Medication reconciliation: tracking the patient’s journey

Linda Graudins

High 5 Workshop
November 2014
The patient med rec journey begins

- ED admission
  - Pharmacist obtains med list and reconciles with patient
  - Patient brings in list, own meds
  - RMO reviews and orders medication
Reconciliation on admission: decrease medication-related error and harm

GP letter

Pharmacist check with second source

…but it’s not just about a list
Med Rec: Value add by listening about the patient medication journey

Are these all the medicines you take?

I take Pradaxa as well...but I saw a program on TV about people bleeding on Pradaxa, so I don’t want to take this. Why do I need this?

Any allergies/reactions to medications?

Last admission I had a terrible rash but I don’t know which antibiotic caused it. The doctors all came into the room and waffle all these names and off they go.....
Alfred experience: extending clinical services

- Clinical pharmacy services in Australia are primarily provided on weekdays.
  - Potential for medications review to be delayed up 4 days after admission, or missed completely if patients are discharged over a weekend.
- Med Rec recognised as core practice for AlfredHealth clinical pharmacists since 2003.
  - Requested by nursing and medical staff pre-admission
  - Priority for weekend clinical staff
- Focus on med rec in the ED
Timely Quality Care: meeting the “4 hour rule”

### Timely Quality Care — Evaluation Framework

**OBJECTIVE:** For all patients to receive timely, high quality care consistent with their clinical need.

<table>
<thead>
<tr>
<th>EQUITY / ACCESS</th>
<th>EFFECTIVENESS</th>
<th>EFFICIENCY</th>
<th>ORGANISATIONAL LEARNINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>QUALITY</strong></td>
<td><strong>SAFETY</strong></td>
<td><strong>ACTIVITY</strong></td>
<td><strong>FINANCIAL</strong></td>
</tr>
<tr>
<td>ED 'low times' for each category</td>
<td>Patient satisfaction / experience</td>
<td>MRT calls with 12 hrs of admission</td>
<td>Staff satisfaction (PULAT survey)</td>
</tr>
<tr>
<td>Number and % of did not wait</td>
<td>% of patients seen by ED consultant / staff within 30mins</td>
<td>Hospital Standardised Mortality Ratio</td>
<td>Staff experience of redesign projects and new model (female group)</td>
</tr>
<tr>
<td>Ambulance turnaround times</td>
<td>% of patients admitted or discharged from ED within 4hrs of arrival to ED</td>
<td>Unplanned hospital re-admission rates</td>
<td>Postgraduate Hospital Environmental Education Measure</td>
</tr>
<tr>
<td>ED Occupancy</td>
<td>% of patients seen by inpatient unit within 2hrs of admission to ED</td>
<td>Unplanned hospital representations</td>
<td></td>
</tr>
<tr>
<td>Effective patient exps</td>
<td>% of patients on appropriate ward first time</td>
<td>% of patients with completed admission pack on transfer from ED</td>
<td></td>
</tr>
<tr>
<td>Outpatient OPs</td>
<td>% of patients undergoing investigations conducted within 24hrs of referral</td>
<td>Critical incident rate within 24hrs of admission (hourly)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>% of patients undergoing investigations in order of referral</td>
<td>ED—patient outcome data</td>
<td></td>
</tr>
<tr>
<td></td>
<td>% of procedures conducted within 24hrs of referral</td>
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<td>% of operations conducted within 24hrs of referral</td>
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<td>% of consultations conducted within 24hrs of referral</td>
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Weekend clinical pharmacy service

- 2009: Clinical pharmacy on weekends
- 2010: Weekend cover expanded to all areas
- 2014: Pharmacists attached to medical/surgical teams on weekends as well as weekdays
- 2015: Pharmacists complete medication lists in discharge summaries*

ED pharmacy service
2010: p’cist also covers other teams
2011: ED pharmacist 0830 – 1600
2012: Timely Quality Care funding
  - Increase in Gen Med/ ED services
  - Three pharmacists; from ED handover @ 0700
to 2100hr
  - Pharmacists chart admission meds* after med reconciliation with medical team
2014: Pharmacist attends stroke call* out for timely med rec pre thrombolysis
  * credentialed
Technology assists the patient ED journey
Mrs MW

- 94 year old living with daughter Patricia
- Seen in ED post fall and injured wrist
- Admitted due to increasing pain

Did you bring in your mother’s medication list?

I have one, but last time I gave it to the paramedics they promised to write it all out, but they didn’t. On discharge they told me to give 2 Panadol Osteo three times a day…but I’m already doing that.
Mrs MW journey

Admission

Transfer

Changes in Rx

Discharge
Dispensing script iPharmacy

- PBS paperwork
- Medication list if required

Script handwritten
- Discharge letter electronic
  - faxed/ sent to GP

Discharge Letter
RMO script + Discharge summary

Pharmacist check and supply
- MRF handwritten
- Medications/supply checked
- Community pharmacy contacted

Dispensing script iPharmacy
- PBS paperwork
- Medication list if required
Is there a medicines list included in the discharge summary?  
N = 50

<table>
<thead>
<tr>
<th>Is the medicines list accurate and complete?</th>
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</thead>
<tbody>
<tr>
<td>1) Missing information regarding ongoing medicine</td>
</tr>
<tr>
<td>2) Missing ongoing medication</td>
</tr>
<tr>
<td>3) Medicine prescribed that should not be continued on discharge</td>
</tr>
<tr>
<td>4) Documented allergies are incomplete or are incorrect</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<tbody>
<tr>
<td>41</td>
<td>19</td>
<td>17</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>82%</td>
<td>38%</td>
<td>34%</td>
<td>20%</td>
<td>14%</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th></th>
<th>2014 March NSWTAG/CEC indicator testing</th>
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<tbody>
<tr>
<td>Indicator 5.8: “Accurate and comprehensive” discharge medication summary</td>
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</table>
Barriers to effective med rec at discharge

1) Templates vary
2) Summary not done in a timely way
   - not sent to GP
3) Incorrect/ incomplete list

Medicines: information left blank

Warfarin
Frasenide 40mg bd
Atorvastatin 40mg daily
Lumigan eye drops
Termisartan 80mg daily
Pantoprazole 40mg daily
Oxazepam pm
Ipratropium 18microgram daily
Symbicort
Med rec improvements @ discharge

- Increased timeliness:
  - General Med patients aim for discharge summary on discharge
  - 60-80% are done within 48 hours vs 30% for other teams

- Standard template
  - Medications clearly stated
  - Changes noted
  - ADR stated + reaction
Discharge

- RMO script + Discharge summary
- Pharmacist check and supply

- Medications reconciled
- Supply checked
- Community pharmacy contacted

Dispense script iPharmacy
- PBS paperwork
- Medication list if required

- Script hand written
- Discharge letter electron
  - faxed/ sent to GP
Ideally

Discharge

One summary by the treating team

Data generated
- KPIs
- Research data
- Incidence data e.g., ADE

Medication information
- Prescription to community pharmacy
- Discharge letter with patient/carer
- Discharge letter sent to GP
Patient centred care: Medline

Number of papers on "patient centred care"

Year


No. papers

0 50 100 150 200 250 300 350 400

With permission- Dr David Greenfield ISQua 2013
Measuring patients' perspectives

- Standardized survey instrument and data collection methodology

- Create a national standard (USA) for collecting and publicly reporting patients' perspectives of care information that would enable valid comparisons to be made across all hospitals.

HCAHPS
Hospital Consumer Assessment of Healthcare Providers and Systems

YOUR CARE FROM DOCTORS

6. During this hospital stay, how often did doctors treat you with courtesy and respect?

- Never
- Sometimes
- Usually
- Always

7. During this hospital stay, how often did doctors explain things in a way you could understand?

- Never
- Sometimes
- Usually
- Always

THE HOSPITAL ENVIRONMENT

8. During this hospital stay, how often was your room and bathroom kept clean?

- Never
- Sometimes
- Usually
- Always

9. During this hospital stay, how often was the area around your room quiet at night?

http://www.hcahpsonline.org. Centers for Medicare & Medicaid Services, Baltimore, MD
Using patient reported outcome measures (PROMs) to improve the patient journey

.....and make medication management easier and safer

With permission
Patient Reported Outcomes: Laying Down a Conceptual Framework  ISQUe 2014
Eyal Zimlichman MD, MSc, Partner Healthcare System and Harvard Medical School, Boston, Chief Quality Officer Sheba Medical Center, Israel
Technology assists the patient ED journey
Using technology to help med rec?

For patients

*Practical* - easily movable device
*User-friendly* – quick, easy via touch screen
*Language options* – all patient groups
*Increased efficiency* - information entered before clinic visit/admission
*Feedback* – rapid response to feedback improves satisfaction

For clinicians

“5% time for quality”

*Real-time* – patient data on hand, checklist
*Statistics* – measurement data immediately available
*Automatic reporting* – informative reports for specified recipients
*Feedback* - patient experience to target gaps
Medication reconciliation and beyond

Interventions by clinical pharmacists that actually result in improved outcomes for hospitalised patients:
1. Reconciling medications
2. Interacting with the healthcare team on patient rounds,
3. Interviewing patients,
4. Providing patient discharge counselling
5. Providing patient follow-up

“Best possible” medication history occurs when the patient/carer...
• maintains an up-to-date, complete, accurate medication list
• brings their medication/ lists to each healthcare appointment
• reports medication concerns / side effects

Kaboli et al. *Arch Intern Med.* 2006 May 8;166(9):955-64
How could we track the patient’s medication journey?

• Reconciliation and medication review from the patient’s perspective

• What questions should we ask patients regarding medication management? (specific, quantifiable)
  – Did you speak to a pharmacist on admission
  – How often have you updated your med list (this year)
  – Have you had a chance to ask questions about your medication
  – How often were you educated about medication by staff
Conclusions

1. Medication reconciliation is part of the patients’ health care journey. Patients/carers are getting more involved in medication management
   • Need to give patients the tools
   • Need trained staff to facilitate med rec

2. Advancing technology will improve medication reconciliation
   – **clinicians:** community / hospital information exchange, E-prescribing, decision support
   – **patients:** access to their own medication/medical information, ADR alerts

3. Patient input improves the journey by
   – highlighting gaps
   – measuring improvements
   – providing real time data on patient outcomes
   – participating in outcomes research
   – **facilitating change**