# Meet Heather

14 Meds



# Meet Heather

Meds





# Polypharmacy

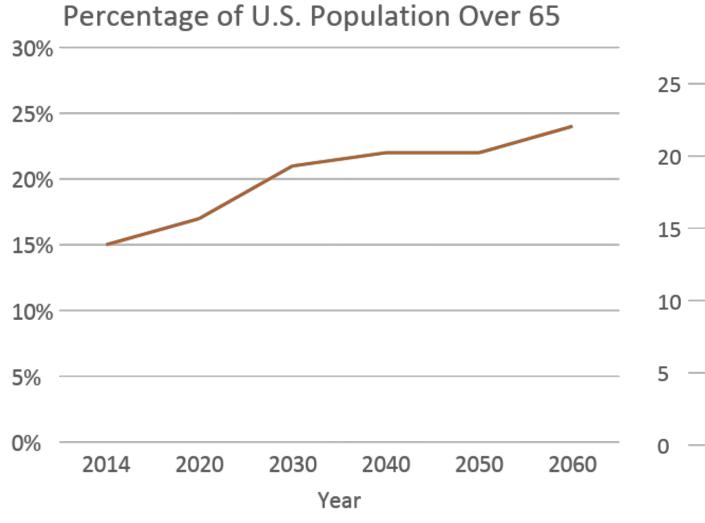
**DEFINITION** 

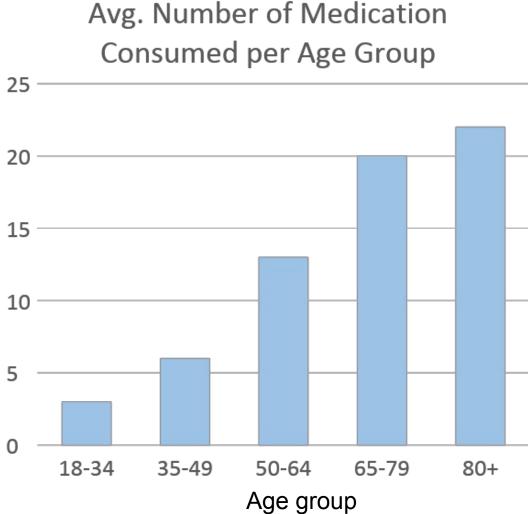
Taking 5+ meds

**PROBLEM** 

Unintended Adverse Symptoms

## Older adults will make up a larger % of the population





And take more meds.

# Properly Prescribed Drugs lead to

1.9 M

Hospitalizations

4th
Leading cause of Death



## My Symptom Minimizer

My Meds

My conditions

My Symptoms

Possible Symptoms

Recommendations

Symptom	Med 1	Med 2	Med 3	Med 4	Med 5	Med 6	Med 7	Med 8	Med 9
Vomit	✓			✓		✓			
Diarrhea	✓	✓	✓	✓	✓		✓	✓	✓
Nausea	✓		✓		✓	✓	✓		
Rash		✓		✓					
Light headed	✓		✓				✓		
Itching	✓	✓				✓			✓
Allergic Reaction		✓	✓				✓		

## My Symptom Minimizer

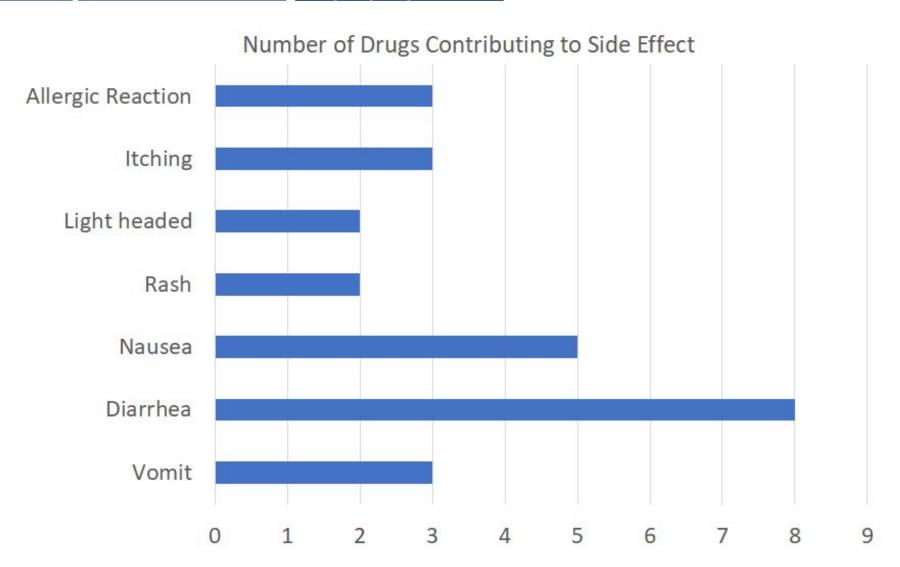
My Meds

My conditions

My Symptoms

Possible Symptoms

Recommendations



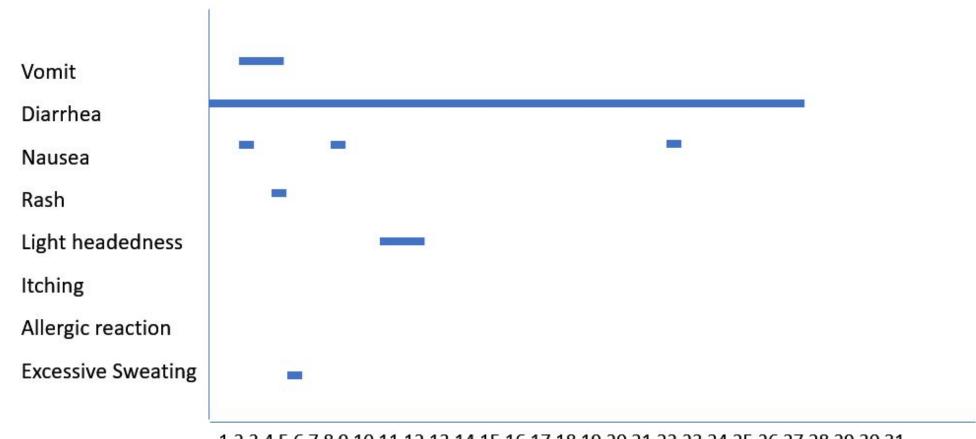
## My Symptom Minimizer

My Meds

My conditions My Symptoms

Possible Symptoms

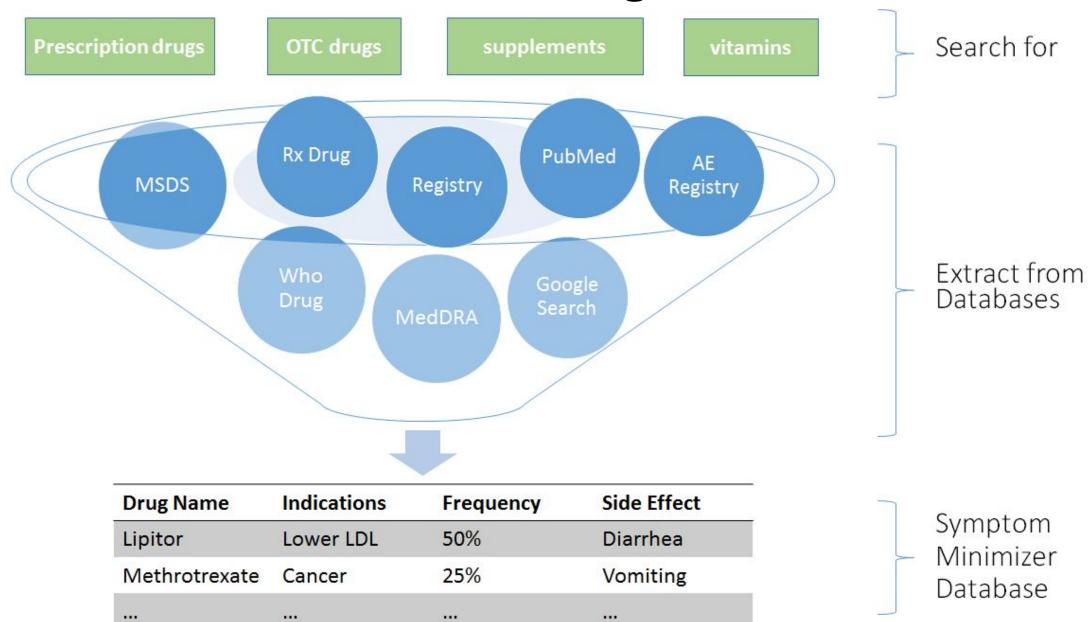
Recommendations



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

January 2019 V

## Generation of Knowledge Database



## Symptom Minimizer Flow

#### Input

#### Individual Input Source

Prescription Drug
OTC Medication
Dietary Supplement
Herbal Supplement
Medical Conditions



#### **Back end Database**

#### **Data Sources**

MSDS

MedDRA

Who Drug

**AE** Registry

**Prescription Drug** 

Registry

Google Research

**PubMed Studies** 



#### **Output Results**

#### Patient

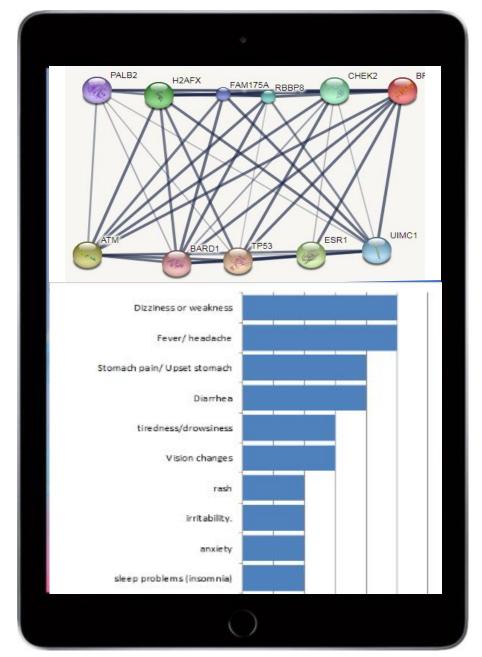
Table of potential symptoms
Tracking symptoms across time
Non-drug alternatives

#### Physician

Table of potential symptoms
Drug mix to minimize side effects
Drug interactions
Non-drug alternatives

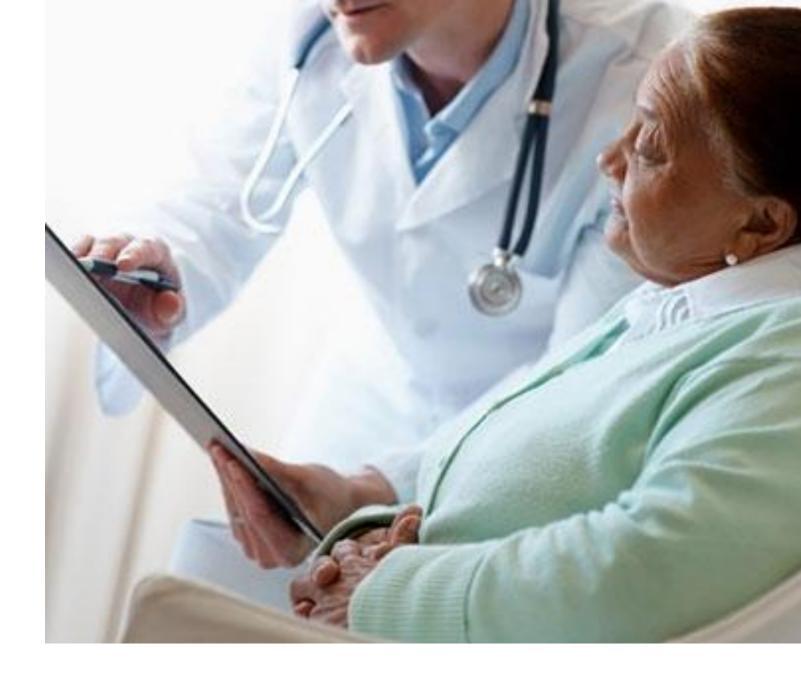
## **Data Visualization**

	Warfa ▼	Diflunis *	heophylli 🔻	iprofloxa *	lethotrex *	Cou *
ever/ headache	1	1	1	1	1	5
Dizziness or weakness	1	1	1	1	1	5
Diarrhea	1		1	1	1	4
Stomach pain/ Upset stomach		1	1	1	1	4
/ision changes	1	1		1		3
iredness/drowsiness		1		1	1	3
Nausea/Vomiting	1	8			1	2
oruising that develops without an injury you	1				1	2
sleep problems (insomnia)			1	1		2
anxiety			1	1		2
irritability.			1	1		2
ash			4	1	1	2
bevere bleeding, including heavier than normal	1					1
Red or brown urine	1		Ť.			- 1
Black or bloody stool	1					1
Joint pain, discomfort or swelling, especially after	1					1
Coughing up blood	1	,				1
Ringing in Ears		1	1			1
Mental/Mood Changes		1				1
Hearing Changes		1		3		1
Bleeding from the gums after you brush your teeth	1					1
Bleeding between menstrual periods	1					1
fast/pounding heartbeat		1				1
fainting		1				1
difficult/painful swallowing		1				1
symptoms of heart failure (such as swelling ankles	lfeet	1			](	1
unusual tiredness		1				1
unusual/sudden weight gain).		1		9		1
heartburn		1				1
headache		1				1
Loss of appetitie			1			1
estlessness			1			1
weight loss			1			1
sweating			1			1
nair loss					1	1
hills				9	1	1
pronchitis					1	1
Go	to A	Anal	lysis			
	(	$\overline{)}$				



Inform prescribing decisions to maximize quality of life.







## Questions???