# Improving Patient Access to Medication Information

Michael Wolf, PhD Northwestern University Ruth Parker, MD
Emory University

#### FRAMING THE PROBLEM

- Beyond content, available evidence suggests
  - pharmacies do not regularly distribute Med Guides
  - patients do not attend to Med Guides, leaflets, CMI

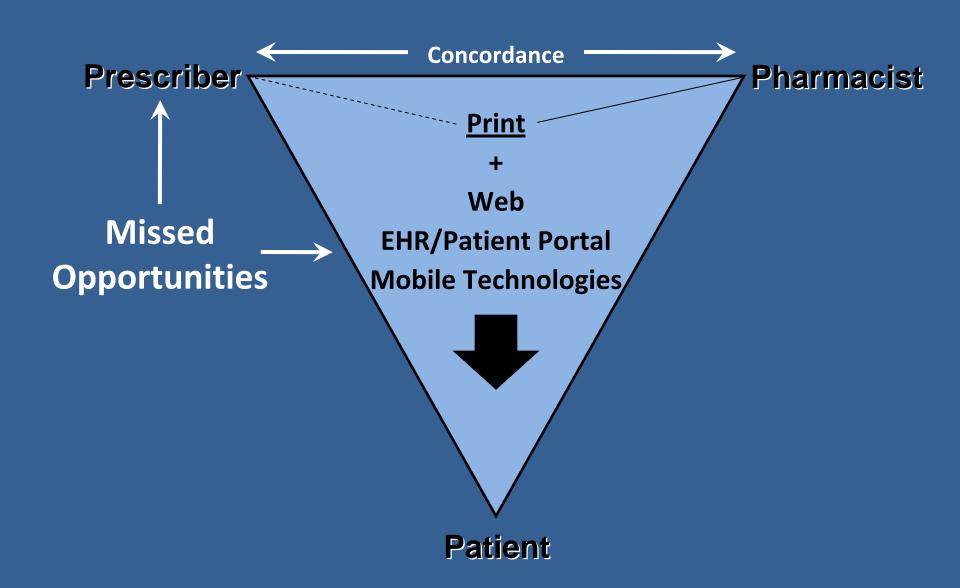
#### FRAMING THE PROBLEM

- Beyond content, available evidence suggests
  - pharmacies do not regularly distribute Med Guides
  - patients do not attend to Med Guides, leaflets, CMI
- Adverse outcome = uninformed patients

#### FRAMING THE PROBLEM

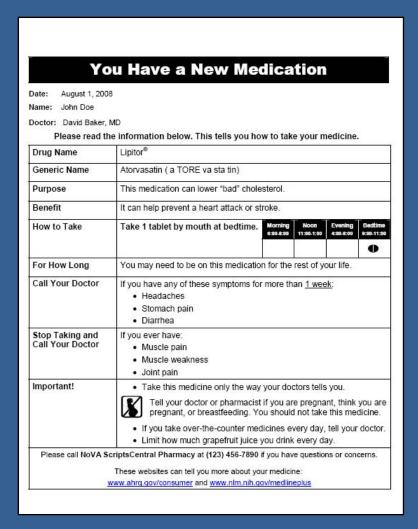
- Beyond content, available evidence suggests
  - pharmacies do not regularly distribute Med Guides
  - patients do not attend to Med Guides, leaflets, CMI
- Adverse outcome = uninformed patients
- Root causes include
  - current CMI- not valued (?s of accuracy, usefulness)
  - linkages with pharmacy software
  - possibly wrong point of contact?

### DISTRIBUTION OPPORTUNITIES



### AHRQ Trial: PMI at PRESCRIBING

- 500 most prescribed medicines redesigned
- Field test at 1 GIM practice (N=600)
- 1 page, plain language PMI linked to physician 'sigs' in Epic EHR
- Automatically printed when ordered,
- 2 pilot tests 100% distribution success



Outcomes: receipt, understanding, satisfaction, preference, adherence

## POTENTIAL CONSTRAINTS OF WEB, MOBILE HEALTH IT

- Access to IT (patient AND provider)
- Patient skills required to interface with IT
- Adaptability of technology to meet user needs
- Limitations of clinical and/or patient environment
- Readiness to accept IT/cultural transformation
- Skills required of relevant staff to interface w/IT\*

<sup>\*</sup>Bailey, et al. Med Care 2009

## POTENTIAL CONSTRAINTS OF WEB, MOBILE HEALTH

- Access to IT (patient AND provider)
- Patient skills required to interface with IT
- Adaptability of technology to meet user needs
- Limitations of clinical and/or patient environment
- Readiness to accept \$\mathbb{T}\/cultural transformation
- Skills required of relevant staff to interface w/IT\*
  - \*Balley et al. Med Care 2009

## http://www....

- 131 Adults w/ limited literacy self-reported less internet access and use (Jensen, et al J Aging Health May 21 2010)
- Anxiety reported with adoption of technologies (N=1204; CREATE Study; Czaja et al Psych Aging 2006)
- Most older adults struggle
   with basic web navigation and
   decision making tasks
   (Czaja, Sharit, Nair, JAMA 2008)

## USER TESTING NEEDED FOR ALL MODALITIES



#### **Front Line Obstacles**

- Lack of Meaningful Standards/Guidance for Content/Format
- Incentive(s) for Industry?
- 3. Multiple Documents & Redundancy
- 4. Lack of Patient Orientation
- 5. No Linkage in Software = Human Factors Problem

<sup>\*</sup>Shrank, et al. Arch Intern Med 2008

## Northwestern-Emory Study

- Funder: Abbott Labs [01/10 7/12]
- Objective: (a) To examine the prevalence and nature of misunderstanding current Med Guides

   (b) to develop and test the effectiveness of an enhanced prototype's ability to improve functional understanding
- 3 Studies: 1. Prevalence of Problem completed
  - 2. Re-design of Med Guides in process
  - 3. Clinical Trial June 2011

## Northwestern-Emory Study

#### **STUDY 1 Findings**

- Sample: 434 (2 sites in Chicago)
- Methods: Face-to-face, structured interviews
- Outcomes: Comprehension (retrieval, inference) of 3 Med
   Guides Aranesp, Morphine Sulfate, Ritalin
- Findings: 35% had heard of a Med Guide

Mean Knowledge Scores for Each Guide (n=434)		
		<b>Mean Points Received</b>
Medication	<b>Points Possible</b>	(% correct)
Pill Form	33	17 (51.5)
Oral Solution	32	20 (62.5)
Injectable	34	17 (50.0)
All Guides Combined	99	54 (54.5)

## Northwestern-Emory Study

#### STUDY 2: Development of Enhanced Prototype

- Methods: Graphic Design, Eye Tracking
- Outcome: attentiveness/review of content, sequencing

#### STUDY 3: Controlled Trial of Enhanced MedGuide

- Methods: Cross-Sectional, Randomized Evaluation
- Outcome: functional understanding, recall

## Guiding Principles from Patient-Centered View

- Current redundancy, inaccuracy, lack of standardization, and unregulated use
- PMI purpose --to inform and educate NOT advertise.
   Transparency essential.
- PMI must NOT increase patient's cost of Rx
- Single, uniform document that is standardized and routinely obtained in seamless process needed

### What Constitutes the Label?

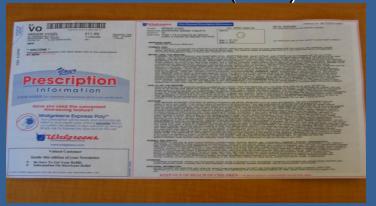
1) Container Label



3) Package Insert



2) Consumer Medication Information (CMI)



4) Medication Guide



## "Ideal" pilots...

- Specified outcomes:
  - -single document delivered with all Rx meds
  - -no other CMI delivered with new PMI
  - -costs identified (development, revision)
  - -define patient preference for mode of delivery
  - -define process for seamless use of PMI
- Biggest challenge: content of the PMI and standardization, need for regulation