

Comprehensive medication management review (CMR) effectiveness on A1c reduction in patients with uncontrolled diabetes (CARDI-B)

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INTRODUCTION

- Pharmacists play an essential role in providing comprehensive medication reviews particularly for high risk populations such as patients with uncontrolled diabetes.
- CMRs are crucial in optimizing patient care and minimizing the risk for adverse drug reactions and interactions.
- The purpose of this study was to conduct a pharmacotherapeutic review of patients at our outpatient practice sites.

METHODS

STUDY DESIGN

- Non-randomized prospective study from February to April 2019
- Report was generated utilizing the outpatient electronic health record (EHR)
 - Patients who qualified based on the inclusion and exclusion criteria were reviewed.
- Approved by the Investigational Review Board

PRIMARY OUTCOME

- To assess the number of interventions identified through CMR services

SECONDARY OUTCOMES

- Percent of recommendations accepted
- Reason for rejection of recommendations
- Specific types of recommendations

INCLUSION CRITERIA

- Greater than or equal to 18 years old
- HbA1c greater than or equal to 9 percent

EXCLUSION CRITERIA

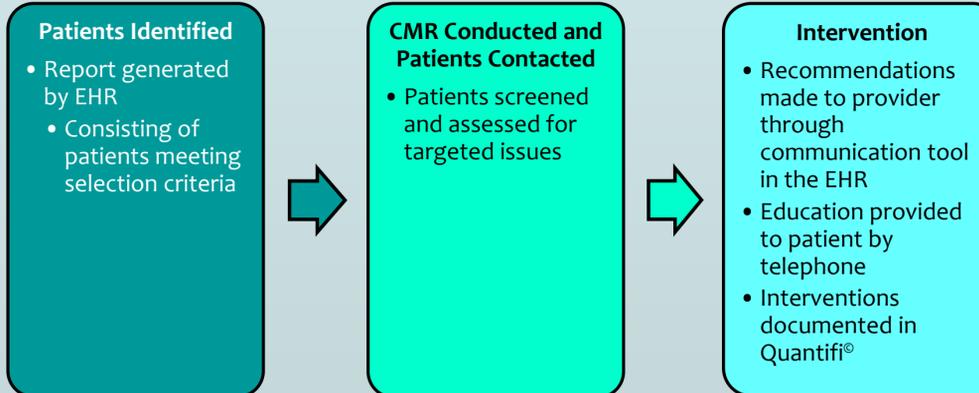
- Diabetes care managed by Endocrinologist
- Patient expired prior to intervention or on hospice
- Patient lost to follow up

CMR EVALUATION

- Components of the CMR include

- | | |
|-------------------------------------|------------------------|
| ▪ Therapeutic duplication | ▪ Therapy optimization |
| ▪ Potential interaction | ▪ Adverse reaction |
| ▪ Apply pharmacoeconomic principles | ▪ Adherence |

Methods (cont.)



RESULTS

BASELINE DEMOGRAPHICS (n=76)

Characteristics	Results (average ± SD)
Age (years)	58 ± 11.3
Male	45 (59.2%)
Baseline HbA1c	10.59 ± 1.3%

PRIMARY OUTCOME

RESULTS

# of interventions	58
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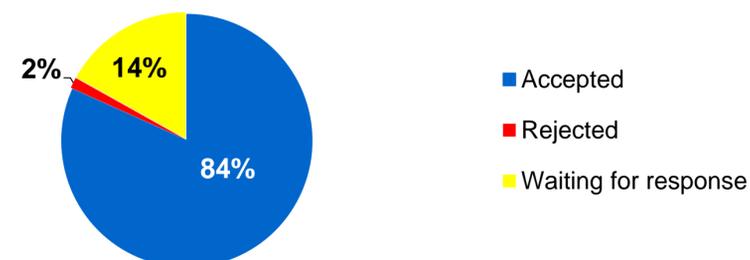
SECONDARY OUTCOMES

RESULTS

% of recommendations accepted	84%
Reasons for rejection of Recommendation	Patient would not benefit from further education

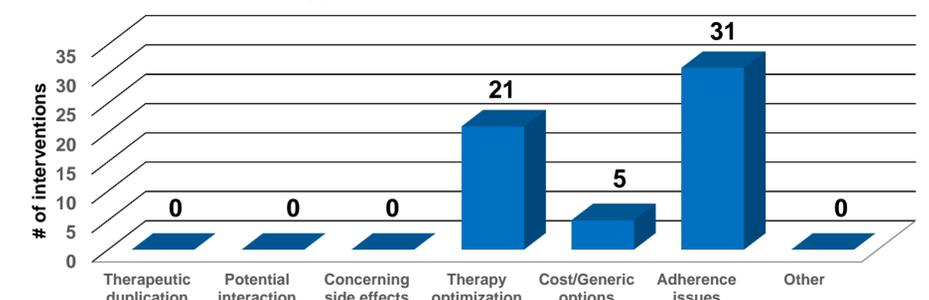
PHARMACIST INTERVENTIONS

Result of Interventions



RESULTS (cont.)

Type of Recommendations



DISCUSSION

- A majority of recommendations were in relation to adherence issues.
 - Interventions and education focused on disease state, glucose monitoring, indication of medications and diet and exercise.
- One of the largest knowledge deficits involving several interventions, were eligible patients being unaware of copay assistance programs provided by drug manufacturers.
- Through CMR services, the pharmacist was able to make appropriate recommendations based on patient preferences, financial considerations, and ability to reach HbA1c goal.
 - However, difficulty of getting in contact with some patients limited the ability to make meaningful recommendations.
- Next Steps
 - Expansion of CMR services to allow high-risk patients opportunity to meet with pharmacists in the ambulatory care setting by utilizing co-visits with physicians to provide more consistent interactions.
 - Expand pharmacist presence into additional clinics within our healthcare system.

CONCLUSION

- CMR was shown to be highly effective in identifying appropriate medication interventions in order to optimize patient care.

DISCLOSURE

Authors of this presentation have the following to disclose concerning possible financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of this presentation: Andrew Giaquinto, Ashmi A. Philips, Michael S. Casias, Navin B. Philips, Geralyn Prosswimmer: Nothing to disclose.