

# Electronic Medication Management in Aged Care *.....a facility perspective*

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**SAMARINDA**  
AGED SERVICES

**icare** *Aged care electronic health record*



## Today's presentation

### Why Medication Management

- Current challenges
- Expectations from electronic systems

### iCare's Medication Management System

- New processes
- System components
- Benefits

### Samarinda Observations

- The good
- The not so good

### The Future



## Why medication management?

- Medication Management in Aged Care
  - Reduced numbers of medically trained professionals across the board
  - Increasing ageing population
  - Increasing number and complexity of drug regimes designed to enhance quality and quantity of life
  - Increased legislative responsibility and a growing litigious environment
  - Increasing demands on staff time
- National Ageing Research Institute, Melbourne
  - 1 in 4 hospital admissions of older people are directly related to drug-related issues.
  - Over 100,000 falls recorded in Australia in 2004 have a direct relationship to medication
  - Adverse drug reactions are the 4th to 6th biggest cause of death in the elderly
- A critical issue for aged care is the lack of ease in measuring and managing medication...



## Why medication management?

### Challenges of paper based systems

- Legibility
- Signature omissions
- ordering process takes significant time
- Time spent liaising with pharmacy
- Medication administration errors - missed, generic/trade names,
- Cumbersome
- Rewriting requirement for medication charts



# iCare's Medication Management

## Medication Management

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### Main Menu



- Web application for medication management & reporting
- Print medication chart & universal signing sheet
- Send messages to pharmacy
- Incident reporting
- Medication tracking report
- Hospital transfer report



## How does it work?

- Interface between pharmacy and facility
- Stored securely off site
- Accessible offline
- Mobile throughout facility
- Integrated with the clinical system



## Prescribing and ordering process

- GP prescribes
- Message to pharmacy
- Fax written order
- Pharmacy dispenses
- Pharmacy creates new medication chart and signing sheet and makes it available to the facility
- Medication delivered to facility
- Facility prints new chart and signing sheet
- Archive old signing sheet and store old med chart until GP returns to sign
- Printed signing sheets are back-up



## **Administration process**

There are 6 simple steps to follow when using iCare's Medication Management System



## Administration process

- 1 Confirm the right resident
- 2 Confirm the right time
- 3 Confirm the right drug & dosage
- 4 Confirm the route
- 5 Administer the right drug whilst timing the whole process
- 6 Documentation



## Facility components



- RxMobile used for medication administration - Acts like the drug chart
- Using a tablet PC
- Leaves messages for other staff regarding administration issues
- On-screen signature



## Facility components



- RxOffice used for communication with pharmacy (RxMessaging)
- Receives medication charts and signing sheets for printing
- Select drugs and send message to
- Order generates reports



## Benefits

- Medication Management Efficiency & Transparency
  - 40 Residents @ 6 tablets per day – 87,600 tablets per annum
  - Organisation-wide transparency, accountability and performance benchmarking
  - Standardisation of systems – achieve consistent method & reporting for medication rounds
  - Clinical & corporate governance
  - 20% of a Div 1's time is spent on medication management



## Benefits

### Facility Benefits

- Immediate notification of missed medication
- Only that rounds medications displayed for administration
- Progress note recorded for prn administrations
- Provides clear visual photo identification of tablets
- Generic and brand name listed
- Messages to pharmacy can be tracked
- Medication charts and signing sheets clear
- Reports available for auditing
- Significant time savings in ordering process



## Benefits

- Pharmacy Benefits
  - Streamline Pharmacy Supply
  - Consistent information at the Pharmacy & Facility
  - Receive messages electronically
- GP Benefits
  - Time saving in medication review
  - Drug administration reporting
  - Minimal disruption to existing process
  - No rewriting of drug charts required



## Samarinda staff observations

### The good...

- Shorter medication rounds due to streamlined easy to read charting
- Signature omissions eliminated
- Significant time savings in medication incident form completion
- Ordering no longer a task - done during round
- More portable than folders of drug charts



## Samarinda staff observations

### The not so good...

- Patterns not immediately identifiable during med rounds
- Beyond 24 hours, medication history requires generation of a report
- Can be too easy and quick so don't read everything



## Where to next

- Integration with medical director
- Single integrated health record for seamless transfer of information
- GP electronic prescriptions /electronic medication chart prescribing


**Section 1: Resident Electronic Health Record**

**Resident Name:** Jane Citizen (Rm: 3-1-5-B) **Preferred Name:** Jane (URN: 123456) **D.O.B:** 19 August 1925 (83 years old)

**Doctors Name:** Peter Smith (Ph: 0400 000 000) **Allergies:** Gluten intolerant, allergic to penicillin, allergic to shell fish.





**Diet:** Normal **Next Review Date:** 3 Dec 2008

**Special Needs / Diagnosis:** Type 2 diabetes, Alzheimer's disease, requires a wheelchair while outdoors.



Medication Chart

**Section 2: Medication Chart**

Drug Name	Instruction	Freq	BB	AB	BL	AL	BD	AD	BT	AN	Start Date
 VASOCARDOL CD SR-CAP 240mg 30 (DILTIAZEM)	Swallow whole ONE capsule daily	Once daily		1							11/07/07
 NEXIUM EC-TABS 20mg (ESOMEPRAZOLE)	Swallow whole ONE capsule daily	Once daily		1							11/07/07
 TEMAZE TAB 10mg (TEMAZEPAM)	Take ONE tablet at night when required	When Required							1		07/08/08
 AVAPRO HCT TAB 150mg/12.5mg (IRBESARTAN/HYDROCHLOROTHIAZIDE)	Take ONE tablet in the morning	Once daily		1							17/09/08

GP Records

Section 3: Drug Administered (Last 48 Hours)				Section 4: GP Records	
Drug Name	Time	Dose	Comment	Visitation	Prescription
VASOCARDOL CD SR-CAP 240mg 30 (DILTIAZEM)	18/09/08 11:30am	1		Dr Jenny Colt visited on 13/09/08 Dr Peter Smith visited on 18/09/08	Dr Jenny Colt prescribed AVAPRO TAB 150mg on 17/09/08
NEXIUM EC-TABS 20mg (ESOMEPRAZOLE)	18/09/08 11:31am	1			
AVAPRO HCT TAB 150mg/12.5mg (IRBESARTAN/HYDROCHLOROTHIAZIDE)	18/09/08 11:33am	1			Jane had an arthroscopy by Dr Peter Smith on 17/09/08
PANAMAX (50mg)	18/09/08 14:08pm	1			Jane had a influenza injection on 16/09/08 14:30pm

Nurse Interventions

Section 5: Last 5 Progress Notes	Section 6: Nurse Interventions
<ul style="list-style-type: none"> <li>Entered By Deborah Time: 16/09/08 13:15 Note: Attended podiatrist &amp; church this a.m. Ambulating slowly</li> <li>Entered By Deborah Time: 17/09/08 16:10 Note: Dressing attended after shower, improvement notes</li> <li>Entered By Andrea Time: 18/09/08 6:20 Note: Jane was concerned about rib pain on the left hand side</li> <li>Entered By Kath Time: 18/09/08 14:08 Note: Given 1 x Panamax as per PRN chart</li> <li>Entered By Deborah Time: 19/09/08 18:09 Note: Dressing to [R] ankle attended</li> </ul>	<p><b>Cognitive &amp; Mental health—Behaviour</b></p> <ul style="list-style-type: none"> <li>Div 1 Nurse spends time explaining wound management strategies.</li> <li>Staff reassure &amp; spend time to gain Jane's confidence.</li> <li>Past success with wound management has given Jane more confidence in staff.</li> <li>Daughter, Angela also needs some reassurance. Staff spend time resolving confusion.</li> </ul>

Resident Details

Drug Administered (Last 48 Hours)

Last 5 Progress Notes

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