#### Systems for Action National Coordinating Center

Systems and Services Research to Build a Culture of Health



Strategies to Achieve Alignment, Collaboration, and Synergy across Delivery and Financing Systems

#### The Comprehensive Care, Community, and Culture Program

Research In Progress Webinar

Wednesday, November 16, 2016

1:00-2:00pm ET/ 12:00-1:00pm CT



Center for Public Health Systems and Services Research

Funded by the Robert Wood Johnson Foundation

## Agenda

Welcome: Anna G. Hoover, PhD, MA, Co-Director, RWJF <u>Systems</u> for Action National Coordinating Center, University of Kentucky College of Public Health

#### The Comprehensive Care, Community, and Culture Program

Presenters: David Meltzer, MD, PhD, Director of the Center for Health and the Social Sciences <u>dmeltzer@medicine.bsd.uchicago.edu</u> Harold Pollack, PhD, School of Social Service Administration, and Co-Director of The University of Chicago Crime Lab <u>haroldp@uchicago.edu</u> The University of Chicago

Commentary: Susan N. Dreyfus, S4A National Advisory Committee member; President, Alliance for Strong Families and Communities

**Questions and Discussion** 

#### RWJF Systems for Action Program to build a national Culture of Health <u>http://www.systemsforaction.org/</u>

Overview

#### Mission: Widen the lens beyond health care & public health systems

Rigorous research to identify novel mechanisms for aligning delivery and financing systems in *medical care*, public health, and social & *community services* in ways that improve *health* and wellbeing, achieve efficiencies in resource use, and reduce *inequities*.

www.systemsforaction.org



Research Agenda Delivery and Financing System Innovations for a Culture of Health

## Wide lens: implicated sectors

- Public health
- Medical care: ACOs, PCMCs, AHCs
- Income support
- Nutrition and food security
- Education and workforce development
- Housing
- Transportation
- Criminal justice
- Child and family services
- Community development and finance





USDA

Program

Putting Healthy Food

Within Reach

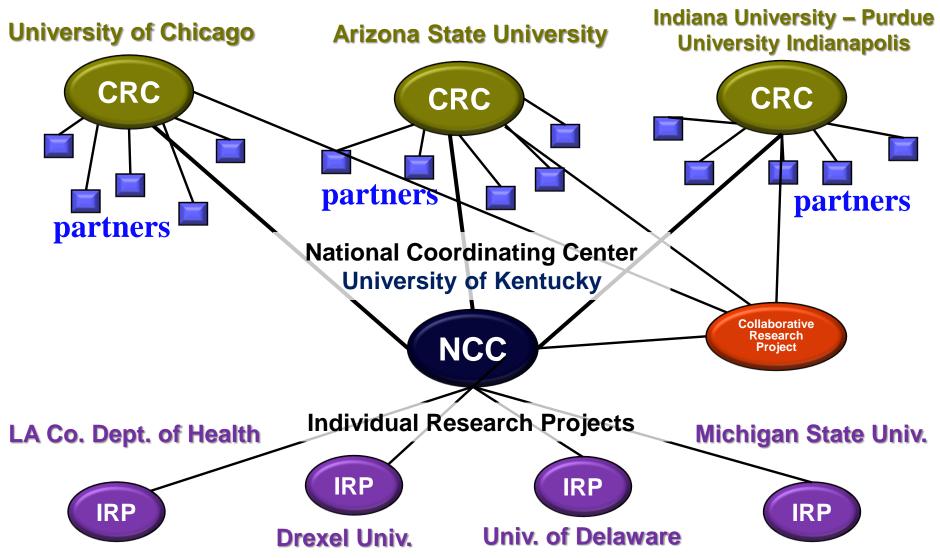
Supplemental Nutrition Assistance

# Study novel mechanisms for aligning systems and services across sectors

- Innovative alliances and partnerships
- Inter-governmental and public-private ventures
- New financing and payment arrangements
- Incentives for individuals, organizations & communities
- Governance and decision-making structures
- Information exchange and decision support
- New technology: m-health, tele-health
- Community engagement, public values and preferences
- Innovative workforce and staffing models
- Cross-sector planning and priority-setting

#### **S4A Program Structure**





### **Collaborating Research Centers**

- University of Chicago: Randomized trial of a Comprehensive Care, Community and Culture program
- Arizona State University: Analysis of medical, mental health, and criminal justice system interactions for persons with behavioral health disorders
- IUPUI: Evaluating integration and decision support strategies for a community-based safety net health care and public health system
- University of Kentucky: Measuring multi-sector contributions to public health services and population health outcomes.

#### **Individual Research Projects**

- Michigan State University: Randomized trial of Community Complex Care Response Team
- Los Angeles Department of Health: Evaluation of Housing for Health initiative, which provides permanent housing and supportive services for vulnerable populations
- University of Delaware: Randomized trial to test the efficacy of using the team approach to leverage different financing systems and services
- Drexel University: Evaluation of Building Wealth and Health Network within anti-poverty programming

## Presenters



#### David Meltzer, MD, PhD

Fanny L. Pritzker Professor, Department of Medicine, Harris School of Public Policy Studies and Department of Economics Director, Health Lab and <u>Center for Health and the</u> <u>Social Sciences</u> The University of Chicago *dmeltzer@medicine.bsd.uchicago.edu* 



#### Harold Pollack, PhD

Helen Ross Professor, School of Social Service Administration

Affiliate Professor, Biological Sciences Collegiate Division and Department of Public Health Sciences Co-Director, <u>The University of Chicago Crime Lab</u> The University of Chicago <u>haroldp@uchicago.edu</u>

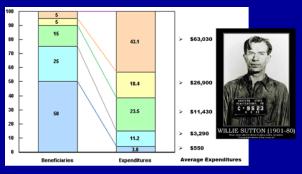
#### Reforming Care for Patients at Increased Risk of Hospitalization: The Comprehensive Care Physician Model and the Comprehensive Care, Community and Culture Program (C4P)

#### November 16, 2016

This project is supported by a Robert Wood Johnson Foundation Systems for Action Research Award, and the University of Chicago Neubauer Collegium. Previous works was supported by and RWJF Investigator Award, and by Funding Opportunity Number CMS-1C1-12-0001 from Centers for Medicare and Medicaid Services, Center for Medicare and Medicaid Innovation. The content of this presentation are solely the responsibility of the authors and do not necessarily represent the official views of HHS or any of its agencies.

## Health Care Reform

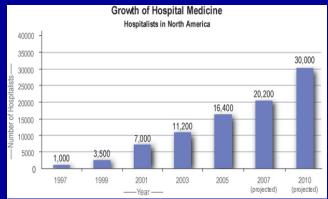
- Improving access to high quality care
  - Breadth of access
  - Patient-centered approach recognizing social/community context
- Controlling costs
  - Highly concentrated (25/85 Medicare)
  - Diverse strategies
    - Prevention
    - Comparative effectiveness research (PCORI)
    - Care integration (patient-centered medical home)
    - Bundling, capitation, and accountable care organizations (ACOs)
    - Center for Medicare and Medicaid Innovation (CMMI)
    - Reinvestment in primary care workforce



## Growth of Hospital Medicine

- Traditionally in US, primary care doctor cares for patient in clinic and in the hospital for general medical problems
  - AM hospital rounds and then clinic
  - Emphasis on continuity of care & doctor/patient relationship
  - Unique in the developed world
- "Hospitalist" defined in 1996 as physicians working  $\geq 25\%$  in inpatient care
- >30,000 hospitalists today
- 1/3 of general medicine admissions





#### Advantages/Disadvantages of Hospitalists: Economics of Specialization

- Advantages of specialization
  - Inpatient focus, presence, expertise
- Disadvantages of specialization
  - Loss of Dr.-Pt. relationship (coordination costs)
- Optimal specialization balances benefits and costs
  - Economic Theory: Adam Smith
  - Medical Theory: Francis Peabody
  - TV Theory: Marcus Welby
- Adjust model
  - Improve handoffs, reduce handoffs
  - Adaptive Organizations Perspective (Dessain and Santos, JPE, 2006): When high returns to specialization and high coordination costs, focus product to reduce needs for coordination ("Solution Shop" – Clay Christensen)



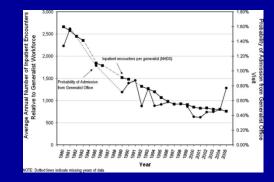
#### Growth of Hospitalist vs. Traditional Model: Two Theories

#### • Needs of hospital care

- Incentive and ability to reduce hospital costs (Medicare PPS)
- Increasing acuity in hospital
- Limited evidence of savings or improved outcomes

#### • Needs of ambulatory care

- Declining hospital admissions and rising ambulatory volumes decreased PCP incentives to see hospitalized patients
- Organization of physicians into groups encouraged specialization



Meltzer, Chung JGIM 2010

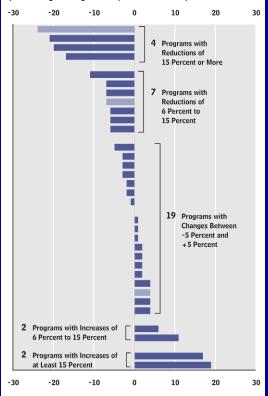
 Ambulatory economics model of traditional primary care vs. hospitalist/PCP balances transport cost vs. communication costs

# What is the Value of the Doctor-Patient Relationship for the Hospital Setting? And for Whom does it Matter?

- Rich literature on the value of the doctor-patient relationship
  - Trust, interpersonal relationship, communication btw. doctor/patient, knowledge of the patient
- Patients value seeing their own doctor in the hospital
  - But willingness to pay is not so high
- Observational studies show lower costs, better outcomes with continuity of care
  - Care by PCP for > 10 years: 15% lower Medicare costs (Weiss et al AJPH 1996)
  - Lung CA patients cared for by own doctor in terminal hospitalization have 25% lower (OR=0.74, p<0.01) odds ICU use (Sharma et al, Annals, 2009)</li>
- One experimental study
  - Wasson et al (JAMA, 1984) randomized 776 complex VA patients to see same physician vs. different physician in each primary care visit. Continuous care group:
    - 49% lower emergent hospitalizations (20% vs. 39%, p<0.002)
    - 38% lower hospital days (6.6 vs. 9.1, p<0.02)
    - 74% lower ICU days (0.4 vs. 1.4, p<0.01)
  - → Discontinuity harmful/costly, esp. for complex, frequently hospitalized patients
  - $\rightarrow$  Can better coordination of inpatient and outpatient care improve outcomes?

#### Lessons from Medicare's Demonstration Projects on Disease Management, Care Coordination, and Value-Based Payment (CBO, January 2012)

#### (Percentage change in hospital admissions)



Source:	Congressional	Budget	Office.
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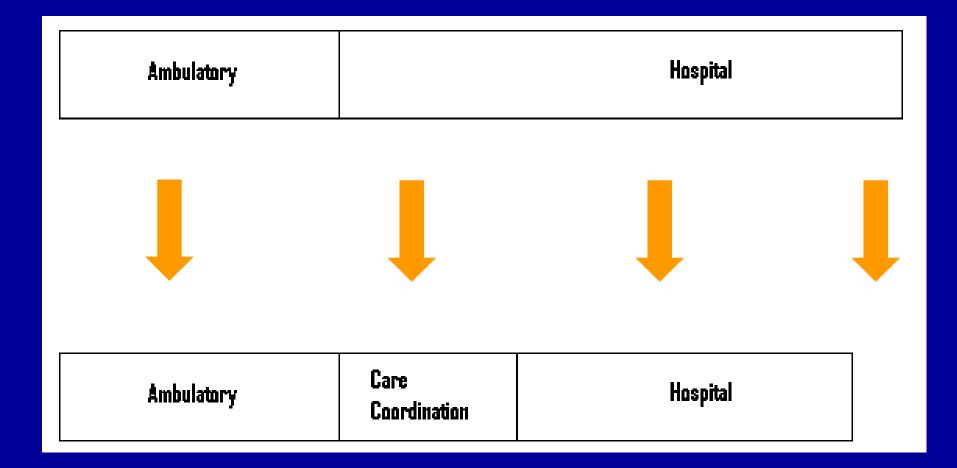
Note: Bars with lighter shading represent programs with fewer than 400 enrollees. The estimates for those programs are less precise than the estimates for the other programs.

		Average Effects (Percent)		Change in Regular Medicare Spending Needed to
Design Feature	Number of Programs	Hospital Admissions	Regular Medicare Spending <sup>a</sup>	Offset Programs' Fees <sup>b</sup> (Percent)
Program Fees Put at Risk				
Yes	18	0	-1	-11
No	16	-2	1	-13
Substantial Direct Interaction				
Between Care Managers and Physicians	7	7	,	12
Yes	/	-7	-6	-13
No	27	0	0	-11
Interaction Between Care				
Managers and Patients <sup>c</sup>				
By telephone and in person	8	-7	-3	-13
Primarily by telephone	23	1	0	-11
All Programs	34	-1	0	-11

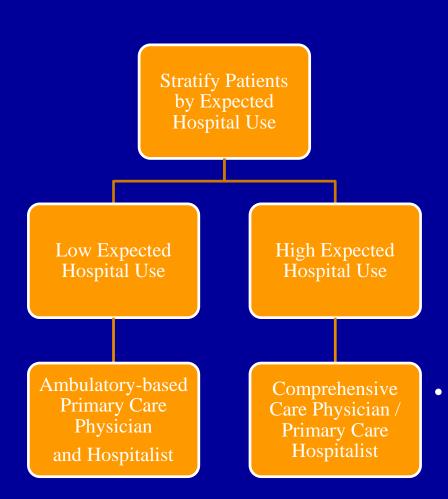
#### Other Lessons:

- 1. Target interventions to high-risk enrollees
- 2. Gather timely data on use of care, esp. hospital admissions
- 3. Focus on transitions in care settings
- 4. Use team-based care
- 5. Limit the costs of intervention

## Financing Care Coordination



#### Tailored Approach to General Medical Care



- Advantages?
  - Most frequently hospitalized patients get own doctor in both settings
    - Patients value continuity
    - Continuity decrease unneeded testing/treatment
    - Continuity lowers doctor costs ( $t_c=0, t_{HI} < t_{HH}$ )
  - All hospitalized patients get doctors with significant hospital experience and presence
    - Physicians can be specialists
  - Patient choice restored
  - Model can work for physician
  - Patient-centered medical home / bundling / readmission penalties
  - Smaller primary care base can fill hospital
  - Challenges?
    - Are enough patients willing to switch?
    - Will doctors let patients switch?
    - Will doctors do this job?
    - Can it be economically viable?
- CMMI Study (2012)

## Key CMMI Design Elements

Lessons from Literature	Program Element		
Focus on High-Cost Patients	Patients expected to spend >10 days in hospital in next year; up to 40% of general medicine days, annual Medicare costs \$100,000 per year; diverse recruitment sources, including resident clinics		
Maximize Direct Interaction with CCP/PCH	Panel size: 200. AM on wards. Midday buffer. PM in clinic.		
Build Interdisciplinary Team	5 CCPs = 1000 patients. Organize CCP/PCH, APN, nursing, social work, etc. around common patient medical and psychosocial needs		
Minimize costs (esp. coordination costs)	Small, well-connected teams, provider continuity		
Focus on care transitions	Post-discharge calls, Health IT		
Financial incentives	Prepare for shared savings (randomized internal controls, external controls from Chicago AMCs via UHC)		
Sustainable roles and training for care team	Support the team members (group to spread weekend coverage, night coverage, psychosocial support, relevant clinical training (e.g., communication, palliative care), academic development, recognition).		
Rapid cycle innovation	Frequent, data-driven meetings that seek to engage relevant leaders		
Rigorous evaluation	Randomized design, Medicare claims data, external and internal evaluators		

## Status and Early Lessons

- Program operations
  - Weekly operations and evaluation meetings
  - Recruitment of 2,000 patients completed in June 2016
- Positive interim qualitative and quantitative impressions
  - Population health metrics driven by evaluation plan
    - Better care, better health, lower costs
    - Need for longitudinal follow-up and analysis
  - Data on individual patients to help CCPs improve care
  - Weekly discussions of complex and/or informative cases
- Address longer-term issues
  - Financial model for expansion/sustainability
    - Fee for service (revenue maximization, clinical volumes, CCM codes)
    - Risk-based contracts (cost mgt, predictive modeling, Medicare Adv., employer)
  - Partnerships (learning collaborative?) with others interested in CCP
    - Programs starting: The Villages/USF, Vanderbilt, VA/Wash U, Kaiser, MCW
    - Interest: ~ 20 hospitals nationally and internationally (NUS, India)



## Needs for Improved Engagement

- ~30% patients randomized to CCP do not engage fully
  - No appointments
  - Make but not keep appointments
  - Other forms of low engagement would add to this
- All forms of engagement create opportunity to benefit patients, lower costs, provide efficient care
  - Frequently admitted, average costs ~\$75-100K/year
- Diverse demographics
  - Young/old, well/sick, low income, little social support
  - History of low engagement

## Why do they not engage?

- Likely not one reason or one solution
- As we develop more solutions, reasons for remaining patients change
- Need patient perspective
  - Focus groups problematic
  - Real time opportunistic interviews with unengaged patients when they present to ER or hospital

#### Reasons Described by Patients (n=5)

- Transportation (2)
  - Too costly
  - Unreliable
  - Not know how to negotiate system
  - Safety
- Mood (2)
  - "Just not feel up to it"
- Childcare (1)

## What would help?

- Better transport
  - Free parking
  - "If I had transportation, I wouldn't have a problem getting up.
    A lot of issues are I don't know if it's just depression or what but a lot of times, I just don't want to be bothered. It's been like that a lot."
- Family friendly environment
- Reminders
- Other
  - "Nothing really, its nothing you guys are doing. I just have to get in the right mindset and come in when I need to. I really would prefer to go out and walk or do something different other than spend my time at the doctor."

#### Comprehensive Care, Community and Culture Program (C4P)

- Community Health Worker (CHW) Program
  - Lay persons, often from community
  - Often disease-focused, not tightly linked to clinical team
  - Seek to engage patient in community/home to address unmet needs (navigate system, connect to resources. reminders, assess home environment, engage psychologically), pull out of home, connect to clinical team
  - Working with Sinai Health System
  - Systematic assessment of unmet social needs
- Artful Living Program (ALP)
  - Engage patients with others and clinical team
    - Music, arts, theater, movies, books, speakers
  - Promote self-efficacy
    - Exercise, cooking, crafts (revenues?)
  - Explore and share values that enhance life, health
    - Narrative (e.g., Stanford Letter Project, photovoice)
  - Need to know patient interests
- Goals
  - Engagement, triple aim (better care, better health, lower cost), goal attainment

#### Goal Attainment

- Very small literature on Goal Attainment Scaling
  - Basic idea: What are you goals? How are you doing in reaching them
  - Contrasts with idea of identifying domains intended to be important across patients
- Our approach
  - Three health goals, three overall goals, rate progress (0-100)
  - Reassess progress and goals every 3 months

## C4P/ALP Design Process

- Faculty Advisory Group
  - Humanities, Arts, Social Work.... Behavioral Economics
  - Urban Labs (Crime, Education, Poverty, Energy/Environment))
- Patient/Community Advisory Group
  - Ideas for programs, problem solving, real world experience
  - Urban Labs (e.g., CPD, CPS, etc.)
- Engagement with difficult to engage patients
  - Enroll, assess, and probe unmet needs and interests
  - Assess engagement and opportunistically probe unengaged patients for needs and interests
- Iterative experimentation
  - Prioritize interventions that engage difficult to engage patients and are sustainable

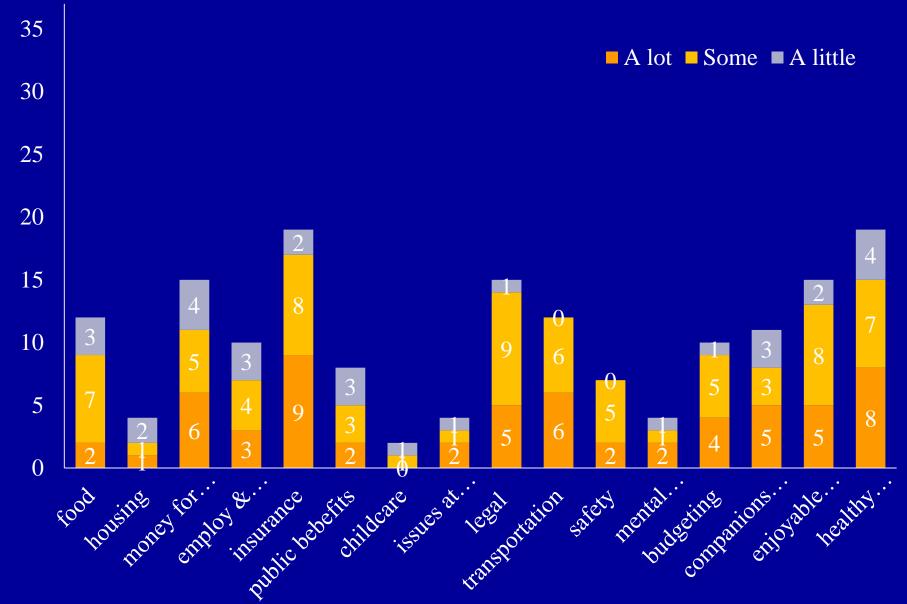
## Assessment for Unmet Needs

(A Lot, Some A Little, No, DK, Refuse)

- 1. Food
- 2. Housing
- 3. Money to pay for basic needs, like utilities, coats and shoes, other household needs
- 4. Employment, education or job training
- 5. Help applying for public benefits, like food stamps or disability
- 6. Child care or activities for children you care for
- 7. Issues with school for children you care for
- 8. Legal assistance
- 9. Transportation
- 10. Personal safety
- 11. Mental health or substance abuse treatment
- 12. Budgeting or financial planning
- 13. Companionship or social support
- 14. Engaging in activities you enjoy
- 15. Healthy eating and physical activity

Domains based on instrument used by Health Leads

#### Patients with Unmet Needs by Category of Need All arms (N=36)



#### **Artful Living Program Interest**

We are also developing new activities that we hope will enrich the lives people in our program and their families, and connect them with new people and experiences they may enjoy. We would love your ideas on what sort activities might interest you enough to attend them. Some suggestions we have gotten from others include concerts and plays, classes on crafts or healthy cooking, field trips to local events like baseball games, museums, or the zoo, and discussions in which people share stories from their lives. These are just some ideas... We'd love to hear what activities might interest you. Any suggestions?

I would be open to all of those because there's just the whole concept of me being alone. I don't think that's healthy. Maybe getting out, like you said. I would be interested in getting out and going to a game or event where we are around and hearing other people going through, to know you are not alone.

#### What sort of activities would interest you?

- Family friendly
- Opportunities to socialize
- Music / performance (theater, dance)
- Story telling / narrative (life stories, photos)
- Arts / crafts
- Sports (men)
- Cooking (all)

#### **Barriers**

- Parking
- Busy
- Lack of family interest
- Tired
- "Me. (The interviewer then asked patient to expound and he continued with) I have an issue with overthinking things too much. The majority of times, I'm always in my head. I noticed it's pretty much like that when I'm to myself or alone. I really want to try and get help with that. Also, transportation might make it difficult."

## First Event: Cooking Class

- Taught by a member of CHeSS staff
  - 90 minutes
  - Cooking with sweet potatoes
- Of ~10 patients in C4P, 3 patients signed up, 2 attended, 1 brought her cousin
  - Enjoyed? 3/3 strongly agreed
  - Learned something? 3/3 strongly agreed
  - More connected to others? 2/3 strongly agreed, 1 agreed
  - Liked food, learning about cultures, doing the cooking
  - Improvements? Longer 3/3
  - Staff idea: seating to promote engagement

## Sustainability

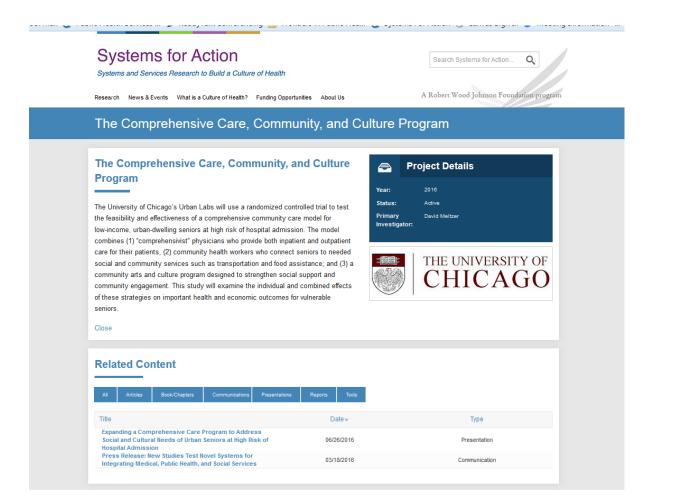
- Use of community resources
  - UC, broader community, patients, neighbors
  - Keeps costs low, promotes self-efficacy
- Build business case to payers/health systems
  - Optimize use of existing resources (PACE, navigation)
  - RCT to show cost savings, efficiencies (no shows)
- Patient economy
  - Produce crafts, sell, revenues to patients and program
- Sustainable philanthropy
  - Multiple small donors, arts foundations
  - Micro philanthropy (linkage to sales, obituary request, matching)

## Timeline

- 2016
  - March: Funding start
  - July: Program launch, start patient recruitment (~15 pts/ month), needs assessments and interviews
  - October: First C4P event
  - November: 40 patients, CHW screening, hiring
  - December: CHW start, accelerated recruitment (~45 pts/month)
- 2017- February 2018
  - Recruitment (Target: 600)
  - Continuing program development, evaluation, and improvement
  - Dissemination of products
  - Seek funding for program maintenance, definitive RCT

#### **Project Updates**

go to: <u>http://systemsforaction.org/projects/comprehensive-care-community-</u> and-culture-program



## Commentary



#### Susan N. Dreyfus

Member <u>S4A National Advisory Committee</u> President <u>Alliance for Strong Families and</u> Communities

### **Questions and Discussion**

#### Webinar Archives & Upcoming Events

go to: <u>http://systemsforaction.org/research-progress-webinars</u>

#### **Upcoming Webinars**

S4A Collaborating Research Center

December 7, 2016, 12 pm ET <u>IMPROVING POPULATION AND CLINICAL HEALTH WITH INTEGRATED</u> <u>SERVICES AND DECISION SUPPORT</u>

*Paul K. Halverson, DrPH,* Dean, and Joshua R. Vest, PhD, Associate Professor, Health Policy and Management, Indiana University Richard M. Fairbanks School of Public Health in Indianapolis

S4A National Coordinating Center Intramural Research

December 15, 2016, 1 pm ET

<u>A NETWORK VIEW OF POPULATION HEALTH DELIVERY SYSTEMS</u> Rachel Hogg Graham, DrPH, MA, Assistant Professor of Health Sciences, Education, and Research, University of Kentucky College of Health Sciences

#### Thank you for participating in today's webinar!



For more information about the webinars, contact: Ann Kelly, Project Manager <u>Ann.Kelly@uky.edu</u> 111 Washington Avenue #201, Lexington, KY 40536 859.218.2317 **www.systemsforaction.org** 

## **Speaker Bios**

**David Meltzer, MD, PhD**, is Chief of the Section of Hospital Medicine, Director of the Center for Health and the Social Sciences and the UChicago Urban Health Lab, and Chair of the Committee on Clinical and Translational Science at The University of Chicago (UC). He is also the Fanny L. Pritzker Professor in the Department of Medicine, the Harris School of Public Policy Studies and the Department of Economics at UC. Meltzer's research explores problems in health economics and public policy with a focus on the theoretical foundations of medical cost-effectiveness analysis and the cost and quality of hospital care.

He recently led a CMMI Challenge award to develop the Comprehensive Care Program (CCP) and study the effects of improved continuity in the doctor-patient relationship between the inpatient and outpatient setting on the costs and outcomes of care for frequently hospitalized Medicare patients. This work led to the creation of the Comprehensive Care, Community, and Culture Program (C4P), currently funded by RWJF, to also address social determinants of health within the CCP model. Dr. Meltzer helps lead the CTSA-funded Chicago Learning Effectiveness Advancement Research Network (Chicago LEARN) and the PCORI-funded Chicago Area Patient Centered Outcomes Research Network (CAPriCORN). He completed his MD and PhD in economics at the University of Chicago and his residency in internal medicine at Brigham and Women's Hospital. His awards include the Garfield Award from Research America, the AHRQ Eisenberg Excellence in Mentoring Award, and the AAMC Learning Healthcare System Award. He is a member of the National Academy of Medicine.

**Harold Pollack**, **PhD**, is the Helen Ross Professor at the School of Social Service Administration. He is also an Affiliate Professor in the Biological Sciences Collegiate Division and the Department of Public Health Sciences. He is Co-Director of The University of Chicago Crime Lab and the UChicago Urban Health Lab and a committee member of the Center for Health Administration Studies (CHAS) at the University of Chicago. He has published widely at the interface between poverty policy and public health. His research appears in such journals as Addiction, Journal of the American Medical Association, American Journal of Public Health, Health Services Research, Pediatrics, and Social Service Review.

A 2012-15 Robert Wood Johnson Investigator in Health Policy Research, Professor Pollack has been appointed to three committees of the National Academy of Sciences. He received his undergraduate degree, magna cum laude, in Electrical Engineering and Computer Science from Princeton University. He holds master's and doctorate degrees in Public Policy from the Kennedy School of Government, Harvard University. Before coming to SSA, Professor Pollack was a Robert Wood Johnson Foundation Scholar in Health Policy Research at Yale University and taught Health Management and Policy at the University of Michigan School of Public Health. His writings have appeared in Washington Post, the Nation, the New York Times, New Republic, and other popular publications. His American Prospect essay, "Lessons from an Emergency Room, Nightmare" was selected for the collection Best American Medical Writing, 2009.