# Huddle-Coaching: A Dynamic Intervention for Trainees and Staff to Support Team-Based Care

Rebecca Shunk, MD, Maya Dulay, MD, Calvin L. Chou, MD, PhD, Susan Janson, PhD, RN, ANP, and Bridget C. O'Brien, PhD

## Abstract

Many outpatient clinics where health professionals train will transition to a team-based medical home model over the next several years. Therefore, training programs need innovative approaches to prepare and incorporate trainees into team-based delivery systems. To address this need, educators at the San Francisco Veterans Affairs (VA) Medical Center included trainees in preclinic team "huddles," or briefing meetings to facilitate care coordination, and developed an interprofessional huddle-coaching program for nurse practitioner students and internal medicine residents who function as primary providers for patient panels in VA outpatient primary care clinics. The program aimed to support trainees' partnerships with staff and full participation in the VA's Patient Aligned Care Teams. The huddle-coaching program focuses on structuring the huddle process via scheduling, checklists, and designated huddle coaches; building relationships among team members through team-building activities; and teaching core skills to support collaborative practice. A multifaceted evaluation of the program showed positive results. Participants rated training sessions and team-building activities favorably. In interviews, trainees valued their team members and identified improvements in efficiency and quality of patient care as a result of the team-based approach. Huddle checklists and scores on the Team Development Measure indicated progress in team processes and relationships as the year progressed. These findings suggest that the huddle-coaching program was a worthwhile investment in trainee development that also supported the clinic's larger mission to deliver team-based, patient-aligned care. As more training sites shift to team-based care, the huddle-coaching program offers a strategy for successfully incorporating trainees.

With the emphasis on medical homes in the Affordable Care Act, many outpatient clinics will restructure to deliver team-based, patient-centered care.[1] One recommendation for improving communication among interprofessional team members is a regular preclinic team briefing meeting, or "huddle," to review the schedule and needs of patients to be seen, troubleshoot problems, and plan for upcoming visits and communication with patients between visits.[2] Incorporating trainees into huddles as full-fledged team members offers an authentic workplace learning experience where trainees learn core skills through participation in the same activities expected of full-time providers and staff.[3,4] During the implementation phase, huddles and team-based care may be as unfamiliar to clinic-based staff as to trainees; therefore, both staff and trainees require training to ensure that teams develop a common understanding about team members' roles, the purpose of huddles, and the skills necessary for effective communication and collaboration.[5]

To address this training need, we developed an innovative huddle-coaching program to teach teams how to huddle as one foundation for effective team-based care. Specifically, our program aims to ensure that trainees and staff:

1. cohere as team members with interdependent tasks rather than as autonomous individuals completing independent tasks;
2. participate consistently in team huddles through physical presence as well as active contribution to discussions; and
3. use skills such as distributive leadership, active listening, negotiation and conflict resolution to support effective teamwork in the huddle and beyond.

### Setting and Participants

In spring 2010, primary care clinics at the San Francisco Veterans Affairs (SFVA) began phasing in a VA-mandated interprofessional team-based model of patient care called Patient Aligned Care Teams (PACTs).[3] In this model, a "teamlet" comprising a registered nurse (RN), licensed vocational nurse (LVN), and medical clerk works with one or more primary providers to care for their patient panels. Teamlets are expected to huddle with each primary provider daily.[2,6]

Implementation of PACT provided an opportunity to train future health professionals in a team-based model of care. In January 2011, SFVA was competitively selected to serve as one of five sites nationally to participate in the VA Centers of Excellence in Primary Care Education[7] to demonstrate strategies to

**Dr. Shunk** is associate professor, Department of Medicine, San Francisco VA Medical Center and University of California, San Francisco, San Francisco, California.

**Dr. Dulay** is assistant professor, Department of Medicine, San Francisco VA Medical Center and University of California, San Francisco, San Francisco, California.

**Dr. Chou** is professor, Department of Medicine, San Francisco VA Medical Center and University of California, San Francisco, San Francisco, California.

**Dr. Janson** is professor, Department of Community Health Systems, School of Nursing, and Department of Medicine, University of California, San Francisco, San Francisco, California.

**Dr. O'Brien** is assistant professor, Department of Medicine and Office of Research and Development in Medical Education, University of California, San Francisco, San Francisco, California.

Correspondence should be addressed to Dr. Shunk, San Francisco VA Medical Center, 4150 Clement St., San Francisco, CA 94121; telephone: (415) 221-4810 ext. 4878; fax: (415) 750-6919; e-mail: rebecca.shunk@va.gov.

Acad Med. 2014;89:244–250.
First published online December 19, 2013
*doi: 10.1097/ACM.0000000000000104*

improve interprofessional, team-based health professions education in patient-centered primary care. In July 2011, we added eight trainee triads (two second-year internal medicine residents and one second-year nurse practitioner [NP] student) to each of eight preexisting teamlets in three SFVA primary care clinics. Each trainee in the triad functions as the primary provider for a patient panel. When primary providers are unavailable, trainee triad members provide backup coverage. Teamlets collaborate with trainee triads to deliver care to patients, thus requiring trainees to work more closely with clinic staff than in traditional models of resident continuity clinic and NP student primary care placements.

## Program Description

We used Reeves and colleagues'[8] conceptual framework for interprofessional teamwork to shape the design, development, and implementation of our innovative huddle-coaching program. The framework includes process, relational, contextual, and organizational factors,[8] which we addressed through a combination of brief didactic presentations, small-group skill-building and reflective discussion sessions (including a daylong retreat), and reinforcement in the workplace through coaching. Table 1 depicts the four factors and the associated content, program aims and activities, and evaluation methods used. Chart 1 provides a timeline of program activities.

To address process factors, we scheduled a 15-minute huddle time slot for each trainee triad on each clinic day. On trainees' first day in clinic together, we held an introductory session in which we reviewed "how to huddle" guidelines derived from the literature, then watched a video of a huddle and evaluated it according to the huddle guidelines. Immediately after the session, trainees met their team members and participated in their first team huddle. Three months into the year, we recognized the need for more structure, so we created a huddle checklist that provided a step-by-step approach (see Appendix) based on the guidelines reviewed in the introductory session.[9,10] In addition, recognizing coaching as pedagogy for workplace learning that could provide teams insights and feedback on team processes

Table 1

**Huddle-Coaching Program Elements: Guiding Framework, Curricular Content, Aims, and Evaluation, San Francisco Veterans Affairs Medical Center, 2011–2012**

| Teamwork domain and factors | Curricular element | Aims* | Evaluation |
|---|---|---|---|
| Process<br>• Time and space<br>• Routines and rituals | • *Introduction to team* and *Introduction to huddle sessions*<br>• *Huddles* have an assigned time, location for huddle<br>• *Huddle checklist* outlines everything that should happen in a huddle<br>• *Huddle coaches* observe, model, make suggestions, and provide feedback about team processes and communication | 2 | • Session evaluations<br>• Huddle checklist data |
| Relational<br>• Professional power<br>• Hierarchy<br>• Socialization<br>• Role clarity | • *Introduction to team* and *Introduction to huddle session*<br>• *Team member roles session*<br>• *Team-building retreat* to provide opportunities for team members to get to know one another on a personal and professional level, overcome stereotypes<br>• *Huddle coaches* observe group dynamic, intervene to model / facilitate discussion | 1, 3 | • Session and retreat evaluations<br>• Trainee interviews<br>• Team development measure |
| Contextual<br>• Culture<br>• Diversity<br>• Gender | • *Interprofessional communication and teamwork skills session* on building rapport, sharing responsibility, negotiating conflict, giving feedback<br>• *Team-building retreat* encourages teamlets and trainees to address differences<br>• *Debrief meetings* allow teams to address diverse perspectives and backgrounds | 3 | • Session and retreat evaluations<br>• Trainee interviews |
| Organizational†<br>• Leadership support<br>• Goal alignment | • *Clinic leadership support* for teamlets to huddle with trainees and participate in team-building retreat and debrief meetings<br>• *Commitment to team-based care* for improved access and coordination of care for patients allowed alignment between clinical and educational missions. | 1–3 | • Huddle checklist data (staff attendance)<br>• Trainee interviews (perceived impact on patient care) |

*Aims: 1 = Cohere as team members with interdependent tasks rather than as autonomous individuals completing independent tasks; 2 = Participate consistently in team huddles through physical presence as well as active contribution to discussions; 3 = Use skills such as distributive leadership, active listening, negotiation, and conflict resolution to support effective teamwork in the huddle and beyond.

†Organizational factors relate more to implementation and overall support for curricular elements, aims, and evaluation than to specific curricular elements and evaluation.

Chart 1

**Timeline of Huddle-Coaching Program Activities at the San Francisco Veterans Affairs Medical Center, 2011–2012**

| 2011 | | | | | | 2012 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun |
| • Beginning of academic year, trainees assigned to teams<br>• Begin huddles | | • Team Development Measure (TDM) completed pre retreat<br>• Team-building retreat<br>• Huddle checklist and coaches begin | | Huddle-coaching and checklists continue (most collected January through March)<br>Team meetings to debrief TDM | Faculty development around huddles and coaching | | | Second round of TDM survey collection and debrief meetings | | | |

and dynamics, we assigned "huddle coaches" to set expectations, provide accountability, and offer guidance for improvement. Huddle coaches were MDs and NPs already designated as trainee preceptors and often assigned as primary care providers with the same teamlets as the trainees. Coaches, who themselves were learning how to huddle, received faculty development regarding their coaching role. Initial instruction included discussion of the checklist items and how to give feedback. Coaches also had opportunities to receive peer mentoring and feedback and to observe other coaches. Coaches were expected to attend the team huddles each week, complete the checklist, and provide structured feedback on checklist items or team dynamic. Coaches typically did not see their own panel patients when they were coaching huddles, so they could focus on their role as observers rather than as full participants in the huddle.

We identified relational factors as the most critical component of our program, anticipating challenges associated with culture change, professional stereotypes, and hierarchy. Providing time for team members to learn more about one another on a personal level and to practice core skills together was an important priority that we fulfilled through a daylong retreat for trainee triads and teamlet staff. In addition, several of the process activities described above included relational components. For example, initial huddles required introductions and acknowledgment that these processes were new to everyone; relationship building was a continuous process reinforced through check-ins at the beginning of each huddle; huddle-checklists and coaching allowed for ongoing identification of issues and team-based reflection. Addressing relational factors also required clarification about roles and scopes of practice in order to define and distribute tasks and responsibilities among the team. We developed short didactic and interactive skill-building sessions related to team-based care and team members' roles to meet this need. Topics for hourlong sessions included team members' roles, interprofessional oral and written communication, debriefing the huddle, how to give feedback, and conflict negotiation and resolution.

Contextual factors, such as the diverse backgrounds and experiences of staff and trainees in our clinic, were also important to address. Huddles and teams represented a departure from prior work duties and cultural norms for some staff and trainees; many skills that support teamwork and collaboration such as delegating and negotiating responsibility were new to trainees and staff. As the year progressed and team members became more comfortable with one another, huddle coaches were expected to focus less on the mechanics of the huddle and more on these higher-order teamwork skills. We also provided opportunities for teams to self-assess their team development and functioning twice per year using the Team Development Measure (TDM).[11,12] Facilitated by a staff psychologist, each team met to discuss the results of their TDM and to develop goals for improvement.

Organizational support for our huddle-coaching program was essential. The VA's commitment to PACT ensured that additional staff was hired to support team-based care. Additionally, SFVA's commitment to education facilitated negotiation for time and resources. Our trainee site director also holds the role of assistant clinic director, which was key to engaging clinic leadership. This dual role allowed us to demonstrate how the investment in trainees supported the clinic's overall mission of team-based care.

## Program Evaluation

In 2011–2012, our program evaluation examined progress toward our three aims through session and retreat evaluations, huddle checklist data, end-of-year interviews with trainees, and results from the TDM survey (Table 2). Our study was approved by institutional review boards at the University of California, San Francisco, and SFVA.

### Session and retreat evaluations

At the end of the team-building retreat and each didactic and small-group skill-building session, participants rated the overall quality of the session on a five-point scale (1 = poor, 3 = good, 5 = excellent) and provided written feedback on the session. Participants rated the overall quality of the team-building retreat highly (4.4 out of 5) and highlighted the opportunity to spend time getting to know team members outside of clinic as most valuable. Trainees rated the overall quality of the didactic and small group skill-building sessions positively (overall mean for sessions = 4.0). However, they suggested making sessions less didactic and more interactive.

### Huddle checklist

A research assistant entered all completed checklists into a database, and the

Table 2

**Team Development Measure Scores at the San Francisco Veterans Affairs Medical Center, 2011–2012***

| | Fall 2011 scores | | | | | Spring 2012 scores | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Team | No. (% response rate†) | Mean | SD | Minimum | Maximum | No. (% response rate†) | Mean | SD | Minimum | Maximum |
| 1 | 5 (83) | 55 | 4.8 | 50 | 60 | 6 (100) | 57.5 | 11.2 | 44 | 76 |
| 2 | 4 (67) | 57.8 | 6.8 | 48 | 64 | 6 (100) | 71.7 | 11.3 | 59 | 88 |
| 3 | 4 (67) | 67.8 | 12.7 | 51 | 79 | 6 (100) | 72.9 | 12.3 | 55.5 | 85 |
| 4 | 4 (67) | 56.5 | 2.5 | 54 | 60 | 5 (83) | 68.8 | 9.1 | 60 | 83 |
| 5 | 3 (67) | 57.7 | 2.3 | 55 | 59 | 4 (67) | 61.0 | 3.4 | 57 | 65 |
| 6 | 5 (83) | 64.2 | 5.2 | 59 | 72 | 5 (100) | 64.4 | 3.8 | 59 | 68 |
| 7 | 6 (67) | 57.0 | 9.1 | 42 | 68 | 8 (89) | 61.4 | 9.4 | 52 | 79 |
| 8 | 9 (86) | 59.1 | 3.9 | 55 | 68 | 6 (67) | 58.8 | 6.2 | 48 | 67 |
| All | 40 | 59.4 | — | — | — | 46 | 64.6 | — | — | — |

*The Team Development Measure contains 31 items, each rated on a four-point scale from Strongly Disagree to Strongly Agree. Scores are transformed to scale from 0 to 100.
†Most teams had six members, but one team did not have a nurse practitioner student, and two teams at community-based clinics had more members.

program evaluator (B.C.O.) calculated descriptive statistics for each team. Huddle coaches completed 82 checklists, and most coaches observed their assigned teams at least three or four times per month from January through March. As coaches observed huddles running more smoothly, checklist completion tapered.

Coaches regularly noted absences in huddles, particularly by LVNs and clerks due to conflicting work demands or scheduling difficulties; 65% of checklists noted at least one team member absent. Several checklist items initially required frequent prompting and feedback by huddle coaches. For example, "LVN or RN presenting patients scheduled for the day" and "RN or trainees leading a discussion of active patients who needed care outside of a scheduled visit." Completion of these items improved substantially as the year progressed, and several coaches wrote comments such as "Good exchange of information and ideas for problem-solving between team."

### End-of-year interviews

The program evaluator (B.C.O.) conducted end-of-year interviews with 19 of 23 trainees (6 NP students, 13 residents). Interviews included specific questions about huddles and interprofessional teamwork. All interviews were recorded, transcribed, and analyzed for themes and confirming/disconfirming evidence related to our three aims.[13]

Our first aim was for participants to cohere as a team with interdependent tasks in clinic. We found many examples supporting this aim. Trainees referred to their RN, LVN, and clerk by name, described positive experiences working with staff on their assigned team, and noted the value of getting to know teamlet staff both personally and professionally.

> It's really nice to know who I am counting on to do different things, and really clearly define one's role and to know that we're all helping each other out. (R2-127)

Nearly all residents mentioned the team, and the huddle in particular, as the most exciting and inspiring part of their experience in clinic. They identified ways in which they saw improvements in coordination and quality of patient care. By experiencing a team-based approach first hand, they deeply appreciated the value for quality primary care.

> Watching how we built the team … and seeing how it actually improved patient care—that was inspiring for our future in primary care.… It was really cool to see. (R2-143)

Our second aim was for trainees and staff to consistently and actively participate in team huddles. Initial inconsistent participation by certain staff and trainees was overcome by implementation of huddle coaches and use of checklists. By the end of the year, trainees were not only consistently participating in huddles, they were thinking about ways to improve the huddle and noticed huddles functioning more organically depending on the needs of the day.

Trainees on teams that had scheduling difficulties and staff turnover noted the potential impact on the effectiveness of their huddle. For example, if the clerk was not present to hear requests for patient scheduling or correcting contact information, others had to assume these tasks. Teams with a long absence by one team member had to adjust to different people filling the role of the missing person each day.

> We probably could have gotten a little bit better swing of things if it was always the same folks. But our LVN changed almost everyday, and … by definition didn't have as strong a commitment to the work. (NP-158)

Our third aim targeted the use of skills for effective teamwork and coordination of care. Several trainees described ways in which their team became more functional over time. Trainees attributed improvements to increased comfort among participants and better understanding of one another's roles. Initial concerns about "stepping on toes" dissipated. As they came to know one another better they found it easier to "divvy up tasks" because "it was just expected" and communication improved.

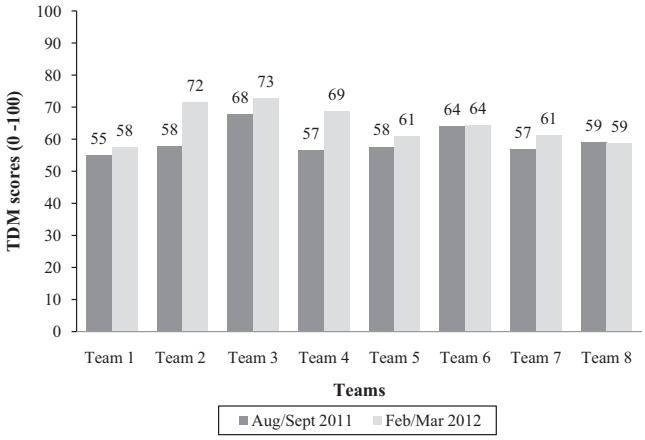


**Figure 1** The Team Development Measure (TDM) contains 31 items, each rated on a four-point scale from "Strongly Disagree" to "Strongly Agree." Scores are transformed to scale from 0 to 100. It evaluates team members' perceptions of cohesiveness, communication, role clarity, and goals and means clarity within their team. Team members completed the TDM in August/September of 2011 and in February/March of 2012. Responses for each team member were combined to generate an overall team score.

> The communication became stronger … it became more honest, more transparent. I think people felt more comfortable with each other and … different members started to feel like they could contribute more in terms of team focused patient care and offer opinions, no matter who had what status or what title. (NP-124)

### Team Development Measure

We used the TDM, a 31-item survey developed by Peace Health, to evaluate team members' perceptions of cohesiveness, communication, role clarity, and goals and means clarity within their team.[11,12] Each team member was asked to complete the TDM in August/September of 2011, prior to the team-building retreat and two to three months into working together, and in February/March of 2012 when teams had worked together for eight to nine months. Responses for each team member were combined to generate an overall team score.

Forty team members completed the TDM in early fall 2011 (August/September), and 46 completed it in spring 2012 (February/March). Response rates for each team ranged from 67% to 86% in early fall and from 67% to 100% in spring. Across professional groups (residents, NP students, RNs, LVNs, clerks), the response rate was lowest among clerks (25% of clerks in fall 2011, 63% in spring 2012); all other groups had 80% or higher response rates. Nearly all teams showed improvement on the TDM, with the mean scores for all teams combined increasing from 59.4 in the fall to 64.6 in the spring (max score is 100). Figure 1 displays scores for each team. Table 2 provides more detail on each team's score. In addition, we looked at subscores and noted that all teams had slightly higher subscores for cohesiveness and/or communication than for role clarity and goals and means clarity in both the fall and the spring. However, five of the eight teams' subscores improved more in goals and means clarity than in cohesiveness, communication and role clarity.

In summary, our evaluation of the huddle-coaching intervention shows that a combination of relationship-building and process-oriented strategies yielded improvement in huddle functioning. Trainees, faculty, and staff rated the team retreat favorably, particularly for the opportunity to get to know their colleagues (relationship building). The combination of huddle checklists and huddle coaches provided accountability and reinforcement that resulted in improved participation and a more consistent, reliable process for huddling. Findings from our interviews with the trainees and the TDM suggest that trainees and staff identified as a cohesive team fairly early in the year. Over time and with support, team members developed a clearer understanding of the purpose and goals of the huddle, learned better ways of communicating, and became more comfortable with one another's roles.

## Discussion

Team-based care is a new concept to many clinical practices and a core element of the patient-centered medical home.[14] Staff and providers are just beginning to learn key components of this approach such as interprofessional communication, roles in the team, and huddling. Incorporating trainees during this formative stage adds complexity; for this reason, many practice-redesign efforts exclude trainees in the early stages. We see this exclusion as a missed learning opportunity, particularly in an era when much emphasis is placed on interprofessional learning and practice.[15,16] Our huddle-coaching program made it possible to fully integrate residents and NP students into the early stages of the VA PACT redesign, such that trainees identified with being a part of the team, participated in huddles, and worked collaboratively with staff and other trainees to complete tasks. Critical elements included huddle coaches, who support staff and trainee skill development; the huddle checklist, representing objective criteria by which teams can review their process and enhance their work together; and the team retreat, which reinforced basic teamwork and communication skills beneficial to all team members.

There are three major lessons to be learned from our huddle-coaching program. First, providing clear structure and guidelines for the huddle process can speed the pace at which teams become functional and valued by all. The initial phases of huddling with minimal guidance and reinforcement resulted in inadequate team member participation and questions about utility. Implementation of the huddle checklist and regular huddle-coaching resulted in increased participation, higher perceived value, and, per our checklist data, improvements in the huddle process. As the huddles became more stable and team members felt more comfortable with roles and scopes of practice, teams could follow the checklist less rigidly and create a process that was more uniquely their own. Several teamlet staff members had competing priorities and missed the huddle, but the presence of coaches helped hold teamlet staff accountable to the huddle with trainees.

Second, both trainees and staff value team retreats as evidenced by their evaluations of the retreat. By providing time for trainees and staff to get to know one

another personally and professionally, retreats play a key role in relationship building. As team members develop a sense of cohesiveness, they can begin the hard work of overcoming professional stereotypes and hierarchy that can inhibit open communication and collaboration. Retreats, coaches, and dedicated training sessions also provide opportunities to teach skills that are new to many staff and trainees and are difficult to learn.

Third, the introduction of trainees into a team-based care model need not wait until the clinic site has fully functional teams. Although PACTs existed before adding trainees, we observed that many providers and teamlets were not huddling consistently or effectively. We initially developed the huddle-coaching program to support teamwork between trainee triads and teamlets but noted a broader impact. By providing modeling and coaching to trainees as well as staff, our program helped establish a culture of huddling which generalized to a culture of collaborative practice throughout the clinic.

We described findings from the first year of the huddle-coaching program, and our focus was primarily on trainee and team-level outcomes. Several areas deserve further investigation—for example, the evolution of this program over time as huddles become a routine part of clinical practice, and the impact of the program on staff and patients. With our small sample size, we were unable to explore the role that personality, logistics, and other unforeseen behaviors played in team development and ways in which our huddle-coaching program may address such factors. As more clinics implement team-based models, exploration of these questions will provide important contributions to the literature on developing highly effective teams in outpatient settings.

Though implementation of huddles has been recommended to optimize communication and coordination of care in ambulatory settings and patient-centered medical home interventions,[2,5,10] there is little evidence of outcomes associated with its use in outpatient settings. In the preoperative setting, similar activities ("briefings") using checklists have decreased nonroutine events and improved compliance with prophylactic practices to avoid infections and deep venous thrombosis.[17–19] Whether similar clinical outcomes can follow from our intervention represents an area of future study. Follow-up work could compare clinical process and outcome measures in other outpatient VA or team-based care sites where huddle interventions have not been implemented.

Huddles are the hub of interprofessional, team-based care. By emphasizing team process and relational factors and actively engaging trainees in leading and facilitating huddles, the huddle-coaching program developed trainees and staff committed to working as a team to deliver quality patient care. These trainees will bring skills to future interprofessional teams, thereby spreading culture change for team-based, high-quality patient care.

*Acknowledgments:* The authors would like to acknowledge the efforts of Parvin Peddi, Carolyn Wong, and the Education in SFVAMC Center of Excellence in Primary Care Education leadership team for making the huddle-coaching program possible. They also wish to thank Jessica Chen and Gillian Earnest for assistance collecting, entering, and analyzing evaluation data and Judy Bowen, David Irby, and the members of ESCape for critical review and feedback on the manuscript.

*Funding/Support:* The Centers of Excellence in Primary Care Education of the Office of Academic Affiliations, U.S. Department of Veterans Affairs Office of Academic Affiliations; San Francisco Veterans Affairs Medical Center; University of California, San Francisco (UCSF).

*Other disclosures:* None reported.

*Ethical approval:* The study was reviewed for ethical approval and deemed exempt by the UCSF committee on human research and SFVAMC research and development committee.

*Previous presentations:* A much earlier version of the manuscript was presented as a poster at the annual meeting of the Society for General Internal Medicine, Orlando, Florida, May 2012, and at the UCSF Medical Education Day in April 2012.

## References

1 Davis K, Abrams M, Stremikis K. How the Affordable Care Act will strengthen the nation's primary care foundation. J Gen Intern Med. 2011;26:1201–1203.
2 Bodenheimer T, Laing BY. The teamlet model of primary care. Ann Fam Med. 2007;5:457–461.
3 Billett S. Learning through work: Workplace affordances and individual engagement. J Workplace Learn. 2001;13:209–214.
4 Yardley S, Teunissen PW, Dornan T. Experiential learning: AMEE guide no. 63. Med Teach. 2012;34:e102–e115.
5 Webster JS, King HB, Toomey LM, et al. Understanding quality and safety problems in the ambulatory environment: Seeking improvement with promising teamwork tools and strategies. In: Henriksen K, Battles JB, Keyes MA, Grady ML, ed. Advances in Patient Safety: New Directions and Alternative Approaches. Vol 3: Performance and Tools. Rockville, Md: 2008.
6 Klein S. The Veterans Health Administration: Implementing Patient-Centered Medical Homes in the Nation's Largest Integrated Delivery System. New York, NY: Commonwealth Fund; 2011.
7 VA Centers of Excellence in Primary Care Education. http://www.va.gov/OAA/coepce. Reviewed/Updated October 18, 2012. Accessed October 16, 2013.
8 Reeves S, Lewin S, Espin S, Zwarenstein M. Chapter 4: A conceptual framework for interprofessional teamwork. In: Interprofessional Teamwork for Health and Social Care. West Sussex, UK: Wiley-Blackwell; 2010:57–76.
9 Fogarty CT, Schultz S. Team huddles: The role of the primary care educator. Clin Teach. 2010;7:157–160.
10 Markova T, Mateo M, Roth LM. Implementing teams in a patient-centered medical home residency practice: Lessons learned. J Am Board Fam Med. 2012;25:224–231.
11 Team Development Measure. http://www.peacehealth.org/about-peacehealth/medical-professionals/eugene-springfield-cottage-grove/team-measure/Pages/Default.aspx. Accessed October 16, 2013.
12 Salem-Schatz S, Ordin D, Mittman B. Guide to the Team Development Measure. Sepulveda, Calif: VA Center for Implementation Practice and Research Support; October 2010. http://www.queri.research.va.gov/ciprs/projects/team_development_measure.pdf. Accessed November 29, 2013.
13 Ryan G, Bernard H. Analyzing qualitative Data: Systematic Approaches. Thousand Oaks, Calif: Sage Publications; 2010.
14 Hoff T, Weller W, DePuccio M. The patient-centered medical home: A review of recent research. Med Care Res Rev. 2012;69:619–644.
15 Interprofessional Education Collaborative Expert Panel. Core Competencies for Interprofessional Collaborative Practice: Report of an Expert Panel. Washington, DC: Interprofessional Education Collaborative; 2011.
16 Crabtree BF, Nutting PA, Miller WL, Stange KC, Stewart EE, Jaén CR. Summary of the National Demonstration Project and recommendations for the patient-centered medical home. Ann Fam Med. 2010;8(suppl 1):s80–s90.
17 Einav Y, Gopher D, Kara I, et al. Preoperative briefing in the operating room: Shared cognition, teamwork, and patient safety. Chest. 2010;137:443–449.
18 Paull DE, Mazzia LM, Wood SD, et al. Briefing guide study: Preoperative briefing and postoperative debriefing checklists in the Veterans Health Administration medical team training program. Am J Surg. 2010;200:620–623.
19 Lingard L, Regehr G, Cartmill C, et al. Evaluation of a preoperative team briefing: A new communication routine results in improved clinical practice. BMJ Qual Saf. 2011;20:475–482.

# Appendix 1

**Huddle Guidelines for Education in Patient Aligned Care Teams Trainees Checklist and Feedback Form, San Francisco Veterans Affairs Medical Center**

Team Observed: _____ Observer: _____ Date: _____

Team members attending: Medical clerk _____ RN _____ LVN _____

NP Student _____ Resident(s)_____

☐ CHECK THIS BOX IF HUDDLE DID NOT OCCUR

| | |
|---|---|
| SET UP | |
| | Met in the usual room |
| | All teamlet members had space / a chair |
| PREP | |
| | Nurse scrubbed the chart prior to the huddle |
| | Trainees were prepared (e.g. scrubbed charts if nurse could not; familiar with patients and had items to discuss) |
| CHECK IN WITH TEAM MEMBERS | |
| | How's everyone doing? Anyone not okay? |
| | Issues for the day? |
| | Is anyone on the team out / planning to leave early / upcoming vacation? |
| SEQUENCE OF SESSION | |
| | LVN presented cases of the clinic session for the day |
| | Agendas of patients are reviewed |
| | Identified whether or not patient was contacted |
| | Trainees/Nurse added concerns about patients (care coordination issues, MSA to update contact information, vaccine to be given @ check-in) |
| | RN or Trainee led the discussion of patients in upcoming weeks |
| | RN or Trainee led the discussion of any active patients who need care outside of a scheduled visit |
| | Special needs required prior to the visit are discussed (e.g. fasting labs, outside records, MSA to schedule same day SW, MH or nutrition apt, pre-planning visit can be with spouse) |
| | Patients are triaged to telephone clinic if indicated |
| | Practice partner patients are triaged: Do they need to be seen or can partner see the patient when next on block? |
| | All hospitalized patients or recent discharges are discussed with RN. |
| | Documents for faxing, mailing, etc. are handed to clerical associate. |
| WRAP-UP | |
| | Did huddle start and stop on time? |

List at least 1 specific feedback point (constructive or reinforcing):

Comment on team member interaction (e.g. all team members engaged throughout the entire huddle, everyone speaks during the huddle):