

Preparation for Discharge: self-administration of medication on an inpatient forensic unit

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BACKGROUND

- Medication non-adherence among outpatients with schizophrenia is a significant problem¹
- Non-adherence has a 6-month to 2 year risk of relapse that is 3.7 times higher than for adherent patients²
- Relapse commonly results in costly re-hospitalization (average daily cost in 1996 was \$285.70)³
- Non-adherence among forensic patients is associated with an increased risk of recidivism⁴

¹ In one journal review (ref #4), 33% of studies of psychiatric outpatients found a non-adherence rate of at least 50%
² Fenton WS, Byler CR, Haiszen RK. Determinants of medication compliance in schizophrenia: empirical and clinical findings. Schizophrenia Bulletin. 1997;23(4):637-51.
³ Downie et al. The economic burden of schizophrenia in Canada. Canadian Journal of Psychiatry. 1999;44(5):464-72.
⁴ Young JL, et al. Medication adherence failure in schizophrenia: a forensic review of rates, reasons, treatments and prospects [Review]. J Amer Acad Psychiatry & the Law. 1999;27(1):20-44.

THE FORENSIC PROGRAM AT THE CENTRE FOR ADDICTION AND MENTAL HEALTH, TORONTO, CANADA

- A large forensic population: 90 inpatients, hundreds of outpatients
- 3 levels of security:
Maximum Medium Minimum
- Many have schizophrenia - often the index offense is attributed to non-adherence with medication

SERVICES AT CAMH THAT ADDRESS NON-ADHERENCE

REASON FOR NON-ADHERENCE	SERVICE
SIDE EFFECTS	⊙ T
LACK OF INSIGHT	⊙
COST OF MEDICATION	⊙ T
STIGMA	⊙
RELIGIOUS/CULTURAL BELIEFS	⊙
FEAR FOLLOWING NEGATIVE EXPERIENCE WITH MEDICATION ERROR	⊙
LACK OF PERCEIVED EFFICACY	⊙ T
PATIENT FEELS BETTER	⊙
SUBSTANCE ABUSE	⊙ (SUBSTANCE ABUSE GROUP)
COGNITIVE IMPAIRMENT	⊙ T
LANGUAGE BARRIERS	⊙ (TRANSLATION SERVICES)
CONFUSING DRUG REGIMEN	⊙ T
FEAR OF LONG-TERM SIDE EFFECTS	⊙
⊙ - MEDICATION GROUP	T - TEAM REVIEW

THE PATIENT – J.M.

- Male, age 46, diagnosed with schizophrenia at age 20
- Transferred to MSRU (Minimum Secure Rehabilitation Unit) in Feb 2000 from another facility
- Committed index offense (homicide) June 1997
- Deemed not criminally responsible for offense because of acute exacerbation of schizophrenia
- Exacerbation attributed to non-adherence
- Currently stabilized on: lithium 300mg AM, lithium 600mg QHS, olanzapine 15mg QHS

PATIENT'S CONCERNS

- J.M. expressed anxiety about eventual discharge – concerned that he won't be able to manage his medication by himself – doesn't want to become ill again
- Residual paranoia as part of his illness – patient fears being given wrong medication by pharmacist/doctor

PATIENT-SPECIFIC PLAN

- Overall goal is for patient to be able to take his medications in a safe and correct manner when he leaves hospital
- Plan is to mimic the medication-taking routine as it will be at home
- Patient favors Dosett[®] container for organizing medication

PATIENT-SPECIFIC PLAN

- With help from the pharmacist, patient identified his specific goals as:
 - Remembering to take medication
 - Be able to visually identify pills and associate them with the right name, strength, dose, frequency
 - To recognize medications if dispensed in error - (patients have an important role to play in prevention of medication errors)
 - To learn what to do when a dose is missed
 - To order and pick up refills before meds run out

Procedure

Physician formally assesses patient for suitability to self-administer medication (including risk-assessment)

Pharmacist explains program to patient

Patient + physician sign consent form

Physician re-writes medication orders with notation "self-medication"

Pharmacist fills labeled Dosett[®] with a week's supply of medication

Pharmacist explains to patient:

- How to use Dosett[®]
- How to visually ID each pill
- What each medication is for
- Dose & frequency & Side effects

Pharmacist gives patient tools:

- Medication calendar to keep in room
- Pamphlets for each medication

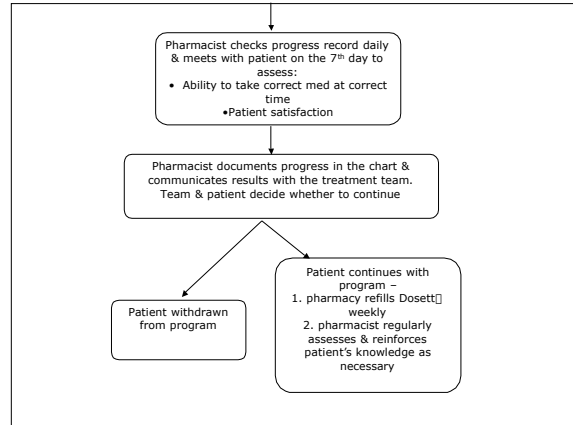
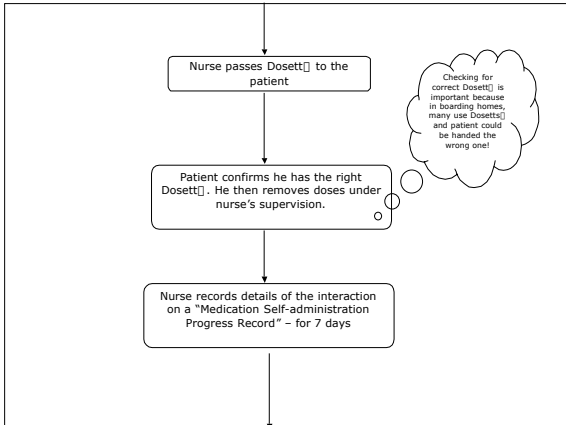
Medication Calendar for _____

Medication	Purpose	8am	1pm	6pm	9pm	PRN (as needed)	Notes
Lithium 300mg capsule	Mood-stabilizer	①			②		
Olanzapine 7.5mg tablets	Antipsychotic (to reduce voices, paranoia etc.)				②		
Acetaminophen 500mg tablets	Headache					①-② up to 4 times daily	

MSRU is a secure forensic unit - medication must be kept locked in medication room

At medication time, patient approaches nurse on his own, without being reminded

Patient asks nurse for medication by name, strength, quantity



**ADVANTAGES OF SELF-MEDICATION
(IDENTIFIED BY J.M. & PHARMACIST)**

1. Taking an active role in medication management increases self-confidence
2. Patient gains some control in a restricted environment
3. Patient's knowledge of his medications improves

**ADVANTAGES OF SELF-MEDICATION
(IDENTIFIED BY J.M. & PHARMACIST)**

4. Incorporation of memory device (Dosett) into daily activities increases likelihood of usage upon discharge
5. Therapeutic relationship develops between pharmacist & patient that forms the basis for future pharmaceutical care activities
6. Proven ability to be independent with medication taking is looked upon favourably by the provincial authorities when deciding upon release

PATIENT'S PROGRESS

- 6 months later – J.M. is still using his Dosett®
- 1 month into the program J.M. asked to be allowed to fill his own Dosett® – (as not all pharmacies will fill Dosetts®)
- Since then, he has been filling his Dosett® weekly from labeled prescription vials (under supervision)

PATIENT OUTCOME

- J.M. is now confident that he will be able to manage his medication regimen after discharge
- The provincial authorities have granted J.M. community living status. He is now waiting for suitable housing.

⁵Offenders who are found not criminally responsible have their incarceration reviewed annually by an independent body called the Ontario Review Board. The 5 member panel decides whether an patient should be freed. They can make an order for another year of detention, determine what level of security the patient must be under, and how much access to the community the patient can have while detained.

THE SELF-MED PROGRAM TODAY

- Following J.M.'s success, a self-medication policy was drafted passed by P&T passed by MAC
- The self-med program is now being offered to all patients on MSRU that meet inclusion criteria:
 - Patient must be motivated to take medication
 - Will be responsible for taking meds at home
 - Adequate cognitive function
 - Stable mental status
 - Stable regimen of medication
- Pharmacist, patient or physician initiates request for Dosett®.

THE SELF-MED PROGRAM TODAY

- 4 patients have joined the self-med program so far
- Challenges:
 - Changes in medication
 - Deterioration of patient's mental state
 - PRN medication
 - Not all patients can manage a Dosett®: may do better with other compliance aids (e.g. vials or blister packaging)