Comprehensive Care Physician Payment Model (CCP-PM): Environmental Scan/Annotated Bibliography

The research questions guiding the environmental scan and the search strategy are described in detail in the attached appendix. The components of the annotated bibliography below (with citations of sources) are grouped into topic areas with main points relevant to the proposal review outlined below.

BRIEF DESCRIPTION OF THE PROPOSAL

The Comprehensive Care Physician Payment Model (CCP-PM) aims to address a major challenge related to the increasing fragmentation of health care in the United States, specifically discontinuities between inpatient and outpatient care. Previously, the submitting organization, University of Chicago Medicine (UCM) had created the CCP program in 2011 with Centers for Medicare & Medicaid Innovation (CMMI) funding to defragment care for patients at increased risk for hospitalization by providing them with a single physician who will care for them in the clinic and the hospital. Through the CCP-PM, UCM proposes to incentivize the adoption of CCP programs and similar models that make it possible for a patient to receive care from the same physician in the hospital and in the clinic. The CCP-PM is designed to be a supplemental program that can integrate with MIPS, existing APMs, ACO models and future Medicare payment models. The add-on nature of the CCP-PM allows practices to participate in the new model without reconfiguring current billing, accounting, and quality management systems.

SUBMITTING ORGANIZATION

University of Chicago Medicine

In 2011, CMMI awarded University of Chicago Medicine a Health Care Innovation Award (HCIA) to conduct a randomized controlled trial called the Comprehensive Care Program (CCP) study, to improve care continuity by having the same physicians (supported by a multidisciplinary team) caring for a patient in inpatient, emergency department, and outpatient settings at the University of Chicago Hospital Medical Center (UCH).[1] The University of Chicago is an urban research university which encompasses UC Medicine: one of the nation's leading academic medical institutions.[2,3]

[1] Centers for Medicare & Medicaid Services (2016). Evaluation of Hospital-Setting HCIA Awards: Third Annual Report, Final.

[2] https://www.uchicago.edu/about/

[3] http://www.uchospitals.edu/index.shtml

CURRENT STANDARD OF CARE/PATIENT CARE

Continuity of Care for Patients at High Risk of Hospitalization

The key aim of UCM's CCP-PM is to address the fragmentation of care patients experience between the inpatient and outpatient settings. UCM proposes to improve the continuity of care by creating a system in which a patient with a high risk of hospitalization can receive care from the same physician in both the hospital and clinic setting.

Redesigning Care for Patients at Increased Hospitalization Risk: The Comprehensive Care Physician Model

Meltzer, D. O., & Ruhnke, G. W. (2014). Redesigning Care For Patients At Increased Hospitalization Risk: The Comprehensive Care Physician Model. Health Affairs, 33(5), 770-777. doi:10.1377/hlthaff.2014.0072

Key Points

- In the CCP model, patients at high risk of hospitalization received care from a single physician in both the inpatient and outpatient setting, with the aim to reduce lapses in care and preventable hospitalizations.
- The eligible patient population was defined as Medicare fee-for-service beneficiaries who had been admitted to the hospital at least once in the past year.
- The CCP model included five hospitalist physicians deemed as comprehensive care physicians (CCPs). The CCPs collaborated with a small clinic team comprised of a clinic coordinator, social worker, registered nurse, and advanced practice nurse. CCPs performed rotating morning and afternoon shifts between the hospital and clinic.
- The model tracked the following health outcome measures: self-rated health status, limitation in activities of daily living and in instrumental activities of daily living, and mortality. Total cost of care to Medicare was also monitored.
- Evidence about the effectiveness of the CCP model can be found in the report of the HCIA Awards, round one third annual evaluation discussed later in this document.

Prevalence of Care Coordination Deficiencies in Efforts to Deliver Improved Quality of Care

The CCP-PM model addresses deficiencies in communication and related problems in care coordination that arise in current care practices.

Use of Hospitalists by Medicare Beneficiaries: A National Picture

Welch, W. P.; Stearns, Sally C; Cuellar, Alison E.; & Bindman, Andrew B. (2014). Use of Hospitalists by Medicare Beneficiaries: A National Picture. Medicare and Medicaid Research Review, 4(2), E1-E8. doi:http://dx.doi.org/10.5600/mmrr.004.02.b01

Key Points

- In 2011, hospitalists constituted 13.3% of physicians who designated their specialty as primary care and 4.4% of all physicians serving Medicare beneficiaries.
- More than one quarter of Medicare admissions had a hospitalist as the attending physician with rates as high as 31.8% for medical conditions and as low as 11.3% of surgical conditions. From 2009 to 2011, the percentage of medical admissions with a hospitalist as the attending physician increased by approximately 25%.

- From 2009 to 2011, the number of hospitalists increased 22.9%, increasing much faster than the total physician population, which grew by 7.1%. If the rate continues, hospitalists trained in primary care specialties will serve as attending physicians for half of Medicare's medical admissions by 2017.

Estimating a Reasonable Patient Panel Size for Primary Care Physicians with Team-Based Delegation

Altschuler, Justin; Margolius, David; Bodenheimer, Thomas; & Grumbach, Kevin. (2012). Estimating a Reasonable Patient Panel Size for Primary Care Physicians with Team-Based Task Delegation. Annals of Family Medicine, 10(5), 396-400. doi:10.1370/afm.1400.

Key Points

- The authors aimed to estimate primary care physician panel sizes under different models of task delegation to non-physician members of the primary care team (i.e. registered nurses, pharmacists, health educators, and medical assistants).
- The average US panel size is about 2,300 and is expected to increase as the number of physicians entering primary care decreases.
- One physician could reasonably care for a panel of 983 patients under a non-delegated primary care model where none of the primary care services were delegated to non-physician team members.
- One physician could reasonably care for between 1,387 and 1,947 patients under a delegated care model where varying types and amounts of primary care services (50-77% of preventative care services and 25-47% of chronic care services) were delegated to non-physician team members.

Continuity of Outpatient and Inpatient Care for Hospitalization Older Adults

Sharma, Gulshan; Fletcher, Kathlyn E.; Zhang, Dong; Kuo, Yong-Fang; Freeman, Jean L.; & Goodwin, James S. (2009). Continuity of Outpatient and Inpatient Care for Hospitalized Older Adults. Journal of the American Medical Association, 301(16), 1671-1680. doi:10.1001/jama.2009.517.

Key Points

- The authors examine continuity of care across the transition from the community to hospitalization, theorizing that outpatient to inpatient continuity for hospitalized older adults declined between 1996 and 2006, with the decline being the greatest in academic hospitals.
- Outpatient to inpatient continuity with any outpatient provider declined from 50.5% in 1996 to 39.8% in 2006. Outpatient to inpatient continuity with a primary care provider declined from 44.3% in 1996 to 31.9% in 2006.
- About one third of the decline in continuity was associated with growth in hospitalist activity.

Association of Communication Between Hospital-based Physicians and Primary Care Providers with Patient Outcomes

Bell, Chaim M.; Schnipper, Jeffrey L.; Auerbach, Andrew D.; Kaboli, Peter J.; Wetterneck, Tosha B.; Gonzales, David V.; et. al (2008). Association of Communication Between Hospital-based Physicians and Primary Care Providers with Patient Outcomes. Journal of General Internal Medicine, 24(3), 381-386. doi:10.1007/s11606-008-0882-8

Key Points

- The patient's inpatient attending physician was a hospitalist in 34% of patients.
- The PCPs for 834 patients (77%) were aware that their patient was admitted to the hospital. PCPs had direct communication with the general medicine service for 23% of patients and 42% of PCPs reported seeing a discharge summary by 2 weeks after discharge.
- Lapses in communication between the hospital physicians and PCPs were not associated with adjusted 30-day risk of death, hospital readmission, or emergency department visits.

Systematic Review: Deficits in Communication and Information Transfer Between Hospital-Based and Primary Care Physicians

Kripalani, Sunil; LeFevre, Frank; Phillips, Christopher O.; Williams, Mark V.; Basaviah, Preetha; & Baker, David W. (2007). Deficits in Communication and Information Transfer Between Hospital-Based and Primary Care Physicians. Journal of the American Medical Association, 297(8), 831-841.

Key Points

- The authors aimed to characterize the prevalence of deficits in communication and information transfer at hospital discharge and to identify interventions to improve communication and coordination. Authors selected observational studies investigating communication and information transfer at hospital discharge (n=55) and controlled studies evaluating the efficacy of interventions to improve information transfer (n=18).
- Only 3% of primary care physicians (PCP) reported being involved in discussions with hospital physicians about discharge, and only 17% to 20% reported always being notified about discharges.
- The availability of a discharge summary at the first post discharge visit with the PCP was low (12%-34%) and remained poor at 4 weeks after discharge (51%-77%). Approximately 11% of discharge letters and 25% of discharge summaries never reached the PCP.
- Audits of hospital discharge documents demonstrated frequent lack of important details previously agreed upon between the hospital physician and the PCP, as well as other missing administrative and medical information.

Association of Continuity of Care and Care Coordination on Patients with Chronic Diseases

The CCP-PM's main patient eligibility requirement is for patients to have had at least 1 hospitalization in the 12 months prior to enrollment. The submitters acknowledge there are other risk factors that could be used to determine risk of hospitalization and advises CMS to suggest other risk factors. Regardless of risk, however, preventable hospitalizations are common among older adults, particularly among those with chronic illnesses. Studies suggest that particular chronic diseases are viable indicators of high-risk of hospitalization and could be used to identify patients and determine the effectiveness of programs aiming to improve continuity of care.

Continuity and the Costs of Care for Chronic Disease

Hussey, Peter S.; Schneider, Eric C.; Rudin, Robert S.; Fox, Steven; Lai, Julie; & Pollack, Craig Evan (2014). Continuity and the Costs of Care for Chronic Disease. Journal of the American Medical Association Internal Medicine, 174(5), 742-748. doi:10.1001/jamainternmed.2014.245

Key Points

- The objective of the study was to measure the difference in costs associated with variation in care continuity during episodes for Medicare beneficiaries with congestive heart failure (CHF), chronic obstructive pulmonary disease (COPD), and type 2 diabetes mellitus (DM).
- About 10.5% of patients with CHF, 6.8% of patients with COPD, and 3.5% of patients with DM had at least 1 hospitalization during the 365-day episode of care.[4]
- The median number of visits to a clinician during a 365-day episode was 5 for patients with COPD, 6 for patients with DM, and 7 for patients with CHF. About 58.1% of patients with CHF, 42.5% of patients with COPD, and 23.5% of patients with DM had more than 1 chronic condition.
- The authors found a consistent association between higher levels of care continuity, lower rates of hospital and emergency department visits, lower complication rates, and lower episode costs.

Continuity of Care and the Risk of Preventable Hospitalization in Older Adults

Nyweide, David J.; Anthony, Denise L.; Bynum, Julie P. W.; Strawderman, Robert L.; Weeks, William B.; Casalino, Lawrence P.; et al (2013). Continuity of Care and the Risk of Preventable Hospitalization in Older Adults. Journal of the American Medical Association Internal Medicine, 173(20), doi:10.1001/jamainternmed.2013.10059

Key Points

- The objective of this study was to determine whether Medicare patients with higher continuity of care have a lower risk of preventable hospitalization.
- The most common reasons for preventable hospitalizations included congestive heart failure (25.7%), bacterial pneumonia (22.7%), urinary tract infection (14.9%), and chronic obstructive pulmonary disease (12.5%).
- A 10% increase in continuity of care (as measured by a continuity score developed by the authors and was based on the concentration of visits with a primary care provider) was associated with a reduction in the rate of preventable hospitalizations by 2%.
- The authors conclude that among Medicare beneficiaries, higher continuity of ambulatory care is associated with a lower rate of preventable hospitalization.

Outpatient Follow-up Visit and 30-Day Emergency Department Visit and Readmission in Patients Hospitalized for Chronic Obstructive Pulmonary Disease

Sharma, Gulshan; Kuo, Yong-Fang; Freeman, Jean L.; Zhang, Dong D.; & Goodwin, James S. (2010). Outpatient Follow-up Visit and 30-Day Emergency Department Visit and Readmission in Patients Hospitalized for Chronic Obstructive Pulmonary Disease. Archives of Internal Medicine, 170(18), 1664-1670. doi:10.1001/archinternmed.2010.345

Key Points

- The authors examined the effect of early follow-up visits with Medicare patients' primary care provider (PCP) or pulmonologist following an acute hospitalization on the 30-day risk of ER visits

[4] For the sample of beneficiaries, the authors identified episodes of care for each of the 3 chronic conditions, with every episode triggered by a physician professional service for one set of predefined ICD-9 diagnosis codes. The authors identified 98,850 CHF episodes, 147,708 COPD episodes, and 281,584 DM episodes. Each person could have only a single episode per condition; however, an individual patient with comorbidities could have up to 3 episodes (1 for each condition).

and readmission. Conclusions suggest continuity with a patient's PCP or pulmonologist after an acute hospitalization may lower rates of ER visits and readmission in patients with COPD.

- The 30-day rates of post discharge ER visits in patients with follow-up with their PCP or pulmonologist was 21.7% compared with 26.3% in those with no post discharge follow-up. The 30-day readmission rates in patients with follow-up were 18.9% compared with 21.4% in those with no follow-up.
- COPD (24.1%), pneumonia or respiratory infection (12.9%), and heart failure (7.3%) were the top reasons for readmission.

Rehospitalizations among Patients in the Medicare Fee-for-Service Program

Jencks, Stephen F.; Williams, Mark V.; & Coleman, Eric A. (2009). Rehospitalizations among Patients in the Medicare Fee-for-Service Program. The New England Journal of Medicine, 360(14). doi:10.1056/NEJMsa0803563

Key Points

- About 19.6% of Medicare beneficiaries discharged from the hospital were rehospitalized within 30-days and 34% we rehospitalized within 90-days.
- There was no bill associated with an outpatient visit for 50.1% of the patients who were rehospitalized within 30 days after discharge and for 52% of those who were rehospitalized for heart failure within 30 days after discharge.
- Five medical conditions (heart failure, pneumonia, COPD, psychoses, and GI problems) and five surgical conditions (cardiac stent placement, other vascular surgery, major hip or knee surgery, other hip or femur surgery and major bowel surgery) were associated with the largest number of rehospitalizations.
- The relative risk of rehospitalization within 30-days after discharge was most influenced by the patient's diagnosis-related group, the number of previous hospitalizations, and the length of stay.

Current Hospitalists Payment and Compensation

A new hospitalist specialty code C6 was implemented in late 2016 as a result of lobbying by the Society of Hospital Medicine who claimed that the quality indicators and compensation rates for non-hospitalists of the same specialty were not appropriate for the hospitalists. The inpatient population tends to be more complex compared to the general outpatient population and many quality indicators may not be applicable to hospital-based care, such as preventive care focused metrics.

Medscape Hospitalist Compensation Report 2017

This report describes the earnings, productivity statistics, and career satisfaction of these subspecialists. https://www.medscape.com/slideshow/compensation-2017-hospitalist-6008860

Key points

- Internal medicine and pediatric hospitalists comprise the majority of hospitalists—physicians who practice inpatient medicine.
- Hospitalists of primary care specialties earn higher compensation compared to outpatient providers. For other specialties, hospitalists may earn less, the same or more.

Payment and Costs of Care Coordination and Continuity of Care

Association of Continuity of Care and Care Coordination on Payment and Costs

The CCP-PM states that participating physicians will receive payments ranging between $10-40 PBPM payable at the end of each year. The payments would be included in the total cost of care. The submitters estimate Medicare savings of more than $10 billion annually if scaled nationally.

Association of Hospitalist Care with Medical Utilization After Discharge: Evidence of Cost Shift From a Cohort Study

Kuo, Yong-Fang & Goodwin, James S. (2011). Association of Hospitalist Care with Medical Utilization After Discharge: Evidence of Cost Shift From a Cohort Study. Annals of Internal Medicine, 155(3), 152-159. doi:10.1059/0003-4819-155-3-201108020-00005.

Key Points

- This study compared the patients of primary care physicians with those of hospitalists and found that hospitalist patients had shorter and less expensive admissions. After discharge, however, patients of hospitalists had more visits to the emergency department, more readmissions to the hospital, and higher total expenses.
- Hospital charges were $282 lower for patients cared for by hospitalists, whereas total Medicare spending in the 30 days after discharge was $332 higher. The authors suggest that the reduction in hospital costs are shifted to costs after discharge and represent more than $1.1 billion in additional Medicare spending.
- The adjusted length of stay was 0.64 day shorter for patients cared for by hospitalists, however, they were less likely to be discharged home than patients followed by primary care. This suggests that the decrease in length of stay may also be shifted to costs at other health care facilities (e.g. skilled nursing facilities) receiving patients.

Effects of Care Coordination on Hospitalization, Quality of Care and Health Care Expenditures among Medicare Beneficiaries

Peikes, Deborah; Chen, Arnold; Schore, Jennifer; & Brown, Randall (2009). Effects of Care Coordination on Hospitalizations, Quality of Care, and Health Expenditures Among Medicare Beneficiaries. Journal of the American Medical Association, 301(6), 603-618.

Key Points

- The caseload of care coordinators for half of the 15 programs ranged between 40 and 70 patients.
- CMS paid each program a negotiated fixed fee ranging from $80 to $444 per member per month, with an average of $225. Actual amounts paid to programs over the follow-up period ranged from $60 to $270 per member per month, with an average of $164.
- Two of the 15 programs showed statistically significant differences in hospitalizations between treatment and control groups (Mercy and the Charlestown program).
- None of the programs reduced regular Medicare expenditures. Two of the 15 programs showed reduction in costs, but were not statistically significant (Health Quality Partners[5] and Mercy).

[5] CMS had extended funding for the Health Quality Partners (HQP) program beyond the conclusion of the MCCD. For more information on HQP, please see the evaluation found later in this document.

- Findings conclude that viable care coordination programs with a strong transitional care component are unlikely to yield new Medicare savings. Programs with substantial in-person contact that target moderate to severe patients can be cost-neutral and improve some aspects of care.

EVALUATION OF SIMILAR MODELS ADDRESSING PAYMENT, COST, AND QUALITY OF CARE

As evidence of effectiveness, UCM alludes to findings from their HCIA round-one awarded Comprehensive Care Physician (CCP) Program, the program on which CCP-PM is based. The findings, as stated in the proposal, suggest the CCP program yields significant improvements in patient satisfaction and health outcomes and reduces costs to Medicare by about $3,000 per patient per year, potentially producing savings of more than $10 billion annually if scaled nationally.

Evaluation of Hospital-Setting HCIA Awards: Third Annual Report, Final – University of Chicago Comprehensive Care Program

Centers for Medicare & Medicaid Services (2016). Evaluation of Hospital-Setting HCIA Awards: Third Annual Report, Final. *University of Chicago's evaluation begins on page 125.*

Key Points

- Most patients were enrolled while in the hospital, but some were enrolled when visiting the ED or outpatient departments, or in community settings.
- There was no evidence that longer tenure in the program achieved greater improvements in health care utilization or Medicare spending.
- The CCP program was associated with an increase of 0.85 additional ED visits per enrollee, totaling roughly 582 additional ED visits over the entire program.
- For more detail on the CCP Program, please find the Year 1 and Year 2 evaluations using the following links:
  - First Annual Report: UCM Case Study starting in Appendix B10, pages B10-1 – B10-27.
  - Second Annual Report: UCM Case Study starting in Appendix B10, pages B10-1 – B10-33.

Evaluation of the Medicare Coordinated Care Demonstration: Final Report for the Health Quality Partners' Program

Peterson, Greg; Zurovac, Jelena; Mutti, Anne; Stepanczuk, Cara; & Brown, Randall (2015). Evaluation of the Medicare Coordinated Care Demonstration: Final Report for the Health Quality Partners' Program.

Key Points on Evaluation Approach

- The Health Quality Partners (HQP) program ran from 2002 to 2014. From 2002-2010, HQP focused on care coordination for Medicare fee-for-service (FFS) beneficiaries with chronic illnesses. In 2010, HQP was granted a program extension through 2014, but only for beneficiaries at higher risk of future service use – the group for which the program was effective (as demonstrated by reducing hospitalizations and Medicare expenditures).
- This report focuses on (1) HQP's impact on service use, survival, and Medicare expenditures during the most recent period of the program's operations (2010-2014), (2) comparing these impacts to those attained earlier in the demonstration (2002-2010), and (3) identifying likely explanations for the changes in results.

Key Points on the Evaluation from 2002 to 2010

- For the 15% of all enrollees who met high-risk criteria (these beneficiaries either (1) had coronary artery disease (CAD), congestive heart failure (CHF), chronic obstructive pulmonary disease (COPD), or diabetes and at least one hospital stay in the year before program enrollment), HQP reduced hospitalizations by 34% and reduced Medicare expenditures (including program fees) by 22%.
- Depending on the enrollee's risk level (enrollees were stratified into three risk levels), the Centers for Medicare & Medicaid Services (CMS) paid between $50-$130 per beneficiary per month (PBPM).

Key Points on the Evaluation from 2010 to 2014

- CMS paid HQP between $83-$281 PBPM for the high-risk population.
- The program had no measurable impact on expenditures, hospital use, or mortality for Medicare FFS beneficiaries at higher risk for future service use.
- The following are programmatic changes HQP made after the extension in 2010:
    - Increased staffing and decreased target caseloads per nurse care manager from 108 to 75 per full-time equivalent.
    - Required care managers to conduct more timely assessments within seven days of intake and more timely intervention following hospitalizations within three days of discharge.
    - Reduced the number of patient education classes offered due to the challenging logistics as a result of caring for a more complex patient population.
    - Nurse care managers spent more of their time addressing psychosocial needs.[6]

Fifth Report to Congress on the Evaluation of the Medicare Coordinated Care Demonstration: Findings Over 10 Years

The Department for Health and Human Services (2014). Fifth Report to Congress on the Evaluation of the Medicare Coordinated Care Demonstration: Findings Over 10 Years

Key Points

- CMS has conducted rigorous evaluations of several large-scale programs of coordinated care (the MCCD) and found that most of these larger-scale programs were not determined to be cost-neutral or to have reduced hospitalizations. Only a small number of programs have been effective for select patients. This report to Congress focuses on the Mercy Medical Center-North Iowa (Mercy) program and Health Quality Partners (HQP) program.
- Over eight years, Mercy reduced hospitalizations by 14% for its high risk population, but did not produce statistically significant reductions in Medicare expenditures. The average monthly program fee paid over the period for high-risk patients was $198 per beneficiary per month (PBPM), which exceeded the estimated savings in traditional Medicare expenditures.
- Between 2002 and 2011, HQP reduced hospitalizations for their high-risk population by 25%, ED visits by 28%, and Medicare expenditures by $291 PBPM (Averaged to be $139 PBPM).

[6] As University of Chicago's CCP program progressed, the program found their patient population had high mental health needs, requiring additional resources to address these needs. These findings can be found in the Evaluation of Hospital-Setting HCIA Awards' First Annual Report and Second Annual Report.

- Several features appear to distinguish HQP and Mercy from other MCCD programs that were unable to reduce hospitalizations among high-risk patients:
    - Frequent face-to-face contact and opportunities for face-to-face contact with patients to build rapport;
    - Strong patient education rooted in behavioral change theory;
    - Comprehensive management of care setting transitions;
    - Care coordinators serving as a communications hub among providers and between patient and providers;
    - Comprehensive medication management

Appendix: Environmental Scan for PTAC Proposals: Comprehensive Care Physician Payment Model (CCP-PM) Submitted by University of Chicago

Research Questions Guiding Search		Sources (Last 5 years unless otherwise stated)	Keywords and Search Terms (Used individually or in combination)
1	Who or what is the submitting organization?	Google, Wikipedia, organization websites and proposal links and citations	University of Chicago, Comprehensive Care Payment Model
2	What is the clinical care "problem" and/or the payment "problem" the proposed model is trying to solve or address?	Proposal, key references cited in the proposal, Google/Scholar, PubMed	Hospitalist, Continuity of Care, Rehospitalization, High Risk of Hospitalization, Discharge, HCIA, Primary Care, High-Risk Populations, Chronic Conditions, Chronic Illness, Chronic Disease, Chronic Obstructive Pulmonary Disease
3	What is current practice/ standard of care/evidence-based guidelines? Adherence to guidelines?	Google/Scholar, PubMed, Cochrane, MMRR, relevant professional organizations/ associations/ societies	Hospitals, Medicare, Physicians, Hospitalists, Primary Care, Patient Panel Size, Specialty, Inpatient, Outpatient, Continuity of Care, Care Coordination, Discharge, High-Risk Populations
4	What are the current payment methodology and relevant regulations/rules, legislative environment, controversies?	Google/Scholar, PubMed, CMS	HCIA, CMS, Medicare Coordinated Care Demonstration, Expenditures, Evaluation, Hospital-Setting
5	Is there evidence that current practices and payments are problematic?	Google/Scholar, Pubmed	Hospitalists in Medicare, Trends, Care Coordination, Continuity of Care, Primary Care, High-Risk Populations, Hospitalizations, Medicare, HCIA, HQP, CMS
6	What is the basis/evidence that problem is relevant to Medicare: i.e., size of population within Medicare and/or costs	Google/Scholar, Pubmed	Preventable Hospitalizations, Hospitalizations, Continuity of Care, Quality of Care, Communication, Hospital, Physicians, Primary Care Providers, Patient Outcomes, Information Transfer
7	Are there evaluations of the model or similar models of care and/or payment? Pilot studies?	Google, Pubmed, CMS	HCIA Awards, Comprehensive Care Program, HQP Program, MCCD, CMS
9	Is there support for the validity of quality metrics or	Google/Scholar, Pubmed	HCIA, CMS, MCCD, Comprehensive Care Program

	outcomes used in the model?		
10	Are there tools (proprietary or non-proprietary) involved in the model? Evidence for use, costs, effectiveness of such tools?	N/A	N/A
11	Miscellaneous – Any evidence behind statements and claims in proposal?	References cited in proposal, Google/Scholar	University of Chicago, Comprehensive Care Program, CCP, HCIA

Additional Keywords related to clinical scenario, patient population, disease/ conditions, setting: Inpatient, Outpatient, Clinic, Medicare, High-Risk Population, Chronic Conditions, Chronic Disease, Chronic Illness, Preventable Hospitalizations, Hospitalizations, Rehospitalizations, Discharge, Care Coordination, Continuity of Care, Communication, Information Transfer, Primary Care, Hospital, Hospitalist, Physician, Specialty, Patient Panel Size

Keywords related to payment model/ methodology: University of Chicago, Health Care Innovation Awards, HCIA, Comprehensive Care Program, CCP, Medicare Coordinated Care Demonstration, MCCD, Health Quality Partners Program, HQP

Keywords related to CMS/ CMMI: CMS, CMMI, HCIA, Medicare & Medicaid Research Review, MMRR

Specific names of tools, models, organizations, awards, mentioned in proposal text: Health Care Innovation Awards, HCIA, Comprehensive Care Program, CCP, Medicare Coordinated Care Demonstration, MCCD, Health Quality Partners Program, HQP

PHYSICIAN-FOCUSED PAYMENT MODEL
TECHNICAL ADVISORY COMMITTEE (PTAC)

PRELIMINARY REVIEW TEAM (PRT)

CONFERENCE CALL WITH CLINICAL EXPERT
S. RYAN GREYSEN, MD, MHS, MA

FOR THE

UNIVERSITY OF CHICAGO MEDICINE COMPREHENSIVE CARE PHYSICIAN PAYMENT MODEL PROPOSAL

Friday, June 29, 2018

2:00 p.m.

PRESENT:

PAUL CASALE, MD, MPH, PTAC Committee Member
TIMOTHY FERRIS, MD, MPH, PTAC Committee Member
KAVITA PATEL, MD, FACP, MSHS, PTAC Committee Member

SARAH SELENICH, Assistant Secretary for Planning and Evaluation (ASPE)
SALLY STEARNS, PhD, ASPE
AUDREY McDOWELL, ASPE
ANJALI JAIN, MD, Social & Scientific Systems (SSS)
JENNIFER TRAN-KIEM, SSS

S. RYAN GREYSEN, MD, MHS, MA, Hospital of the University of Pennsylvania

P R O C E E D I N G S

[2:04 p.m.]

MS. SELENICH: So, first, myself, Sarah Selenich. I am in the Office of the Assistant Secretary for Planning and Evaluation, and I am a staff person that is supporting this PRT.

In the room with me, we have Sally Stearns and Audrey McDowell, who are learning sort of the PRT process, and then also on the call, we have Jenn Tran-Kiem from SSS.

And also, Jennie, I don't know your last name, but she's the person that is going to be doing the transcription for this, and so I think for her benefit, it's helpful if we try to state our names when we are making comments, although I think Tim, Paul, Kavita, and Ryan all have fairly distinct voices, so hopefully that will help, help in the process.

DR. JAIN: I'm here as well, Sarah. It's Anjali.

MS. SELENICH: Okay. And Anjali from SSS is also on the line.

DR. PATEL: Okay, great. And then, as I mentioned, there's three of us that constitute -- that are from the Physician-Focused Technical Advisory Committee, the Physician-Focused Payment Model Technical Advisory Committee, PTAC -- are a part of the Preliminary Review

Team, or PRT, myself, Kavita Patel, also clinical scholar, kind of a nice -- a little nice cohort of us that go around the country, Ryan.

And then we have Paul Casale. I'll let Paul introduce himself. He's physically outside, so he might have to unmute. Paul.

DR. CASALE: Yeah. Thanks.

I think everyone is trying to leave New York City this afternoon.

DR. PATEL: Yes.

DR. CASALE: It's unbelievable.

DR. PATEL: Well --

[Laughter.]

DR. CASALE: They think it's July 4th already.

DR. PATEL: Probably. Yeah.

DR. CASALE: Sorry.

So Paul Casale, cardiologist at the ACO, New York-Presbyterian, Weill Cornell, and Columbia.

DR. PATEL: And, Tim?

DR. FERRIS: So I'm not a clinical scholar. I'm not a scholar at all, really.

[Laughter.]

DR. FERRIS: And I also don't understand why people haven't fled New York City decades ago.

DR. GREYSEN: They don't know about Philadelphia, apparently.

DR. FERRIS: But kidding aside, so I'm a primary care doctor in Boston at Mass General, and I, for several years, led the ACO efforts up here. And now I'm the CEO of the Mass General Physicians Organization.

And for my friends on the phone that care, after completing a five-year process, I found out today that I have been promoted to professor, although I'm not a scholar.

DR. CASALE: Congratulations.

DR. PATEL: Wow.

DR. FERRIS: It's awesome.

DR. PATEL: Knowing how hard that is to get, I -- all the more reason that Tim really is the smartest out of all of us, so --

[Laughter.]

DR. PATEL: Just another proof point, so all right. So let the fun begin.

So, Ryan, I'll let you introduce yourself but then also kind of ask you [inaudible]. We didn't want to [inaudible] our purpose [inaudible] Preliminary Review Team is to -- for the PTAC Committee is to actually just kind of do what we're doing, go through aspects of the proposal,

speak to the submitter, talk to clinical experts such as yourself. We're not looking for you to be a particular payment model expert. In fact, our goal is to actually understand because you are living at the intersection of the kind of policy finance and the practicality of things like this. So we really want you to wear your practical clinical leader hat in having this conversation, and our Preliminary Review Team is trying to understand, as we've pointed out in some of the questions, aspects around practicality, feasibility.

And then, of course, if you do have, you know, because of -- we have -- I personally have looked at your C.V. I don't think Paul and Tim have had the benefit of looking at it, but knowing that you also have kind of a background in health services research and some other interests, it would be obviously nice to hear some of your opinions in other places around this proposal. But our goal really is to kind of reach out to you in the clinical aspect.

Our job then as a Preliminary Review Team is to put together what's called a Preliminary Review Team report that's informed by a number of things, and then that report, along with kind of on-site live interaction, will be presented in front of the entire committee of 11 people

at our September meeting in Washington, D.C., at which time through a very public process will actually vote on this proposal.

So just to give you a sense of like where this fits, you know, kind of in the bigger picture, hopefully that gives you some context.

And so, with that, we'd love to have -- just, you know, briefly kind of introduce yourself, and then also, if possible, kind of diving into the questions. You don't have to take them in any order, but we are, you know, really interested in, again, practicality, feasibility, interest, and how generalizable some of these -- some of what was proposed is.

And because I think of -- you know, because you must have -- I feel like you probably know David Meltzer, just because of the field. So to the extent you have any experience around this model being started would be helpful too.

So, Ryan, the floor is yours.

DR. GREYSEN: Perfect. Well, let me say first thanks for inviting me. It's an honor to be part of the PTAC here, the Super Friends Club, scholars, professors, and all, and thanks to ASPE. Always great working with you guys too.

By way of background, I am a hospitalist now, 10 years of practice. I actually met Kavita when I was doing my residency at George Washington University of D.C., and was an intern in Senator Kennedy's office, unfortunately right around the time he got his diagnosis, but we worked together for a month on some -- a couple of comparative effectiveness things, and since then went on to do the Clinical Scholars Program and then was faculty at UCSF largely in a research-focused career, although became increasingly interested, given my research focus, on vulnerable adults in the hospital, became increasingly interested in health system change within the hospital to promote better continuity and better outcomes for vulnerable patients.

And so because of that focus, I've known about the CCP Chicago model for some time and will admit is if it's bias or objective admiration perhaps for the program, I think it's a really innovative idea. But I do have some thoughts on -- and I thought the questions that you guys posed were very good questions about feasibility, scalability, and such.

So -- and it's great to hear that you wanted to hear my perspective. I imagine that you would want my perspective as the clinician and as a clinical leader for a

group here. I was recruited from UCSF to Penn in 2016 to be the chief of the Section of Hospital Medicine, and in that position, I coordinate a group of about 50 hospitalists and 25 advanced practice practitioners across three hospitals situated within the University of Pennsylvania Health System, which has six hospitals, which all have hospitalists and are doing more and more to think about what system integration means and how we coordinate care across sites for patient populations that need extra care.

So this is a very timely proposal in terms of where our health system is and where my group is situated within that health system.

So maybe we can jump into some of the questions, and the first question, I thought was a really good one, about what does this mean for work flow and for current hospitalists and basically do we think that hospitalists out there -- and I can say a word or two about hospitalists in my group -- would they want to do this and what would the work flow be like and would that improve patient care.

I can say it's actually a funny happenstance. Just this week, one of our more experienced associate professors is going up for a full professor, has been in our group for 10-plus years, wrote me out of the blue and

said, "Ryan, I wanted to bounce an idea off of you. I'd really like to develop a small panel of patients that I have seen many times in the hospital who I think need additional help after they leave the hospital. For various reasons, they're often not able to make it to their primary care or they need someone who's more familiar with their inpatient struggles," so basically someone within our group in this same week asked me could, you know, they do something like this. So I thought that was an interesting, very spontaneous expression of the appeal of this model.

I'll also say that within our group, we have another hospitalist who several years ago developed a program focused on high utilizers, focused on the Hospital of University of Pennsylvania, our biggest hospital, and over -- I think it's -- she's turning into the third or fourth year of the program. She's garnered a lot of support from the health system and directly from the CEO of the hospital to build this inter-professional team that's led by a hospitalist but also has a full-time nurse, and now we'll be adding a full-time social worker to manage a panel of -- it's ever expanding, but it's been relatively small. I want to say they might be approaching 50 patients who are basically in the hospital almost as much as they're out of the hospital. These are folks who have really high

acute care utilization and along with that have a lot of complex social, psychosocial, and medical needs.

And it's been remarkably effective in reducing utilization and improving outcomes in initially a very small group of patients but now growing, and although it's led by one hospitalist who gets support, sort of relief from clinical duties, to coordinate this, there are now, I think, six, maybe eight hospitalists in our group who agree to take on one or two patients in that panel and be the primary contact, the high-utilizer hospitalist for that patient. And they get a little bit of support for that.

But it's all very -- it's not tied to a clinical outpatient space or visit, so these patients in the panel, they have the -- they're able to contact these hospitalists, and anytime they're submitted to the hospital, that lead hospitalist is informed. The whole team draws up care plans. It's particularly important for patients that have chronic pain or recurrent issues that come up in the hospital.

So it's not so much primary care a la, you know, "I'll see you in clinic next afternoon," but it is definitely an overlapping focus on getting patients who need additional help outside of the hospital to stay out of the hospital.

So all of that to say I think there are multiple proof points, as Kavita says, within our group, that there's interest in our academic, urban environment where we care for a pretty high-acuity medical and social population. There is interest in models like this.

We have not talked about doing CCP here expressly, although I think it's something that would be of great interest to our group.

DR. PATEL: Because of the -- just the value it presents, the finances? What's particularly interesting to your group?

DR. GREYSEN: Right. The driving motives.

I think I'll be clearly honest. So I turned to primary care and was really kind of militantly primary care through residency and accidentally became a hospitalist because I had a gap here between fellowship, and then once I tried it discovered that a lot of the things that I really wanted to fix as a primary care doc might be more fixable from within a hospital. I was really interested in transitions and readmission and as I said vulnerable patients.

But one of the things I do really like about hospitalists and I think a lot of hospitalists choose this field and focus a practice, because you don't have to think

about what someone's cholesterol is and when's the last cancer screening test they've gotten. There's so many demands on primary care docs, and that's sort of one of the things that I think people trade for going to hospital medicine, is not having to manage the gazillion recommendations about every year you get X, Y, and Z, for thinking about sort of joys of being a hospitalist. You get to deal with the acute care problems and ideally make a difference for people who are having something that is treatable and acute without having to do the population management stuff.

On the other hand, one of the more frustrating things about hospital medicine practice, and particularly in the environment that we're in here, is that you do see a lot of patients in the hospital who it's very evident the system is failing them. They're just not able to get the care they need, and you're not able to have that experience of fixing their problem or even making really meaningful progress during their hospital stay.

I'm on service right now, and I have several patients that fit this bill. And so that is a source of intrinsic frustration.

I think if you're talking about hospitals wanting to do this type of work, it's a matter of the tradeoffs,

and for some people, picking up more of the primary care duties in exchange for being able to help patients that they -- they aren't getting the satisfaction of being able to help during short -- relatively short inpatient hospitalizations, that's worth it to a lot of folks, like the guy who emailed me this week and basically proposed doing something like this on his own and like the hospitalists who work with our high-utilizer program.

There are, on the other end of the spectrum, some hospitalists who -- part of what they like is being able to have a really intense week or two weeks and then being able to completely disengage clinically, and there are hospital medicine, particularly in academic environments, breeds people that wear multiple hats. I'm a good example of this, where I have half of my job is research funded through the NIH and the other half is split between clinical and administrative duties. And for people who aren't full-time clinicians, it's hard for me to imagine how they could do this.

But for the majority of our folks who are full-time clinical, like I said, there will probably be some in any group who say I want to do pure hospital medicine and be on for a week or two and then off and not worry about all the follow-up, and there's another subset that I think

would very happily trade that to have more like a week-in, week-out job where they could be in the hospital in the morning but then see patients who they know in a panel and help progress their overall care in the afternoons, so --

DR. PATEL: So if you were to start something like this, you would not imagine -- Ryan, just since you do actually run the group, you would not imagine trying to kind of, you know, encourage every single hospitalist to participate? It would actually have to probably initially be a match of interests as well as --

DR. GREYSEN: Yeah.

DR. PATEL: -- some what you talked about, people who are full-time and could do certain things, but also, you know, really did -- having the hospitalist medicine to do more -- you know, that blend?

DR. GREYSEN: Right.

And then -- and maybe this dovetails into thinking about sort of broad scalability and is this something -- could this become the model, you know, coast to coast, everywhere, you know. I think that there is a role for this everywhere, and I'm willing to be convinced that maybe this could be the new thing where everybody does this.

But I think it's -- my thinking is this is good

for a patient population that has additional needs, and there's a large group of patients out there who I think do fine with just sort of really high-quality primary care, and they may only be hospitalized a few times in their life and don't really need to be in this.

I know the screening criteria is hospitalization within the last year, and I agree with the proposal's logic that this is a very big risk factor and great way to screen people, but I think particularly in settings where the patient population isn't quite medically or socially complex as ours, there are a lot of people who just have their one pneumonia and they don't really necessarily need to be in a practice like this.

There are also -- I think the question later on about patients' hesitancy to leave their primary care if they're happy with it, and if they've been hospitalized once, is that reason enough to leave a good primary practice to join a CCP-type practice?

So my feeling is probably not, and I don't think this is a criticism so much as I think this program could occupy a really important space and meet a very important unmet need for a population that does need a different type of model and different type of follow-up.

But for a lot of people -- and I think about, you

know, myself and my immediate family, like, you know, the types of random hospitalizations here to there, but, you know, don't really need to be in a panel like this, I don't think.

So for the otherwise healthy or, you know, maybe chronic disease but stably managed, it's harder for me to see the value for those patients, but for a patient population that has multiple hospitalizations -- I don't know if that's within one year or multiple hospitalizations over several years -- I think the more acute care needs that patients have, the more this type of model makes sense to me.

DR. PATEL: Let me kind of pause and see if Tim or Paul -- that was very, incredibly helpful, Ryan, and you touched actually on quite a number of areas we wanted to touch on. I have some follow-up questions, but I just want to pause and see if Tim -- I'll ask Tim first and then Paul, if they've got any comments, questions, areas to further ask you.

DR. FERRIS: Well, yeah, I want to add my thanks. You obviously spent a good bit of time sort of thinking through these things.

The way -- one of the ways we're framing the question is, is the -- is the payment model sufficiently

flexible to incorporate different approaches to solving the fundamental problem they're trying to solve here? And I just wondered if you could address that, if you understand the question.

DR. GREYSEN: Yeah. So is this flexible enough in the payment structure, the way it works, to be able to avoid making it too rigid? And I think probably embedded in that is also a concern, could there be a couple questions about gaming, and would either individual physicians or practices try and game it here.

This is not as much my area of strength, given that our group, we don't really have a budget. We're a section but within a division of general internal medicine, and so as such, you know, we get FTEs and staffing. But the billing really goes centrally through our division. So I'm less facile about payment models, other than -- what I could say is that here at Penn within general internal medicine, we've recently developed a primary care service line, which has an ACO-like structure.

I believe they're part of one or more Medicare incentive and innovation programs that incentivize the practice to do better population management, and so it's a similar sort of scheme where they get kind of capitated payments for a number of patients who are in the panel,

regardless of how much utilization they have. So the way to make it financially viable for the group is to reduce -- to improve their outcomes and reduce their utilization.

So I could say that that kind of model was something that the group wanted to do. The physicians within the group were sort of the driving force. It wasn't that the leadership of the group said, "We need to do this." It was more the physicians in the group said, "This is a better way to practice medicine, is take accountability for outcomes and manage a panel of patients to try to reduce utilization and improve their experience."

So I know within our division culture here, there is interest both from the front-line providers, the outpatient docs, and from the division leadership to do this type of model.

In the hospitalist group, we're not -- like I said, both from the leadership perspective, in my position, but also the front-line hospitalist, we're just sort of less aware, I think. It's less in our experience what the costs of care are.

We are given targets in terms of RVUs that we try to do some feedback to our physicians around how to do better billing, for notes and things of that nature, but we really don't get much more into than that.

My sense is -- and I get this from our division chiefs -- that -- and I've heard this from others and including my boss at UCSF. Bob Wachter is well known for saying that hospitalists might be the only physician group that doesn't earn their keep in terms of professional fees. They're kind of a losing proposition. They don't generate a billing, what they cost in salary and support, and the benefit, what makes them feasible for hospitals is that they provide value in terms of keeping lengths of stay down, reducing in-hospital complications, reducing readmissions. So it's all about value generation and trying to generate savings in other areas rather than paying for the services rendered.

So between our division leadership and our outpatient practice here, which is exploring this primary care service line and ACO-like capitated program and our hospitalist group, which is sort of rooted in providing value to the hospital, I think there's a lot of interest in figuring out how to do that better.

I don't know if the average physician in our group would find it necessarily attractive or intuitive to think about $40 per hospital, per patient, hospital as in the last year or $10 for others, et cetera. I think they might think more along the lines of what is the clinical

load, is seeing two to five patients in the morning and then a full panel, which I imagine is probably another five patients in the afternoon in the clinic. Is that more or less work than I'm doing now, and how likely would I be to burn out, given that it's probably going to be a, you know, 48-week-a-year job as opposed to doing like 35 or 34 weeks a year inpatient?

The classic hospitalist's job description is week on, week off, so 26 weeks we're on service for those 7 days and then 26 weeks where you're just off. But a lot of places have modified that, and so what we do here is we have 34 weeks defined as Monday through Friday, and then it's a variable number of weekends, but typically 14 to 17 weekends, which actually winds up being as much or more shifts than you would do if you did a week on, week off for 26 weeks a year. But just to put that in perspective, that's part of what people like about the hospitalist model is there are some weeks where you don't see patients, and you engage in quality and safety work or education or research.

So I think I've -- sorry. I think I've gone like several steps out beyond what you were asking, so happy to take --

DR. FERRIS: No, but it's helpful information, so

I appreciate it.

Let me turn it over to Paul.

DR. CASALE: Yeah. Hi. Thank you, and thanks for your comments.

I was wondering if you're thinking -- if you could comment even more broadly within the Penn system, so thinking out to your sort of community health system and the hospitalists working in those areas. Have you had any thoughts as to whether this model would appear to -- you know, would seem to be attractive to them as equally in your experience or, you know, interactions with, you know, those groups of hospitalists who, you know, may not have -- well, may not have the, you know, similar types of interests in either academic pursuits or others and are just sort of thinking as you were alluding to, the time off, time -- you know, trying to understand their scope of their job? So --

DR. GREYSEN: Yeah.

DR. CASALE: -- I wondered if you had any thoughts around that.

DR. PATEL: And I wanted to add [inaudible] include [inaudible].

MS. SELENICH: Kavita, you're breaking in and out a little bit.

DR. PATEL: Okay. Let me see [inaudible] using. That's weird. Can you hear me?

MS. SELENICH: Right now I can, yeah.

DR. PATEL: Ryan, can you also [inaudible] --

MS. SELENICH: No. Still breaking out.

DR. GREYSEN: Yeah. I'm getting chop.

DR. PATEL: Weird. I'll just call back and ask you if you would -- would comment on any contracted hospitalists that you use.

DR. GREYSEN: Yeah.

DR. PATEL: Contract and [inaudible].

DR. GREYSEN: So great. These are all really important points.

So our practice here, so the University of Pennsylvania owns all the hospitals and the physician practice as well. So we are an employed model within the -- so there's the University of Pennsylvania Health System, which is the infrastructure and the facilities, and then there is the clinical practices of the University of Pennsylvania, or CPOP. And the vast majority of physicians are CPOP physicians, although some of the primary care practices are run by another organization, Clinical Care Associates, or CCA, which does contract with CPOP and UPHS.

We don't -- well, we do have some of those who

are hospital medicine. I was just going to say it was all ambulatory, but two of the hospitals in the health system, both primary care and hospitalists are run by CCA. And that group partners with the clinical practices of the University of Pennsylvania, and I think that's an area -- I've been at some meetings where they're discussing how to bring this all together and create a more integrated system.

The health system just recently acquired in January, Princeton University Hospital, and they also have -- it's more of a community physician model, rather than employed physician model, so they're trying to figure out how to have these groups all have one governance. And so if we could think of practices at Penn as over supplying -- well, but think of it almost kind of like concentric circles, and where my group sits is kind of in the bull's eye where University of Pennsylvania is physically located and where the Hospital of the University of Pennsylvania is located. And then there are concentric circles for some of these other hospitals and other physician practices.

I do think that this is something that could spread from the inner circle to the other concentric circles. I think it makes the most sense in our practice here in the middle because of our patient population,

again, because of the clinical complexity and social, psychosocial complexities that we have here, there is not a general or public hospital in Philadelphia. All of the -- all of the hospitals share in underserved care, the teaching hospitals in particular, of which there are four major ones. I think a lot of it -- and HUP. Our catchment area is West Philadelphia. Temple gets a lot of North Philadelphia.

But, any rate, I think this model works really well in that type of environment, and coming out of Chicago is South Chicago I think is similar type of environment to West Philadelphia. And thinking about how this might spread to some of our other hospitals and other practices -- so Chester County is one of our other hospitals that's situated about like three miles west of here. It's a smaller community, much more affluent, less of a specialty hospital, so like no transplant programs and some cancer care, but not the same type of tertiary or coronary care that we have here.

I do think that they still have -- I know that they have patient populations there that are frequently hospitalized, and they may not have as many of them. And they may not be -- I don't know. Maybe the most challenging of those patients is, pound for pound, just

like ours here, but I sort of imagine that the imagine patient that needs this additional assistance out there might be a little less complicated and therefore might be managed with a little bit less resources. But I'm confident that there is still a need out there.

I think if you looked at that practice in Chester County or in Lancaster, which is in -- Lancaster, Pennsylvania, is in kind of Amish Country, 50 miles northwest of here, a very different community. I think both in Chester County and Lancaster, there would be some interest in this, but I think the proportion of hospitalists who would want to be in a model like this and the proportion of patients who would benefit I think would be smaller, not to say none, but I think it would be a smaller group.

Whereas, in our practice here, I think that -- I'm trying to imagine, you know, if this were a full-blown, fully scaled, how many people in our practices and how many patients do we have with this -- to become like half -- I imagine half of our practice does this model and half does the sort of traditional current practice hospital medicine. Maybe. I think we're just starting to get a sense of how deep the need is, but I can say that every time on service, including right now, I'm really overwhelmed with how many

patients need more than we can provide in the hospital and have difficulty navigating through the outpatient world they need to get through.

And I do feel like it's been accelerating over time. I don't know if in part because of the expansion in our health care systems or we're sort of getting more market share, which is not by accident. The health system is strategically trying to position itself, and so maybe because we're getting more volume, we're getting more of these patients.

But if I were to say there is a trend, I think there is more and more need for this that is most easily observed in your inner-city, high-acuity referral hospitals like ours, but I believe also extends to other hospitals in different communities with different patient populations.

And I think if one of my counterparts from those hospitals was on the line, they would probably also agree that for them, even though it's proportionately less, I think they would agree that the trend is towards more of these patients that they are seeing as well.

So I don't think -- if you're worried that, you know, what if we develop this model and scale it up, does the need for it dry up in the near future, I just -- I can't imagine that happening. If anything, I think the

need would expand, and it might be -- the challenge of this might be developing it at a rate that's enough to keep up with the increasing clinical demand for it.

And at what point would it hit an equilibrium? Like I said, does it -- you know, at some point, could this be like half our practice? More or less? I don't know. But I think it would take some time of scaling up before we would run into a position where like, "Gosh, we just don't need any more of this."

DR. PATEL: Great. Thank you, Ryan.

I want to also allow for the entire team. Sarah mentioned that we've got a bunch of folks. Any additional questions for Ryan? Because this is incredibly helpful for multiple reasons, kind of the practicality of it, but then also just your -- I had a feeling you would know the CCP model, so it's great that you've got that insight. Any additional questions from the team or group?

MS. SELENICH: I don't think so.

DR. PATEL: Okay, great.

Ryan, anything -- any -- I kind of went over what this process is, and you're playing a key role in it. Anything you want to ask of us, anything you'd like to -- just kind of final thoughts or comments? We wanted to -- I'm sure since you're on service, you've got other things

you can do, but I want to give you a chance to expand on anything that we asked.

DR. GREYSEN: Sure. I'll just sort of freely editorialize a little bit and expand on what I said earlier that I've, you know, been an admirer of this program, and I think that it's something that I would really like to see come to our institution, given both the faculty interest in this and the -- what I think is pretty evident, patient -- I won't say demand for it because they're not showing up and saying, "We heard about this and we want it," but unmet needs that I think our patients' experience, despite our best efforts here.

And I saw that there was a letter of support from my colleague, Ed Vasilevskis, at Vanderbilt. So it's neat to see that Vanderbilt has been looking at this model. I didn't know that they were looking at this and trying to do it down there.

I did have some curiosity with self-interest in mind or rather the interest of my group. If this is funded, is this something that would enable the University of Chicago to support programs like ours who would be interested in this? I saw some things in there about expanding their reach locally in Chicago and probably surrounding areas, which makes sense, but I am curious what

it -- particularly because I have people like the guy emailing me this week saying he wants to develop his own CCP -- how might this play out and how might programs like mine be able to learn about benefitting from the CCP experience.

I mean, I guess I could always just call David and ask him if we could visit or have him here, but through a structured process like this.

DR. PATEL: Yeah. Yeah, no, no. That's a good question, and I'll go ahead and just kind of answer. And probably, Tim, Paul, and I would maybe even give you three different answers.

But I would just say that the goal is exactly what you said, that like you may have already been thinking about it, but that going through this process, you know, depending on the outcome of the process, it could offer a formal structure through kind of, you know, HHS/CMS. But then what we've also found is that even for proposals that go through the process that, you know, HHS hasn't adopted. It's actually encouraged kind of commercial payers as well as others to think about, "Well, where does this fit in?"

So I think that -- I think that it will be great. You know, I told you we're going to be talking about this in September. So I know that your schedule is pretty full.

I would actually encouraging you once our calendar gets set to listen to the portion where we have a discussion, and that's also with the University of Chicago, with the submitters kind of at the table literally.

DR. GREYSEN: Cool.

DR. PATEL: So I think that you can maybe get a better sense of where this will go because, by that time, our Preliminary Review Team will have done some work, and then we will have the benefit of the full committee's discussion. But you're correct that like PTAC was set up to allow for an idea that like your colleague called you about that may not have been, quote, labeled CCP but fits into this framework. This process is intended to allow for these ideas to come to fruition in some form through kind of the HHS process, and that's traditionally been through CMMI. And that's traditionally been thought of as, quote, new payment models. But as a PTAC, we're also learning that, you know, there might be existing programs in which this fits into.

So I think that there's -- it's a little bit of an unwritten script; however, PTAC offers a process by which even the discussion, in my opinion, offers you -- you know, it will give you more feedback for, okay, how could we formalize this program. Could we even think about, you

know, partnerships with Medicare Advantage plans or others? So that's my kind of very free advice about this.

Tim and Paul might have some additional thoughts, but I would say that that's a good sense of -- it would be helpful to hear your perspective on the value of the idea, and carrying it forward would be something that, you know, I would say in September, we'll have a better sense of what the possibilities are.

DR. GREYSEN: Yeah. That's helpful, and I think even between now and then, we might have some internal discussions about what this looks like, if we do something like this. And I think the sort of challenge is that our group and others might face in just sort of deciding we want to do this on our own, what they did at Vanderbilt, is figuring out in trying this out, there's probably going to be some inefficiencies, almost definitely less -- well, less of RVUs or otherwise keeping up revenues as you adapt to a new model, and so needing to have either some support within the system, some permission to underperform in terms of the revenue or otherwise have some support to kind of experiment with this. And so I think to the extent CMS decides ultimately this is something worth promulgating, I think helping places figure out how do they do that, either where they discover the resources to do it or providing

some start-up.

And the last thought I had was just about -- I mentioned this earlier -- that I know it is a physician payment model, but our experience with the high-utilizer program here is that -- and I'm sure this is the case and others as well -- that a lot of the heavy lifting and difference making is done by the inter-professional team, social work, case management, nurses. So I think it does need to have a physician -- reorganization of physician payment to get docs to practice differently, but I wonder if ultimately the success of these sort of things depends on the team that you build around it.

DR. PATEL: Right. Absolutely.

DR. GREYSEN: That goes to like, well, when this starts up, like is it enough to say that the health system could just have a change-up in how it does the physician billing, or is it kind of like start-up cost of hiring more social workers, case managers, or reorienting them in their current jobs?

So I know it's not in the questions here, but these are sort of -- if I were going to take this forward right now with our primary care service line, I think these are the kinds of things I'd have to figure out with them.

DR. PATEL: No, that's great. That's very

helpful. Thank you.

DR. JAIN: Kavita, I did have one additional clinical question, if that's okay. This is Anjali.

DR. PATEL: Sure.

DR. JAIN: So, Ryan, you mentioned that some patients who have had a hospitalization in the previous year are not necessarily this high-utilizing population, whereas others might be. So do you have a sense of the proportion of patients who have, you know, the hospitalization as a -- in the previous year as an entry criteria to this model, like what -- what proportion would be actually suitable for this model?

DR. GREYSEN: That's a good question, and I'm going to have to remind myself that this is within Medicare.

DR. JAIN: Yes. Yeah.

DR. GREYSEN: So then work in Medicare database is looking at readmission and so it's predominantly an older population. So I think kind of readmission rates for people who have been hospitalized once, I think there's something around nationally 25 to 30 percent are going to have another hospitalization in the next year.

DR. JAIN: Mm-hmm.

DR. GREYSEN: And then maybe within that group,

there is a proportion who are going to have multiple hospitalizations in the next year.

So depending on how you look at it, you could say like, well, there's about a third of Medicare beneficiaries who are eligible for this and probably -- I don't know -- a third or two-thirds of that group, so maybe 10 to 20 percent of the total population that I think would be where I would focus in terms of maximum benefit. That that other third -- or I'm kind of dividing the -- thinking a rough estimate of a third of all Medicare patients would just inflate. Let's say a third of them are readmitted in a year and then separating that into, you know, let's make that into three piles, one that's admitted a lot, one that's admitted more than once, and -- let's do -- now I'm getting too complicated.

Within that 30 percent, I think a portion of them would benefit a lot and a portion of them probably not that much, but in any case, probably south of 30 percent, so maybe 10 to 20 percent of the entire Medicare population that might in a maximum scaled-up national version of this benefit from this kind of program.

That's just my quick and dirty math off the top of my head, and I would further hazard that within that, it's probably the 5 to 10 percent who are, you know --

DR. JAIN: Mm-hmm.

DR. GREYSEN: -- just a disproportionate amount of utilization that benefit the most.

There's probably some population that is getting readmitted a lot that doesn't benefit from this because they might be -- they're probably more appropriate for palliative or, you know, some other programs, because at some point, you probably become too sick for this program. So maybe you're aiming at the sweet spot of patients that are too sick to be optimally managed in just a small but your outpatient doc kind of way, but not so sick that, you know, they're sort of trending more palliative or have more -- would require more of this program than it's designed to do.

DR. PATEL: Right. Great.

Ryan, I really appreciate it. This is Kavita. I thank you so much. If we have anything to follow up on, we'll reach out to you, but -- and vice versa. If you have any thoughts, please reach out as well and just again an appreciation for all the insights from various perspectives.

DR. GREYSEN: Yeah. Thank you. I'll follow with interest to see where this goes because --

DR. PATEL: Yeah, yeah. Very, very central to

your profession. Yes.

MS. SELENICH: And then, Ryan and then Jennie, if we could just ask you all to drop off because we're going to have a second sort of portion of this call.

DR. GREYSEN: Yep.

MS. SELENICH: I'd appreciate it. Thank you.

DR. GREYSEN: All right. Take care, guys.

DR. PATEL: Thank you.

DR. CASALE: Thank you.

DR. FERRIS: Bye.

[Whereupon, at 2:54 p.m., the conference call concluded.]