

Post-Hospital Discharge: **Medication Discrepancies and Drug Therapy Problems in Primary Care**

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Nature of the Problem

- **High risk of medication discrepancies after hospital discharge**
 - at discharge **41.3%** have at least 1 actual discrepancy (Wong) other studies found **40 - 56%** (Vira, Nickerson).
 - post-discharge medication discrepancies not studied
- **If not intercepted discrepancies may lead to medication errors, drug therapy problems (DTP) and adverse drug events**
 - **96.2%** have at least 1 DTP requiring monitoring after discharge (Nickerson)
 - **23%** have an adverse event within **30 days post-discharge**, of these **72%** are drug related (Forster)

Nickerson A, et al. Healthcare Q 2005; 8 (Spec No): 65-72.

Wong J, et al. Ann Pharmcother 2008; 42.

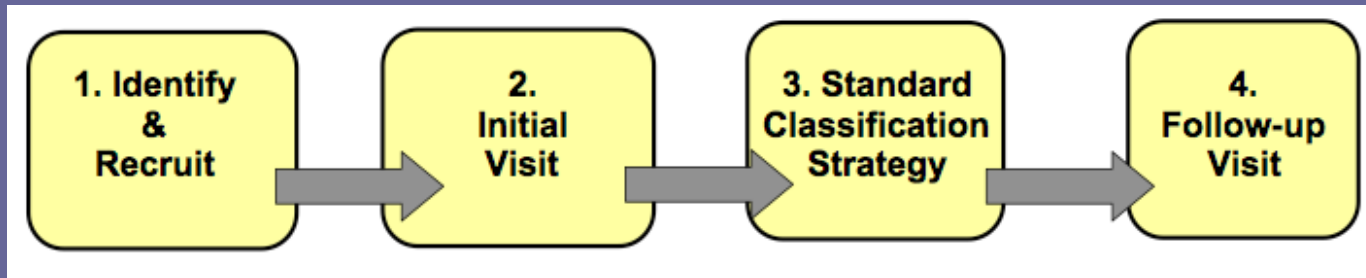
Vira T, et al. Qual Saf Health Care 2006; 15: 122-6.

Forster A, et al. CMAJ 2004 Feb 3;170(3):345-349.

STUDY OVERVIEW

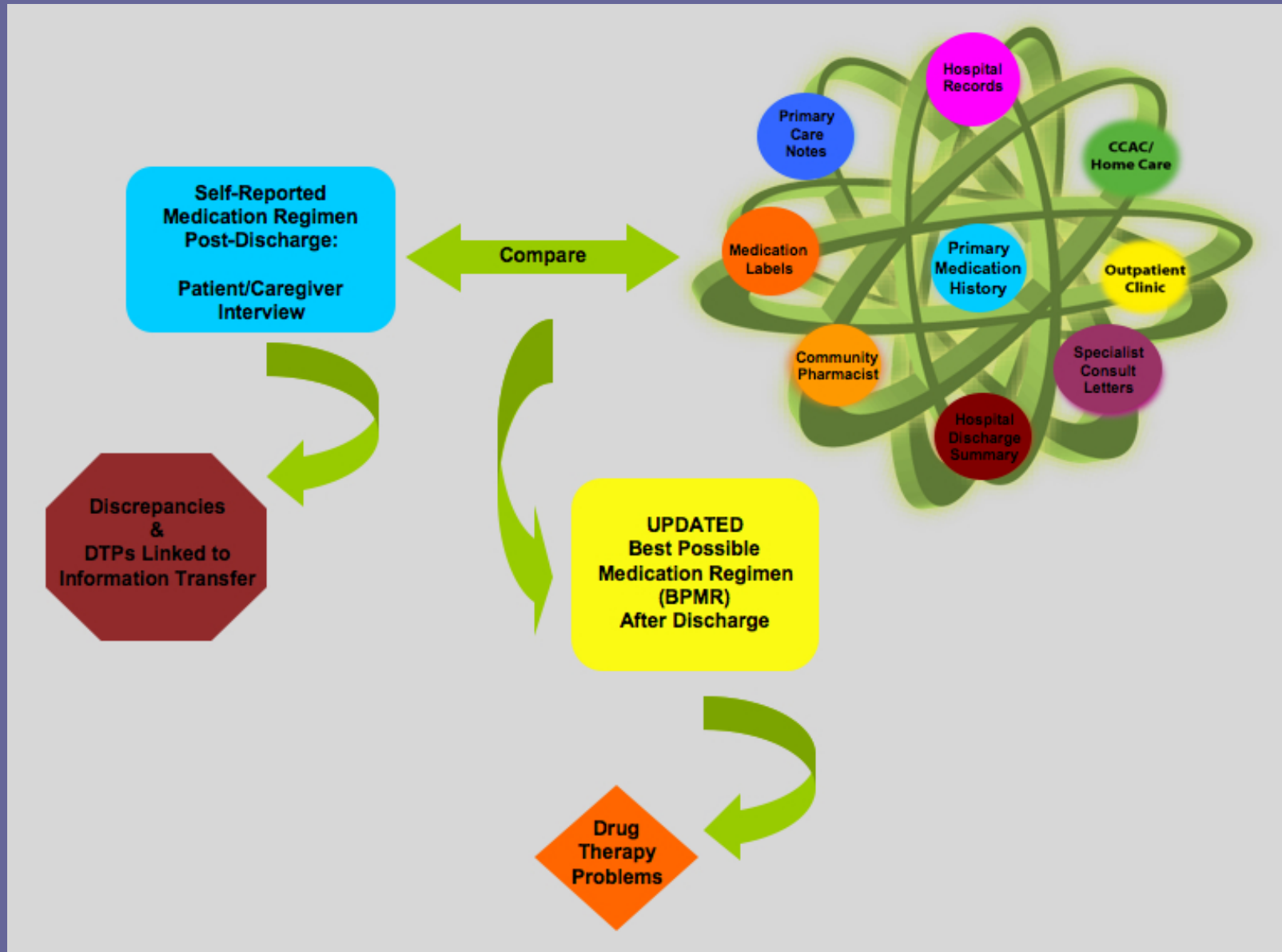
1° Endpoints	# Pt \geq 1 post-discharge discrepancy requiring clarification # Pt \geq 1 DTP linked to medication information transfer
2° Endpoints	Discrepancy types & relation to system vs patient factors DTP types and link to medication information transfer
Patient Sample	30 Patients after hospital discharge
Inclusion Criteria	<ul style="list-style-type: none">❖ FHT patient hospitalized for > 48 hours❖ Discharged home❖ Visit within 14 days post-discharge❖ informed consent for use of data

METHOD



1. **Patient Identification & Recruitment**
2. **Initial Visit:** RPh comprehensive med assessment identified PdMD and DTPs
3. **Standardized Classification**
 - **Categorized discrepancies** requiring clarification by type (drug, dose, etc.) and system vs patient related.
 - **Categorized DTPs** (7 categories) evaluated link to medication info transfer.
4. **Follow-Up:** determined status of discrepancies/DTPs within 45 days post-discharge

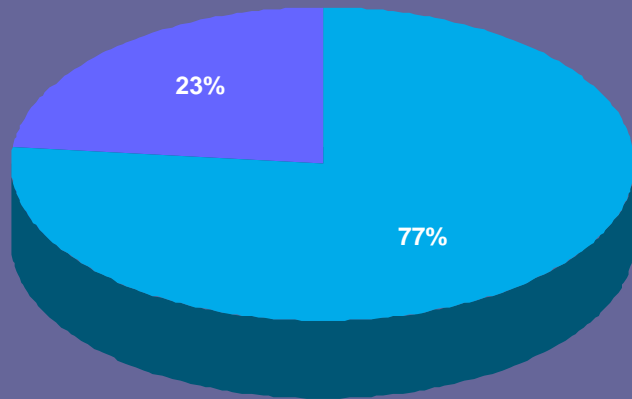
Med-Rec in Community Practice



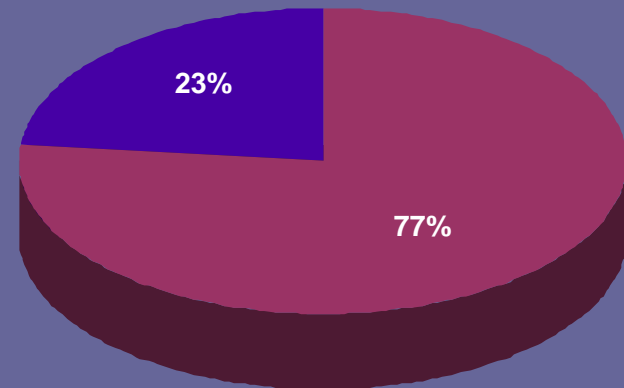
Results

❖ **23 out of 30** patients (77%) had at least 1 discrepancy required clarification

❖ **23 out of 30** patients (77%) had at least 1 DTP linked to med information transfer



■ At least 1 Discrep ■ No Discrep

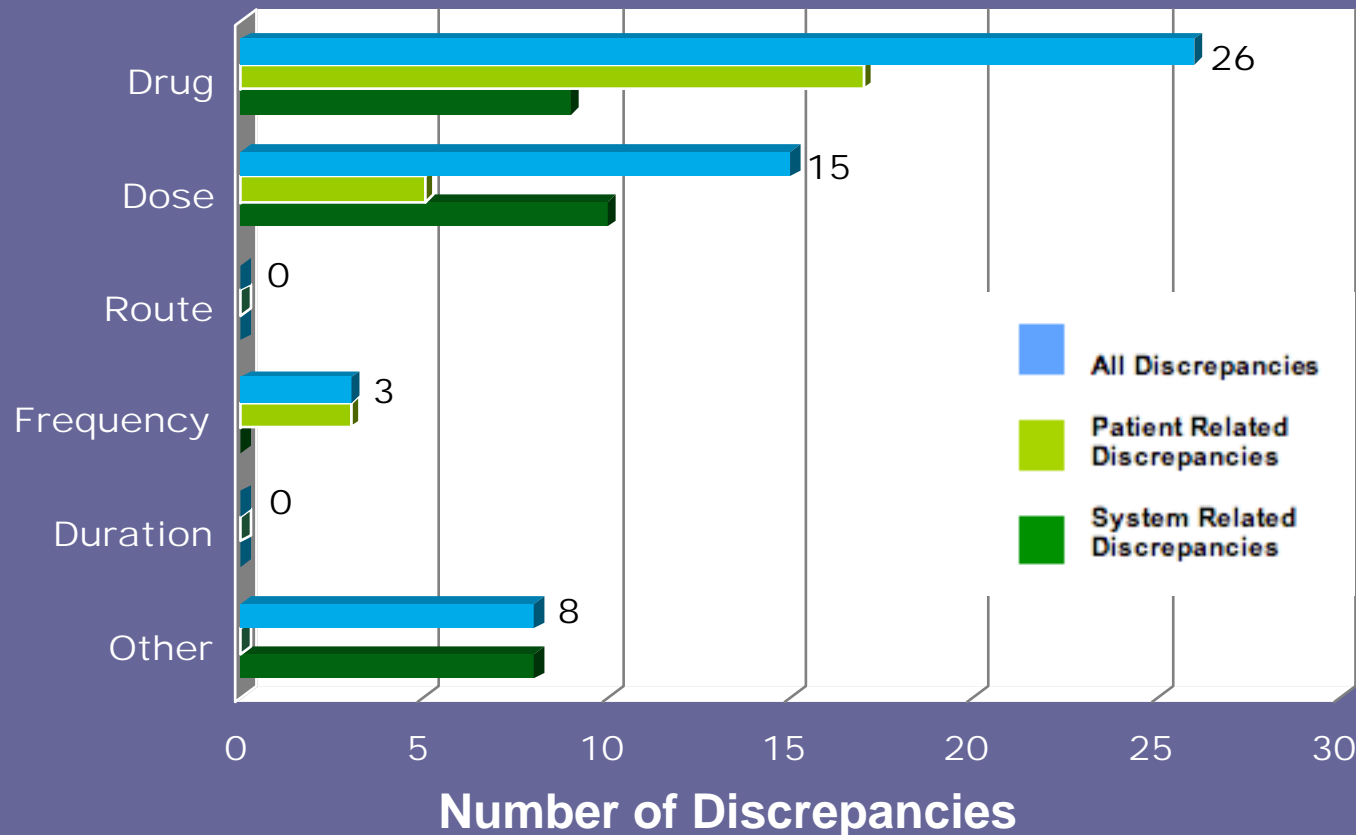
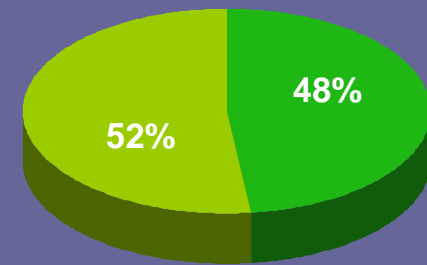


■ At least 1 DTP linked ■ No DTP linked

	No linked DTP	At least 1 linked DTP
No Discrep req. clarification	5 (16%)	2 (7%)
At least 1 Discrep req. clarification	2 (7%)	21 (70%)

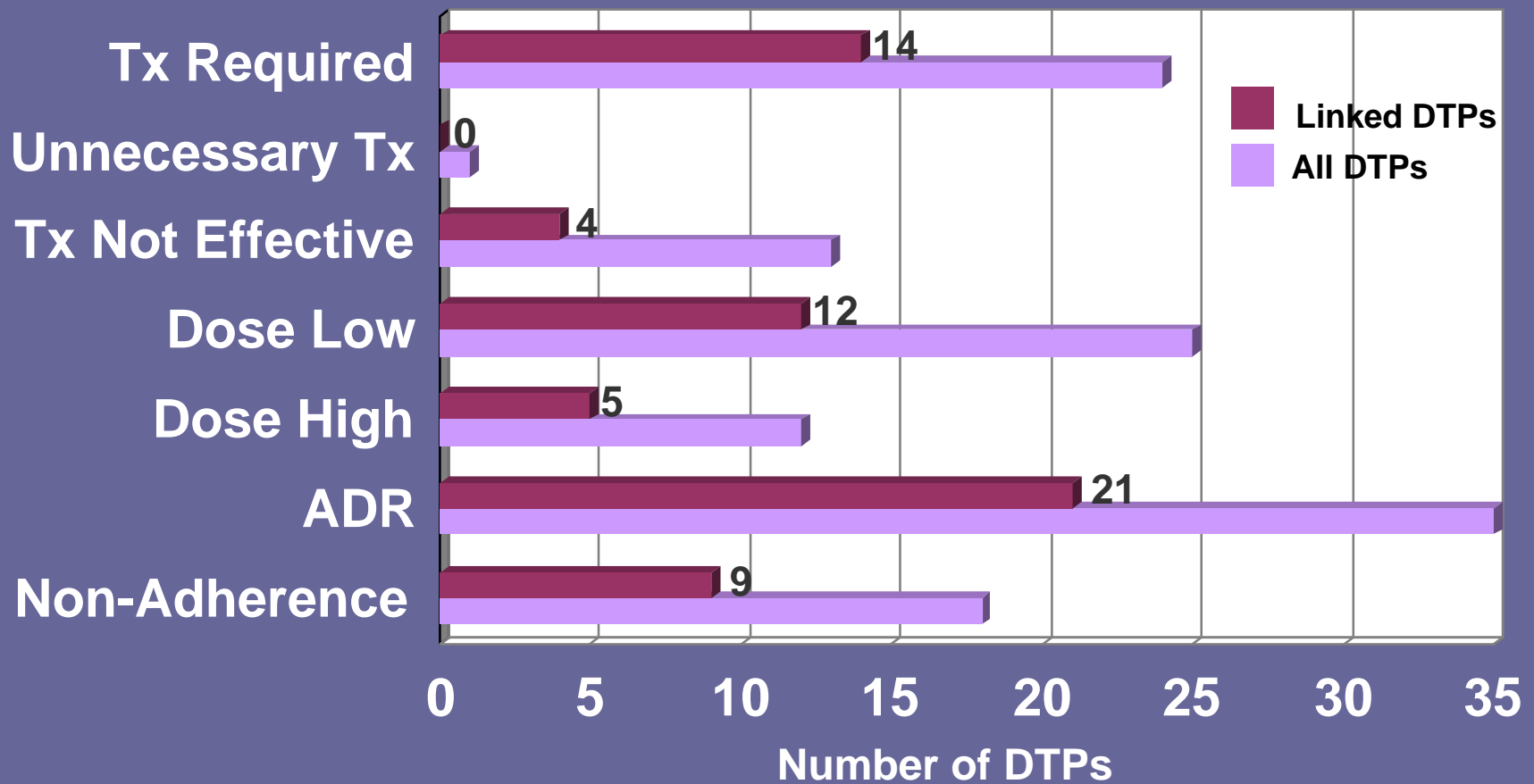
Distribution of Discrepancies

- ❖ Of the 52 discrepancies requiring clarification;
25 (48%) were **system** associated
27 (52%) were **patient** associated



Characterization of DTPs

Of 122 DTPs 50% were linked to medication information transfer



Study Conclusions

- **Ultimately seamless care medication management must incorporate medication reconciliation and pharmaceutical care to prevent harm and fully optimize the patient's medication regimen.**
- **Post-discharge medication discrepancies**
 - appeared frequently at initial visit
 - equally influenced by system and patient factors
- **Post-discharge drug therapy problems**
 - frequently linked to medication information transfer gap
- **Most patients that have a medication discrepancy after discharge also have a DTP linked to medication information transfer.**



FHT Practice Enhancement

- 1) **Increased Awareness & Advocacy for Post-Discharge Follow-up**
- 2) **Team Work!**
 - NEW Automatic Pharmacy Referral for any patient discharged to home
 - Need buy in from FHT, especially receptionists to implement automatic referral
- 3) **Standardized Medication Management Process**
 - Post-discharge pharmacist visit (~30 minutes)
 - MedRec to clarify post-discharge discrepancies
 - Pharmacy Care Plan for issues or DTPs requiring ongoing monitoring, some may be linked to information transfer
 - Back to back visits with pharmacist & physician helps implement pharmacy recommendations

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