

Healthcare On Wheels:

Integrating Pharmacy and Clinical Services in a Mobile Clinic



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INTRODUCTION

The Palmetto Palace provides healthcare services to rural South Carolina (SC) through preventative and diagnostic care to low-income and hard-to-reach residents. With the use of a mobile health unit, we visited four sites throughout SC, offering medical care and medications, free of charge. The medical unit focuses on Chronic Care Management, Women's Health, and Mental Health Navigation.

Appreciating the barrier to obtaining evidence-based medications for the population served, the Board of Directors approved the incorporation of pharmacy services (dispensing and counseling) into the mobile health unit.

The establishment of pharmacy services was a challenging model due to it being the first in SC. This poster highlights some of the challenges yet also presents positive outcomes validating successful integration.

ESTABLISHMENT OF MOBILE PHARMACY SERVICES

Contacted SC Board of Pharmacy for appropriate licensure (new concept)
Obtained Non-dispensing drug permit

Established policies and procedures addressing:

- Consultant Pharmacist
- Dispensing Pharmacist
- Drug storage
- ❖ Labeling (QS1 software, IP address variability from mobile /VPN central)
- Security (unit housed in fire station with 24-hour control)
- Disposal
- Limited space
- Medication wholesaler
- Purchase and maintain medication inventory (limited by grant/charity funding) Also, Partnered with the MUSC College of Pharmacy to establish longitudinal student experience

Developed student project to assist with patient counseling and to collect data for quality metrics of 3 common chronic disease states (last 12 months)

PHARMACY METRICS (2-year data)

Total number of Patients	253
Total number of Prescriptions	2631
Total medication costs	\$68,320 (Start up \$38,000)

STUDENT PROJECT: METHODS

During a twelve-month period, we followed patients affected by at least one of three main disease states: hypertension, diabetes, and hyperlipidemia. With the use of our electronic record, we collected data on number of visits, laboratory results, as well as medications dispensed from the bus during the visit. Additionally, we followed dose and drug changes during follow up visits. Data was collected and organized by the pharmacy students assigned to a longitudinal elective.

Table 1: Patient Characteristics

Total number of patients	75
(at least one disease state)	

Patients with only one visit (%)		21	
	Diabetes	Hypertension	Hyperlipidemia
Number of patients with disease state	32	63	44
Average age	50	55	57
Number of prescriptions	68	151	52

Figure 1: Disease state distribution

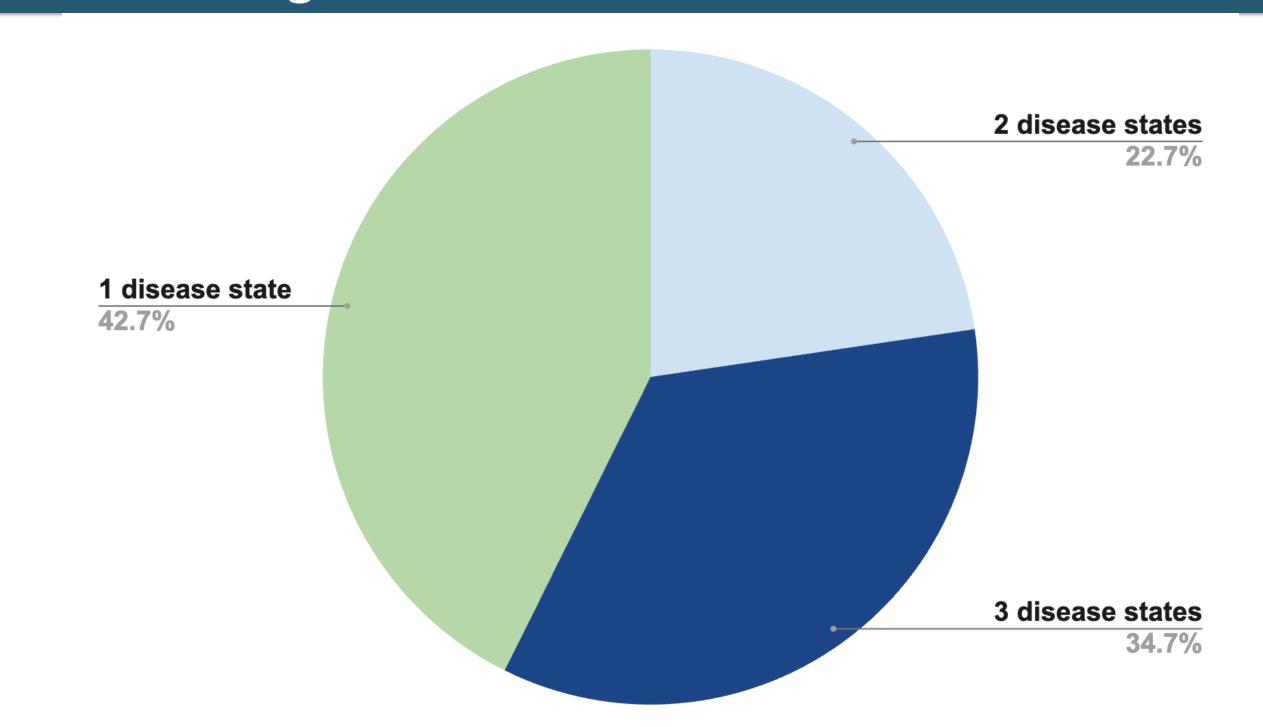


Table 2: Hyperlipidemia data		
Characteristic	Total	
Patients with hyperlipidemia	44	
Lipids not at goal at baseline (%)*	40%	
Lipids at goal at baseline (%)*	25%	
Patients who achieved goal levels during treatment (%)	19%	
Patients with no baseline or repeat labs (%)	47%	

^{*}Percentage based on patients with repeat laboratory values

RESULTS

Table 3: Diabetes data			
Characteristic			
iabetes 32			
rage initial A1c (%)^ 8.7%			
ents with improvement in A1c (%) 37.5%			
ents with no improvement in A1c (%) 12.5%			
ents with no repeat A1c (%) 46%			
rage initial A1c (%)^ ents with improvement in A1c (%) ents with no improvement in A1c (%) 12.5%			

^{^1} patient with no baseline A1c

Table 4: Hypertension data

Characteristic	Total
Patients with hypertension	63
Blood pressure not at goal at baseline (%)	60%
Patients who reached target blood pressure with a goal <130/80 mmHg (%)	21%

CONCLUSIONS

- Patients who participated in the mobile clinic showed general improvement across all three disease states
- Participation stayed high for patients who were part of the program, with almost 80% of the patients with at least one follow-up visit
- A total 271 total prescriptions were given to patients in the 12-month period

LIMITATIONS

- Gaps in care and patients lost to follow up
- Different providers every visit or clinic may have contributed to missing repeat labs
- Labs were outsourced and levels resulted days after the clinic was held
- Noncompliance to medications

IMPROVEMENTS

- Ensure compliance with medications through increase patient understanding and buy-in
- Increase number of student pharmacists to start a call back project to maximize medication adherence and follow-up visits
- Utilize EMR system to tag providers for follow-up labs as recommended by practice guidelines
- Explore additional resources for obtaining free medications (ex. Direct Relief, Dispensory of Hope)