Prevention and Early Intervention of Psychosis: Lessons Learned from the NIMH RAISE Project

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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.
Presentation Outline

- Schizophrenia overview
- Rationale for early intervention in psychosis
- NIMH *Recovery After an Initial Schizophrenia Episode (RAISE)* initiative
- Coordinated Specialty Care (CSC) model
- Financing CSC programs
- Next steps
Response to Incidents of Mass Violence

23 Executive Actions and Recommendations

• DHHS - Increase access to mental health services

• NIMH Focus – Early Psychosis
  ■ For individuals with first episode psychosis, increase access to evidence-based care
  ■ For individuals at high risk for psychosis, improve early detection and intervention approaches

January 16, 2013
Schizophrenia Overview

- ~2.5 million adults in U.S. are affected
- Onset in late adolescence, early adulthood
- 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
Course of Schizophrenia

Functioning

Psychosis

Premorbid  Prodromal  Progressive  Residual

15  20  25  40 . . .

Treatment delays of 1-3 years are common
Duration of Untreated Psychosis

- DUP is the interval between the onset of psychotic symptoms and initiation of antipsychotic treatment.

- Meta-analyses relate longer DUP to:
  - Poorer response to antipsychotic medications
  - Poorer symptomatic and functional outcomes

- In 1992-2003, mean DUP in the United States ranged from 61-166 weeks (558 subjects; 6 studies).

- In 2010-2012, median DUP in the U.S. was 74 weeks (404 clients, 34 clinics, 21 States; RAISE).

What happens if we reduce DUP by improving access to services?
Course of Schizophrenia

Premorbid | Prodromal | Progressive | Residual
---|---|---|---
Functioning | | Early detection and intervention | |
Psychosis | 15 | 20 | 25 | 40....
Early Intervention Services

- Early detection of psychosis and easy access to youth-focused, recovery-oriented care
- Team-based, person-centered treatment model
- Empirically-supported interventions
  - Low-dose antipsychotic medications
  - Cognitive and behavioral psychotherapy
  - Family education and support
  - Educational and vocational rehabilitation
- Time-limited treatment (2-3 years), with step down to usual care
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

Ryan

RA1SE

Recovery After an Initial Schizophrenia Episode

A Research Project of the NIMH

- Indicated prevention
- Community settings
- Scalable interventions
NIMH RAISE Projects

- Randomized clinical trial
  - John Kane
  - Nina Schooler
  - Delbert Robinson

- Implementation study
  - Lisa Dixon
  - Susan Essock
  - Jeffrey Lieberman
RAISE by the Numbers

- 2 Studies
- 22 States
- 36 Sites
- 134 Providers
- 469 Participants
## Coordinated Specialty Care

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Current Pathways to Care

Onset of Symptoms

Help Seeking

PC Physician

School Counselor

Inpatient Unit

CMHC

Police/Crisis Service

Emergency Department

Referral to CSC Program

Longer DUP, more trauma
Building Referral Networks

Onset of Symptoms

Help Seeking

CMHC

PC Physician

School Counselor

Inpatient Unit

Police/Crisis Service

Emergency Department

Shorter DUP, less distress
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CSC Team-Level Activities

- All providers receive training in the principles of phase-specific, team-based care for FEP
- Ongoing supervision and/or consultation bolsters team members’ fidelity to the CSC model
- Weekly team meetings improve coordination and quality of care
- 24-hour phone coverage may decrease crisis episodes, ED visits, and inpatient hospitalizations

Program Costs

Clinical Benefits
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Supported Employment and Education

- SEE is highly valued by clients (~75%-90% in RAISE)
- Availability of SEE boosts overall engagement with CSC
- Trend for lower disability benefit use among clients with FEP who participate in SEE

Corey

Supported Employment/Education Outcomes

Killackey et al. BJP 2008;193:114-120

Nuechterlein et al. 2013; Submitted
# CSC Coverage and Gaps

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<td>Case Management</td>
<td>Assertive case management</td>
<td>Medicaid Waiver</td>
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<td>Family Therapy</td>
<td>Psychoeducation, crisis intervention services</td>
<td>CPT 90846; 90847; 90849</td>
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<td>Supported Employment and Education</td>
<td>IPS model of supported employment</td>
<td>Medicaid Waiver</td>
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<td>Pharmacotherapy</td>
<td>Medication management; primary medical care</td>
<td>CPT 99214; 90862</td>
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<td>CSC Team-Level Activity</td>
<td>Team meetings, coordination of services, CSC training and supervision, 24-hour phone coverage</td>
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How do we close these reimbursement gaps?
H.R. 3547, 113th Congress

- Increases funds for Mental Health Block Grants (MHBG) by ~$25M
- New 5% set-aside for evidence-based programs for FEP
- SAMHSA and NIMH developed guidelines for States regarding effective programs for FEP
- SAMHSA and NIMH briefed Appropriations Committees on set-aside plan, mid-April 2014
What benefits can we expect if Coordinated Specialty Care is implemented broadly?
Lower Rates of Hospitalization

- 12-month hospitalization rates for usual care
  - Bird et al. (2010) – 42%

- 12-month hospitalization rates for CSC clinics
  - Bird et al. (2010) – 28%
  - Nuechterlein et al. (2008) – 17%
  - Ventura et al. (2010) – 17%
  - Uzenoff et al. (2012) – 27%
Lower Health Care Costs

- Example from a longitudinal follow-up study of individuals treated through the Early Psychosis Prevention and Intervention Centre (EPPIC) (Mihalopoulos et al 2009)

- Total mean mental health service costs, per patient, were approximately $48,000 lower than the control group
  - Average cost of EPPIC patient/year = A$3,445
  - Average cost of control patient/year = A$9,503

- Over time, EPPIC group remained less costly to treat and had a more favorable clinical outcome
Next Steps for NIMH

- Study strategies for efficiently implementing CSC for early psychosis in community clinics
- Develop, test, and implement strategies for reducing delays in early detection, speedy referral, and rapid initiation of specialty FEP treatment
- Test clinical staging and stepped care approaches with persons at high risk for psychosis, before FEP occurs
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

Ryan – Fulfiling My Dream
For More Information

www.nimh.nih.gov/RAISE

goldsteinam@mail.nih.gov
Thank you! And...

Any questions?