

Evaluating Implementation of Evidence-Based Care for Schizophrenia

Alexander S. Young, MD MSHS

Alison H. Brown, PhD

Amy N. Cohen, PhD

VA Desert Pacific Mental Illness Research,
Education and Clinical Center (MIRECC)

UCLA

EQUIP Team

Alexander S. Young, MD, MSHS (PI)
Amy N. Cohen, PhD (co-PI)

West Los Angeles VA

Alison H. Brown, PhD
Matthew Chinman, PhD
Jim Mintz, PhD
Noosha Niv, PhD
Jennifer Pope, BS
Qing Chen
Kuo-Chung Shih
Julia Yosef, MA

Long Beach VA

Michelle Briggs, RN
Kirk McNagny, MD
Christopher Reist, MD

Sepulveda VA

Daniel Auerbach, MD
Christopher Kessler, MD
Daniel Mezzacapo, RN

Support

VA HSR&D QUERI: RCD 00-033 & CPI 99-383

VA Desert Pacific MIRECC

UCLA-RAND NIMH Partnered Research Center for Quality Care (MH082760)

Care for Schizophrenia

- ◆ Chronic disorders of thought
- ◆ Lifetime prevalence = 1.3%
 - half of patients at public clinics
- ◆ Leading cause of disability
- ◆ Outcomes are good with
 - Assertive Community Treatment
 - appropriate antipsychotic medication
 - caregiver involvement and support
 - supported employment / IPS
- ◆ Use of these is low to moderate
 - outcomes in routine care are often poor

Improving Care for Schizophrenia

- ◆ President's New Freedom Commission
 - recovery-oriented & evidence-based care
- ◆ VA has improved care nationally
 - not as much in mental health
- ◆ How to improve care for schizophrenia?
 - little research
 - need methods that are feasible at all sites
 - apply chronic illness model
 - » informatics, reorganization, proactive service delivery
- ◆ Challenges
 - lack of routine, valid outcomes data in EMR (CPRS)
 - clinicians not using recovery-oriented treatments

EQUIP

- ◆ Evaluate a Chronic Care Model in Schizophrenia
 - “Enhancing QUality of Care In Psychosis” (EQUIP)
 - improve treatment quality, recovery-orientation
- ◆ Randomized, controlled trial
 - design
 - » 2 clinics, 65 psychiatrists, 398 patients
 - » randomize by MD
 - » summative and process evaluations
 - intervention (2003-2004)
 - » implement chronic care principles
 - control: usual care

Intervention Methods

- ◆ Opinion leaders
- ◆ Nurse quality manager
- ◆ Implementation tool-kits
 - antipsychotic meds: clozapine & wellness services
 - family services: train clinicians to run groups
- ◆ Psychiatric “vital signs”
 - nurses trained to research standards
 - web-entry of assessment before each MD visit
 - “Pop-Up” provides assessment to MDs and allows messaging among clinicians
 - quality reports for clinicians and managers

No Patient Selected
000-00-0000

Remote Data ? No Postings

Patient Selection

Patient List

Default: WLA-MHC ALEX Y
 Providers Clinics
 Team/Persona Wards
 Specialties All

Patients (WLA-MHC ALEX YOUNG)

- Zztest,Adam
- Zztest,Albert
- Zztest,Alex
- Zztest,Anthony
- Zztest,Benjamin
- Zztest,Bruce
- Zztest,Bud
- Zztest,Bull
- Zztest,Claudia
- Zztest,Cliff
- Zztest,Colin
- Zztest,Dan
- Zztest,Darrell
- Zztest,Dennis
- Zztest,Diet
- Zztest,Donna
- Zztest,Dwayne

Zztest,Adam
SSN: 000-00-7780
DOB: Nov 28,1941
Male
Veteran

OK
Cancel

Save Patient List Settings

Notifications

Info	Patient	Location	Urgency	Alert Date/Time	Message	Forwarded By/When
------	---------	----------	---------	-----------------	---------	-------------------

Process Info Process All Process Remove Forward

Symptoms	Current 10/28/03	Previous 08/08/03	Disagree	Get Guideline
Disorganization	mild	Moderate	<input type="checkbox"/>	<input type="checkbox"/>
Hallucinations	Severe	mild	<input type="checkbox"/>	<input type="checkbox"/>
Suspiciousness	Severe	mild	<input type="checkbox"/>	<input type="checkbox"/>
Delusions	mild	mild	<input type="checkbox"/>	<input type="checkbox"/>
Depression	Moderate	Severe	<input type="checkbox"/>	<input type="checkbox"/>
Suicidality	mild	Severe	<input type="checkbox"/>	<input type="checkbox"/>

Other Problems

Non-compliance Severe

Drugs or Alcohol Abuse:

Housing

Caregiver Interaction Fair Quality

General Medical

Side Effects	Current	Previous	Disagree	Get Guideline
Akathisia	Moderate	mild	<input type="checkbox"/>	<input type="checkbox"/>
Tardive Dyskinesia		Moderate	<input type="checkbox"/>	<input type="checkbox"/>
Sexual Dysfunction	mild	mild	<input type="checkbox"/>	<input type="checkbox"/>
Weight	Severe (BMI= 35)			<input type="checkbox"/>
Weight Gain				<input type="checkbox"/>

Messages Click on a Topic to reply

Topic	Modified Date
Substance Abuse	10/28/2003

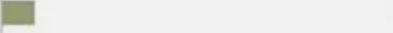
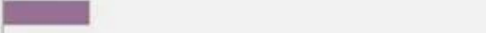
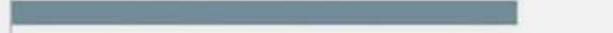
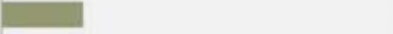
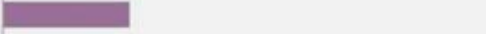
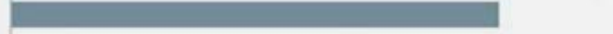
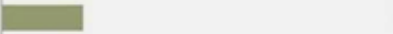
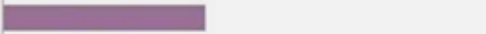

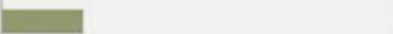
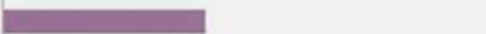
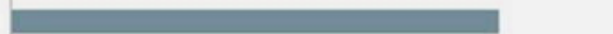
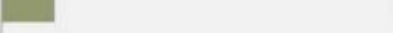
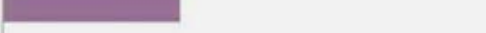

Amy (10/28/2003): Please refer patient to substance abuse counseling.

New Topic

Send Suggestion About Pop-Up

OK

Find Doctor:

Doctor	Compliance & Caregiver Problems				Significant Symptoms					Significant Medication Side-Effects					
Smith, Diane	 8%				 17%					 83%					
Patient	Compliance	Drug / Alcohol Use	Homeless	Caregiver	Hallucination	Disorganized	Delusions	Suspicious	Depression	Akathisia	TD	Sedation	Sex Problem	Weight Gain	Overw'ght (BMI)
Arndt, John										X		X	X		27.3
Bowman, George															
Conway, Melissa															27
Erhart, Mark					X			X							
Geyer, Ivan													X		
James, Jesse	X			X	X										29
Marder, Matthew													X		28.9
Patterson, Jeffrey															36.5
Quintana, Stephen															29.6
Reist, Jane															32.2
Widmark, Karl															31.8
Wirshing, Michael															29.9
Other Doctor	 20%				 25%					 80%					
Other Doctor	 20%				 40%					 60%					
Other Doctor	 20%				 40%					 80%					
Other Doctor	 13%				 35%					 96%					

Summative Results

◆ Improved

- prescribing for psychosis
- use of evidence-based weight intervention
- medication adherence

◆ No improvement

- use of clozapine
- use of family services
- patient quality of life
- patient satisfaction

Process Evaluation: Domains

- ◆ Clinics

- structure and process of care

- ◆ Clinicians

- competencies, practices, burn-out

- ◆ Implementation activities

- ◆ Use of wellness, clozapine, and family services

Process Evaluation: Data from Clinicians

- ◆ Method: semi-structured interviews & questionnaires
- ◆ Pre-implementation (n=44)
 - clinical practices
 - expected barriers and facilitators
- ◆ Mid-implementation (n=18)
 - usefulness and usability of PopUp and Quality Report
- ◆ Post-implementation (n=14)
 - clinical practices
 - attitudes, knowledge, skills: EBPs and recovery
 - barriers and facilitators (especially family)

Results

- ◆ Challenges implementing evidence based treatments differ by treatment
- ◆ Family Services
 - pre & post survey: most clinicians reported support for family services and involving families
 - utilization: no patients who consented to family contact were referred to family intervention
 - post interview: clinicians believed consumers lacked family contact (untrue) and that families could hurt patients
 - need: reorganization & intensive negotiation between patients, families and clinicians

Results

- ◆ Weight and wellness
 - 1/3 to 1/2 of patients were obese
 - evidence-based wellness intervention was implemented
 - » received by 73% of overweight patients
 - » number of visits was low
 - psychiatrists did not change prescribing
- ◆ Clozapine and psychosis
 - new clinic started but very few referrals
 - pharmacy requirements cumbersome
 - clinician competency low
 - » not trained or credentialed
 - » resistant: clozapine requires longer visits, more effort
 - » did not believe clozapine would help

Informatics Results

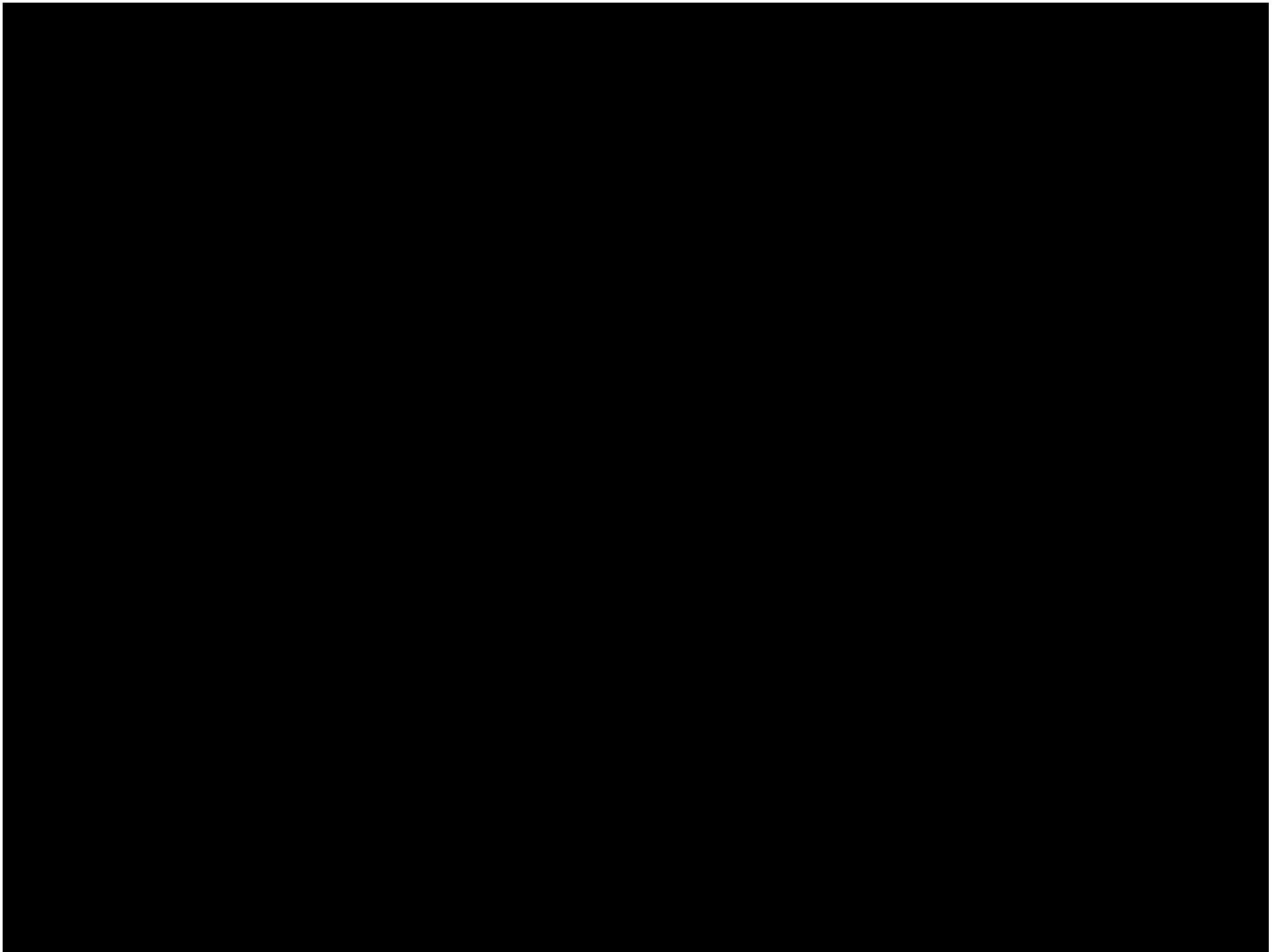
- ◆ Quality reports
 - little use by psychiatrists
- ◆ PopUp
 - clinicians used
 - » data on side-effects and functioning
 - » messaging to collaborate
 - did not use
 - » treatment guidelines
 - » symptom assessment
- ◆ Were critical for implementation

Conclusions

- ◆ Implementation barriers vary by practice
- ◆ Common themes
 - under-developed clinician competencies
 - clinician burn-out
 - low availability of psychosocial treatments
 - organization of care not consistent with quality practice
 - » collaboration between services was very difficult (nutrition, pharmacy, primary care)
 - » needed more local input AND engagement of leadership (VISN)

Lessons Learned

- ◆ Process evaluation critical
 - lessons learned used midstream and in current work
- ◆ Challenges can only be fully understood during implementation
- ◆ In schizophrenia, implement
 - routine outcome assessment
 - resources for each treatment
 - evidence-based quality improvement



References

- ◆ Brown AH, Cohen AN, Chinman MJ, Kessler C, Young AS. EQUIP: Implementing chronic care principles and applying formative evaluation methods to improve care for schizophrenia: QUERI Series. *Implementation Science* 2008; 3: 9.
- ◆ Cohen AN, Glynn SM, Hamilton AB, Young AS: Implementation of a family intervention for individuals with schizophrenia. *Journal of General Internal Medicine*. 2010; 25 Suppl 1: 32-7.
- ◆ Cradock J, Young AS, Sullivan G: The accuracy of medical record documentation in schizophrenia. *Journal of Behavioral Health Services & Research*. 2001; 28: 456-65
- ◆ Young AS, Sullivan G, Burnam MA, Brook RH: Measuring the quality of outpatient treatment for schizophrenia. *Archives of General Psychiatry*. 1998; 55: 611-7
- ◆ Young AS, Mintz J, Cohen AN: Clinical computing: using information systems to improve care for persons with schizophrenia. *Psychiatric Services* 2004; 55:253-5
- ◆ Young AS, Mintz J, Cohen AN, Chinman MJ: A network-based system to improve care for schizophrenia: the medical informatics network tool (MINT). *J Am Med Inform Assoc*. 2004; 11: 358-67.
- ◆ Young AS, Cohen AN, Mintz J: A vignette in the chapter on information systems. In: The Institute of Medicine. *Improving the Quality of Health Care for Mental and Substance-Use Conditions: Quality Chasm Series*. Washington DC: National Academies Press; 2005:241-242.