

Collaboration in Practice

Implementing Team-Based Care



The American College of
Obstetricians and Gynecologists
WOMEN'S HEALTH CARE PHYSICIANS

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Collaboration in Practice: Implementing Team-Based Care was developed under the direction of the Task Force on Collaborative Practice. The information in *Collaboration in Practice: Implementing Team-Based Care* should not be viewed as a body of rigid rules. This guidance is general and intended to be adapted to many different situations, taking into account the needs and resources particular to the locality, the institution, or the type of practice. Variations and innovations that improve the quality of patient care are to be encouraged rather than restricted. The purpose of this guidance will be served if it provides a firm basis on which local norms may be built.

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- ◆ American Academy of Pediatrics (AAP)
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- ◆ American Society of Addiction Medicine
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- ◆ Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN)
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- ◆ Institute for Healthcare Improvement
- ◆ Institute for Patient- and Family-Centered Care (IPFCC)
- ◆ National Association of Nurse Practitioners in Women's Health (NPWH)
- ◆ National Association of Pediatric Nurse Practitioners (NAPNAP)
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- ◆ National Partnership for Women & Families
- ◆ Pacific Business Group on Health
- ◆ Society for Physician Assistants in Pediatrics (SPAP)

The following organizations have reviewed and supported this report:

- ◆ Academy of Nutrition and Dietetics
- ◆ American Osteopathic Academy of Addiction Medicine

Introduction

Background

Since the initial release of *Guidelines for Implementing Collaborative Practice* in 1995 by the American College of Obstetricians and Gynecologists (ACOG), health care providers have endeavored to respond to policy changes designed to move health care from a fragmented system to a seamless, value-based model of care. Passage of the Patient Protection and Affordable Care Act in 2010 highlighted the need to develop alternate care delivery and payment models that improve patient outcomes to achieve the “Triple Aim” of improving the experience of care of individuals and families, improving the health of populations, and lowering per capita costs (1).

Even before the Affordable Care Act, *Crossing the Quality Chasm*, published by the Institute of Medicine in 2001, proposed the core expectations that health care be safe, effective, patient centered, timely, efficient, and equitable (2). It also proposed a set of rules that emphasized patient-centered care that is coordinated, safe, evidence based, and transparent; cooperation between health care providers to ensure care coordination, and consistent and appropriate exchange of information; and improved access to care and creation of a safe and responsive system of care through a well-functioning team.

As part of his presidential initiative in summer 2014, John C. Jennings, MD, (then President of ACOG) convened an interprofessional Task Force on Collaborative Practice to revise ACOG’s 1995 *Guidelines for Implementing Collaborative Practice* publication. The task force was charged with updating and broadening the original publication, exploring team-based practice among all specialties (not just women’s health care) as a model of health care delivery that encourages a patient- and family-centered approach, responds to emerging demands, and reduces undue burdens on health care providers. In doing so, the task force was asked to first consider efficiency, quality, and value in the implementation of team-based care models rather than giving primary consideration to either current or proposed payment reimbursement methods. The following guidance is a result of the task force’s work and is based on current evidence and expert consensus. The task force acknowledges that some areas of the document are based largely on expert consensus because substantial published data are unavailable. In these areas, the task force calls for this document to serve as an impetus for developing additional data on team-based care and clinical outcomes.

Timeliness of Team-Based Care

The changing and increasingly complex health care delivery system and a shift to value-based payment models highlight the importance of a team approach to improve the health of individuals and populations, and the quality and efficiency of health care delivery (3). As an example, the typical Medicare beneficiary visits two primary care providers and five specialists per year, as well as health care providers of diagnostic, pharmacy, and other services. This figure is several times larger for

“Health care teams take many forms, ranging from teams that handle the entirety of a patient’s care to teams focused on a particular patient need or disease process. Although each health care team is unique, shared goals, clear roles, mutual trust, effective communication, and measurable processes and outcomes are the core values embraced by high-performing teams.”

people with multiple chronic conditions (4). In order to manage large amounts of information and multiple handoffs, seamless communication and transitions among health care providers (within a team or among teams) are required to support wellness and care for patients with complex health conditions. These transitions require a shift to interprofessional collaboration that entail a necessary evolution away from single-provider care to a team-based approach, which ensures patient centeredness, quality, and efficiency (5). Cumbersome, uncoordinated processes among unconnected health care providers tend to impede care and decrease safety. Human and financial resources are wasted when systems fail to build on the strengths of all members of the health care team to ensure that care is appropriate, timely, and safe (2). There is growing recognition for the importance of partnerships with patients and families at all levels, including individual care decisions, health system learning and improvement, and community-based interventions (3). Within a team, the shared responsibility for care that leverages patient and health care professional expertise is the optimal approach for achieving the Triple Aim. Although evidence is still emerging, team-based care can lead to improved individual and population health outcomes; improved safety, quality, and efficiency of health care service delivery; enhanced patient experiences and satisfaction; reduced health care costs; and increased health care provider satisfaction and retention (6).

Health care teams take many forms, ranging from teams that handle a patient's care in entirety to teams focused on a particular patient's need or disease process. Although each health care team is unique, shared goals, clear roles, mutual trust, effective communication, and measurable processes and outcomes are the core values embraced by high-performing teams (5). Although teams may vary, it is essential to always acknowledge that the patient and, to the extent that the patient desires, the family are key members of the team. In this document, "family" refers to the family members and others that play a significant role in the patient's life (including family caregivers) that the patient acknowledges as team members, and who may participate in the patient's care to the extent that the patient desires.

"When done appropriately, the team-based approach provides integrated care over the course of a specific experience, as well as across a patient's lifespan and within a regionalized care system."

Journey Toward Team-Based Care

The journey toward collaborative, team-based care is a process that requires education, skill building, continuous evaluation, and team member dedication to the pursuit of the guiding principles of care. The tenets presented in this document are intended to provide a basis for discussion about how to best implement team-based care in diverse settings and beyond the confines of a specific episode. When done appropriately, the team-based approach provides integrated care over the course of a specific experience, as well as across a patient's lifespan and within a regionalized care system.

[Chapter 1](#) defines team-based care. [Chapter 2](#) presents the foundational guiding principles for team-based care. [Chapter 3](#) outlines key considerations in assessing the needs of a practice in implementing team-based care and how emerging technologies (eg, telehealth) can be used to support and facilitate on-site and virtual team-based care. [Chapter 4](#) discusses licensure and scope of practice laws that govern practice relations between team members, how these vary state to state, and regulatory frameworks that support team-based care. [Chapter 5](#) identifies opportunities for effectively implementing team-based collaborative care. Chapters 1, 2, and 3 contain case vignettes that illustrate key concepts of team-based care.

Note: Glossary terms that appear throughout the report are shown in italics. Please refer to the Glossary for the definitions.

For More Information

The task force has identified additional resources on topics related to this document that may be helpful for health care providers and patients. You may view these resources at www.acog.org/More-Info/CollaborativePractice.

These resources are for information only and are not meant to be comprehensive. Referral to these resources does not imply the American College of Obstetricians and Gynecologists' endorsement of the organization, the organization's web site, or the content of the resource. The resources may change without notice.

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Executive Summary

Introduction

Quality, efficiency, and value are necessary characteristics of our evolving health care system. Team-based care will work toward the Triple Aim of 1) improving the experience of care of individuals and families; 2) improving the health of populations; and 3) lowering per capita costs. It also should respond to emerging demands and reduce undue burdens on health care providers. Team-based care has the ability to more effectively meet the core expectations of the health care system proposed by the Institute of Medicine. These expectations require that care be safe, effective, patient centered, timely, efficient, and equitable. This report outlines a mechanism that all specialties and practices can use to achieve these expectations.

The report was written by the interprofessional Task Force on Collaborative Practice and is intended to appeal to multiple specialties (eg, internal medicine, pediatrics, family medicine, and women's health) and professions (eg, nurse practitioners, certified nurse-midwives/certified midwives, physician assistants, physicians, clinical pharmacists, and advanced practice registered nurses). This document provides a framework for organizations or practices across all specialties to develop team-based care. In doing so, it offers a map to help practices navigate the increasingly complex and continuously evolving health care system. The guidance presented is a result of the task force's work and is based on current evidence and expert consensus. The task force challenges and welcomes all medical specialties to gather additional data on how and what types of team-based care best accomplish the Triple Aim and the Institute of Medicine's expectations of health care.

Why is the American College of Obstetricians and Gynecologists taking the lead on this report?

The American College of Obstetricians and Gynecologists (ACOG) felt it was critical that obstetrician-gynecologists take the lead in bringing these diverse but integral specialties and disciplines together to craft a report that all could endorse. This effort was essential because of rapid changes in the workforce, clinical practice models, and financial reimbursement structures, which necessitate a unified effort and a constructive framework. In addition, the multi-faceted aspects of women's health care have placed ACOG in a unique position to lead and move such an initiative forward.

Who is the target audience?

This report will be most useful for those who are charged with developing new practice models based on the changing demographics of health care practices and financial reimbursement structures. However, because of the broad and comprehensive nature of this document, its potential extends far beyond ACOG, affecting professional organizations, health care providers, lawmakers, advocates, and state and federal governments. All may find the guiding principles helpful in the context of their current practice and are urged to implement changes where most appropriate. As medical teams continue to change and develop, especially in a time of predicted physician shortages and continued maldistribution, it is critical that all specialties and disciplines have a common understanding for developing team-based care to ensure that access, quality, and safety are not compromised.

The Approach

About the Task Force

As part of his presidential initiative in summer 2014, John C. Jennings, MD (then President of ACOG), convened the interprofessional Task Force on Collaborative Practice to revise ACOG's 1995 *Guidelines for Implementing Collaborative Practice* publication. The task force was charged with updating and broadening the original publication, exploring team-based practice among all specialties (not just women's health care) as a model of health care delivery that encourages a patient- and family-centered approach, responds to emerging demands, and reduces undue burdens on health care providers. In doing so, the task force was asked to first consider efficiency, quality, and value in implementation of team-based care models rather than giving primary consideration to either current or proposed payment reimbursement methods.

The task force included representatives from ACOG, American Academy of Pediatrics, American College of Physicians, American Academy of Physician Assistants, American Association of Nurse Practitioners, American College of Clinical Pharmacy, American College of Nurse-Midwives, Institute for Patient- and Family-Centered Care, National Association of Nurse Practitioners in Women's Health, and National Partnership for Women and Families.

Methodology

The MEDLINE database, the Cochrane Library, and ACOG's own internal resources and documents were used to conduct a literature search and to locate relevant articles. The search was restricted to articles published in the English language. Priority was given to articles that reported the results of original research, although review articles and commentaries also were consulted. Guidance published by organizations or institutions were reviewed, and additional studies were located by reviewing references of identified articles. When reliable research was not available, expert opinions were used.

Studies were reviewed and evaluated for quality according to the method outlined by the U.S. Preventive Services Task Force:

- I Evidence obtained from at least one properly designed randomized controlled trial.
- II-1 Evidence obtained from well-designed controlled trials without randomization.
- II-2 Evidence obtained from well-designed cohort or case-control analytic studies, preferably from more than one center or research group.
- II-3 Evidence obtained from multiple time series with or without the intervention. Dramatic results in uncontrolled experiments also could be regarded as this type of evidence.
- III Opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees.

Following review of these publications, the task force developed guiding principles, which would form the basis for the document, based on current evidence and expert consensus. The task force acknowledges that some areas of the document are based largely on expert consensus because substantial published data are unavailable. In these areas, the task force calls for this document to serve as an impetus for developing additional data on team-based care and clinical outcomes.

Endorsements

Endorsement from the following organizations has resulted in a highly peer-reviewed and widely accepted document:

- ◆ American Academy of Pediatrics (AAP)
- ◆ American Academy of Physician Assistants (AAPA)
- ◆ American Association of Nurse Practitioners (AANP)
- ◆ American College Health Association
- ◆ American College of Clinical Pharmacy (ACCP)
- ◆ American College of Nurse-Midwives (ACNM)
- ◆ American College of Osteopathic Obstetricians & Gynecologists (ACOOG)
- ◆ American College of Physicians (ACP)
- ◆ American Society of Addiction Medicine
- ◆ Association of Physician Assistants in Obstetrics and Gynecology (APAOG)
- ◆ Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN)
- ◆ Gerontological Advanced Practice Nurses Association (GAPNA)
- ◆ Institute for Healthcare Improvement
- ◆ Institute for Patient- and Family-Centered Care (IPFCC)
- ◆ National Association of Nurse Practitioners in Women's Health (NPWH)
- ◆ National Association of Pediatric Nurse Practitioners (NAPNAP)
- ◆ National Organization of Nurse Practitioner Faculties (NONPF)
- ◆ Pacific Business Group on Health
- ◆ Society for Physician Assistants in Pediatrics (SPAP)

The following organizations have reviewed and supported this report:

- ◆ Academy of Nutrition and Dietetics
- ◆ American Osteopathic Academy of Addiction Medicine

Definitions

Team-Based Care

Team-based care is the provision of health services to individuals, families, and/or their communities by at least two health care providers who work collaboratively with patients and their families—to the extent preferred by each patient—to accomplish shared goals within and across settings to achieve coordinated, high-quality care. A team-based model of care is one that strives to meet patient needs and preferences by actively engaging patients as full participants in their care while encouraging all health care providers to function to the full extent of their education, certification, and experience.

In order to manage large amounts of information and multiple handoffs, seamless communication and transitions among health care providers (within a team or among teams) are required to support wellness and to care for patients with complex health conditions. These transitions require a shift to interprofessional collaboration that entail a necessary evolution away from single-provider care to a team-based approach, which ensures patient centeredness, quality, and efficiency.

Collaborative Practice

Collaboration is a process involving mutually beneficial active participation between autonomous individuals whose relationships are governed by negotiated shared norms and visions. Collaboration is necessary for a team to function optimally, but team-based care requires more than collaboration. Each member of the team has knowledge and skills that contribute to the work, service, and problem-solving that are the purpose of the team. Together, team-based care and collaboration foster meaningful engagement of patients and families in decision making about patients' care.

The learned experience of collaboration and teamwork ideally begins with education programs embedded in the training curriculum of health care providers. However, establishing interprofessional collaboration within a team also requires experiential learning, building respectful relationships, and time.

The Team

The care team for a given patient is composed of health care providers (any licensed member of the team who provides clinical care to the patient) with the training and skills needed to provide high-quality, coordinated care specific to the patient's clinical needs and circumstances. However, the definition of a team may expand beyond the traditional concept that all team members must be in the same location. For example, a patient's team can span multiple practices and locations, especially through the use of telehealth. What is key and essential about team-based care is the movement toward enhancing communication and connectivity within and among teams so that care becomes fluid and transparent to the patient and family.

It is also important to note that the team includes health care providers as well as nonclinical team members. Also, each team is unique and, although the patient always will remain a team member, other members of a team are fluid and may change as patient care needs change.

Does every patient need an entire team?

Yes. When implemented, team-based care provides an integrated care process over the course of not just a specific or singular experience, but across a patient's lifespan and within a regionalized care system. Ensuring coordinated and enhanced communication and connectivity among all health care providers who attend to the patient will reduce instances of overuse or unnecessary testing and improve the patient experience of care.

Guiding Principles

The patient and families are central to and actively engaged as members of the health care team.

Care always should be patient centered in that it is focused on the health needs of the patient; respects the patient's values, preferences, and goals; is based on an enduring personal relationship; and sees the patient as a partner in managing his or her health and making health care decisions. This patient centeredness should be as valued as clinical outcomes.

This principle can be accomplished by establishing shared, clearly articulated goals for the process and outcomes of care, driven by the values and preferences of the patient. These goals should be mutually decided and agreed upon by the patient, the family (according to patient preference), and the health care team.

The team has a shared vision.

The team's vision embraces patient expertise, perspectives, priorities, and needs and integrates those into the fundamental precepts of team-based care. Teams must see themselves as an integrated body of knowledge and skills that works together toward common goals rather than as individuals practicing in parallel. Teams should identify goals that all team members, including the patient, agree upon.

Role clarity is essential to optimal team building and team functioning.

Each team member is respected and recognized for his or her expertise. The team focus is on meeting the needs of the patient while maximizing the expertise of health care providers on the team. It is critical to mutually define the roles and responsibilities of each member, based on the goals and needs of the patient and each member's qualifications.

All team members are accountable for their own practice and to the team.

Team members practice to the best of their abilities; consistently act in the best interests of patients, considering cost, quality, and timely delivery of care; accept only those responsibilities for care that are within their scope of practice and are appropriately based on their experience; integrate their profession-specific recommendations with other team members' recommendations for care; and maintain education necessary for licensure and credentialing. Accountability is one of the best ways to develop trust with patients and families.

Continuous professional development among all team members is essential. In addition, team members create and agree upon circumstances for consultation or referral that reflect and support professional responsibility in decision

making. Teams should focus on decreasing or eliminating care that provides no benefit and may even be harmful; teams should provide care that has high value.

Effective communication is key to quality teams.

Team communication serves the dual purpose of providing an opportunity to relay important information about the task-related responsibilities of the team and providing evidence about the nature of the team's interprofessional performance. It creates a culture that enables a continuous learning environment within the practice and translates to better and more-efficient care. Optimizing communication requires trust, honesty, transparency, and timeliness.

Team leadership is situational and dynamic.

The current health care environment necessitates a situational and collaborative approach to team leadership that best meets patient needs and goals. Thus, the team member who can best address the priority needs of the patient assumes the lead health care provider role. "Shared power" often is used synonymously with collaboration and team care and connotes a collective approach to optimizing care.

Changes in leadership should result from the team's overall and unified discussion concerning the best path of care for the patient at any given point in time. Practices should encourage patients to be a part of the decision-making process regarding team role and responsibility changes and, if patients are not part of this process, they should receive complete, timely information regarding these changes.

Implementation of Team-Based Care

Team-based care, coupled with traditional and nontraditional but evidence-based implementation tools such as telehealth and virtual teams, has the potential to improve health disparities and improve health care access for more of the U.S. population.

It is essential to first assess the needs of the population being served. The composition of a care team will then depend on the local population and population health. Health disparities exist across the country and are common among patients who live in regions with poor access to primary and specialty health care.

Team-based care has the potential to expand the venues at which health care is delivered. In addition to the traditional settings of care, a variety of additional options for health care delivery should be considered when implementing a team-based practice. Such settings include, but are not limited to, colleges, churches, homeless shelters, public housing projects, public schools, mobile health units, birth centers, adult day centers, nursing homes, patients' homes, continuing care retirement communities, retail clinics, prisons, and juvenile detention facilities.

Finally, telehealth has broad and growing applications in health care delivery and also should be considered for delivering team-based care, especially when access is limited. However, fully incorporating telehealth more broadly into practice requires additional emphasis and clarity in the curriculum for all health care providers. Professional health care curricula should support wide use of and instruction in best practices associated with telehealth, particularly to support rural and underserved settings.

Statutory and Regulatory Considerations for Team-Based Practice

Practices and health care providers should be aware of their state requirements and obtain appropriate legal advice when considering entering into legal agreements designed to support team-based care, such as employment, consultation, or supervisory agreements. In addition, although the integrated team-based approach represented in this document is one in which health care providers should be able to practice to the full extent of their education, certification, and experience, practices should recognize that scope of practice and licensure are ultimately established by laws and requirements in each state. Health care providers and practices seeking to build interprofessional health care teams should understand the scope of practice and licensure of each member of the health care team. Health care providers and practices also should understand how such scope of practice is determined, including state law and regulatory requirements, so that all health care providers within the team can function at the highest level of education, certification, and experience within the confines of their state's regulatory scheme.

Although authority for scope of practice determination and regulation resides with individual states, professional health care associations have established and should continue to establish clinical practice guidance and should promote uniform educational requirements, standards of care, and standards of conduct for their specific professions. States should rely on clinical guidance set by professional associations when licensing and regulating health care providers. This would help bring uniformity to licensure rules and practice norms across all states.

Opportunities for Implementation

Key challenges exist in the implementation of team-based care as a result of the current regulatory environment. Some cannot be resolved immediately or solely by the team or practice itself; however, each challenge represents an opportunity. Most important though, is the willingness to work toward achieving the guiding principles (as outlined in [Chapter 2](#)). Opportunities for change center around cost and payment; practice functionality, workflow, and communication; and partnering with patients.

Cost and Payment Tied to Quality

Support for team-based care should focus on reimbursement for improved outcomes, while patients, payers, hospitals, and practices are held accountable for costs. Payers should create incentives for high-value care that improves outcomes while decreasing costs. In addition, this care should be supported by evidence-based guidance and best practice, and delivered in a team-based care model. However, payers also should recognize that there will be instances when high-value care will not decrease cost or when the cost savings is not seen in the short-term.

Payment systems should evolve so that all members of the team can benefit from financial incentives based on outcomes and value of care instead of exclusively by procedure or volume of procedures; outcomes measured may include patient adherence, patient experience, maintaining preventive services at high rates [Healthcare Effectiveness Data and Information Set (HEDIS) metrics], and minimizing hospital admission and readmission.

Practice Functionality, Workflow, and Communication

As health care providers are increasingly encouraged to function to the full capability of their education, certification, and experience, practices may initially struggle with how to best allocate responsibility to various members of the team. Navigating the interconnectivity of scope, complexity, cost, revenue, and health care provider availability can be difficult, and individual health care provider attitude can exacerbate the challenge. Professional respect and willingness to understand skills of all members of the team are foundational to fostering effective workflow.

Partnering With Patients

Perhaps the most underappreciated challenge facing practices seeking to establish a collaborative approach to care is that of designing clinical, operational, and administrative services that are built on a firm commitment to build partnerships with patients. This includes engaging the patient in shared decision making so that health care decisions are based on best evidence as well as a patient's values, goals, and preferences. These challenges can be overcome through a number of strategies, including the following: educating team members on the beneficial effects of partnering with the patient and family; using reliable, high-quality decision aids and other decision support tools and patient engagement techniques that help health care providers present evidence-based information on all care options; ensuring clarity of the lead health care provider, the role of each team member, and providing appropriate contact information to assist in management of the patient's condition; and facilitating the patient's participation in shaping his or her clinical goals and outcomes.

Conclusion

Optimally implemented, the team-based approach provides integrated care over the course of a specific experience, as well as across a patient's lifespan and within a regionalized care system. Some aspects of creating a team-based approach may be difficult to implement or transition to at first, but long-term benefits (such as achieving the Triple Aim) are expected to outweigh short-term difficulties. Many practices already may be informally functioning in a team-based care model, so the transition may be fairly straightforward. For some practices, the transition will be more about building upon and codifying informal approaches or policies that already exist. Others may require analysis and redistribution of responsibilities to safely increase efficiency. In addition, there may be some practices that will identify more opportunity to build in patient and family feedback. The guiding principles are intended to provide practices and organizations with a practical blueprint of how to successfully transition to a team-based approach.

Defining Team-Based and Collaborative Care

↔x ↔19 ↔20



Although the terms *collaboration* and *team-based care* tend to be used interchangeably, team-based care is the provision of health services to individuals, families, and/or their communities by at least two *health care providers* who work collaboratively with patients and their families—to the extent preferred by each patient—to accomplish shared goals within and across settings to achieve coordinated, high-quality care (1, 2). For the purposes of this document, collaboration is used as defined in the *Glossary*. The definition of collaboration should remain pure in the implementation of team-based care. By providing *high-value care*, the team-based approach improves outcomes and cost efficiency (1). This chapter explains the composition and context of team-based care.

Team-Based Care and Collaborative Practice

A team-based model of care is one that strives to meet patient needs and preferences by actively engaging patients as full participants in their care while encouraging all health care providers to function to the full extent of their education, certification, and experience.

Collaboration is a process involving mutually beneficial active participation between autonomous individuals whose relationships are governed by negotiated shared norms and visions (3). Collaboration is necessary for a team to function optimally, but team-based care requires more than collaboration. Each member of the team has knowledge and

skills that contribute to the work, service, and problem solving that are the purpose of the team. Together, team-based care and collaboration foster meaningful engagement of patients and families in decision making about patients' care.

Defining the Team

The care team for a given patient is composed of health care providers with the training and skills needed to provide high-quality, coordinated care specific to the patient's clinical needs and circumstances (4). The team also may include nonclinical members, such as a *team manager*, that assist in functions that are not clinical but may have clinical implications, or team members who address the patient's

Case Vignette No. 1

“Each member of the team has knowledge and skills that contribute to the work, service, and problem solving that are the purpose of the team.”

After obtaining a medical history and assessing the patient's acute gout attack, the *lead health care provider* at the urgent care clinic, a *physician assistant (PA)*, logs into the state-based health information exchange to further evaluate the patient's medical history and determine factors contributing to the patient's current condition.

Based on the patient history, supplemented by review of the patient's medical record available through the health information exchange, the PA finds that the woman has not been adhering correctly to her prescription intended to prevent gout attacks. The PA counsels the patient and her husband, prescribes an anti-inflammatory and pain medication, and recommends that the patient follow up with her *primary care provider*. The PA provides the patient with a summary of findings from the visit for reference during her follow-up visit.

At the patient's appointment with her primary care provider, the primary care provider suggests that the patient undergo a blood test, to measure uric acid levels and other

(continued)

Case Vignette No. 1 (continued)

contributing factors to her gout, and an X-ray to assess joint damage. The primary care provider counsels the patient and her husband about medication options and the importance of lifestyle choices and then refers the patient to a *registered dietitian/nutritionist (RDN)*. The patient and her husband then see the *clinical care coordinator* registered nurse who helps them schedule appointments with the radiology department, schedules the follow-up visit with the primary care provider, and then arranges for an in-clinic laboratory visit during the appointment. The nurse introduces the patient to the in-clinic RDN and provides a summary of the patient's condition to the patient, her husband, and the RDN as the nurse transitions the patient to the RDN.

Although the family has to travel to a separate facility to have an X-ray performed, the RDN follows up with the couple in their home. They discuss manageable alterations to current eating habits and draft meal plans. The RDN also provides documents to help the patient track her weight and schedules a meeting a few months later to assess her progress and address any difficulties.

Because the patient lives far away from the clinic, the follow-up appointment is scheduled to take place at a satellite location within the patient's community. Before

the follow-up appointment, the primary care provider, the satellite clinic nurse practitioner, and the RDN review the woman's blood test and X-ray results. The RDN provides an overview of her findings from the home visit, including observations regarding economic factors and availability of type of food consistent with the patient's meal plan. During the follow-up visit, the patient is seen by the family nurse practitioner at her home community clinic. The nurse practitioner and the patient decide together that, in addition to the lifestyle changes, the patient should regularly take medication to prevent gout attacks. In addition, based on the RDN's observations, the nurse practitioner arranges for the clinic social worker to visit with the patient and her husband to discuss resources available to promote adherence to the diet recommendations. Because the patient is already taking medication for hypertension and high cholesterol, the clinical care coordinator arranges for the patient to speak to her local pharmacist about potential interactions. The pharmacist then checks in with the patient during each prescription refill to answer questions about taking the medication. As a result, the patient's adherence to all her medication increases, her gout attacks are under control, and her hypertension and high cholesterol are stable.

nonclinical needs. For the purposes of this document, the term "health care providers" refers to all licensed members of the team who provide clinical care to the patient. This includes *physicians* and other health care providers, such as PAs, certified nurse–midwives/certified midwives, *clinical pharmacists*, *nurse practitioners*, clinical nurse specialists, and certified registered nurse anesthetists, all of whom may diagnose health conditions, prescribe pharmacologic and nonpharmacologic therapies, and manage patient care. The team also may include many other health care provider types, some of whom may be specific to the needs of a particular patient or population. In high-functioning health care teams, patients are members of the team (5) and should be at the center of decision making. Although the patient will always remain a team member, other members of a team are fluid and may change as patient care needs change.

The definition of a team may expand beyond the traditional concept that all team members must be in the same location. Advances in communication technologies increase interconnectedness among health care providers and patients at different locations, which allows for the development of virtual teams that support care by the most appropriate health care provider in the most appropriate setting at the right time.

Context

Collaboration and team-based care are not inherent skills but practices that are developed and refined over time. The learned experience of collaboration and teamwork ideally begins with education programs embedded in the training curriculum of health care providers. However, establishing *interprofessional* collaboration within a team also requires experiential learning, building respectful relationships, and time. Some aspects of creating a team-based approach may be difficult to implement or transition to at first, but long-term benefits (such as achieving the Triple Aim) are expected to outweigh short-term difficulties. Successful implementation of the team-based model requires practices to be committed to the team-based approach, with core concepts exemplified and encouraged by everyone from senior leadership to front-line staff (6). These concepts include accountability with a willingness to continue professional growth and learning and development of clear role expectations with common goals (7). Team-based care must be customized according to the needs of the practice, the patient, and the family; what works in one setting may not work in another. Successful implementation of a team-based model also will depend on all team members embracing the values of honesty, discipline, and humility (1).

In some areas, collaboration is considered to imply supervision, such as a physician supervising the work of another health care provider, which is an erroneous assumption frequently dictated by laws and requirements. Therefore, we encourage use of the term team-based care rather than collaborative practice because it more appropriately and comprehensively defines a shared approach to patient-centered, high-value, high-quality care.

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“Some aspects of creating a team-based approach may be difficult to implement or transition to at first, but long-term benefits (such as achieving the Triple Aim) are expected to outweigh short-term difficulties.”

Guiding Principles for Team-Based Care ↵x ↵xvi

↵21



The foundational guiding principles for the implementation of *team-based care* are presented in this chapter. The following guiding principles are distinct yet integrated. They are intended to provide a pragmatic and evidence-based approach for establishing an *interprofessional* team-based practice that ensures *collaboration* and quality health care delivery.

Guiding Principles

1. Patients and families are central to and actively engaged as members of the health care team.
2. The team has a shared vision.
3. Role clarity is essential to optimal team building and team functioning.
4. All team members are accountable for their own practice and to the team.
5. Effective communication is key to quality teams.
6. Team leadership is situational and dynamic.

Patients and families are central to and actively engaged as members of the health care team.

What: Care should always be patient centered in that it is focused on the health needs of the patient; respects the patient's values, preferences, and goals; is based on an enduring personal relationship; and sees the patient as a partner in managing his/her health and making health care decisions (1). This patient centeredness should be as valued as clinical outcomes. Patients should experience *individualization*, respect, dignity, and—to the extent patients who are competent or capable of giving consent desire it—choice in all matters, without exception, related to themselves, their circumstances, and their relationships to *health care providers* (2). This view of patient centeredness suggests a partnership with patients, their families (according to patient preference), and their health care providers wherein patients and their unique circumstances are respected. This combined perspective and expertise becomes a powerful tool in advancing safe, effective, patient-centered, timely, efficient, and equitable care (3, 4).

How: Establish shared, clearly articulated goals for the process and outcomes of care, driven by the values and preferences of the patient. These goals should be mutually decided on by the patient, the family (according to patient

preference), and the health care team. Clinical information should be presented in terms that are easily understood and culturally relevant, using health care team members such as health educators and interpreters to do so.

The shared decision-making process between the patient and the health care team is enhanced by the use of reliable, high-quality decision aids and other decision-support tools and *patient-engagement* techniques. These tools and techniques should help health care providers present evidence-based information on all care options, including possible benefits and harms of care, and include the patient's values and preferences (5) (Appendix A). The use of decision aids and shared decision making in obstetric care has been shown to improve patient knowledge, decrease decisional conflict, increase the patient's perception of having made an informed choice, reduce patient anxiety, and increase satisfaction (6, 7). An Institute of Medicine report estimated that widespread systematic implementation of shared decision making facilitated by high-quality decision aids could save the health care system \$9 billion over the next 10 years (8).

Patient engagement is imperative to ascertain if the care is meeting patient expectations. Measurement of patient satisfaction often is identified as a surrogate for evaluation of patient engagement, as it reflects the relational components of care such as rapport, respectful communication, and trust (4).

Markers of patient satisfaction, such as health care provider continuity, comprehensiveness, and coordination of care, have been shown to improve patient outcomes and reduce health care costs (9). Patients who are aware of the resources available to them and who receive consistent care are less likely to switch practices, more likely to receive preventive services, and more likely to appropriately use emergency and hospital services (10). Moreover, it has been shown that high-functioning teams plan care around the needs and preferences of the patient, and that when this occurs, care plans are more focused and outcomes improve (4).

Patient engagement also includes partnering with patients in a macro, systems level. Patient needs and perspectives should be factored into the design of health care processes, the creation and use of technologies, and the training of health care providers (11).

The team has a shared vision.

What: A shared vision for what the team wants to accomplish is what holds a team together and optimizes teamwork. This vision embraces patient expertise, perspectives, priorities, and needs and integrates those into the fundamental precepts of team-based care. Teams must see themselves as an integrated body of knowledge and skills that works together toward common goals rather than as individuals practicing in parallel (4). Regular and honest communication is essential to maintaining a shared vision.

How: Teams should identify goals that all team members, including the patient, agree upon. These goals should be based on the patient being central to the team's vision and address quality of care benchmarks and team functioning. Creating opportunities, such as regularly scheduled team meetings, at which the team can gauge a patient's goals and revisit and reinforce the shared vision, is essential to team sustainability and success (see section "*Effective communication is key to quality teams*").

Role clarity is essential to optimal team building and team functioning.

What: The contributions of each team member are valued through a process of role clarity. Each team member is respected and recognized for his or her expertise. The team focus is on meeting the needs of the patient while maximizing the expertise of health care providers on the team. Teams trust and respect each member's unique contribution to the quality of care provided, and each member is allowed to function to the fullest capability of his or her education, certification, and experience. (12).

How: A team-based practice mutually defines the roles and responsibilities of each member based on the goals and needs of the patient and each member's qualifications. The Institute of Medicine explicitly discusses the concept of a fluid process driven by patient needs rather than ownership solely by *physicians* (8), and this "human factors-based" approach places the patient at the center of care (13). In developing a high-performing team, members must seek an appropriate balance between the roles and responsibilities that fall to individual team members and those that are better accomplished collaboratively. Although roles and responsibility must be clearly defined, flexibility in roles and team leadership is critical in responding to patient care needs (4).

Because roles on the team vary by professional capability and function, organizations should take measures to ensure that the entire team, including the patient and family, is fully informed about team member roles and responsibilities. This includes ensuring that health care providers understand the roles, capabilities, and priorities of patients and families. In this way, high-quality care that fully uses team member expertise is provided outside of a traditional hierarchy. Teams also need to discuss and decide how to handle situations in which roles of health care providers may overlap (4). Doing so avoids frustration in individual team members, prevents duplicate care that risks inefficiencies in cost, and decreases the likelihood of patient confusion and safety issues. Practice commitment and internal communication are essential to fostering role clarity that embraces a team-based philosophy (see section "*Effective communication is key to quality teams*"). A team-based practice has member roles that enhance patient care while supporting the function of the team, including leadership (see section "*Team leadership is situational and dynamic*"), record keeping, and scheduling meetings. Thus, team-based practices should have personnel who can define, manage, communicate, and evaluate these roles. Professional development that addresses the continuous process of collaborative team work and quality improvement can help ensure role clarity.

Practices should ensure that patients and families can easily understand each team member's role and are able to easily identify which health care providers are responsible for various aspects of their care. Each team member should clearly and consistently communicate his or her role to the patient and other team members. This consistency minimizes confusion by making it easier for patients and families to understand the health care provider's name and credentials. Team members also should clarify with the patient who will be coordinating various aspects of the patient's care. Team members should be able to respond to questions about team member roles or be prepared to forward questions to the appropriate team members.

Team members should emphasize their trust and respect for their colleagues. Discussions with patients and families should develop a shared expectation about team-based practice and ensure that all responsibilities are clearly defined and understood among all members of the team.

All team members are accountable for their own practice and to the team.

What: Team members practice to the best of their abilities; consistently act in the best interests of patients, considering cost, quality, and timely delivery of care; accept only those responsibilities for care that are within their scope of practice and are appropriately based on their experience; integrate their profession-specific recommendations with other team member recommendations for care; and maintain education necessary for licensure and credentialing. Continuous learning and accountability are interconnected. Skill, reliability, honesty, and discipline are behaviors and values intrinsic to accountability and fundamental to the success of teams (4). In a team, everyone is responsible for situational monitoring, including cross monitoring each other (14). Developing a culture of safety will enable the practice to focus its care processes and workforce on improving reliability and safety of care for patients, which is critically important in any efforts that are made to reduce errors. Being accountable is also one of the best ways to develop trust with patients and families (4).

How: Team members should stay current in their profession-specific knowledge and be committed to continuous learning. Practices should encourage professional development.

Care decisions are based on the best evidence for efficacy and quality of care. All team members create and agree upon circumstances for consultation or referral that reflect and support professional responsibility in decision making. Teams should focus on decreasing or eliminating care that provides no benefit and may even be harmful; teams should provide care that has high value (15, 16). Cost-efficiency, including patient financial considerations and health care cost control, is an important goal related to accountability. Superfluous tests and procedures should be avoided (15). However, efforts to control cost should focus on the benefit of the health care intervention for the patient rather than the expense of the health care cost. Each team member should be encouraged to reduce overuse and underuse by using best practice algorithms and individualization of care.

Teams also may develop policies and procedures that indicate how teams and team members will receive feedback, including feedback about meeting performance measures. It is important that all team members participate and agree on

these performance measures as part of their shared vision. Performance measures might include timeliness and quality of documentation, innovations in care delivery, a comparison of practice with evidence-based standards, patient satisfaction, and patient perceptions of communications and coordination. Practices may choose to create a quality management department that develops tools to assess team function, including performance measures and outcomes, or to evaluate the validity and reliability of existing tools.

Asking questions, consulting with other team members, and disclosing insufficiencies or adverse events become less threatening when the team fosters an environment of continuous learning and respect. Acknowledging team successes—including successes that relate to integration of team skills to enhance care—fosters the team concept and maintains transparency of the individual health care provider's strengths and challenges. These precepts empower team members to seek support, recognize questions as exemplars of team strength, and promote responsibility and accountability of all team members (4).

Effective communication is key to quality teams. ↩6

What: Effective communication among team members (including the patient) is a core concept of high-functioning teams and safe and reliable patient care (4, 17). Team communication serves the dual purpose of providing an opportunity to relay important information about the task-related responsibilities of the team and providing evidence about the nature of the team's interprofessional performance. It creates a culture that enables a continuous learning environment within the practice and translates to better and more efficient care.

How: Effective communication requires trust, honesty, transparency, and timeliness. Tools to encourage these attributes and promote effective communication can be implemented on the individual and the organizational level.

On the individual level, team members should assume the best motives of others. They should recognize that their initial assumptions may reflect their own world views and should first seek to understand others' views and then to be understood (17). Active listening is also an important aspect of successful interprofessional collaboration and connotes respect when communicating with patients, families, and colleagues. Members also should trust each other to function within their practice's or organization's established protocols and to share needed information.

On an organizational level, practices also should encourage effective, open communication. Practices should encourage members to share their concerns and ideas without fear of

retribution and to rely on each other to help recognize practice patterns that compromise quality of care and correct them before missteps occur.

It also is important to adopt a framework for structuring the communication of patient status reports to facilitate consistency and completeness of information shared. Patients should receive complete, timely information about their care and changes in their care. One way to ensure this is to implement patient and family meetings. For example, a short team meeting (eg, huddle) involving health care providers, the patient, and the patient's family if desired, can be implemented (in an inpatient or outpatient setting) based on the patient's condition and needs. This interaction provides an opportunity for all involved to gain insight on the patient's needs and perceptions, to solicit concerns and questions, and to reach consensus on goals for care, a necessary component

of team-based care (4, 17). During this team meeting, team members (including the patient and family) all communicate, which results in an individualized health care plan.

Regular, scheduled team meetings also can facilitate effective communication by ensuring timely, consistent, and reliable group communication. Meetings should address patient care (ie, appropriate monitoring of care, the patient's condition, collaborative problem solving) and, distinct from patient care, team functioning (ie, discussion of team member contributions, peer feedback on communication patterns and performance). Team members should communicate openly, honestly, and respectfully. Team professional development to teach a variety of communication skills and strategies—such as education and training in effective communication, teamwork, negotiation, and conflict management—is a worthwhile investment and should be encouraged. One

Case Vignette No. 2

“The team focus is on meeting the needs of the patient while maximizing the expertise of health care providers on the team.”

To improve patient health outcomes and meet the unique needs of their low-income patient population, the practice partners with patients, their families, and a team of home visitors. A nurse, medical assistant, and a pediatrician form the practice team, while a second nurse, a social worker, and three community health workers compose the home visitor team. Each team member can act as the *lead health care provider* for different stages of care depending on the patient's needs.

Within the care team, the practice team nurse is the *team manager*. She coordinates communication between the home visitor and the practice teams, clarifies team members' previously determined responsibilities while monitoring the patient's changing needs, and tracks outcomes for practice-wide reports and quality improvement.

The social worker is the *clinical care coordinator* and liaison to the practice team. He is the main point of contact for the family and helps schedule home visits and clinic appointments. He seeks patient and family feedback on their care experiences, screens them for housing and food insecurity, depression, and domestic violence concerns, and helps connect them to local resources as necessary.

After consulting with the patient and family, the social worker arranges for a nurse and a community health worker to visit the home. The family asks the team members for assistance with early childhood education and resources to help them build a healthy relationship with their child. The community

health worker, acting as the child's lead health care provider for this period of care, provides the family with an evidence-based parenting curriculum and educational resources, gives guidance and support to the family as needed, and regularly assesses progress and the experiences of the patient and family during monthly home visits. The community health worker provides regular patient updates to other team members.

When the mother brings her child to the clinic with respiratory distress, the pediatrician becomes the lead health care provider. She examines and stabilizes the child and determines that he needs hospitalization. Other team members support the pediatrician; the nurse continues to coordinate with the home visitor team and the social worker arranges child care so the patient's parents can stay with him in the hospital as much as possible.

The child is discharged from the hospital with a care plan developed by the pediatrician and the family, and the child returns to the practice for follow-up. The mother mentions that the child's grandmother, who smokes, just moved in with the family and expresses concern about her child's exposure to secondhand smoke. The team collectively decides to arrange for a home visitor nurse to assess the home environment. Acting as the lead health care provider, the nurse offers smoking cessation support for the grandmother and helps the family work together to develop a plan to eliminate environmental exposure to secondhand smoke to prevent future health complications. The social worker arranges for the home visitor team to do a follow-up visit with the family to assess their progress. The team determines that the family has worked together to eliminate environmental exposure to secondhand smoke and continues to support the grandmother in her smoking cessation efforts.

example of such programs is the U.S. Department of Veterans Affairs Clinical Team Training, which provides instruction on communication and teamwork skills to improve patient safety (www.patientsafety.va.gov/professionals/training/team.asp).

Patient and family advisory councils can help develop policies and approaches that more globally affect all patients and families, creating an environment in which health care providers, patients, and families work together as partners to improve the quality and safety of care (18). Patient and family advisory councils are supported by institutional or practice leadership but are composed mainly of patients and their families. Although patient and family advisory councils do not require major investments, resources are needed to create and maintain opportunities for patient and family engagement (18). They are one of the most effective strategies for involving families and patients in the design of care (19, 20).

A variety of tools are available to aid in establishing and developing the communication framework. One of the most commonly used tools is the Situation Background Assessment and Recommendation (SBAR) technique, which provides a concise, standardized method for verbal communication (14). This tool, initially developed for the U.S. Navy, is used in health care systems worldwide and is recognized as a best practice by The Joint Commission (21). When possible, electronic medical records that have interoperability between settings and reflect real-time data should be used in practices. All health care providers involved in the patient's care should have the opportunity to document care in a patient's electronic medical record, and the electronic medical record should be accessible by all health care team members.

Many hospitals have used the Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS) Systems Engineering Initiative for Patient Safety (SEIPS) model, which is disseminated through the Agency for Healthcare Research and Quality. In this team-building model, the first step is the establishment of the organization of the team, which includes assessing the environment and culture, relationships, communication methods, and leadership of the team (22). Other components of the SEIPS model include technology and tools that focus on documentation; tasks that include job content; and an environment that includes the physical aspects of design. The TeamSTEPPS SEIPS model now offers a team-training program that provides continuing education credits (13). Introduction of the TeamSTEPPS program in hospitals that participate in the Centers for Medicare & Medicaid Services Partnerships for Patients Program may lead to a significant reduction in preventable harm by improving health care provider skills, communication, team coordination, and shared accountability (23).

Team leadership is situational and dynamic. ↩6

What: The current health care environment necessitates a situational and collaborative approach to team leadership that best meets patient needs and goals. Thus, the team member who can best address the priority needs of the patient assumes the lead health care provider role for the patient. Effective teams require a clear leader, but team leadership should be based on the patient's best interest at that time (4, 24) (Fig. 2-1). "Shared power" often is used synonymously with collaboration and team care and connotes a collective approach to optimizing care (12). Health care team members represent a variety of backgrounds with specific knowledge, skills, and behaviors established by standards of practice within their respective professions (4). Differences in education, skills, and experience should be recognized and used as they apply to the needs of the patient, but one type of training or perspective is not felt to be uniformly superior to the others.

How: Team leadership is fluid and may change as determined by the context of the care. Team engagement, consultation, follow-up, and referral allow health care providers on the clinical team—ideally with help from the patient—to agree on the most appropriate person to lead the care, or the lead health care provider, with the recognition that the lead health care provider may change depending on the evolving needs of the patient. Practices should ensure systems are in place wherein patients can easily identify the lead health care provider on their team. Changes in leadership should result from the team's overall and unified discussion concerning the best path of care for the patient at any given point in time. Practices should encourage patients to be a part of the decision-making process regarding team role and responsibility changes and, if patients are not part of this process, they should receive complete, timely information regarding these changes. Leadership issues should be viewed as topics for open discussion that lead to mutually agreeable solutions rather than sources of conflict. Diversity in types of health care providers in leadership roles should be encouraged and sought in practices and organizations.

It should be noted that clinical leadership (the lead health care provider) is distinct from team management (ie, a team manager) and care coordination (ie, a clinical care coordinator). Leadership, management, and coordination may overlap, but these are distinct responsibilities, and team management and care coordination are not necessarily under the purview of the lead health care provider. Team management coordinates the logistical aspects of the team that are nonclinical but may have clinical implications; this includes clarifying and communicating team member roles (clinical and nonclinical), work flow, and

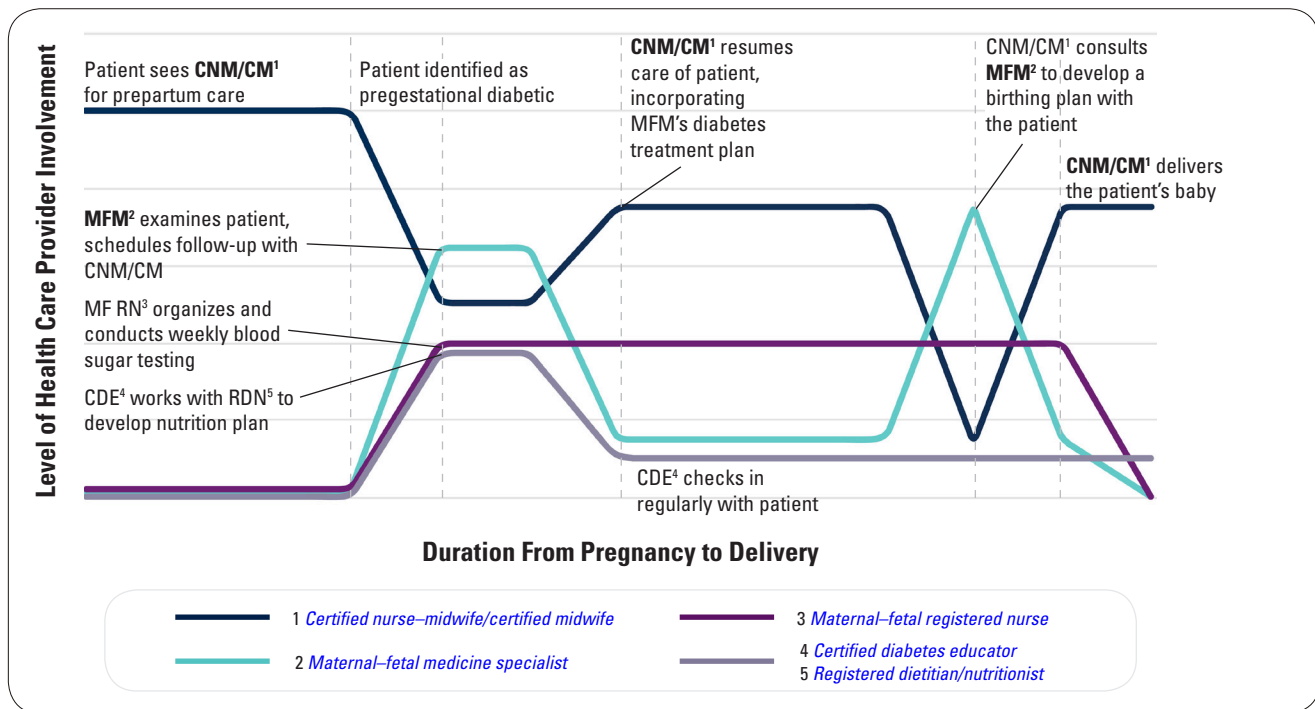


Fig. 2-1. Examples of different levels of health care provider involvement during pregnancy. (Bold font denotes lead health care provider.)

evaluation. A clinical care coordinator organizes patient care activities between two or more participants (including the patient) to facilitate the appropriate delivery of health care services (25). The lead health care provider also may be distinct from a patient's *primary care provider*.

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Implementation of Team-Based Care ↵x



Implementation of *team-based care* can improve access, quality, and safety for the holistic care of all patients (1). Health disparities exist across the country and are common among patients who live in regions with poor access to primary and specialty health care. Socioeconomic status, distance from a health care facility or specialty care, and insurance status can affect a patient's health. According to the Centers for Disease Control and Prevention, health equity is achieved when all individuals have the opportunity to "attain their full health potential," and no one is "disadvantaged from achieving this potential because of his or her social position or other socially determined circumstance" (2). Health inequities are reflected in differences in length and quality of life; rates of disease, disability, and death; severity of disease; and access to treatment (2, 3).

Team-based care, coupled with traditional and nontraditional but evidence-based implementation tools such as *telehealth* and virtual teams, has the potential to improve health disparities and improve health care access for more of the U.S. population. This chapter focuses on how to assess the needs of the population being served; venue and mode of service delivery, including telehealth; health care personnel availability and the virtual team; and barriers to telehealth.

Assessing the Needs of the Populations Being Served

Team-based care requires a practice to build a team that meets the needs of the populations it is serving (*population health*). Thus, a practice should first assess the needs of its patients and patient populations. The Centers for Disease Control and Prevention National Center for Health Statistics helps establish the needs of a population by compiling statistics on health-related factors such as teen birth rates, obesity, and age-adjusted death rates. The Agency for Healthcare Research and Quality also collects data on diagnoses seen in emergency rooms, as well as many other statistics on hospital admissions that can demonstrate the health care needs in a particular area. Practice staff also may be able to gather population and demographic data from local governments, community chambers of commerce, and direct patient surveying.

The composition of a care team will then depend on the local population and population health. The following are examples:

- ◆ The care for adolescents and young women has a prevention focus, yet there are also conditions (dysfunctional uterine bleeding, polycystic ovary syndrome, contraception with or without pregnancy, sexually transmitted infections) that require diagnosis and treatment. A collaborative team may include a *physician, PA, certified nurse-midwives/certified midwives, clinical pharmacists,*

nurse practitioners, clinical nurse specialists, certified registered nurse anesthetists, nurse, health educator, behavioral health specialist, and a laboratory technician.

- ◆ Women of childbearing age may need a team of *health care providers* for low-risk and high-risk pregnancies; health educators for family planning; registered nurses; ultrasound technicians; behavioral health specialists; lactation consultants; and sometimes home visitors and doulas. Pregnant women with substance use disorders often have complex and unmet psychosocial issues. Optimal care, therefore, requires a collaborative approach that integrates areas of expertise (4,5).
- ◆ Individuals with diabetes may need care from a *primary care provider,* health educators, community health workers, pharmacists, social workers, a *registered dietitian/nutritionist* and, for some, an endocrinologist.

Delivery of Clinical Services and Telehealth

All patients should have access to the health care providers needed to deliver the appropriate care. In addition to the traditional settings of care, a variety of legitimate, alternative options for health care delivery settings have emerged and should be considered when implementing a team-based

practice. Such settings include but are not limited to colleges, churches, homeless shelters, public housing projects, public schools, mobile health units, birth centers, adult day centers, nursing homes, patients' homes, continuing care retirement communities, retail clinics, prisons, and juvenile detention facilities.

Telehealth, which uses technology to deliver clinical services, has broad and growing applications in health care delivery and also should be considered as a nontraditional method for delivering team-based care, especially when access is limited (6, 7). Use of technology to monitor high-risk patients may require virtual access to a multitude of specialists and subspecialists. Review of the literature demonstrates that the use of telehealth results in increased efficiency, full use of all health care providers that improved outcomes, and reduced costs in the health care system (8).

In the U.S. military, telehealth technologies have been used in dermatology, orthopedic surgery, behavioral health, and critical care medicine during deployments in combat zones and at community hospitals in the United States (9). In cases of dermatologic and orthopedic surgical consultations, the use of telehealth avoided further transportation of the patient to a higher level of care in up to 7% of all consultations, avoiding additional cost, and most importantly, dangerous and unnecessary travel (9). Cognitive-behavioral therapy for treatment of posttraumatic stress disorder has demonstrated equal or greater patient satisfaction and clinical improvement in symptoms through telehealth compared with face-to-face interventions (10). Critical care telehealth has been associated with lower intensive care unit and hospital mortality and

shorter intensive care unit and hospital lengths of stay and is currently in use by 11% of all nonfederal hospitals and 2% of all critically ill adult patients who are enrolled in the U.S. Army (11). Similarly, the application of telehealth to treat stroke patients continues to advance globally as telestroke networks and technology become better defined, increasingly accurate, and more accessible (12).

One study describes a tailored, web-based care program to enhance postoperative recovery in gynecologic patients (13). Another study successfully implemented a telehealth-based cervical cancer screening program to bridge the Medicaid service care gap for rural women, wherein the venue for care or screening may be the patient's home, a community health center, a health department, or a small rural practice (14). Many women in rural communities have been monitored remotely during pregnancy for high-risk conditions using telehealth and a collaborative team-based approach. Telehealth has been used remotely to read ultrasonograms, interpret tests (other than those using application of stress), counsel patients, manage diabetes, manage postpartum depression, and support parents and children postpartum (15). Telehealth also may be enlisted to help with the physical examination, home visitation, and health education.

Telehealth's applicability across professions, among health care providers, and in a broad range of nontraditional venues makes it an increasingly accessible and cost-effective option of care, particularly in team-based settings. As such, telehealth should be considered a legitimate evidence-based method for communication and provision of care and should be integrated into team-based practices when appropriate and necessary.

Case Vignette No. 3

“Virtual teams are groups of people with a shared purpose across space, time, and organizational boundaries who use technology to communicate and collaborate.”

A 29-year-old pregnant woman with a positive serologic test result for human immunodeficiency virus (HIV) is seen in a rural obstetrics and gynecology clinic. This patient has no other comorbidities and desires to give birth with her *midwife*, a certified nurse-midwife (CNM), at the community hospital near where she lives. The hospital has no medical subspecialty services, and the nearest infectious disease consultants are located more than a 3-hour drive away. Her viral load is determined to be high, and her fetus is at 12 weeks of gestation at the time of presentation for care. An *interprofessional* team of physicians, including *maternal-fetal medicine* and infectious disease subspecialists, are connected through

telehealth for an initial consultation with the patient, her CNM, and the consulting *obstetrician*. The appropriate additional testing and medical treatment are initiated and follow-up telehealth consultations, including a perinatal ultrasound examination, are scheduled to monitor her clinical course. Adult and pediatric infectious disease subspecialists provide consultation through telehealth, and subsequent consultations also include the labor and delivery nursing personnel, pediatricians, and pharmacists. She is noted to have a viral load of zero at follow-up, and she has an uncomplicated labor and vaginal delivery at term, co-managed by the CNM and the obstetrician. Her delivery is monitored by appropriate neonatal medical treatment administered in the community hospital and the newborn has no evidence of infection. The rural obstetrics and gynecology clinic has successfully leveraged community resources, including telehealth, to support the family's ability to stay in their community while receiving high-quality, *high-value care*.

Health Care Personnel Availability and the Virtual Team

Implementation of team-based care requires practices to consider the availability of local personnel. Team composition should include qualified personnel who can provide services that meet the needs of the populations being served. Often, the lead or primary health care provider will be a PA or nurse practitioner. Practice data, including workforce composition in each profession, and standardization of data collection are critical to determine staffing required. This includes assessing population demographics and population-specific medical needs.

In identifying team personnel, practices—particularly those located in rural and underserved areas with telehealth connections—should consider enlisting virtual team members because this may increase timely access to care. This could range from a single virtual team member to an entire virtual team. Virtual teams are groups of people with a shared purpose across space, time, and organizational boundaries who use technology to communicate and collaborate (16). Whereas telehealth will facilitate the inclusion of virtual team members, the use of virtual team members and the concept of the virtual team are more comprehensive than telehealth. Telehealth may be limited to a single episode of care, but virtual team members act as regular health care providers within the team, caring for the patient across the continuum of care.

Consider the following example, based on consistent findings that team-based care offers benefits in improving blood pressure control (17), of a virtual team helping patients maintain normal blood pressure:

A care team includes the patient, his primary care provider, nurse care coordinator, pharmacists, registered dietitians/nutritionists, social workers, and community health workers. Team members communicate virtually through a common electronic medical record and collaborate around the patient's care in this manner:

- ◆ *The patient shares his medical history, diet, and lifestyle information, personal goals, and preferences with his primary care provider. He also asks for support in achieving these goals.*
- ◆ *A primary care provider conducts physical examinations, assesses risk factors, and monitors hypertension status throughout treatment.*
- ◆ *A nurse care manager provides education, counseling, and first-line access for patient communication.*
- ◆ *A social worker helps address social determinants that may be barriers to care, as well as accesses blood pressure cuffs when necessary.*

- ◆ *A pharmacist educates the patient about proper medication use, administration, storage, and adverse reactions that might occur and assists with medication management and adjustments in medication for patients not at their target blood pressure.*
- ◆ *A registered dietitian/nutritionist provides counseling about lifestyle management and diet.*
- ◆ *Community health workers assist with self-monitoring and electronic communications.*

Although virtual teams are important, practices also should be able to identify and collaborate with local or regional facilities in safely transporting patients. Establishing a team within the greater context of regionalization and clinical integration is essential.

Barriers to Education in Telehealth

More clarification and standardization are needed regarding the differing state telehealth requirements, contextual issues such as statutory barriers and state requirements, appropriate telehealth providers, scope of practice and liability (see Chapter 4), and payment for services. Current resident and other health care provider education in telehealth is also not standardized and is taught only in select residency programs. For example, the Accreditation Council for Graduate Medical Education mentions the topic in the context of resident teleprecepting, but does not yet have common requirements for programs or expectations of resident knowledge of telehealth within the context of clinical practice (18). However, many residents are learning in a team-based care environment. This is strongly supported by the Accreditation Council for Graduate Medical Education and is an expected core competency found within Systems-Based Practice education. The shift in training to emphasize team-based care, as it is occurring in current health care provider education, will likely result in younger health care providers practicing in a patient- and family-centered, team-based manner. However, fully incorporating telehealth more broadly into practice requires additional emphasis and clarity in the curriculum for all health care providers. Professional health care curricula should support wide use of and instruction in best practices associated with telehealth, particularly within rural and underserved settings.

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4

Statutory and Regulatory Considerations for Team-Based Practice ↵x ↵15

Different statutes and requirements that affect implementation of *team-based care* are addressed in this chapter. Although not inherently central to the team-based practice model, they are still important to understand before starting a team-based practice. This chapter should not be construed as advocating for these statutory or regulatory approaches. Instead, it will provide an overview of the scope of practice considerations for distinct members of the health care team, offer examples of regulatory framework, suggest ways to navigate these requirements in states where they exist, and discuss vicarious liability and other related factors.

Nothing in this chapter is intended to be considered legal advice. Practices and *health care providers* should be aware of their state requirements and obtain appropriate legal advice when considering entering into legal agreements designed to support team-based care, such as employment, consultation, or supervisory agreements.

Scope of Practice

Scope of practice laws and requirements govern each health care provider’s lawful sphere of activity. Although the integrated team-based approach represented in this document is one in which health care providers should be able to practice to the full extent of their education, certification, and experience, practices should recognize that scope of practice and licensure

are ultimately established by laws and requirements in each state. Each state has the authority to license, regulate, and determine scope of practice for each health care provider type as established by the state’s practice act for each respective health care provider type (1–3). Scope of practice and licensure laws and requirements are not uniform or standardized across states (Fig. 4-1); therefore, what is legally permissible in one

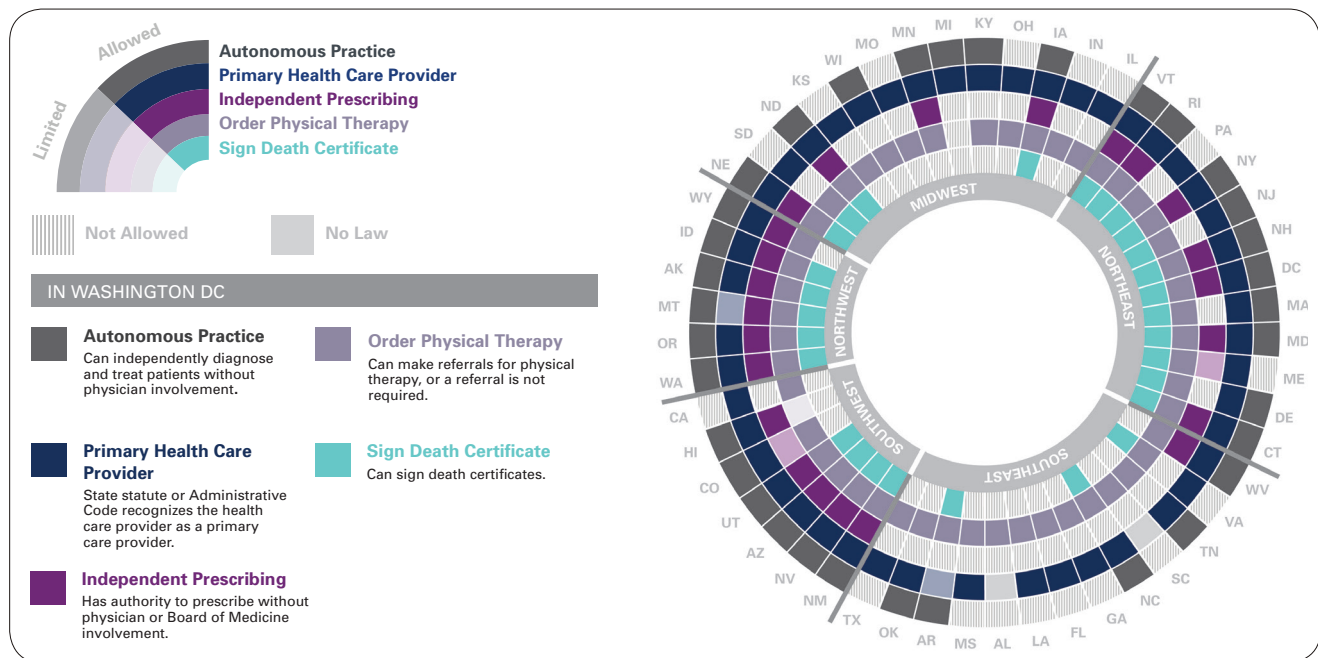


Fig. 4-1. Example of variations in state practice environment. Scope of practice and licensure rules can change as laws and requirements are amended, sunsetted, or repealed. (Modified from Interactive nurse practitioner [NP] scope of practice law guide. Peabody [MA]: Barton Associates; 2015. Available at: <http://bartonassociates.com/providers/nurse-practitioners/nurse-practitioner-scope-of-practice-laws/>. Retrieved September 28, 2015.)

state for a certain health care provider may not be legally permissible in another state. Additionally, scope of practice and licensure rules can change as laws and requirements are amended, sunsetted, or repealed. It is important that practices understand each health care provider’s education, certification, and experience, as well as the different and changing state laws that affect scope of practice and licensure; how they may differ among states and professions; and how they may govern a health care provider’s ability to practice as defined by their education, certification, and experience.

State laws and requirements governing health care providers, including legal relationships among health care providers, can vary in detail and in operational requirements (2). For example, *nurse practitioners* practicing in one state may have full practice authority to diagnose and treat patients, whereas the same health care providers practicing in a neighboring state must enter into a supervisory or consultative practice agreement as a condition for doing so (4). Or, a *clinical pharmacist* may have authority to independently administer immunizations in one state, but may not have such authority in a neighboring state.

It is also important to consider the state regulatory mechanisms when discussing scope of practice and licensure. Each health care provider type has a respective state regulatory body responsible for the regulation of practice and issuing of license. However, purview of and requirements enacted by a health care provider-specific state board vary by state. It should be noted that state laws do not always align with national recommendations, such as those outlined by

professional health care associations, in regards to professional licensure standards.

Health care providers and practices seeking to build *inter-professional* health care teams should understand the scope of practice and licensure of each member of the health care team. Health care providers and practices also should understand how such scope of practice is determined, including state law and regulatory requirements, so that all health care providers within the team can function at the highest level of education, certification, and experience within the confines of their state’s regulatory scheme.

Although authority for scope of practice determination and regulation resides with individual states, professional health care associations have established and should continue to establish clinical practice guidance and should promote uniform educational requirements, standards of care, and standards of conduct for their specific profession. States should rely on clinical guidance set by professional associations when licensing and regulating health care providers. This would help bring uniformity to licensure rules and practice norms across all states.

Types of Regulatory Frameworks

Regulatory frameworks range from full practice authority within a profession to a supervisory or consultative framework that limits a health care provider’s ability to practice to the full extent of his or her education, certification, and experience (Table 4-1).

Table 4-1. Definitions and Examples of Variations in State Practice Environment*

	Full Practice Framework	Supervisory or Consultative Framework	
	Full Practice Authority	Reduced Practice	Restricted Practice
Definition	State laws allow a health care provider to practice to the full extent of his or her education, certification, and experience.	State laws reduce the ability of a health care provider to engage in at least one element of practice, and require a regulated consultative agreement with an outside physician in order to provide patient care.	State laws restrict a health care provider’s ability to engage in at least one element of practice, and require supervision, delegation, or team management by an outside physician in order to provide patient care.
Selected examples	Authority of health care providers to autonomously diagnose, treat, and prescribe medications under the exclusive licensing authority of their respective state regulatory agencies.	Required to establish a written practice agreement with a physician in order to practice. Must have a written practice agreement with a physician, or supervision or delegation of prescriptive authority by a physician in order to prescribe medications.	Supervision by a physician is required in order to practice. Must have supervision or delegation of prescriptive authority by a physician in order to prescribe medications.

*State environment may vary among health care provider types and among states.

Full-Practice Authority Framework

Under this framework, a health care provider is able to practice to the full extent of his or her education, certification, and experience. Some types of health care providers have the authority to autonomously diagnose, treat, and prescribe medications under the exclusive licensing authority of their respective state regulatory agencies. As such, they are required to meet educational and certification requirements for licensure, maintain national certification, consult and refer to other health care providers as warranted by patient needs, and remain accountable to the public and their regulatory board for meeting standards of care. For example, *advanced practice registered nurses* function under full-practice authority when the collection of state statutes, their implementing requirements, and licensure laws allow them to evaluate, diagnose, manage, and treat (including prescribing medications) patients under exclusive licensure authority of the state board of nursing (5).

Within a full-practice authority framework, health care providers still collaborate—as defined in [Chapter 1](#) and as supported by the team-based care model—with members of the health care team and seek consultation as determined by patient need.

Supervisory or Consultative Practice Framework

Some states require particular health care providers to practice with the supervision of or in consultation with a licensed *physician* in order to provide specific elements of patient care, such as patient evaluation; diagnoses and ordering or interpreting diagnostic testing; and initiating and managing treatments, including prescribing legend or controlled drugs. States may have different requirements for each of the different health care provider types, and these types of schemes vary widely among states, with on-site time requirements and chart review requirements as the most common oversight mechanisms (Table 4-2). Some

Table 4-2. Selected Examples of State Regulatory Requirements

Challenge	Opportunities for Change
On-site time requirement	<ul style="list-style-type: none"> State allows remote supervision by a physician, but requires that the physician is able to be physically present at the health care provider's practice site within 14 hours.
Chart review	<ul style="list-style-type: none"> State mandates a physician generally reviews all patient charts seen by other types of health care providers. State mandates a physician reviews a percentage of patient charts seen by other types of health care providers.
Geographic limitations	<ul style="list-style-type: none"> State mandates a supervising physician must be within 30 miles of the practice sites of the other types of health care providers. For health care provider shortage areas, 50 miles is allowed. There is no exception for telehealth.
Prescription limitations	<ul style="list-style-type: none"> State requires that health care providers are delegated prescriptive authority by a physician, although the physician is not required to be on-site. State limits a health care provider's ability to prescribe certain drug schedules or they must receive delegated prescribing authority for such medications.
Physician restrictions	<ul style="list-style-type: none"> State limits the number of supervisory agreements a physician can enter into. State requires that a physician provide documentation regarding a supervisory agreement to the state board of medicine.

Data from Interactive nurse practitioner (NP) scope of practice law guide. Peabody (MA): Barton Associates; 2015. Available at: <http://www.bartonassociates.com/providers/nurse-practitioners/nurse-practitioner-scope-of-practice-laws/>. Retrieved September 28, 2015.

states also require some type of written practice agreement or other documentation broadly delineating the elements under which a health care provider may practice (6). Acting outside of the scope of a state-required supervisory agreement—even when the activity performed is within the health care provider’s education, certification, and experience—can lead to disciplinary action, or other legal actions. The type of written practice agreement and its required elements vary from state to state and among the respective health care provider professions. It is also important to note that statutory language regarding supervisory or consultative requirements does not have uniform meaning among the states. For example, some states may use “*collaboration*” to describe their supervisory or consultative practice requirements and laws. In this context, collaboration denotes a mandated legal arrangement, supervisory in nature, between a physician and other types of health care providers. In this document, all such agreements are referred to as “supervisory or consultative agreements” and collaboration is used as defined in [Chapter 1](#) and the [Glossary](#).

Practices and health care providers should be familiar with statutory and regulatory requirements that govern scope of practice, supervisory or consultative frameworks, and any type of required written practice agreements. Practices should develop the appropriate written practice agreements as required within the state law or regulation and should consider developing written practice agreements as a best practice, even when it is not required by law. In doing so, all parties should obtain appropriate legal advice ([Appendix A](#)).

Other Considerations

Government and private payers may have specific rules or contractual language requirements when billing for health care providers. Specific billing parameters may be required to bill directly for services under the identifier (billing number) of the health care provider who performed them or to bill under the physician’s identifier when services are performed by another member of the health care team. These payment requirements may be developed independently by the payer and may not reflect state regulations. For example, a payer may use supervisory language to trigger payment, although the state regulation supports full practice authority for the health care provider. All health care providers should understand all of the contractual arrangements with payers and seek legal counsel when entering into a contract with the government or private payers ([Appendix B](#)).

Health care providers and practices also should be familiar with the practice’s, health care provider’s, and patient’s state licensing requirements regarding *telehealth*.

Vicarious Liability

Vicarious liability refers to the liability of a supervisory party (principal) for the actionable conduct of a subordinate or associate (agent) based on the relationship of the party (1, 7, 8). Health care providers, including physicians, working in team-based care settings may not always be found to have the requisite principal–agent relationship with other health care team members to be vicariously liable for their actions. In determining legal imputation of vicarious liability, courts will consider the facts of each case, and factors such as statutory and regulatory language in the specific jurisdiction; creation of an agency or employment relationship; and the contractual language in the employment, supervisory, or consultative agreement.

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Opportunities for Implementing Team-Based Care ↵x



In working toward the implementation of *team-based care*, it is essential to acknowledge key challenges internal to a practice and as a result of the current regulatory environment. Some challenges cannot be resolved immediately or solely by the team or practice itself. Still, with each challenge there are opportunities for change. The most important success factor, however, is the practice or organization’s willingness to work through challenges and toward achieving the guiding principles (as outlined in [Chapter 2](#)); this includes making practical changes that support the guiding principles, timely response to the evolving external environment, and adaptation of published best practices. Although every practice and the teams within it will have specific needs that require unique solutions, key opportunities for change are outlined in this chapter.

Cost and Payment

Challenges related to payment can be internal to the practice (allocation of relative value units, individual-based incentives) or they can be external requirements set by payers or by licensure.

Challenges

1. Difficult-to-control costs, including patient out-of-pocket costs, in the current health care system.

2. The current system creates incentives for the individual health care provider for volume of recognized procedures but does not recognize the hidden, nonprocedural services (and thus the value added) provided by the rest of the team; these hidden services contribute to the improvements in outcome.

Opportunities for Change

- a. Practices, payers, hospitals, policy makers, and *health care providers* should support a team-based care model allowing costs to decrease while outcomes improve in the context of achieving the Triple Aim (1, 2). Patients, payers, hospitals, and practices should be fully engaged and held accountable for keeping costs down.

- a. Payment systems should evolve so that all members of the team can benefit from financial incentives based on outcomes and value of care instead of procedure or volume of procedures. Outcomes measured may include patient adherence, patient experience, maintaining preventive services at high rates (HEDIS metrics), and minimizing hospital admission or readmission (ie, National Quality Forum metrics). Health care providers, patients and families, practices, hospitals, payers, and professional health care associations should advocate for this evolution.

- b. Until payment systems change, practices should consider alternative methods of payment such as pooling relative value units for all the health care providers while allowing the most appropriate health care provider to perform the service ([Appendix C](#)).

Challenges

3. Payment structures may generate care that differs from evidence-based clinical guidance and best practice.

4. Current billing practices do not provide incentives for team-based care performed by certain health care providers because they restrict and make cumbersome the ability for health care providers to bill on behalf of (incident to) a *physician*, payers may refuse to reimburse certain health care providers unless it is incident to a physician, and payment for a health care provider who is not a physician is often less than payment allotted for a physician providing the same service. Rates that are based on the health care provider instead of the service is a disincentive to using all team members in the best functional capacity.

Opportunities for Change

- a. Payers should create incentives for *high-value care* that improves outcomes while decreasing costs; this care should be supported by evidence-based guidance and best practice, and delivered in a team-based care model. However, payers also should recognize that there will be times when high-value care will not decrease cost or when the cost savings is not seen in the short-term.

- a. States should allow health care providers to practice to the full extent of their education, certification, and experience; health care providers, practices, payers, hospitals, and professional health care associations should advocate for this. Payers should allow health care providers to bill for services that fall within their education, certification, and experience.
- b. Payers should allow health care providers to bill directly for their services.
- c. Payers should allow health care providers to easily bill on behalf of (incident to) a collaborating physician while maintaining the ability to track the services delivered by each health care provider.
- d. Payers should provide the same payment for the same service, regardless of health care provider type. Health care providers, practices, hospitals, and professional health care associations should advocate for this, bringing payments to a fair and accurate valuation. Contracts with payers should be negotiated with this goal in mind.
- e. Practices and hospitals should be familiar with individual payer requirements and state law. Practices and hospitals are encouraged to bill for *telehealth* and virtual team members, as appropriate, when team members are not in the same location.

Challenges

3. Lack of health care provider comfort or knowledge with telehealth and lack of standard telehealth education.
4. Lack of knowledge and appreciation of education, skills, clinical capabilities, and health care provider overlap among health professionals.
5. Lack of shared vision and goals among team members.
6. Lack of role clarity among health care providers.

Opportunities for Change

- a. Professional health care curricula should support education, training, and research into best practices as well as expanded use of telehealth, particularly within rural and underserved settings.
- b. Practices should educate team members on the use and advantages of telehealth. This includes encouraging professional development for telehealth training.
- a. Practice management and leadership should actively educate all team members on the education, skills, and clinical capabilities of each member. This includes emphasizing overlap and differences among health care provider types. Team management can be responsible for communicating this, but individual team members also must be willing to learn about other team members' education, skills, and clinical capabilities. To ensure that accurate information is provided, practices can obtain this information from professional health care associations.
- a. Practice management and leadership should establish shared, clearly articulated goals for the process and outcomes of care, wherein the patient's values and preferences are respected. These goals should be mutually decided on by the patient and the health care team and may involve family.
- a. Practices should have a clear understanding of who within the practice functions as a *team manager* in that they coordinate the management and logistical aspects of the team that are nonclinical but may have clinical implications; this includes clarifying and communicating team member roles (clinical and nonclinical), work flow, and evaluation.
- b. Each team member should clearly communicate his or her role to other team members, including patients and families.
- c. Individual team member roles should be based on the respective team member's qualifications and should support the clinical goals for and needs of the patient so that the team is functioning toward achieving a shared vision.
- d. All roles should fully use team members' expertise.
- e. Practices should develop or seek out clear, evidence-based protocols for consultation and referral.

Challenges

7. Confusion regarding who is leading team care, managing roles, and coordinating care with the patient.
8. Responsibilities are misallocated and team members with a broader range of skills perform tasks that team members, with a more narrow range of skills, are capable of performing. This becomes a barrier to the delivery of quality care because personnel resources are used inefficiently, and team members with a broader range of skills are unable to provide more complex components of care.
9. Poor individual and organizational communication, especially among different health care providers caring for the same patient. Different team members have learned different communication methods.

Opportunities for Change

- a. Practices should recognize that team leadership is fluid and may change as determined by the context of the care; in particular, the *lead health care provider* may change depending on the evolving needs of the patient.
 - b. Practices should recognize that clinical leadership (the lead health care provider) is distinct from team management (ie, a team manager) and care coordination (ie, a *clinical care coordinator*). Leadership, management, and coordination may overlap, but these are distinct responsibilities and team management and care coordination are not necessarily under the purview of the lead health care provider.
 - c. Practices also should have a distinct clinical care coordinator who organizes patient care activities between two or more participants (including the patient) to facilitate the appropriate delivery of health care services.
 - d. Practices should view leadership issues as topics for open discussion that lead to mutually agreeable solutions.
 - e. Diversity in types of health care providers in leadership roles should be encouraged and sought in practices and organizations.
- a. Practices, legislators, and regulatory bodies should encourage all members to function to the highest level of their education, certification, and experience.
 - b. When outlining team member roles, practices should appropriately and efficiently allocate individual team member responsibilities so that members with a broader range of skills focus on components of care that others cannot perform (see [Fig. 5-1](#) and [Fig. 5-2](#)).
- a. Practices should ensure that all team members are trained in shared communication expectations and techniques, including telehealth.
 - b. Practices should adopt a framework for structuring the communication of patient status reports to facilitate consistency and completeness of information shared. Practices and organizations should consider implementing tools such as the Situation, Background, Assessment, and Recommendation (SBAR) technique, the Systems Engineering Initiative for Patient Safety (SEIPS) model, and Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS) training.
 - c. Practices should use collaborative, simulation-based team training and drills.

Challenges

9. Poor individual and organizational communication, especially among different health care providers caring for the same patient. Different team members have learned different communication methods. (*continued*)

10. Organizational culture, individual character, or health care provider mindset is disruptive.

Opportunities for Change

- d. Practices should schedule regular, timely team meetings that provide ample time, space, and support for team members to meet—in-person and virtually—to discuss patient care (ie, appropriate monitoring of care, patients' conditions, collaborative problem solving) and, distinct from patient care, team functioning (ie, discussion of team member contributions, peer feedback on communication patterns and performance).
 - e. Team professional development to teach a variety of communication skills and strategies—such as education and training in effective communication, teamwork, negotiation, and conflict management—is a worthwhile investment and should be encouraged.
-
- a. Practices should be committed to the team-based approach to care, with core concepts exemplified and encouraged by everyone from senior leadership to front-line staff.
 - b. Team members should assume the best motives of others. They should recognize that their initial assumptions may reflect their own world views and should first seek to understand others' views and then to be understood. Members also should trust each other to function within their practice's or organization's established protocols and to share needed information. Team members should communicate openly, honestly, and respectfully.
 - c. Practices also should encourage effective, open communication. This includes encouraging members to share their concerns and ideas without fear of retribution and to rely on each other to help recognize practice patterns that compromise quality of care and correct them before missteps occur.
 - d. Team members should practice to the best of their ability; consistently act in the best interests of the patients, considering cost, quality, and timely delivery of care; accept only those responsibilities for care that are within their scope of practice and are appropriate based on their individual experience; integrate their profession-specific recommendations with other team member recommendations for care; and maintain education necessary for licensure and credentialing.

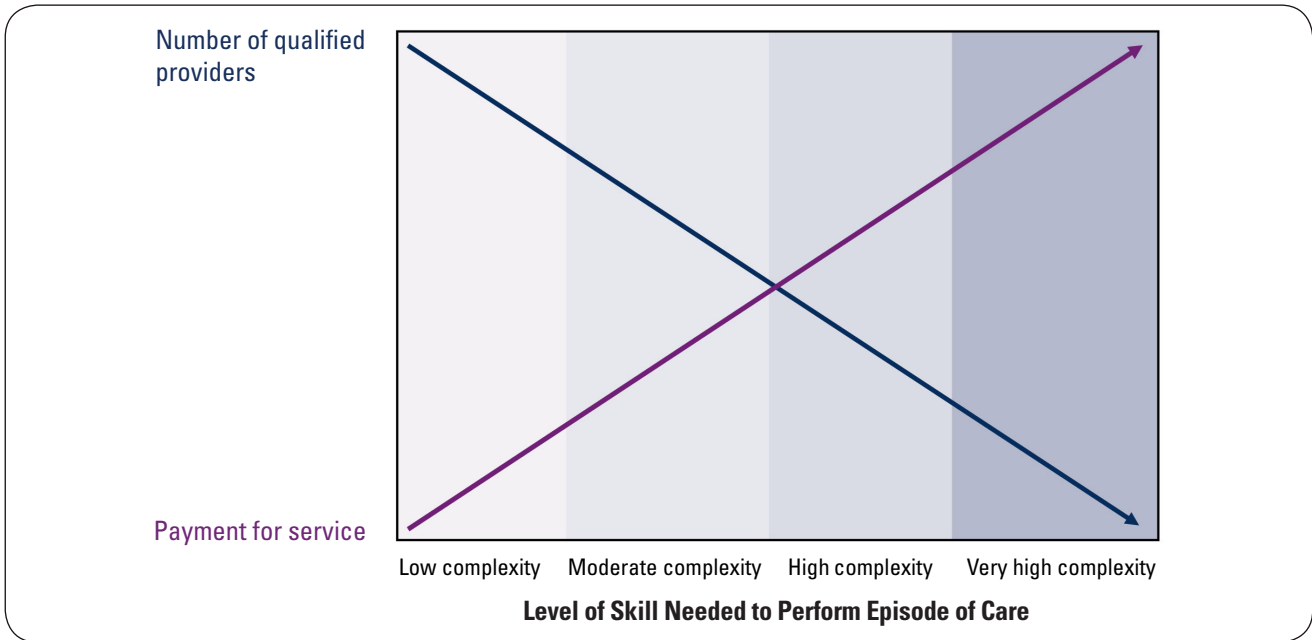


Fig. 5-1. Example of a health care provider payment and availability model. <

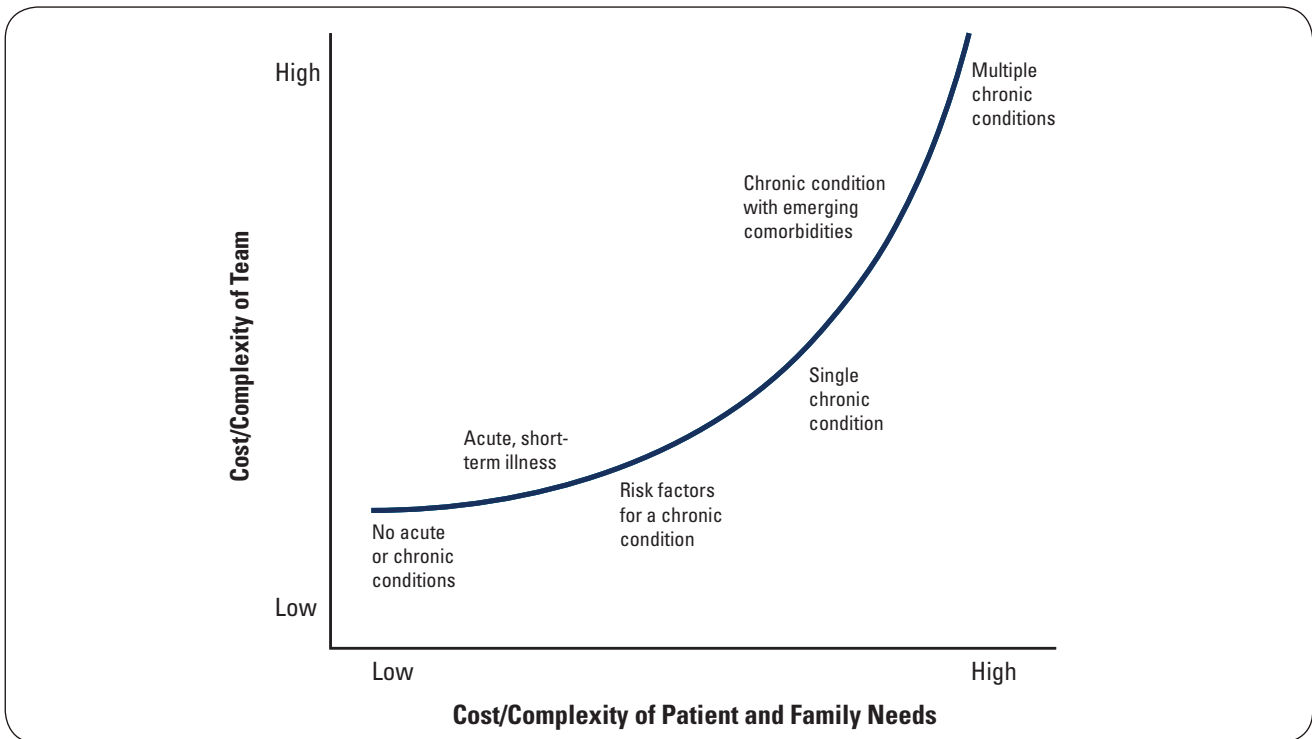


Fig. 5-2. Scaling team-based care with cost/complexity of needs. This axis represents progression of medical needs but also should be interpreted to represent needs from social/situational complexity. (Reprinted with permission from the National Academy of Sciences, courtesy of the National Academies Press, Washington D.C. Reprinted from Mitchell P, Wynia M, Golden R, McNellis B, Okun S, Webb CE, et al. Core principles and values of effective team-based health care. Discussion paper. The best practices innovation collaborative of the IOM roundtable on value & science-driven health care. Washington, DC: Institute of Medicine [U.S.]; 2012. Available at <https://www.nationalahec.org/pdfs/VSRT-Team-Based-Care-Principles-values.pdf>. Retrieved September 28, 2015.) <

Challenges

11. There is poor communication between outpatient and inpatient settings.

12. Electronic medical records are not interoperable or do not reflect real-time data.

13. Restricted admitting privileges prevent integrated, team-based care.

14. Laws and requirements governing a health care provider's scope of practice and licensure are not uniform or standardized across states. Scope of practice and licensure rules can change as laws and requirements are amended, sunsetted, or repealed.

Opportunities for Change

- a. Practices should develop systems and policies that ensure fluid communication between inpatient and outpatient settings. For example, practices should have a policy for direct communication at admission and discharge between the lead health care provider on the outpatient side with the lead health care provider on the inpatient side. Similarly, lead health care providers could coordinate visits with the *primary care provider* and their hospitalized patient within 12–18 hours after admission to provide support and counseling to the patient and their families and consultation to the hospital team (3).
- b. When possible, electronic medical records (EMRs) that have interoperability between settings and reflect real-time data should be used in practices.

- a. Policy makers should create incentives for the development of affordable and accessible medical records that are interoperable and reflect real-time data.
- b. Policy makers should create incentives for the development of analytical tools and dashboards that feedback real-time data to health care providers.
- c. To ensure continuity, all health care providers involved in the patient's care should have the opportunity to document care in a patient's EMR, and the EMR should be accessible by all health care team members.

- a. Integrated, team-based care is an important aspect of quality care. Hospitals should consider expanding bylaws to allow qualified health care providers to admit and discharge patients and to function to the full extent of their education, certification, and experience and within their legal scope of practice and licensure.

- a. Although the integrated team-based approach represented in this document is one in which health care providers should be able to practice to the full extent of their education, certification, and experience, practices should recognize that scope of practice and licensure are ultimately established by laws and requirements in each state. Practices and health care providers should be familiar with statutory and regulatory requirements that govern scope of practice, supervisory or consultative frameworks, and any type of required written practice agreements.

Challenges

14. Laws and requirements governing a health care provider's scope of practice and licensure are not uniform or standardized across states. Scope of practice and licensure rules can change as laws and requirements are amended, sunsetted, or repealed. *(continued)*

Opportunities for Change

- b. Health care providers and practices seeking to build *interprofessional* health care teams should understand the scope of practice and licensure of each member of the health care team. Health care providers and practices also should understand how such scope of practice is determined, including state law and regulatory requirements, so that all health care providers within the team can function at the highest level of education, certification, and experience within the confines of their state's regulatory scheme.
- c. Practices should develop the appropriate written practice agreements as required within the state law or regulation and should consider developing written practice agreements as a best practice, even when it is not required by law. In doing so, all parties should obtain appropriate legal advice.
- d. Practices and health care providers should be aware of their state requirements and obtain appropriate legal advice when considering entering into legal agreements designed to support team-based care, such as employment, consultation, or supervisory agreements.
- e. Professional health care associations should continue to establish clinical practice guidance and promote uniform educational requirements, standards of care, and standards of conduct for their specific professions. States should rely on clinical guidance set by professional associations when licensing and regulating health care providers.
- f. Health care providers and practices also should be familiar with the practice's, health care provider's, and patient's state licensing requirements regarding telehealth.

Building Partnerships With Patients

Perhaps the most underappreciated challenge facing practices seeking to establish a collaborative approach to care is that of designing clinical, operational, and administrative services that are built on a firm commitment to build partnerships with patients. This includes engaging patients in shared decision making so that health care decisions are based on best evidence as well as a patient's values, goals, and preferences.

Challenges

1. Health care providers may have a learned paternalistic approach to their relationship with patients.
2. A patient is unaware of the role of each team member (clinical and nonclinical) or confused about team member roles.
3. The patient is unclear as to who the lead health care provider is.

Opportunities for Change

- a. Practices should educate team members on the beneficial effects of partnering with patients and with family.
 - b. Practices and team members should seek out reliable, high-quality decision aids and other decision-support tools and *patient engagement* techniques that should help health care providers present evidence-based information on all care options, including possible benefits and harms of care, and include the patient's values and preferences.
 - c. Professional health care curricula should support wide use of, and instruction in, best practices associated with telehealth, particularly within rural and underserved settings.
- a. Practices should ensure that patients and families can easily understand each team member's role and are able to easily identify which health care providers are responsible for various aspects of their care.
 - b. Each team member should clearly and consistently communicate his or her role to the patient and other team members. Team members also should clarify who will be coordinating various aspects of the patient's care. Team members should be able to respond to questions about team member roles or be prepared to forward questions to the appropriate team members.
 - c. Team members should emphasize their trust and respect for their colleagues. Discussions with patients and families should develop a shared expectation about team-based practice and ensure that all responsibilities are clearly defined and understood among all members of the team.
- a. Practices should ensure systems are in place wherein patients can easily identify the lead provider on their team.
 - b. Practices should use team engagement, consultation, follow-up, and referral to help health care providers on the clinical team—ideally with help from the patient—agree on the most appropriate person to lead the care with the recognition that the lead provider may change depending on the evolving needs of the patient.

Challenges

3. The patient is unclear as to who the lead health care provider is. (*continued*)

4. Patients do not know whom on the team to contact about clinical or administrative aspects of their care.

5. A patient is unaware of his or her role on the team and is unaware of his or her ability to shape his or her clinical goals and outcomes.

Opportunities for Change

- c. Changes in leadership should result from the team's overall and unified discussion concerning the best path of care for the patient at any given point in time. Practices should encourage patients to be a part of the decision-making process regarding team role and responsibility changes and, if patients are not part of this process, ensure that they receive complete, timely information regarding these changes.

- a. Practices should ensure that their team includes an appropriate number of clinical care coordinators to organize patient care activities and facilitate the appropriate delivery of health care services.
- b. Practices should ensure systems are in place wherein patients can easily identify their clinical care coordinator and understand the care coordinator's role in organizing their care activities to facilitate the appropriate delivery of health care services.
- c. Team members should also clarify with patients and families who will be coordinating the patient's care.

- a. Practices should establish shared, clearly articulated goals for the process and outcomes of care, wherein the patient's values and preferences are respected. These goals should be mutually decided on by the patient and other members of the health care team and may involve the patient's family.
- b. Clinical information should be presented in terms that are easily understood and culturally relevant, using health care team members such as health educators and interpreters to do so.
- c. Patients should receive complete, timely information about their care and changes in their care. Practices should employ patient and family meetings, such as huddles, wherein the team is able to communicate with the patient and family, the patient can communicate with other members of the team, and all members can create an individualized health care plan.
- d. Patient needs and perspectives should be factored into the design of health care processes, the creation and use of technologies, and the training of health care providers.
- e. Practices should have a system in place to regularly collect and analyze patient feedback and act appropriately upon this feedback. This includes administering patient experience surveys that reflect the work of the team and not an individual health care provider.

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Appendix A ↩5 ↩20

Examples of Questions to Be Considered by Both Parties When Entering Into a Written Supervisory or Consultative Agreement as Required by State Statute and Requirements

General

- ◆ What is the *health care provider's* scope of practice as defined within the state's regulatory scheme? Does it match the position for which the individual is being considered?
- ◆ Which regulatory body is responsible for regulating the health care provider's practice?
- ◆ Does the health care provider hold the appropriate credentials to practice in the state, as determined by his or her respective state regulatory body?
- ◆ Does the Board of Medicine/Licensure have specific requirements for *physicians* entering into a relationship with a *certified nurse–midwife/certified midwife, nurse practitioner, PA*, or pharmacist?

Prescribing Authority

- ◆ Does the health care provider have legal authority to prescribe legend drugs?
- ◆ Does the health care provider have legal authority to prescribe controlled drugs? If so, which schedules are included in the prescriptive authority?
- ◆ Does the state have special requirements, such as state recognition, continuing education requirements, oversight, or other documentation of ability to prescribe before the health care provider can legally prescribe medications in the state? If so, are there separate requirements leading to legal authority to prescribe legend versus controlled drugs?
- ◆ Has the health care provider met the legal requirements leading to legal authority to prescribe legend drugs, controlled drugs, or both within the state? Do they hold the required certification, licensure, or other evidence of required state recognition to do so?

Written Practice Agreement

- ◆ Is a written agreement (supervisory or consultative agreement) between a physician and a health care provider required in order for the health care provider to provide specific elements of patient care?
- ◆ Are written protocols or practice agreements required in order for the health care provider to provide specific elements of patient care?
- ◆ If the statutory and regulatory requirements include presence of a written agreement or other documentation in order for the health care provider to provide specific elements of patient care, what specific language must be included in the document?
- ◆ What elements will be included in the written practice agreement or documents, even if they are not required by law? For example, does the supervisory agreement include only those elements required by law, or have additional elements of the employment contract been added to the supervisory agreement?
- ◆ Is the written practice agreement or other documentation required to be filed with one or both of the health care provider's state regulatory bodies?
- ◆ Do different statutory or regulatory requirements apply for written collaborative or supervisory agreements or other required documents if the health care provider is practicing solely in a specific setting, such as a hospital or public health clinic, or with a specific population?

Health Care Provider Responsibilities

- ◆ If the state statutory and regulatory requirements specify physician oversight, monitoring, or supervisory activities in order for the health care provider to provide patient care
 - must the parties practice at the same site for a designated period?
 - must the parties participate in a documentation review process? If so, are there specific requirements as to the number or percentage of patient records that must be reviewed by the physician?
 - do the regulatory entities (Board of Medicine, Board of Nursing, Pharmacy Board, Midwifery Board, or others) require that reports be submitted to the respective board, or that audits will be conducted by the respective Board? If so, which health care provider is the responsible party for maintaining and submitting such records?
 - are disclosure statements related to type of health care providers providing care within the practice required to be publicly posted? If so, is specific language required?
 - is there a requirement for delegation of backup coverage for the health care provider when the physician is unavailable? If so, what are the statutory and regulatory requirements regarding this arrangement?
- ◆ Does the state specify a limit as to the number of health care providers with which a physician may enter into a written supervisory agreement?
- ◆ Is there a limit on the number of physicians with whom a health care provider may enter into a written supervisory agreement?
- ◆ Are there geographic limitations, or other restrictions regarding the distance between the physician and the health care provider when care is provided without the physician's physical on-site presence? Do these restrictions apply when *telehealth* technologies and virtual team structures are used by the practice?
- ◆ Do specific statutes and requirements apply to the use of technologies by the health care provider? In a virtual team structure?
- ◆ Is the health care provider permitted to practice across health care settings, or is the practice limited to one setting such as hospital or clinic only?
- ◆ Are there special statutory or regulatory requirements related to the health care provider practice site?

Appendix B ↵20

Examples of Questions to Be Considered by Both Parties When Entering Into Contractual Agreements With Government or Private Payers

- ◆ Do the respective payer contracts recognize the *health care provider* as an in-network health care provider within the practice eligible for payment under their own name and identifier?
- ◆ Does the payer contract specify the need for or type of *physician* supervision of the health care provider in order to permit payment for patient care provided by the health care provider?
- ◆ Does the payer contract specify that the health care provider's metrics will be identified and included in value-based payment methodologies?

Appendix C ↩21

Example of a Team Compensation Model

- ◆ The care team evaluates its outcomes and effectiveness using a balanced scorecard. The scorecard contains team-based goals around the following:
 - ◆ Patient experience of care
 - ◆ Patient function and outcome
 - ◆ Adherence to evidence-based guidance

The institution, practice, or hospital measures the cost of care. The team does not directly collect information for this measure, although overall efficiency of care may reduce costs. The team develops a goal around its metrics and works to improve these metrics throughout the year.

- ◆ The team receives a bonus if its overall score for the year is more than 70%.
- ◆ The bonus for each team member is the total score (75%) x 20% salary. Therefore, a nurse earning \$60,000/year would make $75\% \times \$12,000 = \$9,000$.

Each team member would make the bonus amount commensurate with his or her salary, but the team works together to improve its care using the same scorecard.

	Smart Aim	End Year Goal	Goal Met?
Patient experience of care	The percentage of patients checked in and given a room in 10 minutes will increase from 22% to 85% by October 2016.	Our end year percentage is 90%.	Yes
Patient function and outcome	The percentage of patients spacing the births of their children by greater than 12 months will increase from 60% to 75% by October 2016.	Our end year percentage is 80%.	Yes
Adherence to evidence-based guidance	The percentage of women who attend their postpartum visit will increase from 60% to 90% by October 2016.	Our end year percentage is 80%.	No
Hospital revenue for the department of obstetrics and gynecology	The department will increase revenue by 6%.	Our end year increase is 8%.	Yes
Total Team Score			75%

Glossary ↩1↩20

Advanced practice registered nurse (APRN): A type of health care provider with advanced clinical training and includes certified registered nurse anesthetists (CRNAs), certified nurse midwives (CNMs), clinical nurse specialists (CNSs), and nurse practitioners (NPs). Visit American Nurses Association at www.nursingworld.org for more information. ↩19 ↩23

Certified diabetes educator (CDE): A health care provider who possesses comprehensive knowledge of and experience in prediabetes, diabetes prevention, and management. A CDE educates and supports people affected by diabetes so that they may understand and manage the condition. A CDE promotes self-management to achieve individualized behavioral and treatment goals that optimize health outcomes (1). Visit the National Certification Board for Diabetes Educators at www.ncbde.org for more information. ↩Fig. 2-1

Certified nurse–midwife (CNM) and certified midwife (CM): A type of health care provider that manages the care of low-risk women in the antepartum, intrapartum, and postpartum periods; manages healthy newborns; and provides primary gynecologic services in accordance with state laws or requirements. In collaboration with obstetricians, CNMs and CMs may be involved in the care of women with medical or obstetric complications (2). Visit the American College of Nurse–Midwives at www.midwife.org for more information. ↩Fig. 2-1 ↩13 ↩33

Clinical care coordinator: A designated team member who organizes patient care activities between two or more participants (including the patient) to facilitate the appropriate delivery of health care services. ↩2 ↩8 ↩25

Clinical pharmacist: A health care provider who provides comprehensive medication management and related care for patients in all health care settings. They are licensed pharmacists with specialized advanced education and training who possess the clinical competencies necessary to practice in team-based, direct patient care environments (3). Visit the American College of Clinical Pharmacy at www.accp.com for more information. ↩2 ↩13 ↩18

Collaboration: A process involving mutually beneficial active participation between autonomous individuals whose relationships are governed by negotiated shared norms and visions. ↩1 ↩5 ↩20

Health care providers: All licensed members of the team who provide clinical care to the patient. This includes physicians and other health care providers, such as PAs, certified nurse–midwives/certified midwives, clinical pharmacists, nurse practitioners, clinical nurse specialists, and certified registered nurse anesthetists, who are licensed to diagnose health conditions, prescribe pharmacologic and nonpharmacologic therapies, and manage patient care. ↩1 ↩5 ↩13 ↩17 ↩21 ↩23 ↩33 ↩35

High-value care: A type of health care that improves outcomes while decreasing costs. ↩1 ↩14 ↩22

Individualization: Creating flexible systems that can adapt, on the spot, to the needs and circumstances of individual patients. ↩5

Interprofessional: Individuals from different professions who work and communicate with each other as a group, providing their knowledge, skills, and attitudes to augment and support the contributions of others (4). An interprofessional team is composed of members from different professions and occupations with varied and specialized knowledge, skills, and methods who work together as colleagues to provide quality, individualized care for patients (5). ↩2 ↩5 ↩14 ↩18 ↩29

Lead health care provider: Health care provider who manages the clinical care of the patient. This position is fluid and may change as patient care needs change. ↩1 ↩8 ↩25

Maternal–fetal medicine specialist (MFM): An obstetrician or gynecologist who has completed an additional 2–3 years of education to develop specialized skills to help the woman and infant before and during a nonroutine pregnancy. Maternal–fetal medicine specialists are high-risk pregnancy experts (6). Visit the Society for Maternal–Fetal Medicine at www.smfm.org for more information. ↩Fig. 2-1 ↩14

Maternal–fetal medicine registered nurse: For this document, a registered nurse who is trained to care for patients with high-risk or nonroutine pregnancies. ↩Fig. 2-1

Midwife: For this document, a midwife refers to either a certified nurse–midwife (CNM) or a certified midwife (CM). ↩14

Nurse practitioner: A type of advanced practice registered nurse (APRN) who has achieved licensure and credentialing beyond his or her role as a registered nurse. Nurse practitioners manage patients' health needs across the continuum of primary, specialty, and acute care, performing a range of health care services, including diagnosing; ordering, conducting, supervising, and interpreting diagnostic and laboratory tests; prescribing pharmacologic agents and nonpharmacologic therapies; and teaching and counseling (7). Nurse practitioners are educated and certified in one of six population foci: 1) Adult-Gerontology, 2) Family, 3) Neonatal, 4) Psychiatric–Mental Health, 5) Pediatrics, and 6) Women's Health. Visit the American Association of Nurse Practitioners at www.aanp.org for more information. ↩2 ↩13 ↩18 ↩33

Obstetrician–gynecologist: A health care provider trained to care for a woman's health throughout her lifespan. Obstetrician–gynecologists extensively study reproductive physiology, including the physiologic, social, cultural, environmental and genetic factors that influence disease in women. Preventive counseling and health education are essential and integral parts of the practice of obstetricians and gynecologists as they advance the individual and community-based health of women of all ages (8). Visit the American College of Obstetricians and Gynecologists at www.acog.org for more information. ↩14

Patient and family advisory council (PFAC): An established council within a health care practice that meets regularly and consists of patients and family members who receive care at the practice. Select health care providers, office staff, and leadership are also integrated members of the PFAC and work with the patient and family advisors to discuss improvements in care, process, and experiences. Key to the PFAC is that patients and family are viewed as respected partners and essential resources to the practice, ensuring that the patient and family perspective is reflected in everything (9, 10). ↩9 ↩23

Patient engagement: Loosely defined as a multidimensional approach that seeks to promote meaningful patient involvement and, in doing so, fosters collaboration between a patient and other members of the health care team in efforts to define and progress toward mutually decided health care goals (11). ↩5 ↩30

Physician: A health care provider who has received a "Doctor of Medicine" or a "Doctor of Osteopathic Medicine" degree or an equivalent degree after successful completion of a prescribed course of study from a school of medicine or osteopathic medicine (12). Visit the American Medical Association at www.ama-assn.org for more information. ↩2 ↩6 ↩13 ↩19 ↩22 ↩33 ↩35

Physician assistant (PA): A health care provider who is nationally certified and state licensed to practice medicine. Among other medical services, PAs can obtain medical histories, conduct physical examinations, diagnose and treat illnesses, order and interpret tests, perform medical procedures like joint injections, counsel patients on preventive health care, assist in surgery, write prescriptions, and make rounds in nursing homes and hospitals (13). Visit the American Academy of Physician Assistants at www.aapa.org for more information. ↩1 ↩13 ↩33

Population health: The health outcomes of a group of individuals, including the distribution of such outcomes within the group (14). ↩13

Primary care provider: A health care provider who sees patients with common medical problems and who is trained to provide preventive care and teach healthy lifestyles, identify and treat common medical conditions, assess the urgency of medical problems and direct patients to appropriate care, and make referrals to medical specialists when necessary (15). ↩1 ↩10 ↩13 ↩28

Registered dietitian/nutritionist (RD/N): The food and nutrition experts who can translate the science of nutrition into practical solutions for healthy living. The RDNs use their nutrition expertise to help individuals make unique, positive lifestyle changes. They work throughout the community in hospitals, schools, public health clinics, nursing homes, fitness centers, food management, food industry, universities, research, and private practice. They are advocates for advancing the nutritional status of Americans and people around the world. Visit the Academy of Nutrition and Dietetics at www.eatrightpro.org for more information. ↩2 ↩Fig. 2-1 ↩13

Team-based care: The provision of health services to individuals, families, and/or their communities by at least two health care providers who work collaboratively with patients and their families (to the extent preferred by each patient) to accomplish shared goals within and across settings to achieve coordinated, high-quality care. ↩1 ↩5 ↩13 ↩17 ↩21

Team manager: A designated team member who coordinates the management and logistical aspects of the team that are nonclinical but may have clinical implications; this includes clarifying and communicating team member roles (clinical and nonclinical), work flow, evaluation. ↩1 ↩8 ↩24

Telehealth: The use of medical information exchanged from one site to another through electronic communications to improve a patient's clinical health status. This includes a growing variety of applications and services using two-way video, e-mail, smart phones, wireless tools, and other forms of telecommunications technology. Telehealth may be used synonymously with telemedicine in that both words are referring to the use of remote health care technology to deliver clinical services (16). ↩13 ↩20 ↩22 ↩34

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