

Implementation of Medicines Reconciliation at Admission in Waitemata District Health Board's Inpatient Mental Health Settings

KIA ORA • GREETINGS
NÎ HÂO • MALO LELEI
BULA VI NAKA • KANGEI
FAKALOFA LAHI ATU
AN NYUNG HAA SE YO
TALOFA LAVA • NAMASTE
HALO • SALAAM ALEIKUM
XIN CHAO • TALOFA NI
CHOUM REAP SUR
NÉI HÓU • MINGALABA
SAH-BYE-DEE • KIA ORANA

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Our core values: Customer Focus 'eye' | Integrity 'sunrise' | Compassion 'bird' | Respect 'koru' | Openness 'flower'



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What exactly is medicines reconciliation?

- Different from taking a medication history
- Three stage process:
 - Collect the most accurate list of medicines, allergies and adverse medication reactions
 - Compare the collected information against the prescribed information and identify discrepancies
 - Facilitate resolution of discrepancies and communicate all changes

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Why is medicines reconciliation important?

- **At a strategic level:**
 - Promotes safe and quality use of medicines
 - Aligns with NZ governmental and professional organisational strategies and recommendations
 - Aligns with NZ Health and Disability Commissioner recommendations due to cases where harm has occurred
 - Promotes working in a multi-disciplinary manner
 - Opportunity for education and training

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Why is medicines reconciliation important?

- **At a client level:**
 - Decreases medication errors and associated harm
 - Detects transcription errors, adherence issues and allows review of therapeutic drug monitoring
 - Allows a known starting point of ALL medication(s) at admission
 - Checks for allergies/hypersensitivities and adverse effects/interactions (that may have precipitated the admission)
 - Documents deliberate changes

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Background at Waitemata District Health Board

- Medicines reconciliation occurring in most non-mental health settings for some time
 - Grew out of historical error detection & reporting
- WDHB mental health pharmacy team decided to implement in 2008
- All clients admitted to inpatient mental health settings with a clinical pharmacist service have a medicines reconciliation
 - Timeframe depends on area

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Challenges

- **Diverse and geographically remote services**
 - 2 x 40 bed adult acute units (one off site) (1FTE each)
 - 1 x 17 bed older adult acute unit on main site (1FTE)
 - 100 beds across 8 units forensic service off site (1.4FTE across 5 units, 3 units no dedicated service)
- **No spare time to resource medicines reconciliation – can be an ongoing issue**
- **Possible tendency to “silo” thinking**
- **Disease states involved mean often unable to use client as primary information source and adherence issues extremely relevant**

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Opportunities (1)

- Admission rates not as high as other services
- Clients generally uncomplicated medically
- Electronic clinical notes system
 - Different usage in different areas so needed to be flexible
- As of end 2010 have electronic access to community pharmacy dispensing records

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Testsafe Pharmacy

Sysmex Eclair - Version 6.1.6.1 - Microsoft Internet Explorer

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Address http://haeclair2:8080/Eclair/Clinical/Workstation.aspx Go

ECLAIR Patient Clinical Record

Nikki Holmes Log Off

Work Area Search Bookmarks Clinician's Enquiry Library Preferences Help

All Data By Service Search Filter

Dispense Report Dispense Details

Print Library

More reports: Prior Later

- 27/02/11 09:20 Midstream Urine
- 25/02/11 08:35 General Chemistry Full Blood Count hCG(beta)
- 22/02/11 17:30 Toxicology Midstream Urine
- 22/02/11 08:12 General Chemistry Iron Studies Full Blood Count Lipid Studies Thyroid Function B12 Folate
- 17/02/11 Lorazepam Quetiapine fumarate
- 14/02/11 Lorazepam Zopiclone Quetiapine fumarate
- 12/02/11 Quetiapine fumarate
- 11/01/11 Nicotine Zopiclone Quetiapine fumarate Bupropion HCL
- 24/12/10 Zopiclone

DATA LIMITATIONS
The information displayed may be incomplete, click here for more details.

Date	Generic Name	Brand Name	Strength	Form	Qty	Instructions	Pharmacy Name
11/01/11	Nicotine	HABITROL	21mg/24hr	Patch	28	Apply as directed	6448 -...
11/01/11	Zopiclone	APO-ZOPICLONE	7.5mg	Tablets	28	Take ONE or TWO tabl...	6448 -...
11/01/11	Quetiapine fumarate	QUETAPEL 100	100mg	Tablets	14	Take HALF-A-TABLET t...	6448 -...
11/01/11	Bupropion HCL	ZYBAN	150mg	Tablets	60	Take ONE tablet ONCE...	6448 -...

Display reports for this episode. Date 11/01/11

Local intranet 11:04 Monday

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Opportunities (2)

- Clients admitted always often have had prior contact with mental health services
- Used non-mental health resources as a template
- Pharmacists already an integral part of clinical teams

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Medicines Reconciliation Form



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*Pharmacy Service
North Shore Hospital
Private Bag 93-503, Takapuna
Auckland 9
Telephone: 486 1491 Extn:2515
Facsimile: 486 8935*

Pharmacist Medicines Reconciliation

Name: Anonymous CLIENT
NHI: ABC1234
Dob: 1/1/93

Admission Medication Summary:
(medication, form, route, dose, frequency, indication)
Olanzapine tablets 20mg at night – psychosis

ADR's/Allergies:
Rash with Augmentin (reported by client's mother)
Prolactin elevation with risperidone (documented in CMHT notes)

Admission plan:
Ongoing schizophrenia unresponsive to risperidone and olanzapine – for clozapine trial

Comments:
Olanzapine CHEM 12345678/Exp 1/1/12

Sources Utilised: Client's Mother, HCC, Testsafe

Pharmacist: Nikki Holmes

Date: 1/2/11

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So has medicines reconciliation made a difference?

- **162 medicines reconciliations performed across all units 1/10/10 - 31/1/11**
 - 26 excluded, as rapid readmissions
 - 45 reconciliations showed no meds on admission
- **Themes:**
 - Few overt errors
 - Pharmacists documenting relevant medication funding information
 - Pharmacists documenting deliberate medication changes on admission

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Examples of good catches

- **Completion of withdrawal of dexamphetamine not documented**
- **Cessation of a short course of omeprazole followed through**
- **Deliberate decrease of quetiapine and donepezil doses not documented**

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Example of “silo” thinking... (1)

- 31 year old male with partially treated schizophrenia admitted from prison
- No medication chart sent from prison
- Unable to access client
- Prison notes stated olanzapine 20mg at night, continued unchanged on admission

- And all was well – or was it???



Example of “silo” thinking... (2)

- The following week when the pharmacist was next on the ward...
- Pharmacist noticed +ve Hepatitis B screen and Gastroenterology clinic letters stating was being treated
- Pharmacist checked with Gastroenterology clinic staff and dispensing community pharmacy
 - Entecavir 0.5mg/day also being dispensed
- Medics contacted, entecavir prescribed

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Why what has gone on before is important...

- 39 year old female admitted due to mental state deterioration, especially hallucinations
- On depot flupenthixol and oral quetiapine
- Negative toxicology screen
- Pharmacist medicines reconciliation revealed had been prescribed bupropion and nicotine patches one month prior to admission by GP
- Facilitated a formulation of possible differential diagnosis – deterioration possibly precipitated by bupropion

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Don't believe everything you think you know... (1)

- 24 year old male admitted for assessment
- Known history of epilepsy, well controlled
- Prison medication chart stated sodium valproate 700mg three times a day and clobazam 20mg at night
- Cross-checked with own medication and dispensing pharmacy as well as clinical notes
- Medications unchanged on admission
- And all was well – or was it???

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Don't believe everything you think you know... (2)

- Seizure frequency increased – why?
- Serum levels lower than previously but no adherence issues
- Pharmacist and Keyworker contacted accommodation provider prior to prison
- Was actually taking sodium valproate 1.2G three times a day and clobazam 20mg at night
- Sodium valproate increased – levels increased, seizures ceased

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Future Directions

- **Implement for transfer between/within all settings, not just at admission**
 - Look at discharges/transfers
 - Look at community mental health teams
- **Improve current documentation**
 - Link with medication record and prescription generation module of clinical notes
 - Documentation of indications when relevant
 - Specific documentation about clozapine
 - Train clinical staff in medication history taking

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Thanks for your attention!

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