Marie Cugini Schur, Ph.D.
Forensic Mental Health Conference
March 2015

Enhanced Treatment Unit: A Successful Intervention for Violent Inpatients

Introduction

- The Enhanced Treatment Unit (ETU) is a pilot program designed to address violence due to mental illness
- Goal is to increase safety in the facility as well as assist these patients in their recovery

3

Outline

- ETU Nuts and Bolts
- Admission and Discharge
- Treatment
- Outcomes
- Strengths and Challenges
- Limitations
- Future Directions

4

Mission

- Protect staff and patients from harm
- Return patients to mainstream treatment with supports in place
- Assist the patients in their recovery
- Prevent future aggression

ETU Guidelines and Policy Manual, 9/1/14

Development

- Extensive manual
- Approved and supported by various levels of administration
- ETU staff were trained
  - 2 weeks of training (staff were also vetted)
  - Focused on Motivational Interviewing, clinical skills, and safety training
- ETU opened December 2011
- Frequent evaluative processes

6

ETU "Nuts and Bolts"

- Pilot program to address aggression influenced by severe mental illness
- Unit opened December 2011
- Staff:
  - Higher staff to patient ratios
    - AM/PM – 7 nursing staff; NOC – 4 nursing staff
    - One full clinical team
    - DPS on unit 24 hours a day (2 per shift)

7

ETU "Nuts and Bolts"

- Patients:
  - 12 patients at one time
  - Has served 103 patients (9 of these twice, 2 three times)
- Layout of unit
  - Cameras
  - Patients in front hall; Four restraint rooms in back
  - Private courtyard
  - DPS Station next to Nursing Station

8

ETU "Nuts and Bolts"

- Training
  - All volunteer staff
  - Booster trainings/off-sites
  - Floats receive one-day training
  - DPS are trained on clinical basics

ETU Staffing

- Full clinical treatment team, with one psychiatrist, psychologist, social worker, rehabilitation therapist, and unit supervisor
- Nursing staff allocation: 7 staff for AM and PM shift, and 4 staff for NOC (overnight) shift
- 2 Police Officers on the unit at all times
  - Sergeant is also often there during AM shift

10

Admission Criteria

- Behaviors primarily driven by **severe mental illness pathology** (formerly referred to as Axis I conditions);
- Recurrent aggressive behaviors originating primarily from severe mental illness that have been **unresponsive to mainstream therapeutic interventions**;
- A **serious assaultive act** that results in serious injury or a significant threat of assault
- A **reasonable prospective to change** with a relatively-brief intervention

ETU Guidelines and Policy Manual, 9/1/14

11

Admission Tracks

1. Stabilization of Aggression (most typical)
2. Diagnostic Clarification
   - Only somewhat complex cases are accepted
   - Once diagnosis is clarified, patient returns to home unit
   - Admission criteria are a bit loosened
     - Only need some evidence that violence may be related to severe mental illness
     - Psychopathic traits are acceptable

12

Typical Reasons for Denial

1. Aggression not due to severe mental illness
   - e.g., secondary to psychopathy, borderline personality disorder
2. Standard interventions have not been attempted on the home unit
   - e.g., no consultation, Clozapine attempt, behavioral intervention
3. Patient is not aggressive enough
   - e.g., he has a HAS Level 3 and can leave the unit unsupervised; patient is simply a "nuisance"

13

Typical Reasons for Denial, con't

4. "Real" issue is not aggression
   - e.g., danger to self
5. Patient is too chronic to benefit from a short-term intervention
   - e.g., patient needs long-term dementia care

Admissions Rates

- Approximately 70% acceptance rate
  - Rate was lower in the past (50%); Majority of those referring better understand the criteria
  - There is an appeal process to Medical Director and Clinical Administrator
  - Administration can place someone on the ETU who does not meet criteria due to hospital need (~10% of admittances)

15

Admission Process

1. Home unit Treatment Team refers
2. Program Director approves referral
3. ETU Treatment Team reviews the referral/patient data
4. If accepted, patient is moved when a bed is available (other patients may be moved to allow an admission; dependent on dangerousness)

16

ETU Interventions

- Aggressive medication regime
  - When legally appropriate, required that incoming patients have involuntary medication order
  - Increased use of Clozapine
  - Consultation actively sought (statewide Psychopharmacology Resource Network)
  - Remove medications for diagnostic clarification

ETU Interventions, con't

- All patients are required to have individual therapy, unless it is unsafe to do so
- Group Treatment is highly encouraged
  - Ex: Aggression Reduction, Cognitive Therapy for Psychotic Symptoms
  - Group participation typically increases on the ETU
- Behavioral Plan – reinforcement for positive behaviors
- Assessment

18

ETU Interventions, con't

- Milieu Treatment – pleasant, clean, structured environment
  - Balance safety and therapy
  - Appropriate behaviors modeled
- Unit culture – staff work to maintain a can-do attitude, excellence is expected, ascribe to a specialist mentality

19

Discharging from the ETU

- Goal: Patient length of stay < 120 days
- Reviewed frequently; determined by consensus of ETU Treatment Team
- Discharged to receiving Program
  - Referring Program must accept patient back
  - Program Director determines unit placement
  - Sometimes, original unit is too toxic
- Other outcomes include discharged to jail (as competent), prison (Salinas Valley), or a conserved

20

Discharge Criteria

- Clinical progress
  - Significant reduction in symptoms, assaults
- Completion of the referral question
  - e.g., the diagnosis is clarified
- Maximum benefit is reached
- Determination that patient is inappropriate for treatment on the ETU
- To make an ETU bed available for a more acute patient

ETU Guidelines and Policy Manual, 9/1/14

21

Transition Process

- Transition process begins at admission
- Typical elements of a transition include:
  - Visits to the receiving unit
  - Transfer meeting between two teams: historical & treatment information presented
  - Motivational meetings with patient
  - Discipline-to-discipline consultation
  - Specialized trainings to home unit (e.g., PKU, Psychopathy, etc.)

22

Follow-Up

- ETU staff available for consultation
- Monitor that receiving units are utilizing treatment recommendations
- Evaluative measures
  - Violence rates (incidents and restraint hours)
  - Psychiatric symptoms
  - Quality of Life
- Follow-up interview with patients (6 months after)

23

…well, does the ETU work?

24

Patient Age & Race

Variable	ETU	DSH-A
Age	36.9 (*SD* = 9.4)	42.1 (*SD* = 12.0)
Race		
Caucasian	41.1%	37.6%
Black	28.9%	29.3%
Hispanic	26.7%	26.2%
Asian-American	3.3%	3.1%

25

Patient Commitment Code

Variable	ETU	DSH-A
Commitment Code		
PC 2962	45.6%	35.8%
PC 2972	16.7%	15.7%
PC 1370	20%	17.3%
PC 2684	5.6%	18.4%
PC 1026	10%	11.4%

*Note: Numbers do not add to 100%, various irregular commitments fill the remaining percentage

26

	ETU	DSH-A
Schizophrenia (all types)	41.1%	50.9%
Schizoaffective Disorder	44.4%	23.3%
Bipolar Disorder (I & II)	7.8%	9.6%
Delusional Disorder	2.2%	0.6%
Polysubstance Dependence	47.8%	36.5%
Mental Retardation	8.9%	2.2%
Borderline Intellectual Functioning	10%	7.7%
Antisocial Personality Disorder	50%	29.2%
Borderline Personality Disorder	3.3%	1.9%
Personality Disorder NOS	1.9%	0.6%

27

Patient Characteristics Summary

- ETU patients are more likely to be an Mentally Disordered Offender (PC 2962), less likely to be an inmate from corrections (PC 2684)
- ETU patients are younger
- More severe disorders (Schizoaffective)
- More complex presentation (co-morbid Personality Disorder, Mental Retardation, substance abuse)

28

Preliminary Analysis

- Average Census = 12
- Length of stay = 113 days (*SD* = 87.1; *Mdn* = 97.0 days)
  - 120 days is the limit
  - Can be extended with Administration approval
- Range for length of stay = 8 to 629 days
  - One highly-dangerous individual placed there for approx. 2 years

29

Outcome Measures

- Psychosis = Brief Psychotic Rating Scale (Overall & Gorham, 1962)
- Mania = Young Mania Rating Scale (Young et al., 1996)
- Quality of Life = World Health Organization's Quality of Life – Brief (WHO, 1996)
- Aggression = Frequency of aggression to staff or peers that resulted in a Special Incident Report
- One-to-one hours = Number of hours patients were in room seclusion, wrist restraints, or full bed restraints due to behavior

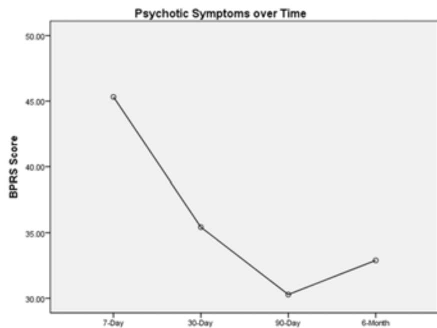
30

ETU and Psychiatric Symptoms

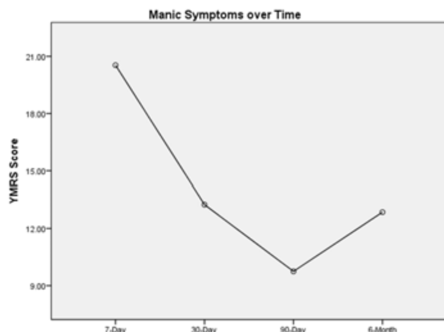
- Psychosis and mania reduced from ETU intake to 6-month follow-up

	M	*SD*
Psychosis		
Intake (7 days)	45.32	11.09
6-Month Follow-up	32.89	14.19
$F(3, 81) = 10.835, p < .001$		
Mania		
Intake (7 days)	20.54	9.13
6-Month Follow-up	12.86	10.94
$F(3, 81) = 12.905, p < .001$		

31



32



33

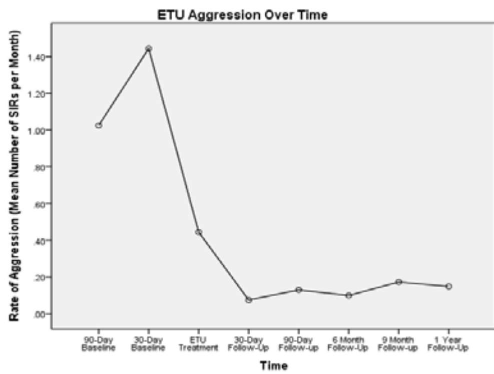
ETU and Quality of Life

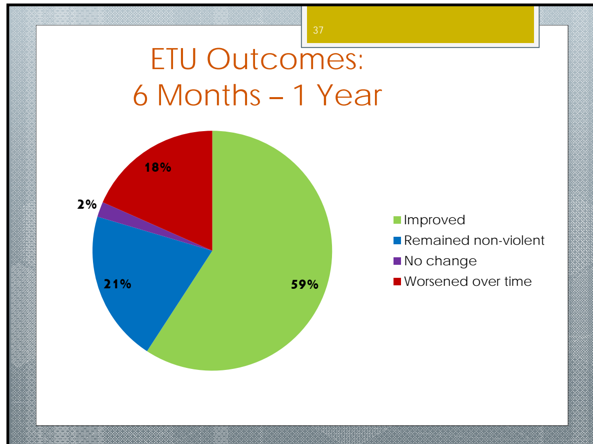
- Quality of life did not improve
- $t(24) = 1.663$, p = ns
- Similar means at intake (57 out of 100) and 90-day follow-up (64 out of 100)
- Speculatively, patients may not be able to achieve a good deal of life satisfaction while being involuntarily committed

ETU and Aggression

- Aggression and one-to-one hours reduced from baseline to 1 year follow-up

	M	*SD*
Aggression		
90-day baseline	1.03	1.41
1-year follow-up	0.15	0.38
$F(2.160, 56.153) = 8.856, p < .001, \eta_p^2 = .254$		
One-to-one hours		
90-day baseline	58.8	139.44
1-year follow-up	12.8	29.3
$F(1.155, 28.865) = 4.867, p < .05, \eta_p^2 = .163$		





38

Maintaining the Change

- From baseline to 6-Month follow-up:
  - 59% are less aggressive
  - 21% had zero incidents upon admission, and remained at zero incidents during follow-up
    - Inappropriate referral
    - Admitted for threat of violence
  - 2% show no improvement
  - 18% *increase* their aggression

Why do we think the ETU works?

- Structure & milieu of the unit
- Clozapine, medication practices
- Increased one-to-one attention, interaction
- Excellent staff (carefully selected)
- Increase in personal and psychological space (reduced crowding)
- Comprehensive program

Why do some "fail" or get worse on the ETU?

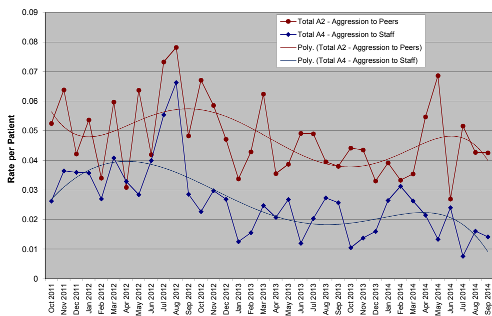
- Salient factors:
  - Medication changes/ETU medications not maintained
  - Home unit does not use behavioral interventions
  - ETU recommendations not able to be followed (resources are key)
  - Chronic conditions - Personality Disorders, Mental Retardation
  - Comorbid conditions – cognitive challenges, personality disorders
  - Illness is simply refractory

40

What about hospital-wide aggression?

- Of the top 50 most aggressive patients, 40% of them were treated on ETU

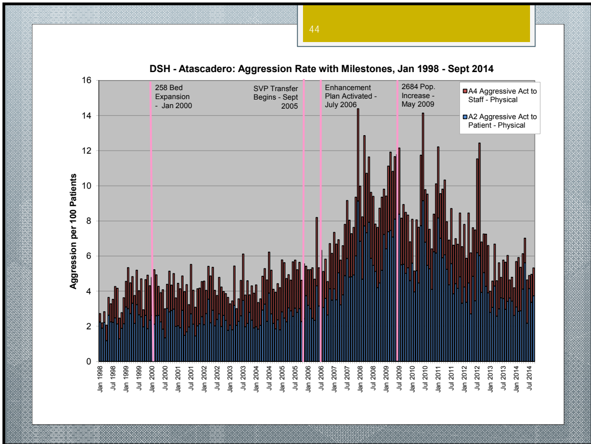
42



43

…can we take credit??

- In a word, no
- Aggression at other hospitals also decreased
- Violence rates are multi-factorial
- Without an experimental design, we don't know how much – if any – of the decrease the ETU is responsible for
- We only know that those admitted to the ETU have improved



Program Challenges

- In the past, many referrals that were inappropriate and extended transfers
- Transition back to home unit sometimes unsuccessful due to resources/other factors
  - Sometimes, units do not want the patients back
- Role confusion & "too many bosses"

Program Challenges, con't

- Assessment completion
  - Resources, time
- Staffing
  - Burnout
  - Conflict/splitting
  - Turnover and vacancies
    - Monitoring, mentoring, off-sites, reassignment
- Drift from policies, manual, intent
  - E.g., admission criteria interpreted too strictly, length of stay too long

Institutional Challenges

- 7301/MDO revocation/AB 109
- Unit for those who do not meet criteria but are dangerous?

Institutional Challenges, con't

- AB 1340
  - Plan to develop an Enhanced Treatment Program that will accept all dangerous patients

49

Limitations

- Fairly small sample size
- Evaluation:
  - Cannot determine exact mechanism of action
  - No comparison group
    - Next report: create two imperfect groups
  - Patients aren't returned to home unit (unequal comparisons)
- Currently, the ETU is still a pilot program and results should be considered as preliminary

50

Future Directions

- Continue to collect aggression data
- Continue to explore new directions in treatment
  - Additional consultation
- Address burnout
- Increase census?
  - Increase program cost savings

51

Conclusions

- Program has many strengths. Many of these are not novel and elemental to patient success (investment, face-to-face time)
- Several challenges, which require a good deal of organization and oversight
- ETU is a successful program for the amelioration of violence due in part to mental illness