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QI/QA

MedManage: A tool in Reporting Over-the-Counter Medication in Rural Primary Care

Natan Harel, OMS I, Zachery Johnson, OMS I; WVSOM; Jill Cochran, Ph.D., APRN, WVSOM; Traci Jarrett, Ph.D., MPH, WVU; Adam Baus, Ph.D., MA, MPH, WVU

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Background

The incidence of chronic diseases in West Virginia, such as hypertension, cancer, diabetes, chronic heart disease, and co-occurring health risk behaviors are nationally high.¹

Medication errors are identified as a significant contributing factor to readmissions, many of which are deemed preventable and cost an estimated \$17 billion annually.^{2,5} There is elevated risk of hospital readmission for elderly patients and patients with multiple conditions^{3,4}

The Center for Healthcare Quality and Payment Reform recognizes the value in utilizing primary care sites as an intervention opportunity for sustainable solutions to reduce hospital readmissions.⁶

In the first part of the Med Manage project, 82% of patients had an over-the-counter medication that they took as needed that was not previously recorded using the symptom driven tool.

The goal of this project was to evaluate the over-the counter (OTC) meds taken by patients at the Robert C. Byrd Clinic by using a symptom driven tool for medication reconciliation.



Methods

- Two providers agreed to utilize the MedManage process with their patient groups. Six months of data were collected (11/17-5/18). The collections were performed during the winter and spring months. One provider was used for the entire time span. The second provider was added in April. Both providers were Family Practice DOs.
- When the patient arrived, reception gave the patient a white sheet of paper with their last reported med list on it. Under the white sheet we placed the yellow MedManage sheet. A note on the top of the chart said to write “No Change” if the meds were correct. The patient took the forms to their seat and completed them while waiting to be called in. The nurse called the patient in and compared the meds on both sheets with what was written in the chart. The meds were reconciled using the lists and any additional patient information.
- An audit sheet was utilized to extract information from the patient charts after the visit. Data from the audits sheets were put in a data base and assessed.

Write “no change” if this list is correct and up to date.

Tester, Cochran 116y F
DOB: 02/01/01

Patient Chart Report

08/18/17 10:25 am

Robert C. Byrd Clinic

All Medications

Drug Name	Diag	Dosage	Days
shakology 1 scoop12 ouncesE66.3		0 days, 0 refills	
Black Cherry Concentrate		30 days, 0	30
Geritol Tonic Oral Liquid R53.83		30 days, 0	30
Tylenol 325MG Oral Tablet R51		0 days, 0 refills	
Amoxicillin 400 MG/5ML B97.89		10 days, P	
Amoxicillin 400 MG/5ML J06.9		10 days, P	PRN
Amoxicillin 400 MG/5ML J06.9		10 days, P	PRN

Dr Ozturk	Reported	08/18/2017
	Reported	08/18/2017
	Reported	08/18/2017
	Reported	08/18/2017
Jill Cochran	Discontnd	06/07/2016
Jill Cochran	Current	06/07/2016
Jill Cochran	Current	06/07/2016

MED MANAGE

Please list any medicine you have taken in the last two (2) weeks for these conditions.

Headache? _____

Allergy/Congestion? _____

Chest pain? _____

Diarrhea/Constipation? _____

Cramps/Menopausal/Birth Control? _____

Depression/Anxiety/Sleep _____

Herbs/Vitamins _____

Natural Remedies/Weight Loss Meds _____

Eyedrops/Eardrops _____

Sore throat/Gum or tooth pain? _____

Heartburn/Indigestion/Nausea? _____

Back Pain? _____

Difficulty urinating/Erectile dysfunction? _____

Muscle or Joint pain/Arthritis/Gout? _____

Foot pain? _____

Acne/Dandruff/Skin conditions/Patches _____

Shakes/Pills/Supplements/Energy drinks _____

Lotions/Creams/Ointments _____

MedManage Chart Review

Month of Project _____

Patient Chart # _____

Patient Age _____

Days since last visit? _____

Active Meds on Sheet:

Meds reported in Med List:

Active Meds in Written on white sheet:

Meds/products from MedManage:

Active Meds in Chart:

Rx Meds reported on MedManage:

Meds Discontinued at visit:

OTC Meds reported MedManage:

Meds w/dosage Δ'd at visit

Categories of OTC Meds/Products from MedManage							Rx Meds	
Headache?								
Chest Pain?								
Back Pain?								
Muscle or Joint pain/Arthritis/Gout?								
Foot pain?								
Allergy/Congestion?								
Sore throat/Gum or tooth pain?								
Heartburn/Indgestion/Nausea?								
Diarrhea/Constipation?								
Difficulty urinating/Erectile dysfunction?								
Cramps/Menstrual/Birth Control?								
Eyedrops/Eardrops								
Depression/Anxiety/Sleep?								
Herbals/Vitamins/Natural Remedies/WT. Loss?								
Shakes/Pills/Supplements/Energy Drinks?								
Acne/Dandruff/Skin conditions/Patches?								
Lotions/Creams/Ointments?								
Comments/Additions:								

Results

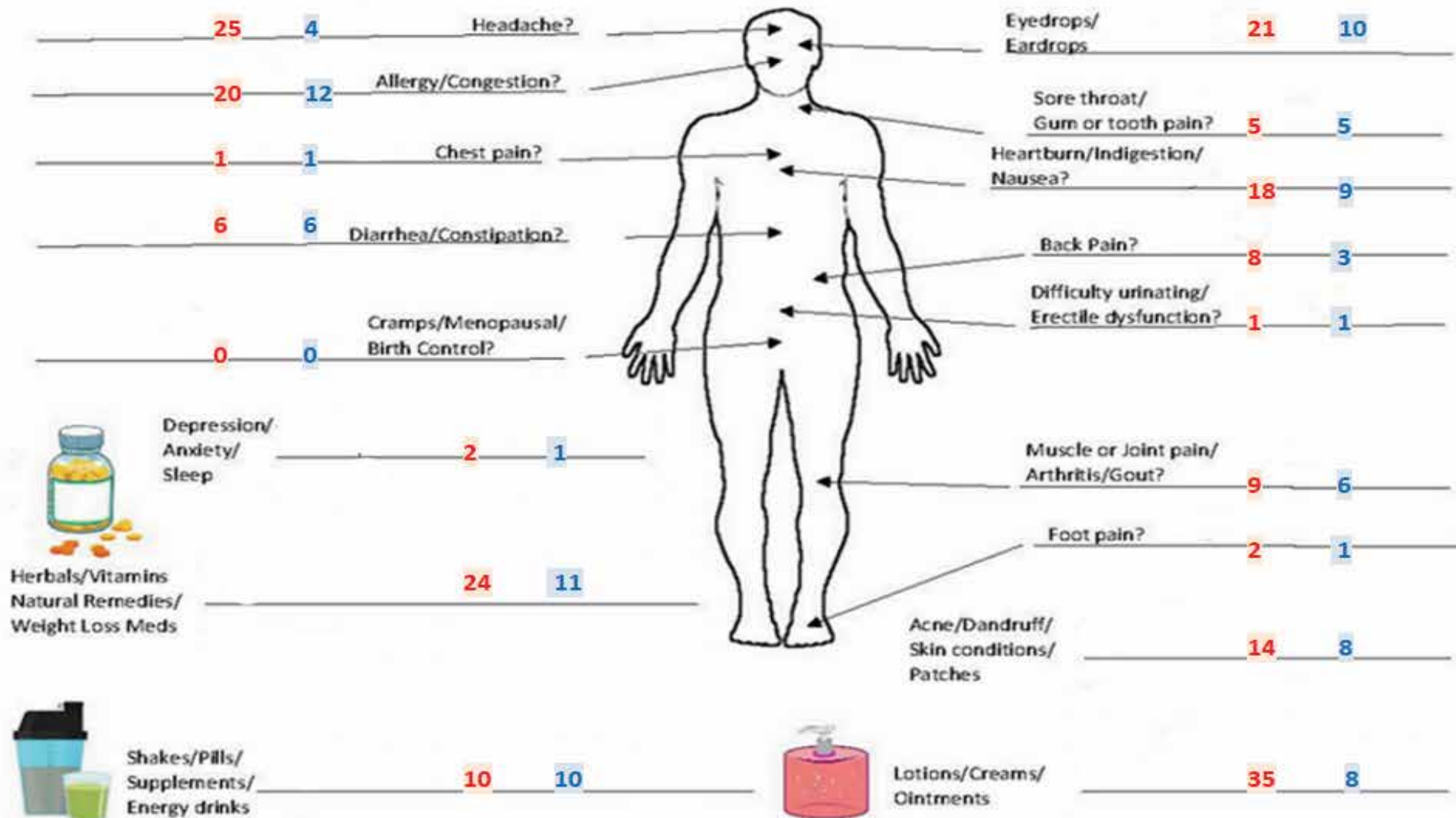
Charts Audited in first 6 months	117
Patient age	mean= 69 range= 67-72
Average time between visits	2.5 months
Active medications	mean= 12
Previously “reported” meds	mean= 5
Unreported meds detected by current Med Manage effort	mean= 2

Med Manage Responses by Symptom

Frequency = **RED**
Diversity = **BLUE**

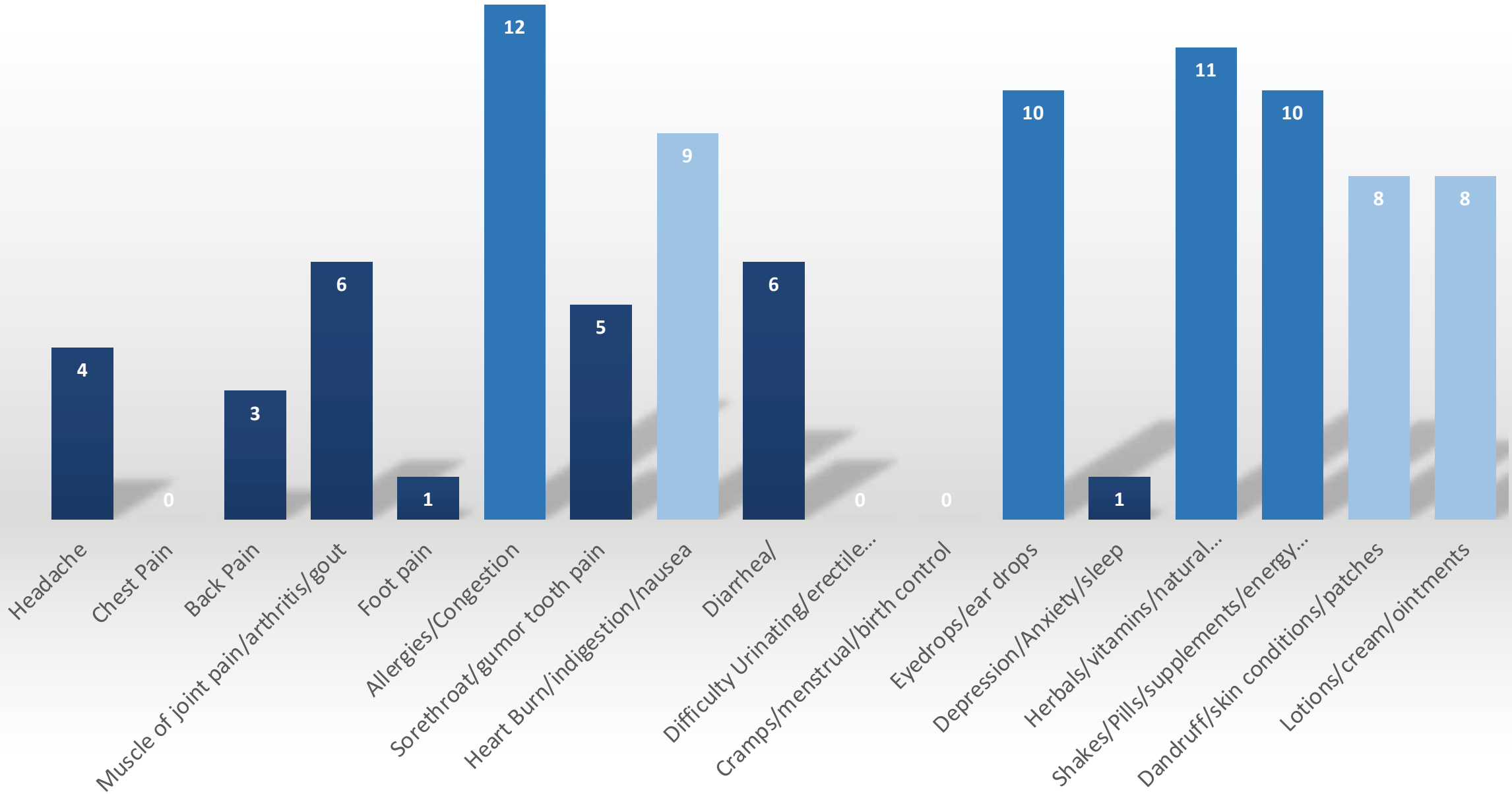
Frequency = **RED**
Diversity = **BLUE**

Please list any medicine you have taken in the last two (2) weeks for these conditions.

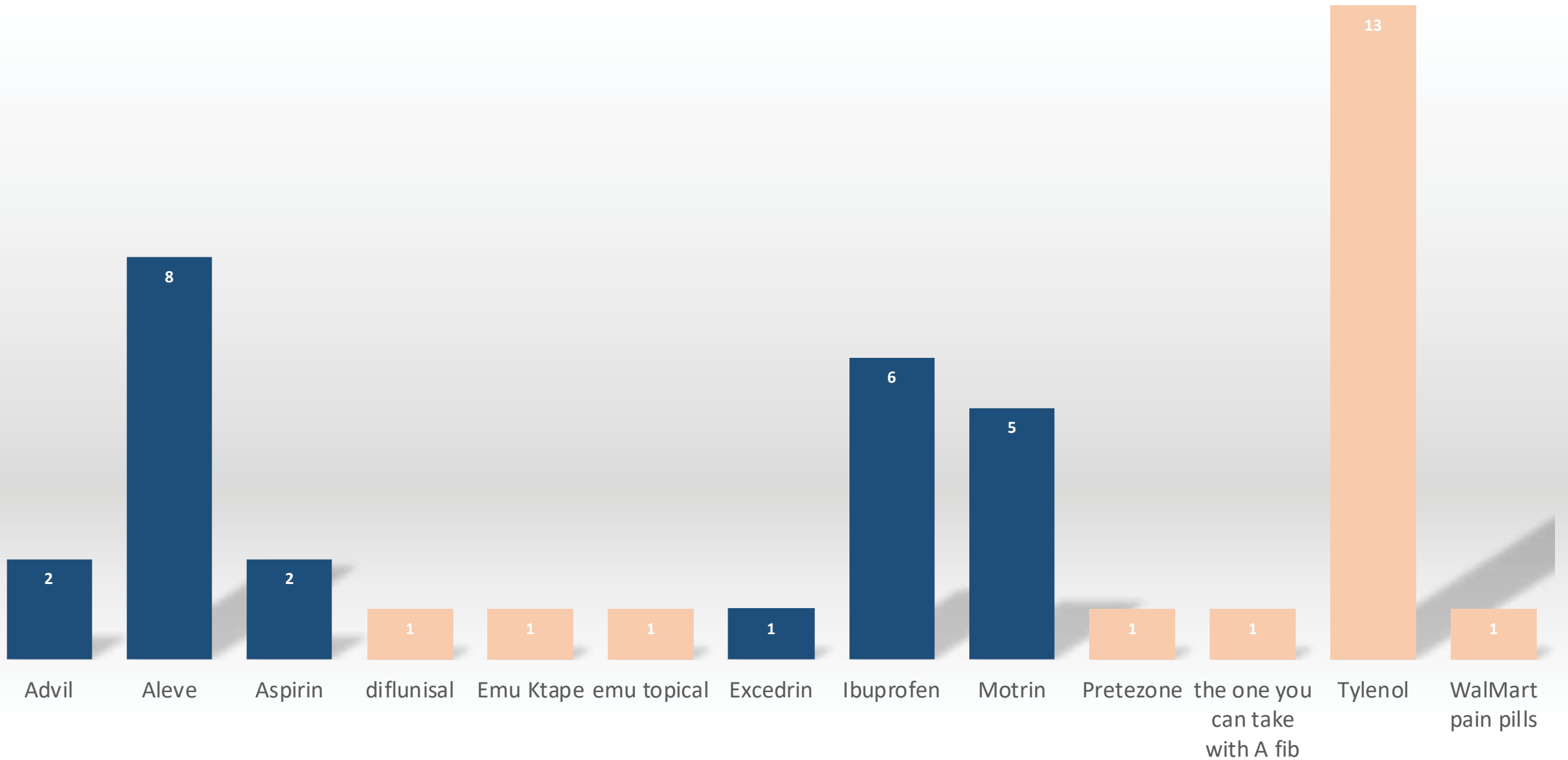


Categories with highest diversity	Categories with highest frequency*
“Allergy/Congestion” = 12	“Lotions/Creams/Ointments”= 35
“Herbals/Vitamins/Natural Remedies/Weight loss meds”= 11	“Headache”= 25
“Shakes/Pills/Supplement/Energy drinks”= 10 “Eye drops/Eardrops”= 10	“Herbals/Vitamins/Natural Remedies/Weight loss meds”= 24
	* When combined, OTC meds for “pain” combined exceeded all the other categories (n= 43). 24 of these meds were NSAIDS.

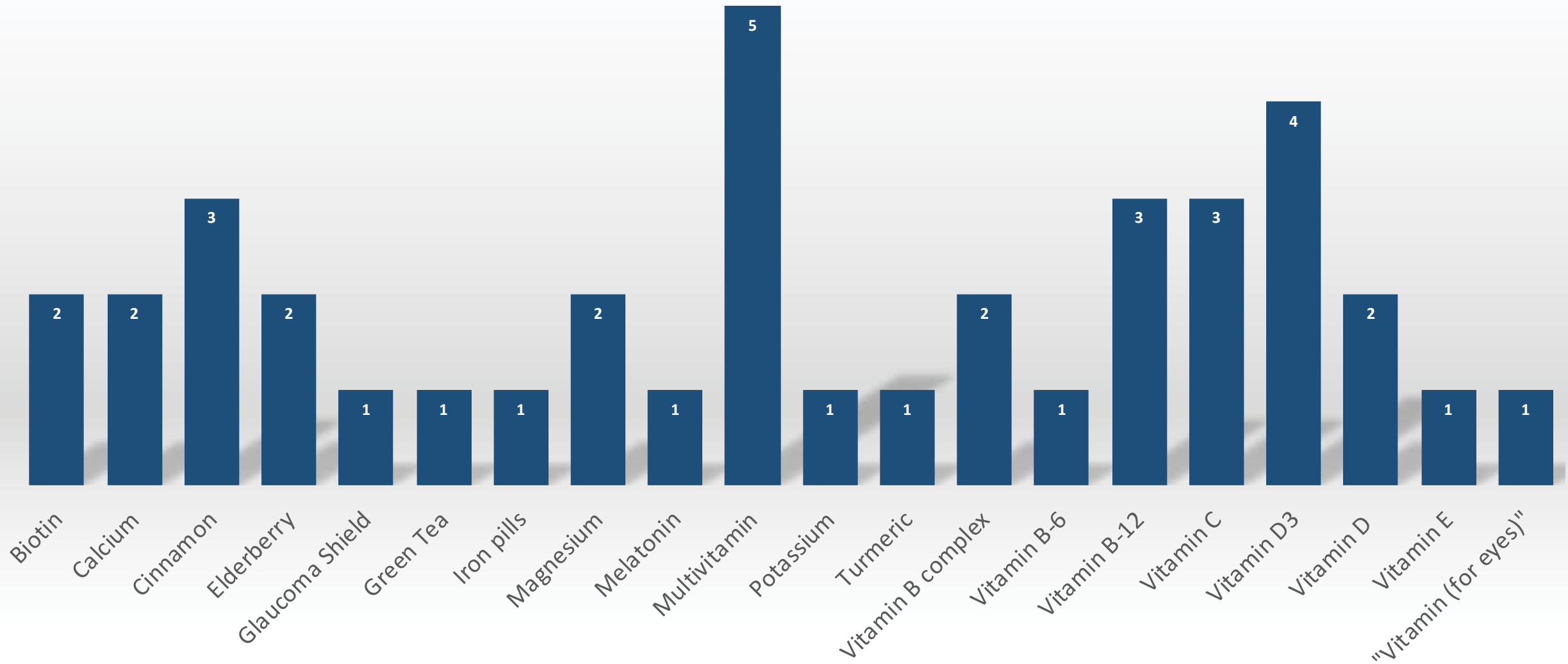
Medication Types Reported by Symptom



OTC Analgesic Frequencies



"Herbals/Vitamins/Natural Remedies/Weight loss" Frequencies



Discussion

- Significant unreported medications were detected by Med Manage
 - effectiveness of symptom-driven tool
 - repeat patients vs. new patients
- Analgesic reporting was high, poses risk in this patient population
 - NSAIDs risks
 - consistent with lit review findings
- “Herbal/Vitamin/Natural Remedies/Weight Loss” reporting was unexpectedly high
 - significant risk due to med interactions/ side effects
 - calcium/ iron/ omega-3 fish oils
- Relatively high rate of “Allergy/Congestion” and “Eye/Ear drops”

Discussion (ctd.)

- Further research and quality improvement efforts are needed to better assess the self-medicating practices of this population
- Further data analysis to assess potential interactions for patients taking high risk OTC and Rx medications is needed.
- Improvements to Med Manage
 - Assistance with forms, HIPPA compliance, EHR difficulties
- Future of Med Manage Effort

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References (ctd.)

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Additional references available upon request.

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