Creation of a "Medication Gap Map" to Match Medication Gaps in Care to Community Pharmacy Services

Hunt S*, McLinden M*, Carroll J, Coley K, McGivney M, Renner H
*Class of 2019
University of Pittsburgh School of Pharmacy, Pittsburgh, PA
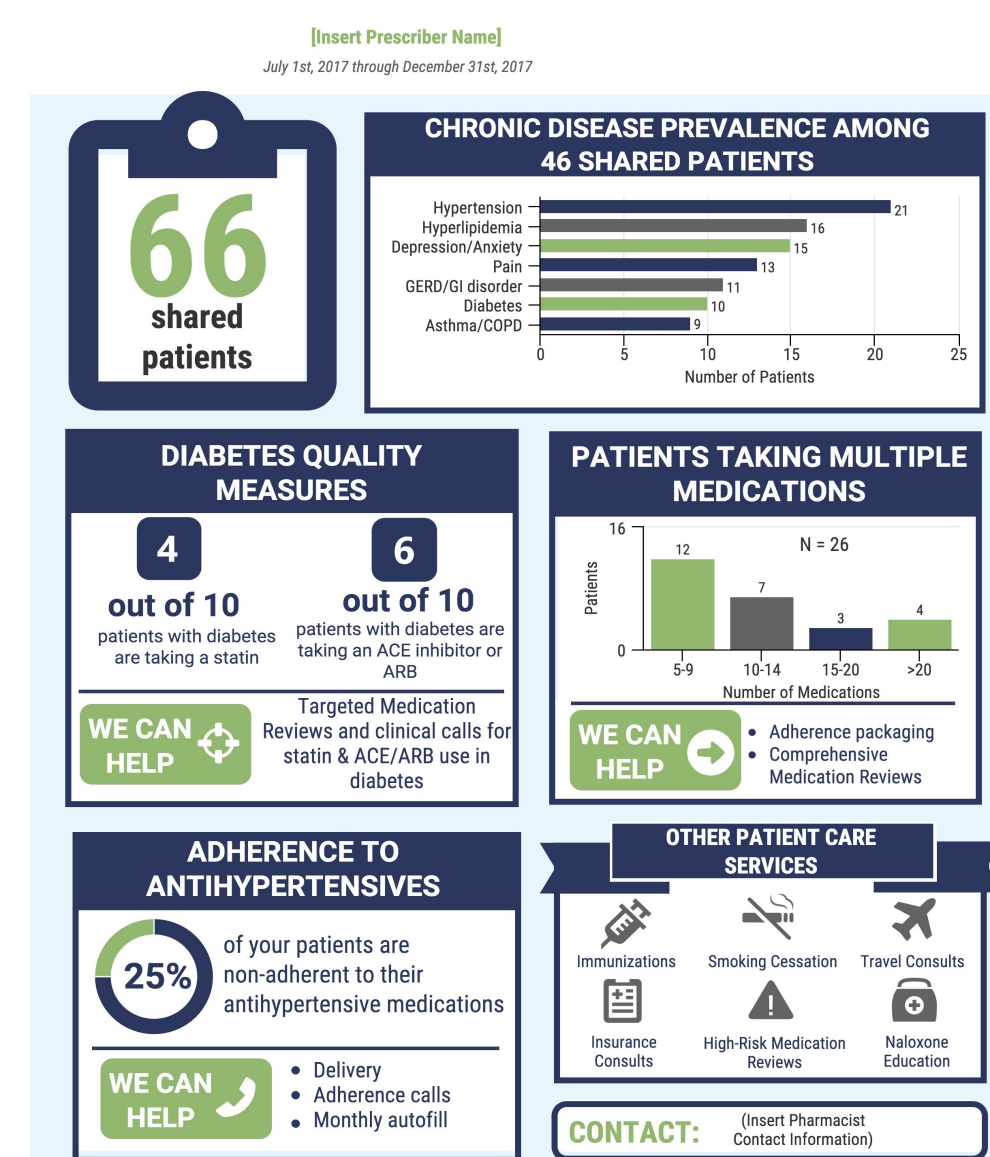
BACKGROUND

Figure 1: Infographic of Patient Population Data

- Community pharmacies offer many patient care services, however pharmacists do not have a systematic way to determine which of the patient care services they offer provide the best opportunities for collaboration with prescribers.
- Medication gaps in care often result when there is a discrepancy between recommended best practices and the care that is provided.
- Prescription dispensing data is a readily available resource that pharmacists can use to identify medication gaps in care.
- The infographic in Figure 1 depicts what patient population level data can be used to facilitate discussions between pharmacists and prescribers on mutual patients.
- A map that links medication gaps in care to pharmacy services using prescription dispensing data will enable pharmacists to populate the infographic.

OBJECTIVE

To construct a process (i.e. Medication Gap Map) that enables community pharmacists to readily analyze their prescription dispensing data in order to identify and match patient population medication gaps in care with patient care services offered at their pharmacy.

METHODS

Comprehensive background literature search to identify:

HEDIS & Pharmacy Quality Alliance (PQA): Nationally recognized quality metrics related to medication gaps in care

Community Pharmacy Enhanced Services Network (CPESN): A comprehensive list of enhanced patient care services offered at community pharmacies

Review and Analyze Data:
- Pre-existing and de-identified prescription dispensing data from Rx30, QS1, and HBS dispensing systems at independent community pharmacies in Pennsylvania were reviewed to determine ease of discerning data.
- Data from "Top Prescribers" (defined as prescribers that service the majority of the patients at the pharmacy) were used for the review.

Map:
- Each medication gap in care was aligned with community pharmacy patient care service(s) that could appropriately resolve that medication gap in care.

Validate:
- The MGM was reviewed for accuracy, comprehensiveness, and usability by an expert panel of Pennsylvania community pharmacists in January 2018.

RESULTS

29 medication gaps in care were identified from **6 resources & 41 enhanced pharmacy services** were identified

14 out of the 29 medication gaps in care were successfully calculated using Rx30 prescription dispensing data.

11 out of the 29 medication gaps in care were successfully calculated using HBS and QS1 prescription dispensing data.

All of the medication gaps in care identified from all **3 dispensing systems** could be addressed with **MTM Services.**

RESULTS: MEDICATION GAP MAP

Gap in Care	Pharmacy Services to Resolve Gap in Care									
	MTM Services	Scheduled Home Delivery Service	Clinical Medication Synchronization Program	Adherence Packaging	Point of Care Testing	Nutritional Counseling	Naloxone Dispensing	Collection of Vital Signs	Long Acting Injectables	Immunization Services
No statin use in patients with Diabetes Mellitus (ages 40-75) — Patients taking any type of oral diabetic medication/insulin between the ages of 40-75 that do not have a statin in their patient profile.	X									
Opiates with Benzodiazepines — Patients who take both an opioid and a benzodiazepine within 30 days of each other.	X	X	X				X			
High risk medications in elderly patients — Patients who are 65 years or older that filled 2 or more medications within the Beers Criteria.	X									
Adherence to medications for chronic disease states (Diabetes Mellitus, Hypertension, Dyslipidemia, COPD) — Patients taking a chronic medication with a PDC threshold of less than 80% over a six-month period.	X	X	X	X	X	X		X		X
Diabetes Screening for People with Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications — Adults (18 years and older) taking any antipsychotic medications if not taking an oral/injectable diabetes medication.	X				X	X				
Vaccinations for Indicated Patients — Influezna vaccination for those between the ages of 18-64, high dose influenza vaccination for those 65 years and older, and Pneumonococcal vaccination for those 65 years and older.	X									X
Adherence to Antipsychotic Medications for Individuals With Schizophrenia — Patients who are receiving antipsychotic medication(s) that have a PDC threshold of less than 80% over a six-month period.	X	X	X	X	X				X	

Table 1: Medication Gap Map for Select Gaps in Care

RESULTS

- The Expert Panel met at a regional pharmacy conference and consisted of 5 pharmacists:
  - 3 (60%) Females and 2 (40%) Males
  - 6.6 Average Number of Years practicing pharmacy
- The main feedback we received from the expert panel resulted in:
  - **Adding pharmacy services available to resolve gaps in care** (MTM Services, Adherence Calls, Abandoned Prescription Calls, Scheduled Delivery Services, Opioid Disposal Envelopes, OTC Counseling, Immunization Services, Physical Assessment)
  - **Adding a time frame to adherence measures**
- The Expert Panel thought the MGM was comprehensive and that this tool would be useful in real life practice
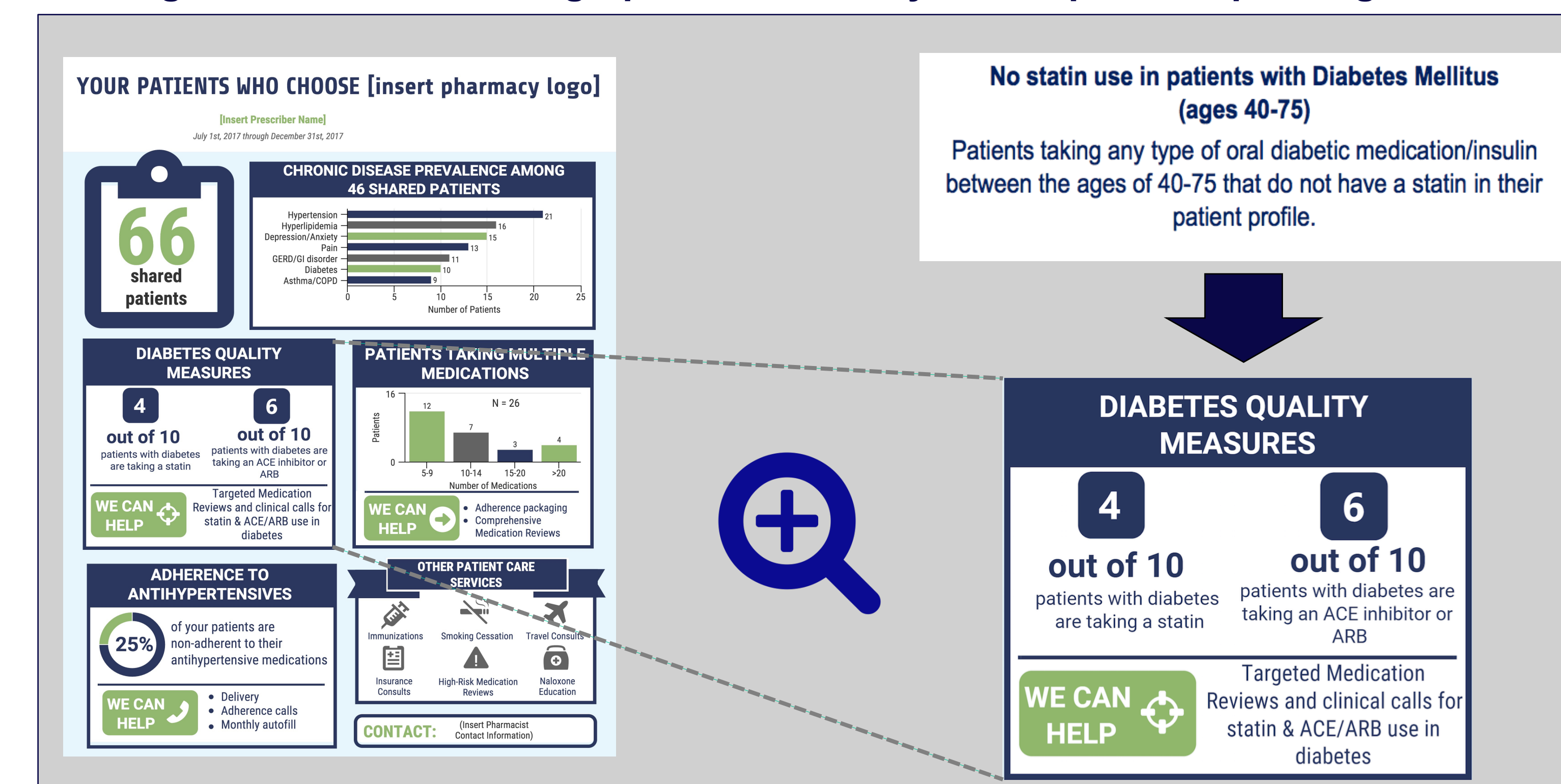
DISCUSSION

- The pharmacy dispensing systems, Rx30, QS1, and HBS, all yield gaps in care that are able to be identified and calculated.
- The infographic (Figure 1) links medication gaps in care of a specific patient population to pharmacist-provided comprehensive patient care services.
- The MGM provides pharmacists with a systematic approach to utilize their prescription dispensing data in order to identify medication gaps in care.
- The data may also stimulate the creation of new patient care services to better meet patient needs.

FUTURE IMPLICATIONS

- A "how to" guide outlining the steps to pull prescription dispensing data reports using the different systems will be created for community pharmacists.
- We will develop preliminary infographic templates that can be populated with dispensing system data.
- Ultimately, community pharmacists could use this infographic as a tool to stimulate conversations with local prescribers in order to initiate collaborative working relationships when caring for shared patients.

Figure 2. Prescriber Infographic Informed by Prescription Dispensing Data

ACKNOWLEDGEMENTS