Fight Tomorrow's Battle, Not Yesterday's: How Technology Can Advance Guideline Care Delivery in the Pharmacy

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One Little Story

Who is this guy?

- Three jobs
    - Critical access hospital
    - Community pharmacy
    - Professional Organization
- Development and sales of clinical programs to payers for community pharmacies in North Dakota
- Work with state Medicaid plans and state employee health plans

Goals

How to capitalize on guideline care in pharmacy

1. Why guidelines matter to pharmacies
2. How technology is used to makes guidelines-based care work in a pharmacy
3. Our efforts to bring guidelines to community pharmacy
4. Integration with other software--happening now or is needed
5. What pharmacies want and need

Why Guidelines Matter to Pharmacies

Why Guidelines Matter to Pharmacies

- Dispensing is under extreme pressure
- Rise of value-based payment models expected to accelerate
  - Pharmacy's role is a bit unclear (as far as what they'll get paid for)
- Change to optimization and monitoring and **outcomes** responsibility for meds

Current State

- Pharmacies currently get paid to dispense and counsel on a drug; they check to see if a drug is safe largely based upon interaction checkers.

- They do NOT necessarily know or look for if the patient is getting a high enough dose of cholesterol medication, or the proper strength of asthma medication.

Why Guidelines Matter to Pharmacies

- When we talk to payers, removing variability in care is of great interest
- Inappropriate prescribing is everywhere!
- Federal government knows guideline care is not happening—they tell you with their grants

How Poor is the Care?

A recent NIH grant described how dismal guideline uptake can be in primary care:

"Despite the research supporting the use of evidence-based practice recommendations, clinical practice guidelines are rarely universally implemented in routine clinical care, resulting in gaps between recommendations and actual clinical practice.

For example, despite the potential deaths prevented with implementation of cardiovascular disease guidelines, only 50-60% of patients with cardiovascular disease risk factors receive recommended treatment.

Only 50% of primary care physicians are aware that there are chronic obstructive pulmonary disease (COPD) guidelines; even among those who are aware of the clinical practice guidelines, only 25% actually use them."

(NIH PAR 18-133 Background)

Not Good Enough!

- Just imagine that—
    - Over 15 million Americans with COPD
    - #4 cause of death in America
    - At best, 12.5% of COPD patients treated properly

https://www.cdc.gov/nchs/fastats/copd.htm

How Tech Can Make Guidelines-based Care Work

How Tech Can Make Guidelines-based Care Work

- There are people in this room who are doing some of this work but a unified solution with large adoption hasn’t arrived
- In one sense, we’re discussing Clinical Decision Support (CDS) today
- CDS is a broad term more often used in electronic medical records (EMR) with prescribers

How Tech Can Make Guidelines-based Care Work

- What CPOE CDS does
  - “Suggest next steps for treatments, alert providers to information they may not have seen, or catch potential problems, such as dangerous interactions.
  - Challenges creating intuitive, user-friendly, and effective protocols for decision-making pathways.
  - More often triggered by drug interactions, duplicate therapy, age restrictions, or lab data-based dosing issues.”

https://healthitanalytics.com/features/understanding-the-basics-of-clinical-decision-support-systems

Our Efforts

Our Efforts

- Hypertension
- Diabetes
  - Adult and pediatric Type 1
  - Adult and pediatric Type 2
  - Gestational
- Asthma
- COPD
- Chronic pain
- Transitions of Care

Our Efforts

- Re-structured our programs from the common CMR to a structured, guideline intense program
- Results have confirmed that there is an immense opportunity for optimizing care through guidelines
- Single sign on
  - PDMP
  - IIS

Our Efforts

- Systems currently work to **prevent errors** but **not optimize care**
- In the example, no error has been committed by the pharmacy but it has not optimized
- Pharmacies rarely have the tools to optimize

Example—Asthma, Diabetes, Hypertension, CHF

- **CURRENT THERAPY**
  - Albuterol 2 puffs every 4 hours as needed
  - Potassium 20mEq twice daily
  - Lisinopril 40mg daily
  - Furosemide 40mg twice daily
  - Metformin 1000mg twice daily
  - Lantus insulin 45 units at bedtime
  - Flovent 50mcg twice daily
  - Lipitor 10mg daily

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OPTIMIZED THERAPY

- Albuterol 2 puffs every 4 hours as needed
- Potassium 20mEq twice daily
- Lisinopril 40mg daily
- Furosemide 40mg twice daily
- Metformin 1000mg twice daily
- Lantus insulin 45 units at bedtime
- Flovent 100mcg twice daily
- Lipitor 40mg daily
- Aspirin 81mg daily
- Brovana 15mcg twice daily
- Metoprolol ER 50mg daily

That’s Reality

- This is not uncommon
- This is the missing opportunity in pharmacy
- This is what technology can do

Integration With Other Software

Happening Now or is Needed

Integration With Other Software

- EQuIPP
  - Patient outliers is a good start
  - Not optimizing the total treatment plan to guidelines

- STAR ratings
  - Measuring statin dispensing on diabetes patients is a good start
  - Other measures not guidelines based

Integration With Other Software

- Some recent M&A had interesting programs
  - Pharmacogenomics work
  - Adverse drug event prediction work
  - Patient education and chronic disease pathways work--an excellent start
- Some payment for true outcomes work (hypertension/glucose)
- eCare plan

Integration With Other Software

- Interesting cases of PMS having eMAR integration with a partner LTC facility

- State electronic medical records vendors
  - PDMP (integrated opioid risk assessment)
  - IIS (vaccine predictor)
  - This is supportive data but isn’t driving gains in guideline migration

What Pharmacies Want and Need

What Pharmacies Want and Need

- Pharmacies need integrated guideline care in their PMS
- Intuitive documentation of interventions in PMS
- Ultimately need access to EMR clinical data
- 2-way messaging is fragmented or non-existent
  - Most often it is currently between patient and pharmacist
  - Need linkage between pharmacist and prescriber

To the Masses

Bring This to the Masses

- Pharmacists not confident they are up to date on every guideline
- There is a need in the payer space
- Large gaps in the software available to pharmacies to support value-based contracts
- Next step before pharmacy starts to truly take ownership for outcomes

Thank you