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"We have to what?": lessons learned about engaging support staff in an interprofessional intervention to implement MVA for management of spontaneous abortion☆,☆☆

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Abstract

Background: Including support staff in practice change initiatives is a promising strategy to successfully implement new reproductive health services. The Resident Training Initiative in Miscarriage Management (RTI-MM) is an intervention designed to facilitate implementation of manual vacuum aspiration (MVA) for management of spontaneous abortion. The purpose of this study was to identify training program components that enhanced interprofessional training and provide lessons learned for engaging support staff in implementing uterine evacuation services.

Study design: We conducted a secondary analysis of qualitative data to identify themes within three broad areas: interprofessional education, the role of support staff, and RTI-MM program components that facilitated support staff engagement in the process of implementing MVA services.

Results: We identified three key themes around interprofessional training and the role of support staff: "Training together is rare," "Support staff are crucial to practice change," and "Transparency, peers and champions."

Conclusions: We present lessons learned that may be transferrable to other clinic sites: engage site leadership in a commitment to interprofessional training; engage support staff as teachers and learners and in shared values and building professionalism.

Implications: This manuscript adds to what is known about how to employ interprofessional education and training to engage support staff in reproductive health services practice change initiatives. Lessons learned may provide guidance to clinical sites interested in interprofessional training, improving service delivery, or implementing new services.

Keywords: Practice change; Miscarriage; Team training; Implementation; Support staff

1. Introduction

The safety and efficacy of office-based uterine aspiration using manual vacuum aspiration (MVA) are known [1–3]; less well understood is how to successfully integrate the service [4]. Using MVA to manage spontaneous abortion in an office setting is cost-effective and permits continuity of care in primary care settings. It also may require new staff roles. Interprofessional and team training, which includes training across all roles in patient care, is an innovation in medical [5–7] and continuing [8,9] education, can facilitate

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implementation of new services [10], and has been associated with better team communication [9] and clinical preparedness by physicians [11]. Interprofessional training may also be effective in achieving practice change [10,12–16]; however, it is challenging to implement [17] and does not yet have strong evidence to support its impact [18–21]. The small existing literature addressing interprofessional training in reproductive health services suggests that including support staff in practice change initiatives is a promising strategy to facilitate implementation of new services [4,22,23].

Our previous work [24,25] underscored the importance of support staff in practice change but did not tell us which parts of the interprofessional training intervention were most important for engaging support staff in the process; this is a key gap in the team training literature [21]. The purpose of the current analysis was to focus on the role of interprofessional training in implementing MVA services at Family Medicine residency sites in Washington State. We used qualitative data to highlight training program components that enhanced interprofessional training, providing lessons learned about engaging support staff in implementing MVA services for spontaneous abortion.

2. Materials and methods

This study is a secondary analysis of a larger prospective mixed-methods impact and process evaluation of the Resident Training Initiative in Miscarriage Management (RTI-MM), which took place in Washington State from 2008 to 2010. Details of the conceptual framework, program characteristics and study design are reported elsewhere [24,25]. Briefly, the RTI-MM trained over 400 individuals, about half of whom were not physicians. In this study, we refer to these nonphysician professionals as clinical or administrative support staff. The RTI-MM was designed to facilitate implementation of office-based management of spontaneous abortion, with a focus on MVA. The intervention includes a didactic session, a hands-on simulation exercise using a papaya model [26], and follow-up sessions targeted at support staff and preparing systems to provide MVA services. Support staff were encouraged to attend all training sessions.

Data collection took place between 6 and 18 months after the initial training session and after all training sessions were completed; timelines were different for each site based on project rollout. All individuals (physicians and nonphysicians) who attended an RTI-MM training session received a recruitment email from the Family Medicine Residency Network, a co-coordinating body of family medicine residency sites. Potential participants contacted the first author (B.G.D.) to learn more about the study, review the consent process and schedule an interview. The first author (B.G.D.) conducted all telephone interviews, which were recorded, and focused on use of MVA at the site prior to the RTI-MM training, the implementation process at that site, remaining barriers to implementation, perceptions of the site champion, and whether the similarity of spontaneous and induced abortion was a challenge to implementing MVA at their site. The first author (B.G.D.) transcribed each interview into a case summary organized by interview question as a first stage of data reduction and synthesis. She then read all transcripts, noting the emergence of overarching themes. Coding was an iterative process. A short initial code list was developed, and we next refined the code list to include emergent themes [27]. Finally, after all case summaries were coded, we refined the code list a final time, merging overlapping codes and renaming codes. Following data coding, we developed matrices [28] to display summarized data by key themes across and within subjects [29] and stratified by role and site [30] to facilitate comparative analyses [31].

Full results of our primary qualitative analysis, focused on barriers and facilitators to implementation of MVA services, are published elsewhere [25]. In this secondary analysis [32,33], we used a subset of our data to identify themes within three broad areas: interprofessional education, the role of support staff and RTI-MM program components that facilitated support staff engagement with implementing MVA services. This study was approved by the University of Washington Human Subjects Division.

3. Results

Thirty-six participants completed an interview, of whom 14 were support staff (8 clinical and 6 administrative) and 22 were physicians (10 residents, 12 faculty). All 10 programs were represented in the data. We present brief exemplars for each key theme organized by our three broad areas of interest: "Training together is rare," "Support staff are crucial to practice change" and "Transparency, peers and champions" ("Champions" are key individuals in the social network who support the innovation or change [15]).

3.1. Interprofessional education: "training together is rare"

Support staff and physicians spoke often about the rarity of support staff and physicians training together. Support staff found it novel and helpful to be included at all:

> "I think the most helpful for me was that my workgroup was included in the discussion. At first I thought well how does this apply to me…it was good that we were included in the discussion and they thought enough of our participation to include us." (Administrative support staff)

Physicians found it novel and helpful to have a forum to hear what support staff think. "We did have support staff present…and we discussed their biases in terms of doing this [uterine evacuation] in the office and it was actually rather interesting because of all the support staff, I don't think there was a single one [who] was in favor of doing an in-office manual vacuum aspiration." (Faculty MD) Several participants, both physicians and support staff, echoed a participant

who cited "hearing the same messages" (Faculty MD) as an important and novel part of team training.

3.2. Role of support staff: "crucial to practice change"

Both physicians and support staff acknowledged the role of support staff in achieving practice change, but physicians spoke about the role of support staff in implementing the service, while support staff focused more on their teaching roles. Two physicians noted: "It is front desk through provider, not just the provider knowing the procedure." (Faculty MD) and "…critical to having it happen is…support staff who want to make it happen." (Resident MD)

Support staff at participating residency sites spoke about their role in practice change in terms of needing to know about new initiatives to serve as resources for others:

> "You know all the back office people serve as resources for the residents…so even though they're the ones using the equipment, they really do look to the back office people for knowing how things work and how to operate things so we need to know how to work things." (RN clinic coordinator)

Other support staff focused on their direct role in clinical training: "I was interested to have the hands on experience with the papaya…to be able to see what the doctors are doing because that helps us in training." (MA, clinical support staff)

3.3. RTI-MM program components: "transparency, peers and champions"

In the context of the RTI-MM focus on interprofessional or team training, participants cited specific program components as helpful to engaging support staff. Key among them were transparency, knowing how peers implemented the service, and use of physician and support staff champions at each site. Participants acknowledged appreciation for transparency in the RTI-MM training model about what was happening in the clinic — which service would be provided and what it looks like. For example, one medical assistant talked about her support staff colleagues' discomfort with viewing products of conception:

"When it came time to seeing the, you know, the product [of conception] everybody was like what? We have to what?" (MA, clinical support staff). She then went on to talk about how it was important that everybody understands exactly what to expect to see during a procedure so there were no surprises later.

Others focused on the differences and similarities between spontaneous and induced abortion, recognizing the overlap and distinctions, which is reiterated in the RTI-MM training: "…it's different, but its done like an abortion." (RN coordinator) Physicians also appreciated the opportunity to talk about uterine evacuation with the entire healthcare team with transparency and in a way that had the potential to change attitudes. "The [RTI-MM was] enriching of training we already did for support staff [who identify as anti-abortion], they were able to think about the procedure itself in a more positive light." (Faculty MD and site champion)

Participants appreciated hearing about peer experiences, how other clinics had implemented services, and common barriers and solutions. Support staff involved in the logistics of implementing MVA were especially receptive to peer experiences: "We discussed scenarios and options and questions and got some ideas how other clinics rolled out the service and used it…" (LPN, Office coordinator)

Champions at each site were central to achieving successful implementation and engaging support staff as champions in addition to physicians proved especially important. One physician champion noted: "…most importantly one of our [support staff] champions was very positive about it…he has a lot of respect from the MAs and staff." (Faculty MD)

4. Discussion

Our qualitative study provides depth to previous research that has documented the important role of support staff in practice change initiatives and suggests that including support staff in practice change or training initiatives is novel for both support staff and physicians. Furthermore, being included in interprofessional training is valued by support staff, as is acknowledgement of their role in the teaching mission of a residency site. Our experience suggested that transparency, having a chance to hear the opinions of others and identifying a support staff champion in addition to a physician champion may enhance engaging support staff and thus the success of practice change initiatives.

Our previous work revealed that perceptions of spontaneous abortion as "emotional" for patients and for staff and similar to induced abortion were barriers to implementing MVA services for spontaneous abortion, but that effective champions and team training were facilitators at the site level [25]. In addition, barriers were often identified as coming from support staff. Our quantitative evaluation focused on physician behavior change and suggested that that site-level mean scores of support staff knowledge and attitudes were significantly associated with individual physician self-reported practice of MVA for spontaneous abortion [24].

Interprofessional education and training provided a unique learning environment where physicians and support staff were able to hear each others' opinions. Team communication has been identified as a central part of successful practice change, whether implementing a new service or improving the safety of existing services [9,21], and discrepancies in perceptions and understandings have been associated with adverse health outcomes [9]. The unique learning environment of interprofessional education is also an opportunity to engage support staff in shared values, the democratization of clinical care and building professional behaviors, even, or perhaps especially, in the context of reproductive health services. Previous research has identified a "shared mental model" [34] as key to successful teamwork, and "collaborative clinical culture" has been found to be associated with better patient outcomes [35]. In our previous

work, we found that the shared values of continuity of care and providing high-quality, evidence based and patient-centered care helped support staff engage with implementing miscarriage management services [25].

Despite the positive response from physicians and support staff to interprofessional training, it was often difficult to engage sites in this training model. Some of the difficulty was no doubt logistical — a comprehensive interprofessional training session may require closing the clinic. Some of the difficulty may have come from unfamiliarity with interprofessional training or a sense that support staff need not be involved in practice change initiatives. However, sites that successfully implemented MVA were generally those sites where study participants articulated their role as learning and training centers, acknowledged the role of support staff in implementation and patient care, and "bought into" the interprofessional training component of the RTI-MM [25]. Being included in training may also contribute to transparency and mitigate discomfort with spontaneous abortion and the MVA procedure expressed by support staff.

We propose lessons learned from our experience about engaging support staff in implementing MVA services that continue to inform our project and may be transferrable to other practice change initiatives:

- Engage site leadership in a commitment to interprofessional training
- Engage support staff as teachers and learners
- Engage support staff in shared values and building professionalism at your clinical site

This study must be interpreted with the following limitations in mind: as with all qualitative data, results may not be generalizable beyond the study participants. Specifically, our results may not translate to medical specialties outside of Family Medicine or to sites not engaged in training (non-residency sites). This study is a secondary analysis of qualitative data collected to examine barriers and facilitators to implementing MVA services; data were not collected to answer the question of how to engage support staff. Our open-ended interview guide, however, captured much rich information on the topic of support staff and interprofessional training.

In conclusion, we identified three key themes about interprofessional training in the RTI-MM that were useful in engaging support staff in practice change to implement MVA services for miscarriage: "Training together is rare," "Support staff are crucial to practice change" and "Transparency, peers and champions." We conclude that interprofessional training can contribute to engaging support staff and thus in the success of practice change initiatives.

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