

# Beyond the Referral: Principles of Effective, Ongoing Primary and Specialty Care Collaboration

## Beyond the Referral: Principles of Effective, Ongoing Primary and Specialty Care Collaboration

# An American College of Physicians Position Paper

This policy paper, written by Brian E. Outland, Ph.D.; Carol Greenlee, MD, MACP, FACE; Varsha Vimalananda, MD, MPH, Sarah Candler, MD, MPH, FACP; Harriet Bering, MD, FACP; Alicia Arbaje, MD, MPH, Ph.D., for the Council of Subspecialty Societies of the American College of Physicians with significant contributions from Suzanne Joy, MPP; Genna Hewett-Abbott, and Sarah Starling Crossan. A list of Council Subspecialty Society member organizations, other participating organizations, and subject matter experts that contributed to this paper can be found in Appendix II. The paper was approved by the Board of Regents of the American College of Physicians on February 15, 2022.

#### How to cite this paper:

Beyond the Referral: Principles of Effective, Ongoing Primary and Specialty Care Collaboration. Philadelphia: American College of Physicians; 2022: Position Paper. (Available from American College of Physicians, 190 N. Independence Mall West, Philadelphia, PA 19106.)

#### Copyright © 2022 American College of Physicians

All rights reserved. Individuals may photocopy all or parts of Position Papers for educational, not-for-profit uses. These papers may not be reproduced for commercial, for-profit use in any form, by any means (electronic, mechanical, xerographic, or other) or held in any information storage or retrieval system without the written permission of the publisher.

For questions about the content of this Policy Paper, please contact ACP, Division of Governmental Affairs and Public Policy, Suite 700, 25 Massachusetts Avenue NW, Washington, DC 20001-7401; telephone 202-261-4500. To order copies of this Policy Paper, contact ACP Customer Service at 800-523-1546, extension 2600, or 215-351-2600.

# Beyond the Referral: Principles of Effective, Ongoing Primary and Specialty Care Collaboration - An American College of Physicians Position Paper

This policy paper, written by Brian E. Outland, Ph.D.; Carol Greenlee, MD, MACP, FACE; Varsha Vimalananda, MD, MPH, Sarah Candler, MD, MPH, FACP; Harriet Bering, MD, FACP; Alicia Arbaje, MD, MPH, Ph.D., for the Council of Subspecialty Societies of the American College of Physicians with significant contributions from Suzanne Joy, MPP; Genna Hewett-Abbott, and Sarah Starling Crossan. A list of Council Subspecialty Society member organizations, other participating organizations, and subject matter experts that contributed to this paper can be found in Appendix II. The paper was approved by the Board of Regents of the American College of Physicians on February 15, 2022.

#### I. Introduction

Visits to specialty care clinicians account for more than half of outpatient visits in the U.S., and referral rates are increasing over time. <sup>1, 2</sup> Among nonelderly patients, about one third of patients are referred to a specialist each year; the proportion is even higher for elderly patients. <sup>3, 4</sup> When referrals split patient care across multiple clinicians, that care can become fragmented and increase the risks for missed care, duplicative services, medication errors, poor clinical outcomes and quality of care, increased costs, patient confusion and dissatisfaction, and clinician frustration and wasted time. <sup>5, 6, 7, 8</sup> The risk for adverse outcomes increases exponentially when multiple sources of medical care are involved. <sup>5</sup>

Collaboration between primary and specialty care clinicians to effectively coordinate care can reduce the chance of poor outcomes. Collaboration is the act of working together and is critical to achieving care coordination, which is "the deliberate organization of patient care activities between two or more participants (including the patient) involved in a patient's care to facilitate the appropriate delivery of health care services."

In 2010, the American College of Physicians (ACP) introduced the medical neighbor concept and defined the core elements of a high-value referral in "The Patient-Centered Medical Home Neighbor The Interface of the Patient-Centered Medical Home With Specialty/Subspecialty Practices." The policy paper established the groundwork for the College's subsequent efforts to improve primary care-specialty care collaboration in the outpatient setting. This position paper expands on that foundational work and addresses ongoing care after the initial referral. The paper outlines how primary care (PC) and specialty care (SC) teams can effectively collaborate—longitudinally, and with patients and families—to support coordinated care.

This paper identifies guiding principles, shared expectations, and core elements that the workgroup considered common to most types of PC-SC working relationships and that are required for effective collaboration. The accompanying playbook (see Appendix I) delves deeper, offering a framework for classifying several common types of PC-SC working relationships and providing principles, expectations, and elements for collaboration that are unique to each.

Underpinning these recommendations is the assertion that mutually respectful interclinician relationships are required for effective collaboration. <sup>12</sup> Coordinating care may be simplified by leveraging health information technology (IT), organizational structure, and standardized processes. <sup>10</sup> However, collegial relationships impact clinicians' satisfaction with day-to-day interactions and are critical for the collaboration required to negotiate complex issues, urgent concerns, and other situations where existing supports are insufficient in and of themselves. <sup>12, 13</sup>

The overall goal of this policy paper is to provide recommendations that support stronger collaboration between PC and SC teams to improve care coordination and thus clinical outcomes, patient and clinician satisfaction, and costs.

#### II. Methods

The workgroup that developed this paper included stakeholders from professional medical organizations representing a wide range of medical specialties, patient and family advocacy organizations, and subject matter experts in care delivery and coordination. A full list of participating organizations and subject matter experts can be found in Appendix II. An initial steering committee developed the strategic direction, processes, and organization for the workgroup efforts. Seven stakeholder subgroups focused on different types of PC-SC collaboration were tasked with developing work products that were then vetted by the full workgroup. Each subgroup's work product defined the following for their assigned collaborative care role:

- 1. Guiding principles—foundational doctrines or tenets that underpin effective PC-SC collaborative care that need to be upheld no matter how implementation is adapted to specific patients or local practice
- 2. Shared expectations—intentions about which all parties agree to build successful SC roles and PC-SC relationships; includes clarification around necessary care, who fulfills what care management tasks, and ground rules for working together to optimize patient care
- 3. Critical elements—crucial items, mechanisms, or processes (such as health IT) or workflows that are paramount to upholding the principles and meeting the expectations for each SC role
- 4. Helpful elements—items, mechanisms, or processes that help, but are not critical to, facilitating the upholding of principles and meeting of expectations for each ideal SC role

A review panel comprising a smaller number of workgroup members and ACP staff used these materials to distill a set of overarching principles, expectations, critical elements, and helpful elements common across all forms of PC-SC collaboration. These common features make up the foundation of this policy paper. Principles, expectations, critical elements, and helpful elements specific to each SC role were used to construct the accompanying playbook. The final policy paper and playbook incorporate feedback from the workgroup, ACP's Council of Subspecialty Societies, Board of Regents, Board of Governors, Council of Early Career Physicians, Council of Resident/Fellow Members, and Council of Student Members, as well as expert outside reviewers. The final position paper and playbook were reviewed by the ACP Board of Regents and approved on February 15, 2022.

#### III. Background

ACP has long been committed to reforming our nation's health care delivery system to put patient needs at the center and focus on value. Since partnering with the American Academy of Family Physicians, American Academy of Pediatrics, and American Osteopathic Association to introduce joint principles for the patient-centered medical home (PCMH) model nearly 15 years ago, the College has increasingly focused on the need to coordinate patient care not only within but also across settings. 14

In its 2010 paper on PCMH-N, the College introduced the concept of the medical neighbor (see Figure 1) and illustrated the necessary expectations for a high-value referral process, including key principles of high-value initial referral requests and referral responses (see Figures 2 and 3). The subsequent High Value Care Coordination (HVCC) Toolkit includes a series of resources to guide the practical implementation of the key principles from the PCMH-N paper, including referral checklists, care coordination agreement templates, and recommendations for preparing patients for optimal referrals.

### Figure 1. Key Principles of a High-Value Patient-Centered Medical Home Neighbor (PCMH-N).

A specialty/subspecialty practice recognized as a PCMH-N engages in processes that:



Figure 2. High-Value Referral Request

#### Critical Elements of the Referral

#### Prepared Patient

#### Patient Demographics and Scheduling Information

 Include any special considerations such as language needs, vision/hearing/cognitive impairments, need for caregiver assistance, etc.

#### Referral Information

- Clinical Question / Detailed Reason for Referral
  - · Summary of pertinent details
  - · Patient goals
  - · Urgency (referral priority status)
- · Supporting Pertinent data
- · Referral type (role for specialty care)

#### Patient's Core Data Set

- Active problem list
- Past medical and surgical history
- Medication list
- Medical allergies
- · Preventive care (e.g. vaccines and diagnostic test)
- Family history
- · Habits / social history
- List of providers (care team) (other specialists caring for patient)
- · Advance directive
- · Overall current care plan and goals of care
- Any pain agreement, Care Management and /or Behavioral Health contacts

#### Core Coordination / Referral Tracking

Referral request sent, logged and tracked and acted on

Figure 3. High-Value Referral Response

#### A High Value Referral Response

- Answer the clinical question / address the reason for referral
  - · Summary (include some thought process)
- Agree with or Recommend type of referral / role of specialty care
- Confirm new, existing, or changed diagnoses
  - Include "ruled out"
- Medication / Equipment changes
- Testing results, testing pending, scheduled or recommended
  - · including how / who to order
- Procedures completed, scheduled or recommended
- Education completed, scheduled or recommended

- Any "secondary" referrals made
  - · Confer with and/or copy PCP on all
- Any recommended services or actions to be done by the PCP/PCMH
- Follow up scheduled or recommended
- · Clear indication of
  - · What specialty care is going to do
  - · What the patient is instructed to do
  - What the referring physician needs to do and when
- Easy to find and refer to in the response note

This current paper aims to expand on this foundational work by addressing effective PC-SC collaboration that extends beyond the initial SC referral, when more than one clinician or care team is involved in the care for a patient. This policy paper introduces fundamental principles, shared expectations, and critical elements common to effective collaboration. The accompanying playbook (Appendix I) operationalizes these concepts with a new framework describing several distinct PC-SC collaborative care roles. These are intended to be viewed as a spectrum along which the SC role may evolve over time as patient needs and circumstances change. By establishing a clear framework for PC-SC collaboration across the chasm that often exists between the PC and SC settings, the goal is to create an intentional mindset that minimizes fragmentation and optimizes coordination of care between PC and SC teams to ensure timely, safe, effective, and efficient delivery of patient-centered care.

We recognize that implementing any new procedures or any new systems requires an upfront investment in clinician and staff time. One of the College's top enduring advocacy priorities remains reducing unnecessary administrative complexities.

Therefore, we underscore that minimizing burden on clinical care teams should be of utmost priority when implementing the guiding principles and recommendations set forth in this paper. While we believe that many of these policies can be implemented with minimal disruption to patient care and clinical workflows and without significant expense to the practice, we also recognize that new policies and processes may need to be implemented on a gradual or prioritized basis to help minimize burden and ensure a smooth transition. In the long term, we are confident that applying these principles, expectations, and critical elements will result in streamlined referrals, more effective and efficient PC-SC coordination, and reduced overall burden on physician practices and be well worth the initial investment.

#### IV. Overarching Principles

#### **Principle 1: Patient and Family Partnering**

Clinical care teams should work collaboratively with patients, families, and caregivers to empower them to be active partners in all aspects of their care. Their needs, preferences, and limitations should be actively predicted, solicited, and considered in all care encounters and decisions.

#### **Background**

Patients, caregivers, and families must navigate an increasingly fragmented, siloed U.S. health care system. The average Medicare beneficiary sees two PC clinicians and five SC clinicians per year. Those with chronic illnesses see an average of 11 clinicians annually. Yet, fewer than half of U.S. PC clinicians report "frequently" coordinating care with SC clinicians. In this leaves patients to coordinate their own care across multiple care teams and separate patient portals and reconcile different sources of medication changes and complex instructions. In Inadequate assessment of patient needs, values, and preferences and failing to engage patients and families in care discussions is another common challenge negatively affecting patients' abilities to navigate their care. 18, 19, 20, 21, 22, 23, 24

ACP believes clinicians engaging one another and the patient and family in shared decision making is critical to achieving positive care outcomes. <sup>25</sup> To ensure patients feel heard, have input into their care decisions, feel adequately informed and supported, and are empowered to engage in their care, particularly when multiple care teams interact, clinical care teams should apply evidence-based approaches to promoting patient-centered care. <sup>26</sup> Tactics are well-described in the literature and include describing the choices; providing patient educational materials; employing shared decision making and/or decision aids; and eliciting and addressing patient goals, preferences, and values. <sup>27, 28, 29, 30</sup>

#### **Shared Expectations**

• Patients and families should be empowered to be active partners in monitoring, engaging with clinicians, and making decisions about their own care. This includes deciding whether and when to refer to a SC practice and what SC level of involvement is initially appropriate as well as participating in any subsequent discussions to reevaluate the SC role based on evolving needs. The patient and family should be provided with the relevant information regarding all available treatment options along with the risks of each and feel encouraged to ask questions, so they are empowered to make informed decisions. Patients should indicate any challenges they might face in following the specialty clinician recommendations and discuss ways to address these challenges with the clinician and care team. Importantly, while the patient and family should be empowered to be active partners in decision making regarding their care, they should <u>not</u> be responsible for the coordination of their care between their PC and SC teams; rather this should be the mutual responsibility of the PC and SC physicians' teams involved in the patient care.

• Clinical teams should actively solicit patient and family needs, preferences, concerns, and limitations and incorporate these into all medical decision making, including but not limited to those about initial SC referrals and ongoing SC engagement. In particular, SC involvement should consider and adapt to the specific needs of the patient and family, including, but not limited to, geographic or travel limitations; availability of telehealth or other virtual care options; work/family demands; financial constraints; literacy, cultural, or spiritual considerations; and physical, mobility, or cognitive impairments or restrictions.

#### **Critical Elements**

Patients and their families should receive an individualized referral and/or transition plan designed in partnership with the patient and family along with copies of any other important information. This could be made available via the patient portal and/or hard copy, based on patient preference.16, 26 Information should always be presented in a linguistically and culturally appropriate manner that the patient and family can readily understand.

With a PC-to-SC referral, provision of information to the patient and family about the referral by the requesting PC care team can help reduce the unknowns and make the referral experience less intimidating and/or frustrating, increasing likelihood of successful completion of the referral. This can include information about the referral itself, such as the clinical question, explanation of the role requested of SC (e.g., cognitive or procedural consultation or a form of co-management), information about the referred-to-practice and SC clinician, and logistics about the appointment. This latter information will need to be obtained in advance from the SC medical neighbor and can be provided to the patient simply as a brochure from that practice or incorporated into a referral "one pager" as suggested in the example. <sup>31, 32</sup>

During the initial SC referral appointment, the SC team can clarify for the patient what issues they will be handling and when and how to contact the SC team.

With transition of management of a condition from SC to PC, the specialty care practice should provide a transition report to not only the PC team but also the patient and/or family. This report should include information about the status of the condition and

anticipated management needs, as well as SC contact information for questions or further follow-up (see Appendix I for details). With transfer of care from one practice to a similar practice such as with a move to a new location or with pediatric-to-adult care transition, providing a transfer summary to the patient and/or family as well as to the new clinician can be invaluable. This document not only allows the patient and/or family to be reminded of critical medical history events and needed care but can be shared with medical personnel for any required interim care (see Appendix I for details).

• Patients and families should receive educational materials with information about their condition, self-management, and any medications. Information for the patient and/or family regarding the medical condition, test results, medications or other treatments, and the follow-up plan should be provided as part of ongoing care. More than one in three, or approximately 80 million U.S. adults, have poor health literacy—that is, a limited ability to understand basic health information to make appropriate health decisions. This can negatively affect their ability to engage in shared decision making and result in suboptimal care outcomes. To help minimize health literacy barriers, resources should avoid medical jargon; consist of short, clear sentences; and incorporate pictures and graphics as needed to enhance patient comprehension, regardless of education level or age. 36

#### **Helpful Elements**

- · Patients should be encouraged to access data and consider communication via their patient portal in a shared electronic health record (EHR). Patient access to EHRs has been shown to improve quality of care and safety and leave patients feeling more in control of their care.<sup>27, 37</sup> Further, transparent patient records have been associated with increased patient satisfaction, trust, and safety.<sup>25</sup> Recognizing the benefits of patient access, in May 2020, the Office of the National Coordinator for Health Information Technology (ONC) promulgated interoperability and information blocking regulations to "advance interoperability and support the access, exchange, and use of electronic health information."38 Access to patient portals and electronic communication, including telehealth, may require practices to address digital literacy and access to electronic technologies. These are critical efforts to support equity and quality in care. Patient portals and EHRs should also make the patient interface easy to use and streamlined across systems to the maximum extent possible to ease patient adoption and use.
- Whenever possible, practices should utilize available support tools to enhance shared decision making with the patient.
   Decision aids increase patient awareness of their options and help patients reach decisions that are consistent with their values while fostering collaboration with their health care professional.
   Motivational interviewing encourages patients to better understand

their own health preferences and goals. Educational resources such as after-visit summaries help support patient knowledge and understanding.<sup>39</sup>

#### **Principle 2: Defined Clinical Roles and Responsibilities**

The roles, responsibilities, and mutual expectations of PC and SC care team members should be clear and acceptable to all parties, including the patient and family.

#### **Background**

Ambiguity and disagreement in the respective roles and responsibilities of PC and SC practices leads to care inefficiencies, duplicated testing, and patient confusion. 40, 41, 42, 43, 44, 45 Poorly defined roles and responsibilities also contribute to the backlog for SC services in the U.S. as SC teams continue long-term follow-up of patients whose conditions might be comfortably managed by their PC teams. 46 Expectations for the roles and responsibilities in the referral process itself, including ensuring the critical elements of a high-value referral request and response, have been described in the PCMH-N policy paper and HVCC Toolkit. Here, we extend this work to define roles and responsibilities during the collaborative provision of care (see Appendix I).

Having common, agreed-on principles and expectations for who does what in each type of care relationship offers a foundation for reducing ambiguity and providing coordinated care for the patient. With the initial referral request, PC clinicians can include a request for the desired type of SC role in care along with agreement from the patient and/or family. This step initiates the process of defining anticipated roles and responsibilities. If the SC clinician feels that another type of role would be more appropriate to help address or manage the condition, then further discussion among all parties can establish what that role will be and adjust for any modifications that better accommodate the patient's needs. As the patient and/or their condition or circumstances change, the roles and responsibilities of the different parties involved in their care may need to be readjusted as well. This should be done in a collaborative and patient-centered manner so that all parties are aware and in agreement.

It is important to recognize that health care delivery is complex work that involves interdependent tasks as well as interdependent people who perform those tasks. Primary care and SC clinicians who share patients simply cannot work in silos, or with a dismissive or competitive stance toward one another. A shared understanding of each other's role in care, acknowledging a shared goal of well-coordinated, high-quality patient care, and proceeding with mutual respect are key aspects of relationships that support the highest level of coordination. The shared understanding of each other's roles means that communication is informed by the understanding of who needs to know what, why they need to know, and how quickly they need to know it.

This PC-SC collaboration will require a new way of approaching clinical responsibilities, one that recognizes that different clinicians will assume principal

responsibility for specific elements of a patient's care for a referred condition as the patient's needs dictate, while working together to coordinate care and avoid redundancy to ensure all patient needs are met. Over time, this approach will mutually empower each clinician to maximize their respective strengths and capabilities, reduce siloed practice, establish a more appropriate balance of PC-SC responsibilities, and improve PC and SC satisfaction with their own roles and each other's. In moving toward this type of model, it is important to adequately reimburse all engaged parties for time spent on continued coordination, guidance, and information exchange (see payment structures under section VI [Barriers and System-Level Limitations to Implementation]).

#### **Shared Expectations**

- The PC team should serve as the "hub" or central organizer of a patient's overall care. The PC team is responsible for transferring care or seeking assistance, guidance, or specialty consultation when the problems being addressed are beyond that clinician's ability to treat due to training, experience, level of time commitment entailed, or comfort level, and is responsible for managing the coordination and integration of the care provided by all involved clinicians. When an extension of care beyond PC is needed, SC partners should work with the PC team to ensure effective, bidirectional communication; appropriate, timely, and effective consultations and referrals; and appropriate division of care management responsibilities and should support the PC practice in its efforts to manage the patient's overall care and coordinate multiple sources of care. <sup>11</sup>
- SC serves as an extension of care from the PC hub with the specific SC role determined on the basis of the clinical best practices for the referred condition, the needs or best interests of the patient, and comfort levels of the requesting clinician and the SC clinician. Ideally, the work of SC and PC occur in alignment or synergistically. Unfortunately, this is often not the case. A mindset of collaboration and cohesion (a sense of being in it together) should extend from the initial referral, through the care process and to any transitions or transfers of care. Understanding SC as an extension of care from the hub of PC and adopting a comprehensive, patient-focused culture of collaboration can help bridge care silos to help augment ongoing patient care versus contributing to fragmentation. 12
- The initial referral request from PC should include a request for a suggested SC role, as suggested in the PCMH-N policy paper and HVCC Toolkit, such as "procedural consultation" or "co-management with principal care for the referred condition." The playbook included in Appendix I can serve as a framework for how to structure those discussions and how specific care management roles and responsibilities would flow from this decision. While a clear delineation of the SC role in care helps to clarify roles and responsibilities, this approach must also be flexible and adaptable based on evolving circumstances. All parties should understand this role is subject to change over time. These decisions should not be considered one-size-fits-all. Additionally, when requested by the referring physician, the initial referral encounter should be

- **conducted by a physician** rather than by an advanced practice practitioner other than in circumstances where it would result in significant delays in care adversely impacting patient outcomes.
- A collaborative approach among the requesting PC clinician, SC clinician, their clinical care teams, and patient and family should be used to determine the appropriate level of SC involvement and extend to and through the ongoing care relationship. All parties should mutually agree on the role of SC while using an adaptive approach to also allow for changes to role expectations based on circumstances and preferences. The process of mutual agreement may only require SC to agree with the role requested or suggested by PC or may require some discussion to arrive at what works best for all parties.
- The responsibilities of the PC and SC teams and the patient and family should be mutually understood and agreed on so that all parties are aware of the division of roles, specific tasks, and accountability at the outset. Once the role of SC is agreed on, each party needs to be aware of what that role entails, and which clinician and care team are responsible for what actions and responsibilities. Clearly defined care responsibilities reduce ambiguity, support effective teamwork, and are critical to optimal referrals and shared care. <sup>25, 39, 48, 49, 50, 51, 52, 53, 54, 55</sup> If a clinician is uncomfortable with the assigned responsibilities, any specific responsibility can be renegotiated. Similarly, patient needs and convenience may require some adaption of some responsibilities, such as SC laboratory testing being done at the PC office. The roles and responsibilities need to be respected and honored. If the patient requests something of SC that should be handled by PC or vice versa, either the patient should be redirected to the proper clinician/care team and/or the clinician or care team can outreach to the other care team to communicate or assist in meeting the need.
- All parties should have a shared understanding that the level of specialty engagement should be reassessed and will likely need to shift over time as a patient's condition and overall health, as well as other needs and circumstances, change. When the need for such a reevaluation arises, the PC and SC teams should engage the patient and family in an open and iterative communication process to determine an appropriate new SC role. This might occur, for example, if a condition worsens and SC needs to assume more of a management role, or if the condition resolves or stabilizes so that SC involvement is no longer needed with a planned transition of management responsibilities back to the patient's PC team.

#### **Critical Elements**

 PC and SC practices should have some form of care coordination agreement that establishes an understanding of common SC roles and care coordination processes.<sup>11, 56</sup> It should be understood by all parties that these care coordination agreements are intended to serve as formal or informal general agreements between practices, while allowing for customizable individual care plans based on individual patient and family circumstances and preferences.

• PC and SC teams should establish an internal plan and define team members for all clinical and care coordination tasks to support the goals of the patient care plan and improve patient-centered care while enhancing patient quality of care and safety. As part of this plan, each care team should establish a lead staff member to manage coordination with external care teams and track care management tasks for which internal care team members are responsible. Support and training for these staff should be provided by health care systems and payers.

#### **Helpful Elements**

- PC and SC teams may benefit from additional administrative staff, designated care managers, and/or patient navigators to further facilitate care coordination within and across clinical care teams. These trained staff can assist other team members in accurate, timely, and appropriate communications between the PC and SC teams, as well as with the patient and family. They can operate within a single practice or be shared across multiple practices, such as between a PC and SC practice that have a high volume of referrals and co-managed patient populations. Patient navigators have been found to improve care coordination, patient experience of care, and clinical outcomes and reduce health disparities. 57,58
- Interprofessional consultations when incorporated into regular PC-SC workflows can help offer expert specialty advice to the patient's PC team in an efficient manner and, in some cases, can alleviate the need for a SC in-person visit altogether, improving patient and clinician satisfaction while saving time and money. 59, 60, 61 Interprofessional virtual consultations or e-consults, as they are commonly called, represent formalized asynchronous, clinician-to-clinician requests for consultative advice without patient presence. 62, 63 These occur within a shared EHR or web-based portal. E-consults can be utilized for new clinical questions or as part of ongoing shared care with PC requesting follow-up advice from SC. Satisfaction with e-consults among PC and SC is generally high.<sup>61</sup> Benefits reported by PC for this type of PC-SC collaboration include improved communication, rapid turnaround, and educational value.<sup>64</sup> Those reported by SC include improved clarity of referral questions, fewer inappropriate clinic visits, and increased efficiency of face-to-face visits when a prior e-consult resulted in completion of the preliminary work-up.<sup>61</sup> By eliminating unnecessary SC visits, e-consults can shorten wait times and enhance patient access to specialty services. 61, 65 A Veterans Affairs study found that e-consults reduced response time by 92%-95% (from an average of 34.4 to 2.4 days) across several specialties.66

#### **Principle 3: Timely, Productive Communication**

All parties should engage in timely, informative, and focused communication with one another that highlights critical issues and/or items needing action.

#### Background

Poor communication is a common pitfall of the current referral system and a major root cause of ineffective transitions between PC and SC teams and adverse patient events. <sup>18, 19, 67, 68, 69, 70, 71, 72</sup> Specialty care clinicians report not receiving needed information with a referral request over 50% of the time, and 25%–50% of the time referring clinicians fail to receive timely communication back from the SC clinician. <sup>8, 73, 74</sup> This lack of communication along with a lack of referral tracking during the referral process often results in the SC clinician not knowing why a patient was referred, the PC clinician not knowing if the patient was ever seen or what the outcome was, and fewer than half of patients ever making it to a SC appointment once referred. <sup>8, 26, 73, 75</sup> Having effective communication across all parties, including the PC and SC teams, patient, and family, helps reduce fragmentation and improve continuity of care. The PCMH-N policy paper and HVCC Toolkit emphasize communication requirements for a high-value, more effective referral process and detail the necessary elements for an effective referral request and referral response as well as for referral tracking. <sup>11, 32</sup>

Communication is also critical during ongoing care relationships. Several critical time points were noted by the workgroup participants as well as in the literature as to when gaps in communication most commonly occur and have an adverse effect. <sup>23, 76</sup> This is especially true when patients have a more critical illness requiring intensive SC involvement. The first time point is when a concerned PC clinician needs feedback on worrisome findings and clarity around the necessity and urgency of a referral (see "Helpful Elements" in this section). <sup>23, 77</sup> The second point is following the initial SC evaluation when the PC clinician needs to hear back promptly regarding the diagnosis and treatment plan along with the patient and family response. Not knowing the diagnosis or treatment plan in a timely matter limits the emotional and clinical support that the PC team can provide. A third time that a gap in communication is all too common is after an adverse event, such as a major change in clinical status or even after death of the patient. Clinicians report often learning of these events sometime later from family, from obituaries, or when mentioned during a conversation with another clinician or staff. Again, this limits the opportunity for support from the PC and long-term SC teams. Finally, too often PC is not notified at the terminal stage of an illness when palliative or end-of-life care is needed. Being mindful of the need to provide information to the other clinicians that share in the care of the patient is an important aspect of improving communication.

Communication includes information exchange, but communication is more than information exchange—"genuine dialogue" is also desirable. <sup>53, 78, 79</sup> There are times when a telephone call or other direct contact is the best way to ensure the other parties are kept up to date and able to provide input on the situation with a mutual patient. <sup>79</sup> In both written and verbal communications, sharing clinical insights, including an explanation of the thought processes,

synthesis, and rationale that went into the evaluation and/or management decisions, is more valuable to collaboration and patient-centered care than is a long list of data elements.  $^{80}$ 

Communication is essential to building peer-to-peer working relationships that enable sharing the care and working together versus working in isolation or with parallel efforts. Improving communication between clinicians has been shown to not only improve clinician job satisfaction but also to improve patient outcomes.<sup>71, 81</sup> Clinically significant improvement in patient outcomes can be seen with increased "interactive communication."<sup>82</sup> Interactive communication, such as with joint patient consultations, scheduled phone calls, and shared progress notes, helps build trust and respect among clinicians and increases relational coordination and collaboration.

#### **Shared Expectations**

- · All parties should share their communications preferences at the outset, including the preferred format and method of contact for routine and more urgent communications. The PC and SC teams should make a reasonable effort to accommodate these preferences, particularly if the two frequently share patients. This helps to ensure all communication is received in the most efficient, timely manner for each party because communication preferences vary on the basis of the individual clinician, practice policies, and technological infrastructure and/or skills. Not knowing how to contact the other party is a major barrier to improving communication, as is fear of interrupting their clinic schedule.39 Setting clear expectations about communications at the outset helps to reduce concerns about not knowing the preferred way to contact a particular clinician or worrying that contacting them might be disruptive or burdensome, thus improving communication and the PC-SC relationship over time.
- Communication should include bidirectional or multidirectional exchange of information. Not only does the PC team need information and updates from SC, but SC should receive updates from PC. Many patients have more than one SC team involved in their care. For example, a patient with complicated diabetes may have a cardiologist, a nephrologist, and an endocrinologist in addition to their PC clinician. In co-management arrangements, SC should send a copy of their note from a follow-up visit to the PC and other relevant SC clinicians, and the PC should also send copy of any relevant follow-up to the SC teams. There is a need for mutual updating by all clinicians involved in patient care. This can serve to keep everyone updated on the patient status and treatment changes and can also reduce duplicated testing.
- All relevant parties should be updated of changes in health status, health care goals, or other relevant patient updates, including social drivers of health, as appropriate. This includes the PC team and all involved or relevant SC teams and applies especially, but not exclusively, in cases of ongoing co-management. It is not uncommon for a medication or procedure implemented for one condition to have effects on or ramifications for other

conditions. For example, the prescription of a glucocorticoid for one condition can alter the management requirements for diabetes or prediabetes as well as other conditions. In addition, to avoid the patient receiving conflicting advice from different clinicians, all involved care teams must be aware of any changes in treatment, health care goals, new diagnoses, or major changes in the patient's health status.

In addition, SC clinicians should notify the PC clinician of any secondary findings from history, examination, or testing that are discovered during the SC evaluation (e.g., thyroid nodule noted during examination in patient referred for management of Crohn disease). In general, the PC clinician will be responsible for follow-up management of secondary findings but can request SC clinician to assist or assume care as appropriate.

Clinicians should always "close the loop." For the referral process itself, "close the loop" refers to SC sending a referral response back to the clinician who provided the referral request, as well as to the PC clinician if the referral was requested by another SC clinician. It can also be utilized to improve referral tracking. In the PCMH-N policy paper and the HVCC Toolkit, ACP suggests expanding the "close-the-loop" practice to include SC notifying PC 1) when the referral request has been accepted and an appointment scheduled, or if alternative care is recommended; 2) if the patient cancels and is rescheduled; 3) if the patient does not show up for the appointment or cancels and does not reschedule; and 4) of the referral response after the initial SC evaluation. This also includes closing the loop on any pending test results that come in after the referral response has been sent, as well as for any secondary referrals (referrals to a SC clinician by another SC clinician rather than by the PC clinician). For example, the SC clinician may need to suggest a second opinion or procedure from another SC clinician. This would add another party into the equation and extend expectations for closing the loop. Similar close-the-loop responses can be expected for ongoing care beyond the referral process itself.

There should be a close-the-loop process for any transition in care. This includes the transition from SC back to PC for management of a condition previously co-managed by SC, where the PC practice can confirm for the SC practice that they have now assumed management of the elements of care for that condition. This is especially critical with the transfer from pediatric to adult care.

#### **Critical Elements**

 PC and SC care teams should have consistent methods for bilateral communication documented in the care coordination agreement and based on level of urgency. All communication methods should incorporate a mechanism to acknowledge that the message was received and is being addressed. Communication mechanisms should also facilitate a way to request and provide additional follow-up information as needed. A direct form of communication, such as a telephone call, may be necessary for issues that are urgent or require clarification or resolution, such as if PC and SC teams disagree on the appropriate form of PC-SC collaboration or if they need to inform the other of a major patient event that may pose serious and/or immediate health risks. <sup>83, 84, 85, 86</sup> Utilizing a care coordination agreement to clarify expectations and mechanisms for communication will help to ensure communication takes place and reduce the opportunities for misunderstandings.

- There must be an agreed-on communication system that alerts members of another clinical care team when urgent action is needed. The inbox for clinicians can be overwhelming. While information sharing is critical for good communication and collaboration, and for achieving care continuity and coordination, it can add to the daily tasks of clinicians. Knowing which items are most urgent and/or require action is critically important. Utilization of an alert system with agreement on the type of time-sensitive or urgent information to be included within the alert, could be used to notify clinicians of items needing more immediate attention. The designations for the alert system should be agreed on in advance and could identify items as "FYI," "Action Needed," "Urgent," "Notice of Major/Critical Event," and so on to help prioritize items.
- PC and SC teams should leverage any trained support staff to help facilitate timely communication across settings. This may include administrative or clinical staff, care coordinators, and/or patient navigators.<sup>87</sup> These individuals would be responsible for assisting in communication and ensuring information exchange with other practices and could serve as the designated contact for those practices.

#### **Helpful Elements**

• Whenever possible, receiving care teams should perform a preconsultation review of incoming referral requests. This helps to maximize the efficiency and effectiveness of SC visits by identifying whether any important information is missing, prioritizing more urgent cases for scheduling, and helping to ensure the requested SC encounter is in fact the most appropriate next step. 88 Administrative staff can help review the referral information for adequacy, especially if referral guidelines have been established, and can request any missing information in advance of the SC appointment. 89 They can also use preestablished guidelines to help triage scheduling urgency in collaboration with clinical staff.

In some cases, this previsit review of the referral information by the SC team may reveal that further evaluation is not medically necessary, that a different type of specialty is more appropriate, or that an alternative visit type might be more appropriate. The requesting PC practice can be notified, preventing unnecessary expense and/or delay for the patient.

In addition, establishing a mechanism for PC clinicians to request prereferral input from the SC clinician can help with the referral appropriateness, timing, and/or preparation. <sup>90, 91, 92</sup> This type of interactive communication also helps improve working relationships between clinicians. <sup>82, 88, 90</sup>

- When necessary and feasible, as schedules and available technology for all parties allow, communication plans should include opportunities for synchronous communication among multiple parties, including the patient, family, and PC and SC teams. Examples include conference calls or video conferences. This is particularly helpful and important when discussing major decisions around treatment options with potentially serious implications, such as with cancer care.
- Ideally, all communications should be facilitated through and recorded within an interoperable EHR, a practice management system, or other form of available health information technology. The patient's medical record that all involved parties can access as needed and as appropriate. The use of health IT system should be transcribed in the EHR. The use of health information and communication technologies like EHRs and health information exchanges provides the opportunity to mitigate fragments in care coordination and communication challenges across parties. Making use of both structured (e.g., computerized provider order entry) and unstructured pathways (e.g., clinician notes) within EHRs, for example, are instances of health IT technology that can be leveraged to support effective communication.

#### **Principle 4: Effective Data Sharing**

Patient data should be shared in a timely, thorough, actionable, and well-organized manner.

#### **Background**

Referral requests for SC often are missing data elements essential to evaluating whether and what type of SC involvement is appropriate and for gauging next steps. The PCMH-N policy paper and HVCC Toolkit indicate what general data are required for a referral request and for a corresponding referral response to be "high value" and thus more effective (see Figures 2 and 3). In addition, recommended data elements for referrals of specific conditions can be detailed in referral guidelines and incorporated into referral templates and referral decision support tools, such as with the AAMC "enhanced referrals" (Project Core). <sup>89, 95</sup> Having the necessary, pertinent data at the time of the initial SC appointment allows a more efficient visit and potentially fewer visits, thus providing greater benefit to the patient. The SC team can assist on their end by using previsit review of the data received with all referral requests and,

if necessary, reaching out to the PC team to obtain any critical missing items before the initial referral appointment.

Data sharing should extend beyond the referral process as part of ongoing care and co-management arrangements and extend to other types of transitions, such as transition of management of a condition from SC to PC or transfer of care to a new practice. The playbook in Appendix I details the data that should be included in these various exchanges. As with communication, data sharing needs to be bidirectional or multidirectional, depending on how many different clinicians/care teams are involved in a patient's care. Timely sharing of data can help reduce unnecessary duplication of testing and can help align care and ensure continuity.

By agreeing on a common set of critical data elements along with optimal data sharing processes, PC and SC teams can work together to help to facilitate the timely transfer of complete and accurate information. These can be incorporated into collaborative care coordination agreements. Use of templates for transition of care from SC back to PC and/or with pediatric to adult care are helpful in ensuring more thorough information sharing and effective hand-offs in care.  $^{96,\,97}$ 

Essential data should be readily accessible and not buried in unnecessarily lengthy progress notes. <sup>80</sup> Information in the referral request, the referral response, and/or interim encounter notes, as well as transfer or transition summaries, should be organized in a format that allows relevant information to be easy to find and refer to as needed.

#### **Shared Expectations**

- Patient data should include specified data elements. Standardizing data elements can help facilitate effective care transitions by helping to expedite the process and ensure the transfer of complete and accurate information. 11, 25, 52, 73, 98, 99 Any exchange of patient data between PC and SC teams at any point in the patient's ongoing care should include all relevant information necessary for the receiving party to make appropriate recommendations about next steps for patient care. This may include, but is not limited to, health goals, test results, current and former medications, procedure history, response to prior therapies or treatments, current health status, summary of care documents, and comorbid conditions. 100 The selection of data elements as standard should be mutually agreed on by both PC and SC and/or pediatric and adult care teams. 101
- Data transfer documents should be well-organized with the data most directly relevant to the clinical question at the top or easiest to find. 80, 102 This makes the data more actionable because it improves the receiving care team's ability to quickly distill the most relevant information and avoids overshadowing important information with the clinician spending minutes, even hours per day sorting through patient medical records that are often hundreds of pages long. Presenting the most important information first and avoiding inclusion of unnecessary or nonessential information helps ensure that critical information will be noted while helping to avoid "note bloat" and its attendant inaccuracies and errors. 103, 104

• Practices should take all reasonable and necessary steps to transmit pertinent information, while dually assessing risks to patient privacy and security. Existing HIPAA requirements and information blocking regulations necessitate practices dedicate efforts to establishing appropriate compliance programs that account for the secure and protected collection, use, and exchange of electronic health information across the health care continuum. 38, 105 While the 21st Century Cures Act independently serves to improve interoperability and enhance data sharing, it also set into motion many other privacy and security considerations. Updating practice policies, procedures, and workflows to reflect both current and imminent data sharing "best practices" should be a priority.

#### **Critical Elements**

• Data-sharing protocols should be established in the care coordination agreement, including ensuring that notifications are prioritized on the basis of level of urgency. For example, medical notes may be shared on an informational basis with a label such as "FYI," versus data that require immediate attention or reflect an important patient status change that may be labeled as a "major/critical event" with an accompanying alert or pop-up notification in the receiving practice's EHR when action is needed.

#### **Helpful Elements**

• Ideally, PC and SC care teams should have access to the patient's medical record through an integrated EHR or health information exchange that is interoperable between the two practices. 74, 93 Both EHRs and HIEs facilitate sharing of information between practices and make it easy to screen for the most pertinent information. Electronic health records can also incorporate templates or decision-support tools that automatically prompt clinicians for missing data elements. This will also improve the effectiveness of interpractice communications and information transfers while minimizing burden on staff. 56, 106

#### V. Barriers and System-Level Limitations to Implementation

Beyond the immediate scope of the PC and SC practice settings, several barriers and system-level limitations add administrative burden and inhibit PC and SC collaboration. These warrant future study and action by policymakers and industry actors.<sup>11</sup>

#### Lack of EHR/Health IT Interoperability

Health IT, including EHRs, provide the opportunity to enhance communication across care teams and health systems, as well as improve patient care coordination. Ideally, health IT is designed to allow clinicians to spend more time with their

patients reviewing and discussing meaningful information regarding their health care and engage in shared decision making. 11 For example, web-based referral platforms, practice management software, and secure messaging and conferencing platforms can streamline referral documentation, facilitate seamless data collection and exchange, and provide a centralized record of a patient's medical history. However, a lack of interoperability across systems and settings has hamstrung the ability of health IT to effectively coordinate care, and in many cases, it has increased burden and decreased health IT usability. 106 Regulations in the 21st Century Cures Act aim to enhance access to and exchange of electronic health information through many technical requirements and provisions prohibiting information blocking (practices that interfere with access, exchange, or use of electronic health information).<sup>38</sup> ACP supports efforts to improve meaningful and useful data exchange along with promoting the consistent adoption and implementation of industry-wide technical standards, which all health care stakeholders should ideally develop collaboratively.<sup>29</sup> These ongoing efforts to improve data access and exchange can also facilitate the integration of clinical guidelines into health IT workflows to support more accurate clinical decision making and improve the overall effectiveness and safety of patient care. 107

#### **Quality and Performance Improvement**

Up to now, performance data have largely focused on performance within the confines of the individual practice as opposed to measuring or rewarding coordination across settings. Only recently have measures to evaluate the success in coordinating patient care between PC and SC teams begun to be developed. 108, 109, 110 A concerted effort is needed to develop targeted value and outcomes metrics that will offer insights into and improve the effectiveness of interclinician collaboration and coordination, including which clinical guidelines, information sharing, and communication strategies are most effective. 111 To minimize administrative burden, ACP recommends value-based payment programs move away from a series of "check the box" performance metrics toward a limited set of patient-centered, actionable, and evidence-based measures for public reporting and payment purposes, while supporting the use of additional metrics and feedback for internal tracking and improvement, including ratings or clinician-to-clinician dialogue. 29

#### **Payment Reform**

While evolving, payment structures remain heavily procedure focused and chronically undervalue non-face-to-face care management tasks. <sup>112, 113</sup> Even fewer meaningfully incentivize collaboration across settings outside of office visits. <sup>29, 113</sup> Lack of financial incentive has been cited as a key deterrent to more effective collaboration between PC and SC clinicians across settings. <sup>101, 109</sup> Payers must recognize and account for the amount of staff time and sophisticated clinical processes and supporting technology required to facilitate a successful referral or transition, such as generating meaningful patient summaries and preparing the patient and family, as well as the ongoing communication and information sharing required between PC and SC practices to successfully co-manage patients. As outlined in this paper, this type of work has been proven to improve patient outcomes, reduce downstream complications, and achieve system-wide savings. In 2019, the Centers for Medicare & Medicaid Services

began reimbursing for interprofessional consultations (e-consults). <sup>114</sup> However, this does not begin to cover the costs of fundamentally restructuring clinical workflows and investing in the staff infrastructure necessary to support care coordination across settings. Until this important work is consistently recognized and adequately reimbursed, practices will be limited in their ability to fully invest in the necessary infrastructure changes to make this type of work possible. This is an important component because it is instrumental to efficient, effectively coordinated care. However, it is hindered by a current lack of reimbursement, underscoring the need for reimbursement models that provide adequate financial support for the necessary infrastructure to provide advanced patient-centered care and care coordination.

For a truly coordination-centric model to work, payment and incentive structures must be reimagined to encourage coordination both within and across clinical care teams. 36 106 Value-based reimbursement models, such as pay-for-performance programs and alternative payment models, particularly capitation-based models, are potentially promising vehicles to incentivize more efficient PC and SC collaboration. The Centers for Medicare & Medicaid Services' Medicare Shared Savings Program has saved more every year, netting nearly \$1.2 billion in savings to Medicare in 2019, while repeatedly earning high-quality marks. The ACP Medical Neighborhood Advanced Alternative Payment Model would offer SC practices that implement advanced clinical care and coordinate care with PC partners prospective payments to fund the necessary infrastructure changes. However, many models require substantial upfront investment and a degree of financial risk that can alienate smaller, rural, and independent practices, which is why ACP has advocated for a range of alternative payment model options that offer flexible financial risk options and prospective payment opportunities. 36

#### Focused Clinician Training to Ensure Successful Care Referrals and Transitions

Traditionally, little attention has been paid during medical school, residency, or fellowship to ensuring high-value referrals and transitions of care across settings. <sup>117, 118</sup> Medical schools and residency programs should incorporate elements to achieving successful care coordination and efficient, ongoing collaboration between PC and SC teams, including the principles and recommendations set forth in this paper into their curricula. Medical schools, nursing schools, and educational programs for other health care disciplines should incorporate training on optimizing referrals and shared care across settings, and how they can contribute to patient safety and outcomes. <sup>119</sup> There should also be an increased focus on, and funding for, programs that specialize in training patient navigators and care coordinators that will provide the necessary infrastructure to support the collaborative, team-based delivery approach to patient-centered care that ACP strongly endorses. <sup>47</sup>

#### **Insurance Coverage and Network Transparency**

Increasingly narrow and constantly shifting insurer networks coupled with nontransparent coverage and pricing information, as well as frequently outdated clinician network directories can hinder systemic care coordination efforts. <sup>20, 121, 122</sup> ACP supports transparency of price information, expected out-of-pocket costs, and performance data that allows patients and families, clinicians, payers,

and other stakeholders to compare and assess medical services and products in a meaningful way. 123 We believe this is a critical factor to delivering patient-centered care, fostering meaningful care coordination across settings, and bringing down system-wide costs.

#### VI. Conclusion

The framework presented in this paper and accompanying playbook outlines the steps to promote and support optimal PC-SC collaboration, reduce care fragmentation, and achieve better care coordination across settings. Grounded in the principles of family-and patient-partnered care, clearly defined clinical roles and responsibilities, timely communication, and effective data sharing, this framework can help PC and SC teams work together more collaboratively and effectively. Over time, this shift has the potential to achieve meaningful system-level impacts, including restoring the PC-SC relationship, improving PC and SC clinician satisfaction, utilizing health care resources more efficiently, and improving patient access to SC services. Most importantly, it can improve patient outcomes and satisfaction with their care. <sup>124</sup>

#### Appendix I: Playbook [see other document]

## **Appendix II: List of Participating Organizations and Subject Matter Experts**

Steering Committee for Beyond the Referral
Eric Bass, MD, MPH, FACP
Desiree Bradley
Harriet Bering, MD, MACP
Susan Brown Buchanan
Deidra Crews, MD, MACP
John Cox, DO, MACP
Nathanial Gleason, MD
Carol Greenlee, MD, MACP, Chair
John Harrold, MD, MACP
Dick Honsinger, MD, MACP
Amy Lu, MD
Beth Neuhalfen

#### Subgroup Co-Leads

- Cognitive Consults
  - o Elizabeth Murphey, MD
  - o Marc Raphaelson, MD
- Procedural Consults
  - o John Harrold, MD, MACP
  - o Michael Van Norstrand, MD, PhD
- Co-Management with Shared Care
  - o Chase Hendrickson, MD
  - o Anna Ratzliff, MD, PhD

- Co-Management with Principal Care of a Disorder or Set of Disorders
  - o Deidra Crews, MD, MACP
  - o Harriet Bering, MD, MACP
- Co-Management with Principal Care of the Patient during a Critical Illness
  - o Dianna Howard, MD
  - o John Cox, DO, MACP
- Transfer of Care from One Practice to a Similar Practice
  - o Laura Pickler, MD
  - o Stacie Renee Schmidt, MD
- Transition of Management from Specialty Care back to Primary Care for a Disorder
  - o Carol Greenlee, MD, MACP, Chair
  - o Nathanial Gleason, MD
  - o Amy Lu, MD

#### Participating Organizations

- American Academy of Allergy, Asthma, and Immunology
  - o Richard Honsinger, MD, MACP
- American Academy of Family Physicians
  - o Mary Reeves, MD
- American Academy of Neurology
  - o Marc Raphaelson, MD
  - o Allen Wu, MD
- American Academy of Pediatrics
  - o Julie Katkin, MD, FAAP
  - o Megan Tschudy, MD, MPH
- American Academy of Physician Assistants
  - o Christopher Norman, PA-C
- American Association of Clinical Endocrinology
  - o Jonathan Leffert, MD, FACP
  - o Daniel Hurley, MD
- American Association of Neurological Surgeons/Congress of Neurological Surgeons o Maya Babu, MD
- American Association of Nurse Practitioners
  - o Joyce Knestrick, PhD, C-FNP, APRN, FAANP
- American College of Allergy, Asthma, and Immunology
  - o Purvi Parikh, MD, FACP
- American College of Cardiology
  - o John Harrold, MD, MACP
- American College of Gastroenterology
  - o Jonathan Leighton, MD, FACP
- American College of Physicians
  - o Banu Symington, MD, MACP
  - o Christine Reimer, MD, MACP
  - o Sarah Candler, MD, MPH, FACP
- American College of Radiology
  - o Greg Nicola, MD
- American College of Surgeons
- American Gastroenterological Association
  - o Larry Kosinski, MD, MBA, AGAF, FACG
- American Geriatrics Society
  - o Alicia Arbaje, MD
- American Medical Society for Sports Medicine
  - o Sameer Dixit, MD, FACP
- American Osteopathic Association

- o Linda Delo, DO
- o Joseph Schlecht DO
- American Psychiatric Association
  - o Anna Ratzliff, MD, PhD
- American Society for Blood and Marrow Transplantation
  - o Dianna Howard, MD
- American Society for Clinical Oncology
  - o Ana Maria Lopez, MD, MPH, MACP
  - o John Cox, DO, MACP
- American Society for Gastrointestinal Endoscopy
  - o Michael Van Norstrand, MD
- American Society of Hematology
  - o Harriet Bering, MD, MACP
- American Society of Nephrology
- o Deidra Crews, MD, MACP
- o Lauren Stern, MD
- ASTRO (American Society for Radiation Oncology)
  - o Ben Wilkinson, MD
- American Thyroid Association
  - o Jennifer Perkins, MD
  - o Pieter Noordzij, MD
- American Urological Association
  - o Jason Jameson, MD
- Association of American Medical Colleges
  - o Scott Shipman, MD
  - o Meaghan Quinn
- Endocrine Society
  - o Chase Hendrickson, MD
  - o Varsha Vimalananda, MD
- Infectious Disease Society of America
  - o David Wheeler, MD, FACP, FIDSA
- National Nurse-Led Care Consortium o Cheryl Fattibene, MSN, MPH, CRNP
- National Patient Advocate Foundation
  - o Nicole Braccio, PharmD
- Patient and Family Centered Care
  - o Lisa Freeman
- Renal Physicians Association
  - o Larry Weisberg, MD, FACP
  - o Alex Liang, MD
- Society for General Internal Medicine
  - o Stacie Renee Schmidt, MD
  - o Rachel Miller, MD
  - o Shahla Baharlou, MD
  - o Eric Bass, MD, MPH, FACP
- Society for Interventional Radiology
  - o Charles Martin, MD
- Society for Vascular Surgery
  - o Russell Samson, MD
  - o William Schutze, MD
- Society of Adolescent Health and Medicine
   ADD MARK MARKET AND MARKET
- o Lawrence J. D'Angelo, MD, MPH, MACP
- Society of Critical Care Medicine
- o Leanne Boehm, PhD, RN, ACNS-BC

Subject Matter Experts Anita Arora, MD Desiree Collins Bradley Susan Buchanan Karen Frederick Gallegos Nathanial Gleason, MD Asra Kermani, MD, FACP Alan Kimura, MD, MPH Larry Kosinski, MD, MBA, AGAF, FACG Lisa Lewis, DO, MPH, FACOG Amy Lu, MD Precious McCown, MS Lisa Murphy, MD Beth Neuhalfen Laura Pickler MD Delphine Tuot, MD Varsha Vimalananda, MD Hal Yee, MD, PhD

#### **Appendix III: Glossary**

#### A. Clinician Types

- Primary care (PC) team: ACP adopts the Institute of Medicine definition of primary care, which is "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." 125 ACP supports a health care system that invests greater resources in PC and supports the value that internal and family medicine specialists offer to patients in the diagnosis, treatment, and management of team-based care, from preventive health to complex illness. 36 The PC team should operate as the central hub of patient information, PC provision, and care coordination and have the overall responsibility for ensuring the coordination and integration of the care provided by all involved clinicians and other health care professionals. 11 Team members have a responsibility to transfer care or seek assistance, guidance, or consultation from a specialty care clinician when problems are beyond their own training, experience, or comfort level.<sup>47</sup>
- Specialty care (SC) team: Specialty care teams provide care for a specific area of expertise and serve as an extension of patient care for discrete medical questions or needs when additional knowledge and/or skills in a specific area are required to meet the patient's needs. They are responsible for helping to ensure effective multidirectional communication, coordination, and integration with the PC team, appropriate and timely consultations, maintaining a flow of necessary information, determining appropriate care management responsibilities, and supporting the PC team.

#### B. Common Acronyms in This Paper

- · PC = primary care
- $\cdot$  SC = specialty care
- · PCC = primary care clinician
- · SCC = specialty care clinician
- · SCP = specialty care proceduralist
- · CI = consuming illness
- SC-CI = specialty care-consuming illness (as in "the SC-CI care team")
- · TL = team lead
- · SC-TL = specialty care team lead

#### C. Common Types of PC-SC Care Coordination

This paper lays the foundation for high-value SC roles with a set of principles, shared expectations, and critical and helpful elements that apply across most care relationships and build on a high-value referral process. The accompanying playbook in Appendix I builds on this by identifying seven common SC relationships each with their own unique set of principles, shared expectations, and critical and helpful elements.

- Cognitive consultation: The SC team is asked to provide diagnostic and/or therapeutic advice on a discrete clinical question to reduce clinical uncertainty, whereas the PC team, in collaboration with patients and families, continues to lead the care for the patient overall, including for the condition of relevance. May take the form of or include the use of electronic consults—e-consults.
- **Procedural consultation:** Request for a SC team to perform a technical procedure to aide or enhance diagnostic precision, or ameliorate, treat, or cure a condition. In each case, the SC clinical care team should assess the need for the procedure and discuss risks, benefits, and alternatives with the patient, family, and PC care team.
- Interprofessional consultation (e-consult): E-consults are formalized synchronous and/or asynchronous, clinician-to-clinician consultations without patient presence.61 These occur within a shared EHR or web-based portal.

For an e-consult, the PC clinician describes the clinical question and should either include all relevant history, physical findings, laboratory data, imaging, and/or photos with the consult question or describe where in the shared EHR that data can be found. The SC clinician reviews the data, presents the PC clinician with an analysis of the patient's problem, including likely diagnosis and suggested management as applicable, as well as alternative diagnoses and management approaches, including the pros and cons of each. The e-consult response should include sufficient scientific background needed to understand the SC's recommendations and also outline suggestions for long-term handling of the patient's problem.

If the problem seems too complex for an e-consultation, the SC clinician can convert the e-consult to an in-person visit instead. CPT codes 99446-99449 require both verbal and written reports CPT codes 99451-99452 require only a written report

- Co-management with shared care: Both SC and PC are involved in the long-term co-management of the defined condition or set of conditions, with the PC team overseeing and responsible for the elements of care and SC providing ongoing advice and support. This can serve as an option between SC co-management with principal care and return to full management by PC.
- Co-management with principal care for a referred condition:

  The SC team oversees and is responsible for the elements of care for the co-managed condition or set of conditions that requires SC expertise. The SC team serves as the patient's first point of contact for the defined condition or set of conditions and maintains ongoing communication with the patient's PC team. The PC team retains authority over other aspects of the patient's care. This may be temporary, or long-term, including for lifelong chronic illnesses.
- Co-management with principal care for a consuming illness: In cases where the patient encounters a life-threatening event or exacerbation of a condition that elevates it to critical status, the SC team may become the patient's first contact for general medical concerns and assume other care management tasks for the duration of the critical illness. The SC team would remain in ongoing communication with the PC team, which still serves as the central hub of the patient's care. Other relevant SC clinicians may continue to provide supportive care during the critical illness. This may be temporary, or long-term, including for lifelong illnesses.
  - o Consuming illness (CI): A consuming illness is a critical illness or an exacerbation of a chronic condition of high acuity that requires continuous care by a single specialist/subspecialist. Often CIs are life-threatening or are chronic illnesses characterized by intermittent life-threatening exacerbations. A CI becomes the highest priority of need for the patient's medical well-being and survival.
- **Transfer of care to a similar practice:** The patient moves from one practice to another similar practice, such as cases where a patient relocates or transitions from pediatric to adult care.
- Transition of care from SC back to PC for management of a disorder: Management of a condition is transitioned back to the PC team following co-management by SC.

- Machlin SR, Carper K. Statistical brief no. 166: expenses for office-based physician visits by specialty, 2004. March 2007. Accessed at www.meps.ahrq.gov/mepsweb/data\_files/publications/st166/stat166.pdf on 19 December 2021.
- 2. **Barnett ML, Song Z, Landon BE.** Trends in physician referrals in the United States, 1999-2009. Arch Intern Med. 2012;172:163-70. [PMID: 22271124] doi:10.1001/archinternmed.2011.722
- 3. **Forrest CB, Majeed A, Weiner JP, et al.** Comparison of specialty referral rates in the United Kingdom and the United States: retrospective cohort analysis. BMJ. 2002;325:370-1. [PMID: 12183310]
- 4. **Shea D, Stuart B, Vasey J, et al.** Medicare physician referral patterns. Health Serv Res. 1999;34:331-48. [PMID: 10199679]
- 5. Medication Errors: Technical Series on Safer Primary Care. World Health Organization; 2016.
- Frandsen BR, Joynt KE, Rebitzer JB, et al. Care fragmentation, quality, and costs among chronically ill patients. Am J Manag Care. 2015;21:355-62. [PMID: 26167702]
- 7. **Chang L, Wanner KJ, Kovalsky D, et al.** "It's really overwhelming": patient perspectives on care coordination. J Am Board Fam Med. 2018 Sep-Oct;31:682-90. [PMID: 30201664] doi:10.3122/jabfm.2018.05.180034
- 8. **Gandhi TK, Sittig DF, Franklin M, et al.** Communication breakdown in the outpatient referral process. J Gen Intern Med. 2000;15:626-31. [PMID: 11029676]
- 9. **Stille CJ, Jerant A, Bell D, et al.** Coordinating care across diseases, settings, and clinicians: a key role for the generalist in practice. Ann Intern Med. 2005;142:700-8. [PMID: 15838089]
- McDonald KM, Sundaram V, Bravata DM, et al. Care coordination. In: Closing the Quality Gap: A Critical Analysis of Quality Improvement Strategies. Vol. 7. (Technical Reviews no. 9.7.) Agency for Healthcare Research and Quality; 2007.
- 11. **Kirschner N, Greenlee MC; American College of Physicians.** The Patient-Centered Medical Home Neighbor: The Interface of the Patient-Centered Medical Home With Specialty/Subspecialty Practices. American Coll Physicians; 2010. Accessed at www.acponline.org/advocacy/where\_we\_stand/policy/pcmh\_neighbors.pdf on 19 December 2021.
- 12. **Manca DP, Breault L, Wishart P.** A tale of two cultures: specialists and generalists sharing the load. Can Fam Physician. 2011;57:576-84. [PMID: 21642740]
- Vimalananda VG, Dvorin K, Fincke BG, et al. Patient, primary care provider, and specialist perspectives on specialty care coordination in an integrated health care system. J Ambul Care Manage. 2018 Jan/Mar;41:15-24. [PMID: 29176459] doi:10.1097/JAC.0000000000000219
- 14. Joint principles of a patient-centered medical home released by organizations representing more than 300,000 physicians [press release]. American College of Physicians; 5 March 2007. Accessed at <a href="www.acponline.org/acp-newsroom/joint-principles-of-a-patient-centered-medical-home-re-leased-by-organizations-representing-more-than">www.acponline.org/acp-newsroom/joint-principles-of-a-patient-centered-medical-home-re-leased-by-organizations-representing-more-than</a> on 22 February 2022.
- 15. **Pham HH, Schrag D, O'Malley AS, et al.** Care patterns in Medicare and their implications for pay for performance. N Engl J Med. 2007;356:1130-9. [PMID: 17360991]
- Doty MM, Tikkanen R, Shah A, et al. International survey: primary care physicians in U.S. struggle more to coordinate care and communicate with other providers but offer patients more health IT tools. Health Aff. December 2019. doi:10.26099/fktx-pe24
- 17. **Anderson G, Horvath J.** Chronic Conditions: Making the Case for Ongoing Care. Robert Wood Johnson Partnership for Solutions; 2002.
- 18. **Naylor MD.** Transitional care of older adults. Annu Rev Nurs Res. 2002;20:127-47. [PMID: 12092508]
- Coleman EA. Falling through the cracks: challenges and opportunities for improving transitional care for persons with continuous complex care needs. J Am Geriatr Soc. 2003;51:549-55. [PMID: 12657078]
- Balaban RB, Weissman JS, Samuel PA, et al. Redefining and redesigning hospital discharge to enhance patient care: a randomized controlled study. J Gen Intern Med. 2008;23:1228-33. [PMID: 18452048] doi:10.1007/s11606-008-0618-9
- 21. **Grimmer K, Hedges G, Moss J.** Staff perceptions of discharge planning: a challenge for quality improvement. Aust Health Rev. 1999;22:95-109. [PMID: 10662237]
- 22. **Burgdorf J, Arbaje A, Wolff JL.** Older adult factors associated with identified need for family caregiver assistance during home health care. Home Health Care Manag Pract. 2019;32:67-75. doi:10.1177/1084822319876608
- 23. **Farquhar MC, Barclay SI, Earl H, et al.** Barriers to effective communication across the primary/secondary interface: examples from the ovarian cancer patient journey (a qualitative study). Eur J Cancer Care (Engl). 2005;14:359-66. [PMID: 16098121]

- 24. **Schoen C, Osborn R, Doty MM, et al.** Toward higher-performance health systems: adults' health care experiences in seven countries, 2007. Health Aff (Millwood). 2007 Nov-Dec;26:w717-34. [PMID: 17978360]
- Nickel WK, Weinberger SE, Guze PA, et al; Patient Partnership in Healthcare Committee of the American College of Physicians. Principles for patient and family partnership in care: an American College of Physicians position paper. Ann Intern Med. 2018;169:796-9. [PMID: 30476985] doi:10.7326/M18-0018
- 26. **Berendsen AJ, de Jong GM, Meyboom-de Jong B, et al.** Transition of care: experiences and preferences of patients across the primary/secondary interface—a qualitative study. BMC Health Serv Res. 2009;9:62. [PMID: 19351407] doi:10.1186/1472-6963-9-62
- Bell SK, Mejilla R, Anselmo M, et al. When doctors share visit notes with patients: a study of patient and doctor perceptions of documentation errors, safety opportunities and the patient-doctor relationship. BMJ Qual Saf. 2017;26:262-70. [PMID: 27193032] doi:10.1136/bmjqs-2015-004697
- 28. Closing the Loop: A Guide to Safer Ambulatory Referrals in the EHR Era. Institute for Healthcare Improvement/National Patient Safety Foundation; 2017.
- Erickson SM, Outland B, Joy S, et al; Medical Practice and Quality Committee of the American College of Physicians. Envisioning a better U.S. health care system for all: health care delivery and payment system reforms. Ann Intern Med. 2020;172:S33-49. [PMID: 31958802] doi:10.7326/M19-2407
- 30. **Tinetti ME, Naik AD, Dindo L, et al.** Association of patient priorities-aligned decision-making with patient outcomes and ambulatory health care burden among older adults with multiple chronic conditions: a nonrandomized clinical trial. JAMA Intern Med. 2019. [PMID: 31589281] doi:10.1001/jamainternmed.2019.4235
- 31. **American College of Physicians.** Template for one pager info sheet for patient on referral to specialty care. ACP High Value Care. 2012. Accessed at www.acponline.org/sites/default/files/documents/clinical\_information/high\_value\_care/clinician\_resources/hvcc\_training/specialty-care-practice-one-pager-for-referral.docx on 19 December 2021.
- 32. **American College of Physicians.** ACP SAN High Value Care Coordination training materials. 2021. Accessed at www.acponline.org/clinical-information/high-value-care/resources-for-clinicians/acp-san-high-value-care-coordination-training-materials on 19 December 2021.
- 33. **Berkman ND, Sheridan SL, Donahue KE, et al.** Health Literacy Interventions and Outcomes: An Updated Systematic Review. Evidence report/technology assessment no. 199. Agency for Healthcare Research and Quality; 2011.
- 34. **Health Resources & Services Administration.** Health literacy. August 2019. Accessed at www. hrsa.gov/about/organization/bureaus/ohe/health-literacy/index.html on 19 December 2021.
- 35. Committee on Improving the Quality of Cancer Care: Addressing the Challenges of an Aging Population; Board on Health Care Services; Institute of Medicine; Levit L, Balogh E, Nass S, et al, eds. Delivering High-Quality Cancer Care: Charting a New Course for a System in Crisis. National Academies Pr; 2013
- 36. Doherty R, Cooney TG, Mire RD, et al; Health and Public Policy Committee and Medical Practice and Quality Committee of the American College of Physicians. Envisioning a better U.S. health care system for all: a call to action by the American College of Physicians. Ann Intern Med. 2020;172:S3-6. [PMID: 31958804] doi:10.7326/M19-2411
- 37. **White A, Danis M.** Enhancing patient-centered communication and collaboration by using the electronic health record in the examination room. JAMA. 2013;309:2327-8. [PMID: 23757080] doi:10.1001/jama.2013.6030
- 38. Office of the National Coordinator for Health Information Technology, 21st Century Cures Act: Interoperability, Information Blocking, and the ONC Health IT Certification Program, 85 F.R. 25642 (2020).
- 39. **Schoenborn NL, Arbaje AI, Eubank KJ, et al.** Clinician roles and responsibilities during care transitions of older adults. J Am Geriatr Soc. 2013;61:231-6. [PMID: 23320747] doi:10.1111/jgs.12084
- 40. **Salerno SM, Hurst FP, Halvorson S, et al.** Principles of effective consultation: an update for the 21st-century consultant. Arch Intern Med. 2007;167:271-5. [PMID: 17296883]
- 41. **Aubin M, Vézina L, Verreault R, et al.** Patient, primary care physician and specialist expectations of primary care physician involvement in cancer care. J Gen Intern Med. 2012;27:8-15. [PMID: 21751057] doi:10.1007/s11606-011-1777-7
- 42. **Williams PT, Peet G.** Differences in the value of clinical information: referring physicians versus consulting specialists. J Am Board Fam Pract. 1994 Jul-Aug;7:292-302. [PMID: 7942098]

- 43. **Dossett LA, Hudson JN, Morris AM, et al.** The primary care provider (PCP)-cancer specialist relationship: a systematic review and mixed-methods meta-synthesis. CA Cancer J Clin. 2017;67:156-69. [PMID: 27727446] doi:10.3322/caac.21385
- 44. Chronic Illness and Caregiving. Harris Interactive; 2000.
- 45. **Ackerman SL, Gleason N, Monacelli J, et al.** When to repatriate? Clinicians' perspectives on the transfer of patient management from specialty to primary care. J Gen Intern Med. 2014;29:1355-61. [PMID: 24934146] doi:10.1007/s11606-014-2920-z
- 46. **Gittell JH.** Relational Coordination: Guidelines for Theory, Measurement and Analysis. Brandeis Univ; 2011.
- 47. **Doherty RB, Crowley RA; Health and Public Policy Committee of the American College of Physicians.** Principles supporting dynamic clinical care teams. An American College of Physicians position paper. Ann Intern Med. 2013;159:620-6. [PMID: 24042251] doi:10.7326/0003-4819-159-9-201311050-00710
- 48. **Arbaje AI, Kansagara DL, Salanitro AH, et al.** Regardless of age: incorporating principles from geriatric medicine to improve care transitions for patients with complex needs. J Gen Intern Med. 2014;29:932-9. [PMID: 24557511] doi:10.1007/s11606-013-2729-1
- 49. **Cooley WC, McAllister JW, Sherrieb K, et al.** Improved outcomes associated with medical home implementation in pediatric primary care. Pediatrics. 2009;124:358-64. [PMID: 19564320] doi:10.1542/peds.2008-2600
- McAllister JW, Colley WC, Sherrieb KA. Medical Home Improvements Enhance Outcomes for Children and Youth With Special Health Care Needs. National Institute for Children's Healthcare Quality National Forum; 2007.
- 51. **Starfield B, Shi L, Macinko J.** Contribution of primary care to health systems and health. Milbank Q. 2005;83:457-502. [PMID: 16202000]
- 52. **McClain MR, Cooley WC, Keirns T, et al.** A survey of the preferences of primary care physicians regarding the comanagement with specialists of children with rare or complex conditions. Clin Pediatr (Phila). 2014;53:566-70. [PMID: 24671871] doi:10.1177/0009922814528035
- 53. **Easley J, Miedema B, Carroll JC, et al.** Coordination of cancer care between family physicians and cancer specialists: importance of communication. Can Fam Physician. 2016;62:e608-15. [PMID: 27737996]
- 54. **Hysong SJ, Esquivel A, Sittig DF, et al.** Towards successful coordination of electronic health record based-referrals: a qualitative analysis. Implement Sci. 2011;6:84. [PMID: 21794109] doi:10.1186/1748-5908-6-84
- 55. **Gurses AP, Xiao Y, Seidl K, et al.** Systems ambiguity: a framework to assess risks and predict potential systems failures. PsycEXTRA Dataset. 2007;55:626-30. doi:10.1037/e577912012-005
- 56. **American College of Physicians.** Resources for clinicians. Accessed at www.acponline.org/clinical-information/high-value-care/resources-for-clinicians on 19 December 2021.
- 57. **Patrick G, Bisgaier J, Hasham I, et al.** Specialty care referral patterns for the underserved: a study of community health centers on the South Side of Chicago. J Health Care Poor Underserved. 2011;22:1302-14. [PMID: 22080711] doi:10.1353/hpu.2011.0147
- 58. Natale-Pereira A, Enard KR, Nevarez L, et al. The role of patient navigators in eliminating health disparities. Cancer. 2011;117:3543-52. [PMID: 21780089] doi:10.1002/cncr.26264
- Liddy C, Drosinis P, Keely E. Electronic consultation systems: worldwide prevalence and their impact on patient care—a systematic review. Fam Pract. 2016;33:274-85. [PMID: 27075028] doi:10.1093/fampra/cmw024
- Tuot DS, Liddy C, Vimalananda VG, et al. Evaluating diverse electronic consultation programs with a common framework. BMC Health Serv Res. 2018;18:814. [PMID: 30355346] doi:10.1186/ s12913-018-3626-4
- 61. **Vimalananda VG, Gupte G, Seraj SM, et al.** Electronic consultations (e-consults) to improve access to specialty care: a systematic review and narrative synthesis. J Telemed Telecare. 2015;21:323-30. [PMID: 25995331] doi:10.1177/1357633X15582108
- 62. **Lee MS, Ray KN, Mehrotra A, et al.** Primary care practitioners' perceptions of electronic consult systems: a qualitative analysis. JAMA Intern Med. 2018;178:782-9. [PMID: 29801079] doi:10.1001/jamainternmed.2018.0738
- 63. **Helmer-Smith M, Fung C, Afkham A, et al.** The feasibility of using electronic consultation in long-term care homes. J Am Med Dir Assoc. 2020;21:1166-70. [PMID: 32360222] doi:10.1016/j. jamda.2020.03.003
- 64. **Liddy C, Afkham A, Drosinis P, et al.** Impact of and satisfaction with a new eConsult service: a mixed methods study of primary care providers. J Am Board Fam Med. 2015 May-Jun;28:394-403. [PMID: 25957372] doi:10.3122/jabfm.2015.03.140255

- 65. **Winchester DE, Wokhlu A, Vilaro J, et al.** Electronic consults for improving specialty care access for veterans. Am J Manag Care. 2019;25:250-3. [PMID: 31120719]
- 66. Siepierski BJ. Electronic consult experience. Fed Pract. 2013;30:38-40.
- 67. **Anderson J, Shroff D, Curtis A, et al.** The Veterans Affairs shift change physician-to-physician handoff project. Jt Comm J Qual Patient Saf. 2010;36:62-71. [PMID: 20180438]
- 68. **Sutcliffe KM, Lewton E, Rosenthal MM.** Communication failures: an insidious contributor to medical mishaps. Acad Med. 2004;79:186-94. [PMID: 14744724]
- 69. **Mills P, Neily J, Dunn E.** Teamwork and communication in surgical teams: implications for patient safety. J Am Coll Surg. 2008;206:107-12. [PMID: 18155575]
- 70. **Snow V, Beck D, Budnitz T, et al.** Transitions of care consensus policy statement: American College of Physicians, Society of General Internal Medicine, Society of Hospital Medicine, American Geriatrics Society, American College of Emergency Physicians, and Society for Academic Emergency Medicine. J Hosp Med. 2009;4:364-70. [PMID: 19479781] doi:10.1002/jhm.510
- 71. **Kripalani S, LeFevre F, Phillips CO, et al.** Deficits in communication and information transfer between hospital-based and primary care physicians: implications for patient safety and continuity of care. JAMA. 2007;297:831-41. [PMID: 17327525]
- 72. **Bell CM, Schnipper JL, Auerbach AD, et al.** Association of communication between hospital-based physicians and primary care providers with patient outcomes. J Gen Intern Med. 2009;24:381-6. [PMID: 19101774] doi:10.1007/s11606-008-0882-8
- 73. **O'Malley AS, Reschovsky JD.** Referral and consultation communication between primary care and specialist physicians: finding common ground. Arch Intern Med. 2011;171:56-65. [PMID: 21220662] doi:10.1001/archinternmed.2010.480
- 74. **Doty MM, Tikkanen R, Shah A, et al.** Primary care physicians' role in coordinating medical and health-related social needs in eleven countries. Health Aff (Millwood). 2020;39:115-23. [PMID: 31821045] doi:10.1377/hlthaff.2019.01088
- Singh H, Esquivel A, Sittig DF, et al. Follow-up actions on electronic referral communication in a multispecialty outpatient setting. J Gen Intern Med. 2011;26:64-9. [PMID: 20848235] doi:10.1007/ s11606-010-1501-z
- Porras-Javier L, Bromley E, Lopez M, et al. Challenges to effective primary care-specialty communication and coordination in the mental health referral and care process for publicly insured children. J Behav Health Serv Res. 2018;45:668-77. [PMID: 29582232] doi:10.1007/s11414-018-9585-z
- 77. **Pollard LC, Graves H, Scott DL, et al.** Perceived barriers to integrated care in rheumatoid arthritis: views of recipients and providers of care in an inner-city setting. BMC Musculoskelet Disord. 2011;12:19. [PMID: 21241497] doi:10.1186/1471-2474-12-19
- Kuo DZ, McAllister JW, Rossignol L, et al. Care coordination for children with medical complexity: whose care is it, anyway? Pediatrics. 2018;141:S224-32. [PMID: 29496973] doi:10.1542/peds.2017-1284G
- 79. **Yee HF Jr.** The patient-centered medical home neighbor: a subspecialty physician's view. Ann Intern Med. 2011;154:63-4. [PMID: 21200042] doi:10.7326/0003-4819-154-1-201101040-00011
- 80. **Gantzer HE, Block BL, Hobgood LC, et al.** Restoring the story and creating a valuable clinical note [Editorial]. Ann Intern Med. 2020;173:380-2. [PMID: 32658567] doi:10.7326/M20-0934
- 81. **Linzer M, Sinsky CA, Poplau S, et al; Healthy Work Place Investigators.** Joy in medical practice: clinician satisfaction in the healthy work place trial. Health Aff (Millwood). 2017;36:1808-14. [PMID: 28971927] doi:10.1377/hlthaff.2017.0790
- 82. **Foy R, Hempel S, Rubenstein L, et al.** Meta-analysis: effect of interactive communication between collaborating primary care physicians and specialists. Ann Intern Med. 2010;152:247-58. [PMID: 20157139] doi:10.7326/0003-4819-152-4-201002160-00010
- 83. **Colorado Springs Health Partners.** Patient Centered Medical Home: Primary Care-Specialist Compact Collaborative Agreement. 2010. Accessed at www.acponline.org/system/files/documents/clinical\_information/high\_value\_care/clinician\_resources/hvcc\_training/colorado-springs-primary-care-specialty-care-compact.pdf on 22 February 2022.
- 84. **American College of Physicians.** ABC Family Physicians\*–XYZ Gastroenterology\* Care Collaborative Guidelines. 2018. Accessed at <a href="https://www.acponline.org/sites/default/files/documents/clinical\_information/high\_value\_care/clinician\_resources/hvcc\_training/actual-care-compact-example.pdf">www.acponline.org/sites/default/files/documents/clinical\_information/high\_value\_care/clinician\_resources/hvcc\_training/actual-care-compact-example.pdf</a> on 19 December 2021.

- 85. **Greenlee C, Neuhalfen B.** Connecting Care: Ensuring Quality Referrals and Effective Care Coordination. Action Segment #1: Get Your Own House in Order. ACP High Value Care. American College of Physicians. 2014. Accessed at <a href="https://www.acponline.org/sites/default/files/documents/clinical\_information/high\_value\_care/clinician\_resources/hvcc\_training/acp-hvcc-step-1-great-lakes-ptn.pptx">https://www.acponline.org/sites/default/files/documents/clinical\_information/high\_value\_care/clinician\_resources/hvcc\_training/acp-hvcc-step-1-great-lakes-ptn.pptx</a> on 19 December 2021.
- 86. **Greenlee C, Neuhalfen B.** Connecting Care: Ensuring Quality Referrals and Effective Care Coordination. Action Step # 4: Create a Care Coordination Agreement. ACP High Value Care. American College of Physicians. 2014. Accessed at www.acponline.org/sites/default/files/documents/clinical\_information/high\_value\_care/clinician\_resources/hvcc\_training/action-step-4-webinar-delmarva.pptx on 19 December 2021.
- 87. **Sinsky CA.** The patient-centered medical home neighbor: a primary care physician's view. Ann Intern Med. 2011;154:61-2. [PMID: 21200041] doi:10.7326/0003-4819-154-1-201101040-00010
- 88. **Harrington JT, Walsh MB.** Pre-appointment management of new patient referrals in rheumatology: a key strategy for improving health care delivery. Arthritis Rheum. 2001;45:295-300. [PMID: 11409672]
- 89. **American College of Physicians.** Pertinent data sets. 2021. Accessed at <a href="www.acponline.org/clinical-information/high-value-care/resources-for-clinicians/high-value-care-coordination-hvcc-toolkit/pertinent-data-sets">www.acponline.org/clinicians/high-value-care-coordination-hvcc-toolkit/pertinent-data-sets</a> on 19 December 2021.
- 90. **Chew-Graham C, Slade M, Montâna C, et al.** Loss of doctor-to-doctor communication: lessons from the reconfiguration of mental health services in England. J Health Serv Res Policy. 2008;13:6-12. [PMID: 18325150] doi:10.1258/jhsrp.2007.006053
- 91. **American College of Physicians.** High value care coordination pre-consultation review. ACP High Value Care. 2018. Accessed at www.acponline.org/sites/default/files/documents/clinical\_information/high\_value\_care/clinician\_resources/hvcc\_training/hvcc-pre-consultation-review-checklist. docx on 19 December 2021.
- 92. **Greenlee C, Neuhalfen B.** Connecting Care: Ensuring Quality Referrals and Effective Care Coordination. Action Step #2: Ensure the Specialty Practice Gets What Is Need for a High Value Referral. ACP High Value Care. American College of Physicians. 2014. Accessed at <a href="https://www.acponline.org/sites/default/files/documents/clinical\_information/high\_value\_care/clinician\_resources/hvcc\_training/action-step-2-qualityimpact.pptx">www.acponline.org/sites/default/files/documents/clinical\_information/high\_value\_care/clinician\_resources/hvcc\_training/action-step-2-qualityimpact.pptx</a> on 19 December 2021.
- 93. **Kim Y, Chen AH, Keith E, et al.** Not perfect, but better: primary care providers' experiences with electronic referrals in a safety net health system. J Gen Intern Med. 2009;24:614-9. [PMID: 19308334] doi:10.1007/s11606-009-0955-3
- 94. Rockwern B, Johnson D, Snyder Sulmasy L; Medical Informatics Committee and Ethics, Professionalism and Human Rights Committee of the American College of Physicians. Health information privacy, protection, and use in the expanding digital health ecosystem. A position paper of the American College of Physicians. Ann Intern Med. 2021;174:994-8. [PMID: 33900797] doi:10.7326/M20-7639
- 95. **Association of American Medical Colleges.** Project Core: Coordinating Optimal Referral Experiences. 2021. Accessed at www.aamc.org/what-we-do/mission-areas/health-care/project-core on 19 December 2021.
- 96. **Doyle MA, Malcolm JC, Liu D, et al.** Using a structured discharge letter template to improve communication during the transition from a specialized outpatient diabetes clinic to a primary care physician. Can J Diabetes. 2015;39:457-66. [PMID: 26454683] doi:10.1016/j.jcjd.2015.06.009
- 97. **American College of Physicians.** Pediatric to Adult Care Transitions Initiative. 2021. Accessed at <a href="https://www.acponline.org/clinical-information/high-value-care/resources-for-clinicians/pediatric-to-adult-care-transitions-initiative">www.acponline.org/clinical-information/high-value-care/resources-for-clinicians/pediatric-to-adult-care-transitions-initiative</a> on 18 December 2021.
- 98. **Wåhlberg H, Valle PC, Malm S, et al.** Impact of referral templates on the quality of referrals from primary to secondary care: a cluster randomised trial. BMC Health Serv Res. 2015;15:353. [PMID: 26318734] doi:10.1186/s12913-015-1017-7
- 99. **Merport A, Lemon SC, Nyambose J, et al.** The use of cancer treatment summaries and care plans among Massachusetts physicians. Support Care Cancer. 2012;20:1579-83. [PMID: 22526150] doi:10.1007/s00520-012-1458-z
- 100. Russell C, Sandu V, Moroz I, et al. Key components of traditional consultation letters and their relevance to electronic consultation replies: a systematic review. Telemed J E Health. 2020;26:689-99. [PMID: 31596680] doi:10.1089/tmj.2019.0161
- 101. Soni SM, Giboney P, Yee HF Jr. Development and implementation of expected practices to reduce inappropriate variations in clinical practice. JAMA. 2016 May 24-31;315:2163-4. [PMID: 27218624] doi:10.1001/jama.2016.4255

- 102. **American College of Physicians.** ACP comments on proposed PFS and QPP rule. September 2019. Accessed at <a href="https://www.acponline.org/acp-policy/letters/acp-comments-proposed-2020-pfs-gpp-rule-september-2019.pdf">www.acponline.org/acp-policy/letters/acp-comments-proposed-2020-pfs-gpp-rule-september-2019.pdf</a> on 19 December 2021.
- 103. Koppel R. Patient safety and health information technology: learning from our mistakes. AHRQ Patient Safety Network. 1 July 2012. Accessed at https://psnet.ahrq.gov/perspective/patient-safety-and-health-information-technology-learning-our-mistakes on 18 April 2020.
- 104. **Hersh WR, Weiner MG, Embi PJ, et al.** Caveats for the use of operational electronic health record data in comparative effectiveness research. Med Care. 2013;51:S30-7. [PMID: 23774517] doi:10.1097/MLR.0b013e31829b1dbd
- 105. HIPAA Administrative Simplification. U.S. Department of Health and Human Services Office for Civil Rights. 2013. Accessed at <a href="https://www.hhs.gov/sites/default/files/hipaa-simplification-201303.pdf">www.hhs.gov/sites/default/files/hipaa-simplification-201303.pdf</a> on 22 February 2022.
- 106. Chen AH, Yee HF Jr. Improving the primary care-specialty care interface: getting from here to there [Editorial]. Arch Intern Med. 2009;169:1024-6. [PMID: 19506170] doi:10.1001/archinternmed.2009.140
- 107. **Mafi JN, Edwards ST.** How can we improve the efficiency of specialty care? [Editorial]. J Gen Intern Med. 2016;31:1267-9. [PMID: 27393485] doi:10.1007/s11606-016-3793-0
- 108. Vimalananda VG, Fincke BG, Qian S, et al. Development and psychometric assessment of a novel survey to measure care coordination from the specialist's perspective. Health Serv Res. 2019;54:689-99. [PMID: 30941764] doi:10.1111/1475-6773.13148
- 109. Vimalananda VG, Meterko M, Qian S, et al. Development and psychometric assessment of a survey to measure specialty care coordination as experienced by primary care providers. Health Serv Res. 2020;55:660-70. [PMID: 33460075] doi:10.1111/1475-6773.13310
- 110. Vimalananda VG, Meterko M, Solch AK, et al. Coordination of care as experienced by the specialist: validation of the CSC-specialist survey in the private sector and the effect of a shared electronic health record. Med Care. 2020;58:1051-8. [PMID: 32925459] doi:10.1097/ MLR.000000000001402
- 111. **Guevara JP, Hsu D, Forrest CB.** Performance measures of the specialty referral process: a systematic review of the literature. BMC Health Serv Res. 2011;11:168. [PMID: 21752285] doi:10.1186/1472-6963-11-168
- 112. **Sofaer S.** Navigating poorly charted territory: patient dilemmas in health care "nonsystems." Med Care Res Rev. 2009;66:75S-93S. [PMID: 19074306] doi:10.1177/1077558708327945
- 113. Kirsh SR, Ho PM, Aron DC. Providing specialty consultant expertise to primary care: an expanding spectrum of modalities. Mayo Clin Proc. 2014;89:1416-26. [PMID: 24889514] doi:10.1016/j. mayocp.2014.04.016
- 114. **Lansey D.** CMS revises rules for E/M documentation, hospital discharges. ACP Internist. 1 January 2014. Accessed at https://acpinternist.org/archives/2014/01/coding.htm on 19 December 2021.
- 115. **Verma S.** 2019 Medicare shared savings program ACO performance: lower costs and promising results under 'pathways to success.' Health Affairs Blog. 14 September 2020. Accessed at www. healthaffairs.org/do/10.1377/hblog20200914.598838/full on 19 December 2021.
- 116. American College of Physicians; National Committee for Quality Assurance. The "Medical Neighborhood" Advanced Alternative Payment Model (AAPM) Proposal. 30 July 2019. Accessed at https://aspe.hhs.gov/system/files/pdf/261881/ProposalACPNCQA-Resubmitted.pdf on 19 December 2021.
- 117. Whitelaw BC, Lindfield D, Bradley V. Referral skills: a significant need within medical training. Presented at National Association of Clinical Tutors Conference 2015, London, United Kingdom, 20–21 January 2015.
- 118. **Bradley V, Whitelaw BC, Lindfield D, et al.** Teaching referral skills to medical students. BMC Res Notes. 2015;8:375. [PMID: 26306775] doi:10.1186/s13104-015-1369-4
- Keely EJ, Archibald D, Tuot DS, et al. Unique educational opportunities for PCPs and specialists arising from electronic consultation services. Acad Med. 2017;92:45-51. [PMID: 28030423] doi:10.1097/ACM.000000000001472
- 120. **Centers for Medicare & Medicaid Services.** Online Provider Directory Review Report. 2017. Accessed at www.cms.gov/Medicare/Health-Plans/ManagedCareMarketing/Downloads/Provider\_Directory\_Review\_Industry\_Report\_Year2\_Final\_1-19-18.pdf on 22 February 2022.
- 121. **American Medical Association.** What Physicians are Saying About Directories. American Medical Association; 2018.
- 122. **Book R.** Narrow networks do not lead to care coordination. Forbes. 28 July 2015. Accessed at <a href="https://www.forbes.com/sites/theapothecary/2015/07/28/narrow-networks-do-not-lead-to-care-coordination/?sh=46cffdf4a341">www.forbes.com/sites/theapothecary/2015/07/28/narrow-networks-do-not-lead-to-care-coordination/?sh=46cffdf4a341</a> on 19 December 2021.

- 123. **Blaser J.** American College of Physicians says efforts to increase health care price transparency are vital. American College of Physicians. 20 November 2017. Accessed at <a href="www.acponline.org/acp-newsroom/american-college-of-physicians-says-efforts-to-increase-health-care-price-transparency-are-vital">www.acponline.org/acp-newsroom/american-college-of-physicians-says-efforts-to-increase-health-care-price-transparency-are-vital</a> on 19 December 2021.
- 124. Tuzzio L, Ludman EJ, Chang E, et al. Design and implementation of a physician coaching pilot to promote value-based referrals to specialty care. Perm J. 2017;21:16-066. [PMID: 28368789] doi:10.7812/TPP/16-066
- 125. **Donaldson M, Yordy K, Vanselow N, eds.** Defining Primary Care: An Interim Report. National Academies Pr; 1994.

