

### Connecting Research and Policy in Early Psychosis Treatment

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Early Psychosis Prevention and Early Intervention: Science Informing Policy Symposium Sacramento, CA

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#### Disclosures

- I have no personal financial relationships with commercial interests relevant to this presentation
- The views expressed are my own, and do not necessarily represent those of the NIH, NIMH, or the Federal Government



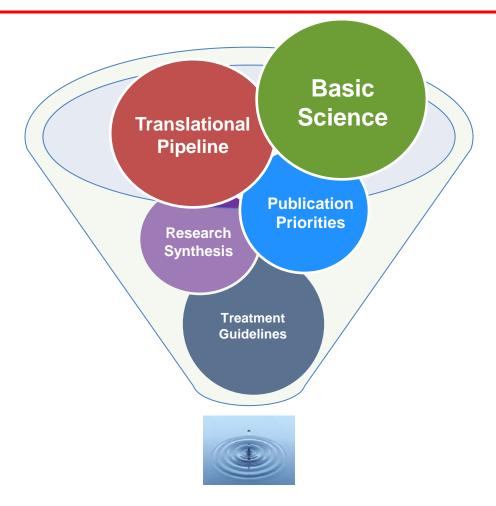








#### Scientific Discovery # Uptake





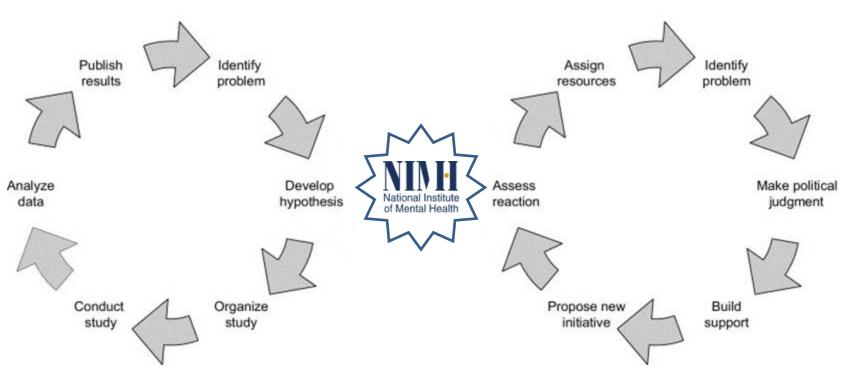




#### Research and Policy Disconnect

#### Scientific decision making

#### Policy decision making

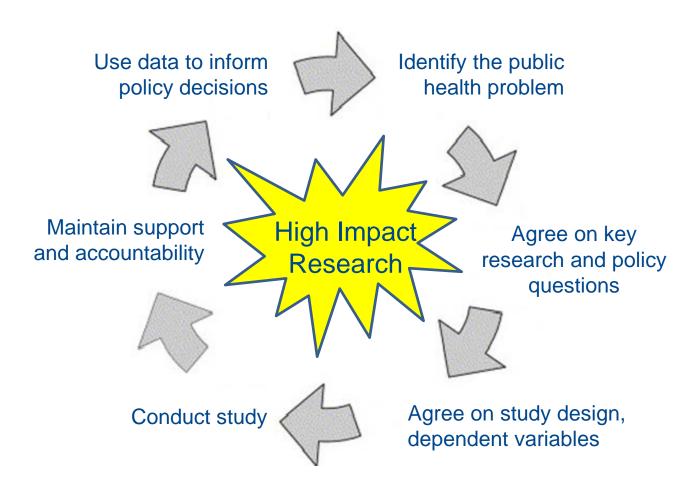


Ross Brownson et al., 2006, American Journal of Preventive Medicine





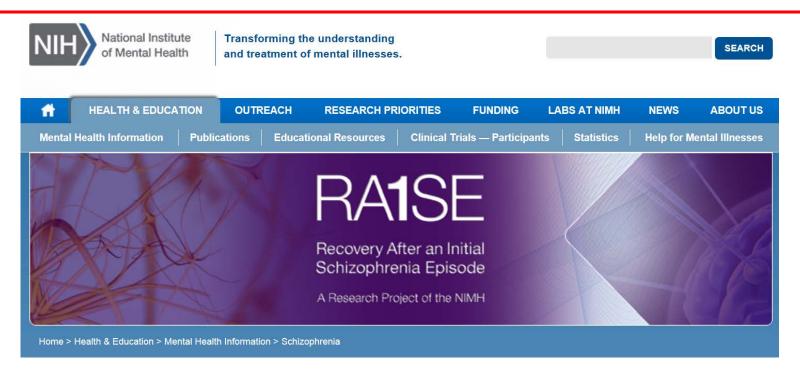
#### Hybrid Decision Making Model







#### Case Study



The "Recovery After an Initial Schizophrenia Episode" initiative seeks to fundamentally alter the trajectory and prognosis of schizophrenia through coordinated and aggressive treatment in the earliest stages of illness.





#### Step 1

Identify the public health problem



#### Established Schizophrenia

- ~2.5 million adults in U.S. are affected
- Onset typically in late adolescence, early 20s
- High morbidity and mortality
  - Multiple episodes of psychosis over the lifetime
  - High unemployment, homelessness, incarceration
  - Shortened lifespan (suicide, medical co-morbidities)
- Economic cost of \$62.7 billion in 2002
  - Direct health care costs of \$22.7 billion





#### Early Intervention Matters

- Rapid remission of positive symptoms
- Lower rates of psychiatric re-hospitalization
- Decreased substance use
- Improved social and vocational functioning
- Increased quality of life



<u>Ryan</u>



http://practiceinnovations.org/ConsumersandFamilies/ViewAllContent/tabid/232/Default.aspx



#### Coordinated Specialty Care Model





#### Step 2

# Agree on key research and policy questions





#### Disability in Schizophrenia

First Episode Psychosis Consumers, Phase-Relatives, Specific Policy Interventions Makers

Can coordinated specialty care, offered early on, improve long term-outcomes for schizophrenia in the US?







#### Step 3

### Agree on study design and dependent variables





### NIMH RAISE Projects

- Comparative effectiveness trial
  - John Kane
  - Nina Schooler
  - Delbert Robinson

The Feinstein Institute for Medical Research



North Shore-Long Island Jewish Health System

- Implementation study
  - Lisa Dixon
  - Susan Essock
  - Howard Goldman





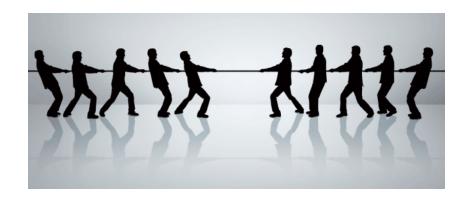
### Policy Makers' Interests

U.S. Federal Stakeholders	Dependent Variables
Substance Abuse and Mental Health Services Administration (SAMHSA)	Recovery, functioning, quality of life
National Institute of Drug Abuse (NIDA)	Substance abuse, tobacco dependence
Centers for Medicare and Medicaid Services (CMS)	Psychiatric relapse, re-hospitalization, cost of medical and specialty care
Social Security Administration (SSA)	School completion, early vocational milestones, competitive employment





#### Brokering Agreement on Measures



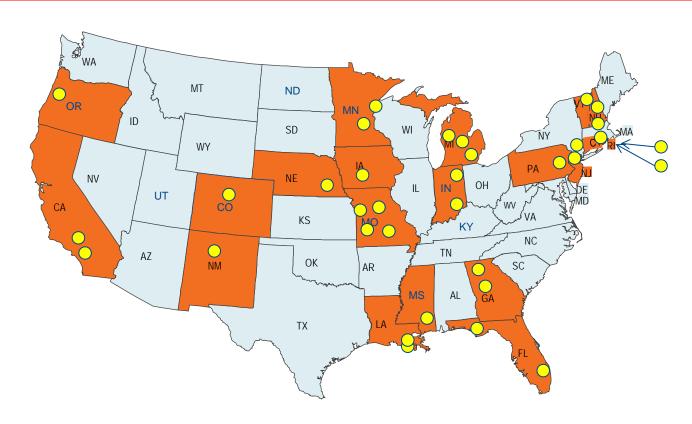
"The Social Security Administration figures its annual budget in terms of U.S. dollars, not Quality Adjusted Life Years."



# Step 4 Conduct study



#### RAISE Clinical Trial



- Phase-specific specialty care for First Episode Psychosis vs. TAU
- Representative patients (N=404) and community clinics (N=34)
- Focus on clinical and functional recovery, cost of care, societal benefits



#### RAISE Implementation Study

State Officials as Research Partners



- NYS Office of Mental Health
- MD Mental Hygiene Administration

"Turn Key" Solutions for State Administrators



- Training and supervising existing staff
- Assertive outreach and client engagement

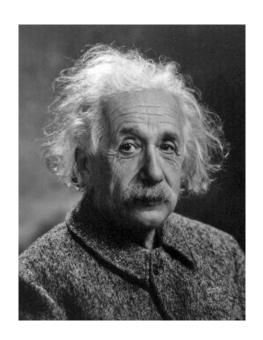


#### Step 5

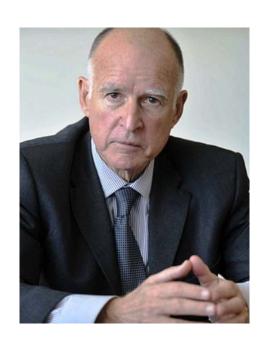
# Maintain stakeholder support, promote accountability



#### Time is Relative











#### Instill productive urgency



#### Early Data from Clinical Trial

Median duration of untreated psychosis is 74 weeks in community clinic settings

Addington et al., 2015, Psychiatric Services



Only 61% of FEP patients receive medications in line with PORT recommendations



Robinson et al., 2014, American Journal of Psychiatry

<5% of FEP patients with cardio-metabolic risk factors receive appropriate medical care



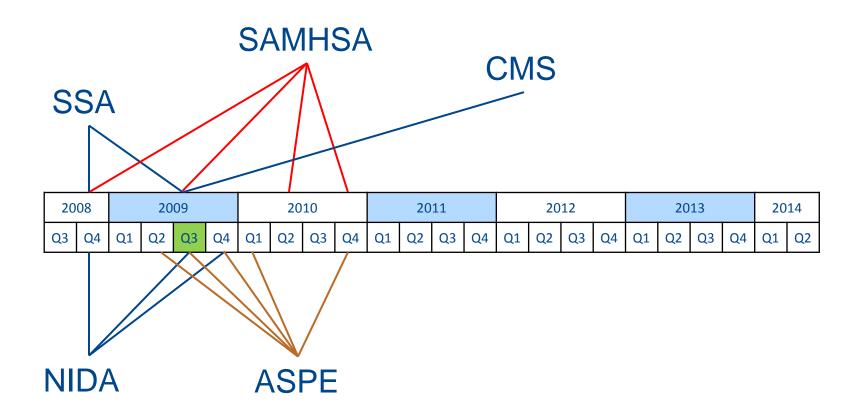
Correll et al., 2014, JAMA Psychiatry



#### Engineer accountability

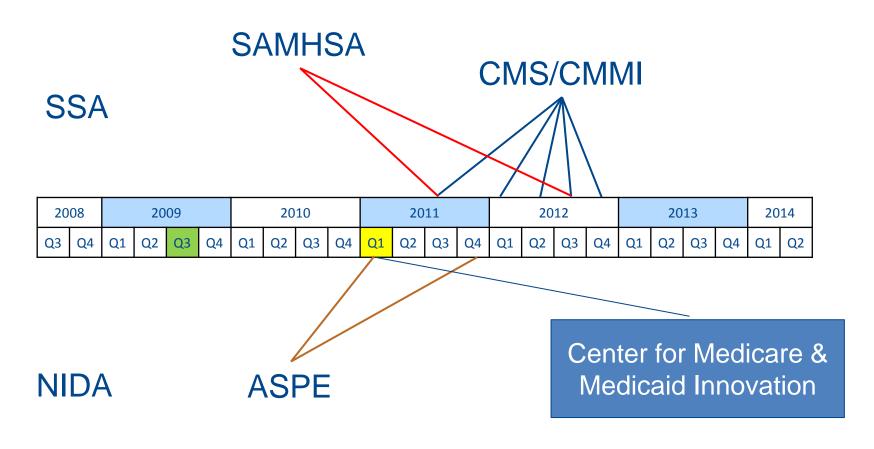




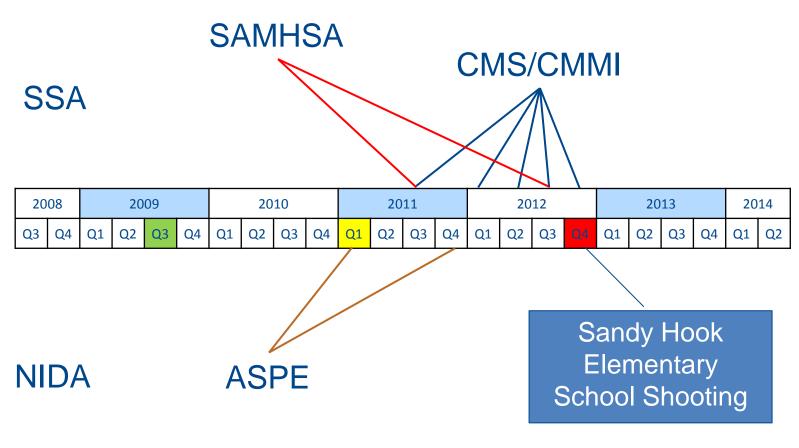




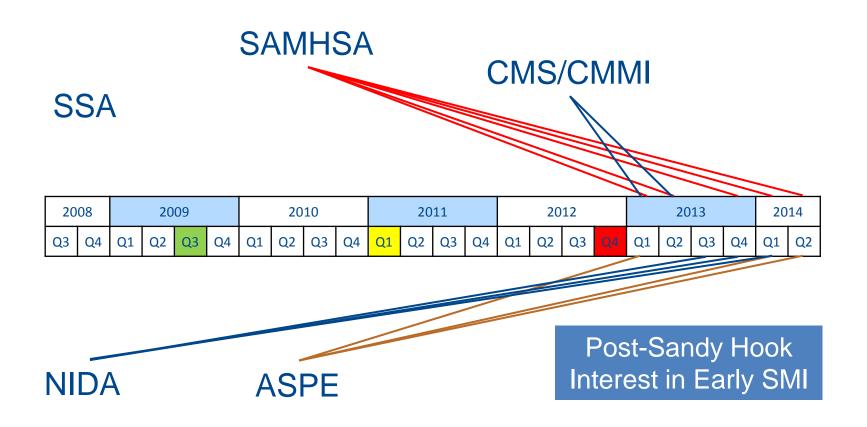




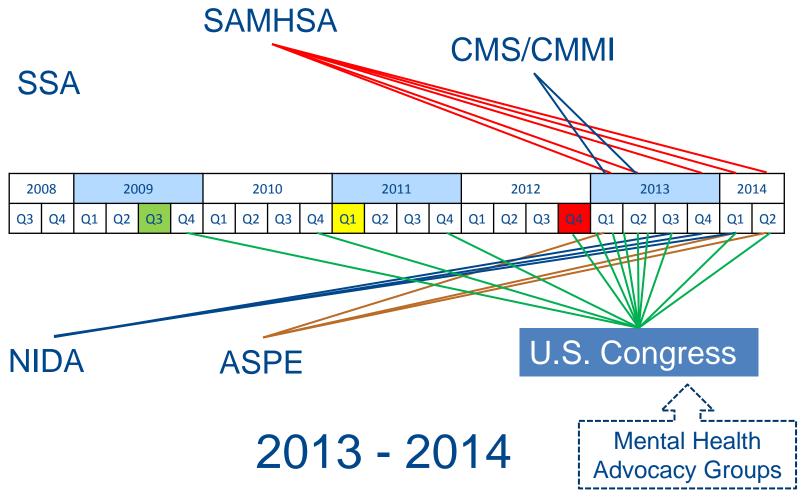














#### Step 6

# Use data to inform policy decisions





#### Early Actions from Implementation Study

■ RAISE → OnTrackNY



- NYS Office of Mental Health
- 4 new clinics for FEP
- June 2013



■ RAISE → Maryland Early Intervention Program



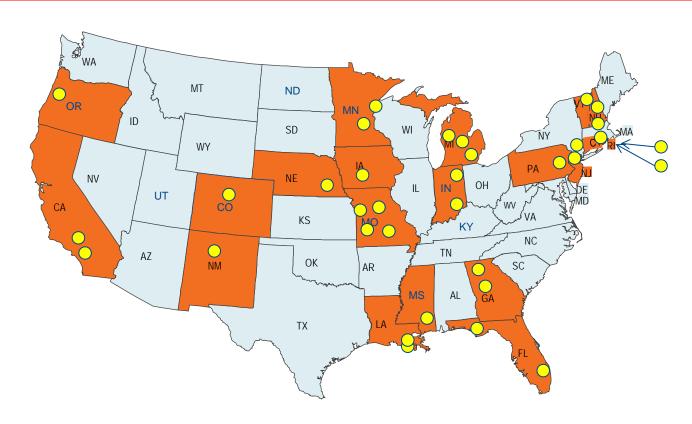
- MD Mental Hygiene Administration
- 4 new clinics for FEP/CHR
- October 2013



In both cases, state officials accepted feasibility data before articles were accepted for publication!



#### RAISE Clinical Trial



- Phase-specific specialty care for First Episode Psychosis vs. TAU
- Representative patients (N=404) and community clinics (N=34)
- Focus on clinical and functional recovery, cost of care, societal benefits





#### Impact of Coordinated Specialty Care

- CSC participants remain in treatment longer
- CSC improves outcomes over 24 months
  - overall quality of life
  - measures of symptoms
  - interpersonal relations
  - involvement in work or school
- Participants with shorter duration of untreated psychosis derive substantially more benefit from CSC

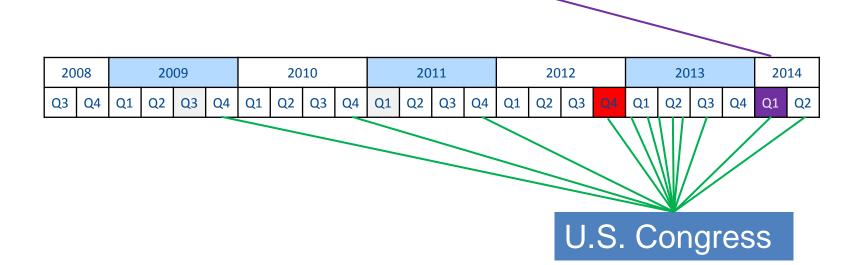


# Do the right things, at the right time.



#### Congressional Action

#### **Consolidated Appropriations Act of 2014**





# H.R. 3547, 113<sup>th</sup> Congress

## January 17, 2014

- Increased Community Mental Health Block Grant (CMHBG) program by \$24.8M
- Funds allocated for first episode psychosis (FEP) programs
- NIMH and SAMHSA to develop guidance for States regarding effective programs for FEP











SEARCH



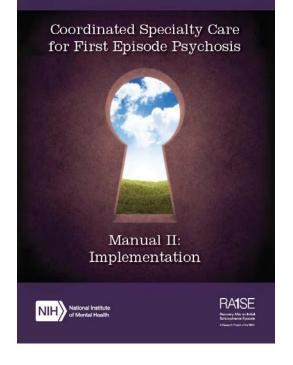
- Evidence-based Treatments for First Episode Psychosis: Components of Coordinated Specialty Care
- RAISE Coordinated Specialty Care for First Episode Psychosis Manuals
- RAISE Early Treatment Program Manuals and Program Resources
- OnTrackNY Manuals & Program Resources
- Voices of Recovery Video Series

http://www.nimh.nih.gov/health/topics/schizophrenia/raise/coordinatedspecialty-care-for-first-episode-psychosis-resources.shtml









Corey – Another Door Opens



Supported Employment and Education (SEE) Manual
This manual teaches the principles of Supported Employment
and Education and provides strategies and skills for the SEE
specialist for engagement, assessment, addressing illnessrelated challenges to work and school, disability benefits, the
pros and cons of disclosure, conducting a school and/or job
search, providing follow-along supports: several useful forms
and handouts are provided for each aspect of providing SEE.

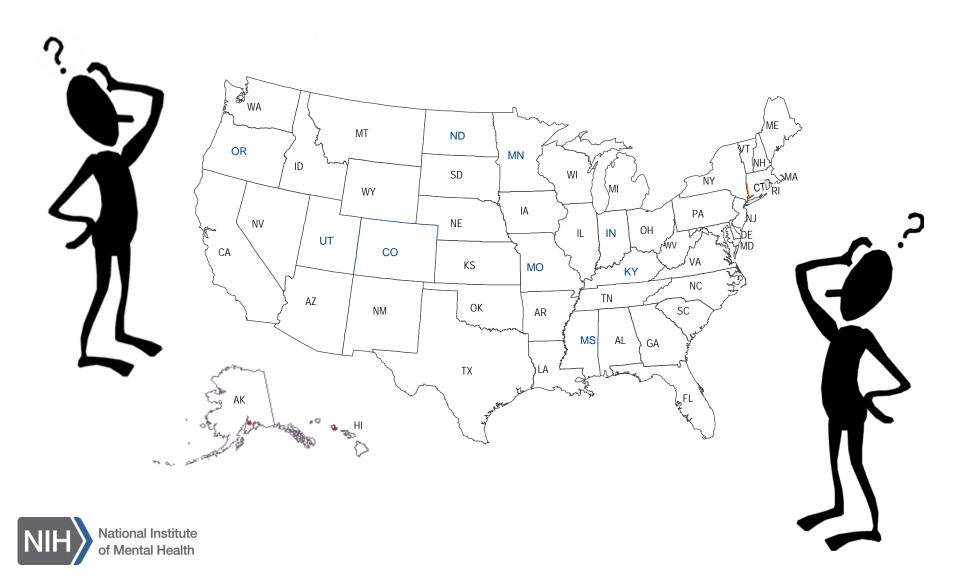
State Mental Health Policy

#### An Interactive Tool to Estimate Costs and Resources for a First-Episode Psychosis Initiative in New York State

Jennifer L. Humensky, Ph.D. Lisa B. Dixon, M.D., M.P.H. Susan M. Essock, Ph.D.

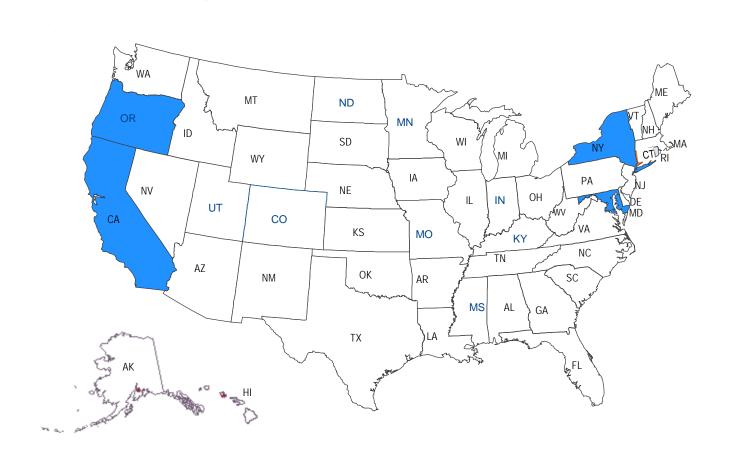
	Estimates of Number of First Episode				
		Low Estimate	High Estimate	Medium Estimate #1	Medium Estimate #2
1	Population size (2010 Census)	19,378,102	19,378,102	19,378,102	19,378,10
	FEP incidence per year (V)	0.0003	0.0003		
	N of incident cases per year (Population size*Incidence)	5,813	5,813	4,845	3,87
4	Fraction of incident cases approached (V)	0.2	0.5	0.333	0.2
5	N of incident cases approached	1163	2907	1613	96
6	Fraction agreeing to enter services (V)	0.5	0.75	0.5	0.
7	# total active individuals	581	2180	807	58
8	# active individuals per team (V)	30	35	35	31
	# months in treatment (V)	18	24	18	2
10	N new individuals each team can take/month (active cases per team/months in treatment)	1.667	1.458	1.944	1.36
11	# new individuals each team can take/year (new individuals per month*12)	20	18	23	1
12	# teams needed statewide (# active individuals/new individuals each team can take per year)	29.1	124.6	34.6	35.
13	Population size to support 1 team (population size/number of teams)	666,667	155,556	560,561	545,45
14	Salary costs per FEP team per year <sup>1</sup>	266,566	266,566	266,566	266,56
15	Total Costs per FEP team per year (including 36% fringe and 15% indirect)	416,908	416,908	416,908	416,90
16	Cost per client (Total salary costs/clients servded per team)	13,897	11,912	11,912	13,89
17	Cost per team per initial year (As calculated on cost worksheet)	\$303,417	\$281,910	\$281,910	5303,41
18	Staffing cost per team per year - at capacity (Cost per client per year)x(N clients per team)	\$416,908	\$416,908	\$416,908	\$416,90
19	Total cost per year (# teams*cost per team at capacity)	\$12,118,341	\$51,935,749	\$14,412,170	\$14,811,30
	Note: Source of Population Data - 2010 Census				
21	Note: (V) indicates variable to be estimated: alter the vi	ariable to see how the numb	er of estimated teams i	needed and associated cos	ts per year change

# Potential Impact of H.R. 3547





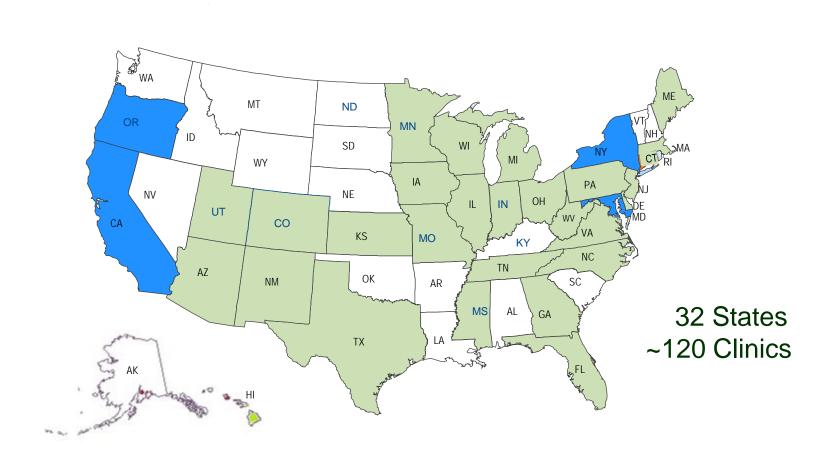
## Innovators and Early Adopters, 2013







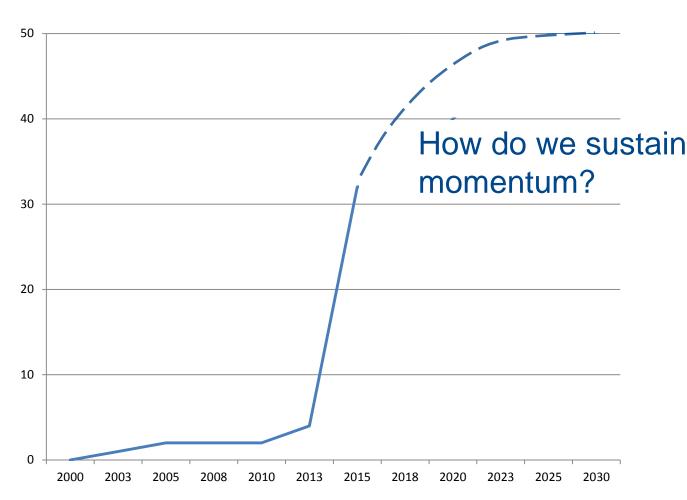
# Early Majority, 2015





# Early Services S-Curve

States with CSC Plans





## **Beyond RAISE:**

Creating an early psychosis learning community in the United States



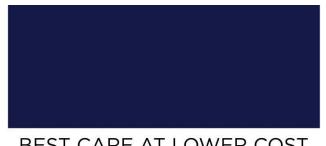
# Early Psychosis Intervention Network (EPINET)







### Strategic Objective 4 – Learning Healthcare Systems



BEST CARE AT LOWER COST

The Path to Continuously Learning
Health Care in America

INSTITUTE OF MEDICINE
OF THE NATIONAL ACADEMIES

#### FY2015



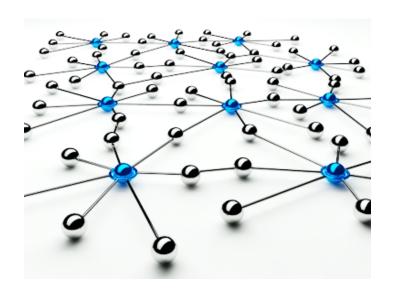
- Common data elements, data sharing, big data analytics
- Feedback loops for ongoing system improvement
- Culture of continuous learning
- Clinical data drive scientific discovery





#### **EPINET Goals**

- Establish a national learning healthcare network among early psychosis clinics
- Standardize measures of clinical characteristics, interventions, and early psychosis outcomes

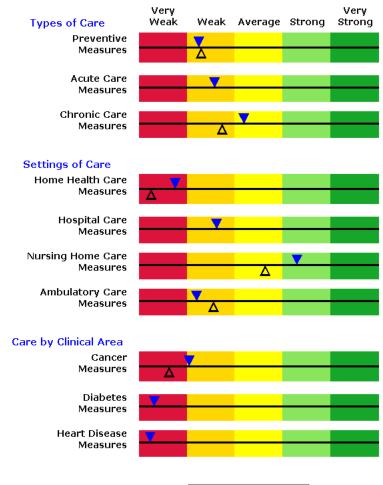


- Adopt a unified informatics approach to study variations in treatment quality, clinical impact, and value
- Cultivate a culture of collaborative research participation in academic and community early psychosis clinics



## How can EPINET improve treatment?

- Fidelity to CSC model
- Monitor key outcomes
- Continuous quality improvement
- Evaluate rare events with statistical power
- Rapid piloting or fielding of new approaches







## Who has a stake in EPINET?

8,000 Clients

5,000 Relatives

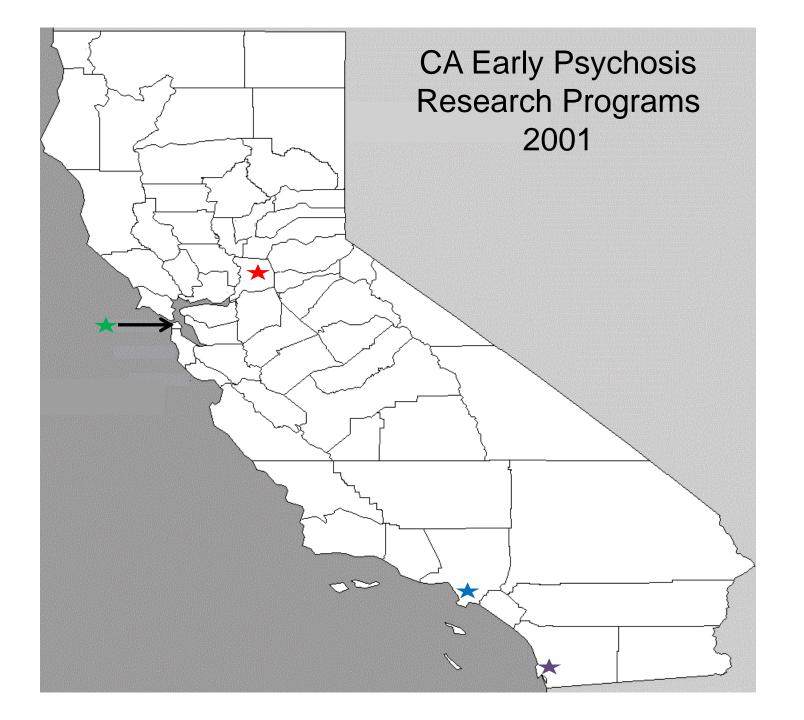
500 Clinicians

50 State MHPDs

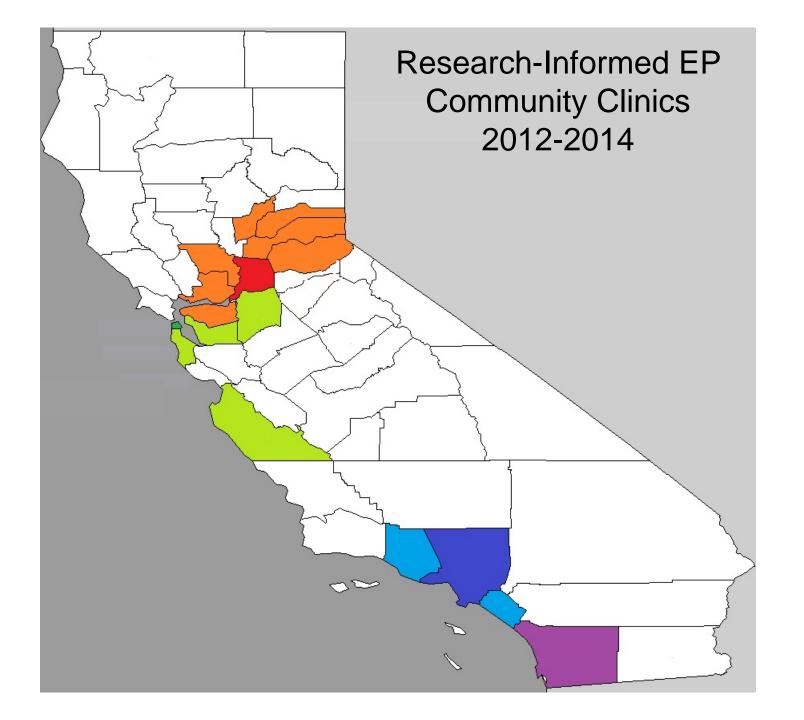
SAMHSA NIMH CMS







### Early Psychosis Research Clinics 2005



## EPIC-CAL??

# (Early Psychosis Intervention Consortium of California)





# Take Home Messages

- Scientists and policymakers often travel in "parallel universes<sup>1</sup>"
- Bridging this gap requires active engagement to find common interests, shared goals, and meaningful outcome measures
- Time matters convey "productive urgency" to scientists; help policy makers see beyond immediate needs
- Recognize that stakeholders come and go, so talk to everyone, all the time.
- Big data may help us to improve the quality of care and drive scientific discoveries



## For more information

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Thank you!

