Integrating Health and Social Services for Older Adults: The Case of the Community Care Connections Program

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

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Research-In-Progress Webinar
May 13, 2020
12-1pm ET

colorado school of public health

Agenda

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Welcome: **Chris Lyttle, JD**

Deputy Director for Systems for Action

Presenters: **José Pagán, PhD**

New York University

Elisa Fisher, MPH, MSW

New York Academy of Medicine

Commentary: **Annie Wells**

Lifespan of Greater Rochester

Q&A: Moderated by Chris Lyttle, JD

Presenter

José A. Pagán, PhD is Chair and Professor of the Department of Public Health Policy and Management at NYU. He is also Director of the Center for Health Innovation at The New York Academy of Medicine and Adjunct Senior Fellow and member of the Executive Advisory Board of the Leonard Davis Institute of Health Economics at the University of Pennsylvania. Dr. Pagán is a former Robert Wood Johnson Foundation Health & Society Scholar with expertise in health economics and population health. He is also a member of the Board of Directors of the Interdisciplinary Association for Population Health Science and a member of the National Advisory Committee of the Robert Wood Johnson Foundation's Health Policy Research Scholars.

NEW YORK UNIVERSITY

Presenter

Elisa Fisher, MPH, MSW is the Deputy Director of Population Health and Health Reform in the Center for Health Policy and Programs. Her work at the Academy focuses on research and evaluation related to state health reform and community-based initiatives that promote health equity by increasing access to quality health care and addressing the broader determinants of health. Previously, she was engaged in evaluations of early childhood and youth development programs, food justice initiatives, and supportive services for victims of violence and abuse in community and academic settings. She also worked as a health care advocate for individuals and families in NYC and served as a member of the AmeriCorps National Civilian Community Corps.

Commentator

Annie Wells is the Director of Care Transitions at Lifespan of Greater Rochester. She has 30 years of experience in the fields of Aging and Disability. Ms. Wells oversees the Healthcare Initiatives and Program Development at Lifespan aimed at reducing hospital readmissions and emergency room use.

Agenda

- **Project Team**
- **Community Care Connections Program**
- **Evaluation**
  - Findings
  - Lessons Learned
  - Next Steps
- **Questions**

Project Team

RESEARCH TEAM

New York University
- José A. Pagán
- Kelley Akiya

The New York Academy of Medicine
- Elisa Fisher

Icahn School of Medicine at Mount Sinai
- Yan Li, PhD

PROGRAM & TECHNICAL LEADS

Lifespan
- Annie Wells
- Christine Peck

Rochester RHIO
- Wendy Beehner
- Andrea Richardson

Lifespan's Community Care Connections Program

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LIFESPAN OF GREATER ROCHESTER

Lifespan "helps older adults and caregivers take on the challenges and opportunities of longer life."

https://www.lifespan-roch.org/

Community Care Connections (CCC) Program

Goals:

1. Help older adults remain in their own homes

2. Reduce hospital admissions/readmissions and emergency department use

3. Reduce caregiver burden

CCC Program

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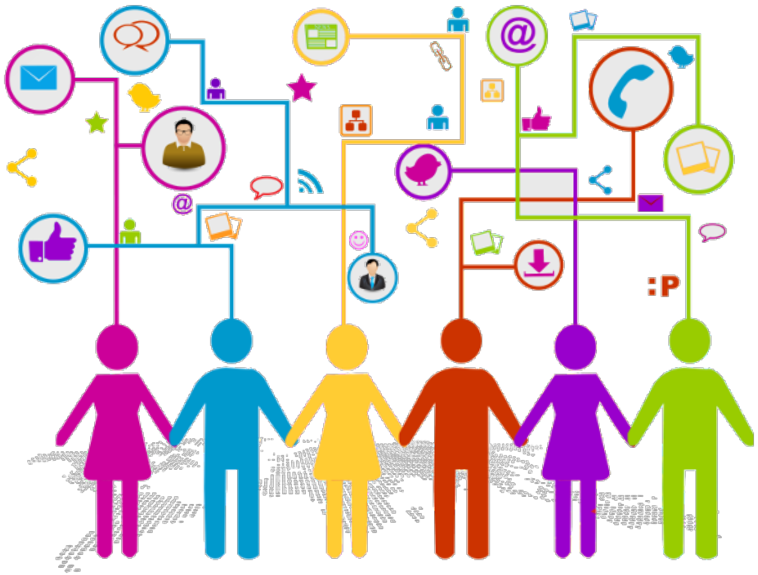
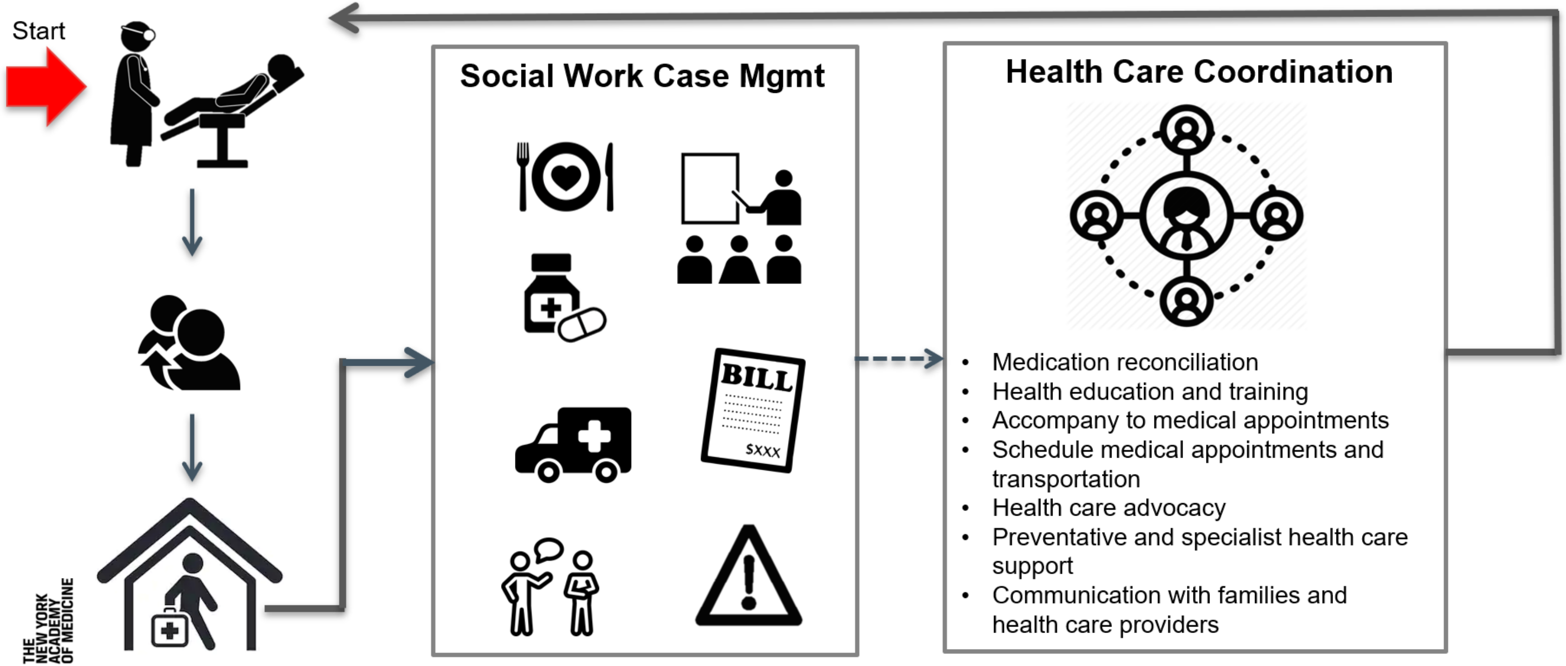
CCC integrates Lifespan's community-based aging services with health needs

1. Using the health system to connect with clients, and
2. Employing MSWs, LPNs, and CHWs to identify and address the full range of social and health needs of clients



CCC Program

- **Patient is referred to CCC by PCP, CCC social work case manager (SW CM) conducts home assessment**
- **CCC SW CM connects client and caregivers to social services and health care coordinator (HCC), if necessary.**
- **SW CMs and HCCs communicate regularly with PCP to manage health-related medical and social needs**



THE NEW YORK ACADEMY OF MEDICINE

Evaluating CCC

Research Question

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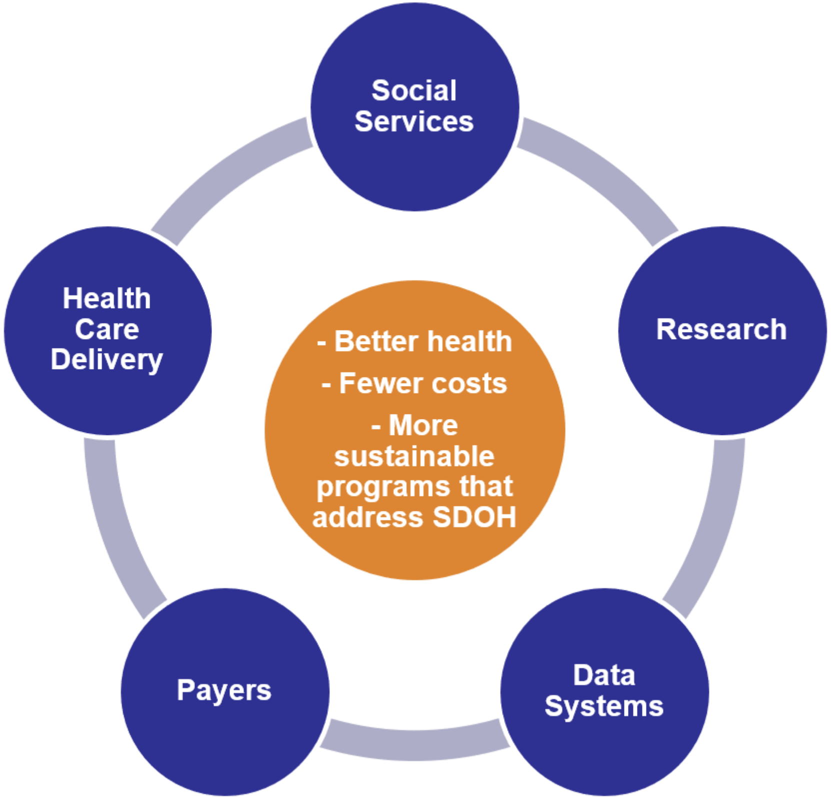
How does the CCC program impact patient wellbeing and system alignment?



Research Objectives

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1. Analyze pre/post changes in hospitalizations and ED visits using a propensity-score matched design to understand the impact of CCC on health outcomes
2. Assess health and social system impacts via qualitative interviews with healthcare and social service providers, patients, and CCC staff.
3. Analyze the "optimal mix" of social services for improving health outcomes using systems science.

Data Flow

1. Client joins CCC
2. CCC case worker inputs information to “Peer Place”
3. CCC (securely) sends identifiable client data to RHIO
4. RHIO de-links clients to hospital & ED data and de-identifies all data
5. RHIO sends de-identified data to Academy for analysis

- **Peer Place Customized Platform**: Demographics, diagnoses, community services needs and referrals and standardized wellness assessments, conducted at intake and case closure.

- **Rochester RHIO Data**: Hospital inpatient and emergency encounters from health systems in Greater Rochester Region.

ROCHESTER REGIONAL HEALTH INFORMATION ORGANIZATION (RHIO)

A secure, electronic health information exchange (HIE) serving authorized medical providers in the following NYS counties:

- Monroe
- Allegany
- Chemung
- Genesee
- Livingston
- Ontario
- Orleans
- Schuyler
- Seneca
- Steuben
- Wayne
- Wyoming, and
- Yates

Quantitative Findings

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Preliminary results, subject to change

Approach

- Conducted preliminary analysis on data from 1,255 clients enrolled in the CCC program between June 2019 and March 2019 due to difficulties accessing control group data

- Conducted one-to-one propensity score matching between CCC participants and Rochester RHIO patients

- Compared hospitalizations and emergency department visits 90 days before and 90 days after program participation

Approach

- Rochester RHIO grouped Lifespan cohort members by each permutation of gender, race, ethnicity and county (e.g., male + white + Hispanic + Monroe County resident)
- Date of birth for each grouping identified as +/- 2 years of the oldest and youngest Lifespan cohort member
- Potential control group members identified by querying for patients whose demographic match each control grouping within the Rochester RHIO data aggregation tool

Approach

- Each Rochester RHIO patient has 10 quarters of data (from Q3 2016 to Q4 2018) so each patient contributes 9 before/after control group periods

- Each CCC participant was coded as belonging to the before/after quarters that best overlaps the Rochester RHIO quarters

- End result – 1,004 CCC members were matched to 1,004 Rochester RHIO patients selected from 560,980 potential before/after quarter matches

Demographics

	Total (N)	Percent (%)
Total	1,467	
Age		
<65	149	10%
65-74	373	25%
75-84	529	36%
85+	405	28%
Not Available	11	1%
Gender		
Female	915	62%
Male	533	36%
Not available	19	1%

	Total (N)	Percent (%)
Race		
White	1,141	78%
Black/African American	202	14%
Other	21	1%
2 or more	2	0.1%
Not Available	101	7%
Ethnicity		
Hispanic/Latino	39	3%
Not Hispanic/Latino	1,290	88%
Not Available	138	9%

Demographics

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	Total (N)	Percent (%)
Monthly Income		
<$1000	605	41%
$1000-$1499	303	21%
$1500-$1999	209	14%
$2000-$2499	151	11%
>$2500	199	14%
Public Insurance		
Medicaid only	33	2%
Medicare only	996	68%
Dual Eligible	208	14%
Neither Medicare nor Medicaid	32	2%
Not available	198	14%

	Total (N)	Percent (%)
County		
Monroe	1,075	73%
Other	365	25%
Not available	27	2%
Lives…		
…alone	646	44%
…with spouse only	353	24%
…with others*	351	24%
Not available	117	8%

*Includes households with spouse and others.

Prevalence of Top* Health conditions

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Condition	N	%*
Hypertension	664	50%
Diabetes	441	33%
High Cholesterol	341	26%
Depression	325	24%
Arthritis	272	20%
Chronic Obstructive Pulmonary Disease	255	17%
Dementia	187	14%
Coronary Artery Disease	169	13%
Heart Failure	144	11%
Cancer	127	10%
Kidney Disease	126	9%
Stroke	116	9%

**Clients may have multiple conditions and/or diagnoses not reported in this table; health conditions listed here are based on the top 10 most prevalent health conditions among Medicare beneficiaries along with those of interest to the CCC program*
***Diagnosis data available for 1,334 clients*

of Diagnosis Categories Per Client

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*Health condition types include:
- Heart
- Metabolic
- Intestinal
- Urinary
- Skeletal
- Infection
- Vision
- Pulmonary
- Psychological
- Neurological
- Cancer
- Nutritional

# of Health Condition Categories	# of Clients	%**
0***	77	6%
1	196	15%
2	298	22%
3	359	27%
4	221	17%
5 or more	183	14%

**Clients may have multiple conditions within a given diagnosis category*
***N = 1,334 due to missing or incomplete data*
**** = 0 conditions may reflect data entry errors and/or clients who chose note to report health conditions, or who have conditions that do not fall into one of the categories described.*

Hospitalizations: Control Group Analysis

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Hospitalizations **decreased by an average of .040** per person for CCC clients

Hospitalizations **increased by .027** for people in the control group

Table 1. Average Number of Hospitalizations per Client

	90 Days Before Program Start	90 Days After Program Start	Mean Change	p-value
Intervention Group	.101	.061	-.040	
Control Group	.077	.104	.027	.008

ED Visits: Control Group Analysis

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- ED visits **decreased by an average of .131** per person for program participants
- ED visits **decreased by an average of .013** for people in the control group

Table 2. Average Number of ED Visits per Client

	90 Days Before Program Start	90 Days After Program Start	Mean Change	p-value
Intervention Group	.394	.263	-.131	
Control Group	.042	.029	-.013	<.001

Hospitalizations: By CCC Client Health Condition

Table 3. Average Rate of Hospitalizations by Health Condition

	90 Days Before Program Start	90 Days After Program Start	Mean Change	p-value
Hypertension (N=423)				
Intervention Group	.059	.047	-.012	
Comparison Group	.087	.113	.026	.265
Diabetes (N=276)				
Intervention Group	.091	.065	-.025	
Comparison Group	.112	.091	-.022	.939
High Cholesterol (N=211)				
Intervention Group	.062	.066	.005	.150
Comparison Group	.071	.147	.076	

ED Visits: By CCC Client Health Condition

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Table 4. Average Rate of ED Visits by Health Condition

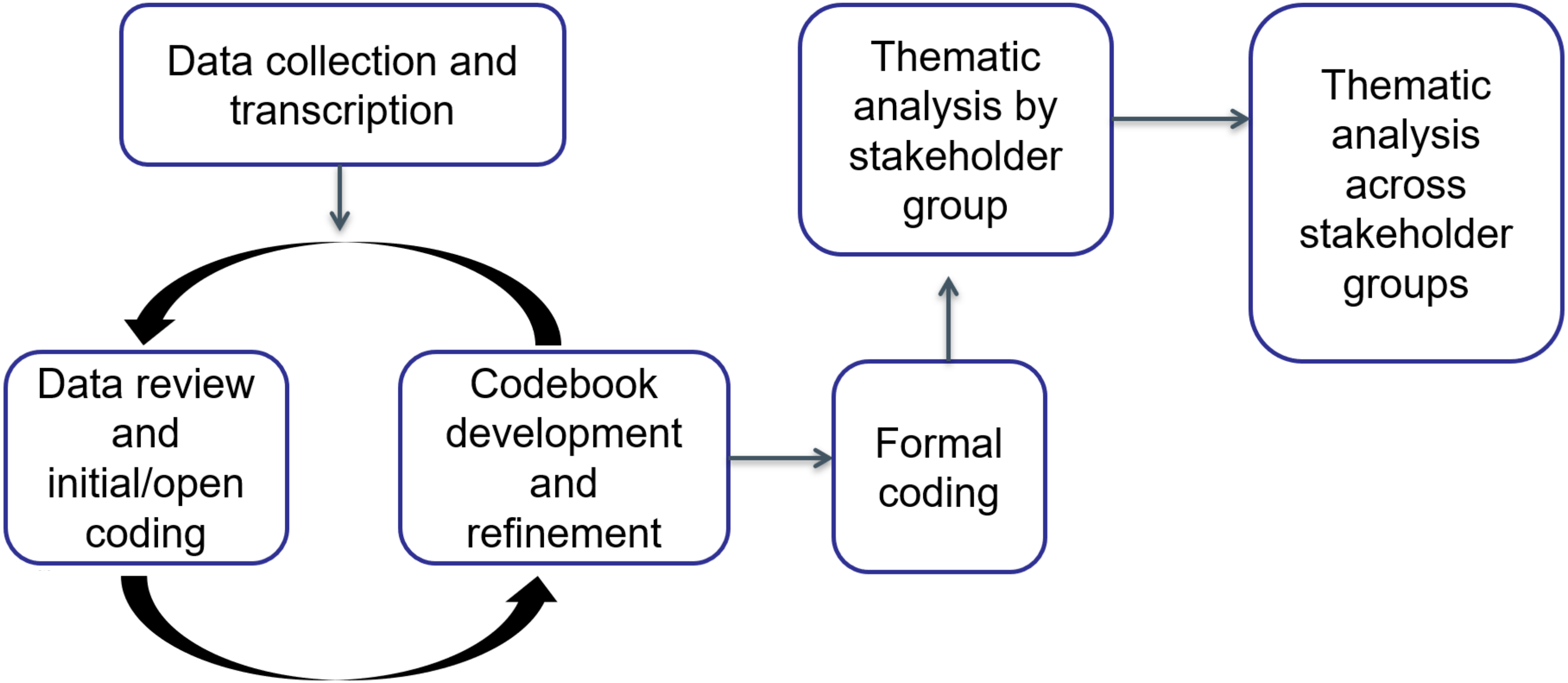
	90 Days Before Program Start	90 Days After Program Start	Mean Change	p-value
Hypertension (N=423)				
Intervention Group	.374	.217	-.156	
Comparison Group	.047	.038	-.009	<.001
Diabetes (N=276)				
Intervention Group	.409	.315	-.094	
Comparison Group	.065	.043	-.022	.221
High Cholesterol (N=211)				
Intervention Group	.365	.246	-.118	.117
Comparison Group	.057	.024	-.033	

Qualitative Data

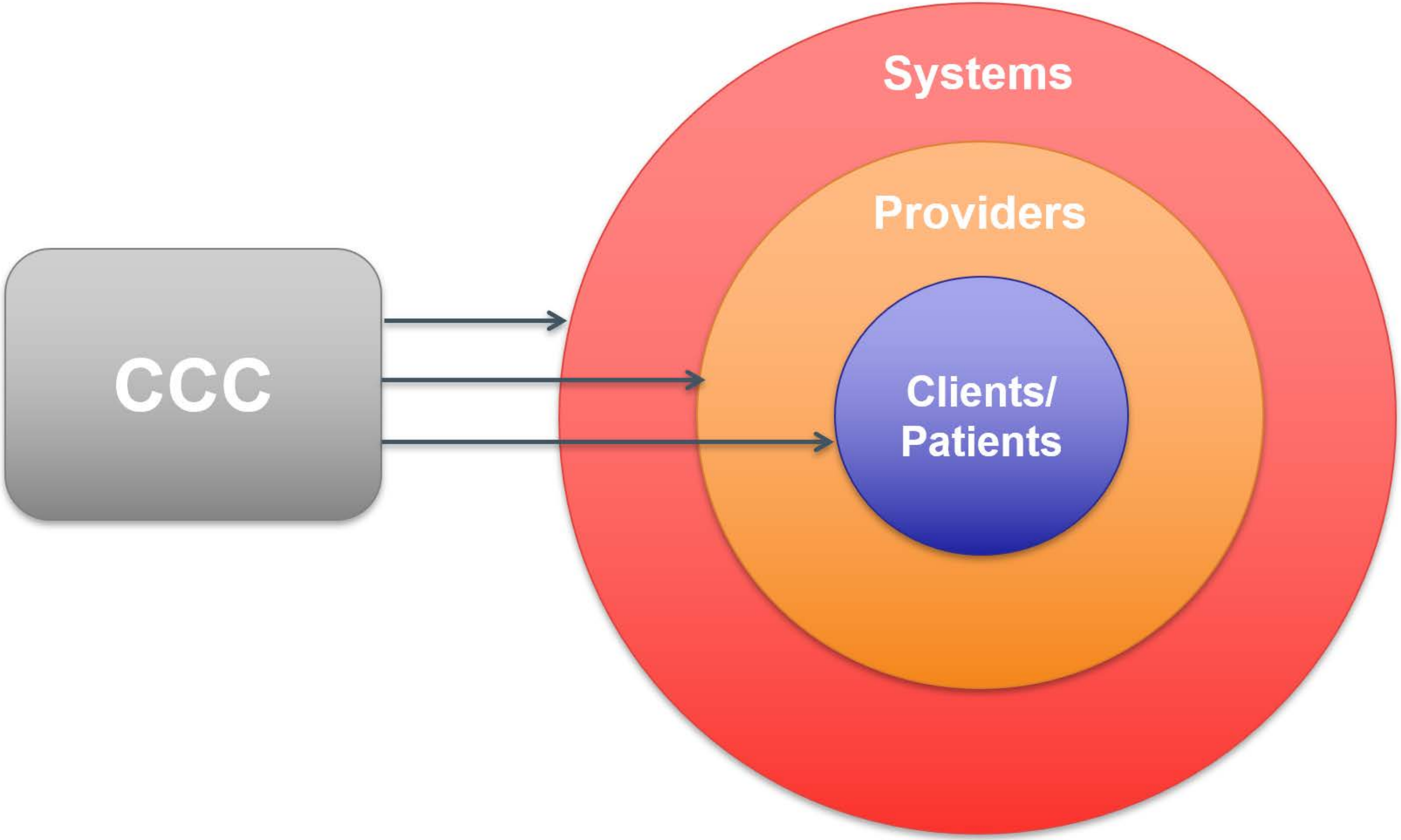
Conducted 28 key informant interviews with:

- Healthcare providers (7)
- Lifespan staff (5)
- CCC clients and caregivers (12)
- Social service providers (4)

Qualitative Methods



Qualitative Findings



Impact on Systems

Stakeholder interviews indicate that the CCC program leads to:

- **More efficient and less fragmented systems of care**
- **A more holistic, integrated and individualized approach to care**
- **Improved and streamlined communication – across sectors and with patients**
- **Improved access to social and medical services**

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Impact on Systems – Fragmented Care

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Health care and social service providers alike felt that the CCC program leads to a more efficient and less fragmented care, as well as greater awareness of social services.

- *“We have a lot of tools in our toolbox as care managers, and for me though, the Community Care Connections program is a big piece of that, and they’ve done some stuff for me, for my patients that I couldn’t have done. It would’ve taken me multiple calls, multiple agencies, that type of thing.” (Health Care Provider)*

- *“I think we are more well known in the physician’s offices among the staff in physician’s office as a result of [CCC]. We get more calls from people who are in physician’s offices from people we’ve actually never met or marketed to that know about us. And they are places where we’ve had Community Care Connection referral. So I’m kind of putting two and two together.” (Social Service Provider)*

Impact on Systems – Holistic Approach to Care

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Providers explained that the CCC program encourages a holistic approach to patient care, which takes into account social, environmental and economic barriers to health.

- *"[The CCC Staff Member] is not only encountering the same difficulties we are, but she's actually going to the home, working through some very important items with the patient and his wife that, in our office, we may have said, "Well, we don't really know what to do about your Social Security." (Health Care Provider)*
- *"Well, first of all, she really listened to us, and it was the first time that we had had that from anyone after he came out of the hospital. And she really paid attention to what are needs were." (CCC Client)*
- *"From the people we do screen who have depression or anxiety, to know some of the things they're anxious about and one of them is finances, if we can help with benefits or have our financial management program helps straighten out bill-paying, the anxiety and depression certainly gets alleviated knowing that someone is there to help them." (Lifespan Staff Member)*

Impact on Systems – Communication

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Providers, patients and Lifespan staff felt that the CCC program fosters communication - between CCC staff and medical providers and also between patients and health care providers.

- *“So, we try to give [providers] whatever the status [of their patient’s case] is. That is things arise, whether it’s a two-week follow-up after the home visit or complications from something else, we’d certainly call the doctor’s office” (CCC Staff)*
- *“Yes. She has accompanied me to some appointments. That is helpful to me, too. She’s more of a medical person than I am, so sometimes the doctors don’t always explain it the way you need it. If I look like I’m confused she will ask them, ‘Can you explain it a little bit better?’ Or she will explain it to me. I enjoy her coming with me.” (CCC Client)*
- *“Information that is shared between Lifespan and me then gets to the providers and I update patients’ charts. So, anybody going into that patient’s chart can see that they’re getting services.” (Health Care Provider)*

Impact on Systems – Access to social and Specialty Medical Services

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Clients and providers described increased access to both social services and specialty medical care.

- *“She was only going to a PCP but there were a number of other appointments [her primary care provider] had recommended, but she always had a barrier for that. We got the client involved with a lot of her medical things. So, overall, she’s doing better medically because there’s close follow-up with everything that she’s doing now. It’s been a relief to her daughter who doesn’t have to take off work to take her mom to any appointments.” (CCC Staff Member)*
- *“So, it’s that clear support to patients who need it and wouldn’t have those kinds of [social] support systems by the – in our traditional medical systems.” (Health Care Provider)*
- *“They have provided transportation for my husband. They pick him up here at the house and they take him to dialysis. And after dialysis they bring him back here. I think that’s one of the biggest things that have made a difference in our lives. No. 2, they’ve provided some services that we weren’t aware of that we were eligible for, and that has helped a great deal, also.” (CCC Client)*

Impact on Providers

Healthcare providers view CCC as beneficial for both providers and patients. Providers report:

- Feeling more confident that patients are receiving help with the social, economic and environmental challenges that impact their health.
- More time to focus on providing medical care instead of trying to address social issues, which they are not trained to do.
- A better understanding of what patients are facing outside of their office that may be impacting their health.

> *"Well, because Lifespan's involved with helping set up resources for the patients, it gives me a little bit more peace of mind that I know that they're getting that extra help to help meet some of their needs and allows me to do other things too."*

Impact on Patients and Caregivers

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The vast majority of clients valued the CCC program. Clients reported that the CCC program:

- Improves physical and mental health
- Supports better access primary and preventative care and better adherence to treatment recommendations
- Provides social support and reduces social isolation
- Reduces caregiver stress

Like I said, I was missing appointments because if I don't write them down and I don't have an appointment book or a calendar I forget them…So, she has a copy of all of my appointments, so she will call me and "Remember, you have an appointment today at 1:00."

" [My CCC Case Manager], she always calls here once in a while to check on me and tell me if I need anything, they – let her know. Like that. And see, I like that because she makes me feel that somebody cares. You know what I mean? "

Lessons Learned

- Data access is often out of your control
- Persistence is key: generating interest and finding sustainable funding is hard work
- Payers want dedicated resources and tailored reports
- Outcomes that matter often can’t be easily tracked
- Who should pay? “Wrong pocket” problem

Next Steps (Research and Evaluation)

- **Testing the CCC model for other populations (e.g., NYSHF)**
- **Qualitative exploration of sustainability opportunities and challenges**
- **Partnering with funders to expand access to data**
- **Additional projects**

Why Does This Matter?

Commentary provided by:

Annie Wells
Director of Health Care Initiatives,
Lifespan

Study Impact from the CBO Perspective

Established a true integrated partnership with 65 physician practices and 3 home healthcare agencies that works:

- Closed loop of communication with Primary Care providers
- Ease of referral and use of CCC intervention

Developed ability to collect and report meaningful data of interest to funders, therefore proving the value of integrating community-based services with healthcare.

Developed experience to share, mentor and offer tools to assist other community-based services providers with evaluation design, value proposition and program development.

Pathway to CCC Model Sustainability

Demonstration Pilot → Analysis led to Proven Value → CCC continues with new demonstration grants and contracts → Sustainable payment model

The study has provided results and cost analyses broken down by funders' population of interest.

Results led to additional demonstration grants and contracts from foundations, an ACO and an insurer.

Working to transition demonstration partnerships to a sustained payment model including value-based contract agreements.

Questions?

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One will be emailed to you.

Upcoming Webinar

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May 27 | 12 pm ET

The Impact of Integrating Behavioral Health with Temporary Assistance for Needy Families to Build a Culture of Health across Two-Generations

Mariana Chilton, PhD, MPH, Drexel University

Acknowledgements

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