

Early Detection and Intervention for Mental Health Issues:

Promising New Approaches

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Lucile Packard
Children's Hospital
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Disclosures of Potential Conflicts

Source Advisory Board Support

Robert Wood Johnson EDIPPP,
Foundation (RWJ) headspace,
PEPPNET

NIMH RAISE

Center for School Mental X
Health



Stanford Psychiatry and Behavioral Sciences

Vision:

- Education
- Research and scholarship
- Clinical advancement and practice
- Community engagement
- Professionalism and leadership

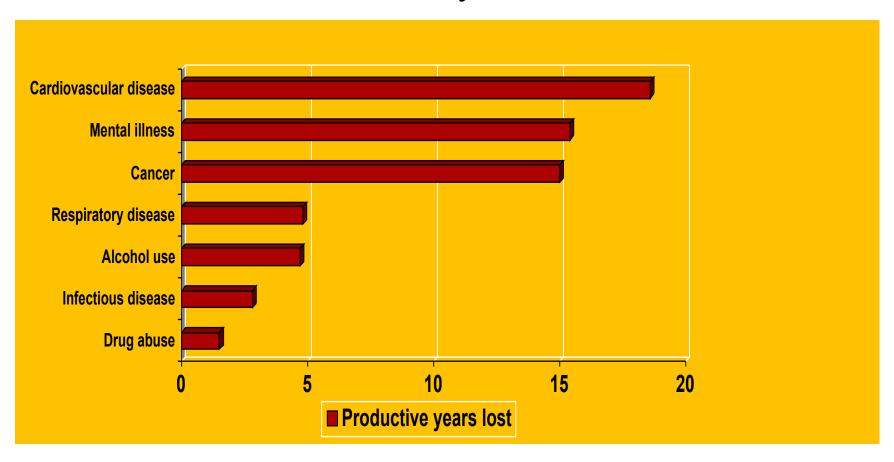


Department of Psychiatry and Behavioral Sciences



Mental Health is a WORLDWIDE Public Health

According to the World Health Organization, mental disorders will be the leading cause of disability in the world by 2020



FACTS ABOUT CHILDREN'S MENTAL HEALTH



29.8%

OF YOUNG ADULTS AGES 18 TO 25 REPORTED HAVING EXPERIENCED A MENTAL, BEHAVIORAL, OR EMOTIONAL DISORDER IN THE PAST YEAR

\$247 BILLION

SPENT ANNUALLY ON MENTAL, **EMOTIONAL & BEHAVIORAL DISORDERS AMONG YOUTH INCLUDING FOR MENTAL HEALTH** SERVICES, LOST PRODUCTIVITY AND CRIME



1 in 5

U.S. CHILDREN AND TEENS HAVE A DIAGNOSABLE PSYCHIATRIC DISORDER

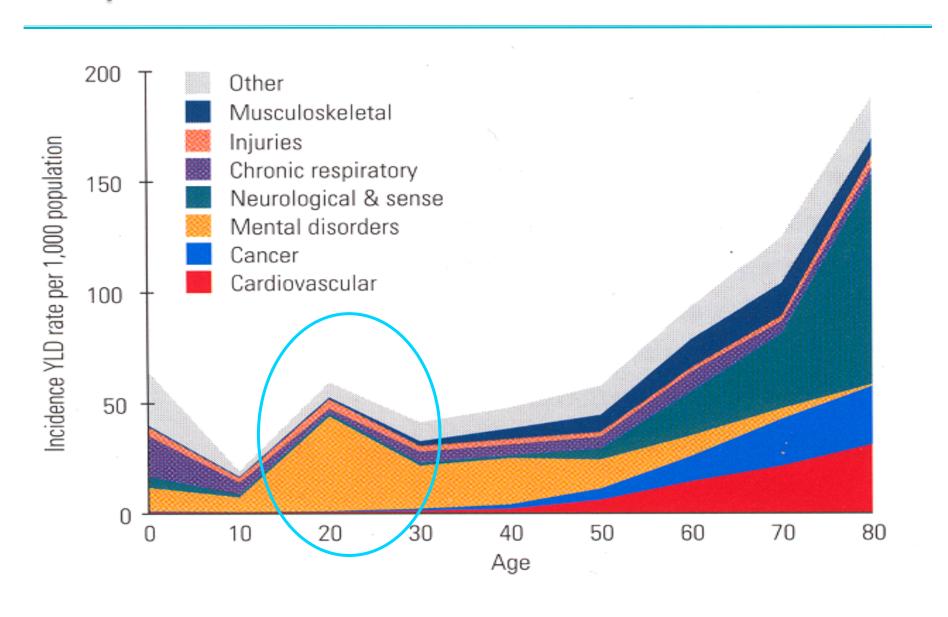
OF ALL LIFETIME CASES OF MENTAL ILLNESS BEGIN BY AGE 14

1 in 4

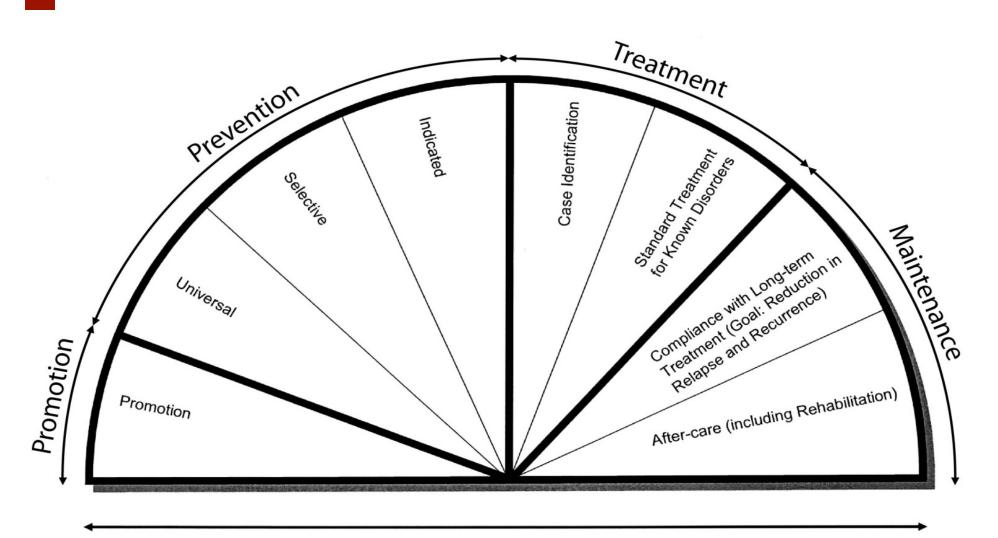
PARENTS FINDS IT DIFFICULT TO OBTAIN **MENTAL HEALTH SERVICES** FOR THEIR CHILD

> AMERICAN ACADEMY OF CHILD GADOLESCENT PSYCHIATRY

Incidence of Disease across the Lifespan



Prevention And Promotion (IOM)

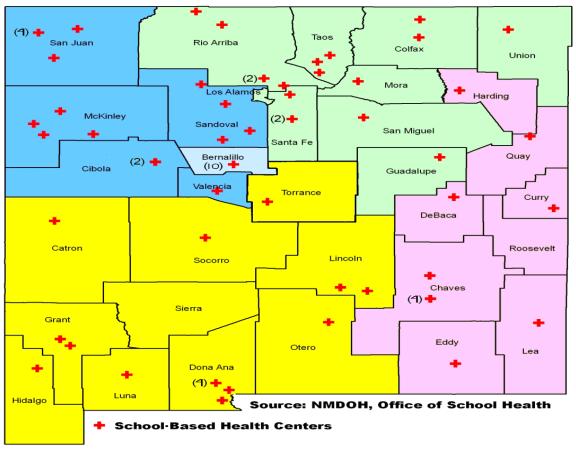


Goal 4. Early Mental Health Screening, Assessment, and Referral to Services Are Common Practice

(President's New Freedom Commission)

- 4.1 Promote the mental health of young children.
- 4.2 Improve and **expand school mental health** programs.
- 4.3 Screen for co-occurring mental and substance use disorders and link with integrated treatment strategies.
- 4.4 Screen for mental disorders in primary health care, across the life span, and connect to treatment and supports.

2001 **New Mexico School-Based Health Centers**



Legend

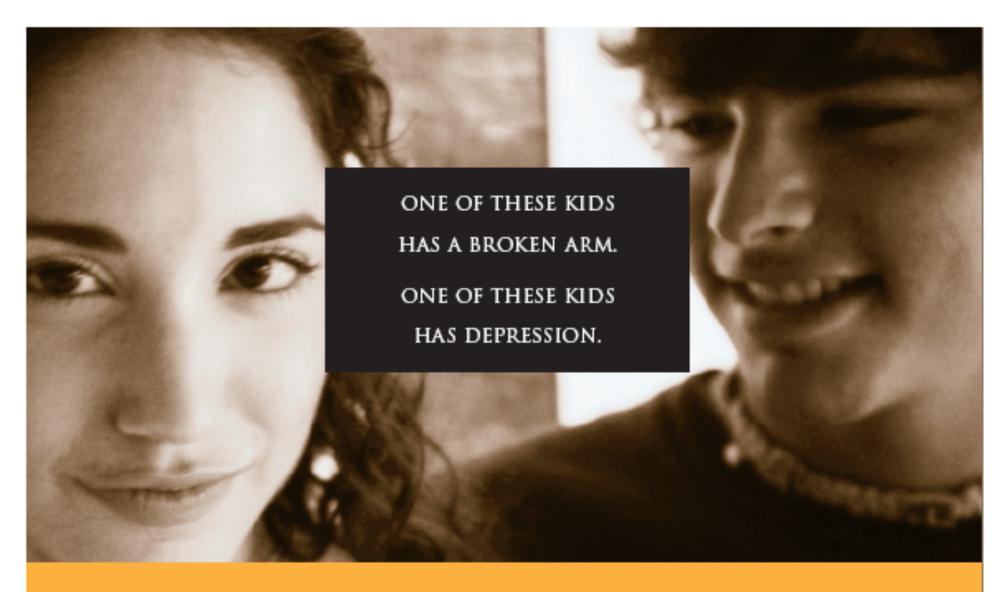
NM Department of Health Regions

Map Prepared by Gabriel D. Chavez, Jr. New Mexico Department of Health
Office of Primary Care and Rural Health
September 2006

ONE IN FIVE YOUTH HAS A MENTAL HEALTH PROBLEM



IT COULD BE YOU. IT COULD BE YOUR BEST FRIEND.



BOTH NEED URGENT TREATMENT.



What if it's not "just a phase"?

Young people outgrow many things, but not severe mental illness. Most cases develop after 12 and begin with the following warning signs:

- · A drop in performance at school, work, or home
- · Increasing social withdrawal and isolation
- · Significant changes in behavior or thinking
- A change in how one thinks, feels, hears, or experiences the world

If you or your child show most of these symptoms, seek help as soon as possible. Treatment is available, and early intervention may prevent an illness.

For more information, call 1-877-880-3377.





What is Psychosis?

Any number of symptoms indicating a loss of contact with reality, including:

- Hallucinations: most often hearing voices or seeing visions
- Delusions: false beliefs or marked suspicions of others
- Associated features:
 - Neurocognitive impairment
 - Behavioral and emotional changes
 - Disordered speech
 - Sleep difficulties



Why Focus on Psychosis

- Symptoms of psychosis are treatable
- The shorter the duration of untreated psychosis, the better the outcomes;

however

 The average duration of untreated psychosis (DUP) in the US and Europe is 1-2 years;



Duration of Untreated Psychosis (DUP) and Outcome

Shorter DUP is associated with:

- Better response to anti-psychotics
- Greater decrease in both positive and negative symptom severity
- Decreased frequency of relapse
- More time at school or work
- Overall improved treatment response over time



The Prodromal Phase

- Encompasses the period of early symptoms or changes in functioning that precede psychosis
- Symptoms generally arise gradually but are new and uncharacteristic of the person
- The person retains awareness that something is not normal and thus is more amenable to help
- During this phase early intervention can be very helpful



There is HOPE with early treatment for mental illness...

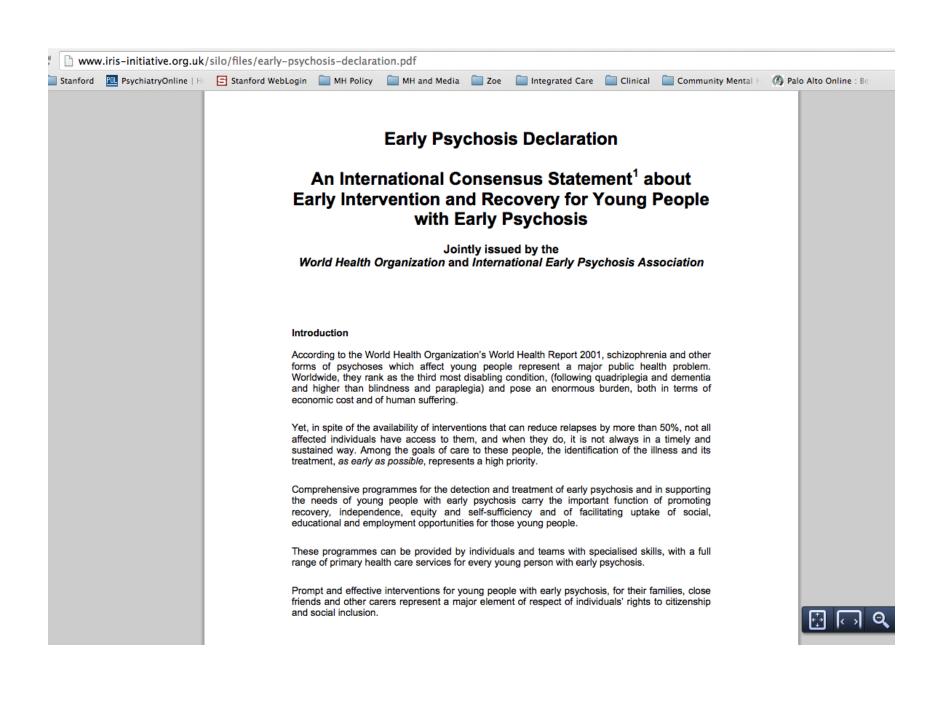
- Early detection <u>makes a difference</u>
- It is associated with
 - More rapid and complete recovery
 - Preserved brain functioning
 - Preserved psychosocial skills
 - Decreased need for intensive treatments
 - Preserved network of supports



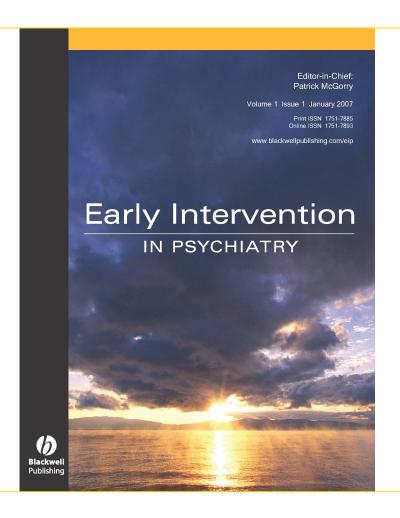
INTERNATIONAL EFFORTS FOR YOUTH MENTAL HEALTH

 Developing a Youth Focused Public Mental Health Model



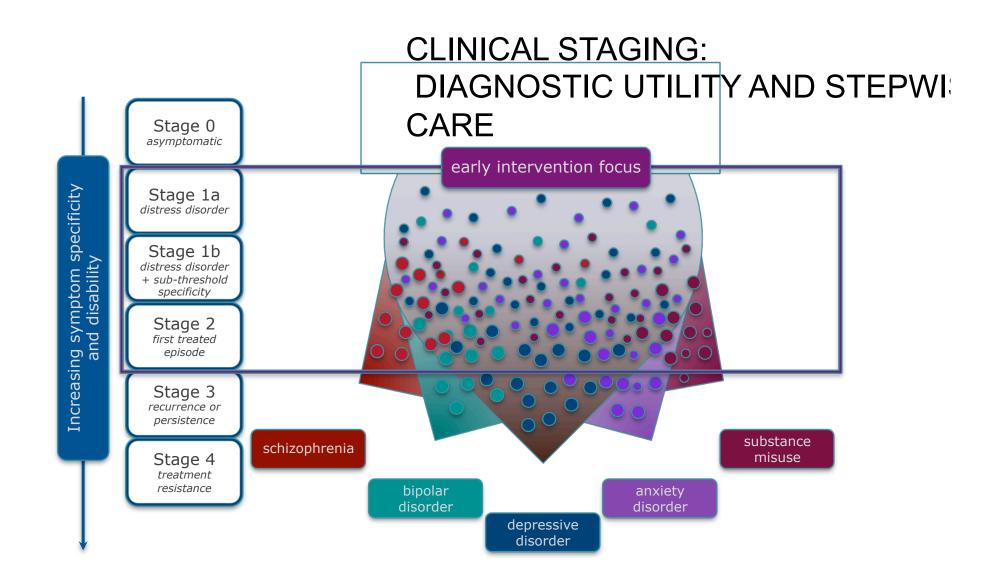


Early Intervention: A General Principle in Modern Healthcare











What to expect at a centre?

Centres provide service across four core streams, at a minimum;

- Physical health
- Mental health
- Alcohol and other drug services
- Vocational and educational support

Youth friendly location (accessible) and centre

- Entry point for ALL young people, aged between 12-25 years
- Focus on early intervention and early help seeking
- No geographical catchment areas
- Fee structure free, low cost or fee for service
- Co-location and integration of support services

Our centres NORTHERN TERRITORY QUEENSLAND **Hervey Bay** Alice Springs Southport Darwin Warwick Townsville Inala Nundah Cairns Mackay Ipswich Maroochydore Mt Isa* Moreton Bay East* Rockhampton* Brisbane - City* SOUTH AUSTRALIA **Edinburgh North** VICTORIA Murray Bridge Geelong Morwell Berri Noarlunga Frankston Port Augusta# Warrnambool Adelaide West* Bendigo Osborne Park Shepparton# Midland Ballarat# Bunbury Rockingham* Melbourne Glenroy Elsternwick Sunshine Collingwood Knox Dandenong# Werribee*

* Opening early 2014 # Opening early to mid 2013

NEW SOUTH WALES

Gosford
Maitland
Wollongong
Coffs Harbour
Bathurst
Wagga Wagga
Nowra
Tamworth
Newcastle#
Port Macquarie
Richmond Valley*

Lismore* Sydney

Camperdown
Campbelltown
Mt Druitt
Parramatta
Penrith#
Chatswood#
Liverpool*
St George/Canterbury*
Northern Beaches*
Cronulla*

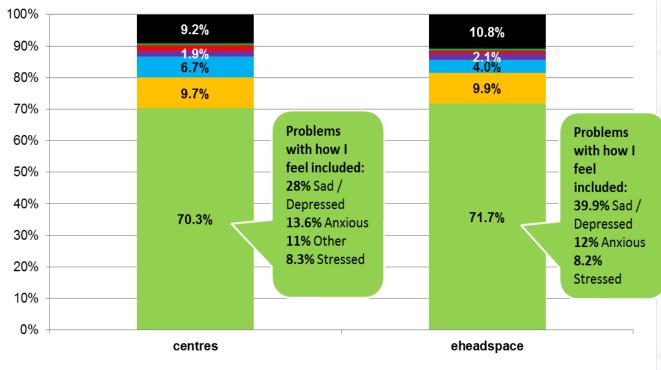
ACT Canberra

Craigieburn/Seymour*

eheadspace



Reason young person presented at headspace & eheadspace



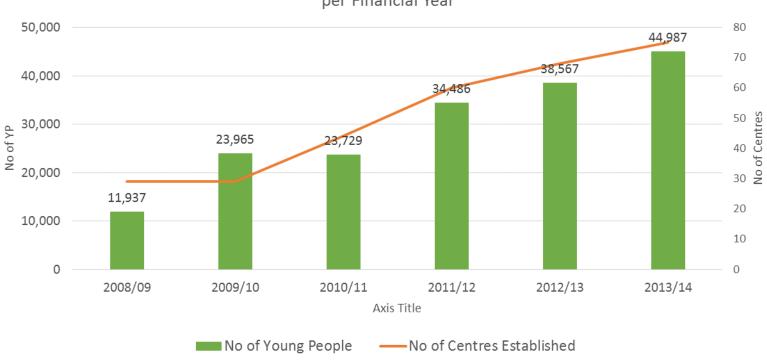
- None of the above
- Problems with alcohol or other drugs
- Problems at school or work:
- Problems with how I feel

- Vocational assistance help getting a job or training
- Problems with my physical health
- Problems with relationships:

Rapid growth



Number of Young People accessing **headspace** Centres against Stage of Establishment per Financial Year







headspace Western Melbourne



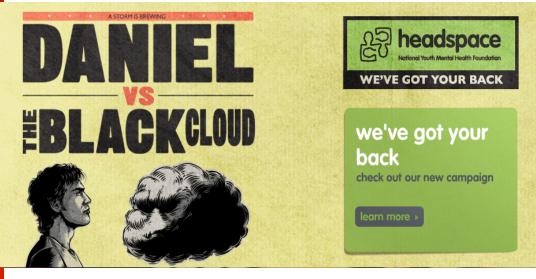


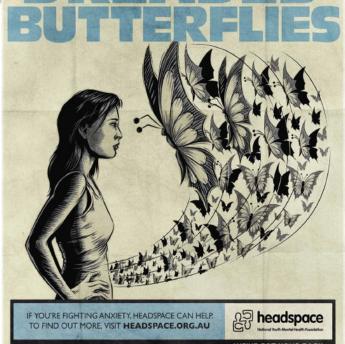
www.headspace.org.au



d head







THE HEART-POUNDING EXTRAVAGANZA











2nd International Conference of Youth Mental Health

30th Sept to 2nd Oct 2013, Brighton Dome, UK



Call for Abstracts/Projects

now open on www.iaymh2013.com

Early Registration Rate Available

until 17th May, now open on www.iaymh2013.com





Announcing the Third International Youth Mental Health Conference

Transformations: Next Generation Youth Mental Health

Hosted by the International Association of Youth Mental Health in partnership with The Graham Boeckh Foundation and McGill University

8th – 10th October 2015,Place des Arts, Montreal, Quebec, Canada

THE UNITED STATES RESPONSE

Towards a Continuum of Care for Youth in the US



A Report on Prevention in Youth

"Preventing Mental, Emotional and Behavioral Disorders Among Young People: Progress and Possibilities."

Released by the Institute of Medicine 2009



2010 SAMHSA Strategic Priority # 1.1

"Goal 1.1: Build emotional health, prevent or delay onset of, and mitigate symptoms and complications from substance abuse and mental illness."





What if it's not "just a phase"?

Young people outgrow many things, but not severe mental illness. Most cases develop after 12 and begin with the following warning signs:

- · A drop in performance at school, work, or home
- · Increasing social withdrawal and isolation
- · Significant changes in behavior or thinking
- A change in how one thinks, feels, hears, or experiences the world

If you or your child show most of these symptoms, seek help as soon as possible. Treatment is available, and early intervention may prevent an illness.

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Early detection and intervention to prevent psychosis (EDIPPP)



EDIPPP is a treatment-research study based on the PIER Program in Portland, Maine, which expanded to 5 additional sites across the nation, with goals to:

- Build the evidence to stop the progression of severe mental illness.
- Engage communities in long-term, sustainable mental health improvement.
- Transform the way we address severe mental illness.





Outreach and Education to Schools and Primary Care

Importance of outreach and community partnerships

- Education, messages, strategies
- Community advisory board
- Youth participation

Primary outreach targets:

- Primary/secondary school /community college/university personnel
- Medical/mental health providers
- Law enforcement/juvenile justice
- Parent and student groups



Family-aided Assertive Community Treatment (FACT):

- Clinical and functional intervention Rapid, crisis-oriented initiation of treatment
 - Psychoeducational multifamily groups
 - Case management using key Assertive Community
 Treatment methods
 - Integrated, multidisciplinary team; outreach PRN; rapid response; continuous case review
 - Supported employment and education
 - Antidepressants or Mood stabilizers, as indicated by symptoms
 - Low-dose atypical antipsychotic medication, as indicated by symptoms-Current standard of care would NOT include





EDIPPP Results



Oxford Journals > Medicine & Health > Schizophrenia Bulletin > Advance Access > 10.1093/schbul/sbu108



Clinical and Functional Outcomes After 2 Years in the Early Detection and Intervention for the Prevention of Psychosis Multisite Effectiveness Trial

William R. McFarlane^{*,1,2}, Bruce Levin³, Lori Travis², F. Lee Lucas², Sarah Lynch², Mary Verdi², Deanna Williams², Steven Adelsheim⁴, Roderick Calkins⁵, Cameron S. Carter⁶, Barbara Cornblatt⁷, Stephan F. Taylor^{8,9}, Andrea M. Auther⁷, Bentson McFarland¹⁰, Ryan Melton¹¹, Margaret Migliorati¹², Tara Niendam⁶, J. Daniel Ragland⁶, Tamara Sale^{12,13}, Melina Salvador⁴ and Elizabeth Spring⁹

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This Article

Schizophr Bull (2014) doi: 10.1093/schbul/sbu108 First published online: July 26, 2014

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Rates of Conversion or Relapse

Over 24 months

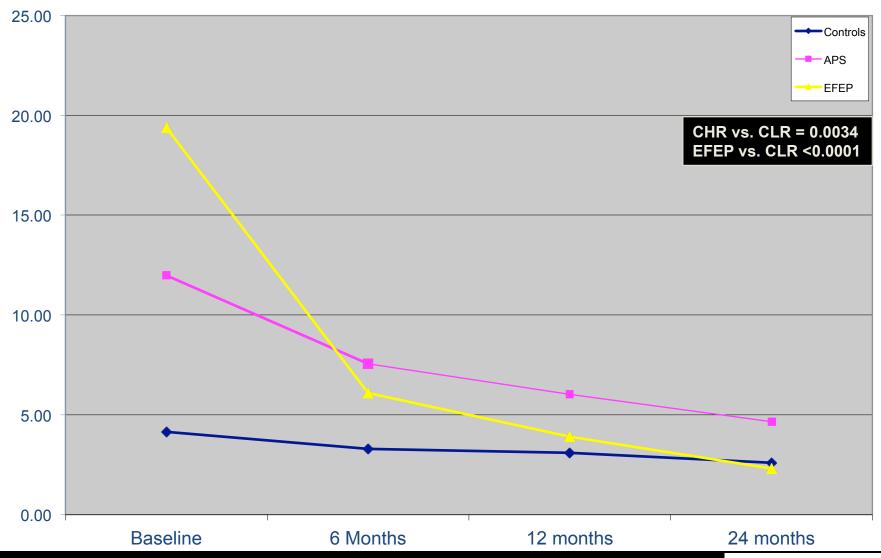
	CLR	CHR	EFEP
n	87	205	45
Severe Psychosis	2.3%	6.3%	
Relapse			11%
Negative Events*	22%	25%	40%

^{*}Hospitalizations, incarcerations, suicide attempts, assaults, rape





Psychotic Symptoms

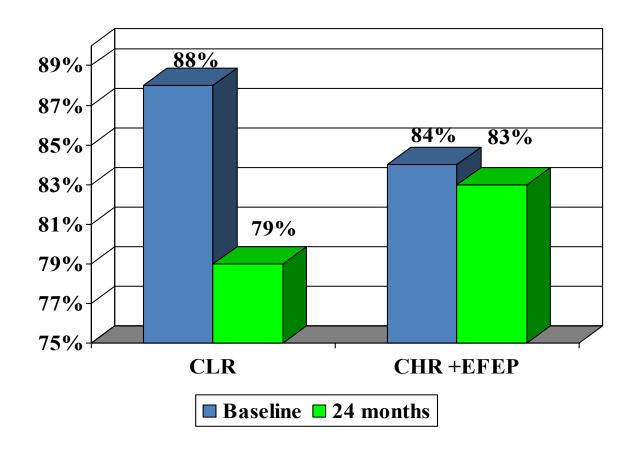






In school or working:

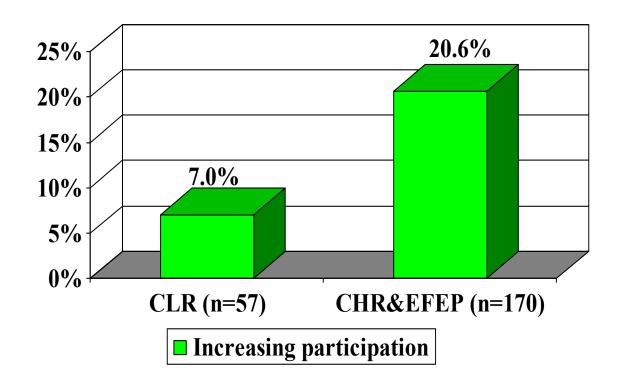
Baseline and 24 months







Increases in participation in school, work or work and school from baseline to 24 months*



^{*} Odds Ratio, CHR+EFEP vs. CLR, = 3.44, 95% C.I. 1.16, 11.0, p=0.025





Conclusions

- Community-wide education is feasible.
- Referral of 30% up to 60% of the at-risk population.
- Global outcome in FACT was better than regular treatment.
- The rate of psychosis onset is less than 1/4 of expected.
- Average functioning was in the normal range by 24 months.
- Five cities show a declining incidence.
- Programs in California are showing same results.
- ¾ were in school or working up to 10 years later.







The NIMH RAISE Early Treatment Program (ETP)

Recovery After an Initial Schizophrenia Episode

RAISE ETP Study Methods

- RAISE was based out of community mental health centers
- An effort to replicate real-world community implementation with individual and family components
- Primary outcome measure: Quality of Life





RAISE ETP Services

A comprehensive, recovery based approach:

- Pharmacological Treatment
- Family Education Program (FEP)
- Supported Employment and Education (SEE)
- Individual Resiliency Training (IRT)



Coordinated Specialty Care for Early Psychosis

- Team-based care that includes individual or group psychotherapy, family education and support, assertive case management, supported employment and education, and low doses of select antipsychotic agents
- CSC emphasizes shared decision making as a means for addressing the unique needs, preferences, and

RAISE-ETP Duration of Untreated Psychosis

- 404 individuals
- Median DUP was 74 weeks
- 68% had DUP greater than 6 months
- Longer DUP
 coorelated with
 early age at onset,
 SUD, positive and
 general symptom

Duration of Untreated Psychosis in Community Treatment Settings in the United States

Jean Addington, Ph.D., Robert K. Heinssen, Ph.D., Delbert G. Robinson, M.D., Nina R. Schooler, Ph.D.,
Patricia Marcy, B.S.N., Mary F. Brunette, M.D., Christoph U. Correll, M.D., Sue Estroff, Ph.D., Kim T. Mueser, Ph.D.,
David Penn, Ph.D., James A. Robinson, M.Ed., Robert A. Rosenheck, M.D., Susan T. Azrin, Ph.D., Amy B. Goldstein, Ph.D.,
Joanne Severe, M.S., John M. Kane, M.D.

Objective: This study is the first to examine duration of untreated psychosis (DUP) among persons receiving care in community mental health centers in the United States.

Methods: Participants were 404 individuals (ages 15–40) who presented for treatment for first-episode psychosis at 34 nonacademic clinics in 21 states. DUP and individual- and site-level variables were measured.

Results: Median DUP was 74 weeks (mean=193.5±262.2 weeks; 68% of participants had DUP of greater than six months). Correlates of longer DUP included earlier age at first psychotic

symptoms, substance use disorder, positive and general symptom severity, poorer functioning, and referral from outpatient treatment settings.

Conclusions: This study reported longer DUP than studies conducted in academic settings but found similar correlates of DUP. Reducing DUP in the United States will require examination of factors in treatment delay in local service settings and targeted strategies for closing gaps in pathways to specialty FEP care.

Psychiatric Services in Advance, January 15, 2015; doi: 10.1176/appi. ps.201400124

RAISE-ETP and Psychotropic Meds at Referral

- 39% would benefit from change in medications
- 9% at higher dosages for antipsychotics than recommended
- 23% on more than one antipsychotic
- 37% on antipsychotic and antidepressant without clear

Prescription Practices in the Treatment of First-Episode Schizophrenia Spectrum Disorders: Data From the National RAISE-ETP Study

Delbert G. Robinson, M.D., Nina R. Schooler, Ph.D., Majnu John, Ph.D., Christoph U. Correll, M.D., Patricia Marcy, B.S.N., Jean Addington, Ph.D., Mary F. Brunette, M.D., Sue E. Estroff, Ph.D., Kim T. Mueser, Ph.D., David Penn, Ph.D., James Robinson, M.Ed., Robert A. Rosenheck, M.D., Joanne Severe, M.S., Amy Goldstein, Ph.D., Susan Azrin, Ph.D., Robert Heinssen, Ph.D., John M. Kane, M.D.

Objective: Treatment guidelines suggest distinctive medication strategies for first-episode and multiepisode patients with schizophrenia. To assess the extent to which community clinicians adjust their usual treatment regimens for firstepisode patients, the authors examined prescription patterns and factors associated with prescription choice in a national cohort of early-phase patients.

Method: Prescription data at study entry were obtained from 404 participants in the Recovery After an Initial Schizophrenia Episode Project's Early Treatment Program (RAISE-ETP), a nationwide multisite effectiveness study for patients with first-episode schizophrenia spectrum disorders. Treatment with antipsychotics did not exceed 6 months at study entry.

Results: The authors identified 159 patients (39.4% of the sample) who might benefit from changes in their psychotropic prescriptions. Of these, 8.8% received prescriptions for recommended antipsychotics at higher than recommended

dosages; 32.1% received prescriptions for olanzapine (often at high dosages), 23.3% for more than one antipsychotic, 36.5% for an antipsychotic and also an antidepressant without a clear indication, 10.1% for psychotropic medications without an antipsychotic, and 1.2% for stimulants. Multivariate analysis showed evidence for sex, age, and insurance status effects on prescription practices. Racial and ethnic effects consistent with effects reported in previous studies of multiepisode patients were found in univariate analyses. Despite some regional variations in prescription practices, no region consistently had different practices from the others. Diagnosis had limited and inconsistent effects.

Conclusions: Besides prescriber education, policy makers may need to consider not only patient factors but also service delivery factors in efforts to improve prescription practices for first-episode schizophrenia patients.

Am J Psychiatry 2015; 172:237-248; doi: 10.1176/appi.ajp.2014.13101355

VIEWPOINT

Early Detection and Intervention in Schizophrenia A New Therapeutic Model

Jeffrey A. Lieberman, MD

Department of Psychiatry, Columbia University College of Physicians and Surgeons, New York State Psychiatric Institute, New York, New York.

Lisa B. Dixon, MD, MPH

Department of Psychiatry, Columbia University College of Physicians and Surgeons, New York State Psychiatric Institute, New York, New York.

Howard H. Goldman, MD, PhD

Department of Psychiatry, University of Maryland School of Medicine, Baltimore. Schizophrenia is a brain disorder with lifetime prevalence near 1%. This disorder is clinically manifested by psychotic, negative, and cognitive symptoms that typically emerge in adolescence and early adulthood (peak age for males, 20 years; for females, 25 years) and follows a course characterized by recurrent exacerbations and remissions, resulting in a chronic state of residual symptoms and functional impairment. 1

The annual cost of schizophrenia in the United States is approximately 60 billion dollars, including direct medical costs, non-health care costs, and lost productivity.² This is because individuals become ill early in life and have high rates of unemployment and psychiatric and medical comorbidities.

Historically, schizophrenia was thought to have devastating consequences. However, the advent of antipsychotic drugs, the development of psychosocial treatments, and the accounts from individuals diagnosed with schizophrenia who have recovered have begun to change the perspectives and expectations of clinicians and the public. In addition, an increasing body of research in the last 2 decades has inspired optimism for development of a comprehensive strategy that has the potential to minimize (if not prevent) the cumulative morbidity of this once-debilitating illness.

tal supports, and range of outcomes observed, all patients who develop schizophrenia would benefit from prompt, effective treatment to limit the disruption to their lives caused by the symptoms of their illness and the potential for progression and lasting disability.

Collectively, these findings have suggested the value of early detection, intervention, and sustained engagement with treatment to enhance recovery and prevent disability.

Effectiveness of Treatment

Pharmacologic treatment of schizophrenia has targeted reducing symptoms and preventing relapse, whereas psychosocial approaches have focused on fostering treatment engagement and adherence as well as enhancing self-efficacy and social and occupational functioning. Studies reveal that patients with first-episode psychosis have greater therapeutic responses and require lower doses of medication than patients in the chronic stages of illness, indicating an overall greater pharmacologic sensitivity. However, the greater response to pharmacological treatment among patients with first-episode illness has not led to high rates of recovery. Rather, high rates of dropout and medication discontinuation frequently follow initial treatment and reduction in symp-

JAMA August 21, 2013

Financing First-Episode Psychosis Services in the United States

Howard H. Goldman, M.D., Ph.D. Mustafa Karakus, Ph.D. William Frey, Ph.D. Kirsten Beronio, J.D.

Adequate financing is essential to implementing services for individuals experiencing a first episode of a psychotic illness. Recovery After an Initial Schizophrenia Episode (RAISE), a project sponsored by the National Institute of Mental Health, is providing a practical test of the implementation and effectiveness of first-episode services in real-world settings. This column describes approaches to financing early intervention services that are being used at five of 18 U.S. sites participating in a clinical trial of a team-based, multielement RAISE intervention. The authors also describe new options for financing that will become available as the Affordable Care Act (ACA) is im-

rvices for individuals experiencing a first episode of psychosis are being implemented in Australia, Europe, Canada, and Asia (1), at a pace that outstrips initial efforts in the United States. An important reason for the slow U.S. growth is a lack of financing. Health insurance does not pay for some services recommended for individuals in the earliest stages of psychosis, and many individuals in the United States who are at this stage of illness do not even have health insurance. Furthermore, funding and service delivery priorities for the public mental health system, designed to serve those without health insurance and to provide services not covered by insurance, favor individuals who have already become disabled

a first psychotic episode of any duration but have not taken antipsychotic medication for a cumulative period of six months. Services include individual resilience training, supported employment and education (SEE), family psychoeducation, and medication management (2).

From the outset, NIMH wanted RAISE services to be tested outside academic settings and wanted services to be covered by health insurance when possible (2). Medicaid is the insurance program most likely to cover most NAVIGATE components; however, most individuals in the first episode of psychosis are not expected to be enrolled in Medicaid. Some will have private insurance, and some will be uninsured, but very few are ex-



Early care for psychosis catches on, raises questions

Kim Painter, Special for USA TODAY 6:03 a.m. EST November 17, 2013

Early treatment for serious mental illness makes sense, advocates say: "With heart disease, we don't wait for the heart attack to do something."



For years, Lisa Halpern says she was able to explain away and conceal the early warning signs of psychosis.

When she hid in her college dorm room, with towels stuffed under the door and black paper over the peephole, she was just "antisocial." Later, when she was a Harvard graduate student who became unable to read, shower or leave her apartment, she thought she might have a brain tumor.

She didn't tell the neurologist who scanned her brain — and found no tumor — that she was also hearing voices.

(Photo: USA TODAY)

H.R. 3547, 113th Congress

- 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





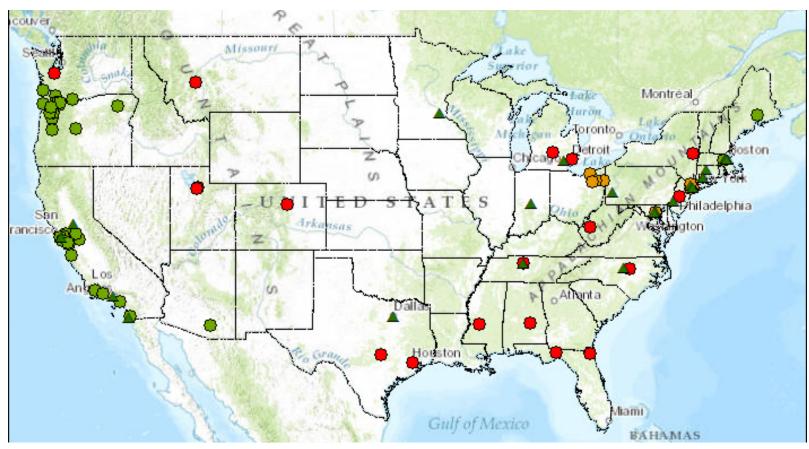


Potential Impact on FEP Capacity*

	2013	2015	% Change
U.S. States with ≥1 Coordinated Specialty Care Programs for FEP	16	29	+81%
Total number of FEP Programs Nationwide	63	100	+59%

^{*} Based on information available 30 NOV 2014; this summary does not include the 9 territories/districts that also receive CMHBG funds.

Research and Community EP Clinics, 2015



- ▲ Research Clinics (N=22)
- Community Clinics (N=32)
- RAISE Clinics (N=9)
- MHBG CSC Clinics (N=19)





California
Prodrome
and/or First
Episode
Programs

Building the Early Intervention Component in the US

- How do we expand on the education and outreach portion of the continuum in the US?
- How do we ensure a youth voice in the services developed?
- Where does the early detection/ intervention happen?
 - Schools and SBHCs?
 - Community Health Centers/Health Homes?
 - A US Headspace model?



PEPPNET Development

- Small grant from SAMHSA for organization
- Exploratory meeting September 2014 at SAMHSA, sponsored by NIMH and RWJ
- Participants included clinicians, researchers, NAMI, NASMHPD, Mental Health America, National Council for Behavioral Healthcare, NIMH, SAMHSA, people with lived experience, RWJ



RWJ Prodrome and Early Psychosis Program Network (PEPPNET)

- One year of funding from RWJF through 2015 to develop infrastructure
- Initial partnership includes SAMHSA, NIMH, NAMHPD, NAMI, National Council, Mental Health America, people with lived experience, providers, researchers, others
- Training workgroup started with multiple trainers for state rollout, mostly from RAISE programs
- EPINET being developed by NIMH for national site data collection and analysis
- Development of treatment workgroup for screening treatment & service agreement.

