

# Principles Supporting Dynamic Clinical Care Teams: An American College of Physicians Position Paper

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The U.S. health care system is undergoing a shift from individual clinical practice toward team-based care. This move toward team-based care requires fresh thinking about clinical leadership and responsibilities to ensure that the unique skills of each clinician are used to provide the best care for the patient as the patient's needs dictate, while the team as a whole must work together to ensure that all aspects of a patient's care are coordinated for the benefit of the patient. In this position paper, the American College of Physicians offers principles, definitions, and examples to dissolve barriers

that prevent movement toward dynamic clinical care teams. These principles offer a framework for an evolving, updated approach to health care delivery, providing policy guidance that can be useful to clinical teams in organizing the care processes and clinician responsibilities consistent with professionalism.

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The U.S. health care system is shifting from the prevailing care delivery model in which clinicians operate independently toward team-based care. In this new model, groups of physicians, nurses, physician assistants, clinical pharmacists, social workers, and other health professionals establish new lines of collaboration, communication, and cooperation to better serve patient needs. The team-based model requires a new way of thinking about clinical responsibilities and leadership, one that recognizes that different clinicians will assume principal responsibility for specific elements of a patient's care as the patient's needs dictate, while the team as a whole must ensure that all elements of care are coordinated for the patient's benefit.

The American College of Physicians (ACP) believes that the nation's health care system must encourage and enable clinicians to work together in dynamic clinical care teams. The movement to team-based health care delivery has generated confusion among the public, policymakers, physicians, and other health disciplines on how to organize teams to achieve the best possible outcomes for patients. To address this confusion, ACP offers the following principles related to the professionalism, regulation, reimbursement, and research of clinical care teams to attempt to dissolve the barriers that hinder the evolution toward dynamic clinical care teams and nimble, adaptable partnerships that encourage teamwork, collaboration, and smooth transitions of responsibility to ensure that the health care system meets patient needs. These principles offer a framework for an evolving, updated approach to health care delivery, providing policy guidance that can be useful to clinical teams in organizing care processes and clinician responsibilities.

## PROFESSIONALISM AND CLINICAL CARE TEAMS

Professionalism requires that all clinicians—physicians, advanced practice registered nurses, other registered nurses, physician assistants, clinical pharmacists, and other health care professionals—consistently act in the best interests of patients, whether providing care directly or as part of a multidisciplinary team (1, 2). Therefore, multidisciplinary clinical care teams must organize the respective responsibilities of the team members guided by what is in the best interests of the patients while considering each team member's training and competencies.

The following framework applies principles of professionalism to the organization, functions, and responsibilities of clinical care teams and applies to teams that are part of a single practice or institution as well as to virtual teams comprising members from more than 1 practice or institution that organize around shared patients to deliver care.

### Definition of Clinical Care Team

*A clinical care team for a given patient consists of the health professionals—physicians, advanced practice registered nurses, other registered nurses, physician assistants, clinical pharmacists, and other health care professionals—with the training and skills needed to provide high-quality, coordinated care specific to the patient's clinical needs and circumstances.*

Clinical care teams typically include, and are supported by, personnel who have a wide range of clinical,

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Editorial comment. . . . . 1

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administrative, managerial, financial, human resource, and other skills, each with distinct educational backgrounds, experiences, and competencies. Highly functioning teams typically assign responsibility and authority for distinct organizational domains to the person or persons most appropriate for the tasks required. Clinical care teams vary in composition depending on the medical specialty (for example, internal medicine or cardiology) and clinical setting (such as inpatient, outpatient, small practice, or large institution) and will vary in function depending on leadership, institutional policies, available team members, and even individual talents and characteristics of specific team members. Optimal effectiveness of clinical care teams requires a culture of trust; shared goals; effective communication; and mutual respect for the distinct skills, contributions, and roles of each member (3).

### Definition of Primary Care

ACP adopts the Institute of Medicine (IOM) definition of primary care: “The provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community” (4).

Primary care encompasses various activities and responsibilities. It is simplistic to view primary care as a single type of care that is uniformly best provided by a particular health care professional. The diverse activities that are often considered under the rubric of primary care often extend into what may be better considered “secondary” or even “tertiary” care and include:

- A. Wellness and preventive care
- B. Diagnosis and treatment of self-limited minor illnesses (such as upper respiratory infections and urinary tract infections)
- C. Care of a well-defined single problem with standardized treatment algorithms (such as uncomplicated hypertension and hyperlipidemia), noting that a patient’s seemingly simple or mundane symptoms, such as back pain or nausea, may have complex or arcane causes, and the patient may not be well-served by algorithmic diagnostic or treatment approaches.
- D. Diagnosis of an undifferentiated clinical presentation more complicated than that previously described under item B (that is, serving as a “diagnostic detective”)
- E. Acute or chronic management of patients with more complex and often multiple clinical conditions (such as multiple, serious, or rare illnesses or clinical problems)
- F. Comprehensive, longitudinal care of the “whole person” not limited to a specific disease condition or medical intervention over a patient’s lifetime and across all care settings.

Because areas of training and experience overlap among clinicians, specifically in the realm of primary care, it is important to more clearly identify its various components. Some aspects of primary care are most appropriately

provided by certain health care disciplines or team members. For example, much of the care and treatment needed in A through C can generally be provided by advanced practice registered nurses and physician assistants, whereas care and treatment in categories D and E are generally most appropriately provided by physicians (5, 6). However, no matter who takes primary responsibility for a given aspect of a patient’s care, all team members have a responsibility to transfer care or seek assistance, guidance, or consultation when the problems being addressed are beyond that clinician’s training, experience, or comfort level (1).

### Principles

1. *Assignment of specific clinical and coordination responsibilities for a patient’s care within a collaborative and multidisciplinary clinical care team should be based on what is in that patient’s best interest (1), matching the patient with the member or members of the team most qualified and available at that time to personally deliver particular aspects of care and maintain overall responsibility to ensure that the patient’s clinical needs and preferences are met. If 2 team members are both competent to provide high-quality services to the patient, matters of expedience, including cost and administrative efficiency, may contribute to division of that work.*

2. *ACP reaffirms the importance of patients having access to a personal physician who is trained in the care of the “whole person” and has leadership responsibilities for a team of health professionals, consistent with the Joint Principles of the Patient-Centered Medical Home.*

The Joint Principles of the Patient-Centered Medical Home, adopted in 2007 by ACP, American Academy of Family Physicians, American Osteopathic Association, and American Academy of Pediatrics and subsequently endorsed by dozens of physician specialty societies, describe the importance of each patient having “an ongoing relationship with a personal physician trained to provide first contact, continuous and comprehensive care . . . . [T]he personal physician leads a team of individuals at the practice level who collectively take responsibility for the ongoing care of patients” (7).

3. *Dynamic teams must have the flexibility “to determine the roles and responsibilities expected of them based on shared goals and needs of the patient.”*

As noted by the authors of a 2012 IOM discussion paper, Core Principles & Values of Effective Team-Based Health Care (3):

Members of health care teams often come from different backgrounds, with specific knowledge, skills and behaviors established by standards of practice within their respective disciplines. Additionally, the team and its members may be influenced by traditional, cultural, and organizational norms present in health care environments. For these reasons it is essential that team members develop a deep understanding of and respect for how discipline-specific roles and responsibilities can be maximized to support achievement of the team’s

shared goals. Attaining this level of understanding and respect depends upon successful cultivation of the personal values necessary for participating in team-based care.

*4. Although physicians have extensive education, skills, and training that make them uniquely qualified to exercise advanced clinical responsibilities within teams, well-functioning teams will assign responsibilities to advanced practice registered nurses, other registered nurses, physician assistants, clinical pharmacists, and other health care professionals for specific dimensions of care commensurate with their training and skills to most effectively serve the needs of the patient.*

The IOM discussion paper suggests that appropriate decisions on clinical responsibilities within teams can best be achieved when “team members . . . engage in honest, ongoing discussions about the level of preparation and capacities of individual members to allow the team to maximize their potential for best utilization of skills, interests, and resources. This frankness allows the team to inventory the discipline-specific assets of team members and ensure that they are creatively aligned with the team’s shared goals” (3). The IOM also stated that effective and dynamic teams have a “nuanced” approach to defining team leadership:

The issue of team leadership has sometimes been contentious, especially when approached in the political or legal arenas, where questions about team leadership often become entangled in professional ‘scope of practice’ issues . . . . However, our interviews [with high-functioning teams] produced two potentially helpful observations. First, these questions seem much less problematic in the field than they are in the political arena. Among the teams we interviewed, notions of ‘independent practice’ were not relevant because no one member of the team was seen as practicing alone, and leadership questions were not sources of conflict; rather, when leadership issues were raised they were portrayed as matters for open discussion that led to mutually agreeable solutions. Second, this relative lack of conflict might be because these teams use the term ‘leadership’ in a nuanced way. There is widespread agreement that effective teams require a clear leader, and these teams recognize that leadership of a team in any particular task should be determined by the needs of the team and not by traditional hierarchy . . . . (3).

*5. A cooperative approach including physicians, advanced practice registered nurses, other registered nurses, physician assistants, clinical pharmacists, and other health care professionals in collaborative team models will be needed to address physician shortages.*

In many communities, severe and growing shortages of physicians (particularly of internal medicine physician specialists and other physician specialties trained in pri-

mary and comprehensive care) create a barrier to achieving the vision of every patient being able to have “an ongoing relationship with a personal physician trained to provide first contact, continuous and comprehensive care,” as requested by the Joint Principles of the Patient-Centered Medical Home (7).

Public policy needs to be directed toward increasing the number of primary care physicians (as well as other disciplines in shortage) and reducing barriers to physicians practicing in currently underserved communities.

The ACP policy on the role of nurse practitioners in primary care, adopted by the Board of Regents in 2009, acknowledges that:

NPs [nurse practitioners] are critical to improving access to health care in underserved communities. Most state laws do not include physical proximity requirements for supervising and collaborating physicians, allowing NPs to provide much-needed primary care in rural and other underserved communities. The success of health care delivery will require collaborative teams of physicians and nonphysicians to provide quality care for individuals and populations with both common and complex health care needs using evidence-based guidelines and effective models of collaboration (8).

The ACP 2009 paper recommends further examination of nurse-managed health centers (NMHCs):

NMHCs are mostly independent nonprofit organizations or academically based clinics affiliated with schools of nursing. NMHCs provide primary health care, health promotion, and disease prevention services to people in rural and urban areas with limited access to health care and record over 2.5 million annual patient encounters. More than 250 NMHCs operate throughout the U.S. and serve an estimated 250,000 patients. The centers are managed by advanced practice nurses, and care is provided by NPs, collaborating physicians, clinical nurse specialists, RNs [registered nurses], health educators, community outreach workers, and health care students. As safety net providers, NMHCs supply cost-effective care that reduces expensive emergency room use and hospitalization among patients (8).

Especially in physician shortage areas, it may be infeasible for patients to have “an ongoing relationship with a personal physician trained to provide first contact, continuous and comprehensive care” (7). They may also be unable to have immediate on-site access to other team members who may be located some distance from where the patient lives and accesses medical care. In such cases, collaboration, consultation, and communication between the primary care clinician or clinicians who are available on site and other out-of-area team members who may have additional and distinct training and skills needed to meet the patient’s health care needs, are imperative. The patient

should have access to a “virtual” clinical care team through use of telemedicine, electronic health records, regular telephone consultations, and other technology to enable the on-site primary care clinician and all members of the health care team to effectively collaborate and share patient information. Telemedicine and telehealth technologies can help virtual clinical care teams to provide clinical consultation and decision support as well as patient education, remote monitoring, and other services (9–11).

6. *A unique strength of multidisciplinary teams is that clinicians from different disciplines and specialties bring distinct training, skills, knowledge bases, competencies, and patient care experiences to the team, which can then respond to the needs of each patient and the population it collectively serves in a patient- and family-centered manner.*

Physicians, advanced practice registered nurses, other registered nurses, physician assistants, clinical pharmacists, and other health care professionals have different training, skills, knowledge bases, competencies, and experience in patient care. Although some training and competencies overlap, physicians have more years of training, and the range of care appropriately provided by each discipline is not equal (8). Advanced practice registered nurses and physician assistants cannot substitute for or replace the skills and expertise of physicians within their discipline, but when they practice to the top of their licenses, they can provide complementary and unique approaches, as well as additional skills in the service of patients and families. Advanced practice registered nurses and physician assistants who have additional training in specialty care can acquire skills and knowledge that enable them to enhance access to specialty services when they work with physician specialists. All clinicians are needed to meet the growing demand for primary and comprehensive care in the United States (8, 12).

Patients have the right to be informed of the discipline, educational background, and competencies of the members of the clinical care team (8). To minimize patient confusion and ensure informed choice, the clinical care team should be able and prepared to provide patients and families with information about the training of all health professionals within the team and the meaning of all professional designations (such as MD, DO, NP, DNP, PA, PhD, PharmD, and LCSW-C), including information on the differences in the years of training and clinical experiences associated with their professional designations. Such information should always be available for each clinician providing care. Because patients view the term “doctor” as being synonymous with “physician” when used in a health care setting, it is incumbent on all health care professionals with a doctoral degree other than MD or DO to clarify that they are not physicians when using the term “doctor” in the patient care setting.

Clinicians within a clinical care team should be permitted to practice to the full extent of their training, skills, and experience and within the limitations of their profes-

sional licenses as determined by state licensure and demonstrated competencies. All clinicians should consult with or make a referral to other clinicians in disciplines with more advanced, specific, or specialized training and skills when a patient’s clinical needs would benefit from such consultation and referral (1). This principle is best satisfied when each member of the team has appropriate confidence in his or her own training and skills, combined with professional ethics in recognizing the limits of his or her training and skills (13, 14). In a well-functioning team that is providing primary care, collaboration among all team members, using the full range of skills and abilities among primary care clinicians, may help to reduce unnecessary referrals and escalation of care to non–primary care specialists, thereby enhancing access to these specialties for patients who need such services (15).

Internal medicine physicians are specialists who apply scientific knowledge and clinical expertise to the diagnosis, treatment, and compassionate care of adults across the spectrum from health to complex illness. They provide both acute and long-term, comprehensive care in the office and the hospital, managing both common as well as complex or unusual illnesses of adolescents, adults, and the elderly. Internists receive in-depth training in the diagnosis and treatment of conditions that affect all organ systems. Internists are specially trained to solve puzzling diagnostic problems and manage patients in both acute and chronic situations where several illnesses may occur and interact at the same time. They are also trained in the essentials of primary care internal medicine, which incorporates an understanding of disease prevention, wellness, substance abuse, and mental health. Internists are often accordingly and appropriately expected to provide high-level clinical leadership within the clinical care teams for care of adolescent, adult, and elderly patients with more complex or unusual illnesses and diagnostic challenges, highly coordinated with all team members who contribute to the patient’s care.

Physicians in other specialties also have unique training in the care of different types of patients and medical conditions. They are often expected to provide high-level clinical leadership within the clinical care team for patients who benefit from their distinct training, experience, and competencies, coordinating with all team members contributing to the patient’s care. Other health care professionals, including advanced practice registered nurses, other registered nurses, physician assistants, and clinical pharmacists, also have training and skills in patient care within their discipline that may accordingly and appropriately result in their providing clinical leadership within the team for patients who would benefit from their distinct training, experience, and competencies, highly coordinated with all team members who contribute to the patient’s care (16).

Examples of clinical care team scenarios can be found in the Appendix (available at [www.annals.org](http://www.annals.org)).

7. *The creation and sustainability of highly functioning care teams require essential competencies and skills in their members.*

In 2009, 6 associations formed the Interprofessional Education Collaborative with the goal of advancing interprofessional educational learning experiences to better prepare students for collaborative and team-based care. A panel of experts appointed by this collaborative in 2010 developed a set of core competencies in 4 domains to ensure that students had the foundation of knowledge, skills, and values they need to function as part of a team to provide effective patient-centered collaborative care: values and ethics, roles and responsibilities for collaborative practice, interprofessional communication, and teamwork and team-based care.

The panel further identified 38 competencies that describe essential behaviors across the 4 core domains. For example, under the interprofessional teamwork and team-based care domain, students should be prepared to “share accountability appropriately with other professions, patients and communities for outcomes relevant to prevention and health care. Another example, under the roles and responsibilities domain, they should be able to ‘explain the roles and responsibilities of other care providers and use the unique and complementary abilities of all team members to optimize patient care’” (17). However, these skills and competencies are not incorporated into training programs for most health care professionals. This lack of training needs to be addressed, and currently functioning teams should have procedures in place to ensure the development of members’ core competencies (18).

8. *The team member who has taken on primary responsibility for the patient must accept an appropriate level of liability associated with such responsibility.*

Health care professionals with clinical responsibility may be required to obtain their own liability insurance as mandated by practice setting, regulation, or state law (19, 20). More research is needed to understand the liability implications of team-based care.

## LICENSURE AND REGULATION AS THEY APPLY TO CLINICAL CARE TEAMS

Licensure and regulation of clinical disciplines cannot substitute for the principles of professionalism previously described. Licensure, however, has an important public safety role: setting regulatory standards to ensure that clinicians have the qualifications and training to provide safe, effective, and ethical care. Although policy circles have discussed national licensing, licensure remains a state responsibility. Nevertheless, given that accreditation of health care training programs and certification of individual health care professionals reflect national standards, it is desirable that state licensing authorities review their laws and scope of practice statutes to allow clinicians to deliver care that is commensurate with, but does not extend beyond,

their training, skills, and demonstrated competencies in accord with national standards. Team-based care should also be in line with standards for training and certification in each profession.

### Principles

1. *The purpose of licensure must be to ensure public health and safety.*

Licensure should be evidence-based. It should protect the public from receiving care from clinicians that is beyond their training, skills, clinical experience, and demonstrated competence; licensure should not restrict qualified clinicians from providing care that is commensurate with, but does not extend beyond, their training, skills, clinical experience, and demonstrated competence. Licensure should ensure that each member of the health care team practices within ethical standards as a condition of obtaining and maintaining their license.

2. *Licensure should ensure a level of consistency (minimum standards) in the credentialing of clinicians who provide health care services.*

3. *Licensing bodies should recognize that the skills, training, clinical experience, and demonstrated competencies of physicians, nurses, physician assistants, and other health professionals are not equal and not interchangeable.*

4. *Although a one-size-fits-all standard for licensure of each clinical discipline should not be imposed on states, state legislatures should conduct an evidence-based review of their licensure laws to ensure that they are consistent with the previously mentioned licensure principles. The review should consider how current or proposed changes in licensure law align with the documented training, skills, and competencies of each team member within his or her own disciplines and across disciplines and how they hinder or support the development of high-functioning teams.*

Licensing laws should ensure that clinicians who are qualified to provide a level of care commensurate with their training, skills, clinical experience, ethical standards, and demonstrated competency are not restricted from doing so. Changes in licensure laws must not harm patients by allowing health professionals to deliver services for which they are not qualified.

To the extent that states have laws that require ongoing communication between and among physicians and advanced practice registered nurses (sometimes called “supervision” or “collaboration” requirements), such requirements should be directed solely to ensuring ongoing, team-based communication and exchange of information, consultation, and appropriate referrals between and among the clinical disciplines involved in a patient’s care. They should not restrict clinicians from providing a level of care that is commensurate with, but does not extend beyond, their training and competencies. Laws should seek to promote and support true team-based and collaborative care.

5. *State regulation of each clinician’s respective role within a team must be approached cautiously, recognizing*

*that teams should have the flexibility to organize themselves consistent with the principles of professionalism described previously.*

Although regulations may be promulgated with the intent of ensuring that patients get the care they need from the most qualified clinician, they may have the unintended effect of imposing a rigid structure that may not be suitable for all teams and patients.

## REIMBURSEMENT AND COMPENSATION OF CLINICAL CARE TEAMS

Reimbursement and compensation methods for services provided by teams and members within teams play a critical role in influencing how well the team can provide coordinated, high-quality, high-value, patient- and family-centered care. In particular, traditional fee-for-service payment systems may contribute to high-volume, fragmented, rushed, and uncoordinated care, compared with payment models that create incentives for all members of the clinical care team to work together in a highly coordinated manner. Even within fee-for-service models, however, changes can be made to encourage team-based, coordinated care.

### Principles

*1. Reimbursement systems should encourage and appropriately incentivize (21, 22) the organization of clinical care teams, including but not limited to patient-centered medical homes and patient-centered medical home neighbor practices. Reimbursement and compensation should appropriately reflect the complexity of the care provided.*

In addition to fee-for-service payments, Medicare's Comprehensive Primary Care Initiative pays selected primary care practices in 7 market areas a risk-adjusted per-patient, per-month care coordination fee. The selected practices have an opportunity to share in savings to the program. Other payers in the selected market areas also provide financial or other support to the selected practices. In return, the practices are accountable for having the capabilities to provide team-based coordinated care of the whole person and for achieving measurable gains in outcomes and effectiveness of care.

Bundled payments, accountable care organizations, risk-adjusted global capitation, and salaried compensation are also models that may contribute to high-quality, cost-conscious care through clinical care teams. Specialty practices that demonstrate the capabilities and have the accountability for seamlessly sharing information with primary care physicians (patient-centered medical home neighbor practices) should receive appropriate incentives in compensation enhancements and opportunities for shared savings.

*2. Payment systems that require the clinical care team to accept financial risk must account for differences in the risk and complexity of the patient population being treated, including adequate risk adjustment.*

## RESEARCH AND MEASUREMENT RELATED TO CLINICAL CARE TEAMS

The IOM discussion paper notes the need for more research to determine specific practices that achieve the best outcomes: To date, research on team-based care has largely focused on describing the successful elements of individual programs. Comparisons of team-based care programs and paradigms have been hampered by lack of common definitions, shared conceptualization of components, and a clear research agenda. The bulk of this paper attempts to frame the first two elements. Here, we outline suggestions for an approach to the third element—the research agenda. We suggest that the research agenda be divided into two broad categories: targeting team-based care and sustaining effective team-based care.

The first main purpose of research about team-based care is to determine the specific practices that achieve the best outcomes and cost savings for particular patients in a given setting. Simply stated, the research agenda should aim to perfect the science of targeting team-based care. The elements of team-based care to be studied include the *who* (team composition and roles), *what* (services provided), *where* (health care setting, home or community environment, transition between settings), and *how* (teamwork model employed, including methods of communication, conflict resolution, etc.). The measured outcomes should be meaningful to patients and should include improved personal and community health, reduced costs, and the comparative effectiveness of team-based care elements for particular patients in particular settings (3).

The authors of this report also note that “[t]here is a deficiency in the availability of validated measures with strong theoretical underpinnings for team-based health care. Improved measurement will enable teams to grow in their capacity to fulfill the principles, facilitate the spread, improve the research, and refine evaluation of the high-value elements of team-based care” (3).

### Principles

*1. Optimal formulation, functioning, and coordination in team-based care to achieve the best outcomes for patients should be evidence-based.*

Research should be directed at “determining the specific practices that achieve the best outcomes and cost savings for particular patients in a given setting” (3). To date, a limitation of current research has been that much of it is focused on how the outcomes of care associated with individual clinicians compare with each other, not on the outcomes of care provided by clinical care teams, using all team members in a highly coordinated way to achieve the best outcomes of care. Accordingly, these studies often lead to an unhelpful, divisive, “Who is better?” public controversy rather than to conversations about how to organize teams to achieve the best patient outcomes.

Research that compares the outcomes and costs associated with care by clinicians from different disciplines

must consider differences in the complexity, severity, and health status of the patient populations; the practice and reimbursement structures in which the care is delivered; and the expertise each member of the clinical care team brings to the patient encounter.

2. *Efforts should be made to address the “deficiency in the availability of validated measures with strong theoretical underpinnings for team-based health care” (3).*

Improved measurement should include appropriate risk adjustment to reflect differences in the complexity, severity, and health status of the patients being treated by the clinical care team and individual team members.

## CONCLUSIONS

ACP offers these definitions, principles, and examples to encourage positive dialogue among all of the health care professions involved in patient care—in the hope of advancing team-based care models that are organized for the benefit and best interests of patients. ACP also hopes to inform policymakers to ensure that regulatory and payment policies are aligned with, rather than creating barriers to, dynamic team-based care models. ACP encourages discussion of dynamic clinical care teams that puts patients first.

From the American College of Physicians, Washington, DC.

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## APPENDIX: EXAMPLES OF CLINICAL CARE TEAM SCENARIOS

i) An internal medicine specialist providing primary care commensurate with his or her training may have primary responsibility within the team for the care of adult patients with more complex medical challenges but will also consult with or transfer the patient to another clinician when necessitated by the patient's condition. To illustrate, an elderly woman with a history of severe arthritis sees her internist about pain in her hip and severely limited motion. The internist refers the patient to an orthopedic surgeon who, after further evaluation, recommends surgery. The orthopedic surgeon now assumes the role of leader of the clinical care team for the surgery, and the internist serves as the consultant for managing the patient's medical problems during and immediately after surgery. After completion of the surgery and postoperative follow-up by the surgeon's team, the internist resumes principal responsibility for care of the "whole person."

ii) An advanced practice registered nurse providing primary care commensurate with his or her training may consult with or make a referral to an internal medicine physician, a family physician, or another physician specialist when presented with a patient with significantly complex medical conditions. To illustrate, the advanced practice registered nurse sees a patient who scheduled an appointment for the symptom of "nausea and fatigue." On initial evaluation in the office, the nurse practitioner determines that the patient is acutely ill and may have hepatitis on the basis of icteric sclera and jaundice. Because of the complexity of the patient's underlying problems of diabetes and hypertension and his current acute presentation, the nurse practitioner consults

with an internist and subsequently transfers the patient to the internist's care. The internist immediately assumes primary responsibility for the patient's care.

iii) An internal medicine physician specialist may consult with or refer a patient to an advanced practice registered nurse who has specialized skills and training in educating patients and engaging them in their own care. To illustrate, the internist diagnoses a patient who has advanced diabetes in addition to other chronic conditions. The internist initiates a consultation for the patient with a nurse practitioner colleague who has significant expertise in educating patients on how to effectively manage diabetes and other chronic conditions. The advanced practice registered nurse designs a care management program with input from the patient that meets the patient's needs. While the nurse practitioner leads the effort to engage the patient in shared decision making and self-management, the internist maintains overall clinical responsibility for the patient's care.

iv) An internist using a formal collaborative drug therapy management agreement with a clinical pharmacist refers a patient for ongoing medication management or decisions that meet jointly developed clinical goals of the care plan developed from the physician's or team's diagnostic workup and assessments. Achievement of medication-related goals is sustained or documented or revisions to the patient's care plan or medication management are accomplished either through referral back to the physician or through collaboratively developed care plan adjustments.

v) The IOM discussion draft offers examples of dynamic, highly-coordinated clinical care teams working in various settings to address patient needs. It cites the palliative care team at New York's Mount Sinai Hospital, a team that includes nurses, physicians, social workers, and chaplains, aiming to "help patients with advanced illnesses and their families make informed decisions regarding their health care when curative measures are no longer effective, with the goals of relieving suffering and attaining optimum quality of life." To facilitate regular communication and coordination, "[t]eam members hold both daily interprofessional rounds and meetings with patients and families, and weekly in-person meetings—both care-oriented and administrative—to coordinate their activities. Communication also happens virtually, through the electronic medical record, email, text messages, or phone calls" (3).