









Welcome to

# Addressing the Unmet Needs of Complex Patients



www.HealthcareValueHub.org
@HealthValueHub











#### **Welcome and Introduction**

**Lynn Quincy** 

**Director, Healthcare Value Hub** 









### Housekeeping

- Thank you for joining us today
- All lines are muted until Q&A
- Technical problems? Please text/call Tad Lee at 703-408-3204 or our office at 202-462-6262. Or use the Chat function in the webinar.









#### **Agenda**

#### **Welcome & Introduction**

Lynn Quincy (Consumers Union, Healthcare Value Hub)

#### Who is the Complex Patient?

Tanya Shah, MBA, MPH (The Commonwealth Fund)

#### **Successful Models of Care**

- Ross Owen, MPA (Hennepin Health)
- Sanjeev Arora, MD (Project Echo)

Q & A

#### ConsumersUnion<sup>\*</sup> **HEALTHCARE VALUE HUB**









#### **ConsumersUnion HEALTHCARE VALUE HUB**









RESEARCH BRIEF NO. 17 | FEBRUARY 2017

#### Addressing the Unmet Medical and Social Needs of **Complex Patients**

As providers, policymakers and advocates navigate myriad result in lower healthcare costs, improved quality and approaches to addressing high healthcare costs and uneven quality in America, special attention to meeting the needs of complex patients is warranted. The care these patients receive is often fragmented and not tailored to address their unique social and medical needs.

Innovative models have been adopted around the country that employ new care approaches to address unmet social and medical needs. These approaches can

#### SUMMARY

Complex patients have multiple chronic conditions and often struggle to manage them. They may have a number of functional limitations, or a combination of vulnerabilities that are exacerbated by social disadvantages such as homelessness, low income, behavioral health issues, or being a racial and ethnic minority.

Because this is a very high-cost population that often experiences unmet social needs and care coordination failures, there is tremendous opportunity to improve the lives of these patients and possibly reduce net social and health spending. Models of care that are data driven tailored to patient needs and integrate care from healthcare and social service providers are extremely promising and deserve the sustained attention of policymakers and advocates. Implementing models of care described in this paper could mean great progress in lowering cost, improving quality of care and reducing disparities.

may reduce disparities. Realizing these benefits can be challenging-program directors must surmount financing silos, adopt new data systems and tailor the right model to the right population. Nonetheless, these models deserve a

#### Who are Complex Patients?

Complex patients account for a large portion of healthcare spending in the U.S. The costliest one percent of patients account for 20 percent of healthcare spending and the costliest five percent account for 50 percent.

Excellent work by the Commonwealth Fund<sup>2</sup> and others reveals that complex patients are a very diverse group, including:

- · people who have major complex chronic conditions in multiple organ systems;
- · the nonelderly disabled;
- · frail seniors; and
- · children who have complex special healthcare needs. This patient group lacks a precise taxonomy. Complex patients are also referred to as super utilizers and highcost, high-need patients.

The Agency for Healthcare Research and Quality defines complexity as the "magnitude of mismatch between a patient's needs and the services available to him/her in the healthcare system and community."3 The Centers for Medicare & Medicaid Services defines these patients as those with "complex, unaddressed health issues and a history of frequent encounters with healthcare providers."4 Research done by The Commonwealth Fund defines complex patients as those with three or more chronic conditions and a functional limitation.5

#### Resources

- Key studies on this topic
- Webinar slides and recording
- New Hub Research Brief
- Available at:

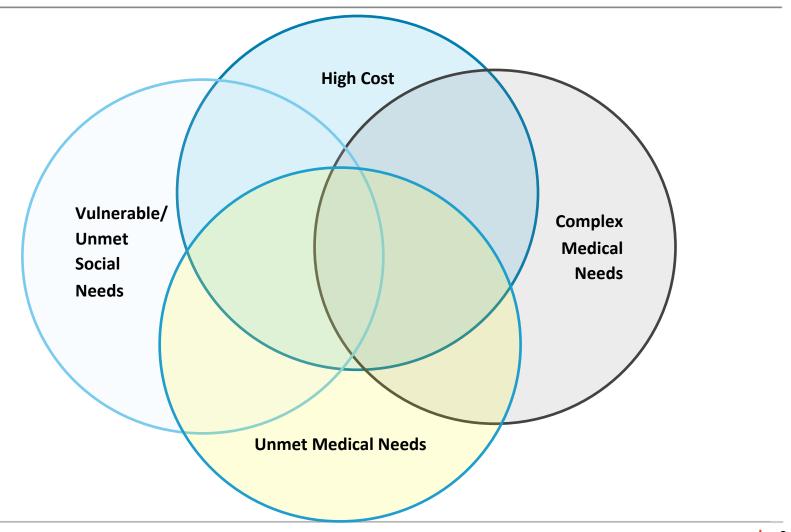
HealthcareValueHub.org/complex-patients



















### **Understanding High-Need, High-Cost Patients**

Tanya Shah,
Senior Program Officer
The Commonwealth Fund



# Understanding High-Need, High-Cost Patients

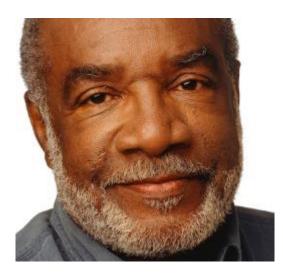
Tanya Shah, Senior Program Officer



# High-need, high-cost patients are a heterogeneous population



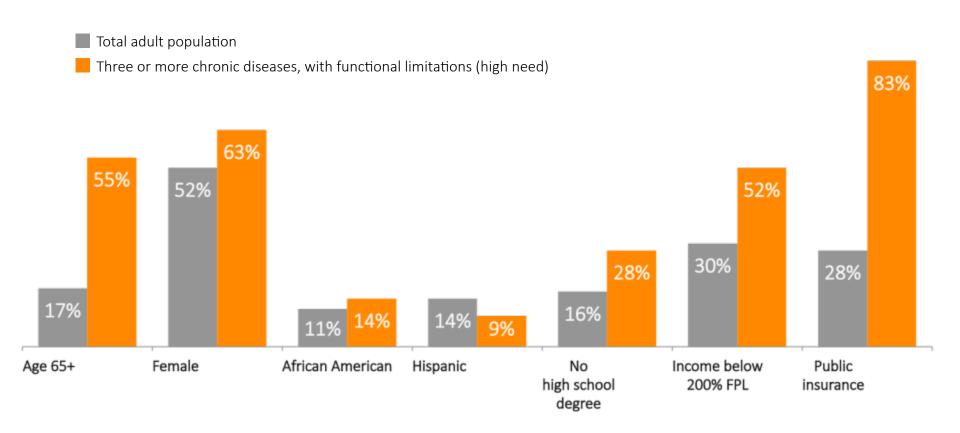








# Adults with High Needs Have Unique Characteristics





# High need adults face challenges in experiencing "good" care

- The health care system is not optimally configured to serve adults with high needs
  - They experience difficulty obtaining access to appropriate care.
  - Despite much greater health care spending, one out of five high-need adults reported having an unmet medical need.
- Less than half of high need patients said their doctors spent enough time, showed respect, listened carefully, and explained things in a way that was easy to understand
- High need patients struggle to pay for care
  - High-need adults spend more than double, on average, on out of pocket expenses as adults in the total population (\$1669 vs. \$702).



### So what do complex patients need?

### What High-Need Patients Want From Their Providers

- Acknowledge my progress, help me get from pain to possible
- Reinforce what bolsters my resilience
- Help me avoid becoming complacent
- Simplify my pills and appointments

### What High-Need Patients Want From The System

- Don't cut my care and services short
- Help me understand my coverage
- Keep me with doctors who know me. Empower me to pick my care team. Ensure
  my team is talking to each other
- Include my supporters in my care



### What works for people with complex needs?

- 1. Strong evidence base supports integration of social services and medical care for improved outcomes
  - Screening patients for unmet needs
  - Connecting patients with social service organizations
- 2. Targeting and tailoring initiatives to serve the unique characteristics and needs within sub-groups of the population
- 3. Care models are evolving that aim to improve outcomes for high-need patients, some of which have shown promising results



### 1. Integration of social and medical care

- 80% of physicians conclude that addressing patients' social needs is as critical as addressing their medical needs
- Tools and techniques have emerged to help providers meet non-medical needs of their patients:
  - HelpSteps and Healthify offer electronic platforms that screen patients for unmet social needs in clinical settings, such as clinic waiting rooms
  - Health Leads, encourages health care providers to write prescriptions for patients' basic needs, such as food and heat.
  - Medical-Legal Partnerships (MLPs) place legal experts at health care institutions to help patients address legal issues that affect health status
  - Care management programs in CA connect Homeless individuals to permanent housing and showed a 32 percent drop in emergency department charges



# 2. Segmentation approaches can help tailor interventions





Source: <u>www.bettercareplaybook.org</u>

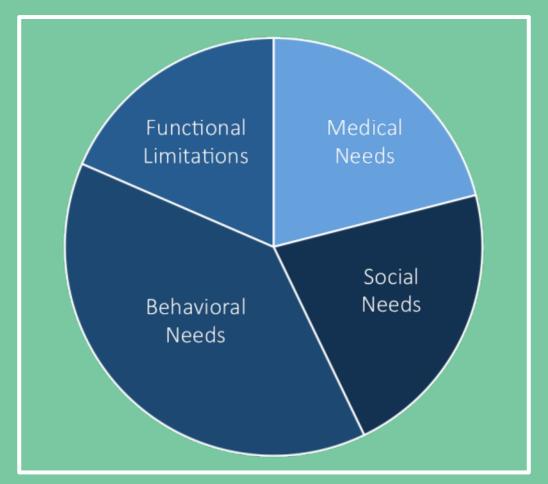
# 2. Segment high-risk patients with common medical and functional needs into subgroups

High-risk Major Complex Children with Non-elderly Multiple Advancing Chronic Disabled Chronic **Complex Needs** Illness Frail Elderly

Source: www.bettercareplaybook.org

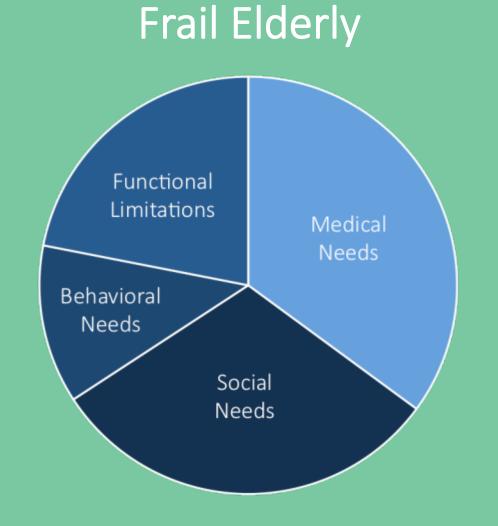
# 2. Assess behavioral and social service needs in addition to medical and functional limitations

### Frail Elderly



Source: www.bettercareplaybook.org

# 2. Depending on the assessment, the intervention and care team will vary



# 3. Target interventions based on promising care models

To view all 20 care models, please visit <u>www.bettercareplaybook.org</u>: <u>A Quick Reference Guide to Promising Models</u>

		Care plan	Ongoing review of care plan	inter- professional care team	Point of contact	Active coordi nation	Information sharing	Training	Quality Improvement		
Model	Target Population	Attributes of Person-Centered Care*							Outcomes	Learn More	
Community Aging in Place— Advancing Better Living for Elders (CAPABLE)	Low-income elderly who need assistance with at least one activity of daily living like self-feeding or two instrumental activities of daily living like managing money	~		~			~	~		Multiple studies suggest improvements in patients' ability to five independently:  • 79% of participants improved their self-care over course of five months (learn more).  • 94% of intervention group participants thought program made life easier for them; 67% saw decrease in average ADL problems (learn more).  • 53% of participants exhibited improvement in depressive symptoms; average program cost was \$2,825 per participant (learn more).	Sarah Szanton, PhD, ANP, FAA Associate Professor and PhD Program Director, Johns Hopkins School of Nursing e: sszanto1@jhu.edu
Geriatric Resources for Assessment and Care of Elders (GRACE)	Low-income elderly with multiple diagnoses	~	~	~	~	~	~	~	~	After two intervention years of three-year controlled research study (learn more):  • emergency department use significantly lower in intervention group compared to usual care  • hospitalization rate significantly lower in high-risk patients in intervention group compared with high-risk patients receiving usual care  • among high-risk patients, program was cost-neutral in first two years and cost-saving in third year (post-intervention).	Dawn Butler, JD, MSW Director, GRACE Training and Resource Center e: butlerde⊕ku.edu
Guided Care	Older adults with multiple chronic conditions who are at risk of high health expenditures in the next year	~	~	~		~	~	~		20-month cluster-randomized trial at three health systems in Bahimore-Washington area, representing over 800 patients, found Guided Care participants experienced (learn more):  29% decrease in home health episodes  37% fewer skilled nursing facility days  15% fewer emergency department visits Improvements more pronounced among Guided Care patients receiving primary care from integrated delivery system.	e: guided@jhsph.edu









### Addressing the Unmet Needs of Complex Patients--Hennepin Health

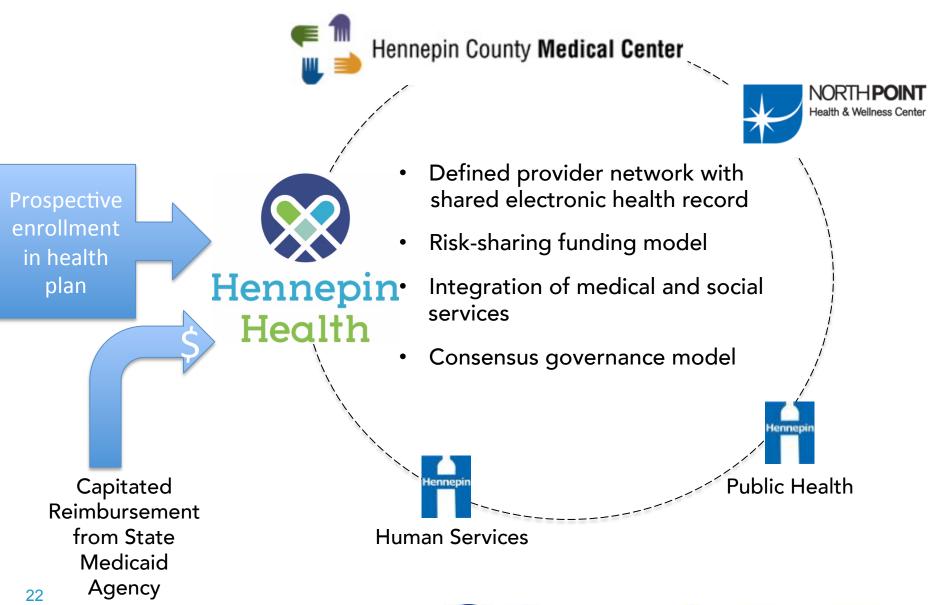
Ross Owen,
Health Strategy Director,
Hennepin Health





# ADDRESSING THE UNMET NEEDS OF COMPLEX POPULATIONS

February 24, 2017





### Medicaid Expansion Population Characteristics in Hennepin County

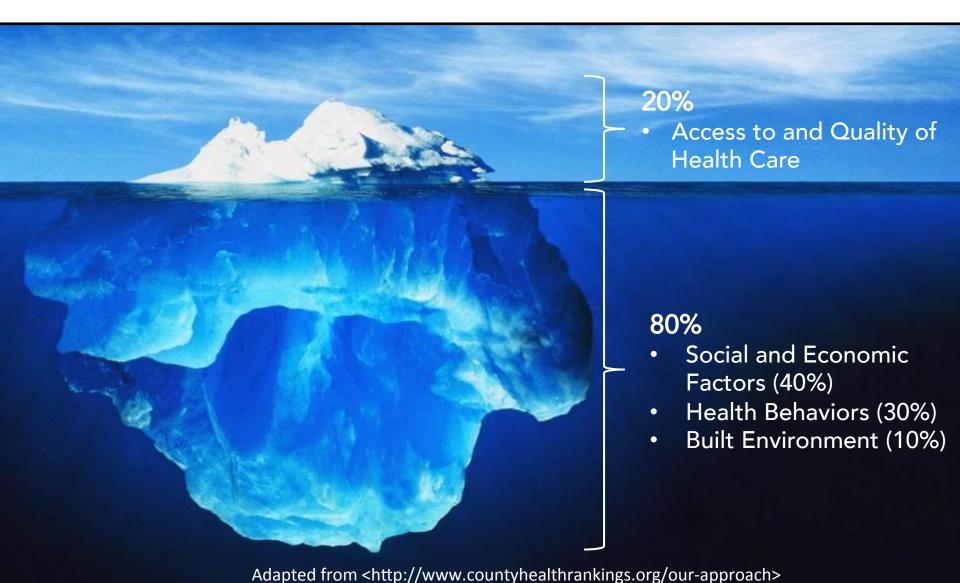
- 70% male
- 64% racial/ethnic minority
- Common overlapping issues:
  - Mental health conditions
  - Chemical dependency
  - Homelessness/unstable housing
  - Chronic physical conditions
  - Lack of social support



Frequent use of the emergency department (ED) to access care



# Modifiable factors influencing health outcomes

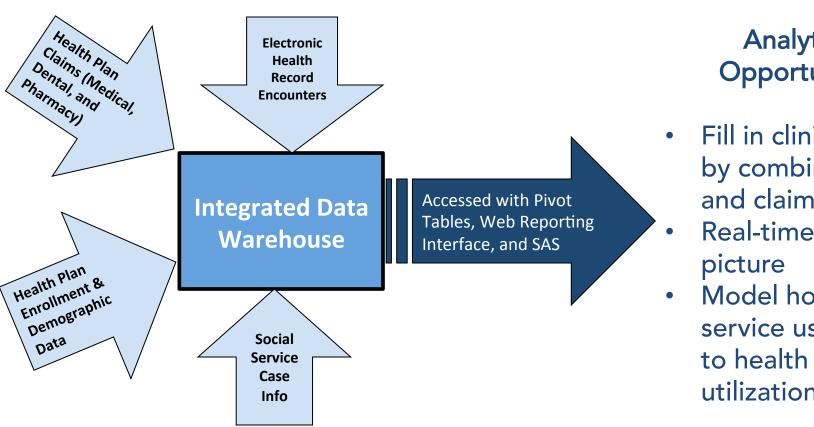


### **Financial Model**

	Before Hennepin Health / Traditional Health Care	With Hennepin Health	
Method of Paying Providers for Care	Fee-for-Service ( <i>Volume</i> )	Total-Cost-of-Care ( <i>Value</i> )	
Health Plan <> Provider Financial Incentives	Opposed	Aligned	
Remaining Funds if Financially Successful	Health Plan Margin	Reinvestment to Further Improve the System	
Services Offered to Patients	Medicaid Benefit Set ( <i>Rigid</i> )	Medicaid Benefit Set + Care Coordination + Targeted Social Service Interventions (Flexible)	



### **Analytics Model: Current State**



#### **Analytics Opportunity:**

- Fill in clinical gaps by combining EHR and claims
- Real-time Rx
- Model how social service use relates to health care utilization



### Understanding of Social Needs









### Care Model

- Primary care medical home
- "Ambulatory ICU" clinic for most complex
- Targeted behavioral health and social service interventions
- Shared electronic health record (EHR)





### **Broadening Conception of Accountability**

















### Thank You!



www.hennepinhealth.org











## Addressing the Unmet Needs of Complex Patients--Project ECHO

Sanjeev Arora, MD
Director of Project ECHO





# Project ECHO® (Extension for Community Health Outcomes)

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<sup>ff</sup> UNMProjectECHO





# At ECHO, our mission is to democratize medical knowledge and get best practice care to underserved people all over the world.

Our goal is to touch the lives of 1 billion people by 2025.

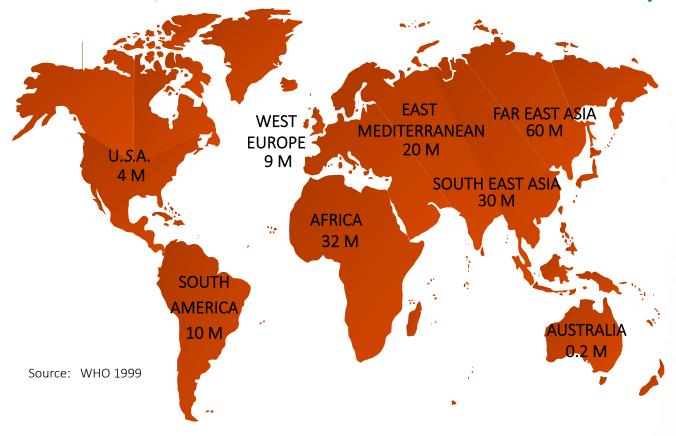
Supported by New Mexico Department of Health, Agency for Health Research and Quality, New Mexico Legislature, the Robert Wood Johnson Foundation, the GE Foundation, Helmsley Charitable Trust, Merck Foundation, BMS foundation, NM Medicaid



Moving Knowledge Instead of Patients

### **A Global Health Problem**

Over 170 Million Carriers Worldwide, 3-4 Million new cases/year



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### **HCV** in New Mexico

Estimated number was greater than 28,000

- In 2004 less than 5% had been treated
  - 2,300 prisoners were HCV positive (~40% of those entering the corrections system), none were treated

Copyright 2015 Project ECHO®

### **HCV** Treatment 2004

#### Good news...

Curable in 70% of cases

#### Bad news...

- Severe side effects:
  - anemia (100%)
  - neutropenia >35%
  - •depression >25%
  - No Primary Care Physicians treating HCV

Copyright 2015 Project ECHO®

# **Goals of Project ECHO**

Develop capacity to safely and effectively treat HCV in all areas of New Mexico and to monitor outcomes.

Develop a model to treat complex diseases in rural locations and developing countries.

#### **Methods**

- Use Technology to leverage scarce resources
- Sharing "best practices" to reduce disparities
- Case based learning to master complexity
- Web-based database to monitor outcomes

Arora S, Geppert CM, Kalishman S, et al: Acad Med. 2007 Feb;82(2): 154-60.

# Steps

- Train physicians, physician assistants, nurse practitioners, nurses, pharmacists, educators in HCV
- Train to use web-based software iECHO & ECHO Health®
- Conduct teleECHO™ clinics "Knowledge Networks"
- Initiate case-based guided practice "Learning Loops"
- Collect data and monitor outcomes centrally
- Assess cost and effectiveness of programs

### **Benefits to Rural Clinicians**

- No cost CMEs and Nursing CEUs
- Professional interaction with colleagues with similar interest
  - Less isolation with improved recruitment and retention
- A mix of work and learning
- Access to specialty consultation with GI, hepatology, psychiatry, infectious diseases, addiction specialist, pharmacist, patient educator

















NEJM: 364: 23, June 9-2011, Arora S, Thornton K, Murata G



# **Technology**

- Videoconferencing Hardware
- Videoconferencing Software
- Video Recording System
- You Tube-like Website/Archive
- ECHO Health Electronic Clinical Management Tool
- iECHO Electronic TeleECHO Clinic Management Solution

#### How well has model worked?

- 600 HCV teleECHO Clinics have been conducted
- >6,000 patients entered HCV disease management program

### CME's/CE's issued:

 Total CME hours 79000 hours at no cost for HCV and 19 other disease areas

# Project ECHO Clinicians HCV Knowledge Skills and Abilities (Self-Efficacy)

scale: 1 = none or no skill at all 7= expert-can teach others

	Community Clinicians N=25		ORE ipation (SD)	TODAY MEAN (SD)	Paired Difference (p-value) MEAN (SD)	Effect Size for the change
1.	Ability to identify suitable candidates for treatment for HCV.	2.8	(1.2)	5.6 (0.8)	2.8 (1.2) (<0.0001)	2.4
2.	Ability to assess severity of liver disease in patients with HCV.	3.2	(1.2)	5.5 (0.9)	2.3 (1.1) (< 0.0001)	2.1
3.	Ability to treat HCV patients and manage side effects.	2.0	(1.1)	5.2 (0.8)	3.2 (1.2) (<0.0001)	2.6

(continued

)

# **Project ECHO Clinicians**

**HCV Knowledge Skills and Abilities (Self-Efficacy)** 

Community Clinicians N=25	BEFORE Participation MEAN (SD)	TODAY MEAN (SD)	Paired Difference (p-value) MEAN (SD)	Effect Size for the change
4. Ability to assess and manage psychiatric co-morbidities in patients with hepatitis C.	2.6 (1.2)	5.1 (1.0)	2.4 (1.3) (<0.0001)	1.9
5. Serve as local consultant within my clinic and in my area for HCV questions and issues.	2.4 (1.2)	5.6 (0.9)	3.3 (1.2) (< 0.0001)	2.8
6. Ability to educate and motivate HCV patients.	3.0 (1.1)	5.7 (0.6)	2.7 (1.1) (<0.0001)	2.4

(continued



# **Project ECHO Clinicians**

**HCV Knowledge Skills and Abilities (Self-Efficacy)** 

Community Clinicians N=25	BEFORE Participation MEAN (SD)	TODAY MEAN (SD)	Paired Difference (p-value) MEAN (SD)	Effect Size for the change
Overall Competence (average of 9 items)	2.8* (0.9)	5.5* (0.6)	2.7 (0.9) (<0.0001)	2.9

Cronbach's alpha for the BEFORE ratings = 0.92 and Cronbach's alpha for the TODAY ratings = 0.86 indicating a high degree of consistency in the ratings on the 9 items

Arora S, Kalishman S, Thornton K, Dion D et al: Hepatology. 2010 Sept;52(3):1124-33

## **Clinician Benefits**

(Data Source; 6 month Q-5/2008)

Benefits N=35	Not/Minor Benefits	Moderate/Major Benefits
Enhanced knowledge about management and treatment of HCV patients.	3% (1)	97% (34)
Being well-informed about symptoms of HCV patients in treatment.	6% (2)	94% (33)
Achieving competence in caring for HCV patients.	3% (1)	98% (34)

# **Project ECHO**Annual Meeting Survey

	Mean Score (Range 1-5)
Project ECHO® has diminished my professional isolation.	4.3
My participation in Project ECHO® has enhanced my professional satisfaction.	4.8
Collaboration among agencies in Project ECHO® is a benefit to my clinic.	4.9
Project ECHO® has expanded access to HCV treatment for patients in our community.	4.9
Access, in general, to specialist expertise and consultation is a major area of need for you and your clinic.	4.9
Access to HCV specialist expertise and consultation is a major area of need for you and your clinic.	4.9



# Outcomes of Treatment for Hepatitis C Virus Infection by Primary Care Providers

Results of the HCV Outcomes Study

Arora S, Thornton K, et al. N Engl J Med. 2011 Jun; 364:2199-207.

Copyright 2015 Project ECHO®

## **Treatment Outcomes**

Outcome	ЕСНО	UNMH	P-value
	N=261	N=146	
Minority	68%	49%	P<0.01
SVR* (Cure) Genotype 1	50%	46%	NS
SVR* (Cure) Genotype 2/3	70%	71%	NS

\*SVR=sustained viral response

NEJM: 364: 23, June 9-2011, Arora S, Thornton K, Murata G

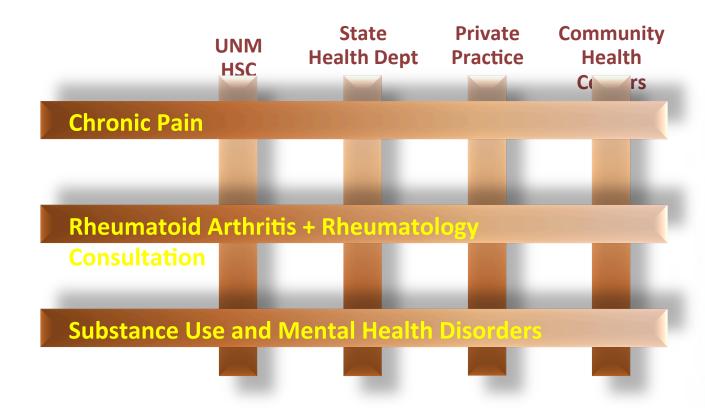


#### **Disease Selection**

- Common diseases
- Management is complex
- Evolving treatments and medicines
- High societal impact (health and economic)
- Serious outcomes of untreated disease
- Improved outcomes with disease management

# **Bridge Building**

**Pareto's Principle** 

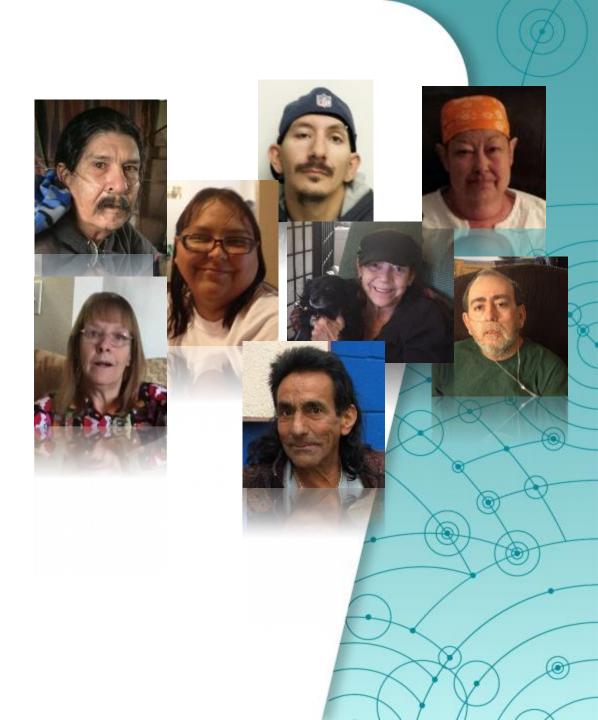




## **ECHO Care**

An innovative, evidence-based, multi-disciplinary program for treating high need patients.

**ECHO Care Video** 





"The project described was supported by Grant Number 1C1CMS331334 from the U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services. The content of this abstract is solely the responsibility of the authors and does not necessarily represent the official views of the U.S. Department of Health and Human Services or any of its agencies. The research presented was conducted by the awardee. Findings may or may not be consistent with or confirmed by the findings of the independent evaluation contractor."

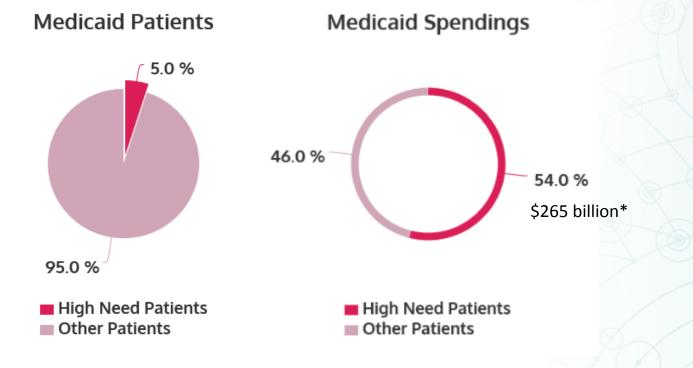
"The research presented here was conducted by the awardee. Findings might or might not be consistent with or confirmed by the independent evaluation contractor."



# The Standard Healthcare System:

## Not Designed for the Highest Need Patients

- ECHO Care targets the 5% of patients that utilize 54% of resources
- These patients' outcomes and quality of care are often poor.
- Many providers struggle to provide the necessary support to care for these patients.

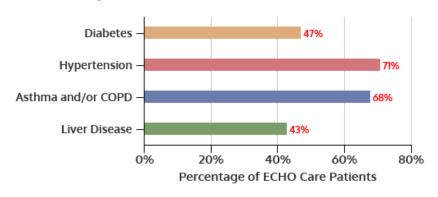


<sup>\*</sup> Annual Medicaid spending in 2014 was \$492 billion dollars

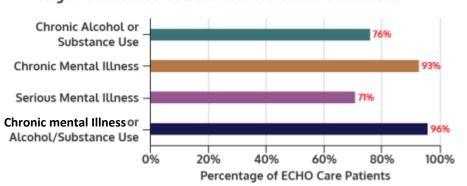
### **ECHO Care Patients**

- 50% female, 64% White, 69% Hispanic, average age of 45
- Significant social barriers to care
  - 29% report being homeless or needing housing assistance
  - 25% report having little to no social support
  - 56% report having a high school diploma or less

#### Average of Six Chronic Medical Conditions



#### High Prevalence of Behavioral Health Conditions



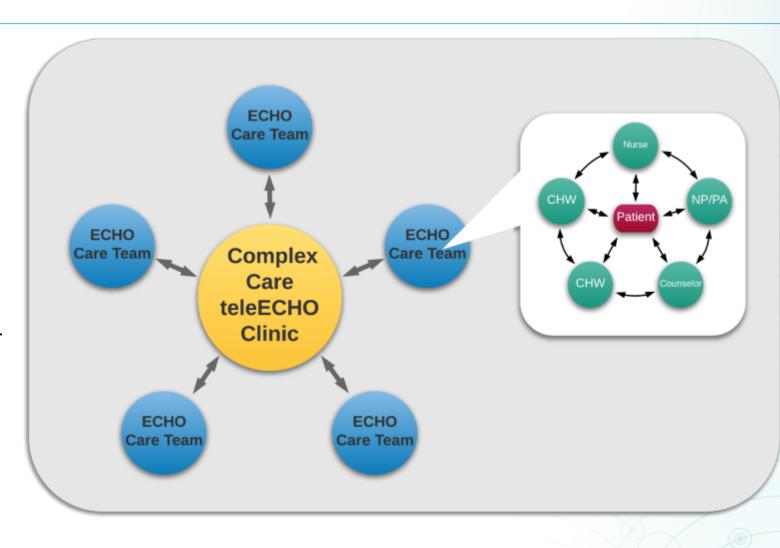
Note: Social Barriers self-reported in intake assessment; medical and behavioral health conditions from Medicaid claims analysis



## **ECHO Care Model**

# Complex Care Clinic Specialists:

- Addictions
- Chronic pain
- Palliative Care
- Psychiatry
- Counseling
- Pharmacy
- Nursing
- Community Health Worker
- Endocrinology
- Cardiology
- Pulmonary
- Infectious
   Disease
- Nephrology
- GI
- Hospitalist













- Use Technology to leverage scarce resources
- Share best practices to reduce disparities
- Use case based learning to master complexity
- Monitor outcomes to evaluate effectiveness



# Complex Care TeleECHO Clinic

Case-based learning with access to integrated recommendations for care from multiple specialists.

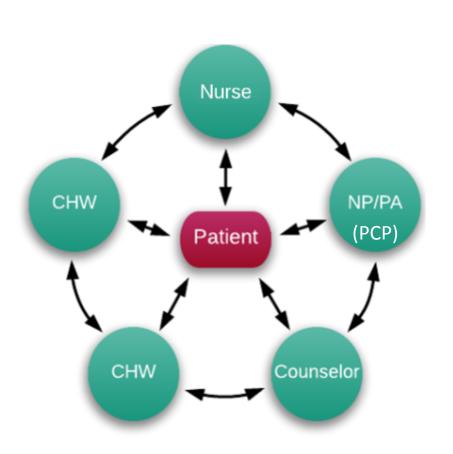


Photo credit: Kip Malone, from The Commonwealth Fund, 'Project ECHO's Complex Care Initiative', August 9, 2016



## The ECHO Care Teams:

### Team-based Primary Care



- Coordinated, high-intensity care
- Integrates physical and mental health care
- Addresses social barriers
- Focuses on transitions of care
- 24/7 access to care
- Teams supported by specialists through the Complex Care teleECHO Clinic

# **Outcomes of the ECHO Care Program**

Over 2 ½ years, ECHO Care served 770 high need Medicaid patients and produced positive outcomes in many areas:

- Patient engagement
- Patient satisfaction
- More appropriate use of healthcare services:
  - 29% decrease in hospitalizations; 26% decrease in emergency department visits
  - Increase in outpatient visits, including follow-up visits after hospitalizations
  - Increase in prescriptions, while use of controlled substances decreased
- Cost savings

## What ECHO Care Patients Value

#### **Establishing an Emotional Connection and Building Trust**

#### Support for Material Needs

Community health workers address basic needs such as housing, food and financial assistance.



#### **Direct Access to ECHO Care Teams**

Patients have direct access to their team. Teams are available for home visits and extended clinic visits, and by phone 24 hours a day, 7 days a week.

#### Non-judgmental Approach

Teams communicate a nonjudgmental approach, verbally and through acceptance of patient decisions.

#### **Social Support**

Teams become source of social support, as well as medical and social services.



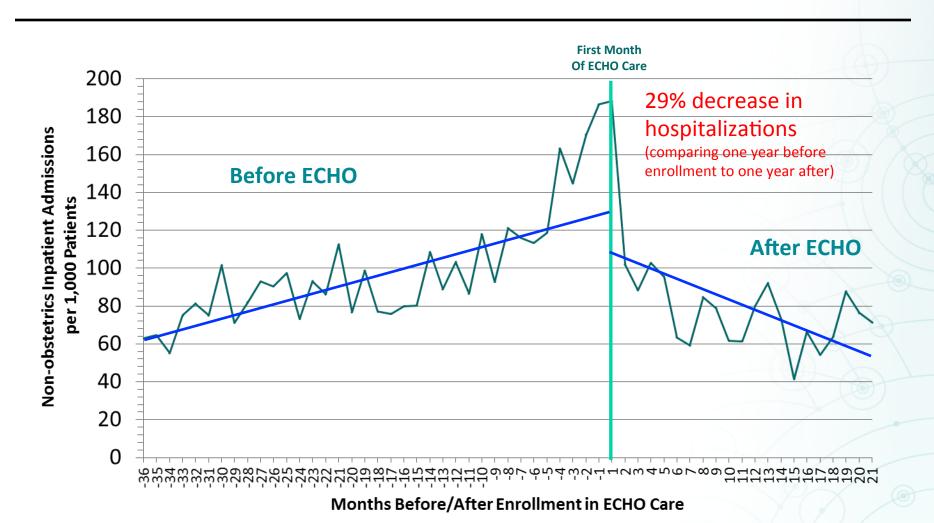


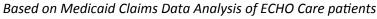
## **Outcomes: Patient Satisfaction**

In the past 6 months	Baseline N=287	6 months N=145	12 months N=111
I always got care as soon as I thought I needed it	31%	66%	81%
When I get sick I usually go to my primary healthcare team	26%	56%	70%
I have <b>never</b> received healthcare in my home	72%	22%	21%
My primary healthcare team cares about me as a person	47%	77%	92%
My primary healthcare team talked with me about my health goals	44%	84%	88%
My primary healthcare team provides the best possible care	25%	59%	70%
I am very satisfied with the care I receive	28%	66%	86%



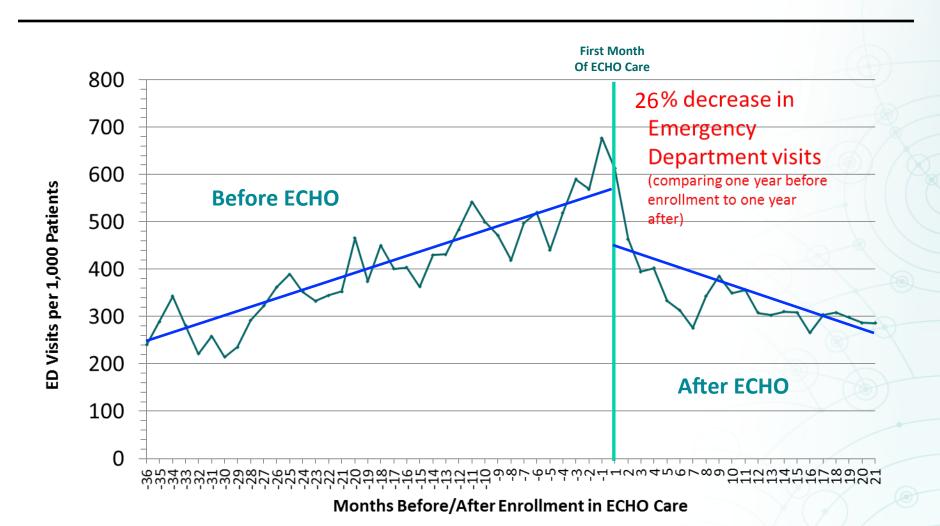
# Outcomes: Decrease in Inpatient Hospital Admissions







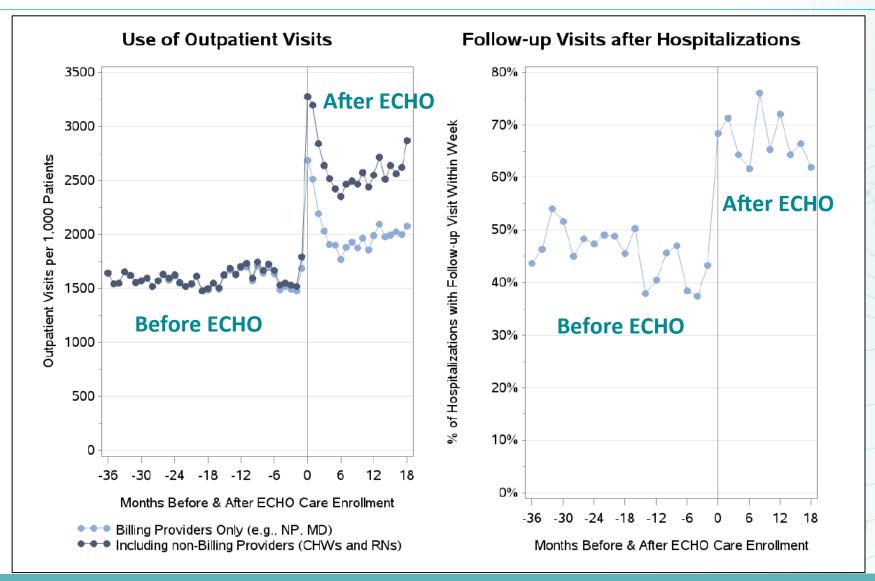
# Outcomes: Decrease in Emergency Department Visits



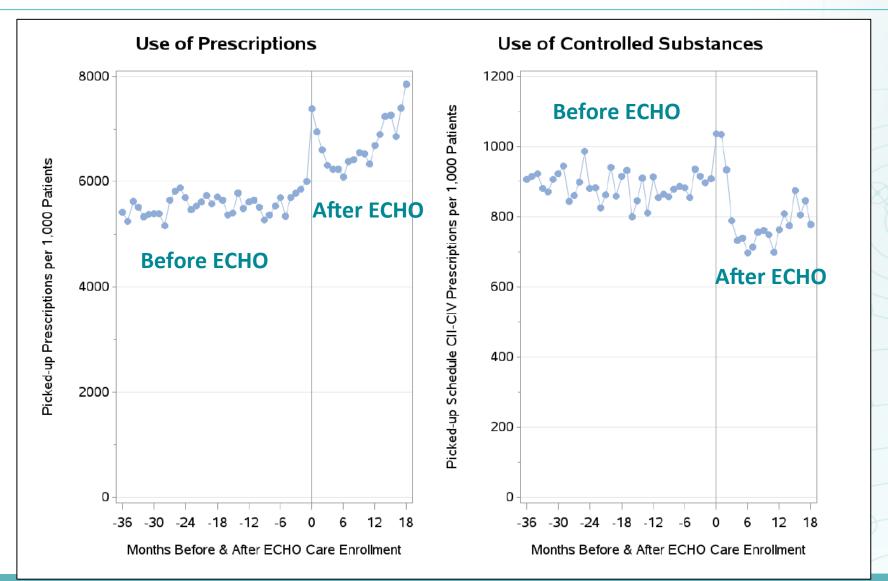
Based on Medicaid Claims Data Analysis of ECHO Care patients



# **Outcomes: Increase in Outpatient Visits**



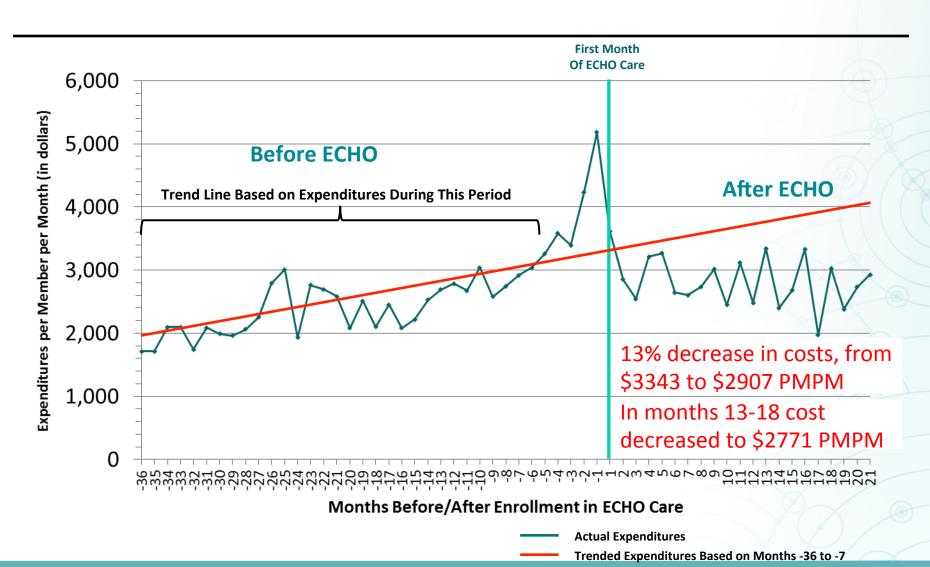
# Outcomes: Overall Prescriptions Increased, While Controlled Substances Decreased



# **Outcomes Based on Claims Analysis:**

#### Decrease in Medicaid Expenditures

(Does not include the cost of intervention)





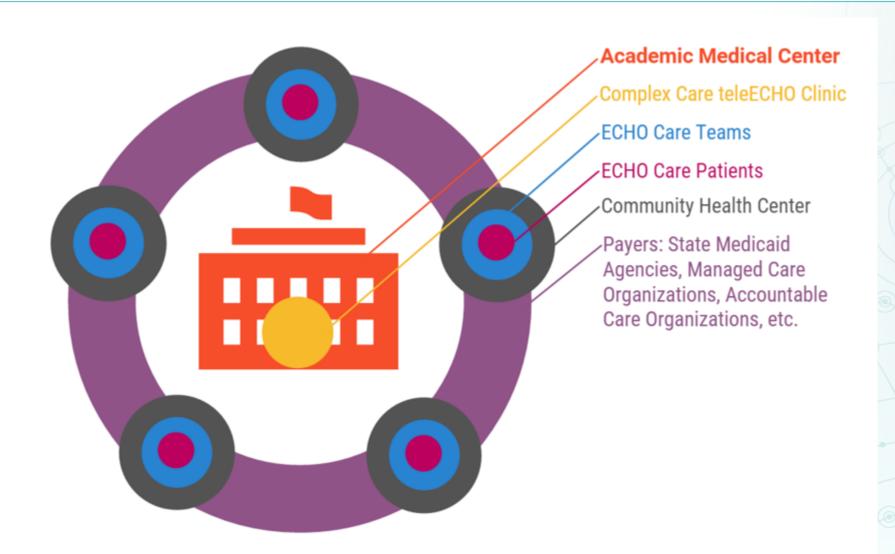
# **ECHO Care Shows Cost Savings**

Estimated Per-Member-Per-Month Decrease in Medicaid Expenditures	\$505
Per-Member-Per-Month Costs*	
Average Cost of ECHO Care Outpatient Intensivist Team	\$356
Complex Care teleECHO Clinic	\$51
Total Per-Member-Per-Month Costs	\$407
Per-Member-Per Month Savings**	\$98

<sup>\*</sup> These costs assume that the teams are operating at capacity.

<sup>\*\*</sup> This represents a savings of **one million dollars for every 850 patients served** by the ECHO Care model.

# **Ecosystem Needed to Support ECHO Care**



# How do you pay for ECHO Care?

Payers can fund ECHO Care with per-member-per-month (PMPM) payment. This pays for:

- Wrap-around services, including care coordination and care management, referrals to community services, transitional care from inpatient to other settings, health education and promotion.
- <u>Primary care services</u> provided by the billing providers on the ECHO Care Team. (This could, instead, be billed separately.)
- Complex Care teleECHO Clinic

Medicaid Health Homes are another way to fund the ECHO Care model, which brings additional federal funding to the state.

# Support from Project ECHO to Start an ECHO Care Program

- 1. Call our ECHO Care team to determine if this program is a good fit
- 2. Basic training: ECHO Orientation
- 3. Advanced training: ECHO Immersion- bring your team
- 4. ECHO Care resources: Clinical and administrative operations manual, implementation tools, training curriculum
- 5. Consultation during ECHO Care start-up and during ongoing operations









#### **Questions for the speakers?**

Use the chat box or to unmute, press \*6

\*Please do not put us on hold!\*



## Thank you!

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Contact Lynn Quincy at Iquincy@consumers.org with your follow-up questions.

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