CBE ID

4825

Title

The percent of contraceptive care patients giving “top box” scores on a PRE-PM focused on quality of contraceptive care (the Person-Centered Contraceptive Counseling [PCCC] measure), within a 6-month lookback period

Project

Primary Prevention

Endorsement Status

Endorsed

Is Under Review

No

Next Maintenance Cycle

Spring 2030

Previous Endorsement Cycle

Spring 2025

Initial Endorsement

Tue, 08/26/2025 - 07:33

Steward

University of California, San Francisco

1.0 New or Maintenance

New

1.1 Measure Structure

Single Measure

1.3 Electronic Clinical Quality Measure (eCQM)

No

1.6 Measure Description

The measure is a PRE-PM, which calculates the percentage of contraceptive care patients who give a “top box” score for their experience of contraceptive counseling. The measure is a four-question survey which asks patients about key components of patient-centered counseling, including respect and adequate information. A “top box” score is defined as a response which gives the highest score for each of the four questions. Respondents give answers evaluating the quality of contraceptive care they received in the past six months.

1.7 Measure Type

Patient-reported Experience Performance Measure (PRE-PM)

1.8 Level of Analysis

Health Plan, Population or Geographic Area

1.8a Population or Geographic Area Level of Analysis

Regional and State-level

1.9 Care Setting

Other

1.9b Other Care Setting

Primary care and reproductive health settings

1.10 Measure Rationale

Patient experience of contraceptive counseling is an important outcome, in that it is highly valued by patients [1] and measures patient-centeredness, a core aspect of care quality as defined by the National Academy of Medicine (previously Institute of Medicine) in its report, Crossing the Quality Chasm [2]. Additionally, patient-centeredness of contraceptive counseling has been demonstrated to be associated with contraceptive continuation at six months [3], indicating a relationship between patient experience of counseling and the ability of patients to achieve their own reproductive goals, including pregnancy prevention. Patient experience has also been linked to improved engagement with care in various contexts [4,5]; in the context of contraceptive care, this means that patients who receive patient-centered care may feel more able to continue engaging with the reproductive health care system not only for contraception but also if and when they become pregnant and/or give birth [6] and for their other reproductive health needs. As such, positive patient experience of contraceptive counseling can support positive pregnancy and birth outcomes such as reduced maternal mortality.

Given the important implications of patient-centeredness of contraceptive counseling, both for patient experience and reproductive health outcomes, many healthcare organizations are invested in gathering information on the experiences of their patients and improving those experiences at various levels of aggregation. The Retrospective Person-Centered Contraceptive Counseling measure (PCCC-RS) is a four-item patient-reported experience performance measure (PRE-PM), informed by the input of a patient stakeholder group and a healthcare quality expert workgroup and designed to give state healthcare organizations and health plans an opportunity to understand the quality of their patients' experience of contraceptive counseling. Adapted from the visit-specific Person-Centered Contraceptive Counseling (PCCC) Measure (CBE #3543), the PCCC-RS measure allows for state and regional population-level and health plan-level sampling.

The original, visit-specific PCCC measure collects information on the quality of care at a specific encounter and is endorsed for use at the facility and provider level. The PCCC-RS measure, in

contrast, asks patients to reflect on the quality of contraceptive care across a six-month lookback period, with aggregation of scores at the level of region and state population and health plan. This higher level of aggregation allows for public reporting and accountability and can be used to track changes in quality in response to interventions at these higher levels. Use of this measure at the state/region and health plan levels also uplifts the importance of patient experience metrics as population metrics. We expect its use will encourage providers to invest in high-quality contraceptive care practices. While PCCC-RS results are intended to have stand-alone value to organizations, the measure exists in an ecosystem of person-centered measures working to improve the quality of contraceptive services. This includes measures of contraceptive use and provision, as well as screening for contraceptive need. Widespread use of validated performance measures for contraceptive care in diverse care contexts has the potential to improve patient experience and reproductive outcomes, particularly in underserved populations. Improvement in the quality of contraceptive care has been shown to improve people's ability to identify methods that they can use over time and to promote engagement with health care across the reproductive life course (1–3), which will improve people's reproductive outcomes and therefore would also be expected to have a positive impact on health care costs.

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1;4:100081.

1.11 Measure Webpage

https://pcccmeasure.ucsf.edu/retrospective-pccc

1.13 Data Dictionary

Not attached. I attest that all information will be provided where codes and/or value sets are needed (1.14a - 1.15c).

1.14 Numerator

The PCCC-RS is a retrospective measure of patient-centeredness in contraceptive counseling. It specifically measures how many patients report a top-box (i.e., the highest possible) score of patient experience in their contraceptive counseling interactions during any visits in the last 6 months.

1.14a Numerator Details

The PCCC-RS is a retrospective measure of patient-centeredness in contraceptive counseling. It specifically measures how many patients report a topbox score of patient experience (i.e., the highest possible summative score out of 20, adding together the four items of the scale, each with individual score ranges from 1-5) in their contraceptive counseling interactions during any visits in the last 6 months.

1.15 Denominator

The target population for the PCCC-RS is patients aged 15-45 who were assigned female at birth, who are not currently pregnant, and who received contraceptive counseling as part of their visits in the last 6 months prior to being surveyed.

1.15a Denominator Details

The denominator includes all eligible patients who completed the PCCC-RS. Specifically, individuals are eligible for the PCCC-RS if they are 15-45 years of age, assigned female at birth, are not currently pregnant nor have given birth in the preceding six months, and have received any contraceptive counseling as part of their visits in the six months prior to being surveyed. Potentially eligible patients are initially targeted by identifying all patients with a recorded female sex aged 15-45 years of age with a record of receiving services in the preceding six months. Eligibility is further determined by the following eligibility screening question: “In the last 6 months, did you talk about contraception or pregnancy prevention with a member of a healthcare team (including any doctor, nurse, medical assistant, etc.)?". Two separate questions ask patients to self-report their current pregnancy status and whether they have given birth in the preceding six months. Those who respond “Yes” to the screening question, do not indicate current pregnancy or pregnancy in the preceding six months, and respond to all four items of the PCCC-RS comprise the denominator.

1.15b Denominator Exclusions

Pregnant and recently postpartum patients (i.e. pregnant in the preceding six months) are excluded from the denominator because contraceptive counseling during this period has unique considerations. Specifically, given distinct issues related to postpartum contraceptive use, including increased risk of blood clots, effect on lactation, and the health impact of birth spacing, counseling pregnant women about future contraceptive use has components distinct from that of non-pregnant women. For these conceptual reasons, the PCCC-RS was designed for use with non-pregnant patients and has not been extensively tested with pregnant patients to determine whether it accurately captures their needs and desires for counseling. Pregnant or recently postpartum patients self-identify as such in the patient survey. Of note, our team is currently conducting work to develop and validate a measure that would capture patient experience of contraceptive counseling in the peripartum period, taking into account the unique aspects of this point in the reproductive life course.

1.15c Denominator Exclusions Details

The PCCC-RS survey asks patients if they are currently pregnant or if they have given birth in the last six months, and these responses are excluded from the calculation of the measure.

1.15d Age Group

Other

1.15e Age Range in Years

15-45

1.16 Type of Score

Rate/proportion

1.17 Measure Score Interpretation

Better performance = Higher score

1.18 Calculation of Measure Score

Measure users should follow these steps in order to obtain measure results:

1. Identification and data collection
    1. Survey distributors identify all patients within the network (health plan and/or all health plan networks in a state or region) aged 15-45 years with documented female sex who received services within the preceding six months
    2. Patients are sent the survey using established patient surveying pathways or new surveying efforts, e.g. through patient portal, email, text, or mailed paper survey
    3. Patients who receive the survey will answer the following screening question, “In the last 6 months, did you talk about contraception or pregnancy prevention with a member of a healthcare team (including any doctor, nurse, medical assistant, etc.)?". This question serves to identify those within the target population who had any encounters relevant to the PCCC-RS (individuals who received contraceptive

counseling the past six months)
    4. Patients who answer “Yes” to the screening question complete the survey (self-administered via mailed paper survey or electronically, e.g. a link sent through patient portal, text, etc.)
    5. Patient responses are collected into an electronic database for analysis, either through data entry of paper surveys or collation of electronic survey responses
2. Data aggregation and measure calculation
    1. Patients indicating that they did not receive contraceptive counseling have their responses excluded
    2. Patients indicating that they are currently pregnant or have given birth in the last 6 months have their responses excluded
    3. Patients who did not answer all four items of the PCCC-RS have their responses excluded
    4. Measure responses are summed as the total of all PCCC-RS item values (maximum value of 20)
    5. PCCC value sums are dichotomized as a maximum value of 20 (topbox score) versus any value less than 20
    6. Measure result is calculated as the percentage of patients responding with a topbox score, divided by the total number of patients who gave any complete response to the survey, on a region/state or health plan-level

1.19 Measure Stratification Details

The measure is not stratified.

1.20 Types of Data Sources

Patient-Reported Data and/or Survey Data

1.20c Format: Patient-Reported Data and/or Survey Data

Non-digital

1.21a Data Collection Tool URL(s)

https://pcccmeasure.ucsf.edu/retrospective-pccc

1.22 Proxy Responses

No

1.23 Survey Respondent

Patient

1.24 Data Collection and Response Rate

As described in section 1.18, accountable entities send the survey to all patients with documented female sex and between the ages of 15 and 45 years who received services in the preceding six months using established patient surveying pathways, e.g. through patient portal, email, text, or mailed paper survey. The survey is self-administered and can be completed in English or Spanish.

The anonymous nature of the survey should be emphasized, with assurance that answers to the survey will not be linked to the individual patient and will not impact care. Respondents first answer a screening question asking them to verify if they have received contraceptive counseling in the past six months. Those who say no are screened out and do not complete the survey.

The response rate is calculated as the number of patients to whom a survey is administered who returns a completed survey, divided by the number of patients asked to complete a survey. Improving response rates is possible through mixed-mode protocols, such as calling patients to request that they complete a survey sent through text message.

1.25 Data Source Details

None.

1.26 Minimum Sample Size

We recommend a minimum sample size of 150 patients to achieve adequate reliability in both region/state population and health plan levels of analysis.

2.1 Attach Logic Model

LogicModel_Section2.1_4.23.25_508.pdf

2.2 Evidence of Measure Importance

There are demonstrated gaps in the quality of contraceptive counseling. Analyses utilizing the 2017-2019 wave of National Survey of Family Growth (NSFG) found that only 58% rated quality of contraceptive care received over the last year as optimal, demonstrating a gap nationally (1). A similar national survey conducted by KFF in 2022 found only 40% reported optimal counseling (2). Use of the visit-specific PCCC measure (CBE #3543), has demonstrated a range of scores from 30% to 95% at the health center level in community health centers across the country, suggesting differential care at the health facility level (3). To understand gaps in quality, studies have explored inadequacies in contraceptive counseling. In multiple studies examining patient experience of counseling, patients reported receiving information from their providers that was inadequate to support them in making an informed decision on contraception (4–7), and the patients felt dissatisfied with the patient-centeredness and adequacy of counseling overall (7–10). Research conducted by our team at UCSF examining quality of counseling via audio recording of patient visits found that providers inconsistently elicited or engaged with patient experiences and preferences during counseling (11,12).

Gaps in quality of contraceptive care are experienced inequitably. Analyses using the version of the Retrospective Person-Centered Contraceptive Counseling measure (PCCC-RS) integrated into the 2017-2019 wave of the NSFG have found lower scores among Black, Spanish-

speaking Latine, low-income, and gay and bisexual patients (1,13). Similar differences were noted in the national KFF survey in 2022 (2). Other studies have surfaced indications of poor quality of contraceptive care differentially experienced by women of color, such as low-income women of color having greater odds of being advised to limit their childbearing (14) and greater emphasis on highly effective methods by providers when counseling women of color (10,15). A randomized controlled trial explored this dynamic explicitly by using a standardized patient approach and found that providers were more likely to recommend an intrauterine device to standardized patients identified as low-income Black or Latina compared to those identified as white. (16) This is further elucidated in qualitative research, where Black, Latine and low-income patients describe themes of discriminatory and/or coercive contraceptive care practices (17–21). Scholars have highlighted that these differential practices are rooted in a longstanding history of racial and class discrimination and systemic oppression (22–25). Thus measuring and monitoring quality of contraceptive counseling is important to address healthcare disparities and promote health equity.

Patient experience is an outcome meaningful and important to patients and aligned with positive health outcomes. Patient experience is an important outcome in and of itself, in that it is highly valued by patients (4) and measures a core aspect of quality care – patient-centeredness – as defined by the National Academy of Medicine in its report Crossing the Quality Chasm (26). A large body of evidence demonstrates how patient experience is associated with a range of health outcomes, structures, and processes. This includes two systematic reviews (one UK-based (27) and one US-based (28)), which both found that patient experience was positively associated with outcomes such as seeking and adhering to preventive care treatments, and positive clinical health outcomes, including self-rated health, engaging in heath-promoting behavior, and primary care utilization. In addition, a 2009 meta-analysis of 127 studies documented that the quality of provider communication, which is the specific aspect of patient-centeredness measured by the PCCC-RS, was directly associated with patient treatment adherence (29)**.**

Patient experience of high-quality contraceptive counseling enables patients to meet their reproductive goals. In the context of contraceptive care specifically, the patient-centeredness of contraceptive counseling is associated with contraceptive continuation and satisfaction (30,31). By working to improve patient experience, health care entities can therefore help support their patients achieve their reproductive goals, such as pregnancy prevention. Further, qualitative data suggests that patients who experience non-patient-centered contraceptive care are less likely to return to seek out care for future reproductive health needs (17,32). This has the potential to negatively impact a range of outcomes, including pregnancy-related morbidity and mortality.

The PCCC-RS provides the ability to monitor contraceptive counseling at region/state population and health plan levels, which is particularly critical given the use of contraceptive provision performance measures (CBE #2903 and #2904) at these levels, which has the potential to incentivize coercive contraceptive practices. The motivation

behind the development of the visit-specific PCCC originated during the Department of Health and Human Services Office of Population Affair's (OPA's) development of measures CBE #2903 and #2904, which focus on most and moderately effective contraception and long-acting reversible contraceptive (LARC) methods. The OPA team and others involved in the measure development process foresaw that use of these important measures could have the unintended consequence of incentivizing provider pressure on patients to use more effective methods and away from use of prescription methods. During the Consensus-Based Entity endorsement process, this concern was voiced by stakeholders, including the National Partnership for Women & Families (NPWF). The NPWF submitted a public comment that stated, "It is extremely important to keep in mind that reproductive coercion has a troubling history, and remains an ongoing reality for many, including low-income women, women of color, young women, immigrant women, LGBT people, and incarcerated women. We hope this measure will be paired with a woman-reported 'balancing measure' of experience of receiving contraceptive care. Such a measure can be expected to help identify and/or check inappropriate pressure from the health care system." CBE #2903 and #2904 have been endorsed, institutionalized, and included in the CMS Adult Core Set (33), making to mandatory for states to report. The visit-specific PCCC measure (CBE #3543), however, cannot be evaluated at this level due to the infeasibility of collecting a population-level sample at the time of the visit. Therefore, in addition to the value of having information about the quality of contraceptive counseling at the region/state and health plan levels in its own right, the PCCC-RS is also critical as a balancing measure of patient experience of contraceptive counseling at the state/region and health plan levels, allowing for the collection of population-level data using a retrospective lookback approach aligned with the Consumer Assessment of Healthcare Providers and Systems Clinician & Group (CG-CAHPS) and other measures of patient experience.

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2.3 Anticipated Impact

Desired outcomes: The PCCC-RS is designed to help states/regions and health plans assess the quality of contraceptive counseling within their networks. Our desired impact for this measure is to help patients achieve their reproductive health life goals, as fits their self-defined needs and preferences. The outcomes associated with the use of this measure fall into three categories: short-term, medium-term, and long-term outcomes. Our short-term goals include having more patients report on their counseling experiences and share their feedback with administrators at their health plan, as well as establishing ongoing monitoring of the quality of contraceptive counseling at the state or regional level. Outcomes also include increasing administrator knowledge and awareness of the quality of contraceptive counseling within their states or networks. As administrators are more aware of contraceptive care quality and encourage quality improvement efforts in their networks/health plans, this leads to the medium-term outcomes of improved quality of contraceptive counseling, improved patient experience, and increased trustworthiness of reproductive care across geographies and health plan networks (1). An increase in focus on contraceptive care and with quality improvement practices, improves the quality of counseling across the network. Specifically, by collecting PCCC-RS, systems will be able to better support patients and meet their reproductive health needs by improving this contraceptive counseling quality. With increased attention to patient feedback and improved contraceptive counseling, better trust with patients may be established, which can improve adherence to care plans and lead to better health outcomes (2–6). Long-term outcomes of utilizing this measure can include increasing usage of patient-preferred contraceptive methods and, thus, a decrease in undesired pregnancies.

Adverse events or costs avoided: No adverse events were reported by users of the PCCC-RS. While no direct costs were reported to be avoided, health plans may better utilize their resources by targeting areas for quality improvement identified by this measure, rather than applying quality improvement resources more broadly.

Improvement in the quality of contraceptive care has been shown to improve people’s ability to identify methods that they can use over time and to promote engagement with health care across the reproductive life course, which will improve people’s reproductive outcomes and therefore would also be expected to have a positive impact on health care costs. Moreover, while the goal of this measure is not to control fertility outcomes, improved alignment between care and patient preferences can lead to better health outcomes and more efficient use of healthcare resources.

Unintended consequences: As reported, some people may feel uncomfortable with some of the questions asked during the survey. However, respondents may refuse to answer any question they

don’t want to answer and may stop the survey at any time with no consequence. All data is anonymous and aggregated, so information cannot be tied to an individual.

Our team learned through dialogue with patient stakeholders during the development process for our visit-specific PCCC survey (CBE # 3543) that many patients directly benefited from the opportunity to respond to a measure about their patient experience of contraceptive counseling. By having their feedback solicited, patients felt more engaged in their medical care and aware of their right to receive care focused on their needs (5,6).

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2.4 Performance Gap

To assess variation of our proposed PRE-PM at a state population level, we worked with twelve Planned Parenthood Federation of America (PPFA) affiliates to collect the PCCC-RS. These affiliates act as state-level equivalents (SLE) for population-level analyses, aligned with how data from PPFA affiliates were used in testing for measures CBE #2902, #2903, and #2904. For this analysis, PPFA collected data from 3,284 patients from 9/1/2023-4/1/2024.

Washington Health Care Authority (WA HCA) served as a representative of health plan data collection. WA HCA collected data from 151 patients from 5/1/2024-10/3/24.

Across the twelve units of analysis of PPFA, performance score ranged from 36.9% to 72.9%, with a median score of 58.6%, demonstrating a wide range of performance scores. This presents evidence of an existing performance gap for this measure at the population level. Since we only have data from one health plan, we cannot provide deciles of scores at that analysis level. WA HCA score was 48.3% (not included in table), which is both within range of the PPFA results and demonstrates opportunity for improvement.

Table 1. Performance Scores by Decile

Performance Gap

	Overall	Minimum	Decile_1	Decile_2	Decile_3	Decile_4	Decile_5	Decile_6	Decile_7	Decile_8	Decile_9	Decile_10	Maximum
Mean Performance Score	0.586	0.369	0.369	0.503	0.507	0.540	0.586	0.593	0.599	0.605	0.626	0.729	0.729
N of Entities	12	1	1	1	1	2	1	2	1	1	1	1	1
N of Persons / Encounters / Episodes	3284	168	168	137	148	342	1019	351	576	248	188	107	107

2.4a Attach Performance Gap Results

Table 2.4a_508.pdf

2.5 Health Care Quality Landscape

The PCCC-RS meaningfully adds to the landscape of contraceptive care quality measures. Existing measures, including the OPA-developed measures for contraceptive provision (CBE #2902, 2903 and 2904), the Contraceptive Use electronic clinical quality measure (CU-SINC; CBE#3699e and 3682e), and the Contraceptive Care Screening eCQM (CCS-SINC; CBE #4655e) are valuable tools for assessing access to contraceptive care, including access to counseling and contraceptive methods.

The visit-specific PCCC (CBE #3543) was the first validated and endorsed measure of the quality of patient experience of contraceptive counseling. However, this measure primarily assesses immediate counseling quality, making it difficult for health systems and policymakers to evaluate whether providers and systems are consistently supporting person-centered decision-making, and infeasible for collection at the population level. Some health systems and insurers rely on retrospective data collection (e.g., surveys sent periodically) for patient experience surveys, such as CG-CAHPS. A measure that aligns with this methodology can improve data collection feasibility, as well as allow for actionability at higher levels of aggregation by enabling meaningful quality improvement efforts at the state/region- and plan-level. The PCCC-RS, with its six-month lookback period, meets the standard for use at the population and health plan level and provides a more comprehensive assessment of care over time.

The contraceptive provision measures, contraceptive use measures, and contraceptive care screening measures are the only other CBE-endorsed measures to address quality in the context of contraceptive care. An original motivation for the visit-specific PCCC development was the need for a PRE-PM of patient-centered contraceptive counseling to balance use of contraceptive provision measures. However, as described above the visit-specific PCCC is infeasible for use at a state/region or health plan level, necessitating the development of the PCCC-RS. The CU-SINC and CCS-SINC eCQMs were developed to be more patient-centered measures of contraceptive use; however, they do not capture patients' experiences with care. When contraceptive use, contraceptive screening, and PRE-PMs are used together, these measures can provide a robust picture of contraceptive care quality and ensure that advances in contraceptive provision do not come at the cost of patient experience.

2.6 Meaningfulness to Target Population

The choice of a contraceptive method is a highly preference-sensitive decision with multiple medically appropriate options. Each patient has unique preferences regarding key contraceptive method attributes, such as pregnancy prevention, side effects, and menstrual cycle control. Research also shows the patient experience is influenced by historical and ongoing forceful and coercive practices of pressuring patients, particularly low-income patients and Black and Latine patients, to use contraceptive methods that they do not want (1–6). The visit-specific PCCC (CBE#3543) and PCCC-RS measures have been specifically designed with patient and provider stakeholder input to reflect the individualized nature of contraceptive counseling and ensure that patient-centered care is prioritized, which can help safeguard against care inequities.

The visit-specific PCCC was derived from the Interpersonal Quality of Family Planning scale (IQFP) (7). The IQFP is a validated 11-item scale of patient experience of contraceptive counseling that addresses three domains of contraceptive counseling preferences: interpersonal connection, decision support, and adequate information. These domains and items were elucidated though qualitative interviews with patients (8).

To create the visit-specific PCCC, a short form of the IQFP, we conducted cognitive interviews with 33 patients (10 in English, 13 in Spanish, and 10 with bilingual participants with substantial discussion in both languages) to understand which items held the greatest relevance and importance to patients (9). The items included in the final measure were those that held greatest importance to patients while also continuing to reflect the domains of patient importance identified in the IQFP, as well as maintaining the scientific validity and acceptability.

The items contained in PCCC-RS are the same as the visit-specific measure. However, it was important that we assess the appropriateness of the specific lookback period and additional

changes made to the measure stem. We tested the relevance of these qualities of the measure through iterative engagement with the Person-Centered Reproductive Health Program's Patient Stakeholder Group (PSG). The PSG, a standing group of nine individuals assigned female at birth, provided critical feedback on survey elements, ensuring accessibility and relevance. All members of the PSG confirmed that providing feedback on their healthcare experiences with contraceptive counseling at a population level is meaningful, as it informs system-level improvements.

Specific refinements based on patient input included adjusting language for clarity, such as replacing the term "member of the healthcare team," and shortening the lookback period from twelve months to six months to improve recall accuracy (also confirmed through a Delphi process of quality improvement leaders, as discussed in section 5.3). These changes were incorporated into the measure before finalization. Overall, our patient engagement and review of the literature demonstrates that the target population values the measured outcome and finds the feedback process meaningful in enhancing contraceptive counseling experiences.

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3.1 Contributions Towards Closing Care Gaps

Inadequate and inequitable experiences of contraceptive care are well-documented. Studies have shown that poor quality of contraceptive care is differentially experienced by women of color, such as low-income women of color having greater odds of being advised to limit their childbearing (1), and greater emphasis by providers on highly-effective methods in counseling of women of color (2,3). A randomized controlled trial further explored this dynamic by using a standardized patient approach and found that providers were more likely to recommend an intrauterine device to standardized patients identified as low-income Black or Latina than those identified as white (4). This is further elucidated in qualitative research, where Black, Latine and low-income patients describe themes of discriminatory and/or coercive contraceptive care practices (5–9). Scholars have highlighted that these differential practices are rooted in a longstanding history of racial and class discrimination and systemic oppression (10–13). Patient experience of quality contraceptive care is also important in that it enables patients to meet their reproductive goals, including through contraceptive continuation and satisfaction and continued engagement in reproductive health care (5,14–16). Therefore, measuring and monitoring the quality of contraceptive counseling is important to address healthcare disparities and promote health equity.

The PCCC-RS can be used to surface and address these inequities. Analyses using a version of the PCCC-RS integrated into the 2017-2019 wave of the National Survey of Family Growth have found lower scores among Black, Spanish-speaking Latine, low-income, and gay and bisexual patients (17,18). Similar differences were noted in a 2022 national KFF survey (19). In a quality improvement collaborative, the visit-specific PCCC (CBE #3543) was collected before and after a health equity-informed intervention that included targeted quality improvement to improve baseline PCCC-RS scores (20). Five out of nine participating CHCs improved their scores, in a range of 2.1% - 26.2% after the intervention. This included an improvement of 8.8% among Black patients across all agencies. This intervention illustrated how a version of this measure helped healthcare entities identify inequitable differences in care and make improvements through quality interventions. The PCCC-RS is an adaptation of this visit-specific measure made feasible for use at the region/state population or health plan level, and we anticipate a similar responsiveness to intervention.

Empirical analysis of differences in performance scores

Methods: Based on the healthcare disparities identified in previous literature, we explored scores by age (binary of youngest age group versus older), race/ethnicity, and language of survey completion for Planned Parenthood Federation of America (PPFA) affiliates (state-level equivalents) and Washington Healthcare Authority (WA HCA) (health plan). (Table 3.1 and 3.2,

see Section 7 - Supplemental attachment). We then conducted two mixed-effects logistic regressions examining the odds of PCCC-RS topbox score within the PPFA dataset, first by age then by race/ethnicity group, with random intercepts by affiliate. Given the small cell sizes, we restricted the latter analysis to the following race/ethnicity groups: white, Hispanic/Latina, African American/Black, and Multi-racial. We made white race the reference group based on the previous literature that demonstrates that white people are more likely to receive a higher quality of contraceptive care compared to people of other races and racialized ethnicities. Cell sizes were too small to conduct inferential statistics to examine differences by language. We also did not conduct regression analyses for a health plan-level analysis with the WA HCA data given the limited sample and small cell sizes.

Results: Descriptive breakdown of scores by demographic subgroups within each PPFA affiliate is provided in Table 3.1 (located in Section 7 - Supplemental attachment) and within WA HCA in Table 3.2 (see Section 7 - Supplemental attachment). In regression analyses among PPFA affiliates, compared to the youngest age group, older respondents reported greater odds of reporting a topbox score (Table 3.3, Section 7 - Supplemental attachment), and compared to white respondents, all racial/ethnic groups had lower odds of reporting a topbox score (Table 3.4, Section 7 - Supplemental attachment).

Interpretation and anticipated impact: Results among PPFA affiliates suggest that those of younger ages and those from minoritized racial and ethnic groups have lower odds of experiencing high quality contraceptive care. Descriptive analyses within the WA HCA sample suggest that these differences hold true in the health plan-based dataset, however sample size is too small to investigate statistically. Additionally, descriptive analyses suggest that similar differences in scores may be apparent by language of respondent as well, though low volume of Spanish-speaking respondents does not allow us to explore in depth.

Exposure to lower quality contraceptive care may result in these groups being pressured to utilize a contraceptive method that they do not want to use, extending a long history of reproductive oppression in healthcare as described above. Alternatively, this poor-quality care may result in racially minoritized and younger patients not receiving desired contraception due to negative experiences of care. We know that quality of contraceptive counseling is associated with contraceptive continuation and satisfaction (15,21), suggesting in both cases that these patients are less likely to have their pregnancy prevention needs met in the way they want. Longer term, this may impact patients' overall engagement in reproductive healthcare (5,16), which may have negative impact a range of outcomes, including pregnancy-related morbidity and mortality for these groups.

Accountable entities can use these findings to identify disparities and provide resources to improve care for groups within their states and networks. This may include trainings provided to

clinics and providers to increase person-centeredness of contraceptive counseling, as well as deepen understanding and practice of cultural responsiveness and humility. They may also incentivize clinics in their networks to engage with patient groups to identify gaps in quality of care to identify quality improvement targets.

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4.1a Data Structure and Availability

The Retrospective Person-Centered Contraceptive Counseling measure (PCCC-RS) is a patient-reported experience performance measure (PRE-PM) collected through patient surveys; measure calculation is based solely on information provided by patients responding to the instrument and thus cannot be captured from existing electronic sources. Accountable entities identify all patients who received services in the preceding six months, have a documented female sex and are between 15-45 years. Survey distributors can utilize existing patient surveying efforts or distribute a standalone survey of the PCCC-RS and include an eligibility question ("In the last 6 months, did you talk about contraception or pregnancy prevention with a member of a healthcare team (including any doctor, nurse, medical assistant, etc.)?") to identify patients eligible to answer the PCCC-RS survey question. Patients' PCCC-RS responses may be captured using electronic or

paper collection with all eligible patients at the state/region- or health-plan level who report receiving contraceptive counseling within the six months prior to receiving the survey.

PCCC-RS measure implementation was completed by two partner organizations, Planned Parenthood Federation of America (PPFA) (affiliates=state-level equivalents) and Washington Health Care Authority (WA HCA) (health plan), using two different data collection mechanisms.

PPFA's implementation of the PCCC-RS measure was integrated into a larger patient experience survey across twelve affiliates. Patients received a survey via email with a link to the anonymous survey, in which they were asked if they received contraceptive counseling in the preceding six months. Those who responded yes were prompted to complete the PCCC-RS. WA HCA implemented a stand-alone patient survey that was distributed to all patients who were enrolled in the Family Planning Only waiver and attended a visit in the preceding six months. Those patients received an anonymous survey link through text/email and follow-up was conducted via phone if patients did not complete the survey within two weeks.

The level of missingness from patient-collected information was <5% across all required items and optional demographic information. The PCCC-RS measure is a brief, four-item survey that can be paired with optional demographic questions to determine any equity considerations in quality improvement. Given survey brevity and anonymity, the measure is not susceptible to inaccuracies other than incomplete responses. Auditing data to detect problems can occur throughout the collection process. For example, if organizations implementing the PCCC-RS measure notice that patients are overwhelmingly submitting incomplete surveys, additional messaging can be added to communication containing the PCCC-RS surveys in initial and follow-up outreach.

4.1b Implementation Costs and Burden

We worked with PPFA and the WA HCA to implement the PCCC-RS for the purposes of validity and reliability testing. In doing so, we were able to benefit from and build upon our partner organizations' existing strengths in implementing patient surveys, as well as work with these partners to address challenges and find solutions to complete data collection. Our collaboration with partners allowed for a deep understanding of implementation costs and burdens. Partner organizations' iterative input related to project feasibility and existing survey practices guided the development of a standard but adaptable workflow for survey implementation, which all participating entities used in collection efforts. The resulting process consisted of administering the survey to patients who received in the last six months. Implementation costs, burdens, and barriers were identified in regular check-ins with these partners over their collection period.

PPFA distributed their survey through the Planned Parenthood Health Outcomes, Measurement and Evaluation (PPFA HOME) Survey. Patients from twelve affiliates were contacted via email

with a link to the anonymous survey. Patients were not surveyed in the health care setting, and there was no impact on clinical workflow. PPFA did not have significant barriers to collection other than having to extend their data collection to ensure optimal collection of surveys from all twelve affiliates. The data collection concluded in approximately six months.

WA HCA surveyed patients who were part of the Family Planning Only Waiver program. Their survey was distributed via an electronic survey link sent to patients via text message after identifying patients who had a visit in the last six months. Non-respondents were sent 2-3 follow-up reminders via text message over two weeks. Clients who did not respond to 2-3 reminders were called on the phone for a telephone survey. One implementation-related cost was utilizing the Washington State Department of Social and Health Services Research and Data Analysis (RDA) resource to survey patients via telephone. Patients were not surveyed in the health care setting, and there was no impact on clinical workflow. During implementation, improvements to survey collection were identified. Early evaluation from survey administrators and respondents found that respondents, when answering the screening question about whether they received contraceptive counseling, were erroneously screening themselves out, as they faced confusion about the healthcare setting included in the measure. The language initially read: “In the last 6 months, did you talk about contraception or pregnancy prevention with a member of a healthcare team (including any doctor, nurse, medical assistant, etc.)?”. Based on respondent feedback, they modified the question to say: “In the last 6 months, did you talk about contraception or pregnancy prevention with a member of a healthcare team (including any doctor, nurse, medical assistant at a Planned Parenthood, primary care provider, etc.)?” This led to an increased percentage of respondents selecting “Yes” to receiving contraceptive counseling and completing the survey. We have updated our implementation guidance to provide the opportunity to modify the question stem to describe in more detail the care settings at which respondents may have received care.

With respect to potential burdens faced by patients completing the survey themselves, as described in sections 5.3.3 and 5.3.4, we conducted face validity testing with a patient stakeholder group to explore their feelings about the completion of this survey and worked to minimize burden through understanding the optimal retrospective lookback period. The length of the survey (four items) was designed to capture the three domains of quality contraceptive counseling (interpersonal connection, adequate information, and decision support) while remaining short and limiting patient burden.

4.1c Confidentiality

Patients were identified as eligible and then received a survey electronically. For WA HCA, patients had had a visit in the six months prior to survey collection as part of their participation in the Family Planning Only waiver. Electronic surveys were sent over email/text, and if there was a nonresponse, the RDA team reached out over a phone call to remind patients to look at their email/text to complete the survey. After patients were identified and contacted, data collection was not tied to their patient records, and thus was anonymous. Patients were informed that their answers to the patient survey were confidential and reports about the survey would not include

names or information that could identify them.

For PPFA, the PPFA HOME survey was not tied to electronic health records or other sources of identifiable information about the patient. Anonymous electronic survey links were distributed via email and at the end of the survey, participants were directed to a separate survey to claim their gift card.

4.3 Feasibility Informed Final Measure

The measure is an adjusted form of the visit-specific PCCC, optimized for use in retrospective patient surveys to ask about any relevant patient visits over a period of time. The final measure specifications include a retrospective lookback period of six months. This period was determined based on patient and healthcare expert consensus during our modified Delphi process conducted during measure development. We also developed implementation guidance supporting adding additional specificity to visit context to the question stem if needed for the setting.

4.4 Proprietary Information

Not a proprietary measure and no proprietary components

5.1.1 Data Used for Testing

Data for testing came from two sources: Planned Parenthood Federation of America (PPFA), affiliates serving as state-level equivalents (SLEs), and Washington Health Care Authority (WA HCA), as an example of health plan-level collection.

PPFA administered the PCCC-RS survey through their Planned Parenthood Health Measurement & Evaluation (PP HOME) survey between 9/1/2023-4/1/2024 at 12 PPFA affiliates. Data from PPFA are described in the patient demographic table (Table 5.1, see Section 7 - Supplemental Attachment) and were used to assess the validity and reliability of the instrument. Survey response rate was 10%.

WA HCA administered the PCCC-RS survey utilizing Washington State Department of Social and Health Services Research and Data Analysis (RDA) to administer an electronic survey via text and phone call between 5/1/2024-10/3/24. Data from Washington are described in the patient demographic table (Table 5.2, see Section 7 - Supplemental Attachment) and were used to assess the validity and reliability of the instrument. Survey response rate was 34%.

5.1.1a Dates of Testing Data

Field not required Spring 2025.

5.1.2 Differences in Data

Given that WA HCA serves as our only dataset from health plan-level collection, we do not use these data for score-level reliability or PRE-PM-level construct validity testing. For these analyses, we exclusively present findings from the analyses of PPFA, representing analyses at the state population level. Person-level reliability and validity tests use both datasets to reflect analyses at the health plan and state population level.

5.1.3 Characteristics of Measured Entities

State-level equivalent (SLE) data (PPFA): The measure was tested at twelve PPFA affiliates. Affiliates vary in size and can cover geographic service areas ranging from several counties within a single state to an entire state or even multiple states. Among the twelve affiliates included in our dataset, there were 214 health centers across 21 states. Overall, for PPFA, there are 49 total affiliates with 599 health centers. For the purposes of this application, UCSF suggests that each affiliate be considered a proxy for a U.S. state, as was previously done in the endorsement processes for CBE #2902, 2903 and 2904. We utilized the PPFA data for reliability and validity testing.

Health plan data (WA HCA): The measure was tested via Washington State's 1115 Family Planning Only (FPO) program demonstration waiver. The waiver extends eligibility for family planning services to uninsured people capable of producing children and certain groups that need confidential family planning services, all with income at or below 260 percent of the federal poverty level. FPO covers a single comprehensive sexual and reproductive health visit every 365-days, a range of FDA-approved birth control methods, and a limited scope of family planning-related services to help clients use their contraceptive methods safely and effectively. In a report from May 31, 2024, 94.2% of enrollees identified as female (1). We include WA HCA as an example of health-plan level collection. We utilized the WA HCA data for person-level reliability and validity testing.

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5.1.4 Characteristics of Units of the Eligible Population

Patients who received services in the preceding six months, who had recorded female sex, and who were between the ages of 15 and 45 years were contacted and asked to complete the survey. Patients were then further assessed for eligibility by answering a brief eligibility question at the

beginning of the survey to determine if they had received contraceptive counseling in the preceding six months.

SLE: PPFA sent a survey to all patients who had received care at one of their twelve affiliates in the preceding twelve months. Survey efforts occurred between 9/1/2023-4/1/2024 at the discretion of each affiliate and resulted in 3,284 responses used for analyses.

Health plan-level: WA HCA data collection occurred between 5/1/2024 and 10/3/24. They sampled patients by using billing data to identify all patients who had received care using the FPO waiver over a rolling time frame. These patients were sent an introductory text and an initial survey text from HCA communications with 2-3 follow-up texts over two weeks following initial communication. Then, the RDA team called non-respondents up to five times to either remind patients to take the survey or survey the patients over the phone, depending on patient preference. Patients were able to opt out of phone calls at any point. WA HCA procured 151 surveys used for analyses.

Within both datasets, those with a recorded female sex, were aged 15-45 years, responded "Yes" to the PCCC-RS screening question and completed all four PCCC-RS items, and had not given birth in the preceding six months are included in the eligible population. Tables 5.1 and 5.2 (see see Section 7 - Supplemental attachment) describe patient characteristics of respondents by PPFA affiliate and from the WA HCA respectively.

5.2.1 Level(s) of Reliability Testing Conducted

Person or encounter level (i.e., data element) (e.g., inter–abstractor reliability), Accountable entity level (i.e., measure score) (e.g., signal-to-noise analysis)

5.2.2 Method(s) of Reliability Testing

Reliability testing for the four critical data elements (the four items that comprise the PCCC-RS survey) was examined with Cronbach's alpha. Cronbach's alpha is a measure of internal consistency that examines how closely related a set of items (critical data elements) are as a group or the extent to which the data elements measure the same concept or construct (1).

The formula for Cronbach's alpha is $\alpha = N\,\bar{c}/(\bar{v} + (N - 1)\bar{c})$, where N is the number of items, c is the average between-item covariance, and v is the average within-item variance. Item-total correlations were evaluated by Pearson's product-moment correlation coefficient (r). The correlation between each individual item and the domain and/or global scores omitting the item was assessed. Critical data element reliability was conducted with the PPFA dataset, representing state-level data, and, separately, the WA HCA health plan data.

Accountable entity reliability

For both conceptual and analytic reasons, and aligned with the visit-specific PCCC measure, our calculation of the performance score used a dichotomous scoring system, in which all surveys reporting the highest rating (20/20) was given for all four questions are considered a positive score, whereas any survey in which a less-than-optimal rating on any of the four questions is considered a negative score. To assess reliability of this measure, we adhered to the recommendations in the National Quality Forum-commissioned paper entitled "Patient-Reported Outcomes in Performance Measurement," in which signal-to-noise ratio (SNR) is recommended as a measure of reliability (2), with signal defined as the variance in a performance measure due to systematic differences across units, and noise as the residual variance due to random error within units. We have focused on the equivalent Spearman-Brown (S-B) measure of reliability (3–6), which is a function of the intraclass correlation (ICC), defined as the ratio of between-unit variance to the sum of between- and within-unit variances, and the prospective panel size to be used in evaluating state-level performance. Specifically, with a prospective panel size of n and $ICC=V_b/(V_b + V_w)$, where V_b and V_w denote the between- and within-unit variances, we have

$$
\begin{aligned}
Reliability_{S\text{-}B} &= nICC/(1 + (n - 1)ICC) \\
&= nV_b/(V_b + V_w)/(1 + (n - 1)V_b/(V_b + V_w)) \\
&= nV_b/(nV_b + V_w) \\
&= V_b(V_b + V_w/n) \\
&= SNR
\end{aligned}
$$

Thus the reliability of a profile increases as the panel size increases and as the difference in practice patterns between accountable entities becomes larger.

Given that we only have one health plan dataset, we exclusively conduced these analyses utilizing PPFA data, representing state-level units. With a binary performance measure, and respondents nested within units of analysis (PPFA affiliate), the ICC can be estimated using a normal-logistic model with nested random effects for affiliates. Specifically, our analysis used the Stata **melogit** and **estat icc** commands to estimate the ICC with 95% confidence intervals. Confidence bounds for S-B reliability were estimated by plugging the confidence limits for the ICC provided by **estat icc** into the formula for the Spearman-Brown reliability. Our analysis was implemented using Stata Version 16.0 (StataCorp LLC, College Station, TX 77845).

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5.2.3 Reliability Testing Results

Data element reliability

Using the datasets described in section 5.1.1, we calculated the Cronbach's alpha for the PCCC-RS.

State-level equivalent analysis: The PCCC-RS measure has a Cronbach's alpha of 0.94 (Item-total correlations ranged from 0.80 - 0.89). Inspection of Cronbach's alpha if any single item was deleted yielded no improvement in Cronbach's alpha.

Health plan level analysis: The PCCC-RS measure has a Cronbach's alpha of 0.84 (Item-total correlations ranged from 0.52 - 0.67). Inspection of Cronbach's alpha if any single item was deleted yielded no improvement in Cronbach's alpha.

Accountable entity-level reliability

Table 5.3 displays the SLE estimates of Spearman-Brown reliabilities for a range of panel sizes (i.e. number of patient respondents). Our ICC of 0.024 (0.008, 0.069) resulted in adequate reliability with moderate panel sizes of 150.

Accountable Entity Level Reliability Testing Results by Denominator, Target Population Size

Our PPFA dataset included twelve affiliates, representing units of analyses. Thus we were unable to split them into deciles. We instead provide summary statistics including mean, minimum, maximum, and median in Table 5.4 (see Section 7 - Supplemental attachment). As we only have data from one health plan, we are unable to provide reliability estimates of health.

5.2.3a Attach Additional Reliability Testing Results

5.2.3a_table_508.pdf

5.2.4 Interpretation of Reliability Results

Data element reliability

A value for Cronbach's alpha of 0.70 or above is viewed as acceptable and a value of 0.90 or above is excellent and indicating a strong internal consistency of the measure (1). Our reported value of 0.93 within our state-level analysis is in the excellent category and of 0.84 within our health plan-level analysis is in the good category. Given the role of sample size in calculating Cronbach's alpha, we believe this lower alpha score from the WA HCA sample likely is a result of the smaller sample size of only having one health plan with an overall smaller number of respondents available for testing. Notwithstanding, both are strong and sufficient results, especially in light of the small number of items (four items) providing assurance that the high Cronbach alpha level is not inflated by instrument length.

Accountable entity-level reliability

Our results indicate moderate to high reliability across our state-level sample (0.73 – 0.96) and are consistent with recommendations for reliability estimates for performance measurement of >0.7. These values also compare favorably with reliability estimates for the CG-CAHPS surveys, including the communication composite score, which has been reported to have a reliability of 0.62-0.81 (2).

To ensure high reliability in the context of high variability in provision sites at the state/region level, we recommend state/region entities utilize a minimum panel size of 150 respondents to result in an estimated reliability of 0.79. We expect a similar level of variability at the health plan level and would recommend the same minimum panel size. This will be reassessed with testing conducted in the future for measure maintenance.

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5.3.1 Level(s) of Validity Testing Conducted

Person or encounter level (i.e., data element) (e.g., sensitivity and specificity), Accountable entity level (i.e., measure score) (e.g., criterion validity)

5.3.2 Type of Accountable Entity Level Validity Testing Conducted

Empirical validity testing at the accountable entity-level (e.g., criterion validity, construct validity, known groups analysis), Systematic assessment of face validity of the measure's performance score as an indicator of quality or resource use

5.3.3 Method(s) of Validity Testing

Data element validity

Our data element validity is based on prior testing completed as part of our submission for endorsement by the CBE for the visit-specific PCCC (CBE #3543). Briefly, we evaluated the visit-specific PCCC critical data element validity by assessing the association between each of the four critical data elements (individual PCCC scale items) with specific clinician communication practices consistent with patient-centered care and assessed from audio recordings of 341 clinical visits using measures derived from the Four Habits Coding Scheme (4HCS). We ran linear mixed models to assess the association between individual visit-specific PCCC items used in a continuous (1-5 response scale) and the specified 4HCS components (aggregated across specified items).

Since data elements remain the same for the PCCC-RS, we did not conduct additional data element validity testing for this application.

Systematic face validity

We conducted a modified Delphi process to iteratively reach a consensus on the PCCC-RS and determine systematic face validity. This process focused on the elements of the validated visit-specific PCCC that were to be modified for the retrospective adaptation, namely the time period and means of capturing all encounters within that period of time. No changes were made to the language of the four items that comprise the scale. This modified Delphi process was complemented by engagement with a Patient Stakeholder Group (PSG) to understand validity from a patient perspective.

The modified Delphi process engaged 25 measurement experts, which we defined as people with operational and/or administrative expertise related to quality improvement in reproductive health and/or primary care ranging from facility-, plan-, or state-level engagement. We also engaged with

five members of our PSG with invaluable lived experience to provide feedback during this process. The process had several rounds of feedback that included two surveys rounds with the measurement expert group ad two meetings with the patient stakeholder group. The entire process took place from May to August 2023. Both groups were compensated for their time spent on engagement.

Individuals in the measurement expert group were recruited in May 2023, and surveys were circulated in June and July 2023. Survey One asked to assess the lookback period, format of survey items, and feasibility of implementation. Responses were aggregated and the team discussed results prior to the first PSG meeting. At the first PSG meeting, patients were introduced to the PCCC-RS measure and initial proposed modifications by the measurement expert group. A discussion was held wherein the PSG group reacted to suggested modifications and the idea of a retrospective measure of PCCC. Both the survey with measurement experts and engagement with the PSG resulted in initial modifications to the survey. A second survey was distributed to the measurement expert group, where they were given a series of proposed changes and asked how satisfied they were with the proposed changes and how feasible they felt the proposed changes were. This review period culminated in a final presentation with the PSG. Members of the PSG offered final suggestions and confirmed that the look-back period felt feasible from a patient perspective. The PCCC-RS was finalized prior to pilot data collection.

Construct validity

Convergent validity was assessed by examining associations between the PCCC-RS and two patient-reported measures: (1) satisfaction with provider help with the choice of a birth control method and (2) satisfaction with the method choice. These two single-item measures were collected as part of the same data collection efforts as the PCCC-RS scores. The choice of these measures of validity was based on the fact that measures of satisfaction often correlate with measures of patient-centered processes of care but are considered distinct. We conceptualized the PCCC-RS as being more specific than measures of satisfaction, as satisfaction measures tend to be informed by expectation disconfirmation theory (i.e., the extent to which an experience exceeded or fell below expectations (1,2)) and have additional limitations of lack of differentiation and lack of specificity of measured behaviors (3). In contrast, the items in the PCCC-RS assess the extent to which the patient experienced or perceived specific types of communication and exchanges consistent with patient-centered care. To measure satisfaction with how the provider helped with choice of a birth control method, women were asked to rate their “How satisfied are you in how your healthcare provider helped you to choose what birth control method to use” on a 7-point Likert scale from excellent to poor. Satisfaction with the method choice was assessed using the question “How satisfied are you with your choice of birth method at this visit?”, using a 7-point Likert scale. To align with PCCC-RS scoring, responses in the highest or most positive rating category were compared to all others.

Aligned with guidance for PRO-PMs,(4) we first tested the constructs at the Patient Reported

Experience Measure (PREM) level, and then conducted testing at the Patient Reported Experience Performance Measure (PRE-PM) level.

For the PREM level, we conducted two logistic regression models with PCCC-RS as a binary variable as the outcome and binary scoring of provider and method satisfaction as predictors respectively. We tested the need for random effects at the affiliate level by assessing the postestimation ICC and determined random effects were not necessary for the model. We then ran two simple univariate logistic regression models. PREM testing was conducted with both the PPFA dataset (SLEs) and WA HCA data (health plan).

For the PRE-PM level, we averaged PCCC-RS scores, provider satisfaction scores, and method satisfaction scores at the unit of analysis. Given we only had one health plan unit available, PRE-PM testing was exclusively conducted with PPFA data, comprised of affiliates as SLEs. We estimated Pearson's correlation coefficient (r) to assess strength and direction of the linear relationship between the mean PCCC-RS score by affiliate and each of the mean scores of satisfaction with method selection and with provider by affiliate. We then conducted two univariate Ordinary Least Squares regression models with PCCC-RS score (outcome) and each of satisfaction variables as predictors averaged at the state-level equivalent level.

At both the PREM and PRE-PM level, we hypothesized a moderate to strong positive relationship between the PCCC-RS score and satisfaction with contraceptive method and satisfaction with provider.

Analysis of missing data

We identified the extent and distribution of missing items among respondents. We evaluated the pattern of missingness to assess if items were missing completely at random. As missingness did not exceed 5% across any variable necessary for validity testing, we conducted a complete case analysis, aligned with best practice of handling item-level missingness (5).

Assessment of Non-Response bias

This PRE-PM is collected through an anonymous survey and, by design, not connected to other sources of patient information, such as electronic health records. This practice serves to protect data quality and improve response rates, as patients may be concerned about care consequences if they report lower scores and, as a result, choose to either record higher scores that do not reflect quality of care or refuse to respond to the survey if they know or suspect it will be linked to their patient records. Thus, we do not have demographic information on nonrespondents and cannot assess differences between groups.

Moreover, the survey is distributed to patients identified as likely having received contraceptive counseling in the preceding six months. This is verified when respondents answer the survey screening question, confirming that they did, in fact, receive counseling. Without confirmation of eligibility of nonrespondents, we do not know the true population of those who received contraceptive counseling among those who were contacted, and thus, cannot assess differences between that population of interest and the sample who completed the survey.

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5.3.4 Validity Testing Results

Data element validity

Table 5.5 shows results from the visit-specific PCCC validity testing (CBE #3543). These data elements were adapted to the PCCC-RS with no changes, making this evidence inclusion appropriate for PCCC-RS evaluation. Per the 4HCS coding system, 4HCS components are interpreted in the direction of lower values, indicative of highly effective use of a code, whereas higher values are indicative of lower effective use. As shown in Table 5.5, each critical data element from the visit-specific PCCC was significantly associated with the specific 4HCS component selected on the basis of conceptual match, with the negative betas signifying the association between higher visit-specific PCCC scores and lower (meaning more effective use) of the 4HCS component. Betas presented in Table 5.5 represent a unit change in the visit-specific PCCC item score for each unit change in the 4HCS score. All results remained significant, and with a virtually identical pattern of findings, when testing the visit-specific PCCC items dichotomized (5 vs. else) and when not adjusting for provider.

Systematic face validity

A modified Delphi process with measurement experts and engagement with a PSG was used to inform the final measure and document systematic face validity. Twenty-five measurement experts received two surveys asking open- and closed-ended, Likert scale questions. The first survey included four open-ended questions exploring options for modifying the visit-specific PCCCs inclusion question, measure introduction, and question stem. One key theme in ten responses from experts was the necessity of clarity for patients on the scope of the measure (experiences with all visits in the specified time period with all members of the healthcare team from whom they received contraceptive counseling). Eleven experts also advised that the term "healthcare provider" be made plural and defined to ensure patients are thinking about all possible visits and interactions where they received counseling. The first survey also asked for feedback on potential lookback periods that patients would be reflecting on (ex. 3, 6, 12 months). Five experts noted that HP-CAHPS and CG-CAHPS use a 12- and 6-month lookback period, respectively, which could be possible lookback periods for the PCCC-RS survey. While six experts cautioned that recall becomes difficult after six months, one expert noted that most patients would only be receiving contraceptive counseling once/year, and surveying a six-month lookback period might exclude some patients. Experts were also asked a close-ended, Likert scale question about how likely they were to consider results from the PCCC-RS survey an accurate reflection of the quality of contraceptive counseling. 64% of experts selected at least a 7 on a scale of 1-9, 9 being very likely. These results were reviewed with the PSG and modifications made to the measure.

The second survey included a summary of changes to the PCCC-RS measure following the first expert survey and first meeting of the patient stakeholder group. Experts were asked several satisfaction questions on a scale of 1-9, 9 being very satisfied. There was overall satisfaction (noted as percentage of experts selecting at least a 7 on a scale of 1-9) with the changes made to the eligibility question (90%), measure introduction (75%), and question stem (90%). Satisfaction was also indicated for the six-month lookback period (85%). In an open-ended question asking for feedback on any additional changes, four experts advised that allowing entities to change the measure introduction and question stem to be specific to the population would likely support implementation of the PCCC-RS (e.g. explicitly naming that an entity is surveying patients who went to Planned Parenthood). Overall, engagement from the two measurement expert surveys and two PSG meetings resulted in optimal feedback to modify the visit-specific PCCC measure for retrospective use. For example, when contemplating what look-back period would be optimal for both patients taking the survey and for retrospective reporting, the measurement experts and patient stakeholder group had several deliberations on whether that look-back period could be six months, twelve months, or some other amount of time. At the end of the surveys and engagement, six months was determined to be the optimal lookback period. Additionally, survey language was expanded from just mentioning “birth control” to instead be “contraception or pregnancy prevention” following feedback from experts and PSG. Other changes were made to both the measure introduction and question stem. The measure introduction asked patients to think about their “appointments” rather than a singular visit in the last six months. The question stem also expanded language to ask patients how they think the “member(s) of the healthcare team (including any doctor, nurse, medical assistant, etc.) did” instead of a singular provider. No changes were made to the PCCC-RS survey items.

Construct validity

As displayed in Table 5.6, the PCCC-RS is positively and significantly associated with both a measure of satisfaction with contraceptive method and with healthcare provider, at both the PREM and PRE-PM levels (all p-values <0.001). We also found an estimated Pearson's correlation of 0.63 (p<0.001) between average PCCC-RS scores and average satisfaction with contraceptive method choice and a Pearson's correlation of 0.84 (p<0.001) between average PCCC-RS scores and average satisfaction with provider help with method choice, demonstrating a strong positive relationship between constructs.

Analysis of missing data

We investigated item-missingness within the eligible sample. Percent missingness across all variables used in validity testing was low and ranged from 1.9% (first item of survey) to 4.0% (measure of method satisfaction). Item missingness increased in the order the items were presented in the survey, suggesting attrition bias. However, level of missingness did not exceed 5% for any item used in analysis. In line with best practice, we conducted a complete case analysis (1).

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5.3.4a Attach Additional Validity Testing Results

5.3.4a_tables_508.pdf

5.3.5 Interpretation of Validity Results

We provide two distinct sources of evidence of the validity of the PCCC-RS. First, in systematic face validity, healthcare experts and patients agree that the measure can determine better versus worse care and the lookback period is adequate and reasonable for patient recall. Second, our construct validity results show a strong positive association with two related measures of satisfaction, as we hypothesized. Together, these findings support the validity of the PCCC-RS measure. While we were only able to assess construct validity with the state-level equivalent sample, we expect the measure to be equally valid at the health plan level.

5.4.1 Methods Used to Address Risk Factors

No risk adjustment or stratification

5.4.1b Rationale For No Adjustment or Stratification

We do not believe that risk adjustment is justified. While it is possible that different demographic groups may report different results on the PCCC-RS measure, this would represent true differences in patient-centeredness due to the manner in which the questions are framed and the fact the concepts of respect and attention to preferences and adequate provision of information are generally desirable. This is consistent with the interpretation of the visit-specific PCCC and how it has been endorsed.

With respect to the question of stratification, we do note that studies have suggested that women of color receive poorer quality contraceptive counseling than their white counterparts. These disparities are rooted in the long history in the United States of coercion on the part of the reproductive health care system towards women of color, including forced sterilization and pressure to use long-acting contraceptive methods. While this suggests that stratification by race/ethnicity may be desirable in order to assess differences in care, neither the PCCC-RS nor the visit-specific measure on which it's based have yet been evaluated to assess these differences in an accurate and nuanced way. Given the findings in Section 3 of this application, specifically that there were in fact empirical differences in PCCC-RS scores by race/ethnicity and age, and indications of differences by language, future stratified analyses are warranted. We acknowledge the existence of these disparities and intend to use the PCCC-RS to examine them more closely in the future. In the current application, we wish to demonstrate the validity and reliability of the measure overall before taking a focused approach to examining disparities in quality of care.

6.1.1 Current Status

Not in use

6.1.2 Current or Planned Use(s)

Public Reporting, Payment Program, Quality Improvement with Benchmarking (external benchmarking to multiple organizations), Quality Improvement (Internal to the specific organization)

6.2.1 Actions of Measured Entities to Improve Performance

Measurement and reporting of the Retrospective Person-Centered Contraceptive Counseling measure (PCCC-RS) can be used to identify the need for improvement of quality care on a population or system level. Identifying this need can lead to systems-level interventions, such as education and training initiatives, leveraging financial incentive programs, such as pay for performance, and provision of resources, including visual aids and web-based content such as decision aids, to enhance contraceptive counseling. If low scores are identified, the visit-specific PCCC measure (CBE #3543) can be strategically deployed to identify lower-performing sites or plans, allowing for more targeted quality improvement (QI) initiatives. Additionally, analysis of low-scoring population subgroups can aid in understanding of root causes of low performance, allowing for appropriate intervention.

QI actions may vary in amount of effort needed to achieve favorable results, in accordance with what scores indicate about performance (e.g. how much improvement is needed) and the size and structure of the accountable entity. Entities can overcome difficulties by leveraging existing expertise within staff and engaging with patient stakeholder groups who are already focused on quality improvement, patient engagement, and language interpretation.

Following the implementation of these interventions, we recommend re-measurement of the PCCC-RS to track change and reevaluate quality. When used in combination other currently endorsed contraceptive care measures, such as the Contraceptive Care claims measures (CBE #2902, #2903 and 2904), PCCC-RS can also serve as a tool for identifying whether attention to method provision is leading to a decrease in attention to patient-centeredness and allow for intervention if such an effect is observed.

6.2.5a Potential Unintended Consequences

Potential unintended consequences due to the measure's planned use include possible discomfort from patients reflecting on their experiences in the preceding six months, which may include negative experiences with providers. However, the key benefit that outweighs this is that the PCCC-RS emphasizes the importance of patient input, with the goal that patients are able to reflect on their experiences and reflect on the quality of their care towards improving overall quality of contraceptive counseling.

7.1 Supplemental Attachment

Section7_Supplemental_Attachment.pdf

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The measure developer is different from the measure steward

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