

Defining Value and Measuring Impact



October 17, 2018



The National Center
for Complex Health and Social Needs



Camden Coalition
of Healthcare Providers



The National Center

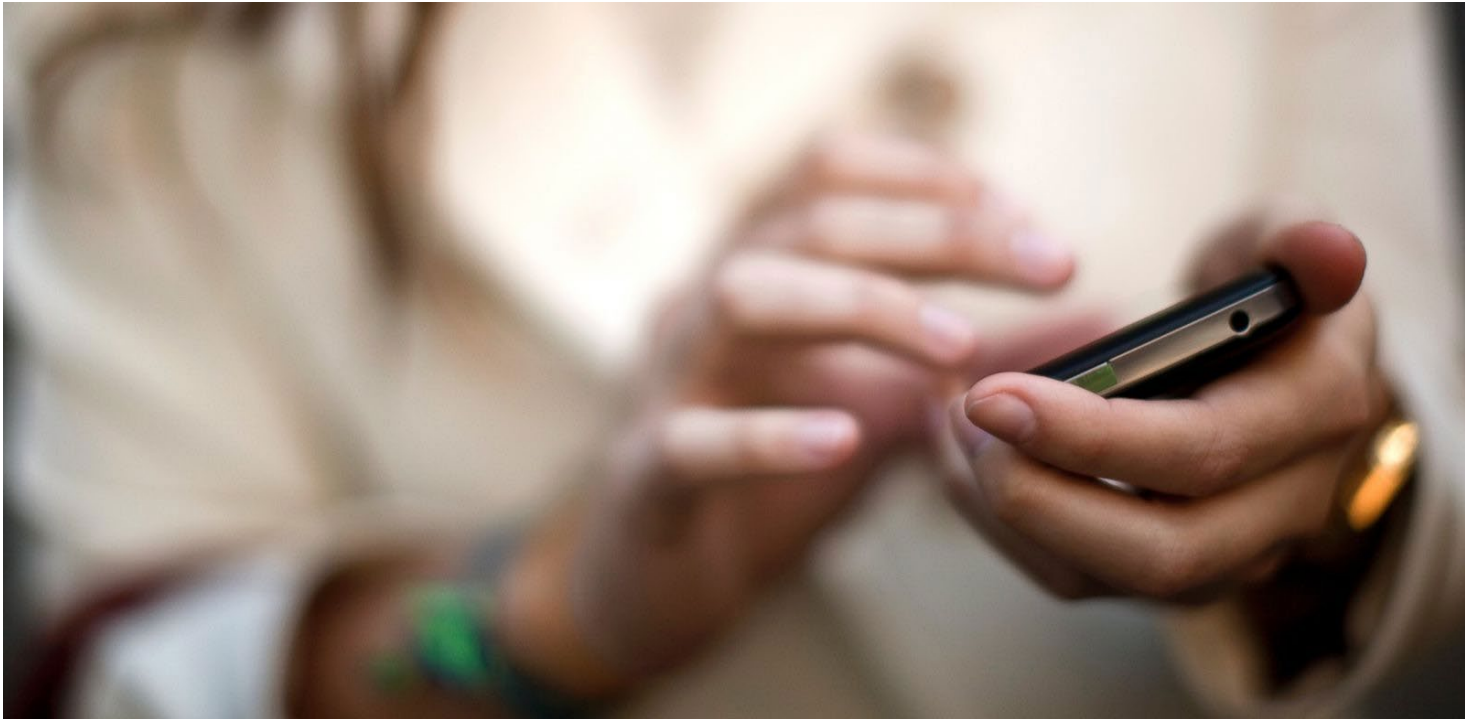
for Complex Health and Social Needs

www.nationalcomplex.care

Starting a national movement



It started with one phone call....



The First Patient Story

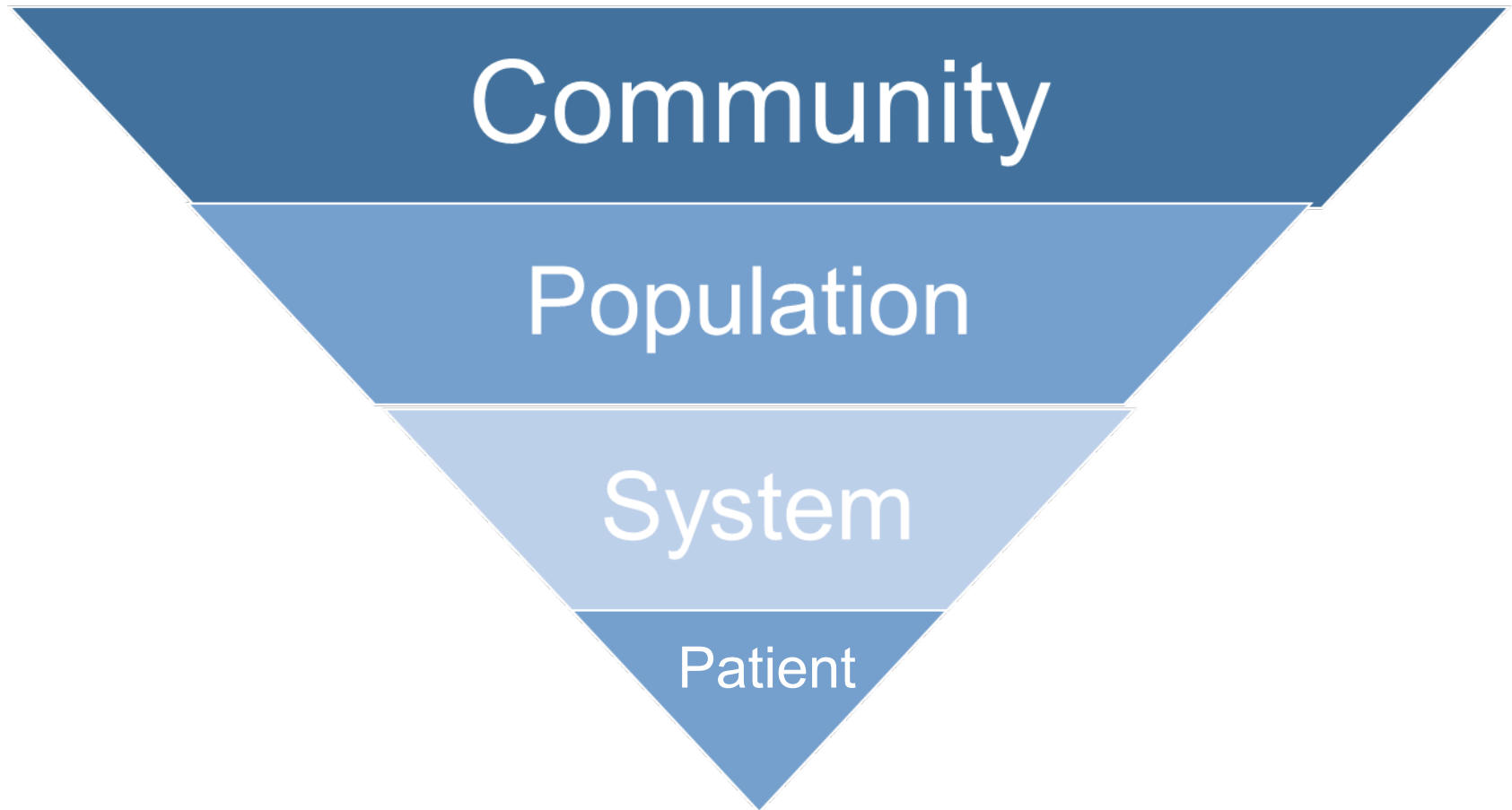


Andrew Rae. "The Tangle of Coordinated Care." New York Times. April 13, 2015.

Transformation

**\$1.3 million reduction in
unreimbursed care**

Innovation at all Scales



Complex Care Center



Patient is connected to the appropriate intervention

Key Components

- Focus on *changing the system*
- Intervene *whether the patient engages or not*
- Increase effect of *existing resources*
- *Change root causes* in the system, population, community

Data Analysis

“Frequency as systems failure”



Root Cause Analysis: Patient Story

Medical, Behavioral, Social and System



Case Conferencing

Carrying the patient story cross continuum



Complex Care Map[©]

Plan of care linked to EMR pop-up alert



Common Subpopulations

- Policy and Process Improvements
- Interagency Relationships









What if patient population
needs are greater than what one
health system
or multiple systems can offer?

Community Collaborative

Solving complex problems with shared resources



Outcomes – 339 patients in 24 months


Hospital Utilization			
Admissions Reduction	Emergency Visit Reduction	Outpatient Visit Reduction	
195 44%	1,498 43%	199 17%	
			
Patient Economics			
High Frequency Population Management	Net Revenue Reduction	42%	
	Direct Expense Reduction	47%	
	Operating Margin Increase	\$632k	

[Hardin, L., Kilian, A., Muller, L., Callison, K., & Olgren, M. \(2016\). Cross-Continuum Tool Is Associated with Reduced Utilization and Cost for Frequent High-Need Users. *The Western Journal of Emergency Medicine*, 18\(2\), 189–200. doi:10.5811/westjem.2016.11.31916](#)

Outcomes – 339 patients in 24 months

Quality Measurements


Patient
Housing

14% 

Primary Care
Physician

15% 

Insured

16% 

Patient Utilization

High
Frequency
Population
Management

Length of Stay 41%



CAT Scans 62%



ED/Urgent Care Minutes 49%

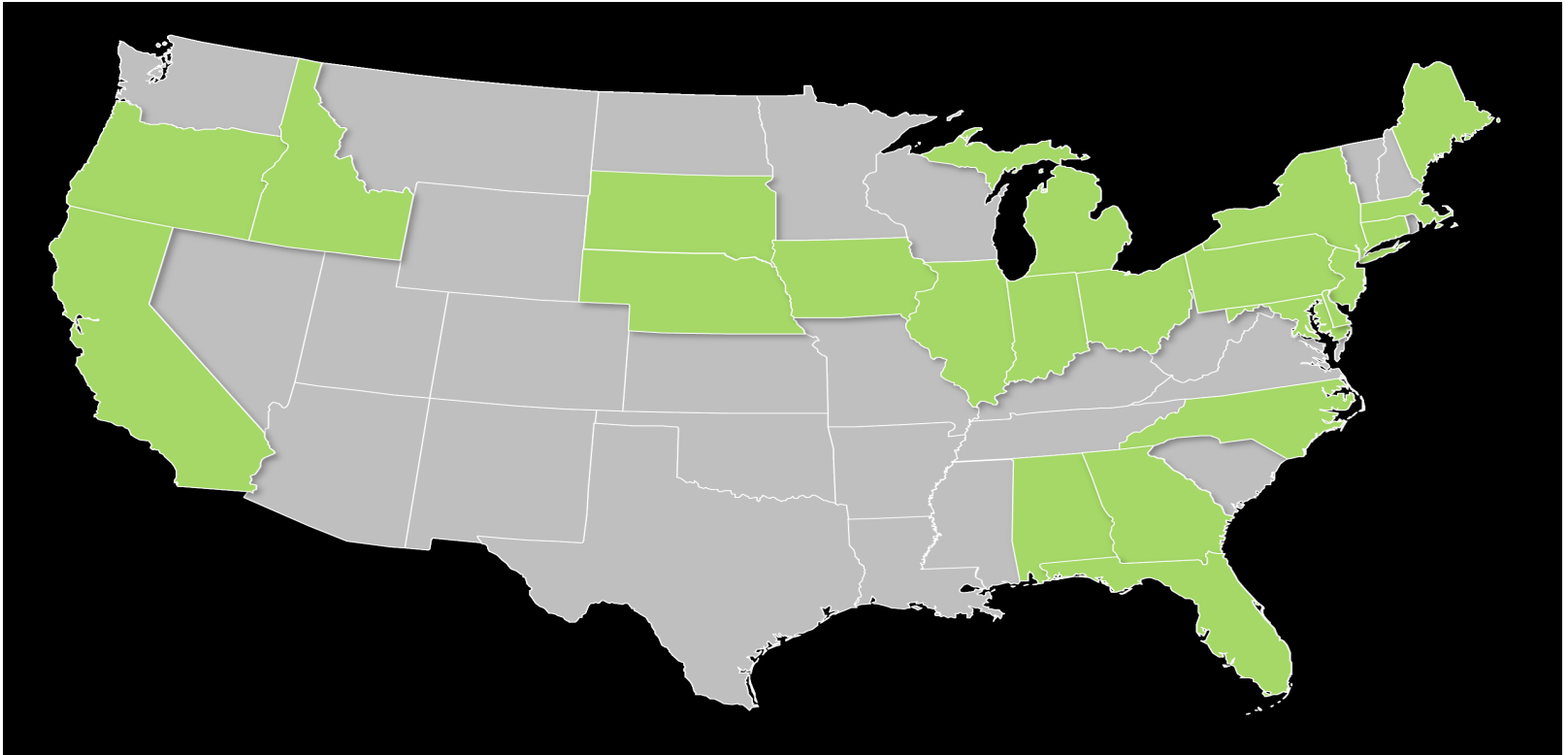




**The Impact of
changing the
system...**



Scale within Trinity Health





Complex Care Business Plan Financial Performance

Outcomes Over a Two Year Time Period

Proposal

- Proposed investment of \$3 million over 5 years
- Estimated return on investment of 28% within 5 years
- Targeted population of 900 patients

Actual Financial Performance

- Actual investment of \$760,000 over 2 years
- Actual return on investment of 23% over 2 years
- Actual patient population exceeded 1,000

**Where Could
you Start?**



Shifting our Focus



Underneath the Surface



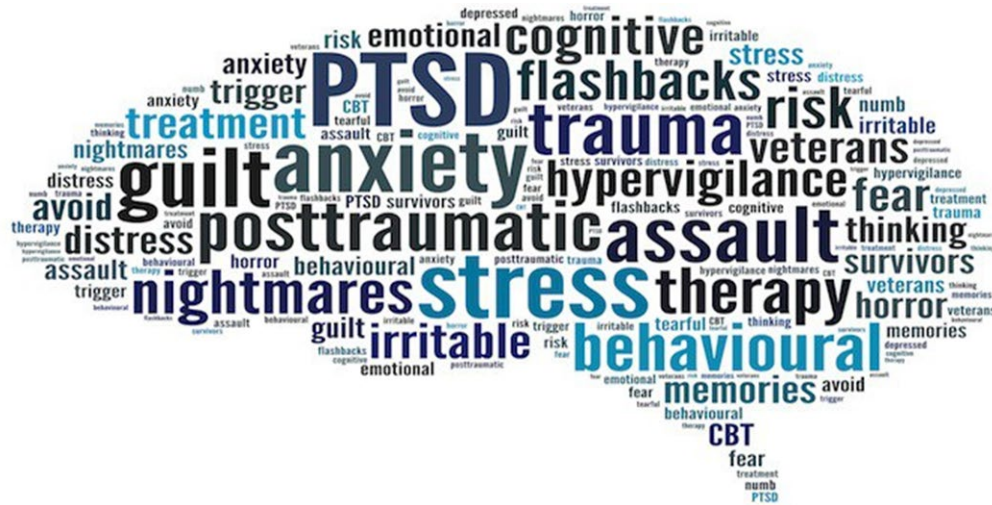
Social Determinants of Health

- Housing
- Transportation
- Food Insecurity
- Social Isolation
- Legal Issues
- Health Literacy/Language
- Safety

System Barriers:

- Access
- Disorganized Services
- Disconnect bw medical/social/behavioral services
- Complex Health Problems – fragmented treatment silos

Traumatic Life Experience



Self-actualization

desire to become the most that one can be

Esteem

respect, self-esteem, status, recognition, strength, freedom

Love and belonging

friendship, intimacy, family, sense of connection

Safety needs

personal security, employment, resources, health, property

Physiological needs

air, water, food, shelter, sleep, clothing, reproduction



From the Navigator to the Advocate



**Where Could
you Start?**



Complex Care Committee



- Internal System Collaborative
- Interprofessional
- Data Review of High-Utilizers
- Root Cause Analysis
- Patient Intervention
- Process Improvements



Complex Care Committee



Interagency Case Conferencing



- Focused on System Gaps
- Interprofessional
- Interagency
- Root Cause Analysis
- Shared Plan of Care
- Patient Intervention
- Process Improvements



Interagency Case Conferencing



Project Restoration Lake County CA



- Cross Sector Collaborative
- Shared Metrics & Intervention
- Community Root Cause Process Improvements

↓ >50% reduction in Utilization

↑ >60% improvement in financial performance

↑ 1.3 Million Investment



Project Restoration



Finding your Focus





Data Analysis

Understand the Population and the opportunity.



Asset Mapping

Understand the strengths in the organization, the possibilities for partnership and the opportunities to build something new.



Co-Design

Informed by data and asset mapping – answer the question “What is the problem we are trying to solve?”
Co-design the solution.

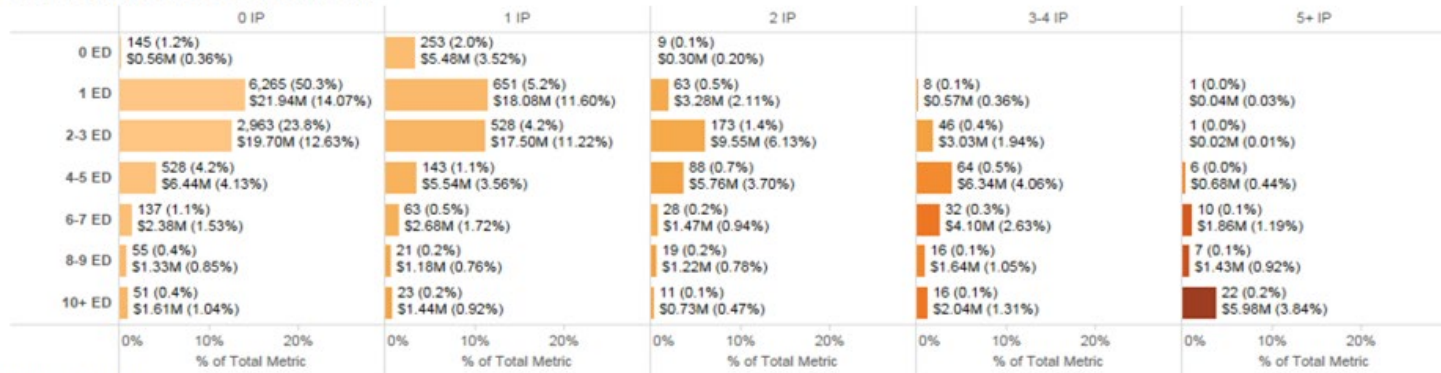


Data Analysis

Who is your population?

Select Region: All
 Select Facility: All
 Select Payer: All
 Select DRG(s): All
 Select Group Service Line(s): All
 Select Metric Charges: All
 Metric/Patient: \$3,502 to \$271,909

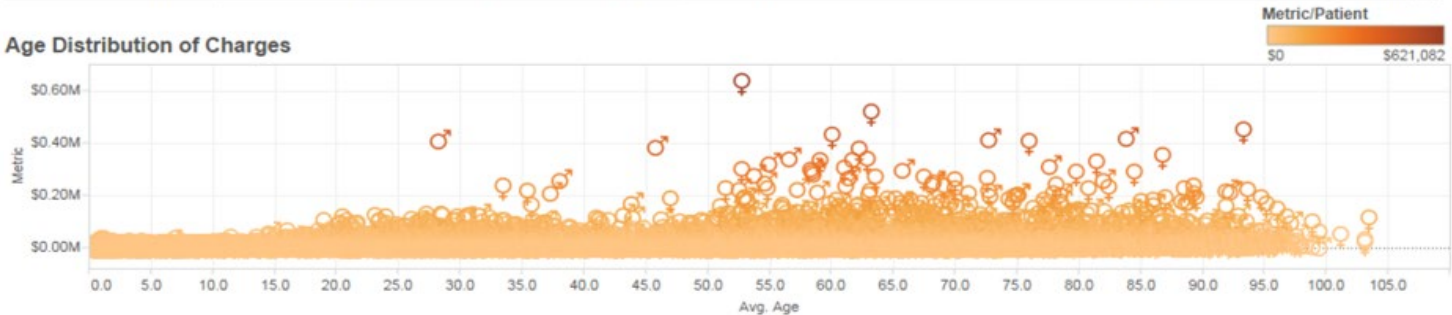
Click on a group to see the Patient Detail Below



Patient Detail

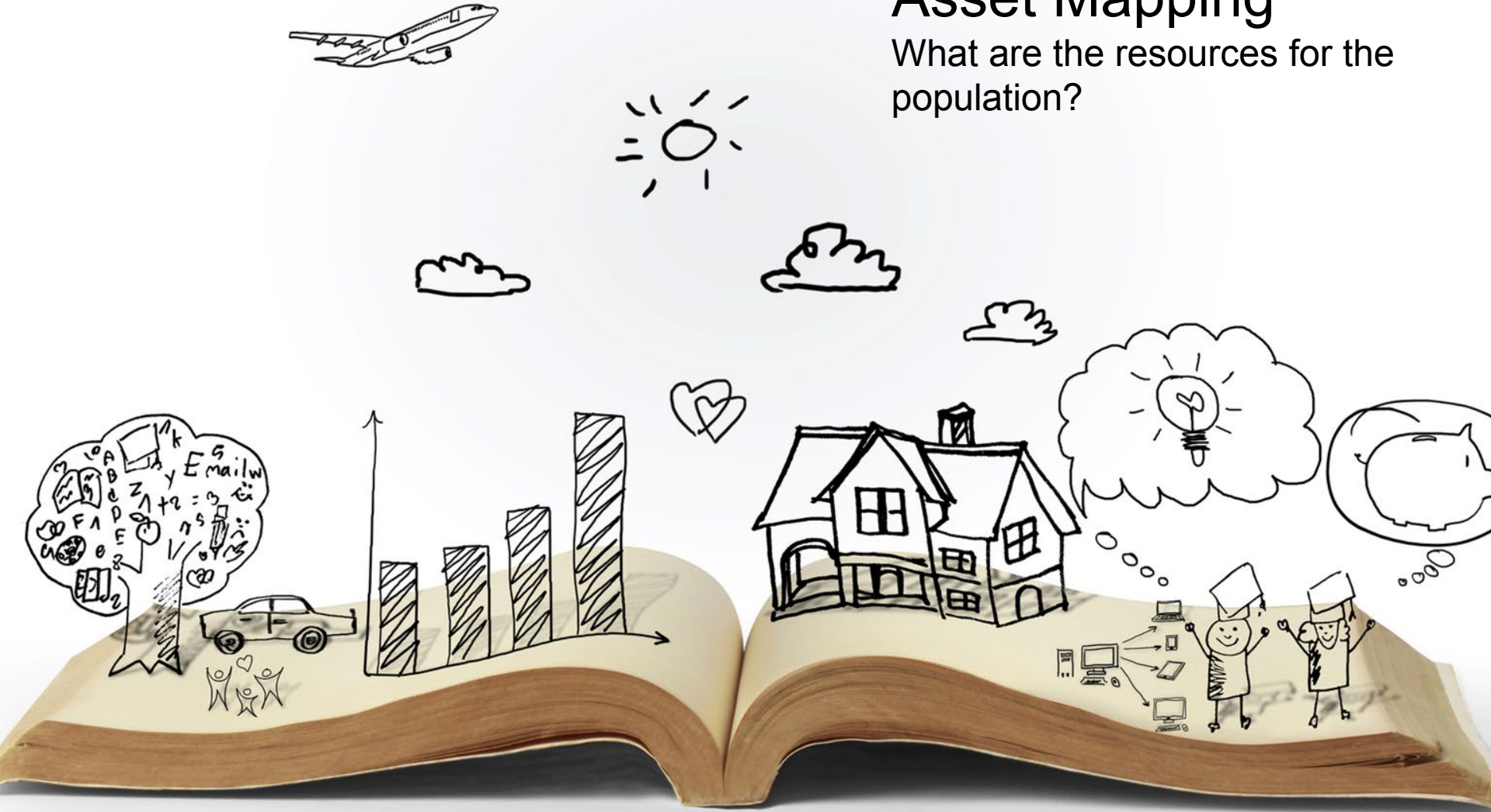
MRN	Primary Lan..	Entity Name	ED	IP	Prim Financi..	Median Age	Encntrs All	Encntrs Inp..	Encntrs Em..	Total Paym..	Total Chrg..	Total Cost	
Grand Total							42.7	22,360	1,673	21,394	\$43,159,233	\$155,933,944	\$28,937,271
	English		10+ ED	5+ IP	Medicaid Mgd	52.7	8	2	8	\$49,927	\$183,612	\$38,961	
					Capitated	52.7	4	4	3	\$135,721	\$437,470	\$66,794	
	English		10+ ED	5+ IP	Medicare	63.3	11	7	11	\$182,455	\$504,848	\$97,915	
	English		2-3 ED	1 IP	Medicare	93.3	2	1	2	\$146,617	\$436,331	\$104,773	
	English		6-7 ED	3-4 IP	Medicare	84.0	7	3	7	\$137,848	\$422,907	\$92,779	
	English		10+ ED	5+ IP	Medicaid Mgd	60.1	6	0	5	\$3,271	\$44,382	\$4,701	
					Capitated	60.1	7	5	6	\$136,520	\$373,028	\$79,286	
	English		4-5 ED	2 IP	Medicare	72.9	4	2	4	\$107,294	\$417,153	\$87,071	

Age Distribution of Charges



Asset Mapping

What are the resources for the population?



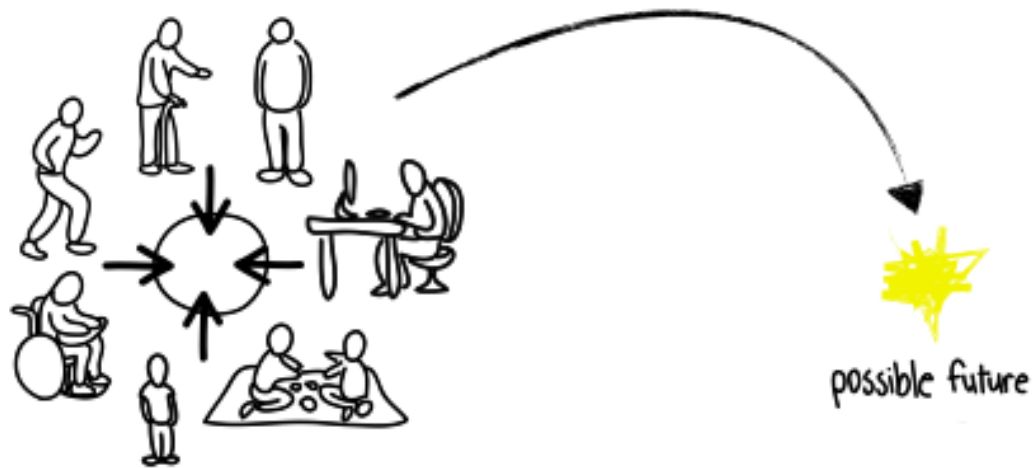
Asset Mapping

Who are your key partners?



What is the problem
we're trying to solve?

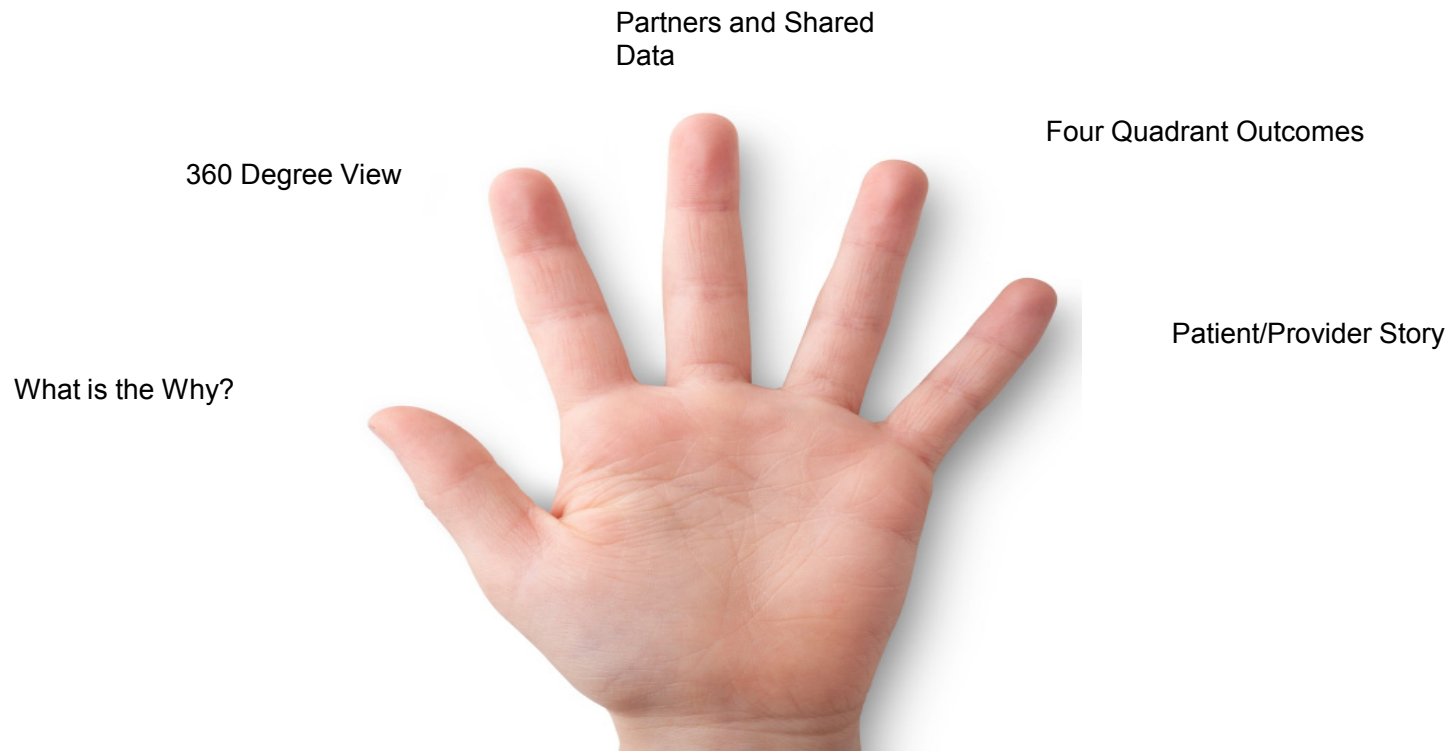
CO-DESIGN HOW?



Measuring Impact



Top Five Strategies for the Business Case



Cost

Utilization

Quality
Improvement

Satisfaction



**Four Quadrant
Outcomes**





What is Possible....



Publications

lhardin@camdenhealth.org

- Hardin, L., Kilian, A., & Spykerman, K. (2017). Competing health systems and complex patients: An interprofessional collaboration to improve outcomes and reduce healthcare costs. [Journal of Interprofessional Education and Practice, 7, 5-10](http://jieponline.com/article/S2405-4526(16)30103-3/pdf). [http://jieponline.com/article/S2405-4526\(16\)30103-3/pdf](http://jieponline.com/article/S2405-4526(16)30103-3/pdf)
- Hardin L, Kilian A, Muller L, Callison K, & Olgren M. (2016). Cross-Continuum Tool is Associated with Reduced Utilization and Cost for Frequent High-Need Users. [The Western Journal of Emergency Medicine, 18\(2\), 189–200](https://doi.org/10.5811/westjem.2016.11.31916). doi:10.5811/westjem.2016.11.31916
- Hardin L, Kilian A, & Olgren M. (2016). Perspective on Root Causes of High Utilization that Extend Beyond the Patient. [Population Health Management](https://doi.org/10.1089/pop.2016.0088). doi:10.1089/pop.2016.0088
- Hardin L. (2016). Restoring Dignity for Vulnerable Populations: Changing the System for Complex Patients. [Health Progress, January-February, 28-32](https://www.chausa.org/docs/default-source/health-progress/restoring-dignity-for-vulnerable-populations-changing-the-system-for-complex-patients.pdf?sfvrsn=0). <https://www.chausa.org/docs/default-source/health-progress/restoring-dignity-for-vulnerable-populations-changing-the-system-for-complex-patients.pdf?sfvrsn=0>.

Putting Care at the Center 2018

December 5 – 7, 2018 | Chicago, Illinois

www.centering.care



Keynote Speaker

Ai-jen Poo

*Executive Director, National Domestic Worker's Alliance
Co-Director, Caring Across Generations*

Tickets are on sale

Early Bird: **\$595** • General Admission: **\$695**

Student Rate: **\$350** • Student Hotspotting Current and Alumni: **\$250**



Resources for Learning



The National Center
for Complex Health and Social Needs

- <https://www.nationalcomplexcare/>

the Playbook

- <https://www.bettercareplaybook.org/>