Society for Academic Continuing Medical Education Intervention Guideline Series: Guideline 2, Practice Facilitation

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Abstract: The Society for Academic Continuing Medical Education commissioned a study to clarify and, if possible, standardize the terminology for a set of important educational interventions. In the form of a guideline, this article describes one such intervention, *practice facilitation*, which is a common strategy in primary care to help practices develop capacity and infrastructure to support their ability to improve patient care. Based on a review of recent evidence and a facilitated discussion with US and Canadian experts, we describe practice facilitation, its terminology, and other important information about the intervention. We encourage leaders and researchers to consider and build on this guideline as they plan, implement, evaluate, and report practice facilitation efforts. Clear and consistent use of terminology is imperative, along with complete and accurate descriptions of interventions, to improve the use and study of practice facilitation.

Keywords: practice facilitation, practice coaching, continuing education, continuing medical education, quality improvement, innovative educational interventions, interprofessional education, knowledge translation

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The Society for Academic Continuing Medical Education (SACME) commissioned the Terminology Project to shed light on four major educational interventions for which terminology may be a source of confusion, and, as such, may interfere with progress in research and application. Based on published evidence reports, systematic reviews, expert opinion, and an earlier project phase that identified a set of confusing terms,[1] the project selected four interventions with the goal of creating guidelines to assist leaders and researchers in their ongoing use and study of the selected educational interventions. The purpose of each guideline is to standardize terminology and generate additional discussion. This article describes the findings—in the form of a guideline—about one of the educational interventions considered: practice facilitation. Subsequent articles in the series will address three other interventions.

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The project team used the Chaffee framework, known as "explication,"[2] to establish a clearer scientific meaning for each intervention, to the extent that current research and thinking allow. Explication strengthens ties between theory, observation, and research by helping experts to use words (terms) in more disciplined ways.[2] Through concept explication, experts are able to communicate more precisely by having explicit, shared understandings of key terms, which in this project include terms associated with common evidence-based interventions. Once a term is selected, explication includes identifying and reviewing relevant literature, drafting definitions or descriptions, and applying and revising definitions.[2] The team modified the Chaffee framework by following it to the point of developing a guideline that SACME and authors of the article will promote for application and revision.

The internal project team (R.E.G., S.K., T.V.H.) operationalized the Chaffee framework through a consensus process with a group of US and Canadian experts, who were leaders and/or researchers in continuing education. The project team used a series of biweekly surveys to interact virtually with the experts throughout four consecutive 3-month cycles, with each cycle devoted to a single intervention. Based on a review of evidence, the project team drafted an initial survey in each cycle to introduce the intervention of focus, common terms associated with it, sources of recent evidence, and other key articles and resources. With input from the experts, the team developed a second survey and used a modified Delphi technique[3] in this and in subsequent survey rounds to solicit feedback about key aspects of the intervention. The Delphi-style surveys continued until the experts either came to consensus on each item or until responses were not moving toward agreement. The Delphi technique is a virtual strategy to generate discussion while minimizing nonproductive group dynamics.[3] We modified the typical Delphi technique using the same expert group members across all 4 cycles of the project. Although not every person has expertise in each intervention, collectively the project team and expert group have specific expertise in, and a general appreciation for, the history, culture, and application of this area of research.

As per the Delphi technique, experts who provided timely feedback (within 8 days) in the Delphi rounds were provided results (personal and aggregate responses) and were asked to reconsider their previous responses in the next survey for any items for which the group had not reached consensus. In this way, the team tried to facilitate the experts coming to consensus (defined either as $\geq$70% agreement on any single response or as $\geq$80% agreement on the combination of two adjacent responses at either end of a 5-point Likert scale, when applicable) about different facets of the intervention. Based on the final Delphi results, the project team drafted and sent a guideline to the experts as the fifth and final survey of the cycle with a request for additional feedback that informed the final version described in this article.

This article describes the information contained in the guideline for practice facilitation. In this cycle (May to July 2014), 18 experts began the process with participation in the Delphi rounds at 94.4%, 94.1%, and 87.5%, with 14 experts completing all three rounds for an overall response rate of 77.8%. Providing yet another opportunity for interaction and discussion, the authors of this article include both the project team and the 14 experts who 1) completed all three Delphi rounds, 2) met criteria for authorship, and 3) agreed to authorship. Additional information is available about the cycle and the project's methods.[4]

WHAT IS PRACTICE FACILITATION?

Practice facilitation is an educational intervention used for quality improvement (QI) purposes. The essence of the intervention is that a *practice* (most commonly but not necessarily a primary care clinic, center, or practice) provides information (e.g., current performance and improvement barriers) as part of a specific and comprehensive *assessment* of its leadership, culture, and systems. The *facilitator* forms an ongoing and trusting *relationship* with the practice and typically enlists a *multifaceted strategy* (i.e., a combination of two or more educational or QI interventions) that is carefully *tailored* to meet the needs of the practice. The facilitator, who may be an individual or a team, has appropriate *preparation* (i.e., education and/or training) to fully support the practice through process expertise (i.e., QI tools and methods) and content expertise (i.e., guidelines and evidence in relevant areas of patient care). Consistent with the concept of "clinical microsystem,"[5] we are using the term *practice* in this article to mean a group of clinicians and staff working together as a team in any clinical setting.

WHAT IS THE BEST PUBLISHED DESCRIPTION OF PRACTICE FACILITATION?

The group did not come to consensus on this question, but the majority of experts selected one or the other of the descriptions below of practice facilitation as the better two of many published options. Importantly, many experts commented that practice facilitation should not be restricted to primary care although most published evidence reflects this context.

> Practice [facilitation]. . . involves an external facilitator who works with the practice to develop an ongoing, trusting relationship both through working on specific initiatives and developing more systematic and continuous internal [QI] capacity. Through this process, practices decide which areas to target for improvement. Facilitators help them build capacity to achieve these goals and sustain improvements by initiating new QI projects and "maintaining the gains.[6]

> [Practice facilitation] is a supportive service provided to a [practice] by a trained individual or team of individuals. These individuals use a range of organizational development, project management, QI, and practice improvement approaches and methods to build the internal capacity of a practice to help it engage in improvement activities over time and support it in reaching incremental and transformative improvement goals. This support may be provided on site, virtually (through phone conferences and Webinars), or through a combination of onsite and virtual visits.[7]

WHAT OTHER TERMS DO PEOPLE USE TO DESCRIBE PRACTICE FACILITATION?

The experts came to consensus on the term *practice facilitation* to describe the intervention, but *practice coaching* was another term that received serious consideration. Across the literature, variation exists both in the terms used and in their component descriptions, which are often incomplete.[8] Any term used to describe an intervention should include a complete description of what precisely constitutes the intervention strategy.[9]

WHAT ARE SOME INTERVENTIONS THAT MAY BE CONFUSED WITH PRACTICE FACILITATION?

One common intervention that may be confused or may conceptually overlap with practice facilitation is "academic detailing," also known as "educational outreach."[10] Some experts describe academic detailing as an intervention that is focused primarily on providing information to clinicians in support of change[10] rather than on building capacity and infrastructure, although the distinction between these two interventions is inconsistent in the literature.[11] QI collaboratives and other types of educational meetings, such as interactive workshops, can also be confused with practice facilitation, although participants in QI collaboratives and interactive workshops are more likely to be working in groups on specific areas of care than working one-on-one to build general infrastructure and capacity.

WHAT ARE SOME IMPORTANT CHARACTERISTICS OF PRACTICE FACILITATION?

Evidence reflected in the most recent systematic review[12] of practice facilitation (first three items) and/or expert opinion (all items) has identified the following characteristics—described in the affirmative—as being potentially important to practice facilitation:

1. Tailoring the intervention strategy to meet the specific needs of the practice[12]
2. Serving a smaller number of practices at the same time[12]
3. Offering higher-intensity facilitation (e.g., more frequent visits)[12]
4. Using carefully selected interventions along with practice facilitation
5. Focusing facilitation on change process rather than on clinical content
6. Setting specific goals with practices
7. Holding complementary collaborative meetings, in-person or virtual
8. Selecting facilitators with particular backgrounds (e.g., medicine, nursing, and pharmacy) that are credible to practices
9. Preparing or training facilitators for outreach efforts
10. Offering facilitation over a significant duration of time.

Other characteristics may be important too, but additional research is necessary.[12] Because no precise formula exists, the best strategy is careful assessment[13] of each practice facilitation initiative with these characteristics in mind.

HOW IS PRACTICE FACILITATION BELIEVED TO WORK?

Solberg[14]'s conceptual framework for practice improvement may be a helpful theory to explain practice facilitation. Solberg[14] explains that QI is a product of a combination of identifying a priority and promoting both change process capability and care process content to leverage facilitators and overcome barriers in practice. By modeling the process of planning, implementing, and evaluating efforts to improve patient care—helping practices to do (complete a project) and to understand (reflect and discuss) the process—facilitators help practices to build capacity and infrastructure, especially if an explicit framework, such as the expanded outcomes framework,[13] guides the process. In contrast to consultants, who may offer similar expertise, facilitators work with practices to markedly decrease their need for ongoing external assistance.

UNDER WHAT CIRCUMSTANCES SHOULD ONE CONSIDER USING PRACTICE FACILITATION?

Practice facilitation requires considerable time and resources, so facilitators and practices alike need to make a significant commitment to work together toward the shared understanding that practices are learning what to do (a project), and also how to do it (the process) and why to do it (a framework for understanding change). Typically, this work will result in changes in leadership, culture, and systems within practices. Selecting practices that are ready and willing to change is critical, so recruitment is an important step preceding other efforts to engage practices.[15] Requiring practices to meet frequent, important milestones (driven by action plans) to move forward with assistance is recommended. A firm written agreement about mutual responsibilities and consequences for breach thereof is a prudent strategy to ensure that practices appreciate their commitment. Some organizations that provide practice facilitation require that multiple individuals at the practice management level, e.g., clinical and administrative leaders, sign a contract to begin to receive assistance. Selecting practices that have successfully completed other long-term QI projects and that have multiple reasons (incentives) and a goal to participate may predict better recruitment decisions.

WHAT OTHER INTERVENTIONS COMPLEMENT PRACTICE FACILITATION?

Depending on the initial and ongoing needs that practices have, virtually any evidence-based intervention may complement practice facilitation. Such interventions as workflow redesign, team care, and patient self-management education are strong possibilities, as they require a general appropriate change in how practices function. Other interventions commonly associated with practice facilitation include clinician reminders, patient reminders, academic detailing, performance measurement and feedback, and interactive educational meetings. Other areas of assistance, such as development of policies and procedures and meaningful use of health information technology, may also be part of practice facilitation efforts, as might leadership training. Some experts have conceptualized different phases of educational change, such as predisposing, enabling, and reinforcing, and have described interventions that align well with these phases.[13] Such thinking is quite consistent with the approach of practice facilitation.

WHAT IS THE EVIDENCE ASSOCIATED WITH PRACTICE FACILITATION'S EFFECTIVENESS?

According to the most recent systematic review and meta-analysis of practice facilitation, primary care practices are nearly three times more likely to adopt evidence-based guidelines through practice facilitation.[12] Also, these same authors report that "as the number of practices per facilitator increases, the overall effect of facilitation diminishes but [does] not plateau. The intensity of the intervention is associated with larger effects as well. In addition, whether the

intervention [is] tailored for the practice also [impacts] effectiveness, and we found that a larger effect size is associated with tailored interventions."[12] Although far from conclusive, practice facilitation is an evidence-based strategy worthy of continued use with better understanding.

WHAT ARE SOME BEST PRACTICES ASSOCIATED WITH PRACTICE FACILITATION?

Given the flexibility inherent in practice facilitation (if appropriately resourced) and the relevance of local conditions to QI efforts,[16] the most important practice is conducting initial and ongoing needs assessments,[13] which includes the perspectives of patients and families, to offer what is needed and in a manner and pace at which the practice can adjust with changes in leadership, culture, and systems. Formative and summative evaluations are critical to adjusting QI efforts and to judging their impact, respectively.

WHAT ARE SOME IMPORTANT RESEARCH ISSUES CONCERNING PRACTICE FACILITATION?

Pressing research issues include a better understanding of important determinants of practice facilitation's effectiveness, such as tailoring of support, intensity of interactions, and the number of practices served by facilitators.[12] Collecting and reporting on a comprehensive set of determinants will help the field to improve educational interventions and understand their effectiveness.[9] Determining the most appropriate interventions to offer, along with in what order and at what pace, is also critical given that the primary purpose of practice facilitation is to improve capacity and infrastructure in light of local conditions.[16] Valid and reliable tools to assess leadership, culture, and systems in support of practice facilitation would facilitate additional research. Also helpful would be research on effective ways to prepare facilitators for their roles and a standardized approach to facilitator note-taking and postvisit debriefing to improve the effectiveness of practice facilitation and the quality of information arising from it.

WHERE CAN ONE LEARN MORE ABOUT PRACTICE FACILITATION?

The following articles provide helpful guidance on practice facilitation:

1. The most recent systematic review and meta-analysis of practice facilitation:
   Baskerville NB, Liddy C, Hogg W. Systematic review and meta-analysis of practice facilitation within primary care settings. *Ann Fam Med*. 2012;10:63–74.
2. A description of essential features of practice facilitation, including process and content expertise, and international examples of programs and relevant research questions:
   Grumbach K, Bainbridge E, Bodenheimer T. *Facilitating Improvement in Primary Care: The Promise of Practice Coaching*. The Commonwealth Fund pub. 1605. Vol. 15. 2012. Available at: http://www.commonwealthfund.org/~/media/Files/Publications/Issue%20Brief/2012/Jun/1605_Grumbach_facilitating_improvement_primary_care_practice_coaching.pdf. Accessed May 15, 2014.
3. A description of how to develop and run a practice facilitation program in primary care, and a resource with a logic model to support practice facilitation:
   Knox L, Taylor EF, Geonnotti K, et al. *Developing and Running a Primary Care Practice Facilitation Program: A How-to Guide*. AHRQ Publication No. 12-0011. Rockville, MD: Agency for Healthcare Research and Quality. December 2011. Available at: http://pcmh.ahrq.gov/sites/default/files/attachments/Developing_and_Running_a_Primary_Care_Practice_Facilitation_Program.pdf. Accessed May 15, 2014.
4. A description of the role of practice facilitation in the context of implementation research, identifying important research questions and a role for formative evaluation and for theory:
   Stetler CB, Legro MW, Rycroft-Malone J, et al. Role of "external facilitation" in implementation of research findings: A qualitative evaluation of facilitation experiences in the Veterans Health Administration. *Implementation Sci*. 2006;1:23. doi: 10.1186/1748-5908-1-23.
5. A description of the role of practice facilitation in the broader context of necessary supports and resources for the improvement and transformation of primary care:
   Taylor EF, Genevro J, Peikes D, et al. *Building Quality Improvement Capacity in Primary Care: Supports and Resources*. Agency for Healthcare Research and Quality. Decision maker Brief: Primary Care Quality Improvement No. 2. April 2013. Available at: http://www.ahrq.gov/professionals/prevention-chronic-care/improve/capacity-building/pcmhqi2.pdf. Accessed May 15, 2014.
6. A description of the roles of two important supports for primary care practices, i.e., practice facilitators and care managers:
   Taylor EF, Machta RM, Meyers DS, et al. Enhancing the primary care team to provide redesigned care: the roles of practice facilitators and care managers. *Ann Fam Med*. 2013;11:80–83. doi: 10.1370/afm.1462.
7. A description of how practice facilitators in four practice-based research networks in the US function:
   Nagykaldi Z, Mold JW, Robinson A, et al. Practice facilitators and practice-based research networks. *J Am Board Fam Med*. 2006;19:506–510.
8. An example of a growing evidence base for ways (e.g., reciprocal learning) and tools that practice facilitators can use to increase engagement in primary care settings:
   Leykum LK, Palmer R, Lanham H, et al. Reciprocal learning and chronic care model implementation in primary care: results from a new scale of learning in primary care. *BMC Health Serv Res*. 2011;11:1–7. Available at: http://www.biomedcentral.com/1472-6963/11/44.

Practice facilitation is an evidence-based intervention that can be an effective strategy to change important educational outcomes, but reports about the intervention suffer from incomplete data and conflicting terminology. We offer this guideline, which is based on a recent evidence review and an expert consensus process, as a starting point for leaders, who are planning practice facilitation initiatives, and for researchers, who are studying educational interventions. At the very least, we encourage complete and accurate descriptions of

intervention efforts, and caution educators and QI experts from solely relying on terms to convey details or meaning, especially when interventions are multifaceted. Along with SACME, we welcome constructive criticism about the opinions expressed here, and we hope that this guideline will inspire better practice and research in the field.

Lessons for Practice

- Practice facilitation is an evidence-based intervention that primarily strives to improve capacity and infrastructure in practice settings, most notably primary care.
- Authors should provide complete and accurate descriptions of practice facilitation efforts and avoid reliance on new or established terms.
- Leaders and researchers should engage in ongoing discussion about the terminology, evidence, and theory underlying practice facilitation.

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REFERENCES

1. Horsley T, Zeiter J, O'Connor M, et al. *Exploring the Need for a Taxonomy of CME/CPD Terms and Frameworks: An Environmental Scan*. Birmingham, AL: Society for Academic Continuing Medical Education; 2012. Unpublished report.
2. Chaffee SH. *Explication*. Newbury Park, CA: Sage; 1991.
3. Dalkey NC, Rourke DL, Lewis R, et al. *Studies in the Quality of Life: Delphi and Decision-Making*. Lexington, MA: Lexington Books; 1972.
4. Grant RE, Van Hoof TJ, Sajdlowska J, et al. Terminology in continuing education: a hybrid methodology for improving the use and reporting of interventions in continuing education. *J Contin Educ Health Prof*. 2015; 35(suppl 2):S45–S50.
5. Nelson EC, Godfrey MM, Batalden PB, et al. Clinical microsystems, part 1. The building blocks of health systems. *Jt Comm J Qual Patient Saf*. 2008;34:367–378.
6. Taylor EF, Genevro J, Peikes D, et al. *Building Quality Improvement Capacity in Primary Care: Supports and Resources. AHRQ Publication No. 13-0044-2-EF*. Rockville, MD: Agency for Healthcare Research and Quality; 2013.
7. Knox L, Taylor EF, Geonnotti K, et al. *Developing and Running a Primary Care Practice Facilitation Program: A How-to Guide. AHRQ Publication No. 12-0011*. Rockville, MD: Agency for Healthcare Research and Quality; 2011.
8. Marinopoulos SS, Dorman T, Ratanawongsa N, et al. *Effectiveness of Continuing Medical Education. Evidence Report/Technology Assessment No. 149. AHRQ Publication No. 07–E006*. Rockville, MD: Agency for Healthcare Research and Quality; 2007.
9. Davis D, Bordage G, Moores LK, et al. The science of continuing medical education: terms, tools, and Gaps: effectiveness of continuing medical education: American College of Chest Physicians evidence-based educational guidelines. *Chest*. 2009;135:8S–16S.
10. O'Brien MA, Rogers S, Jamtvedt G, et al. Educational outreach visits: effects on professional practice and health care outcomes. *Cochrane Database Syst Rev*. 2007:CD000409.
11. Van Hoof TJ, Miller NE. Consequences of lack of standardization of continuing education terminology: the case of practice facilitation and educational outreach. *J Cont Educ Health Prof*. 2014;34:83–86.
12. Baskerville NB, Liddy C, Hogg W. Systematic review and meta-analysis of practice facilitation within primary care settings. *Ann Fam Med*. 2012;10: 63–74.
13. Moore DE, Green JS, Gallis HA. Achieving desired results and improved outcomes: integrating planning and assessment throughout learning activities. *J Cont Educ Health Prof*. 2009;29:1–15.
14. Solberg LI. Improving medical practice: a conceptual framework. *Ann Fam Med*. 2007;5:251–256.
15. Margolis PA, Lannon CM, Stuart JM, et al. Practice based education to improve delivery systems for prevention in primary care: randomized trial. *BMJ*. 2004;328:388.
16. Ovretveit J. Understanding the conditions for improvement: research to discover which context influences affect improvement success. *BMJ Qual Saf*. 2011;20(suppl 1):i18–i23.