CaSS | Medication Services Queensland
A CLINICAL AND STATEWIDE SERVICE

Queensland Health Medication Action Plan (MAP) 4 years down the track

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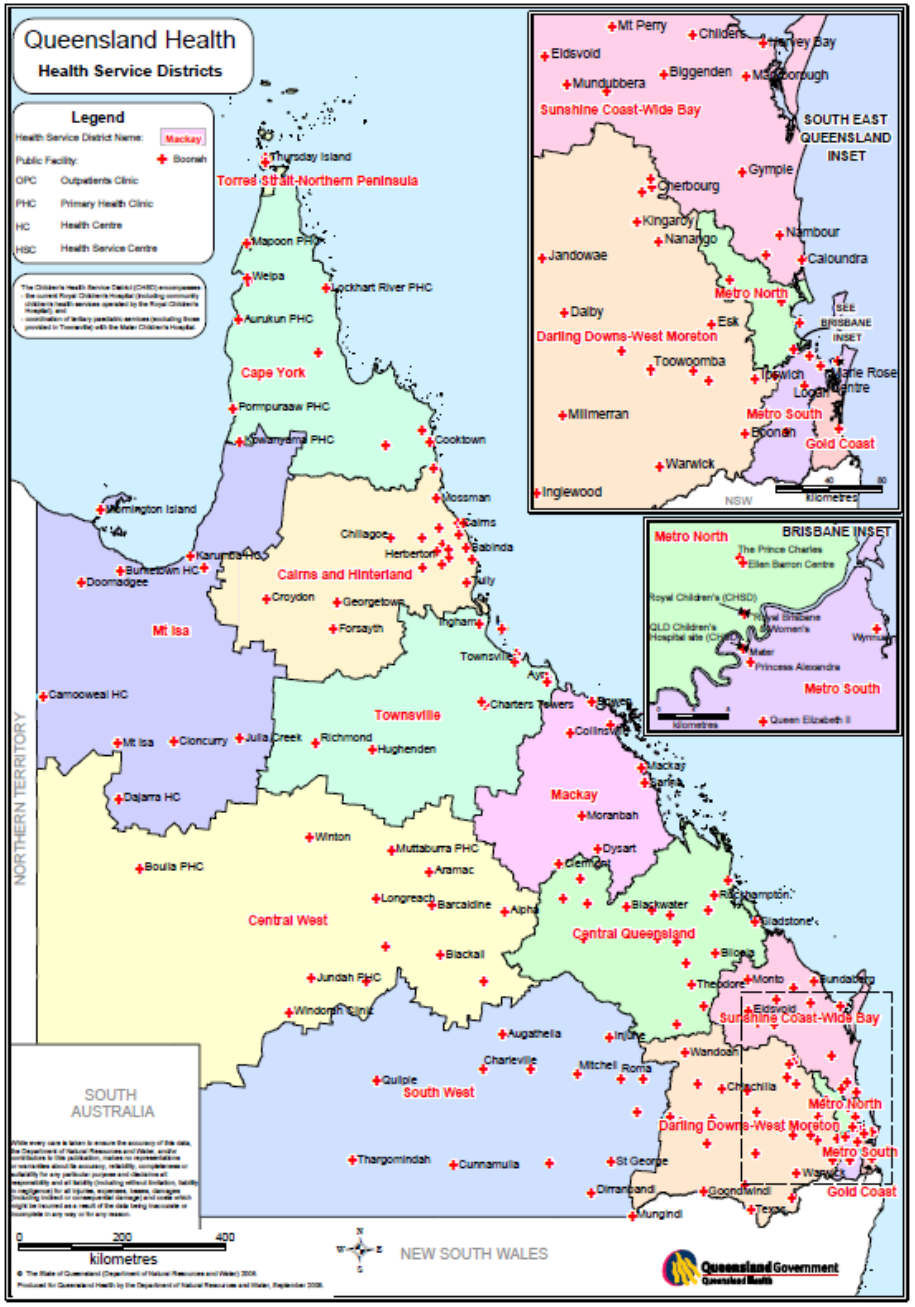
Safe Medication Management Unit

Queensland Government

SMMU Overview

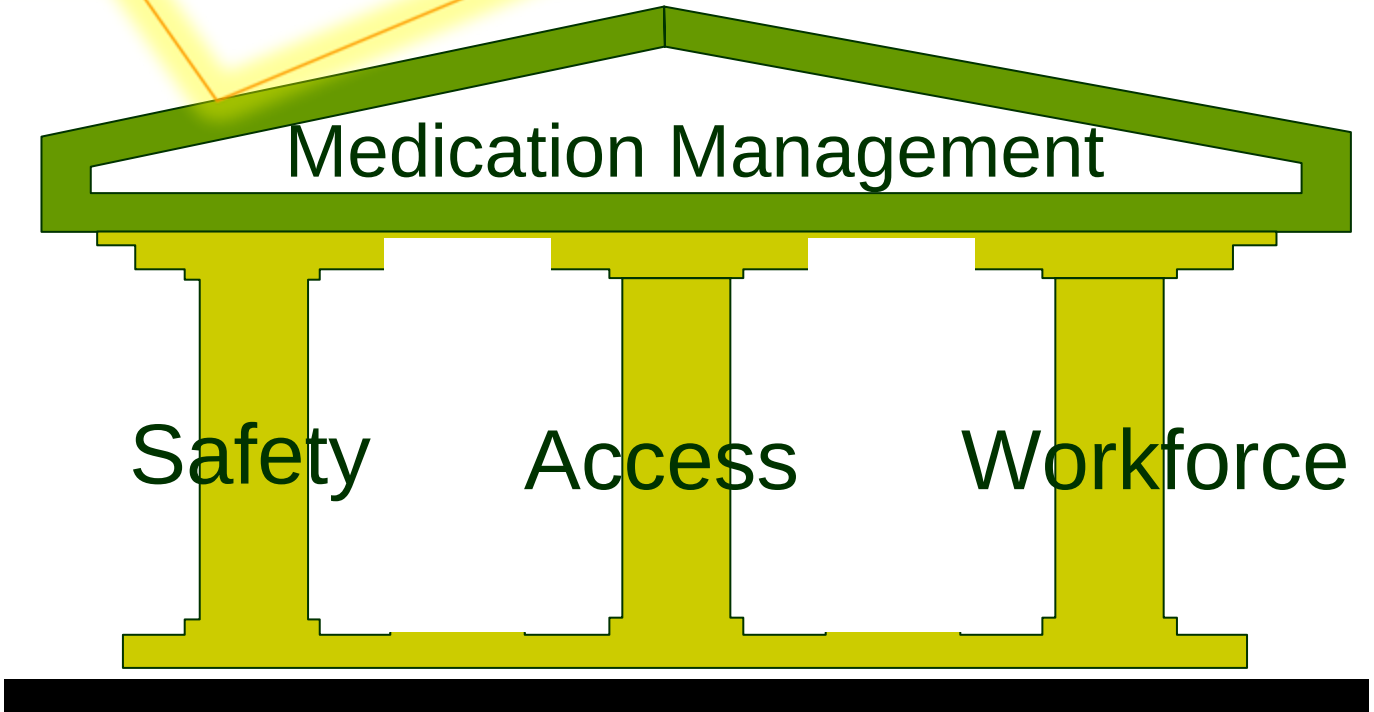
- Background
- Standardisation
- Med chart to MAP
- MAP now
- Implementation
- Enablers



Improving medication management

A **system** of processes and behaviours that determines the way that medications are used or handled by patients, clinicians and organisations

- Involves all aspects of supply and use of medications and management of related service



Medication liaison…

- Inaccuracies at admission carried through to discharge medication orders
- 41- 60% of discharge contain discrepancies

  Coombes JPPR 2000, *Stowasser JPPR 2002*

- 1 regular medication omitted on discharge = 2.3 x incr. risk – Unplanned re-admission

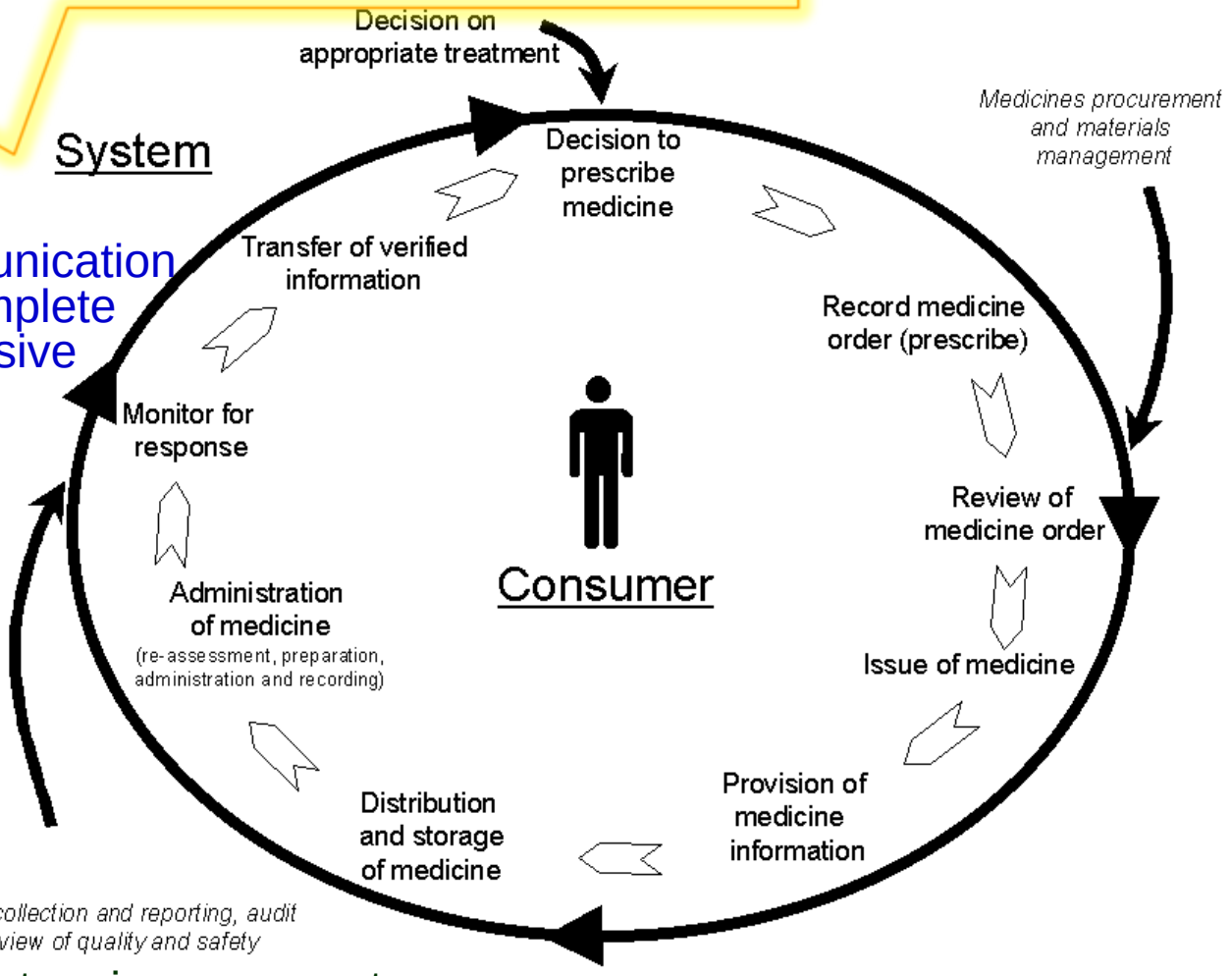
  Stowasser JPPR 2002

Medication liaison… *Stowasser JPPR 2002*

- Points of transfer:
  - Admission – Reconciliation/ liaison
  - Between clinical areas – Reconciliation
  - Discharge - Reconciliation/ liaison
- Who is responsible for getting it right?
  - Everyone has a role
  - Role of the pharmacist?
- Medication Liaison at all points of transfer
  - Pre- admission, ward review, discharge liaison
  - Sig red unplanned re-admissions

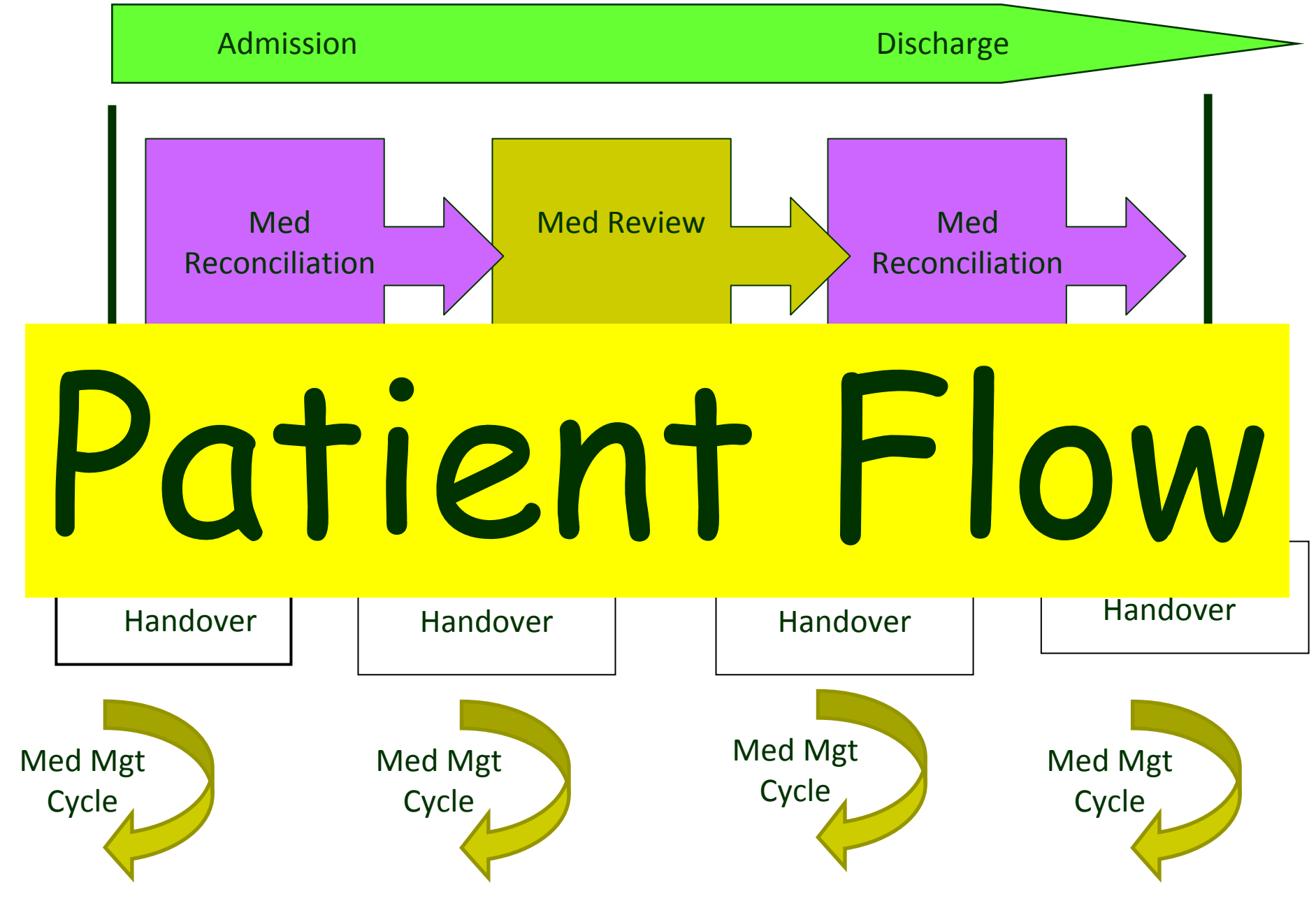
Medication management cycle

- Individuals from many disciplines interact with system
- Complex multistep processes



Effective communication of accurate, complete and comprehensive information

& system improvement


Admission
Discharge
Med Reconciliation
Med Review
Med Reconciliation
Patient Flow
Handover
Handover
Handover
Handover
Med Mgt Cycle
Med Mgt Cycle
Med Mgt Cycle
Med Mgt Cycle

Factors contributing to prescribing errors (Coombes, MJA 2008)

- Complex system with multiple steps
  - Many opportunities for error, median 4 factors:
- Team factors
  - communication, supervision & structure
  - Involves ***clinicians within hospital and community***
- Process and system factors
  - chart design, protocols, availability & accuracy of tests,, lack decision support - ***availability of medication information***

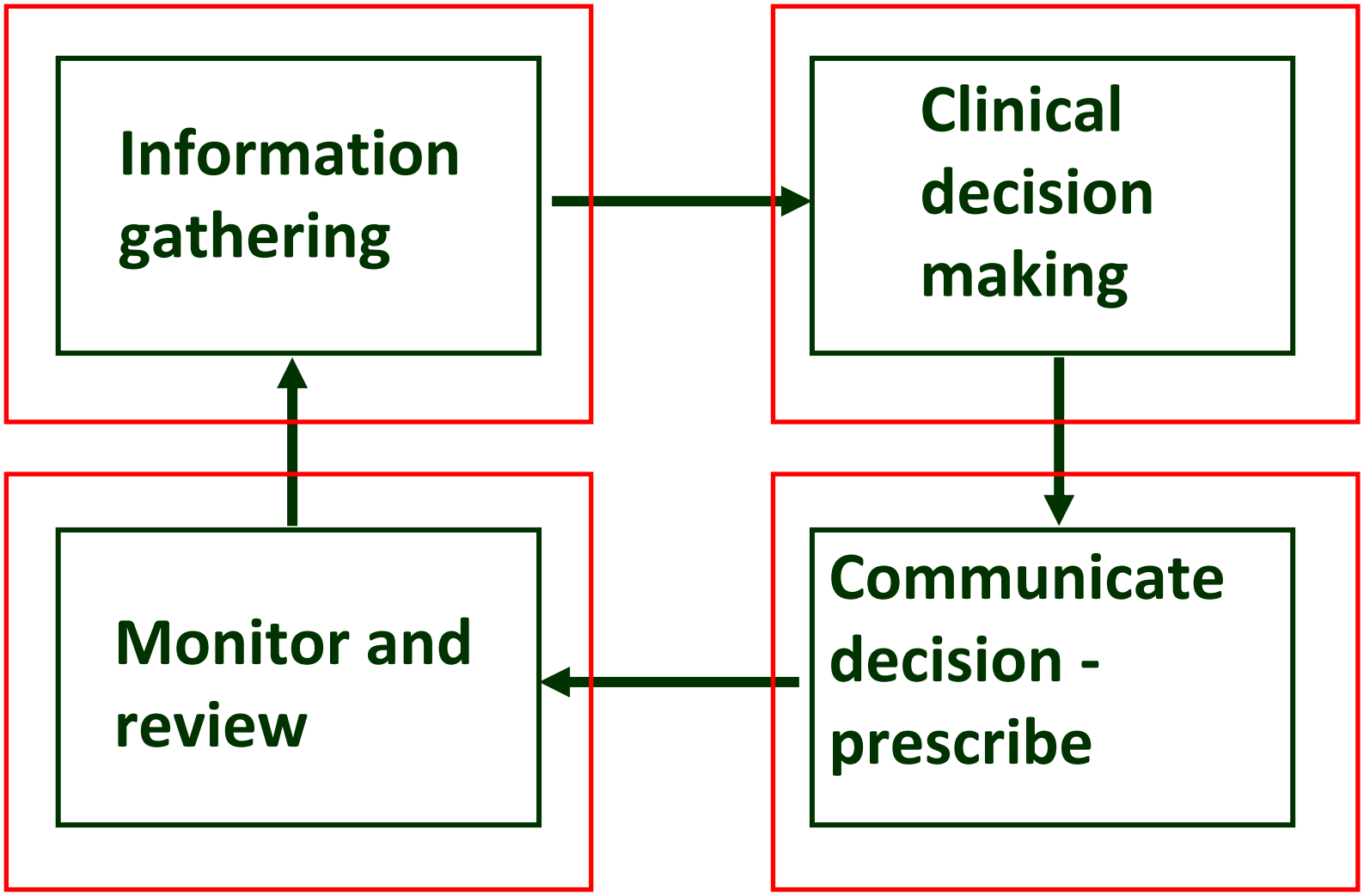
More factors…

- Environment factors
  - e.g. staffing level, skill mix, workload, workflow, admin & managerial support
- Individual practitioner factors
  - Knowledge, skills, motivation & awareness of risks – assumptions
  - Hungry Angry Late Tired (HALT)
- Patient factors
  - e.g. beliefs, condition & communication

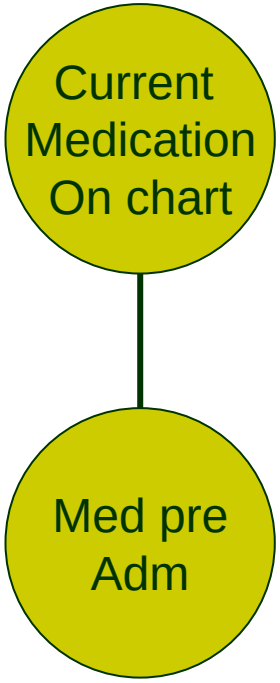
Interns perception of prescribing

- On admission and discharge
  - “A low risk non cognitive task
  - “Just copy it over”
  - “someone else has thought about it”
  - “transcribing vs “re-prescribing”
- Focus groups with registrars
  - Prescribing on admission informed by GP
  - Discharge are always reviewed by pharmacist….

Four components of prescribing (Coombes I, Phd Thesis, 2008)



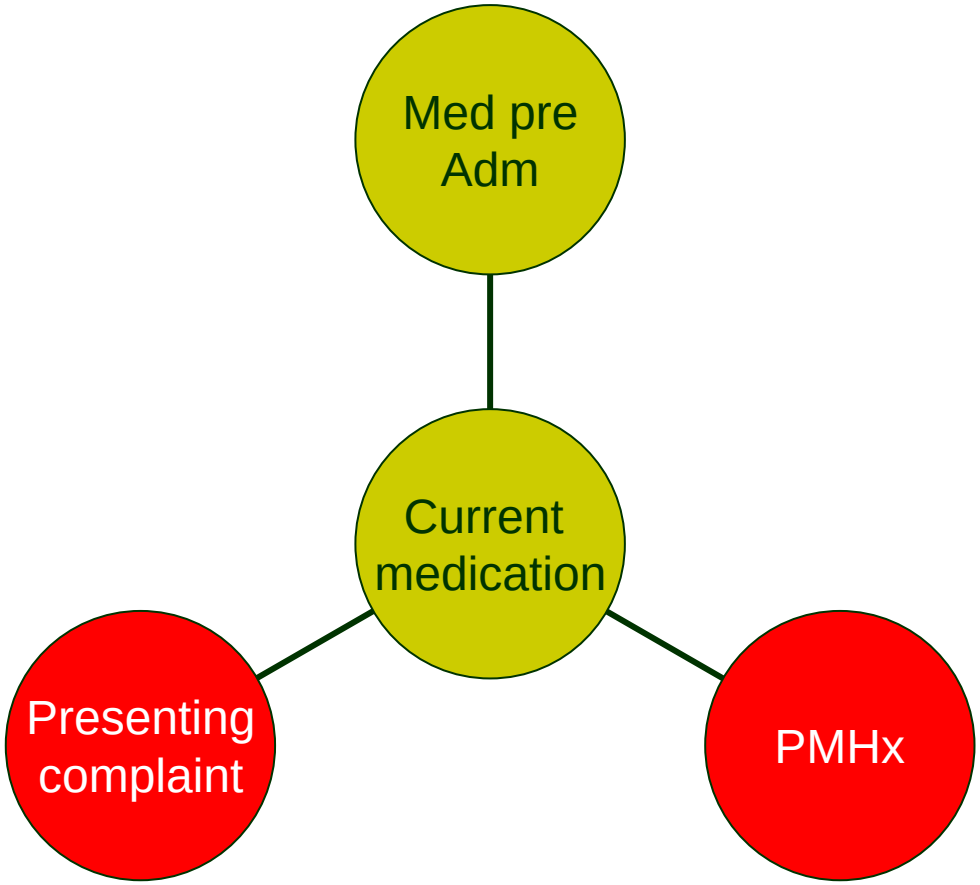
“Matching Up” medicines to medication chart and……



Appropriateness of medications continued, ceased or changed

- Medication Continuum (Zermansky)
- De-prescribing (Woodwood)
- PRN (Rowett)
  - ***P***erceive if there is still a need
  - ***R***eview the patient and report to prescriber
  - ***N***ote the effect of ceasing vs continuing

Mapping medicines to medication chart and……



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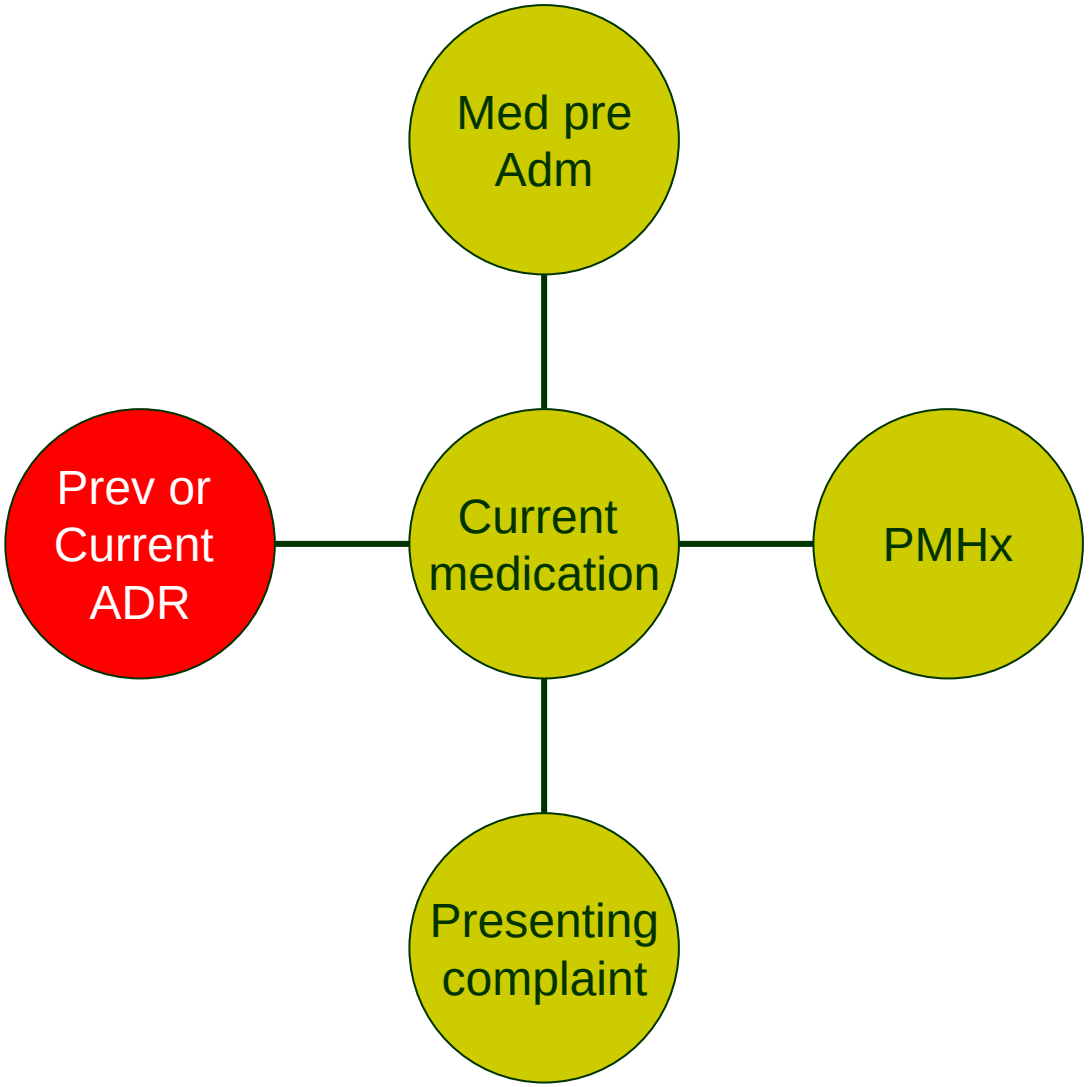
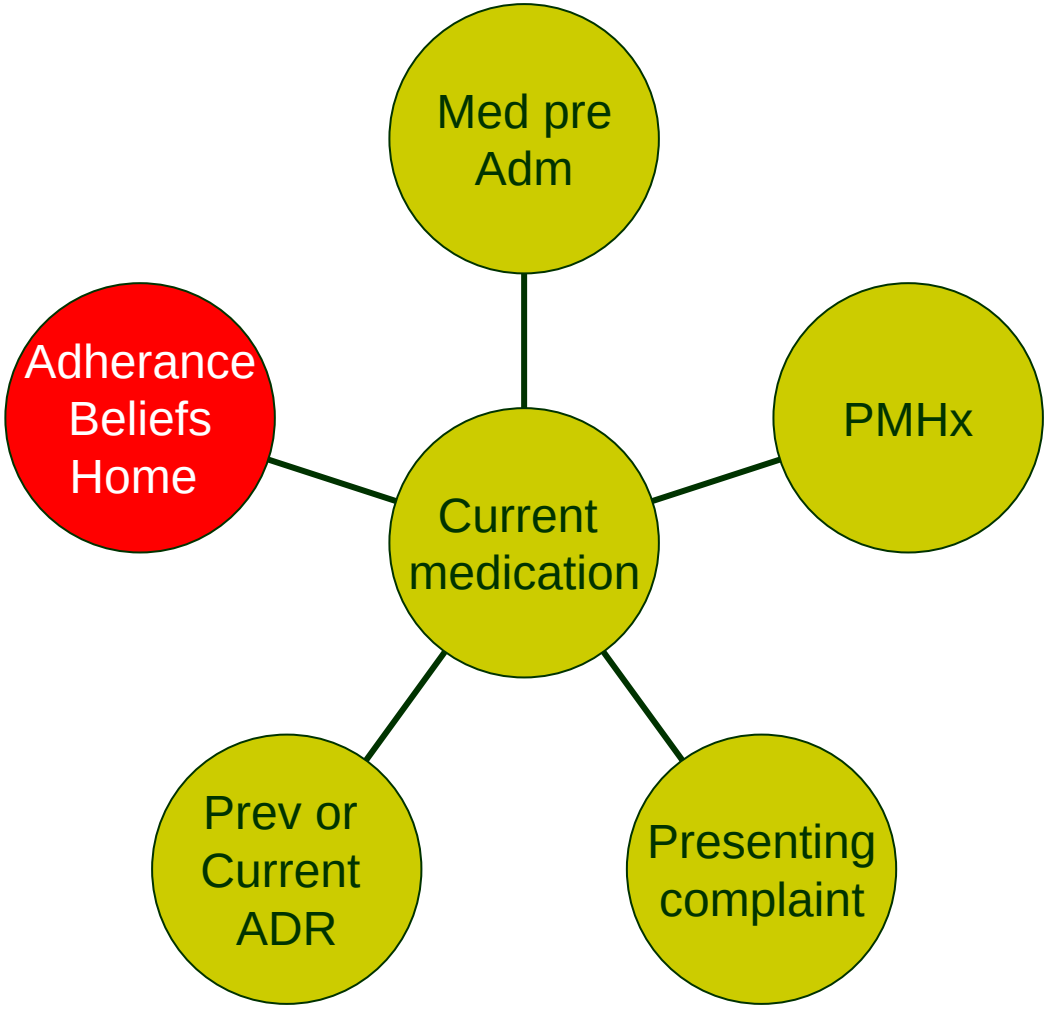


Mapping medicines to medication chart and……



Need for medication history: from medication chart to MAP 1995->

- Medication history key feature of NIMC
- Information required throughout stay
- 1 vs 9 sources of medication history
- Accessible to all members of the team
- Risk if medication chart has a 10 day life
- Issues on sticky notes
- Lack of adherence assessment
- Discharge planning checklists

Need for Clinician Development

- Tools are only as good as the people who use them:
  - Medical student training
    - Safe Medication Practice Tutorial
    - NPS modules
  - Pharmacy Intern training (Intern Level Framework)
  - Pharmacy General training
    - General Level Framework
    - Medicine Related Consultation Framework (MRCF)
  - Nursing induction and training

Where are we now?

- MAP piloted in 2006
- Launched July 2007
- Telephone Survey (June 2009)
  - 116 acute care facilities
    - 46 with pharmacists
      - 20 sole pharmacists
  - DOP, DON or delegate

Results of survey

- 36 (31%) of 116 sites use the form
  - 24 (66%) on 40% or more of patients
    - 9 (25%) on 80% to 100%
  - 25 (69%) sites with pharmacists
    - 2 sites by RNs also
  - 11 (31%) sites with no pharmacists
    - 1 by medical officer
    - 8 by nursing staff
    - 2 by visiting pharmacist or via Telepharmacy

Results

- 47 (41%) aware but not using it
  - 12 (25%) planning to implement in the near future (8 pharmacy, 4 nurse)
- 33 (28%) were not aware of the form
  - 16 (48%) would consider using it
  - Others required more information

Early Learning's

- Large Sites
  - Multidisciplinary?
    - Difficult to engage Medical Officers
    - Nurses role?
    - Ownership
    - Pharmacists already undertaking role
- Rural Sites
  - Nurses already undertaking some parts of medication management

Barriers

- Another form!!
- Takes up too much time
- Don’t have the resources
- Don’t see the need
- Medical Officer participation
- Will not remain with the medication chart
- Ownership

Statewide Implementation

- Staged implementation targeting sites with pharmacists
- Official launch of MAP and Implementation Kit at the 10th Medication Safety Workshop July 2007
- MSO support provided on request
- Promotion – workshops, factsheets, educational visits (80 rural sites)

Obtain Clinician & Executive Support

- Clinician
  - Workshops
  - Education sessions
  - APAC/PBS
  - Participation in feedback
- Executive
  - Drug and Therapeutics Committee
  - QH Medication Safety Implementation Group

At Sites

- Choose small area – medical ward/s
- Support by Medication Safety Officer
- Local driver at each site
- Pre and post audits at each site
- Audit report feedback to DTC
- DTC approved further implementation

Implementation Kit

- Implementation documents
- Procedures and work flow charts
- Marketing materials
- Educational materials
- Audit tools and user guides
- Literature review

Rural Factors

- No onsite pharmacists
- Little or no pharmacy support
- Limited training in medication management processes
- Difficulty accessing training
- High turnover of staff

Rural Sites

- Medication History Training and Competency Assessment Module
  - Presentation incl. videos
  - Role play scenarios
- Discharge Reconciliation and Discharge Medication Record Training and Competency Assessment Module
  - Presentation
  - Role play scenarios

Assessment tool for modules

Safe Medication Practice Unit

Practice Scenario No.1 - Assessment Tool

Candidate Name:.....

Assessor Name:.....

	Yes	No
1. Provides clear introduction to consultation	☐	☐
2. Agrees on agenda with patient	☐	☐
3. Asks about drug allergies including drug name, reaction and date	☐	☐
4. Elicits following information about prescribed medication:	☐	☐
☐ *Perindopril (Coversyl) 2.5mg Tab x 1 mane*		
☐ *Warfarin (Marevan) 3mg Tab x 1 evening*		
☐ *Digoxin (Lanoxin) 62.5mcg Tab x 1 mane*		
☐ *Metformin (Diabex) 1000mg Tab x 1 bd*		
☐ Isosorbide Mononitrate (*Imdur) 120mg Tab x 1 mane*		
☐ *Glyceryl Trinitrate 600mcg Tab x 1 SL prn*		
5. Asks about indication for use	☐	☐
6. Asks about length of treatment of prescribed medication	☐	☐
7. Asks about non-prescribed medication	☐	☐
☐ *Paracetamol 500mg x 2 prn*		
☐ *Hydrocortisone cream prn*		
8. Asks about complementary medication	☐	☐
☐ *St John's Wort dose x1 for a couple of days*		
9. Uses appropriate sources for information i.e. patient, medicines and GP letter	☐	☐
10. Assesses and questions the patient on non-compliance	☐	☐
11. Identifies the need to confirm the dose of metformin with the GP and prescribing hospital doctor	☐	☐
12. Allows patient to ask questions	☐	☐
13. Uses appropriate questioning to obtain relevant information from the patient	☐	☐
14. Reconciles the admission history with the current medication chart	☐	☐

Essential criteria are 3, 4, 7& 11. Candidates must also achieve minimum 10/14 criteria.

OVERALL COMPETENT	Yes	No
	☐	☐

Comments:

Tool specific for each scenario

- Predetermined criteria
- Lists specific medications

Successful completion

- Essential criteria and minimum criteria must be achieved

Drivers and Enablers

- Start small and spread
- Nominate a local driver
- Generate local evidence of a problem
- Provide information sessions to all
- Fit in with current work flow
- Inform Health Information Managers/Medical Records
- Incorporate into orientation/training

MSQ Initiatives also Drivers

- General Level Framework for Pharmacists
- Pharmacist training workshops
- Telepharmacy
  - Medication History Training and Competency Module
- eLMS
  - Discharge Reconciliation and DMR Training and Competency Module
- Medication Risk Awareness Package for Nurses

e-version

- Enterprise-wide Liaison Medication System (eLMS)
  - Medications on admission
  - Issues and actions
  - Medication risk identification
  - HMR
- Limitations
  - Printing A4 single sheets
  - Version control of copies
  - Access to PC / wireless LAN

Yet to be achieved

- Embedding medication reconciliation processes into work practices for **every** patient on admission and discharge
- Spreading to other points of transfer in care e.g. ICU to ward, metropolitan to rural hospital