Practice Expenses Associated with Comprehensive Primary Care Capabilities

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### Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>CCM</td>
<td>chronic care management</td>
</tr>
<tr>
<td>CCO</td>
<td>Coordinated Care Organization</td>
</tr>
<tr>
<td>CMS</td>
<td>Centers for Medicare &amp; Medicaid Services</td>
</tr>
<tr>
<td>CMMI</td>
<td>Center for Medicare &amp; Medication Innovation</td>
</tr>
<tr>
<td>CPC</td>
<td>Comprehensive Primary Care</td>
</tr>
<tr>
<td>CPC+</td>
<td>Comprehensive Primary Care Plus</td>
</tr>
<tr>
<td>CPT</td>
<td>current procedural terminology</td>
</tr>
<tr>
<td>DME</td>
<td>durable medical equipment</td>
</tr>
<tr>
<td>ED</td>
<td>emergency department</td>
</tr>
<tr>
<td>EHR</td>
<td>electronic health record</td>
</tr>
<tr>
<td>FMG</td>
<td>foreign medical graduate</td>
</tr>
<tr>
<td>FTE</td>
<td>full-time equivalent</td>
</tr>
<tr>
<td>HIE</td>
<td>health information exchange</td>
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<tr>
<td>HIT</td>
<td>health information technology</td>
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<tr>
<td>HMO</td>
<td>health maintenance organization</td>
</tr>
<tr>
<td>IPA</td>
<td>independent practice association</td>
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<tr>
<td>IT</td>
<td>information technology</td>
</tr>
<tr>
<td>MA</td>
<td>medical assistant</td>
</tr>
<tr>
<td>NCQA</td>
<td>National Committee for Quality Assurance</td>
</tr>
<tr>
<td>NP</td>
<td>nurse practitioner</td>
</tr>
<tr>
<td>PA</td>
<td>physician assistant</td>
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<tr>
<td>PCMH</td>
<td>patient-centered medical home</td>
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<tr>
<td>PCP</td>
<td>primary care practitioner</td>
</tr>
<tr>
<td>PQRS</td>
<td>Physician Quality Reporting System</td>
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<td>QI</td>
<td>quality improvement</td>
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1. Semi-Structured Interview Guide

The following interview guide was designed for a 90-minute semi-structured interview with one or more practice leaders, including parent organization leaders as appropriate. The interview guide asked about practice staffing and governance, the relationship with the parent organization (if any), and team structure, followed by items designed to elicit detailed descriptions of capabilities within each standardized capability group.

For each capability described, the interview guide also prompted descriptions of the types of expenses incurred (e.g., which practice personnel might devote effort to it, which nonlabor expenses were incurred), but did not ask interviewees to quantify these expenses (i.e., neither labor hours nor cost amounts were elicited).
**Intro and Overview of the Practice**

1. Please tell us a little about your role at [name of practice] and how long you’ve been here.

2. Can you give us a brief overview of [name of practice]? Just the highlights would be fine.
   
   *Probes: Who owns the practice? Is it affiliated with any larger organizations? Which ones? What types of affiliations? What have been the biggest changes over the past few years? Has the practice changed in size (number of sites, physicians, other staff, etc.)?*

3. How is the practice governed? How are decisions made about clinical operations, policies, and strategic directions for the practice as a whole? How are decisions made for individual clinics (if applicable)?

**Teams Within the Practice**

4. Are primary care clinicians and other staff in your practice organized into care teams? Please describe these teams.
   
   a. Who is on a typical team? What types of clinicians and staff are included in the care team (e.g., a physician or NP with an RN and/or MA)? How many? What types of non-clinicians might be included (e.g., social worker or community outreach worker)? How many?
   
   b. How many care teams are in the practice [if more than one]? Does the composition of types of staff differ across care teams [if more than three care teams exist]? Are they organized into “pods” or clusters?

5. Does your practice assign patients to practitioner panels or practitioner-led teams? This is also known as empanelment.
   
   a. How does the empanelment work? Which staff members are involved in making sure patients are empaneled? Any expenses other than staff time? *Probe on staff time: What activity would these staff members be doing if not this activity?*
   
   b. *[If answers to the above are not clear]: Is this empanelment performed by the practice, the payer (e.g., by a health plan that might assign patients to primary care practitioners [PCPs]), or both?*
   
   c. *[If answers to the above are not clear]: Does this empanelment differ, depending on whether the patient is in an HMO or PPO (i.e., managed care versus non-managed care plan)?*
6. Does your practice have team huddles to discuss upcoming scheduled patients? These huddles might be times when teams identify special needs or concerns and plan the day or clinic session.
   a. How often? How long do these huddles typically last?
   b. Who attends these? Probe on staff time: What activity would these staff members be doing if not this activity?
   c. Other than staff time, have there been additional costs incurred for having these huddles?

CPC Capabilities of the Practice

The primary aims of this section are to obtain an inventory of the Comprehensive Primary Care (CPC) capabilities of the practice and to identify the types of costs the practice incurs in delivering each capability. However, in these initial interviews, we will not request estimates of the magnitude of these costs.

Care Management

7. Does your practice have staff members who provide care management services? Note: We are using the term “staff members” in a general way to mean people who work at or with your practice. But they do not necessarily have to be employed by your practice.

   [Use the following examples only if needed]
   Care management services include:
   - helping patients make appointments with subspecialists outside the practice, reminding them of scheduled appointments, helping arrange transportation, and helping reschedule appointments that were canceled or missed;
   - helping patients access home health services and serving as the practice’s primary point of contact for home health providers;
   - providing educational resources or referrals to help with self-management, assisting patients with self-management tools to develop and document plans and goals, helping to identify barriers and document self-management abilities, and counseling patients and their families to adopt healthy behaviors;
   - performing medication management, which might include reviewing and reconciling medications, providing information about new medications, assessing patient/family understanding of medications, assessing patient responses to medications and barriers to adherence, and documenting over-the-counter medications along with herbal and regular supplements;
   - helping patients identify and address barriers to care, which might include scheduling appointments and discussing medication side effects.
a. Please describe the kinds of care management services these staff members provide.
   i. Any other kinds of care management services? [Keep probing until respondent says no more.]
   ii. How long has your practice provided these services? Have there been any changes in the past one to two years in how your practice provides these services?
   iii. [If not already clear]: Does your practice provide self-management support to patients? [Definition if needed]: Self-management support is help for patients with chronic conditions; it enables them to manage their health on a day-to-day basis, learn about their condition, and take an active role in their health care.

b. Who in your practice provides these services? [Probe on exactly who provides which service.]
   i. Which types of employees? [Probe on staff time: What activity would these staff members be doing if not this activity?]
   ii. Which types of contractors or vendors (i.e., people who are paid by the practice to provide these services but are not practice employees)? Do these contractors or vendors receive any payment directly from patients or health plans (i.e., payment that doesn’t go through your practice first)?
      1. [If not clear]: Does the practice make payments directly to these contractors or vendors?
   iii. [If there is a parent organization]: Does [parent organization] provide any of these care management services to patients who receive primary care from your practice? Which services? Do you make any payments to [parent organization] in exchange for these care management services?
   iv. Do any other external organizations provide any of these care management services, onsite and free of charge, to patients who receive primary care from your practice? Example: A nurse care manager employed by a health plan who is embedded in the practice but who is not paid by the practice).

c. What kinds of equipment do these staff members use? Example: Electronic health records (EHRs) or other software.
   i. Did the practice purchase or enhance any of this equipment specifically to enable care management?
   ii. Did [parent organization] provide any of this equipment to you?

d. What other practice resources do these staff members use to provide care management services? Example: Office space, furniture, telephone, utilities.
   i. Did the practice purchase or enhance any of these resources specifically to enable care management?
   ii. Did the practice increase the quantity used of preexisting resources specifically to enable care management?
   iii. Did [parent organization] provide any of these resources to you?

e. [If not already mentioned]: Were there any special, one-time costs to your practice when you first set up this service? Examples: One-time trainings, recruiting-associated costs for new staff members or contractors/vendors.
f. To what extent do physicians provide care management services? *Probe: How much time? If not providing these services, what would they be doing?*

g. Are these care management services documented? How—in patient records or elsewhere? Who documents these services? *Probe: Are there any specific documentation criteria that must be met?*

h. Other than what we’ve discussed already, does the practice incur any additional costs associated with providing care management services? *Examples: Expenses for ongoing training, membership or subscription fees, or management’s extra time.*

i. For which of these services—if any—does your practice receive payment?

8. Does your practice have written care plans for some patients?
   a. Can you describe the care plans for us? *Probe: For which groups of patients? How are these patients identified? How are the care plans used?*
   b. Which kinds of staff develop the written care plans? *Probe: Who is responsible for updating the plans? How often are the care plans updated? Where are the plans documented? Are they integrated into the patient’s main medical record?* *Probe on staff time: What activity would these staff members be doing if not this activity?*
   c. Are patients involved in developing the care plan? In what ways?
   d. Is a written copy of the care plan provided to patients? Who provides it?
   e. Which kinds of staff monitor the care plan? Which kinds of staff review or follow up on the care plan with patients? *Probe on staff members’ alternative use of time: What activity would these staff members be doing if not this activity?*
   f. To what extent do physicians provide care plans? * Probe: How much of the time? If not providing these plans, what would they be doing?*
   g. Other than staff time, have there been additional costs associated with having written care plans for patients?

9. *If the practice has huddles other than team huddles:* Does your practice conduct previsit planning? In other words, is there regular review of upcoming patient visits to ensure that previsit tasks are done when these tasks have been ordered or planned? These tasks might include lab tests, specialty consults, and procedures.
   a. For which groups of patients? How are they identified?
   b. How often is previsit planning conducted?
   c. Which kinds of staff conduct the previsit planning tasks? *Probe on staff time: What would these staff members be doing if not this activity? To what extent are physicians involved?*
   d. Other than staff time, have there been additional costs associated with conducting previsit planning? *Examples: Additional EHR or other health information technology (HIT) capabilities (such as a patient portal or phone-messaging system).*
Care Coordination

10. Now we would like to ask about practice infrastructure that might help your practice coordinate care with outside clinicians and other caregivers.

a. Has your practice established formal service agreements or other relationships with subspecialists and hospitals that specify how information will be shared with your practice? Such agreements might include guarantees about how soon your patients will be seen upon referral or about the time period in which your practice will receive information from the subspecialist or hospital. What about community resources, such as social service agencies? Probe for details: Who are these agreements with? What do they contain? Do they allow your practice to do referral tracking? Do they allow your practice to track usage patterns? Do they allow your practice to arrange timely post-discharge follow-up? How long have you had them?
   i. Can you think of any other kinds of service agreements or other relationships your practice has with outside providers and service organizations? [Keep probing until respondent says no more.]
   ii. What types of costs were involved in establishing these service agreements? Probe: Did practice leaders or other staff members spend time on these? Who and how much time? Were there any legal fees? Any other one-time or ongoing costs associated with these service agreements?
   iii. Did [parent organization] provide any support in establishing these agreements?

b. Does your practice maintain a list of community services (e.g., those that help with smoking cessation, weight loss, parenting, fall prevention, housing, or aging) to share with clinicians, patients, and family members?
   i. Who maintains this list?

c. Does your practice have an EHR or any other software that can communicate with subspecialists, hospitals, laboratory and imaging services, community resources, or other outside providers? Please describe.
   i. [If not clear from the care management section]: Who in the practice is responsible for managing referrals and other information exchanges with outside providers? What exactly do they do?

d. Has your practice purchased or upgraded its information technology to facilitate communication with subspecialists, hospitals, laboratory and imaging services, community resources, or other outside providers?
   i. Any changes to your EHR? Probe: Did you pay to have data exchange capabilities added to your EHR or otherwise pay for data exchange? Did you change EHRs to be able to communicate better with outside providers (e.g., switch to the same EHR used by these providers)? If so, how big a factor was this better communication in your decision to switch?
   ii. Any changes to other information technology?

e. Has your practice hired any staff to facilitate communication with outside providers? This might include information technology (IT) staff, phone bank workers, etc.
   i. Any contractors or vendors who are not staff members?
   ii. Did [parent organization] provide any of these people to you?
f. Other than what we’ve discussed already, does the practice incur any additional costs associated with care coordination infrastructure (i.e., having the ability to communicate better with providers outside the practice)? Examples: Meetings with outside providers, training to use new IT, additional time spent by management.

Comprehensiveness

11. In the past few years, has your practice added or expanded services in specific areas of clinical need among your patients. Examples: Behavioral health care, dementia care or caregiver support, chronic pain, women’s health, end-of-life care? Which ones? Any other kinds of specific clinical services? Why these areas? Probe: To address unmet needs? To reduce usage outside the practice? To increase payment? [Keep probing until respondent says no more.]
   a. [For each need mentioned]: Please describe the kinds of services provided.
      i. How long has your practice provided these services? Have there been any changes in the past one to two years in how your practice provides these services?
      ii. [For each service mentioned]: Please describe how this service is organized. Is this service a relatively independent part of the practice (i.e., its own team, with its own budget and resources), or is it more integrated, structurally speaking?

b. Who in your practice provides these services? [Probe on exactly who provides which service.]
   i. Which employees? Probe on staff time: What would these staff members be doing if not this activity?
   ii. Which contractors or vendors (i.e., people who are paid by the practice to provide these services but are not practice employees)? Do these contractors or vendors receive any payment directly from patients or health plans (i.e., payment that doesn’t go through your practice first)?
   iii. Which tenants (i.e., providers who are physically located within the practice, who may or may not be paid a subsidy by the practice, and who might actually pay rent to the practice)? Do they receive any payments from your practice? Do they pay anything to your practice (e.g., rent)?
   iv. [If not already clear]: Where do these staff members deliver these services—within the clinic or in a different location?
   v. [If there is a parent organization]: Does [parent organization] provide any of these services to patients who receive primary care from your practice? Which ones? Do you make any payments to [parent organization] in exchange for these care management services?
   vi. Do any other external organizations provide any of these services onsite to patients who receive primary care from your practice? Example: A nurse employed by a health plan who is embedded in the practice but who is not paid by the practice.
c. What kinds of equipment do these staff members use? *Example: EHRs or other software.*
   i. Did the practice purchase or enhance any of this equipment specifically to provide these services?
   ii. Did [parent organization] provide any of this equipment to you?

d. What other practice resources do these staff members use to provide these services? *Example: Office space, furniture, telephone, utilities.*
   i. Did the practice purchase or enhance any of these resources specifically to provide these services?
   ii. Did the practice increase the quantity used of preexisting resources specifically to provide these services?
   iii. Did [parent organization] provide any of these resources to you?

e. *If not already mentioned:* Were there any special, one-time costs to your practice when you first set up this service? *Examples: One-time trainings, recruiting-associated costs for new staff or contractors.*

f. Other than what we’ve discussed already, does the practice incur any additional costs associated with providing these services? *Examples: Ongoing training, membership or subscription fees, extra time spent by management.*

g. For which of these services—if any—does your practice receive fee-for-service payment?

12. Other that what we just discussed, does your practice provide any services or care for any conditions that primary care practices in your area generally refer to a subspecialist or outside agency instead of providing themselves? *Examples: Palliative care, social support services, procedures (e.g., biopsies, office-based surgeries), and specific complex health conditions (e.g., HIV care).*
   a. *For each service mentioned:* Who in your practice provides these services? *[Probe on exactly who provides which service.]*:
      i. Which employees? *Probe on staff time: What would these staff members be doing if not this activity?*
      ii. Which contractors or vendors (i.e., people who are paid by the practice to provide these services but are not practice employees)? Do these contractors or vendors receive any payment directly from patients or health plans (i.e., payment that doesn’t go through your practice first)?
      iii. Which tenants (i.e., providers who are physically located within the practice, who may or may not be paid a subsidy by the practice, and who might actually pay rent to the practice)? Do they receive any payments from your practice? Do they pay anything to your practice (e.g., rent)?
      iv. *If not already clear:* Where do these staff members deliver these services—within the clinic or in a different location?
      v. *If there is a parent organization:* Does [parent organization] provide any of these services to patients who receive primary care from your practice? Which services? Do you make any payments to [parent organization] in exchange for these care management services?
      vi. Do any other external organizations provide any of these services onsite to patients who receive primary care from your practice? *Example: A nurse employed by a health plan who is embedded in the practice but who is not paid by the practice.*
b. What kinds of equipment do these staff members use? *Example: EHRs or other software.*
   i. Did the practice purchase or enhance any of this equipment specifically to provide these services?
   ii. Did [parent organization] provide any of this equipment to you?

c. What other practice resources do these staff members use to provide these services? *Example: Office space, furniture, telephone, utilities.*
   i. Did the practice *purchase or enhance* any of these resources specifically to provide these services?
   ii. Did the practice *increase the quantity used* of preexisting resources specifically to provide these services?
   iii. Did [parent organization] provide any of these resources to you?

d. *[If not already mentioned]:* Were there any special, one-time costs to your practice when you first set up this service? *Examples: One-time trainings, recruiting-associated costs for new staff or contractors.*

e. Other than what we’ve discussed already, does the practice incur any additional costs associated with providing these services? *Examples: Ongoing training, membership or subscription fees, extra time spent by management.*

f. For which of these services—if any—does your practice receive payment?

**Continuity**

13. Do members of your practice’s staff provide care to your patients in locations outside the practice? *Examples: Homes, assisted-living facilities, hospitals. Note: This can include “social visits” to patients in other care settings—not just services that can be billed.*
   a. Who? Where? Under what circumstances? *[If not clear]:* Do physicians provide this service?
   b. Which of these services do you bill on a fee-for-service basis? *Note: In general, we might expect a PCP who attends or consults on the practice’s hospitalized patients to bill for this service. But this would probably not be true for a nurse employed by the practice who visits hospitalized patients to help arrange follow-up after discharge.*
   c. Does [parent organization] reimburse the practice for this care? *Examples: Reimbursement for transportation and time spent with patients in outside locations.*

14. At your practice, what is the system for taking call? In other words, how are incoming messages from patients or outside providers handled when the practice is closed?
   a. Of the hours clinicians are on call, roughly what percentage of the time are they actively participating in patient care (either by communicating with the patient directly or by communicating with an outside provider)? *[If stuck: Ask about a typical weeknight, then a typical weekend.]*
   b. Are clinicians paid for taking call? Does the practice incur any other costs to maintain its call system (e.g., fees paid to an answering service)?
Enhanced Access

15. Does your practice have an open-access scheduling model? Please describe. 
*Note: The answer to this question might cover much of the material in this section.*

16. Does your practice provide same-day office visits? What is your scheduling system for this? 
*Note: If they offer next-day appointments instead of or in addition to same-day appointments, inquire about those too.*
   a. Who provides these office visits? Are they employees/contractors/tenants? How much unbooked time do they have at the beginning of the day? How completely do these unbooked slots fill (and how many are typically left unfilled)? 
   *Note: The idea here is that same-day visits might require having staff with unbooked time in their schedules, which represents an opportunity cost to the practice if the alternative is to book solid far in advance. Probe on employed provider time: What would these providers be doing if not this activity?*
   b. Is your practice able to meet the demand for these same-day or next-day visits?
   c. Does offering these same-day visits require staff time beyond what you’d need if you didn’t offer same-day visits? Whose time? What kinds of staff? 
   *Probe on staff time: What would these staff members be doing if not this activity?*
   d. What other practice resources are required to offer same-day visits?
      i. Did [parent organization] provide any of these resources to you?

17. Does your practice provide office visits before or after typical business hours, or on weekends? Please describe.
   a. Who provides these visits? Are they employees/contractors/tenants? 
   *Probe on employed provider time: What would these providers be doing if not this activity?*
   b. What costs associated with providing these off-hours visits go beyond your normal-hours costs of operations? 
   *Note: The idea here is that a practice might have to pay a higher hourly rate during off hours for staff or even utilities per unit-patient-volume.*
   c. How fully booked are these off-hours visit slots? 
   *Note: This is the same concern as with open access—unfilled slots are a cost to the practice.*
   d. What other practice resources are required to offer off-hours visits?
      i. Did [parent organization] provide any of these resources to you?

18. Does your practice provide patient care or contact outside of office visits (e.g., via telephone or internet)? Please describe.
   a. [If not clear]: What electronic means are available in the practice for two-way communication with patients regarding refills, test results, referrals, etc.? 
   *Examples: Patient portal, secure email.*
   b. [If not clear]: Through what means are patient medical records and other relevant information accessed by clinicians when the practice is closed? (For example, e-faxing medical records to the emergency department [ED].)

10
c. Has your practice purchased or upgraded its information technology to provide patient care outside office visits?
   i. Any changes to your EHR?
   ii. Any changes to other information technology? Example: Patient portal, secure email.

d. Has your practice hired any staff to provide patient care outside office visits?
   This might include IT staff, phone bank workers, etc.
   i. Any contractors who are not staff members?
   ii. Did [parent organization] provide any of these people to you?

e. Other than what we’ve discussed already, does the practice incur any additional costs associated with providing patient care outside office visits?

f. For which of these services—if any—does your practice receive payment?

Planned Care and Population Health

19. Does your practice have a system or registry for identifying high-risk patients?
   a. Who maintains this system or registry? Probe on staff time: What would these staff members be doing if not this activity?
   b. Has your practice purchased or upgraded its information technology to identify these patients?
      i. Any changes to your EHR?
      ii. Any changes to other information technology?
   c. Have there been additional costs associated with installing or maintaining this system or registry? What types of costs?
   d. Does [parent organization] provide any of these resources to you?

20. Does your practice have a system or registry that creates lists of patients who are overdue for various services?
   a. Who maintains this system or registry? Probe on staff time: What would these staff members be doing if not this activity?
   b. Has your practice purchased or upgraded its information technology to identify these patients?
      iii. Any changes to your EHR?
      iv. Any changes to other information technology?
   c. Have there been additional costs associated with installing or maintaining this system or registry? What types of costs?
   d. Does [parent organization] provide any of these resources to you?

21. Does your practice regularly track cost, quality, usage, and/or access patterns among your patients at a population level?
   a. What data feed into it? Probe: Claims/EHR data, all/some providers?
   b. Who maintains this system? Probe on staff time: What would these staff members be doing if not this activity?
   c. Has your practice purchased or upgraded its information technology to support this system?
      v. Any changes to your EHR?
      vi. Any changes to other information technology?
d. Have there been additional costs associated with installing or maintaining this? What types of costs?
e. Does [parent organization] provide any of these resources to you?

22. Does your practice have a performance-improvement team that meets regularly to discuss performance measurement and approaches to addressing performance? Please describe this team. What does it do?
   a. Who is on the team? *Probe on staff time: What would these staff members be doing if not this activity?*
   b. Other than staff time, have there been additional costs incurred by having this team?

23. Does your practice participate in any other quality improvement (QI) activities outside of the regularly scheduled meetings? *Examples: Performance reports to physicians, care reminders, process-improvement activities.*
   a. Who participates in these activities? *Probe on staff time: What would these staff members be doing if not this activity?*
   b. Other than staff time, have there been additional costs associated with participating in these activities?

**Patient and Caregiver Engagement**

24. Does your practice have a system or initiative for incorporating patient preferences into care delivery? Please describe. *Example: Shared decisionmaking programs, decision coaches for patients, surveys of patients.*
   a. Which staff members? *Probe on staff time: What would these staff members be doing if not this activity?*
   b. Which IT or other resources?
   c. Any other costs?
   d. Does [parent organization] provide any of these resources to you?

25. Does your practice have a standing patient and family advisory council? Please describe it.
   a. What types of costs are involved with having this council? *Example: Staff time, other expenses.*
   b. *[If not clear]: Does the practice make payments to advisory council members?*

**Interpreter Services**

26. Please describe how your practice arranges language-interpretation services when needed. *Probe: Are there professional interpreters? Informal interpreters (e.g., a nurse who can interpret)? Off-site interpreters? Do patients bring their own interpreters (e.g., a family member who can interpret)?*
   a. Which languages?
   b. Which practice employees, if any?
   c. Any vendors/contractors?
   d. How about telephone or other remote interpreter services?
      i. How is the practice billed for these?
   e. Does [parent organization] provide any interpreter services to your practice?
Summing Up

[Review aloud the inventory of CPC services and capabilities reported by the interviewee.]

27. [After reviewing the inventory]: Does your practice have any CPC services or capabilities that we haven’t discussed yet? What are they?
   a.  Probe: For each service or capability listed, get a sense of personnel, equipment, and other types of costs involved. Probe on staff time: What would these staff members be doing if not this activity?
2. Annual Costs for All Standardized Capabilities

This Appendix chapter presents detailed cost data on all standardized comprehensive primary care capabilities from the 50 practices that contributed data. We also present cost data on interpreter services and administrative activities related to comprehensive primary care.

Standardized Capability Group: Care Management

Appointment Assistance

Annual Costs

![Figure 1. Annual Costs of Appointment Assistance per FTE PCP](image)

Table 1. Quantiles of Annual Costs of Appointment Assistance per FTE PCP and per Patient

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th>$ per Year per FTE Clinician*</th>
<th>$ per Year per Patient</th>
<th>Specific Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>1</td>
<td>0.00</td>
<td>Nurses occasionally arrange taxi transportation when there is concern for the safety of patients driving themselves. The practice pays for these taxi rides.</td>
</tr>
<tr>
<td>P25</td>
<td>2,740</td>
<td>N/A</td>
<td>Care managers contact patients discharged from the hospital and follow patients closely for at least four weeks, ensuring they are connected to the services they need, such as home care. Care managers also provide education and resource support.*</td>
</tr>
<tr>
<td>P50</td>
<td>7,532</td>
<td>11.10</td>
<td>An RN uses special software (outside the EHR) to identify patients discharged from hospitals, briefly reviews their charts, and then reaches out to help them schedule their next clinic appointments.*</td>
</tr>
<tr>
<td>P75</td>
<td>14,280</td>
<td>14.28</td>
<td>The medical-records staff provides referral assistance, which includes making referral appointments, reminding patients of upcoming referral appointments, and following up and rescheduling missed appointments.</td>
</tr>
<tr>
<td>Maximum</td>
<td>141,140</td>
<td>47.05</td>
<td>For urgent referral and follow-up appointments, the practice calls and schedules needed services before the patient leaves. When needed, the nurse or front desk staff also call to schedule services on behalf of patients between visits.</td>
</tr>
</tbody>
</table>

NOTE: Sixty-four practice-reported capabilities from 41 practices were used to populate this table. Of these, zero had unknown costs.
N/A: Not applicable because this practice did not provide a patient panel size estimate.
*This practice-reported capability spans multiple standardized capabilities (i.e., the standardized capability is coupled with other standardized capabilities, and the cost estimates therefore include multiple capabilities).
Figure 2. Annual Costs of Appointment Assistance per FTE PCP, with Practice Characteristics

NOTE: In this figure, the triangles represent capabilities of practices participating in CPC+, and the circles represent capabilities of practices not participating in CPC+. The size of each circle and triangle is proportional to the number of FTE PCPs in the practice.

Home Health Management

Annual Costs

Figure 3. Annual Costs of Home Health Management per FTE PCP
### Table 2. Quantiles of Annual Costs of Home Health Management per FTE PCP and per Patient

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th>$ per Year per FTE Clinician*</th>
<th>$ per Year per Patient</th>
<th>Specific Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>711</td>
<td>0.46</td>
<td>The medical assistants (MAs) coordinate with home health services.</td>
</tr>
<tr>
<td>P25</td>
<td>1,735</td>
<td>0.81</td>
<td>The practice has relationships with two home health-care services. If providers identify that a patient needs home care or they want to see what is happening in the patient’s home, they contact the home health agency to arrange for a social worker and do a home evaluation.</td>
</tr>
<tr>
<td>P50</td>
<td>6,530</td>
<td>4.27</td>
<td>The nurse and provider spend time serving as the point of contact for home health services.</td>
</tr>
<tr>
<td>P75</td>
<td>17,117</td>
<td>25.16</td>
<td>Home health agencies help the practice to manage high-risk patients who require extra monitoring. When a physician or nurse practitioner (NP) deems that the patient requires home health services, a practice nurse arranges this. The practice providers serve as the primary points of contact for home health agencies seeing their patients (home health nurses send reports to the practice providers periodically and request guidance from them). Front office staff also devote significant time to receiving and sending faxes between the practice and the home health agencies.*</td>
</tr>
<tr>
<td>Maximum</td>
<td>36,573</td>
<td>26.56</td>
<td>Providers make home health referrals and manage prescriptions for home health patients, but when necessary, triage nurses handle most of the coordination with visiting nurse associations and email providers. Health coaches also coordinate with visiting nurse associations for the high-risk patients they help manage.*</td>
</tr>
</tbody>
</table>

*This practice-reported capability spans multiple standardized capabilities (i.e., the standardized capability is coupled with other standardized capabilities, and the cost estimates therefore include multiple capabilities).  

**NOTE:** Twenty-seven practice-reported capabilities from 25 practices were used to populate this table. Of these, zero had unknown costs.

### Figure 4. Annual Costs of Home Health Management per FTE PCP, with Practice Characteristics

![Figure 4: Annual Costs of Home Health Management per FTE PCP, with Practice Characteristics](image)

**NOTE:** In this figure, the triangles represent capabilities of practices participating in CPC+, and the circles represent capabilities of practices not participating in CPC+. The size of each circle and triangle is proportional to the number of FTE PCPs in the practice.
Patient Education and Self-Management Support

Annual Costs

Figure 5. Annual Costs of Patient Education and Self-Management Support per FTE PCP

![Graph showing the distribution of annual costs for patient education and self-management support per FTE PCP.]

Table 3. Quantiles of Annual Costs of Patient Education and Self-Management Support per FTE PCP and per Patient

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th>$ per Year per FTE Clinician*</th>
<th>$ per Year per Patient</th>
<th>Specific Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>0</td>
<td>0.00</td>
<td>The practice provides some patient education materials in Spanish and English.</td>
</tr>
<tr>
<td>P25</td>
<td>2,349</td>
<td>2.61</td>
<td>The health coach provides one-on-one education and self-management support for high-risk and “noncompliant” patients in the areas of nutrition, weight loss, diabetes, smoking cessation, and chronic conditions. The health coach uses a care-planning module in the EHR that provides templates to document goals and next steps, which can be printed out for patients. The health coach also receives lists of patients who have had high emergency-room usage; the coach then contacts these patients to encourage their use of practice hours, identify unmet needs, and schedule any overdue services.*</td>
</tr>
<tr>
<td>P50</td>
<td>5,689</td>
<td>3.66</td>
<td>The practice offers an educational program for diabetic patients, which includes four visits with clinical staff. The practice also offers educational programs for patients with COPD, asthma, and hypertension. The practice offers weight-loss counseling. These services are offered by the NP and physician assistants (PAs). One of the MAs (an LPN) provides diabetic education for four visits at 30 minutes a visit.*</td>
</tr>
<tr>
<td>P75</td>
<td>14,503</td>
<td>13.82</td>
<td>The practice operates a diabetes clinic for 60 to 90 minutes every Friday afternoon. Attendance is free and supported by a volunteer who is a retired nurse.</td>
</tr>
<tr>
<td>Maximum</td>
<td>64,047</td>
<td>16.16</td>
<td>A chronic care coordinator is responsible for identifying patients with comorbid chronic care conditions in the EHR, enrolling them in the practice’s chronic care management (CCM) program, developing written care plans, helping them manage their conditions, and ensuring they receive needed services and follow-up care. Providers also review the care plans developed by the chronic care coordinator.*</td>
</tr>
</tbody>
</table>

NOTE: Fifty-nine practice-reported capabilities from 44 practices were used to populate this table. Of these, zero had unknown costs.

*This practice-reported capability spans multiple standardized capabilities (i.e., the standardized capability is coupled with other standardized capabilities, and the cost estimates therefore include multiple capabilities).
Figure 6. Annual Costs of Patient Education and Self-Management Support per FTE PCP, with Practice Characteristics

NOTE: In this figure, the triangles represent capabilities of practices participating in CPC+, and the circles represent capabilities of practices not participating in CPC+. The size of each circle and triangle is proportional to the number of FTE PCPs in the practice.

Medication Management

Please see main report.

Team Huddles

Annual Costs

Figure 7. Annual Costs of Team Huddles per FTE PCP
Table 4. Quantiles of Annual Costs of Team Huddles per FTE PCP and per Patient

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th>$ per Year per FTE Clinician*</th>
<th>$ per Year per Patient</th>
<th>Specific Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>746</td>
<td>N/A</td>
<td>The providers and MAs huddle daily. The MAs and physicians discuss gaps in care and look at what services and immunizations are due for upcoming patient visits. The MAs check the state database to ensure patients records are up to date. The reception staff also huddles daily to discuss which physicians are in the office, who is covering walk-in hours, and which patients (if any) are high-risk (e.g., high fall risk).*</td>
</tr>
<tr>
<td>P25</td>
<td>3,679</td>
<td>6.13</td>
<td>All practice staff have informal discussions about patient visits when needed. For example, the physician may review with the MA what a patient needs so that the MA can prepare.</td>
</tr>
<tr>
<td>P50</td>
<td>5,438</td>
<td>2.47</td>
<td>Practice MAs huddle each morning, led by the office manager, to review that day’s patients; they identify any missing tests or specialist communications and assess any other needs to be addressed during the visits. The physician joins the morning huddle every other week to discuss broader practice-related issues and concerns.*</td>
</tr>
<tr>
<td>P75</td>
<td>8,542</td>
<td>10.22</td>
<td>Providers huddle with their assigned nurses or MAs at the beginning of each day to review scheduled patient cases.</td>
</tr>
<tr>
<td>Maximum</td>
<td>33,168</td>
<td>41.46</td>
<td>Team huddles are held in the morning, and sometimes a lunchtime update is required to discuss upcoming scheduled patients.</td>
</tr>
</tbody>
</table>

NOTE: Thirty-two practice-reported capabilities from 31 practices were used to populate this table. Of these, zero had unknown costs.
N/A: Not applicable because this practice did not provide a patient panel size estimate.
*This practice-reported capability spans multiple standardized capabilities (i.e., the standardized capability is coupled with other standardized capabilities, and the cost estimates therefore include multiple capabilities).

Figure 8. Annual Costs of Team Huddles per FTE PCP, with Practice Characteristics

NOTE: In this figure, the triangles represent capabilities of practices participating in CPC+, and the circles represent capabilities of practices not participating in CPC+. The size of each circle and triangle is proportional to the number of FTE PCPs in the practice.
**Written Care Plans**

**Annual Costs**

![Figure 9. Annual Costs of Written Care Plans per FTE PCP](chart)

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th>$ per Year per FTE Clinician*</th>
<th>$ per Year per Patient</th>
<th>Specific Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>0</td>
<td>0.00</td>
<td>The practice creates a structured management plan for patients with diabetes and osteoporosis.</td>
</tr>
<tr>
<td>P25</td>
<td>2,431</td>
<td>2.70</td>
<td>Care coordinators and managers develop care plans and goals, especially for high-risk patients. Providers also enter care plans and print instructions for patients.*</td>
</tr>
<tr>
<td>P50</td>
<td>7,372</td>
<td>5.02</td>
<td>Patients with care plans often have multiple chronic conditions. The RN case manager is the main person responsible for writing the care plans, but case-management workers, including the diabetes educator, may also contribute to these plans.</td>
</tr>
<tr>
<td>P75</td>
<td>13,060</td>
<td>8.54</td>
<td>The hospital sends faxes when a practice patient is admitted or discharged from the hospital. The care manager prints this information for the provider and makes an initial transition-to-care call and visit with the patient within 7 to 14 days. If the patient is not able to come to the practice, the care manager verifies medications and ensures that the patient has what they need, such as a prescription or a walker. When the patient comes into the office, the care manager conducts the transition visit to ensure that all needs are met and reviews a printed self-care plan.*</td>
</tr>
<tr>
<td>Maximum</td>
<td>64,047</td>
<td>16.16</td>
<td>A chronic care coordinator is responsible for identifying patients with comorbid chronic care conditions in the EHR, enrolling them in the practice’s chronic care management program, developing written care plans, helping them manage their conditions, and ensuring they receive needed services and follow-up care. Providers also review the care plans developed by the chronic care coordinator.*</td>
</tr>
</tbody>
</table>

**Table 5. Quantiles of Annual Costs of Written Care Plans per FTE PCP and per Patient**

NOTE: Thirty-four practice-reported capabilities from 28 practices were used to populate this table. Of these, zero had unknown costs.

*This practice-reported capability spans multiple standardized capabilities (i.e., the standardized capability is coupled with other standardized capabilities, and the cost estimates therefore include multiple capabilities).
Figure 10. Annual Costs of Written Care Plans per FTE PCP, with Practice Characteristics

NOTE: In this figure, the triangles represent capabilities of practices participating in CPC+, and the circles represent capabilities of practices not participating in CPC+. The size of each circle and triangle is proportional to the number of FTE PCPs in the practice.

Previsit Planning

Annual Costs

Figure 11. Annual Costs of Previsit Planning per FTE PCP
Table 6. Quantiles of Annual Costs of Previsit Planning per FTE PCP and per Patient

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th>$ per Year per FTE Clinician*</th>
<th>$ per Year per Patient</th>
<th>Specific Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>188</td>
<td>0.16</td>
<td>MAs review records, either a day or two before or the morning of the scheduled patient visit, to prepare needed materials, such as lab and imaging information. MAs also identify patients who are scheduled to have an annual wellness visit and inform care coordinators when they will need to take the patient after the regular visit with the provider.</td>
</tr>
<tr>
<td>P25</td>
<td>2,312</td>
<td>1.19</td>
<td>One RN manages care for “heavy-need” patients, adverse childhood-experience patients, patients with dual diagnoses, and patients with severe psychiatric disorders with concurrent chronic medical illnesses. The nurse identified several hundred patients who are frequent users and conducts intense care coordination with one-fourth of these patients. Providers also occasionally refer high-need patients to the RN care manager. The RN care manager provides a range of support to high-need patients, including scheduling appointments, issuing reminders for upcoming visits, and meeting patients in the clinic before and after they see their physician, to help them with medical literacy and understanding their care.*</td>
</tr>
<tr>
<td>P50</td>
<td>5,668</td>
<td>4.63</td>
<td>Each care team prepares the night before to ensure that previsit tasks for the next day’s patients are completed (e.g., scheduling immunizations, making sure needed test results are available).</td>
</tr>
<tr>
<td>P75</td>
<td>17,469</td>
<td>33.66</td>
<td>The practice has a dedicated transitions-of-care team comprised of the social worker, pharmacist, medical residents, and other staff who coordinate patient care after hospital discharge. Each morning, the patient health manager receives a list of patients discharged from the local hospital and goes into the hospital EHR to access the hospital ER list and pull patient information. The practice has less visibility of patients discharged from other hospitals. The patient health manager schedules patients identified as recently discharged from the hospital for follow-up visits and ensures they keep those appointments. The team performs previsit planning for these follow-up visits, including gathering information from the hospital and other sources (e.g., pharmacy and subspecialist records), to decide which transitions-of-care team member will lead the visit for a patient—often the social worker or pharmacist. During the follow-up visit, the patient is seen by various relevant team members, the last of whom is typically a faculty physician.*</td>
</tr>
<tr>
<td>Maximum</td>
<td>50,860</td>
<td>36.86</td>
<td>Dedicated MAs are responsible for reviewing patients’ chief complaints and medical records prior to their arrival, to initiate any activities indicated.</td>
</tr>
</tbody>
</table>

NOTE: Thirty-seven practice-reported capabilities from 32 practices were used to populate this table. Of these, zero had unknown costs.
*This practice-reported capability spans multiple standardized capabilities (i.e., the standardized capability is coupled with other standardized capabilities, and the cost estimates therefore include multiple capabilities).
Figure 12. Annual Costs of Previsit Planning per FTE PCP, with Practice Characteristics

NOTE: In this figure, the triangles represent capabilities of practices participating in CPC+, and the circles represent capabilities of practices not participating in CPC+. The size of each circle and triangle is proportional to the number of FTE PCPs in the practice.

Care Management for High-Risk Patients

Annual Costs

Figure 13. Annual Costs of Care Management for High-Risk Patients per FTE PCP
Table 7. Quantiles of Annual Costs of Care Management for High-Risk Patients per FTE PCP and per Patient

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th>$ per Year per FTE Clinician*</th>
<th>$ per Year per Patient</th>
<th>Specific Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>0</td>
<td>0.00</td>
<td>Care managers receive training in care management services.*</td>
</tr>
<tr>
<td>P25</td>
<td>2,649</td>
<td>N/A</td>
<td>Care managers use education, motivational interviewing, and brief action planning to help patients with chronic and high-risk conditions self-manage their conditions. The practice offers group visits for diabetic patients and an advance-directive lunch-and-learn.*</td>
</tr>
<tr>
<td>P50</td>
<td>5,052</td>
<td>3.25</td>
<td>[Program 1] is a care management program for frequent ED users, which incorporates workflow with the ED, social workers, and a pharmacist for medication management. It also includes a team dashboard separate from the EHR as well as written care plans.*</td>
</tr>
<tr>
<td>P75</td>
<td>18,636</td>
<td>6.95</td>
<td>In association with chronic care management, the providers print out self-management materials for patients or email content through the patient portal.*</td>
</tr>
<tr>
<td>Maximum</td>
<td>64,047</td>
<td>16.16</td>
<td>A chronic care coordinator is responsible for identifying patients with comorbid chronic care conditions in the EHR, enrolling them in the practice’s chronic care management program, developing written care plans, helping them manage their conditions, and ensuring they receive needed services and follow-up care. Providers also review the care plans developed by the chronic care coordinator.*</td>
</tr>
</tbody>
</table>

NOTE: Sixty-two practice-reported capabilities from 35 practices were used to populate this table. Of these, zero had unknown costs.
N/A: Not applicable because this practice did not provide a patient panel size estimate.
*This practice-reported capability spans multiple standardized capabilities (i.e., the standardized capability is coupled with other standardized capabilities, and the cost estimates therefore include multiple capabilities).

Figure 14. Annual Costs of Care Management for High-Risk Patients per FTE PCP, with Practice Characteristics

NOTE: In this figure, the triangles represent capabilities of practices participating in CPC+, and the circles represent capabilities of practices not participating in CPC+. The size of each circle and triangle is proportional to the number of FTE PCPs in the practice.
## Transitional Care Management

### Annual Costs

**Figure 15. Annual Costs of Transitional Care Management per FTE PCP**

![Graph showing annual costs per FTE PCP](image)

**Table 8. Quantiles of Annual Costs of Transitional Care Management per FTE PCP and per Patient**

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th>$ per Year per FTE Clinician*</th>
<th>$ per Year per Patient</th>
<th>Specific Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>0</td>
<td>0.00</td>
<td>The practice employs two hospitalists, who provide a degree of coordination between the practice and local hospital.*</td>
</tr>
<tr>
<td>P25</td>
<td>1,380</td>
<td>0.76</td>
<td>Each morning, a dedicated medical-group MA reviews patient ER discharges on the EHRs of local hospitals. She then calls patients to check on their condition, educate them on services available at the practice, and schedule a follow-up office visit, if necessary, within two to three days (up to a maximum of one week).*</td>
</tr>
<tr>
<td>P50</td>
<td>4,160</td>
<td>2.74</td>
<td>The practice identifies patients who have been discharged from hospitals by running reports off of the local hospital EHR, the state Medicaid site, and the regional health information exchange (HIE) system. The RN care coordinator is responsible for calling these patients to schedule a follow-up visit.*</td>
</tr>
<tr>
<td>P75</td>
<td>7,513</td>
<td>2.50</td>
<td>The practice tracks patients who are admitted to the hospital and calls and schedules a follow-up appointment with patients. The nurse calls patients after they are discharged to ensure they are home, help them understand their medication list, and confirm their follow-up visit.</td>
</tr>
<tr>
<td>Maximum</td>
<td>25,754</td>
<td>23.94</td>
<td>As part of transitional care, the staff nurse manager contacts patients and discusses any changes in medication. At each consultation, the physician reviews the patient’s medication list.*</td>
</tr>
</tbody>
</table>

*NOTE: Forty-nine practice-reported capabilities from 36 practices were used to populate this table. Of these, zero had unknown costs.
*This practice-reported capability spans multiple standardized capabilities (i.e., the standardized capability is coupled with other standardized capabilities, and the cost estimates therefore include multiple capabilities).
NOTE: In this figure, the triangles represent capabilities of practices participating in CPC+, and the circles represent capabilities of practices not participating in CPC+. The size of each circle and triangle is proportional to the number of FTE PCPs in the practice.

**Other Care Management**

**Annual Costs**

**Figure 17. Annual Costs of Other Care Management per FTE PCP**
Table 9. Quantiles of Annual Costs of Other Care Management per FTE PCP and per Patient

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th>$ per Year per FTE Clinician*</th>
<th>$ per Year per Patient</th>
<th>Specific Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>0</td>
<td>0.00</td>
<td>Care managers receive training in care management services.*</td>
</tr>
<tr>
<td>P25</td>
<td>1,613</td>
<td>0.76</td>
<td>Patients are assigned to providers. The medical assistants, nurse care managers, quality management, and IT staff ensure that every patient is empaneled. For patients assigned to the office by the health maintenance organization (HMO), the practice calls, texts, and mails letters to the patients to encourage them to come in. The practice runs monthly reports to track patients and messages patients who haven’t been in for one year.*</td>
</tr>
<tr>
<td>P50</td>
<td>5,800</td>
<td>3.73</td>
<td>The practice pays for a referral module in the EHR, which is used to manage the referral process. Most specialists require the practice to make the initial appointment for the patient, which is done by the provider’s MA. For specialists who also use Allscripts, the consult report comes back electronically. For others, the consult report is faxed and must be scanned into the EHR. MAs track and ensure that referrals are completed in the EHR. The practice also has paid for a bidirectional electronic interface for lab orders.*</td>
</tr>
<tr>
<td>P75</td>
<td>13,752</td>
<td>7.56</td>
<td>An MA in the practice manages referrals through the EHR, which is able to send referral orders and receive consultant reports electronically for many specialists and labs. (This EHR setup incurred vendor costs.) For other specialists and labs, referrals are handled by fax, with results scanned into the EHR. The MA or front desk has the provider review the lab results before entering them into the patient record. Depending on the type of referral and level of urgency, the MA may assist patients with scheduling the referral appointment. The provider may occasionally spend time communicating with the specialist about the reasons for the referral. The MA also contacts the specialist if results are not received at the time of the patient’s follow-up visit with the primary care provider.*</td>
</tr>
<tr>
<td>Maximum</td>
<td>45,585</td>
<td>33.19</td>
<td>Care managers provide patients with education on self-management and other topics. Providers and their MAs or RNs also provide educational resources for patients.*</td>
</tr>
</tbody>
</table>

NOTE: Fifty practice-reported capabilities from 29 practices were used to populate this table. Of these, one had unknown costs.

*This practice-reported capability spans multiple standardized capabilities (i.e., the standardized capability is coupled with other standardized capabilities, and the cost estimates therefore include multiple capabilities).
Figure 18. Annual Costs of Other Care Management per FTE PCP, with Practice Characteristics

NOTE: In this figure, the triangles represent capabilities of practices participating in CPC+, and the circles represent capabilities of practices not participating in CPC+. The size of each circle and triangle is proportional to the number of FTE PCPs in the practice.

Standardized Capability Group: Empanelment

Empanelment

Annual Costs

Figure 19. Annual Costs of Empanelment per FTE PCP
**Table 10. Quantiles of Annual Costs of Empanelment per FTE PCP and per Patient**

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th>$ per Year per FTE Clinician*</th>
<th>$ per Year per Patient</th>
<th>Specific Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>0</td>
<td>0.00</td>
<td>Most patients see a physician when joining the practice and then get assigned to that physician (PCP). The NP doesn’t have her own panel, although some patients preferentially see her.</td>
</tr>
<tr>
<td>P25</td>
<td>58</td>
<td>0.04</td>
<td>Every patient is assigned to a PCP, with several processes to coordinate empanelment: New patients are assigned to existing panels by the medical director; letters for empanelment are mailed by a research coordinator; patients request new PCPs through the management system; and yearly restructuring, necessary to account for the cycling of residents, is managed by the medical director.</td>
</tr>
<tr>
<td>P50</td>
<td>208</td>
<td>0.25</td>
<td>At the time of registration, front-desk staff assign a new patient to a provider and record that assignment in the EHR.</td>
</tr>
<tr>
<td>P75</td>
<td>799</td>
<td>0.66</td>
<td>Practice schedulers are responsible for empaneling all new patients during the registration and check-in processes.</td>
</tr>
<tr>
<td>Maximum</td>
<td>4,173</td>
<td>2.73</td>
<td>Patients are empaneled to a physician or NP. Physicians and NPs cover for each other. Empanelment depends on the insurance carrier; however, most patients choose their provider. Some insurance carriers assign patients to the practice, and practice staff track these assignments. The practice also screens patients to match them to their PCPs by learning about their medical history and the care that they are looking for.</td>
</tr>
</tbody>
</table>

*This practice-reported capability spans multiple standardized capabilities (i.e., the standardized capability is coupled with other standardized capabilities, and the cost estimates therefore include multiple capabilities).

**Figure 20. Annual Costs of Empanelment per FTE PCP, with Practice Characteristics**

![Figure 20](image)

NOTE: In this figure, the triangles represent capabilities of practices participating in CPC+, and the circles represent capabilities of practices not participating in CPC+. The size of each circle and triangle is proportional to the number of FTE PCPs in the practice.
Standardized Capability Group: Care Coordination Infrastructure

Service Agreements

Annual Costs

Figure 21. Annual Costs of Care Service Agreements per FTE PCP

Table 11. Quantiles of Annual Costs of Service Agreements per FTE PCP and per Patient

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th>$ per Year per FTE Clinician*</th>
<th>$ per Year per Patient</th>
<th>Specific Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>0</td>
<td>0.00</td>
<td>The practice spent time setting up formal service agreements with a local cardiologist and pulmonologist to enable electronic viewing of each other’s charts.</td>
</tr>
<tr>
<td>P25</td>
<td>0</td>
<td>0.00</td>
<td>The practice has formal service agreements with certain subspecialists, including those in gastroenterology and ophthalmology.</td>
</tr>
<tr>
<td>P50</td>
<td>0</td>
<td>0.00</td>
<td>The practice has two service agreements: with ear, nose, and throat (ENT) providers and behavioral health services.</td>
</tr>
<tr>
<td>P75</td>
<td>333</td>
<td>0.18</td>
<td>The practice set up a consultative arrangement with a radiology group in order to read x-rays.</td>
</tr>
<tr>
<td>Maximum</td>
<td>26,291</td>
<td>9.80</td>
<td>[Local IPA] provides the EHR and maintains service agreements. Providers at the practice invested a significant amount of volunteer time for this IPA. An RN affiliated with the IPA makes home visits and provides home-based education for diabetes patients who have an A1C level over 9 percent.*</td>
</tr>
</tbody>
</table>

NOTE: Twenty-two practice-reported capabilities from 21 practices were used to populate this table. Of these, one had unknown costs.

*This practice-reported capability spans multiple standardized capabilities (i.e., the standardized capability is coupled with other standardized capabilities, and the cost estimates therefore include multiple capabilities).
Figure 22. Annual Costs of Service Agreements per FTE PCP, with Practice Characteristics

NOTE: In this figure, the triangles represent capabilities of practices participating in CPC+, and the circles represent capabilities of practices not participating in CPC+. The size of each circle and triangle is proportional to the number of FTE PCPs in the practice.

Community Service Lists

Annual Costs

Figure 23. Annual Costs of Community Service Lists per FTE PCP
Table 12. Quantiles of Annual Costs of Community Service Lists per FTE PCP and per Patient

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th>$ per Year per FTE Clinician*</th>
<th>$ per Year per Patient</th>
<th>Specific Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>0</td>
<td>0.00</td>
<td>The practice initially developed its own list of community services. This was combined with lists from other local practices into a booklet, which is now updated by the IPA.</td>
</tr>
<tr>
<td>P25</td>
<td>0</td>
<td>0.00</td>
<td>The practice has a list of local physical therapists, psychologists, and nonprofits, which is accessible via the EHR.</td>
</tr>
<tr>
<td>P50</td>
<td>75</td>
<td>0.03</td>
<td>The practice MAs maintain a list of community resources.</td>
</tr>
<tr>
<td>P75</td>
<td>788</td>
<td>0.37</td>
<td>The EHR generates a list of community resources for patients with specific health conditions or risk behaviors (e.g., smoking) that meet criteria that the physician enters into the system. The automated list was developed by IT personnel.</td>
</tr>
<tr>
<td>Maximum</td>
<td>16,010</td>
<td>9.97</td>
<td>The practice nurse case manager and social worker assist patients with needs for durable medical equipment (DME), transportation, and various social services (e.g., Meals on Wheels). This responsibility includes maintaining a list of community services and making referrals to external social-service providers.*</td>
</tr>
</tbody>
</table>

NOTE: Thirty-eight practice-reported capabilities from 38 practices were used to populate this table. Of these, two had unknown costs.

*This practice-reported capability spans multiple standardized capabilities (i.e., the standardized capability is coupled with other standardized capabilities, and the cost estimates therefore include multiple capabilities).

Figure 24. Annual Costs of Community Service Lists per FTE PCP, with Practice Characteristics

NOTE: In this figure, the triangles represent capabilities of practices participating in CPC+, and the circles represent capabilities of practices not participating in CPC+. The size of each circle and triangle is proportional to the number of FTE PCPs in the practice.
Software-Based Communication Infrastructure

Annual Costs

**Figure 25. Annual Costs of Software-Based Communication Infrastructure per FTE PCP**

![Annual Costs of Software-Based Communication Infrastructure per FTE PCP](image)

**Table 13. Quantiles of Annual Costs of Software-Based Communication Infrastructure per FTE PCP and per Patient**

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th>$ per Year per FTE Clinician*</th>
<th>$ per Year per Patient</th>
<th>Specific Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>0</td>
<td>0.00</td>
<td>The practice receives all laboratory results electronically in the EHR.</td>
</tr>
<tr>
<td>P25</td>
<td>759</td>
<td>0.19</td>
<td>Medical-records staff identify patients recently hospitalized using the local hospital’s EHR, an established regional HIE, and a statewide “pre-managed” system. These lists are then given to MAs, who contact and schedule patients to be seen within 7 to 14 days of hospital discharge.*</td>
</tr>
<tr>
<td>P50</td>
<td>3,171</td>
<td>2.30</td>
<td>For specialty referrals within the practice’s health system, consult reports are received electronically in the EHR. For specialists outside the system (neurosurgeons, urologists, gastroenterologists), the practice often needs to call to get faxed reports, which they must then scan into the EHR.*</td>
</tr>
<tr>
<td>P75</td>
<td>8,500</td>
<td>5.31</td>
<td>One of the practice MAs is responsible for closing referral gaps identified in the EHR system. The practice has electronic exchange interfaces to receive lab results directly in its EHR, as well as access to records produced at a local x-ray service via an online web portal. The practice also employs part-time clerical staff to scan receipts of faxes and other documents for electronic filing in the EHR.*</td>
</tr>
<tr>
<td>Maximum</td>
<td>65,926</td>
<td>41.95</td>
<td>The practice recently transitioned to a new EHR, which is integrated with the local hospital and other practices in [local IPA]. The practice bears part of the cost of this transition, while [local IPA] bears some of the cost. The practice hired IT staff for the switch. As part of this transition, the practice upgraded the office Wi-Fi and bandwidth and replaced existing computer monitors with 22-inch monitors and added some computer hardware and firewalls—although security upgrades may have been done regardless of whether the practice switched EHRs. Significant staff hours were also spent to move information to the new system and to learn the new system.</td>
</tr>
</tbody>
</table>

NOTE: Eighty-seven practice-reported capabilities from 43 practices were used to populate this table. Of these, six had unknown costs.

*This practice-reported capability spans multiple standardized capabilities (i.e., the standardized capability is coupled with other standardized capabilities, and the cost estimates therefore include multiple capabilities).
Figure 26. Annual Costs of Software-Based Communication Infrastructure per FTE PCP, with Practice Characteristics

NOTE: In this figure, the triangles represent capabilities of practices participating in CPC+, and the circles represent capabilities of practices not participating in CPC+. The size of each circle and triangle is proportional to the number of FTE PCPs in the practice.

Other Communication Infrastructure

Annual Costs

Figure 27. Annual Costs of Other Communication Infrastructure per FTE PCP
### Table 14. Quantiles of Annual Costs of Other Communication Infrastructure per FTE PCP and per Patient

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th>$ per Year per FTE Clinician*</th>
<th>$ per Year per Patient</th>
<th>Specific Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>161</td>
<td>0.16</td>
<td>The practice has access to a local hospital’s EHR to view recently released patients and occasionally receives calls from the hospital social worker for an inpatient discharge. The practice also receives lists of patients who have been in the ER from insurance companies. The receptionist calls patients to schedule follow-up appointments after they have been discharged.*</td>
</tr>
<tr>
<td>P25</td>
<td>2,614</td>
<td>1.90</td>
<td>The practice receives notifications of inpatient admissions and discharges from two hospitals via electronic means and from other hospitals via fax; faxes are subsequently scanned into the EHR. Health coaches then call patients and schedule them for a practice visit within three days, if necessary. The practice has access to hospitals that share the same EHR with the practice. The practice can also access inpatient records through the statewide health information exchange.*</td>
</tr>
<tr>
<td>P50</td>
<td>5,763</td>
<td>3.77</td>
<td>The referral specialist sends patient information to the specialist and tracks that appointment until it is closed out in the practice management and EHR systems. For some specialist referrals, the practice can make the appointment on the patient’s behalf. The practice sends a form to the specialist and asks that it be returned when the appointment has been set up. The check-out staff schedules eye exams for diabetic patients.*</td>
</tr>
<tr>
<td>P75</td>
<td>12,517</td>
<td>13.93</td>
<td>The practice has two referral coordinators who help patients make appointments for specialists and diagnostic tests, and initiate external services such as physical therapy or home health care. Referral coordinators track referrals in the EHR and follow up to ensure that results are received from specialists; though received electronically in a few instances, these results are typically received by fax. Referral coordinators work with the medical-records department to ensure that specialist results are entered into the EHR and indexed to the appropriate provider. Orders and results from external lab services are exchanged electronically.*</td>
</tr>
<tr>
<td>Maximum</td>
<td>38,742</td>
<td>17.43</td>
<td>The practice carries pamphlets on self-management for topics like diet and exercise. It also assists patients with DME. In addition, there are patient logs for self-management, which the RN contacts patients about and the MDs and NPs review. The practice also communicates the meaning of lab results and how patients can act on them.*</td>
</tr>
</tbody>
</table>

NOTE: Sixty-one practice-reported capabilities from 39 practices were used to populate this table. Of these, zero had unknown costs.

*This practice-reported capability spans multiple standardized capabilities (i.e., the standardized capability is coupled with other standardized capabilities, and the cost estimates therefore include multiple capabilities).
Figure 28. Annual Costs of Other Communication Infrastructure per FTE PCP, with Practice Characteristics

NOTE: In this figure, the triangles represent capabilities of practices participating in CPC+, and the circles represent capabilities of practices not participating in CPC+. The size of each circle and triangle is proportional to the number of FTE PCPs in the practice.

Other Care Coordination Infrastructure

Figure 29. Annual Costs of Other Care Coordination Infrastructure per FTE PCP
Table 15. Quantiles of Annual Costs of Other Care Coordination Infrastructure per FTE PCP and per Patient

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th>$ per Year per FTE Clinician*</th>
<th>$ per Year per Patient</th>
<th>Specific Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>0</td>
<td>0.00</td>
<td>The provider no longer visits practice patients at local nursing homes, but spends time coordinating care with the nursing homes' onsite doctors and other staff.</td>
</tr>
<tr>
<td>P25</td>
<td>0</td>
<td>0.00</td>
<td>The practice employs two hospitalists, who provide a degree of coordination between the practice and local hospital.*</td>
</tr>
<tr>
<td>P50</td>
<td>5,625</td>
<td>4.74</td>
<td>Practice physicians spend some time coordinating care with the hospitalists for their hospitalized patients.*</td>
</tr>
<tr>
<td>P75</td>
<td>9,121</td>
<td>15.20</td>
<td>The practice sometimes contacts specialists or hospitals to request information from a patient's visit.</td>
</tr>
<tr>
<td>Maximum</td>
<td>24,473</td>
<td>21.21</td>
<td>Providers spend time on the phone coordinating care with specialists, home health agencies, external care managers, and other service providers whenever the provider or external service has inquiries or needs clarification.*</td>
</tr>
</tbody>
</table>

NOTE: Six practice-reported capabilities from six practices were used to populate this table. Of these, zero had unknown costs.

*This practice-reported capability spans multiple standardized capabilities (i.e., the standardized capability is coupled with other standardized capabilities, and the cost estimates therefore include multiple capabilities).

Figure 30. Annual Costs of Other Care Coordination Infrastructure per FTE PCP, with Practice Characteristics

NOTE: In this figure, the triangles represent capabilities of practices participating in CPC+, and the circles represent capabilities of practices not participating in CPC+. The size of each circle and triangle is proportional to the number of FTE PCPs in the practice.
Standardized Capability Group: Comprehensiveness

*Geriatric Care*

Not reported due to an insufficient sample size (fewer than five observations).

*Behavioral Health*

Please see main report.

*Other Expanded Services*

Annual Costs

**Figure 31. Annual Costs of Other Expanded Services per FTE PCP**

**Table 16. Quantiles of Annual Costs of Other Expanded Services per FTE PCP and per Patient**

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th>$ per Year per FTE Clinician*</th>
<th>$ per Year per Patient</th>
<th>Specific Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>0</td>
<td>0.00</td>
<td>The practice physician has a background in dermatology and offers related services to patients, including cyst and abscess removals.</td>
</tr>
<tr>
<td>P25</td>
<td>0</td>
<td>0.00</td>
<td>The practice includes midwives and physicians with specialized training in obstetrics, who offer a range of services (e.g., pelvic exams). The practice is making money from these services.</td>
</tr>
<tr>
<td>P50</td>
<td>0</td>
<td>0.00</td>
<td>The practice offers x-ray services. The types of radiological tests provided are limited to those that are reimbursable. The practice does not lose money on these services.</td>
</tr>
<tr>
<td>P75</td>
<td>617</td>
<td>0.28</td>
<td>The practice administers nebulizer treatments to patients with acute breathing trouble. Reimbursements for this service do not typically cover the full cost.</td>
</tr>
<tr>
<td>Maximum</td>
<td>21,898</td>
<td>13.63</td>
<td>The practice’s program for diabetes care includes a PhD pharmacist to help patients with uncontrolled diabetes, a nurse educator for patient education and self-management, a nutritionist who consults on diet, and patient care technicians who conduct retinal scans (and send them by computer to an outside ophthalmologist to read).*</td>
</tr>
</tbody>
</table>

*NOTE: One hundred twenty-five practice-reported capabilities from 42 practices were used to populate this table. Of these, one had unknown costs.

*This practice-reported capability spans multiple standardized capabilities (i.e., the standardized capability is coupled with other standardized capabilities, and the cost estimates therefore include multiple capabilities).
NOTE: In this figure, the triangles represent capabilities of practices participating in CPC+, and the circles represent capabilities of practices not participating in CPC+. The size of each circle and triangle is proportional to the number of FTE PCPs in the practice.

Standardized Capability Group: Continuity

*Home Visits*

Annual Costs
Table 17. Quantiles of Annual Costs of Home Visits per FTE PCP and per Patient

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th>$ per Year per FTE Clinician*</th>
<th>$ per Year per Patient</th>
<th>Specific Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>0</td>
<td>0.00</td>
<td>Three of the practice’s providers conduct home visits for frail and immobile patients. The practice didn’t report losing money on this.</td>
</tr>
<tr>
<td>P25</td>
<td>279</td>
<td>0.24</td>
<td>Providers visit patients in their homes. Home visits are conducted by both faculty physicians and medical residents. Home visits performed by medical residents only are not chargeable and represent a financial loss to the practice.</td>
</tr>
<tr>
<td>P50</td>
<td>712</td>
<td>0.40</td>
<td>Two to four home visits occur per month. Geriatric faculty take residents on home visits, because residents must do at least two home visits during their residency.*</td>
</tr>
<tr>
<td>P75</td>
<td>2,788</td>
<td>5.37</td>
<td>An interprofessional complex patient team, including the social worker, pharmacist, medical residents, and other staff, makes home visits to “super utilizers.” Since these visits rarely include a faculty physician, they are typically not billable.*</td>
</tr>
<tr>
<td>Maximum</td>
<td>45,292</td>
<td>24.91</td>
<td>As part of the practice’s participation in a Medicare CCM program, a team of foreign medical graduates (FMGs) at the medical group manages chronic care patients with the goal of keeping these patients out of the ER and hospital. The FMGs identify patients with two or more chronic conditions from the EHR, print out lists to use in contacting patients to confirm their CCM eligibility, check on patients’ conditions and care needs, document their needs in the EHR, and coordinate with the provider and other services. If a patient needs home care, an internal referral is made to NPs by the medical group that does home visits, including wellness check-ins.*</td>
</tr>
</tbody>
</table>

NOTE: Twenty-four practice-reported capabilities from 23 practices were used to populate this table. Of these, zero had unknown costs.

*This practice-reported capability spans multiple standardized capabilities (i.e., the standardized capability is coupled with other standardized capabilities, and the cost estimates therefore include multiple capabilities).

Figure 34. Annual Costs of Home Visits per FTE PCP, with Practice Characteristics

NOTE: In this figure, the triangles represent capabilities of practices participating in CPC+, and the circles represent capabilities of practices not participating in CPC+. The size of each circle and triangle is proportional to the number of FTE PCPs in the practice.
Hospital Visits

Annual Costs

Figure 35. Annual Costs of Hospital Visits per FTE PCP

Table 18. Quantiles of Annual Costs of Hospital Visits per FTE PCP and per Patient

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th>$ per Year per FTE Clinician*</th>
<th>$ per Year per Patient</th>
<th>Specific Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>0</td>
<td>0.00</td>
<td>Practice physicians have appointments at local hospitals. If one of their patients is admitted, they assume the role of the attending physician and bill for this. The practice is not losing money on this service.</td>
</tr>
<tr>
<td>P25</td>
<td>363</td>
<td>0.26</td>
<td>Providers meet with their patients at the hospital if problems arise (e.g., family concerns) and do not charge for this service.</td>
</tr>
<tr>
<td>P50</td>
<td>2,156</td>
<td>1.56</td>
<td>Physicians at the practice make wellness visits to patients at the hospital.</td>
</tr>
<tr>
<td>P75</td>
<td>3,883</td>
<td>4.32</td>
<td>Practice providers visit patients in the hospital. Some of these visits are billed as rounding, and some are unreimbursed social visits.</td>
</tr>
<tr>
<td>Maximum</td>
<td>10,638</td>
<td>10.64</td>
<td>The physician visits patients in the hospital and is not fully reimbursed for the cost of these visits.</td>
</tr>
</tbody>
</table>

NOTE: Sixteen practice-reported capabilities from 16 practices were used to populate this table. Of these, zero had unknown costs.
**Figure 36. Annual Costs of Hospital Visits per FTE PCP, with Practice Characteristics**

**Other External Visits**

Annual Costs

**Figure 37. Annual Costs of Other External Visits per FTE PCP**
Table 19. Quantiles of Annual Costs of Other External Visits per FTE PCP and per Patient

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th>$ per Year per FTE Clinician*</th>
<th>$ per Year per Patient</th>
<th>Specific Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>0</td>
<td>0.00</td>
<td>Three of the practice’s providers conduct visits at assisted living residences for geriatric patients. The practice does not report losing money on this.</td>
</tr>
<tr>
<td>P25</td>
<td>0</td>
<td>0.00</td>
<td>Some practice physicians are jointly employed at a local nursing home and see some of the practice’s patients there. Doctors are directly reimbursed through Medicare for this. The practice does not lose money on this.</td>
</tr>
<tr>
<td>P50</td>
<td>168</td>
<td>0.17</td>
<td>The practice includes physicians who meet with patients at nursing homes where they reside. These visits are fully reimbursed, but the transportation to and from the nursing home is not, so the practice loses money overall.</td>
</tr>
<tr>
<td>P75</td>
<td>2,268</td>
<td>4.37</td>
<td>Physicians occasionally visit their patients at a local nursing home in which the practice has focused its admissions.</td>
</tr>
<tr>
<td>Maximum</td>
<td>5,760</td>
<td>2.30</td>
<td>The physician and MA scribe conduct nursing home and assisted living visits. Scribe time is not reimbursed.</td>
</tr>
</tbody>
</table>

NOTE: Seventeen practice-reported capabilities from 16 practices were used to populate this table. Of these, zero had unknown costs.

*This practice-reported capability spans multiple standardized capabilities (i.e., the standardized capability is coupled with other standardized capabilities, and the cost estimates therefore include multiple capabilities).

Figure 38. Annual Costs of Other External Visits per FTE PCP, with Practice Characteristics

NOTE: In this figure, the triangles represent capabilities of practices participating in CPC+, and the circles represent capabilities of practices not participating in CPC+. The size of each circle and triangle is proportional to the number of FTE PCPs in the practice.
On-Call System

Annual Costs

Figure 39. Annual Costs of On-Call System per FTE PCP

Table 20. Quantiles of Annual Costs of On-Call System per FTE PCP and per Patient

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th>$ per Year per FTE Clinician*</th>
<th>$ per Year per Patient</th>
<th>Specific Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>0</td>
<td>0.00</td>
<td>Weekend call duty rotates among three or four doctors.</td>
</tr>
<tr>
<td>P25</td>
<td>109</td>
<td>0.10</td>
<td>Six providers use a practice cell phone for one month each, as they rotate being on call. This cost is the cost of the cell phone.</td>
</tr>
<tr>
<td>P50</td>
<td>810</td>
<td>0.84</td>
<td>The parent organization contracts with an answering service for after-hours telephone inquiries, which are routed to the provider on call. The physician at this practice takes his own call, except when on vacation. This cost is the cost of the answering service.</td>
</tr>
<tr>
<td>P75</td>
<td>1,680</td>
<td>0.76</td>
<td>The practice hires a 24-hour answering service that pages the physician after hours Monday through Friday; on weekends, the service pages either the physician or one of the other local doctors who rotate being on call. This cost is the cost of the answering service.</td>
</tr>
<tr>
<td>Maximum</td>
<td>42,494</td>
<td>26.46</td>
<td>Practice patients can use the parent organization’s nurse-call service to talk to a nurse by phone at any time during or outside office hours. This remote nurse answers patient questions or refers them back to the practice (including messaging the practice nurses if the call takes place during office hours).*</td>
</tr>
</tbody>
</table>

NOTE: Thirty-seven practice-reported capabilities from 37 practices were used to populate this table. Of these, five had unknown costs.

*This practice-reported capability spans multiple standardized capabilities (i.e., the standardized capability is coupled with other standardized capabilities, and the cost estimates therefore include multiple capabilities).
Figure 40. Annual Costs of On-Call System per FTE PCP, with Practice Characteristics

NOTE: In this figure, the triangles represent capabilities of practices participating in CPC+, and the circles represent capabilities of practices not participating in CPC+. The size of each circle and triangle is proportional to the number of FTE PCPs in the practice.

Standardized Capability Group: Enhanced Access

Same-Day or Next-Day Office Visits

Annual Costs

Figure 41. Annual Costs of Same-Day or Next-Day Office Visits per FTE PCP
Table 21. Quantiles of Annual Costs of Same-Day or Next-Day Office Visits per FTE PCP and per Patient

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th>$ per Year per FTE Clinician*</th>
<th>$ per Year per Patient</th>
<th>Specific Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>0</td>
<td>0.00</td>
<td>The practice offers 15- and 45-minute same-day and next-day visits. These slots are almost always filled.</td>
</tr>
<tr>
<td>P25</td>
<td>0</td>
<td>0.00</td>
<td>The practice offers same-day and walk-in appointments. The practice uses an outside scheduling system. Almost all of these slots are filled.</td>
</tr>
<tr>
<td>P50</td>
<td>0</td>
<td>0.00</td>
<td>The practice is capable of taking most same-day walk-ins. Slots are typically full.</td>
</tr>
<tr>
<td>P75</td>
<td>1,997</td>
<td>1.64</td>
<td>The practice supports direct scheduling online through the EHR patient portal, with designated slots that patients can sign up for. Slots are rarely unfilled. Developing this scheduling capability required IT customization of the online patient portal.</td>
</tr>
<tr>
<td>Maximum</td>
<td>17,089</td>
<td>9.85</td>
<td>The practice uses an open-access scheduling model—about half of the practice days are open. The marginal staff hours dedicated to scheduling this service (hours that would not have been spent running a practice without open-access scheduling) are included here. This includes some front-desk and RN/triage staff labor to adjust schedules to get people in as needed. Also included here are any hours that open access is offered but the slots go unfilled and otherwise unused. In other words, staff are paid to be ready for open-access slots that go unfilled, and these unfilled slots have a labor cost.</td>
</tr>
</tbody>
</table>

NOTE: Forty-seven practice-reported capabilities from 45 practices were used to populate this table. Of these, zero had unknown costs.

*This practice-reported capability spans multiple standardized capabilities (i.e., the standardized capability is coupled with other standardized capabilities, and the cost estimates therefore include multiple capabilities).

Figure 42. Annual Costs of Same-Day or Next-Day Office Visits per FTE PCP, with Practice Characteristics

NOTE: In this figure, the triangles represent capabilities of practices participating in CPC+, and the circles represent capabilities of practices not participating in CPC+. The size of each circle and triangle is proportional to the number of FTE PCPs in the practice.
Extended Hours

Annual Costs

Figure 43. Annual Costs of Extended Hours per FTE PCP

Table 22. Quantiles of Annual Costs of Extended Hours per FTE PCP and per Patient

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th>$ per Year per FTE Clinician*</th>
<th>$ per Year per Patient</th>
<th>Specific Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>0</td>
<td>0.00</td>
<td>The practice offers hours on Saturday from 8:30 a.m. to 12 p.m. Slots are nearly always filled. Staff are not paid overtime for working on weekends. To compensate, Wednesday is a half day.</td>
</tr>
<tr>
<td>P25</td>
<td>0</td>
<td>0.00</td>
<td>Several physicians start at 7:30 a.m. and some work through lunch. All of the slots during these hours are filled.</td>
</tr>
<tr>
<td>P50</td>
<td>0</td>
<td>0.00</td>
<td>The practice is open at 7:00 a.m. Mondays and Fridays, and it schedules appointments until 7:00 p.m. as needed. All of these appointment slots are filled, and there are no overtime costs.</td>
</tr>
<tr>
<td>P75</td>
<td>156</td>
<td>0.23</td>
<td>The practice sometimes remains open after hours to accommodate patients, especially during winter, when more patients come in. Some labor hours are paid at a higher-than-usual (overtime) wage.</td>
</tr>
<tr>
<td>Maximum</td>
<td>13,496</td>
<td>8.89</td>
<td>The practice has extended hours—5 p.m. to 8 p.m. on Friday and 8 a.m. to 8 p.m. on Saturday and Sunday, during which there are two to three hours per day of unfilled slots. Weekend staff are paid higher rates.</td>
</tr>
</tbody>
</table>

NOTE: Thirty-two practice-reported capabilities from 32 practices were used to populate this table. Of these, zero had unknown costs.

*This practice-reported capability spans multiple standardized capabilities (i.e., the standardized capability is coupled with other standardized capabilities, and the cost estimates therefore include multiple capabilities).
Figure 44. Annual Costs of Extended Hours per FTE PCP, with Practice Characteristics

NOTE: In this figure, the triangles represent capabilities of practices participating in CPC+, and the circles represent capabilities of practices not participating in CPC+. The size of each circle and triangle is proportional to the number of FTE PCPs in the practice.

Patient Care Other Than Office Visits

Annual Costs

Figure 45. Annual Costs of Patient Care Other Than Office Visits per FTE PCP
### Table 23. Quantiles of Annual Costs of Patient Care Other Than Office Visits per FTE PCP and per Patient

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th>$ per Year per FTE Clinician*</th>
<th>$ per Year per Patient</th>
<th>Specific Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>0</td>
<td>0.00</td>
<td>Patients can directly contact providers to have questions answered through a patient portal.</td>
</tr>
<tr>
<td>P25</td>
<td>3,227</td>
<td>2.19</td>
<td>Patients can contact their PCP or a nurse through an online patient portal. This includes the ability to send a private message directly to the provider. The time for this is not billable.</td>
</tr>
<tr>
<td>P50</td>
<td>8,425</td>
<td>1.93</td>
<td>Patients can contact the practice with care questions or requests either by phone or through an online patient portal. There are IT costs for the EHR vendor and another company related to the patient portal. A triage nurse screens and manages these requests.</td>
</tr>
<tr>
<td>P75</td>
<td>16,482</td>
<td>4.16</td>
<td>For primary care visits, providers routinely print educational resources and send content through the patient portal.*</td>
</tr>
<tr>
<td>Maximum</td>
<td>60,000</td>
<td>20.00</td>
<td>The practice has a patient portal for routine questions, such as medication or appointment refills. A front-desk staff member monitors the patient portal. Portal use is minimal. However, the practice also answers approximately 75 to 100 patient questions per day by phone.</td>
</tr>
</tbody>
</table>

NOTE: Forty-eight practice-reported capabilities from 37 practices were used to populate this table. Of these, zero had unknown costs.

*This practice-reported capability spans multiple standardized capabilities (i.e., the standardized capability is coupled with other standardized capabilities, and the cost estimates therefore include multiple capabilities).

### Figure 46. Annual Costs of Patient Care Other Than Office Visits per FTE PCP, with Practice Characteristics

NOTE: In this figure, the triangles represent capabilities of practices participating in CPC+, and the circles represent capabilities of practices not participating in CPC+. The size of each circle and triangle is proportional to the number of FTE PCPs in the practice.
Other Enhanced Access

Not reported due to an insufficient sample size (fewer than five observations).

Standardized Capability Group: Planned Care and Population Health

High-Risk Patient List

Please see main report.

Preventive or Overdue Care List

Annual Costs

Figure 47. Annual Costs of Preventive or Overdue Care List per FTE PCP

Table 24. Quantiles of Annual Costs of Preventive or Overdue Care List per FTE PCP and per Patient

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th>$ per Year per FTE Clinician*</th>
<th>$ per Year per Patient</th>
<th>Specific Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>0</td>
<td>0.00</td>
<td>The EHR automatically generates a list of patients who are overdue for particular services, including those specific to the patient's condition. The cost of this is built into the EHR base product; there is no marginal cost.</td>
</tr>
<tr>
<td>P25</td>
<td>1,022</td>
<td>1.51</td>
<td>MAs and other practice staff review a special report that combines information from inpatient and outpatient medical records to track health maintenance items. Child immunization lists are also tracked and produced using an immunization database.</td>
</tr>
<tr>
<td>P50</td>
<td>2,809</td>
<td>2.91</td>
<td>The parent organization's administrator collects lists of patients who have care gaps from insurance companies and from the group's EHR. An LPN in the parent organization manages the care-gap lists for this practice, and an administrative clerk was hired to contact these patients to encourage and assist them with obtaining the needed services. The administrator also has spent time working with the EHR vendor on improving care-gap dashboards and EHR reporting functionality.*</td>
</tr>
</tbody>
</table>

*The asterisk indicates that the described activity involves a cost, but it is included as part of the EHR base product.
Table 24—Continued

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th>$ per Year per FTE Clinician*</th>
<th>$ per Year per Patient</th>
<th>Specific Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>P75</td>
<td>5,071</td>
<td>4.65</td>
<td>Vaccinations are reviewed, and the EHR flags overdue screenings and services.</td>
</tr>
<tr>
<td>Maximum</td>
<td>34,091</td>
<td>18.75</td>
<td>The parent organization has a compliance group comprising a parent organization manager and five MAs. One MA downloads care-gap lists from insurance companies, and the four other MAs are dedicated to calling patients on those lists to close the care gaps. The MA who downloads the lists and the parent organization manager meet with insurance companies once a month to discuss care gaps.*</td>
</tr>
</tbody>
</table>

NOTE: Fifty practice-reported capabilities from 41 practices were used to populate this table. Of these, two had unknown costs.

*This practice-reported capability spans multiple standardized capabilities (i.e., the standardized capability is coupled with other standardized capabilities, and the cost estimates therefore include multiple capabilities).

Figure 48. Annual Costs of Preventive or Overdue Care List per FTE PCP, with Practice Characteristics

NOTE: In this figure, the triangles represent capabilities of practices participating in CPC+, and the circles represent capabilities of practices not participating in CPC+. The size of each circle and triangle is proportional to the number of FTE PCPs in the practice.
Performance Measurement

Annual Costs

**Figure 49. Annual Costs of Performance Measurement per FTE PCP**

![Annual Costs Graph](image)

**Table 25. Quantiles of Annual Costs of Performance Measurement per FTE PCP and per Patient**

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th>$ per Year per FTE Clinician*</th>
<th>$ per Year per Patient</th>
<th>Specific Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>198</td>
<td>0.13</td>
<td>The health group operates a quality and compliance committee that convenes monthly and reviews a set of eight metrics for each practice. A practice site manager on quality metrics is responsible for reviewing the monthly report at the provider and practice levels.*</td>
</tr>
<tr>
<td>P25</td>
<td>1,100</td>
<td>1.01</td>
<td>The practice tracks usage and cost information from data provided by payers and Comprehensive Primary Care Plus (CPC+).</td>
</tr>
<tr>
<td>P50</td>
<td>2,055</td>
<td>1.32</td>
<td>The practice manager reviews quality metrics and production reports on a weekly basis.</td>
</tr>
<tr>
<td>P75</td>
<td>3,398</td>
<td>2.24</td>
<td>The practice tracks performance metrics and reports these to the patient-centered medical home (PCMH) programs of insurance plans on a routine basis.*</td>
</tr>
<tr>
<td>Maximum</td>
<td>30,795</td>
<td>10.27</td>
<td>The practice participates in CPC+. A physician meets with nurses in the practice to review quality metrics for this program and to meet other program requirements.*</td>
</tr>
</tbody>
</table>

NOTE: Forty-three practice-reported capabilities from 32 practices were used to populate this table. Of these, three had unknown costs.

*This practice-reported capability spans multiple standardized capabilities (i.e., the standardized capability is coupled with other standardized capabilities, and the cost estimates therefore include multiple capabilities).
Figure 50. Annual Costs of Performance Measurement per FTE PCP, with Practice Characteristics

NOTE: In this figure, the triangles represent capabilities of practices participating in CPC+, and the circles represent capabilities of practices not participating in CPC+. The size of each circle and triangle is proportional to the number of FTE PCPs in the practice.

Performance Improvement

Annual Costs

Figure 51. Annual Costs of Performance Improvement per FTE PCP
Table 26. Quantiles of Annual Costs of Performance Improvement per FTE PCP and per Patient

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th>$ per Year per FTE Clinician*</th>
<th>$ per Year per Patient</th>
<th>Specific Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>0</td>
<td>0.00</td>
<td>Some physicians in the practice participate minimally in the parent organization’s executive committee, which reviews quality and patient experience data and discusses quality issues applicable across the system. The practice also holds a monthly meeting for all staff, in which quality and performance issues are discussed but constitute a minimal part of the agenda.</td>
</tr>
<tr>
<td>P25</td>
<td>545</td>
<td>0.50</td>
<td>Some practice staff participate in webinars offered by CPC+. This estimate only covers CPC+ webinars that focus on how to improve services, not the ones that focus on other issues such as CPC+ enrollment.*</td>
</tr>
<tr>
<td>P50</td>
<td>2,074</td>
<td>1.29</td>
<td>The practice occasionally conducts quality-improvement initiatives, such as improving the management of diabetic patients or setting a target for the number of colon cancer screenings performed in a given time period.</td>
</tr>
<tr>
<td>P75</td>
<td>5,250</td>
<td>7.72</td>
<td>The practice manager reports to the practice team regarding how well they are meeting CPC+ goals. Practice staff meet once every one to two months to review performance. The practice manager leads these meetings and reports the team’s progress on CPC+ goals. Staff members then discuss ways to improve; such discussions and improvement efforts continue outside of these meetings.*</td>
</tr>
<tr>
<td>Maximum</td>
<td>32,414</td>
<td>32.84</td>
<td>The practice’s portal pulls data from the practice’s EHR to track lists of people who are overdue for preventive visits and have other gaps in care as measured by CPC+ metrics. The practice spends time verifying this information and working with the portal vendor to ensure the accuracy of the data. The practice also has one staff member dedicated to contacting patients with the goal of closing these gaps in care.*</td>
</tr>
</tbody>
</table>

NOTE: Fifty-seven practice-reported capabilities from 42 practices were used to populate this table. Of these, two had unknown costs.

*This practice-reported capability spans multiple standardized capabilities (i.e., the standardized capability is coupled with other standardized capabilities, and the cost estimates therefore include multiple capabilities).
Figure 52. Annual Costs of Performance Improvement per FTE PCP, with Practice Characteristics

NOTE: In this figure, the triangles represent capabilities of practices participating in CPC+, and the circles represent capabilities of practices not participating in CPC+. The size of each circle and triangle is proportional to the number of FTE PCPs in the practice.

Other Planned Care and Population Health

Annual Costs

Figure 53. Annual Costs of Other Planned Care and Population Health per FTE PCP
Table 27. Quantiles of Other Planned Care and Population Health per FTE PCP and per Patient

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th>$ per Year per FTE Clinician*</th>
<th>$ per Year per Patient</th>
<th>Specific Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>223</td>
<td>0.33</td>
<td>The practice gets reports from insurance companies that track cost, quality, or usage patterns among patients at the population level. Practice staff review them, but it is unclear whether these reports are used for internal measurement or improvement efforts.</td>
</tr>
<tr>
<td>P25</td>
<td>893</td>
<td>0.45</td>
<td>The practice participates in the Physician Quality Reporting System (PQRS). The physician enters the data for Medicare patients for the PQRS. The practice uses software to generate PQRS reports and to send data to Centers for Medicare &amp; Medicaid Services (CMS).*</td>
</tr>
<tr>
<td>P50</td>
<td>2,809</td>
<td>2.91</td>
<td>The parent organization’s administrator collects lists of patients who have care gaps from insurance companies and from the group’s EHR. An LPN in the parent organization manages the care-gap lists for this practice, and an administrative clerk was hired to contact these patients to encourage and assist them with obtaining the needed services. The administrator also has spent time working with the EHR vendor on improving care-gap dashboards and EHR reporting functionality.*</td>
</tr>
<tr>
<td>P75</td>
<td>6,971</td>
<td>5.73</td>
<td>The practice care coordinator does previsit planning for all patients, which includes a “chart scrub” for gaps in care. This responsibility includes ordering labs and having patients come in early for these labs; it also includes examining gaps in care for other exams (e.g., mammograms, colonoscopies) and scheduling these exams on the same day. The care coordinator coaches patients with chronic conditions (such as diabetes), helping them establish self-care goals. The coordinator is also responsible for running a monthly list of patients with overdue services. Creating these lists required EHR customizations as well as an investment in population software (separate from the main EHR).*</td>
</tr>
<tr>
<td>Maximum</td>
<td>23,496</td>
<td>13.54</td>
<td>The practice uses wellness-visit templates (structured data fields) that are part of the EHR.</td>
</tr>
</tbody>
</table>

NOTE: Eight practice-reported capabilities from seven practices were used to populate this table. Of these, zero had unknown costs.

*This practice-reported capability spans multiple standardized capabilities (i.e., the standardized capability is coupled with other standardized capabilities, and the cost estimates therefore include multiple capabilities).
Figure 54. Annual Costs of Other Planned Care and Population Health per FTE PCP, with Practice Characteristics

NOTE: In this figure, the triangles represent capabilities of practices participating in CPC+, and the circles represent capabilities of practices not participating in CPC+. The size of each circle and triangle is proportional to the number of FTE PCPs in the practice.

Standardized Capability Group: Patient and Caregiver Engagement

*Shared Decisionmaking*

Annual Costs

Figure 55. Annual Costs of Shared Decisionmaking per FTE PCP
### Table 28. Quantiles of Annual Costs of Shared Decisionmaking per FTE PCP and per Patient

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th>$ per Year per FTE Clinician*</th>
<th>$ per Year per Patient</th>
<th>Specific Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>292</td>
<td>0.17</td>
<td>The practice provides shared decision aids for patients with hyperlipidemia, osteoarthritis of the knee or the need for knee replacements, and antibiotic use in pediatric colds.</td>
</tr>
<tr>
<td>P25</td>
<td>1,194</td>
<td>1.24</td>
<td>The practice uses three decision aids triggered by diagnosis. Printed copies are kept in exam rooms, which MAs give to eligible patients to read before meeting with the physician. Practice staff had to be trained on the shared decision tools and had to document the results of shared decision discussions in the EHR. Two of the decision tools (PSA testing and lower back pain) were acquired without charge through websites referenced by CPC+; another one (antibiotic use for upper respiratory infections) was developed by the parent organization.</td>
</tr>
<tr>
<td>P50</td>
<td>1,716</td>
<td>1.17</td>
<td>Shared decisionmaking tools were obtained from the CPC classic program for lower back pain, depression, and colorectal cancer screening, and the practice still uses these tools. This involves some MA and provider staff time.</td>
</tr>
<tr>
<td>P75</td>
<td>4,294</td>
<td>4.76</td>
<td>The system provided education to providers to use shared decisionmaking tools. The practice providers focus on six tools, which are tracked in the EHR.</td>
</tr>
<tr>
<td>Maximum</td>
<td>13,150</td>
<td>10.81</td>
<td>The parent organization’s director of care management has designed shared decisionmaking tools for topics such as smoking cessation and colorectal screening, which the MA prints and hands out to patients, the care coordinator, or the PCP, depending on the topic. Creation of these tools involved a contracted developer and input from content experts. A field in the EHR was also created to document when shared decisionmaking occurs. There is also a monthly care team meeting with care coordinators, in which the use of decisionmaking tools is tracked and reviewed. An implementation coordinator ensures that this meeting stays on track.</td>
</tr>
</tbody>
</table>

NOTE: Eight practice-reported capabilities from eight practices were used to populate this table. Of these, zero had unknown costs.

*This practice-reported capability spans multiple standardized capabilities (i.e., the standardized capability is coupled with other standardized capabilities, and the cost estimates therefore include multiple capabilities).
NOTE: In this figure, the circles represent capabilities of practices not participating in CPC+. The size of each circle is proportional to the number of FTE PCPs in the practice.

**Patient Surveys**

**Annual Costs**

**Figure 57. Annual Costs of Patient Surveys per FTE PCP**
Table 29. Quantiles of Annual Costs of Patient Surveys per FTE PCP and per Patient

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th>$ per Year per FTE Clinician*</th>
<th>$ per Year per Patient</th>
<th>Specific Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>0</td>
<td>0.00</td>
<td>The practice is enrolled in a state care transformation collaborative, which pays a vendor to administer patient experience surveys.</td>
</tr>
<tr>
<td>P25</td>
<td>132</td>
<td>0.09</td>
<td>The parent organization administers its own patient survey, developed by the organization’s practice administrator with input from the clinical operations committee. The survey is fielded twice a year, with receptionists handing the survey to patients to be completed before they leave, if possible. The goal is to obtain 20 to 25 surveys per provider at each fielding. An administrative staff person at the parent organization collates the surveys, and results are shared with office managers to address any issues.</td>
</tr>
<tr>
<td>P50</td>
<td>297</td>
<td>N/A</td>
<td>The larger institution administers patient-satisfaction surveys through a vendor. Patient feedback is categorized into the top ten areas of needed improvement along with strategies for improvement, both of which are discussed during monthly meetings. The practice manager reviews survey results weekly, responds to complaints, and shares the results with providers. The practice cannot estimate the cost of administering the survey through the vendor.</td>
</tr>
<tr>
<td>P75</td>
<td>1,789</td>
<td>1.30</td>
<td>Patient surveys are conducted three times per year, with a goal of 50 surveys completed for each provider. A vendor administers the surveys, and administrators provide scorecards to each practice and physician.</td>
</tr>
<tr>
<td>Maximum</td>
<td>7,638</td>
<td>8.47</td>
<td>Through a vendor, the system administers patient-satisfaction surveys to all patients after they visit their providers.</td>
</tr>
</tbody>
</table>

NOTE: Thirty-one practice-reported capabilities from 31 practices were used to populate this table. Of these, five had unknown costs.
N/A: Not applicable because this practice did not provide a patient panel size estimate.
*This practice-reported capability spans multiple standardized capabilities (i.e., the standardized capability is coupled with other standardized capabilities, and the cost estimates therefore include multiple capabilities).

Figure 58. Annual Costs of Patient Surveys per FTE PCP, with Practice Characteristics

NOTE: In this figure, the triangles represent capabilities of practices participating in CPC+, and the circles represent capabilities of practices not participating in CPC+. The size of each circle and triangle is proportional to the number of FTE PCPs in the practice.
Patient and Family Advisory Council

Please see main report.

Other Patient and Caregiver Engagement

Not reported due to an insufficient sample size (fewer than five observations).

Standardized Capability Group: Interpreter Services

Interpreter Services

Annual Costs

Table 30. Quantiles of Annual Costs of Interpreter Services per FTE PCP and per Patient

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th>$ per Year per FTE Clinician*</th>
<th>$ per Year per Patient</th>
<th>Specific Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>0</td>
<td>0.00</td>
<td>The practice translated some forms into Spanish years ago, but this doesn’t incur an ongoing annual cost.</td>
</tr>
<tr>
<td>P25</td>
<td>15</td>
<td>0.01</td>
<td>The practice arranges for an interpreter to come in with deaf patients when needed.</td>
</tr>
<tr>
<td>P50</td>
<td>192</td>
<td>0.13</td>
<td>Translation costs come out of a practice-level budget line. The practice uses computer- and phone-based interpreters.</td>
</tr>
<tr>
<td>P75</td>
<td>856</td>
<td>1.65</td>
<td>The practice contracts for in-person sign-language interpretation and provides a phone-based interpreter service for other languages.</td>
</tr>
<tr>
<td>Maximum</td>
<td>43,092</td>
<td>63.51</td>
<td>Some nurses and providers are helping patients they believe could benefit from more coordinated care. A dedicated diabetes program is also included under care management. This program employs bilingual specialists who intensively help patients manage diabetes. A nutritionist in the clinic also participates in this project.*</td>
</tr>
</tbody>
</table>

NOTE: Thirty-six practice-reported capabilities from 35 practices were used to populate this table. Of these, six had unknown costs.

*This practice-reported capability spans multiple standardized capabilities (i.e., the standardized capability is coupled with other standardized capabilities, and the cost estimates therefore include multiple capabilities).
NOTE: In this figure, the triangles represent capabilities of practices participating in CPC+, and the circles represent capabilities of practices not participating in CPC+. The size of each circle and triangle is proportional to the number of FTE PCPs in the practice.

Standardized Capability Group: Administrative Activities

_CPC or PCMH Administrative Activity_

Annual Costs
Table 31. Quantiles of Annual Costs of CPC or PCMH Administrative Activity per FTE PCP and per Patient

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th>$ per Year per FTE Clinician*</th>
<th>$ per Year per Patient</th>
<th>Specific Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>0</td>
<td>0.00</td>
<td>The practice purchased a new EHR system in the past year, primarily to track and manage PCMH metrics. The transition included paying for data entry into the new EHR, running the old and new systems simultaneously, and providing significant staff training. Ongoing costs separate from these startup costs have not been incurred yet.</td>
</tr>
<tr>
<td>P25</td>
<td>1,324</td>
<td>0.30</td>
<td>The practice attained National Committee for Quality Assurance (NCQA) PCMH Level 3 recognition. The office manager and administrative assistant managed most of the process. Outside grants from the parent organization also provided support.</td>
</tr>
<tr>
<td>P50</td>
<td>2,943</td>
<td>2.14</td>
<td>The practice attained NCQA PCMH Level 2 recognition. The informatics nurse tracks capabilities for the PCMH.*</td>
</tr>
<tr>
<td>P75</td>
<td>4,098</td>
<td>1.03</td>
<td>The practice reports quality metrics to a Medicaid Coordinated Care Organization (CCO) as well as to CPC+. This reporting consumes significant staff time, especially for the IT specialist.</td>
</tr>
<tr>
<td>Maximum</td>
<td>42,584</td>
<td>44.16</td>
<td>The parent organization and practice participate in CPC+, which requires time by the medical group staff and practice physician, to attend CPC+ webinars, conferences, and training. The parent organization’s administrator also meets quarterly with the practice physician to review CPC+ requirements. In addition, the parent organization’s administrator has spent substantial time helping the EHR vendor refine its CPC+ dashboard and reporting.</td>
</tr>
</tbody>
</table>

NOTE: Thirty-one practice-reported capabilities from 23 practices were used to populate this table. Of these, zero had unknown costs.

*This practice-reported capability spans multiple standardized capabilities (i.e., the standardized capability is coupled with other standardized capabilities, and the cost estimates therefore include multiple capabilities).

Figure 62. Annual Costs of CPC or PCMH Administrative Activity per FTE PCP, with Practice Characteristics

NOTE: In this figure, the triangles represent capabilities of practices participating in CPC+, and the circles represent capabilities of practices not participating in CPC+. The size of each circle and triangle is proportional to the number of FTE PCPs in the practice.
Other Administrative Activity Related to Comprehensive Primary Care

Annual Costs

Figure 63. Annual Costs of Other Administrative Activity Related to Comprehensive Primary Care per FTE PCP

Table 32. Quantiles of Annual Costs of Other Administrative Activity Related to Comprehensive Primary Care per FTE PCP and per Patient

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th>$ per Year per FTE Clinician*</th>
<th>$ per Year per Patient</th>
<th>Specific Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>318</td>
<td>0.21</td>
<td>The practice participates in a regional accountable care organization. This requires staff time to establish formal agreements and startup, as well as ongoing reporting and administration.</td>
</tr>
<tr>
<td>P25</td>
<td>1,283</td>
<td>1.11</td>
<td>Insurance companies send lists of patients who have gaps in prevention care or other care. Providers and front-office staff spend time following up with patients to close any actual care gaps identified.*</td>
</tr>
<tr>
<td>P50</td>
<td>2,969</td>
<td>1.35</td>
<td>Medicare MAs and other insurance plans send lists of patients; the practice must indicate whether certain preventive or other services were provided to these patients.</td>
</tr>
<tr>
<td>P75</td>
<td>5,574</td>
<td>10.74</td>
<td>There is substantial administrative time spent in organizational meetings to discuss payer-related accountable care organization, PCMH, and similar initiatives; substantial time is also spent reporting metrics for these programs.</td>
</tr>
<tr>
<td>Maximum</td>
<td>34,091</td>
<td>18.75</td>
<td>The parent organization has a compliance group comprising a parent organization manager and five MAs. One MA downloads care-gap lists from insurance companies, and the four other MAs are dedicated to calling patients on those lists to close care gaps. The MA who downloads the lists and the parent organization manager meet with insurance companies once a month to discuss care gaps.*</td>
</tr>
</tbody>
</table>

NOTE: Twenty-nine practice-reported capabilities from 21 practices were used to populate this table. Of these, two had unknown costs.

*This practice-reported capability spans multiple standardized capabilities (i.e., the standardized capability is coupled with other standardized capabilities, and the cost estimates therefore include multiple capabilities).
NOTE: In this figure, the triangles represent capabilities of practices participating in CPC+, and the circles represent capabilities of practices not participating in CPC+. The size of each circle and triangle is proportional to the number of FTE PCPs in the practice.
3. Frontline Personnel Interview Guide

The following interview guide was designed for a 30- to 45-minute one-on-one semi-structured interview with frontline personnel who had been previously reported to perform CPC capabilities in the practice. The interview guide consists of (1) a review of the participant’s involvement in practice capabilities relevant to frontline personnel interviews and (2) a discussion of the implementation of those capabilities over time.
CMMI Primary Care Valuation Data-Collection Methodology: Frontline Personnel Interview Guide

Introduction

1. Please tell us a little about yourself, your background, and the specialty training you received (if any).
   a. How long have you been at <CLINC NAME> and what is your role?
   b. Are you part of a care team?
      i. Do you work with more than one care team?
      ii. Who is on your care team?
         1. (If not on a care team): Who do you typically work with in the practice?
      iii. In your day-to-day work, do you interact with
         1. contractors?
         2. free labor (e.g., a CM call center from the insurance company, hospital care managers calling to help with transition-of-care services)?

2. <FOR PERSONNEL HIRED FROM OUTSIDE THE PRACTICE (E.G., BY THE PARENT ORGANIZATION, CONTRACTORS, OR OTHER ORGANIZATIONS ONLY)>
   Please tell me a little about [the organization you work for] and how it relates to your work at [name of practice].

CPC Capabilities

When we spoke with the managers of your practice, we catalogued the activities they reported as being done by various practice personnel. In this interview, we are focusing on activities involving care management and behavioral health. We hope to drill down with you on the activities you are involved in to gain a better understanding of how these activities are performed, how long they take, and how they came to be performed the way they are today.

3. Before we dive into specific activities, I am hoping you can give me a sense of what the typical day (or week or month) looks like for you. How do you spend your time?
4. We understand that, in general, this practice does a number of care management activities. I will now run through the list, as reported by the managers of your practice. As I do so, please let me know if these are things that you do, if they are things that someone else does in your practice, or if they are no longer being done.
   a. Discuss each item.
5. Are there any other care management activities that you do that we haven’t talked about specifically here?
6. Now that we have gotten a sense of the care management activities that you perform, we would like to learn a little bit more about what these activities entail. Please tell me more about <ACTIVITY>.
   a. What does <ACTIVITY> entail?
      i. Do you perform this activity only for a subset of patients? (If so, which patients?)
      ii. Do you perform this activity differently for one group of patients versus another? (If so, what patient characteristics determine the way in which this activity is performed?)
      iii. On average, how many hours per week do you spend on this activity?
   b. <ONLY FOR STAFF AND ONLY IF PARTICIPANT WORKS WITH MORE THAN ONE CLINICIAN/CARE TEAM>
      Do you perform the activity differently when working with different clinicians/care teams?
         i. (If so): How is it different? What is done differently?
         ii. Does it take more or less time to complete the activity when working on a different clinician/team?
         iii. Why is it done differently (i.e., What is the aim or desired goal) (e.g., volume versus comprehensiveness, the preferences of team members, the background of team members, the skills of team members)?
   c. How much of your day is spent on <ACTIVITY>? 
   d. Where is this activity performed (i.e., the location)?
   e. Do others also perform this activity?
      i. (If so): Are they all [the same personnel type as participant]? 
         1. How would you describe the variation in how this activity is performed by others? 
         2. Is there variation in how long it takes others to perform this activity? (If so): How large is this variation? 
         3. What causes this variation (in 1 and 2) (i.e., the aim/desired goal, the preferences, background, or skills of team members)?
   f. When a new [the same personnel type as participant] is hired, do you take time to train them on this activity?
      i. (If so): How is this training done (i.e., during patient care, during meetings)?
      ii. How long does it take you to train this staff member on this activity?
   g. <ONLY IF OTHER PERSONNEL TYPES ALSO PERFORM THIS ACTIVITY>
      When a new [different personnel type on the team] is hired, do you take time to train them on this activity?
      i. (If so): How is this training done (i.e., during patient care, during meetings)?
      ii. How long does it take you to train this staff member on this activity?
h. **<ONLY FOR CLINICIANS>**
   When a new person is hired to work with you or your team, do you spend time training that person (or problem-solving with them) on how to effectively work with you/your team in delivering the care management activities we’ve been discussing? If so, how much time?
   i. (Either formally—for example, in regular meetings or all-day training sessions—or informally, such as via on-the-job training, during patient visits, or in huddles)

7. **<ONLY IF THERE ARE OTHERS OF THE SAME PERSONNEL TYPE AS THE PARTICIPANT>**
   As we complete our discussion of care management services, I wonder:
   a. Do the other [same personnel type] do the same range of activities that you do? (Or are there tasks that you perform that they do not, or vice-versa)?
   b. Also, do certain [same personnel type] specialize in performing certain tasks more often?

**Behavioral Health**

8. **<FOR NON-BH PERSONNEL>**
   We understand that, in general, this practice also offers behavioral health (BH) services. Are you involved in delivering those services? If so, what do you do?
   **<FOR BH PERSONNEL>**
   How much of your time is spent on BH? Are you full-time? (If not, probe for how many total hours worked per week.) Please tell me about what you do in a typical day.
   a. NOTE: Only ask this way (above) if we know they do BH services. If we think they don’t, then ask them: does your practice offer BH services?

9. Are you also involved in **<LIST OF ACTIVITIES>**?
   a. What does **<ACTIVITY>** entail?
      i. Do you perform this activity only for a subset of patients? (If so, which patients?)
      ii. Do you perform this activity differently for one group of patients versus another? (If so, what patient characteristics determine the way in which this activity is performed?)
      iii. On average, how many hours per week do you spend on this activity?
   b. **<ONLY FOR STAFF AND ONLY IF PARTICIPANT WORKS WITH MORE THAN ONE CLINICIAN/CARE TEAM>**
      Do you perform the activity differently when working with different clinicians/care teams?
      i. (If so): How is it different? What is done differently?
      ii. Does it take more or less time to complete the activity when working on a different clinician/team?
      iii. Why is it done differently (i.e., What is the aim/desired goal) (e.g., volume vs comprehensiveness; the preferences, background, or skills of team members)?
   c. How much of your day is spent on **<ACTIVITY>**?
   d. Where is this activity performed (i.e., the location)?
e. Do others also perform this activity?
   i. (If so): Are they all [the same personnel type as participant]?
      1. How would you describe the variation in how this activity is performed by others?
      2. Is there variation in how long it takes others to perform this activity? (If so): How large is this variation?
      3. What causes this variation (in 1 and 2) (e.g., the aim or desired goal; the preferences, background, or skills of team members)?

f. When a new [the same personnel type as participant] is hired, do you take time to train them on this activity?
   i. (If so): How is this training done (i.e., during patient care, during meetings)?
   ii. How long does it take you to train this staff member on this activity?

g. <ONLY IF OTHER PERSONNEL TYPES ALSO PERFORM THIS ACTIVITY>
   When a new [different personnel type on the team] is hired, do you take time to train them on this activity?
   i. (If so): How is this training done (i.e., during patient care, during meetings)?
   ii. How long does it take you to train this staff member on this activity?

h. <ONLY FOR CLINICIANS>
   When a new person is hired to work with you/your team, do you spend time training that person (or problem-solving with them) on how to effectively work with you/your team in delivering the behavioral health activities we’ve been discussing? If so, how much time?
   i. (Either formally—for example, in regular meetings or all-day training sessions—or informally, such as via on-the-job training, during patient visits, or in huddles?)

10. <ONLY IF THERE ARE OTHERS OF THE SAME PERSONNEL TYPE AS THE PARTICIPANT>
As we complete our discussion of behavioral health services, I wonder:
   a. Do the other [the same personnel type] do the same range of activities that you do? Or are there tasks that you perform that they do not, or vice-versa?
   b. Also, do certain [the same personnel type] specialize in performing certain tasks more often?

Reflection

11. As you reflect on all of these activities, do you think that there is enough time to do what you are asked to do? When is there enough time? When is there not enough time?

12. Thank you very much for walking me through these activities. Is there anything else that you do in a typical day? In other words, are these activities we’ve been discussing the only things that you do, or are there other activities that you also do in the practice?
   a. (If there are other things): What are those other activities? In a typical day, what proportion of your day is spent on these activities?
Implementation Over Time

13. Were you hired specifically to perform these activities, or did your position evolve over time to include these activities?
   a. (If the latter): Can you please describe a typical day before these activities were added? What are the activities you would be performing if not these activities?

14. Have any of these care management and behavioral health activities been performed by different roles over time? If so, please describe those changes and what prompted them.
   a. Have you noticed a change in the number of personnel over time?
      i. Eliminated/added a job category?
      ii. Hired more people in an existing job category?

15. How long did it take your team/practice to work through all the bugs of delivering these services?
   a. Can you please give me an example?

16. Can you think of anything that you tried in these areas that you later abandoned (e.g., a specific tool or process)?
   a. What happened? Why was it abandoned (e.g., facilitators, challenges)?
   b. Was another method found for delivering that service or performing that activity?

17. <FOR THOSE WHO PARTICIPATE IN CODING FOR SERVICES ONLY>
   Which of these services are included in current billing codes? Did the way in which you code for these services change over time (e.g., use of the following Medicare billing codes)?
   a. Welcome to Medicare visit
      i. G0402, G0403, G0404, G0405
   b. Annual wellness
      i. G0438, G0439
   c. Transitional care management services
      i. CPT 99495 (moderate medical decision complexity), 99496 (high medical decision complexity)

Closing

18. Finally, reflecting overall:
   a. What do you find has helped you develop these capabilities (to deliver the services we have discussed)? (E.g., the below items could be probes):
      i. Time in the day to deliver services, patient-panel size, the timing of the activity’s implementation?
      ii. Training (various types)?
      iii. Goals of the practice?
      iv. Support for these activities from other team members?
   b. What do you find has made this more difficult?
4. Frontline Personnel Confirmation and Disconfirmation of Practice Leader Cost Estimates

In this section, we compare the estimates of practice leaders to those of frontline personnel regarding the amount of time spent engaging in care management capabilities that are not presented in the main report. Specifically, we report the amount of confirmation and disconfirmation; and when the estimates are off, we report how off they are using the following metrics: half a day per week, between a half and a full day per week, and more than one day per week.

Appointment Assistance

Eighteen participants agreed with practice leaders that they didn’t have a role in the capability.

Two agreed they did have a role in the capability and agreed on the quantity.

Three agreed they had a role in the capability but disagreed on the quantity. For two participants, their leader’s estimate of time spent in this capability was off by more than a half day and less than one day per week. For one participant, his/her leader’s estimate of time spent in this capability was off by more than one day per week.

Nine participants disagreed with leaders on whether they had a role in the capability at all. Specifically, all nine participated in this capability, although the leader did not report this. Of these, three participants reported spending up to one half day per week on appointment assistance when management had not reported any hours for them in this role, while four participants reported spending more than one day per week when management had not reported any hours for them. One participant indicated that he/she participated in this capability, though the time estimate is unclear, and another incorporated the estimate with the time spent on another capability.

Care Management for High-Risk Patients

Eighteen participants agreed with practice leaders that they didn’t have a role in the capability.

Two agreed they did have a role in the capability and agreed on the quantity.

Three agreed they had a role in the capability but disagreed on the quantity; indicating that their leader’s estimate of time spent in this capability was off by within a half day per week.

Another one person agreed that he/she had a role in the capability but could not provide a numerical time estimate.
Eight participants disagreed with their leads on whether they had a role in the capability at all. Three participants were incorrectly reported by the practice leader as performing this capability (i.e., they actually do not perform it). Five participated in this capability, although the leader did not report this. Of these, one participant reported spending up to one half day per week, when management had not reported hours for him/her that contributed to care management for high-risk patients. One participant reported spending more than one day per week, when management had not reported hours for him/her that contributed to this capability. Two participants indicated they participated in this capability, though the time estimate is unclear; another incorporated the time estimate with another capability.

**Home Health Management**

Twenty-six participants agreed with practice leaders that they didn’t have a role in the capability.

One agreed that he/she did have a role in the capability but disagreed on the quantity; namely, that the leader’s estimate of time spent in this capability was off by within a half day per week.

Five participants disagreed with their leads on whether they had a role in the capability at all. One participant was incorrectly reported by the practice leader as performing this capability (i.e., he/she actually does not perform it). Four participants do participate in this capability, although the leader did not report this; and all of them reported spending up to one half day per week, when leaders had not reported hours for them that contributed to home health management.

**Other Care Management**

Thirty participants agreed with practice leaders that they didn’t have a role in the capability.

Two participants were incorrectly reported by the practice leader as performing this capability (i.e., they actually do not perform it).

**Patient Education and Self-Management Support**

Sixteen participants agreed with practice leaders that they didn’t have a role in the capability.

Six agreed that they did have a role in the capability but disagreed on the quantity, indicating that their leader’s estimate of time spent in this capability was off by within a half day per week.

Ten participants disagreed with their leads on whether they had a role in the capability at all. Of these, four participants were incorrectly reported by the practice leader as performing
this capability (i.e., they actually do not perform it). The remaining six participated in this capability, although the leader did not report this. These six reported spending up to one half day per week on patient education and self-management support.

**Previsit Planning**

Seventeen participants agreed with practice leaders that they didn’t have a role in the capability.

Two agreed that they did have a role in the capability and agreed on the quantity.

Seven agreed that they had a role in the capability but disagreed on the quantity. For six participants, their leader’s estimate of time spent in this capability was off by within a half day per week. For one participant, the leader’s estimate of time spent in this capability was off by more than a half day and less than a day per week.

Six participants disagreed with their leaders on whether they had a role in the capability at all. One participant was incorrectly reported by the practice leader as performing this capability (i.e., he/she actually does not perform it). The other five participate in this capability, although the leader did not report this. Of these, three participants reported spending up to one half day per week, while the other two participants reported spending more than a half day but less than one day per week.

**Team Huddles**

Twenty-one participants agreed with practice leaders that they didn’t have a role in the capability.

Two agreed that they did have a role in the capability and agreed on the quantity.

Five participants agreed that they did have a role in the capability but disagreed on the quantity, indicating that their leader’s estimate of time spent in this capability was off by within a half day per week.

Four participants disagreed with their leaders on whether they had a role in the capability at all. Of these, two participants were incorrectly reported by the practice leader as performing this capability (i.e., they actually do not perform it). The other two participated in this capability, although the leader did not report this; both of these participants reported spending up to one half day per week.

**Transitional Care Management**

Twenty-three participants agreed with practice leaders that they didn’t have a role in the capability.

Two agreed that they did have a role in the capability but disagreed on the quantity; namely, their leader’s estimate of time spent in this capability was off by within a half day per week.
Seven participants disagreed with leads on whether they had a role in the capability at all. Of these, two participants were incorrectly reported by the practice leader as performing this capability (i.e., they actually do not perform it). The other five participated in this capability, although the leader did not report this. Of these five, two participants reported spending up to one half day per week when management had not reported hours for them that contributed to transitional care management. One participant reported spending more than a half day but less than one day per week, when management had not reported hours for him/her contributing to this capability. The other two participants reported spending more than one day per week when management had not reported hours for them that contributed to this capability.

**Written Care Plans**

Twenty-four participants agreed with practice leaders that they didn’t have a role in the capability.

One agreed that he/she did have a role in the capability and agreed on the quantity.

One agreed that he/she did have a role in the capability but disagreed on the quantity; the leader’s estimate of time spent in this capability was off by within a half day per week.

Six participants disagreed with their leads on whether they had a role in the capability at all. Three participants were incorrectly reported by the practice leader as performing this capability (i.e., they actually do not perform it). Three do participate in this capability, although the leader did not report this. Of these three, one participant reported spending up to one half day per week when management had not reported hours for him/her that contributed to written care plans. Another participant reported spending more than a half day but less than one day per week. The third participant reported that the time estimate had already been incorporated with another capability.
5. Additional Selected Findings: Implementation of Comprehensive Primary Care Capabilities

This section uses the interviews with frontline personnel to understand how practices’ organization and implementation of select capabilities may account for differences in the intensity and costs of the capabilities. Two of the capabilities included in this analysis are reported on in Chapter Five (medication management and behavioral health). Here, we report results obtained for four additional capabilities: care management for high-risk patients, previsit planning, team huddles, and written care plans. We do so to provide additional content, so the interested reader can more fully understand the nuances associated with the capabilities examined. We report how interviewed frontline personnel described their roles in delivering comprehensive primary care capabilities. Also, we describe participants’ thoughts on the evolution of these capabilities over time at their practice, recognizing that not all interviews or interviewees were able to describe this history.

Although many frontline participants were involved in appointment assistance, patient education, and self-management support, we do not include these, because the capability descriptions provided via the cost workbook were sufficient; frontline interviews did not provide a wealth of new information about these capabilities. We also do not include empanelment, home health management, and transitional care management, as few frontline participants engaged in these activities, and the capability descriptions captured in the cost-workbook data were deemed sufficient. No other care management activities were reported by these participants, so we could not report on such activities in this section.

Care Management for High-Risk Patients

Interviewed participants involved in care management for high-risk patients included the following: care/case managers (i.e., a nurse, certified nursing assistant), MAs, and clinicians. Medical records clerks claimed that they indirectly contributed by facilitating communication with outside providers, handing off faxes regarding care management patients to the care management personnel.

Participants described this capability as encompassing at least some, if not all, of the other capabilities in the care management domain. For example, one care manager described her role as including setting up and managing written care plans, patient education, and self-management.

*I’m reaching out to them monthly and setting up care plans and helping them manage that and sending them education information and just letting them know about if they are having—just when to call us if there’s any issues. So, I send them that information for the chronic issues, just how to manage that. And*
if they’re diabetic, just where their blood sugars should be at. And setting parameters that, if they’re outside these parameters, when do you call and when should you be seen immediately.

Another care manager at a different site noted similarities in caring for patients with different chronic conditions.

One of the biggest areas I would say is diabetes, and we have to make sure that the patient meets certain criteria, has certain labs, foot checks, their mental health is looked into. We have to make sure that the patient is seen frequently and that they stay educated as to what their disease process is. That’s also true of heart disease.

This same care manager reported having attempted to standardize care management across those working at this site.

. . . there are some protocols that have been set up. We had care manager meetings there for a while, and there was protocol set up as to how they wanted things done and we all pretty much follow those.

The intensity with which these services were offered was reported to vary, depending on patients’ needs (see the following section), but care plans were generated using one generic template. Some service delivery was done in person, but most was delivered over the phone.

I get my list, and throughout the quarter, I call everyone on that list and see if they’re interested in—if they have what they need, what their health concerns are, what they would like assistance with, what their goals are.

Other services were also mentioned as part of care management. One participant reported spending a lot of time in appointment assistance; specifically, for behavioral health and services that had proven difficult to find a provider to refer to (e.g., for dental care that is required prior to the patient completing a knee replacement). The participant also mentioned involvement in medication management.

This same participant also reported that, because a subset of his/her high-risk patients are high utilizers of ERs due to opioid use, a substantial amount of the role is opioid-related detective work and coordination across sites of care.

Another thing that takes a lot of my time is researching narcotic use . . . we often have patients . . . who are overusing their narcotics . . . and they don’t want to tell us. . . . I spend a lot of time communicating with other clinics, specifically pain management clinics, where the patient is getting their narcotic—this is really typical: so somebody comes into the hospital with an overdose, and I have to figure out who their pain provider is, who’s prescribing for them. And then I have to reach out to that provider to get the documentation from the hospital because the patient will not tell them. . . . Detective work . . . to coordinate the information among providers for narcotic users.
Patients in need of care management were identified via a number of methods, including risk stratification, number of chronic conditions, clinician referral, and self-referral.

...And every quarter I get this high-risk list, which is supposed to identify people at risk based on a combination of the utilization of their health-care system and the number of diagnoses in their record or the type of diagnoses in their record.

One care manager described how her practice’s three-tier risk-stratification strategy related to the level of care management delivered.

...Here’s Level 1 who’s, they’re pretty healthy, they don’t really have health issues. And then there’s the Level 2, and it’s mild; they need to be checked in probably quarterly or so, and then you update their care plans every year and stuff. But then you have the high-risk patients, and that’s who I’m also taking care of and calling about monthly and making sure that they have good care plans and good information, and just helping them manage their conditions.

That participant went on to describe varying levels of care management for patients officially in the care management program versus for patients at high risk in one or two areas but not officially part of that practice’s program.

...The high-risk, they’re focusing more in on one, maybe two, conditions to really nail down and manage very well. But with the chronic care coordination, it’s more conditions...they’re seeing tons of specialists, and they have lots of different chronic—they’re having cholesterol and blood pressure and thyroid issues, and that whole laundry list. I’m helping them sort through that and manage it...I can provide that same service for all the patients, but...it’s a little bit more keyed in for patients who are not part of chronic care management. Just like I said, we’re trying to focus in on one or two that we find is the main issue for them for the high-risk... (emphasis added)

One care manager indicated that, at her practice, she was responsible for Medicare and Medicaid patients in the program, whereas another care manager was responsible for commercial patients in the program. Together, they covered all patients needing these services at their practice. She described the evolution and spread of this more intense care management within the practice as a stepwise process that was spurred by payers.

So, the chronic care management program is a Medicare program, and then Medicaid adopted the same thing. So, it’s a service that Medicaid wants providers to offer their patients. So that’s where I started. And then once we went to CPC+, now the management of all high-risk patients, they need similar care, so I just took that population.
The MA we interviewed also reported that the practice is now beginning to conduct telephone care management calls as they have expanded to providing care management to more of their patients.

*We’re just starting . . . [to] call them and go over whatever their high risk is and make sure that they’re getting the help that they need and doing the things that the doctor had suggested to them.*

A PA commented that care management responsibilities increased over time at the site, whereas the initial job “ . . . didn’t have huddle tools that the assistants had to go through. And we didn’t do the previsit planning for every patient.”

Finally, in describing its evaluation, a care manager noted that evolution at that practice resulted in MAs absorbing some responsibilities, which allowed care managers to focus on wellness visits and patient transitions.

*Mostly at the beginning, I was just to oversee the MAs, make sure that they were—assist them in anything they were doing. I did most of the triage work as far as the phone calls. I handled most of the ordering for the physicians, for any tests or referrals or anything like that. And then as it went along, my duties, they switched a lot of that over to the MAs, let them handle a lot of it, so that we could focus more on the wellness visits, the transitions into care, making sure that the diabetic registry was up to snuff. And so, that kind of is where we’re at right now more. We still oversee the . . . we’re still the nurses to the doctors, but the MAs have taken on a lot of that responsibility now too. They do most of the rooming and refills, and I still do triage, but I don’t do nearly as much as I used to.*

**Written Care Plans**

Care managers were frequently reported to create and update written care plans, with contributions from clinicians. One clinician described this ongoing process as follows:

*I will review the care plans and make recommendations on those. If there’s any questions as to how better they should be served, we’ll communicate that with the care manager and then identify specifics as to, okay, we may need to check on this person more often. These are things I would like to have them do or come back for. I think that’s mostly it.*

In addition to written care plans, which were created and managed in primary care, one care manager reported also being able to access written care plans created and managed by behavioral health personnel. These plans were separate from the ones created and managed by care managers, but they were closely related.

*I can read her notes because it’s in-clinic. So, if that’s part of anything that I can follow up on [I will]. But for the most part, that’s something she manages.*

Clinicians were also involved in drafting and sharing written care plans for patients. Written care plans were created in addition to visit notes and were provided to patients, to be discussed and updated during each subsequent visit.
Participants indicated that care plans were more or less complex, depending on the patient’s need and level of engagement.

...the care plans that are provided by the case manager for the Medicare population are detailed beyond what is necessary for most other patients. It just depends on their degree of complexity...the detail of that and how often they’re revised and that kind of thing is all dependent upon the severity and complexity...

The goal of case management—or at least I would hope the goal is—to help people improve their health. And in our population, there are very few people that are interested in improving their health. So the care plans are supposed to be like, you’ll get a better lab value in the future, you’ll lose weight, you’ll do whatever. Almost never is the patient interested in doing something like that. But when they are, that’s really a great care plan. Most of the care plans are—we will help you navigate the health-care system, we’ll help coordinate your care, we’ll communicate with you, explain things to you, provide you with resources, those kinds of things. I wish that we did more of the actual preventative and educational stuff with patients, but there just is not a lot of interest in that.

One key driver of the evolution of written care plans was PCMH requirements, which induced the development of more detailed care plans for patients.

[That said,) we are actually required, because of us being a patient-centered medical home, to have care plans for everyone who has chronic health conditions...We are still working on, to get care plans for all of the rest of our patients. Because historically, before it was required, it was more generic, and now we’re making it much more specific for each person, and that’s something that is in process right now.

Insurers also drove the evolution of written care plans. Some were seen as burdensome to the practice.

...[W]hat you’re talking about, there is a very specific thing for chronic care management, which is an her-generated process to satisfy quality metrics with some of the insurance companies. But I mean, every single patient has a care plan generated for whatever problems they present with [for the insurance companies]. I have to click a bunch of buttons.

**Previsit Planning**

The activities involved in previsit planning were similar across practices, with the major difference being who was involved in the previsit planning. Previsit planning was done in one of two ways: one time per day or in between patients, for each upcoming patient. Either way, it was done by support staff (e.g., patient navigators or MAs).

In both cases, support staff reviewed the patient chart to make sure preventative care activities had been performed and to assess whether any outstanding tasks needed to be queued for the clinician prior to the patient visit. In one practice, a practice manager was involved in
creating a template for support staff to follow when completing the previsit plan. That manager was also involved in updating the template as needed.

When a clinician was involved, that person was generally reviewing the information queued by the practice staff. One clinician described her role in previsit planning as follows:

*I review my charts the morning of, and I will go—if they’re there for some chronic disease management. I’m going into that chart and reviewing their last note, what their blood pressure was if it was for hypertension, what changes were made last time. I’m identifying if they are due for labs, if they’re diabetic and we need to do their foot exam, for example, or if they need their eye exam. The health navigator does identify those, but I’m kind of double-checking before that visit takes place that morning of, and I’m discussing that with my medical assistant—any specifics as to needs for that patient or if we want to have a referral already placed, and so we don’t have to do that at the end of the visit.*

**Team Huddles**

Team huddles were performed in one of two ways: as a one-time scheduled event, multiple times a day, or on an ad hoc basis. For practices performing scheduled huddles, an MA would queue patient information (through a previsit planning process) for clinicians to review during their team huddle. In this case, the lead clinician was not involved in previsit planning and reviewed the information queued during the huddle. These huddles were done daily with the clinicians who were treating patients. MAs were not part of the huddle; instead, they worked closely with their clinicians and checked in with them throughout the day.

Other practices performed and scheduled their team huddles on an ad hoc basis, based on clinician decisionmaking about which patients required a huddle in a given day. These huddles included a lead clinician, an MA, and sometimes a practice manager.

*I have some providers who include me in on huddles when they decide that they can see more patients, or to reduce the amount of time, they’ll include me in on it.*

The huddles were done in one of two ways—either in person or through a chat function on the computer—but were always done immediately before a patient visit. Whether to use the chat tool or perform huddles in person was determined by the proximity of the MA to the clinician. Some MAs were stationed away from the clinician, while others worked nearer to their lead PCP. Huddle frequency varied based on clinician preference.

*It’s provider preference. There’s always going to be those specific patients that “We need to discuss this patient before I go in,” but otherwise it’s just provider preference.

Additionally, there were ad hoc MA-only huddles. These were organized by MAs and were done when one MA needed help with a patient.