were assigned to registration desks and assisted with implementation of core medical home features under PACT. In other clinics, administrative associates were limited to scheduling appointments, had little in-person interaction with patients, and/or were not considered part of the teamlet. Clinics reported similar variation in the extent to which nurses were able to practice to the top of their license. Despite this variation, nursing staff (RN and LPN) in 4 of 8 VAMCs reported increased ability to engage in the full range of tasks they were licensed to perform after PACT. As one nurse expressed, *"It [PACT] has done a lot for me... to be able to do more in our realm of practice... before we couldn't call in medications... well, now we can do it, we can click on renewals of medications that have expired, [and] we do more patient teaching."*

### Use of core medical home features

As shown in Table 2, panel management was only consistently implemented in about half of VAMCs; in other VAMCs, respondents reported engaging in panel management only as time permitted. Difficulty tracking gender-specific procedures such as mammograms and Pap smears was identified as an additional barrier to panel management of women veteran patients.

Implementation of other core PACT practices such as schedule scrubbing, health coaching, and shared medical appointments for patients with chronic conditions also varied significantly across VAMCs and even across teamlets within the same VAMC (Table 2). Limited implementation of schedule scrubbing and shared medical appointments were both partially attributed to patient resistance and/or lack of interest. For example, several support staff indicated that their teamlets stopped schedule scrubbing because trying to cancel or reschedule face-to-face visits made patients “angry.” Similarly, in explaining her teamlet’s decision to not implement shared medical appointments, one RN explained, “*Our veterans... when they come in to see their provider, they want to see their provider and spend time with their provider only.*” Women veterans’ reluctance to participate in group visits comprised primarily of male veterans was identified as an additional barrier to implementing shared appointments. Efforts to address this concern by scheduling women-only group visits were often challenged by limited numbers of eligible women veteran patients available to participate.

### Daily teamlet huddles

In all VAMCs, teamlets in both general primary care and women’s health clinics varied in the extent to which they participated in huddles. Even when teamlets reported huddling, it was not always with the full teamlet or on a daily basis. For example, respondents in several VAMCs described huddles as primarily dyadic interactions between providers and RNs on an “as-needed” basis. In another VAMC, providers and staff reported weekly ‘problem-solving’ meetings involving the entire primary care clinic but no meetings specific to their teamlets. Only a handful of respondents reported routinely meeting with their teamlets for previsit planning, problem solving, and/or discussion of treatment plans for patients with complex care needs. Consistent huddling was particularly problematic for women’s health teamlets and others in which support staff were shared across multiple providers and/or in which teamlet members were not co-located. For example, at one VAMC, RNs responsible for panel management spent most of their time in administrative offices located in a different building from the clinic where patients were seen; at this VAMC, physical separation of teamlet members made it particularly difficult to consistently implement huddles.

### Interactions with the medical neighborhood

Consistent with national PACT guidance, teamlets in all VAMCs reported on-site access to mental health providers, social workers, and pharmacists. In 4 of 7 VAMCs with teamlets providing primary care to women veterans in a separate space, these extended team members were considered shared resources and not dedicated specifically to women’s health. In 2 of these 4 VAMCs, the physical separation of the women’s health clinic from general primary care meant these extended team members were not co-located and/or not

readily available to women's health teamlets for warm hand-offs (i.e., direct introduction to the extended team member at the time of the visit), phone calls, or consultations. One provider noted, *"We share services with the rest of primary care... I wish we could have more services here at the time of the visit, such as mental health, social work, case management, pharmacy. Those are the big issues they [women veterans] could have addressed at the time of their visit if we had the staff here."*

Respondents also emphasized that co-location did not always mean extended care team members were readily available or proficient in gender-specific care needs. For example, one primary care provider working in a clinic with co-located mental health providers noted, *"It's not exactly primary care-mental health integration because the [co-located] mental health providers see their own patients... They're there but their panels are full so they're not always available on an as-needed basis."* In contrast, another provider working in a clinic in which mental health services were located in a separate building felt highly supported: *"It's [mental health] not co-located but there is a great relationship between primary care and the psychologists and psychiatrists in that practice. We communicate about our patients routinely. I feel very connected to them."* Thus, quality of interactions with the broader medical neighborhood were dictated not by co-location but actual ease of communication and availability of extended team members for referrals, consults, and/or hand-offs.

### Barriers to PACT implementation

The three most prevalent barriers to PACT implementation identified by respondents in both primary care and women's health clinics were short staffing, inclusion of part-time providers on teamlets, and space constraints. Short staffing was the most serious concern, with respondents in all 8 VAMCs describing teamlets as chronically understaffed. Short staffing was perceived as contributing to high panel sizes, burnout, and turnover, as well as making it difficult to deliver PACT-principled care. As one provider explained, *"People are drowning just trying to take care of their panel... They have no time to step back and reflect... and manage the panel proactively."* Similar concerns were expressed by support staff, with one RN noting, *"It's hard to get past the staffing issue... A lot of PACT would fall into place with better staffing... I like the idea behind PACT but you can't do it without proper staffing."* Several respondents also felt that it was unfair for understaffed teamlets to be held accountable to the same performance metrics as those that were fully staffed.

In all 8 VAMCs, at least some teamlets included part-time providers. Working part-time was identified by some providers as a buffer against burnout; however, respondents in 7 of 8 VAMCs felt inclusion of part-time providers made it more difficult to deliver PACT-principled care. Support staff on these teamlets reported being responsible for juggling multiple providers; on days when these providers' schedules overlapped, the need to simultaneously support multiple providers made it difficult for their teamlets to implement PACT as intended. Respondents also noted that part-time providers – particularly those that were DWHPs – often ended up working in more than one clinic location (e.g., mixed-gender primary care as well as women's health). The subsequent need to coordinate patient care across multiple teamlets, often involving different support staff, was viewed as detrimental to teamlet functioning and workflow. Meeting PACT performance expectations related to

continuity and same-day access was also viewed as particularly challenging for part-time providers. As one part-time provider noted, *“Continuity of care and same-day access are almost mutually exclusive in terms of provider sanity.”* Multiple respondents (all providers) thought these performance expectations should be made more flexible.

Finally, respondents in 6 of 8 VAMCs identified space constraints as a challenge to provision of PACT-principled care. In some VAMCs, space issues resulted in physical separation of teamlet members (e.g., RN care managers performing case management activities on a separate floor from where patients were seen). In others, it prevented members of the broader medical neighborhood from being co-located with primary care. As one RN explained, *“Our physical space is too small. If space were larger we could have other resources readily available such as a pharmacist, dietician, and social worker. That would make a huge difference in how we could be a team caring for the patient. An overall, comprehensive team.”* Respondents in several VAMCs indicated that efforts to improve space constraints were underway but would take several years to be fully realized.

### Issues specific to women’s health

When asked to identify challenges unique to care of women veterans, respondents in 5 of 8 VAMCs identified the high prevalence of psychosocial needs among women veterans and the need for specialized training of providers and staff as key issues. The high prevalence of psychosocial needs was perceived as contributing to complexity of care for women veterans, as well as to greater need for coordination of care with the broader medical neighborhood. Teamlets providing care to women veterans in mixed-gender clinics were typically not able to accommodate the longer visits with women veterans that are recommended by VA policy. VAMCs also varied in the extent to which panel sizes were adjusted to account for differences in patient complexity. One provider explained, *“Women veterans voice more mental health needs... I think it would be beneficial to acknowledge that and build in some flexibility within the panel for that...”*

The need for specialized training of providers and staff on teamlets providing care to women veterans was viewed as challenging in terms of support and cross-coverage. VAMCs providing care to a smaller number of women veterans only had a limited number of DWHPs. Similarly, support staff with specialized training in women’s health could cover for support staff in general primary care, but the reverse was not always true. These issues were exacerbated in 4 VAMCs in which there was considerable physical distance between comprehensive women’s health clinics and general primary care. One provider felt that, *“we’re in a silo. It creates a tough work environment, especially for providers. There’s nobody to talk to, you can’t bounce cases off of anyone... We also have problems getting coverage for our ancillary staff...”* In these VAMCs, the physical separation of women’s health from primary care also resulted in perceived inequities in allocation of resources between general primary care and women’s health. As one RN working in a comprehensive women’s health clinic noted, *“The resources aren’t here. They’re not readily available. We have to consult them to primary care.”*



## DISCUSSION

This qualitative study examines experiences of providers and staff implementing a patient-centered medical home model in VA primary care and women's health clinics and also identifies challenges unique to teamlets providing care to women veterans, one of the fastest-growing segment of the VA patient population. Findings suggest that providers and staff have generally positive attitudes towards PACT; however, early challenges to delivery of PACT-principled care identified in previous studies, such as inadequate teamlet staffing and variable implementation of key PACT practices (Rodriguez et al., 2014; Tuepker et al., 2014), persist in both primary care and women's health clinics. Medical home models such as PACT can reduce employee burnout and improve quality of care, but only when appropriately staffed and when team members are working to the top of their competency levels (Helfrich et al., 2014). In the current study, chronic understaffing of primary care teamlets in all 8 participating medical centers contributed to burnout and turnover and limited teamlets' ability to fully implement PACT.

Study findings also highlight a number of issues unique to teamlets providing care to women veterans. The high prevalence of perceived psychosocial needs among women veterans is consistent with prior research in this area (Haskell et al., 2011; Murdoch et al., 2006). Interview results also suggest that providers and staff providing care to women veterans face unique challenges in adequately addressing the needs of this special VA patient population. In most VAMCs, teamlets providing care in mixed-gender clinics are not able to accommodate longer visits with women veterans, even though such visits are recommended in VA policy. Teamlets providing care for women veterans in a separate space can schedule longer visits; however, these teamlets face different challenges to team functioning and coordination of care resulting from the higher prevalence of part-time providers, sharing of support staff with co-located gynecologists and/or other specialists, and/or physical separation from other medical neighborhood resources. For all teamlets providing care to women veterans, the need for specialized training in gender-specific care raises coverage and backfill issues not always acknowledged by leadership. Difficulty tracking gender-specific procedures can also result in increased administrative burden for these teamlets. Currently, the unique challenges experienced by providers and staff caring for women veterans are not acknowledged or otherwise accommodated in national PACT guidance. Adaptations to PACT for women veterans may be necessary to ensure provision of high-quality, comprehensive care for this population.

Several limitations should be considered in interpreting current study findings. First, our interview sample was limited to providers and staff working in clinics based in VAMCs and may not reflect the experiences of providers and staff in VA community-based outpatient clinics. Second, in order to protect the anonymity of respondents, findings were presented by medical center rather than by teamlet, which limits our ability to directly link themes to specific teamlet structures and functions. Participating VAMCs were selected in part due to their membership in the Women's Health Practice-Based Research Network and associated interest in women's health issues (Frayne et al., 2013); thus, our study may under-represent challenges experienced by VA providers and staff providing care to women veterans. Finally,

this study does not include women veteran patient perspectives on whether and how PACT should be adapted to better meet their needs.

### Implications for Practice and/or Policy

Despite these limitations, our study highlights several issues unique to teamlets providing care for women veterans that policymakers and administrators may wish to take into account when considering ongoing adaptations to PACT. First and foremost, findings indicate that providers and staff face unique challenges in provision of comprehensive primary care to women veterans that may contribute to gender disparities in care if not addressed. The study also identifies persistent challenges of relevance to providers and staff implementing medical home models in VA and non-VA primary care clinics, such as the need to accommodate part-time provider schedules, balance competing patient demands for continuity vs. same-day access, and ensure adequate and stable staffing support..

### ACKNOWLEDGMENTS:

We would like to thank Eva Selski and Anneka Oishi for their assistance in coordinating interviews and Philip Pantoja for pulling the sample file used to recruit interview respondents. We are also grateful for all of the primary care providers and staff that participated in this study.

**FUNDING STATEMENT:** Support for this research was provided by VA HSR&D Service, Veterans Health Administration through the CREATE initiative (CRE 12–026) and the VA HSRD Center for the Study of Healthcare Innovation, Implementation, & Policy (CIN 13–417). Dr. Yano’s effort was funded by a VA HSR&D Senior Research Career Scientist Award (Project #RCS 05–195). The views expressed within this study are solely those of the authors and do not necessarily represent the views of the Department of Veterans Affairs or the U.S. government.

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**TABLE 1.**

Organizational Characteristics of Participating VAMCs\*

VAMC	Region	Urban/Rural	Total Veteran VHA Users	% Women Veteran Patients	# Women's Health teamlets
1	Northeast	Urban	7,600	10%	6 of 16
2	Northeast	Urban	17,000	6%	3 of 25
3	Northeast	Urban	8,800	13%	12 of 19
4	South	Rural	11,300	7%	1 of 15
5	Midwest	Urban	35,300	6%	6 of 37
6 <sup>†</sup>	Midwest	Urban	27,900	2%	0 of 10
7	Midwest	Urban	13,400	8%	5 of 22
8	Midwest	Urban	16,000	10%	3 of 20

\* Data on total veteran VHA users (rounded to nearest hundred) and % of women veteran patients were drawn from FY 2013 data in the VSSC Primary Care Almanac. Data on number of teamlets drawn from the Primary Care Management Module in the VA Corporate Data Warehouse. Data on models of care for women veterans were drawn from the 2015 VA Women's Assessment Tool for Comprehensive Health (WATCH). "Women's Health" teamlets include all teamlets providing care to women veterans in a separate space, rather than in a mixed-gender primary care.

<sup>†</sup>This VAMC provides care to veterans and CHAMPVA patients; however, only numbers for veteran patients are included here.

Use of Core VA Medical Home Features by General Primary Care and Women’s Health Teamlets within 8 VA Medical Centers (VAMCs)

TABLE 2.

Core Feature	Definition	General Primary Care (out of 8 VAMCs)		Women’s Health* (out of 7 VAMCs)	
		Any Use	Consistent Use	Any Use	Consistent Use
Panel management	Proactively identifying patients’ unmet care needs and providing appropriate outreach and follow-up	8	4	6	4
Schedule scrubbing	Reviewing appointments in advance and calling patients to cancel unnecessary appointments and/or ensure use of appropriate appointment modality (e.g., telephone vs. face-to-face)	7	4	6	4
Health coaching	Patient-centered approach to facilitating sustainable health behavior change in patients, e.g., via goal-setting or skill building that takes into account patient values and preferences	8	4	6	5
Shared medical appointments or group visits	Patients with similar chronic conditions are seen as a group for health education, peer support, and preventive care.	6	3	3	1
Planned telephone encounters	Providing certain types of care by telephone rather than face-to-face	8	6	6	5
Secure messaging	Secure electronic messaging between patients and their health care team, typically to exchange non-urgent health-related information	8	8	7	5
Daily huddles	Brief meetings between providers and staff to review, make, and/or share plans for patient care	5	0	5	3

\*“Women’s Health” includes teamlets within each VAMC providing primary care to women veterans in a separate space from general primary care (only present in 7 of 8 VAMCs); teamlets providing care to women veterans in a mixed-gender clinic are captured in “General Primary Care.”