TITLE: MEASURING PATIENT EXPERIENCE DURING THE COVID-19 PANDEMIC AND BEYOND

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Abstract

Measuring patients' primary care experiences during the novel coronavirus pandemic is critical to ensuring that patients receive the care they need. Traditional patient experience measures may not fully capture the changes quickly transpiring in patient care due to COVID-19. This paper presents a questionnaire that could be a helpful starting point. The questionnaire addresses topics such as telehealth and non-visit-based care; care by non-physicians; discussion about end-of-life preferences, domestic violence, social health needs; and primary care follow-up after acute care. The questionnaire was developed for the evaluation of the Centers for Medicare & Medicaid Services' Comprehensive Primary Care Plus model.

Keywords

- Patient experience
- Primary care
- Survey measures
- Innovative care models
- Telehealth
- COVID-19

List of abbreviations

- AHRQ = Agency for Healthcare Research and Quality
- CAHPS = Consumer Assessment of Healthcare Providers and Systems
- CG CAHPS = Clinician and Group Consumer Assessment of Healthcare Providers and Systems
- CMS = Centers for Medicare & Medicaid Services
- CPC+ = Comprehensive Primary Care Plus
- ED = emergency department

Introduction

The novel coronavirus has drastically changed the landscape of primary care. To limit transmission of the virus, health care delivery is undergoing a massive pivot away from traditional office visits toward non-office-visit-based care, meaning that more patients than ever before are receiving health care via telephone, email, patient portal messages, and video appointments. In addition, providers other than a patient's regular primary care doctor may increasingly deliver care as health care resources shift to cover surges of patients. Measuring patient experience of care in this new primary care environment is critical to ensuring patients are still able to get care they need.

Surveys about patient experience of care provide important feedback to primary care practices, health plans, and health care services researchers.2-4 The Consumer Assessment of Healthcare Providers and Systems (CAHPS®) family of surveys often serves to assess patient experience. However, CAHPS surveys implicitly assume that patients predominantly receive

care through in-person office visits with practitioners.5,6 Changes in health care technology and models of care delivery, especially now in the time of COVID-19, mean that the CAHPS surveys might not fully capture patient experience.7

Developing thoroughly tested new survey questions takes time, so for now, we can offer a modified patient experience survey as a start. We developed this questionnaire as part of our evaluation work for the Centers for Medicare and Medicaid Services' (CMS) Comprehensive Primary Care Plus (CPC+) model. With nearly 3,000 participating primary care practices, CPC+ is CMS's largest primary care delivery transformation model to date .8 We tailored the CPC+ patient survey to the innovative care delivery that CPC+ promoted, but some of the specialized content may now also be useful during the current pandemic: moving health care outside the office, moving from physician-only care to care from a broader team, addressing patients' end-of-life preferences, screening for social needs (such as food insecurity and domestic violence), and primary care follow-up after acute care. The questionnaire includes 43 questions about care delivery and 5 about sociodemographics (see online appendix) with an estimated completion time is 15 to 20 minutes. To date, Mathematica has fielded the survey by mail to more than 80,000 Medicare beneficiaries following standard CAHPS survey administration protocols.9

Methods

We developed the CPC+ patient survey based on CAHPS surveys, including the core Clinician and Group (CG)-CAHPS 3.0 survey, the CG-CAHPS 3.0 Patient-Centered Medical Home supplement, and other established patient surveys.4, 6,10-14 We also incorporated key elements of the CPC+ model and feedback from experts in patient experience and primary care from the Center for Medicare & Medicaid Innovation and CAHPS experts in patient experience and primary care. To test the instrument, we recruited a convenience sample of 73 respondents age 65 or older from urban, suburban, and rural geographic areas across the United States with different levels of education. Pre-testing focused on older adults because the CPC+ patient survey is only administered to Medicare beneficiaries, most of whom are older than age 65.

We conducted five rounds of hour-long cognitive interviews regarding subsets of the new questionnaire via telephone. The interviews used concurrent "think-aloud" interviewing techniques (in which participants are instructed to think aloud as they answer questions to gather their initial thoughts and responses) and targeted verbal probes (to ask about specific aspects of the survey questions of interest to the researchers).15 Participants received a \$50 check for completing interviews.

Results

We present four sets of findings from the CPC+ patient survey testing relevant to how primary care is changing with COVID-19; Table 1 includes examples of final questions.

(1) Including questions that situate health care in different settings primed respondents to think more broadly about health care. To orient respondents to a new primary care landscape, we first asked patients how they had received care recently, listing common experiences, such as having a scheduled appointment, and many possible alternatives to the

traditional office visit, such as telehealth and email interactions as options. These questions primed respondents to consider many modes of receiving health care as they answered the survey and, in a way, taught them a broader definition of health care.

- (2) Replacing office visit and physician-centric language with more inclusive language enabled us to measure non-visit—based care and care from a broader team of people from the doctor's office. The CG-CAHPS survey asks about care that patients receive during scheduled, in-person office visits with a named provider, which, until COVID-19, reflected most patients' experiences. To account for non-visit—based care, we changed CG-CAHPS's office-visit-centric language (such as "get an appointment" and "did you see") to a broader phrase ("get care"). To account for care provided by someone other than the patient's lead provider, we changed provider-centric language ("how often did this provider") throughout the survey to language that included others ("people from this doctor's office, including your doctor"). These new phrases, though slightly wordy, were easy for respondents to understand and fully encompassed anyone they might have seen or talked with.
- (3) Adding questions on elements of care usually not covered in standard patient experience measures that are particularly relevant now—such as advance care planning, social health needs, and domestic violence—required additional design work, such as tailoring question wording to our target population. To assess these topics, we developed new survey questions using plain language and specific examples to help respondents interpret the question. For example, to capture screening for domestic violence, an area of concern during shelter-at-home orders, we found that the standard domestic violence screening language of "feeling safe at home" did not work well for our older sample. Some of our respondents thought this phrase referred to feeling safe from fall risks or feeling independent enough to care for themselves without supports such as home health services. Therefore, we changed the wording to ask more directly about abuse and violence.
- (4) Adding survey questions on emergency department (ED) visits, hospital admissions, and follow-up by primary care practices after ED visits and hospitalizations can measure the experience of patients most severely affected by COVID-19. These questions, modified items developed by Mathematica for a previous CMS evaluation survey, can evaluate how primary care can take over after acute care, a topic relevant to the experiences of recovering COVID-19 and other patients.4

Discussion

The patient survey we developed to help evaluate CPC+'s innovative model of care delivery can be a useful starting point to measure patient experience for other innovative models and during the COVID-19 pandemic. The final CPC+ survey reflects major shifts in primary care delivery emphasized by CPC+ (such as non-visit–based care, care from a broader team from the

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office, and follow-up after acute care after hospitalizations and ED visits) and assesses patient experiences with newer areas of focus in primary care, such as social health needs, domestic violence, and advance care planning; all areas of care likely affected by the pandemic.

The instrument development and testing process had two primary limitations. First, we drew pre-test participants from a small convenience sample (N=73) that was not representative of the general population. Second, because of the necessity of developing the instrument quickly for the evaluation, the reliability and validity have not been tested psychometrically.16 Still, we think this survey could serve as a starting point to assess patients' experiences of care in new primary care environments.

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Conflict of Interest Statement

The authors report no conflicts of interest.

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Table 1. Sample survey items for measuring patients' new experiences with primary care

(1) New survey items to prime respondents to	think more broadly about health care
Asking about more-common ways to get care	Asking about less-common ways to get care
Patients can get health care in different ways. How did you get care in the last 6 months from this primary care doctor's office? <i>Mark one or more.</i>	Did you get any other kinds of care from this doctor's office in the last 6 months? <i>Mark one or more.</i>
 ☐ Had a scheduled appointment at this doctor's office ☐ Had a same-day appointment or walk-in visit at this doctor's office ☐ Received help from this doctor's office to fill prescriptions, set up medical tests, or schedule appointments ☐ Discussed your health with your doctor or someone from this doctor's office via phone, email, text messaging, or a patient portal 	 Your doctor or someone from this doctor's office came to see you in the hospital Your doctor or someone from this doctor's office came to see you at another location besides this doctor's office or the hospital to provide health care (such as at your home or a senior center) Had a video appointment with your doctor or someone from this doctor's office Attended a group medical appointment arranged by this doctor's office with other patients who have similar medical issues
☐ None of the above	Received help from this doctor's office to fill prescriptions, set up medical tests, or schedule appointments None of the above
(2) Modified CAHPS items to better measure experiences with non-visit–based care and care from a broader team of providers	
Original CG-CAHPS question wording	Final CPC+ Patient Survey wording
In the last 6 months, did you contact this provider's office to get an appointment for an illness, injury, or condition that needed care right away?	In the last 6 months, did you contact this doctor's office to get care for an illness, injury, or condition that needed care right away?
In the last 6 months, did you see a specialist for a particular health problem?	In the last 6 months, did you get any health care from a specialist?
In the last 6 months, how often did this provider listen carefully to you?	In the last 6 months, how often did people from this doctor's office, including your doctor, listen carefully to you?
In the last 6 months, did someone from this provider's office ask you if there are things that make it hard for you to take care of your health?	In the last 6 months, did your doctor or someone from this doctor's office ask you if there are things that make it hard for you to take care of your health?

Table 1, continued. Sample survey items for measuring patients' new experiences with primary care

(3) New survey items to measure topics of special interest during the COVID-19 pandemic

Social health needs screening

In the last 6 months, did your doctor or someone from this doctor's office ask you about any **non-medical problems you might need help with**? These might include things like problems paying for or finding a place to live, not having enough food, lack of reliable transportation, or trouble paying utility bills.

Interpersonal violence screening

In the last 6 months, did your doctor or someone from this doctor's office ask you if you have any problems with abuse or violence at home or in your neighborhood?

Advance care planning

An **advance care plan** describes a patient's wishes for end-of-life care in case the patient becomes too sick to make his or her own decisions. In an advance care plan, patients can choose family members or friends to make medical decisions for them, including health care that patients may not want.

Advance care plans are often recorded in a document such as an advance directive, a do not resuscitate (DNR) order, health care power of attorney, or a living will.

Do you have any kind of advance care plan?

(4) Survey items to assess follow-up by primary care practices after emergency department and hospital visits

Follow-up after an emergency department visit

In the last 6 months, have you gone to an emergency room or emergency department for care? Please do not include visits to an urgent care center.

IF YES: Did your doctor or someone from this doctor's office contact you to discuss your health needs within one week after your most recent emergency room or emergency department visit?

Follow-up after an overnight hospital stay

In the last 6 months, have you been a patient in a hospital overnight or longer?

IF YES: Did your doctor or someone from this doctor's office contact you to discuss your health needs within 3 days after your most recent hospital stay?

Sources: Clinician and Group Consumer Assessment of Healthcare Providers and Systems 3.0 and the 2019 Comprehensive Primary Care Plus Beneficiary Survey.