

# Medication Therapy Management

Presented by

**Sylvia Saade, PharmD**

**Ghada Khoury, Pharm D, BCACP**



Quality  
ISO 9001





# Objectives

---

- ▶ Describe the components of medication therapy management (MTM) programs
- ▶ Discuss the needs of MTM programs
- ▶ Discuss the outcomes that have been documented for MTM delivery in the US
- ▶ Describe and explain the patient profile prepared by OPL





# What is Medication Therapy Management?

- ▶ Medication Therapy Management (MTM) is medical care provided by pharmacists who aim to optimize drug therapy and improve therapeutic outcomes for patients.





# What is Medication Therapy Management?

---

*Comprehensive medication management is defined as the standard of care that ensures each patient's medications (whether they are prescription, nonprescription, alternative, traditional, vitamins, or nutritional supplements) are individually assessed to determine that each medication is appropriate for the patient, effective for the medical condition, safe given the comorbidities and other medications being taken, and able to be taken by the patient as intended."*



# Why is MTM Needed?

---





# The Facts

- ▶ Medication-related problems and medication mismanagement are a massive public health problem in the United States
- ▶ Experts estimate that 1.5 million preventable adverse events occur each year that result in \$177 billion in injury and death





# Patients Forget

---

- ▶ Patients forget 80% of what their doctor tells them
- ▶ Nearly half of what they remember, they remember incorrectly.

Source: Journal of the Royal Society of Medicine, news release, May 1, 2003



# Drug Therapy Problems in the USA, 2015

---

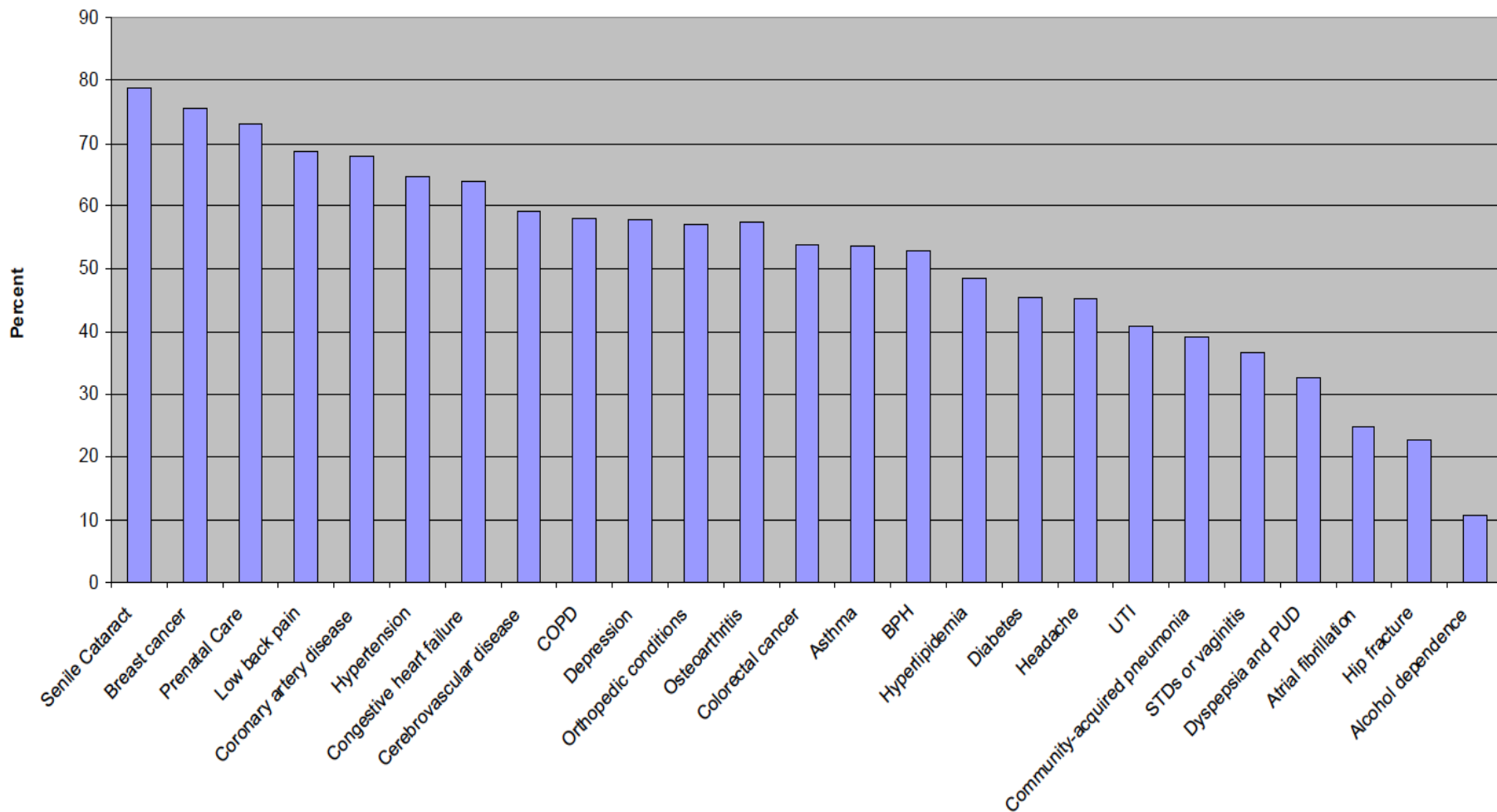
20,061 Drug Therapy Problems Identified

- ▶ Dosage Too Low 31 %
- ▶ Needs Additional Drug Therapy 23 %
- ▶ Noncompliance 14 %
- ▶ Adverse Drug Reaction 10 %
- ▶ Dosage Too High 9 %
- ▶ Unnecessary Drug Therapy 7 %
- ▶ Ineffective Drug 6 %





# Percent of Recommended Care Received



*N Engl J Med.* 2003;348:2635-45.



# MTM in Healthcare

---

## **MTM identifies medication issues such as:**

- ▶ If medications are prescribed appropriately
- ▶ Duplications in therapy
- ▶ Needs additional therapy
- ▶ Appropriate doses
- ▶ Drug-drug interactions
- ▶ Drug-disease interactions
- ▶ Cost-effectiveness
- ▶ Barriers to compliance



# Goals of MTM

---

- ▶ Ensure optimum therapeutic outcomes for targeted beneficiaries through improved medication use
- ▶ Improve medication adherence
- ▶ Reduce the risk of adverse events
- ▶ Reduce drug-drug interactions
- ▶ Empower patients to take an active role in managing their medications



# A New Model

---

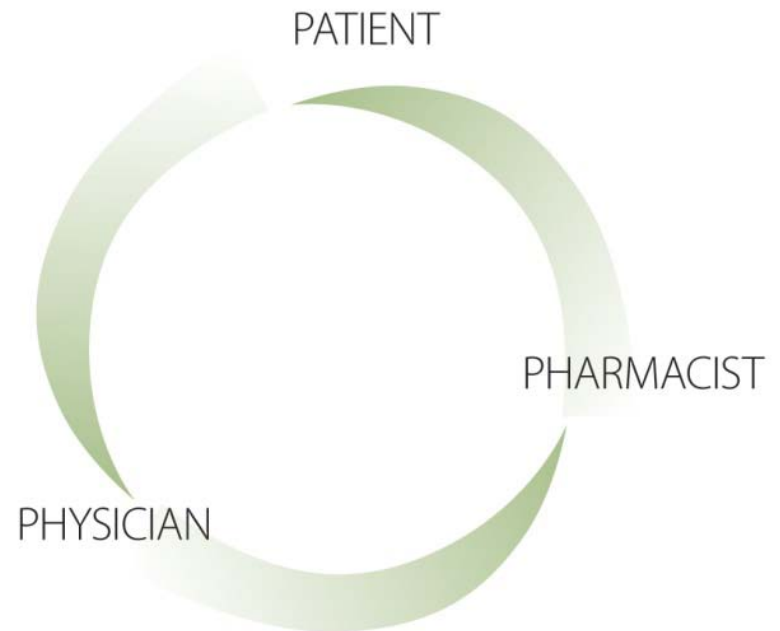
- ▶ One that recognizes the value of the pharmacist
- ▶ One that aligns the interests of the plan, patient, and the pharmacist
- ▶ One that positions the pharmacist as the risk manager and a true partner with the plan
- ▶ One where a pharmacist-centric benefit model is recognized for the value it brings to health care



# A Team-Based Approach

---

- ▶ MTM is a team-based approach to health care. It can help manage the treatment of many chronic diseases such as diabetes, asthma, hypertension, and high cholesterol. All these disease states are increasing with the aging United States population.
- ▶ Together the patient, physician, and pharmacist work towards achieving better outcomes for the patient.





# The Five Core Elements of MTM

---

**Medication Therapy Review (MTR)**



**Personal Medication Record (PMR)**



**Medication-Related Action Plan**



**Intervention and/or Referral**



**Documentation and follow up**

---



# Medication Therapy Review

---

- ▶ Sometimes called CMR, Comprehensive Medication Review
- ▶ Patient meets with their pharmacist to review their medications one by one
- ▶ Collection of patient-specific data
- ▶ Assessing therapy to identify drug-related problems
- ▶ Prioritization
- ▶ Plan for resolution
- ▶ Designed to improve patients' self-management of medications
  - ▶ Needed when patient experiences a transition of care
  - ▶ Addresses new or ongoing medication-related problems





# Personal Medication Record

---

- ▶ From the information gathered during the MTR, a PMR is created
- ▶ Comprehensive record of patient's:
  - ▶ Medications – dose, indication, instructions, start/stop dates, prescriber, etc.
  - ▶ Over the counter medications
  - ▶ Herbal supplements
  - ▶ Vitamins, minerals, and others
- ▶ Should include provider information, allergies, pharmacy, patient information ..
- ▶ Should help engage medication self-management
- ▶ Increase patient awareness of their medications and conditions
- ▶ Carry with patient at all times





# Personal Medication Record

## MY MEDICATION RECORD

Name: \_\_\_\_\_ Birth date: \_\_\_\_\_ Phone: \_\_\_\_\_

Always carry your medication record with you and show it to all your doctors, pharmacists and other healthcare providers.

Emergency Contact Information	
Name	
Relationship	
Phone Number	
Primary Care Physician	
Name	
Phone Number	
Pharmacy/Pharmacist	
Name	
Phone Number	
Allergies	
What allergies do I have? (Medicines, food, other)	What happened when I had the allergy or reaction?
Other Medicine Problems	
Name of medicine that caused problem	What was the problem I had with the medicine?
When you are prescribed a new drug, ask your doctor or pharmacist:	
•What am I taking?	
•What is it for?	
•When do I take it?	
•Are there any side effects?	
•Are there any special instructions?	
•What if I miss a dose?	
<b>Notes:</b>	
Patient's Signature	Healthcare Provider's Signature
	Date last updated
	Date last reviewed by healthcare provider



# Personal Medication Record

## MY MEDICATION RECORD

Name: \_\_\_\_\_ Birth date: \_\_\_\_\_



Include all of your medications on this record: prescription medications, nonprescription medications, herbal products, and other dietary supplements. Always carry your medication record with you and show it to all your doctors, pharmacists and other healthcare providers.

Drug		Take for...	When do I take it?				Start Date	Stop Date	Doctor	Special Instructions
Name	Dose		Morning	Noon	Evening	Bedtime				






# Medication-Related Action Plan

---

- ▶ Patient-centered document with list of actions related to self-management
- ▶ Goal is to engage patient and encourage participation in therapy: Checking med use and adherence, blood sugars, weights, blood pressure, dietary logs, functional status...
- ▶ The MAP is used by the individual and the health care professional for goal settings and follow up

## MY MEDICATION-RELATED ACTION PLAN

<b>Patient:</b>	MT
<b>Doctor (Phone):</b>	555-555-5555
<b>Pharmacy/Pharmacist (Phone):</b>	555-555-5555
<b>Date Prepared:</b>	4/20/2008

**The list below has important Action Steps to help you get the most from your medications.  
Follow the checklist to help you work with your pharmacist and doctor to manage your medications  
AND make notes of your actions next to each item on your list.**

Action Steps → What I need to do...	Notes → What I did and when I did it...
<input type="checkbox"/> Refill atenolol and take as directed. RPh will monitor.	
<input type="checkbox"/> Discussed with RPh and will discuss with MD.	
<input type="checkbox"/> Schedule appointment with Ob/Gyn for evaluation.	
<input type="checkbox"/> Report symptoms back to your prescriber for further evaluation	
<b>My Next Appointment with My Pharmacist is on: 5/10 (date) at 10:00AM <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM</b>	

This sample Medication-Related Action Plan (MAP) is provided only for general informational purposes and does not constitute professional health care advice or treatment. The patient (or other user) should not, under any circumstances, solely rely on, or act on the basis of, the MAP or the information therein. If he or she does so, then he or she does so at his or her own risk. While intended to serve as a communication aid between patient (or other user) and health care provider, the MAP is not a substitute for obtaining professional healthcare advice or treatment. This MAP may not be appropriate for all patients (or other users). The National Association of Chain Drug Stores Foundation and the American Pharmacists Association assume no responsibility for the accuracy, currentness, or completeness of any information provided or recorded herein.





# Intervention and/or Referral

---

- ▶ Pharmacist intervenes when necessary to address identified drug-related problems
- ▶ Collaborate with other members of the health care team: pharmacist refers the patient to the appropriate health care provider.





# Documentation and Follow Up

---

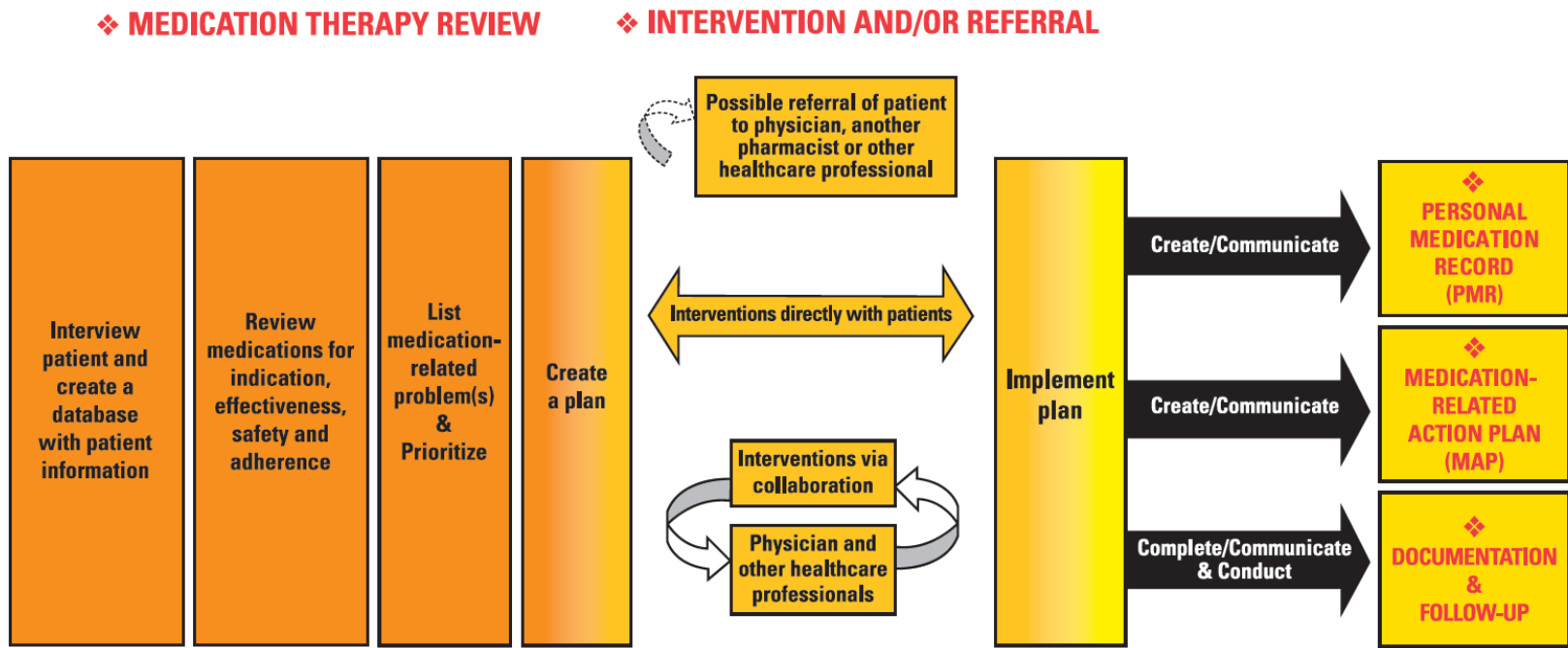
- ▶ MTM services are documented and communicated to the prescriber and patient, and follow-up MTM visit is scheduled based on patient's medication related needs
- ▶ Documentation
  - ▶ Enhance continuity of care
  - ▶ Evaluate patient progress
  - ▶ Protect against liability
  - ▶ Assists with documenting outcomes
- ▶ Billing



# MTM Core Elements

## The Medication Therapy Management Core Elements Service Model

The diagram below depicts how the MTM Core Elements (❖) interface with the patient care process to create an MTM Service Model.





# MTM in Healthcare

---

## Who benefits from MTM?

- ▶ Patients who use prescription medications, non-prescription medications, herbals, or other dietary supplements
- ▶ Patients who use several medications
- ▶ Patients with several health conditions
- ▶ Patients with questions about their medications
- ▶ Patients taking medications that require close monitoring
- ▶ Patients who have been hospitalized
- ▶ Patients who obtain medications from more than one pharmacy
- ▶ Patients with a history of noncompliance
- ▶ Patients who want to reduce healthcare costs
- ▶ Physicians when pharmacists apply their pharmacotherapeutic expertise in a collaborative process to help manage complex drug therapies





# Advantages for Patients

---

- ▶ Improved patient adherence and utilization of medications
- ▶ Face-to-face patient relationship
  - ▶ Know and see more than claims history
  - ▶ Higher patient acceptance
- ▶ Patient-centered – empower patient to self-manage medications
- ▶ Improved education of medications
- ▶ More cost effective medication regimen
- ▶ Increased percentage of patients meeting their treatment goals
- ▶ Reduced drug duplication
- ▶ Reduced harmful side effects and/or interactions between medications, vitamins, and supplements
- ▶ Reduced medical recourse cost savings (e.g. fewer emergency department visits) due to more effective use of medication



# The Benefits of MTM

---

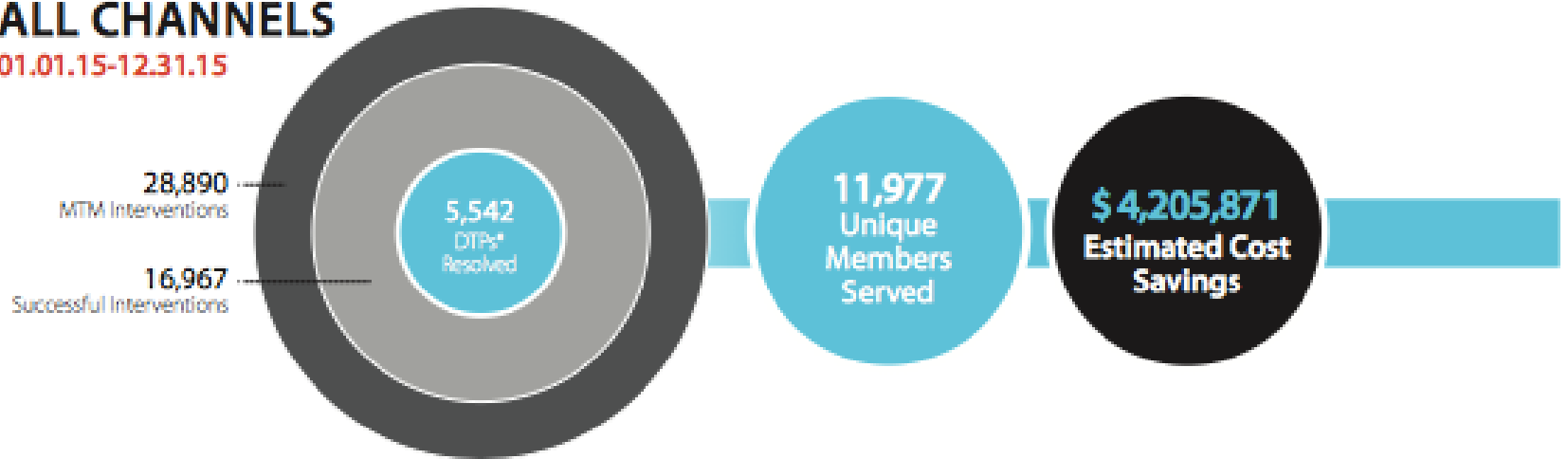
- ▶ MTM empowers individuals by providing them with the education necessary to make informed decisions on the proper use of their medications.
- ▶ It is estimated that for every 1\$ spent on MTM services 3-5\$ is saved.
- ▶ With more people using their medications correctly there would be less hospitalizations and adverse effects. This would lessen the burden placed on physicians, tax payers, insurance providers, and the health care system as a whole.



# Outcomes of MTM

## ALL CHANNELS

01.01.15-12.31.15



	Medicare Network	Medicare PCMH	Commercial Network	Commercial PCMH
Participating Locations	283	6	552	6
Members Served	6,269	3,403	1,826	650
DTPs* Resolved	2,283	1,985	964	310
AIM Savings	\$ 1,312,080	\$ 1,837,164	\$ 591,429	\$ 465,199

\*DTP = drug therapy problem



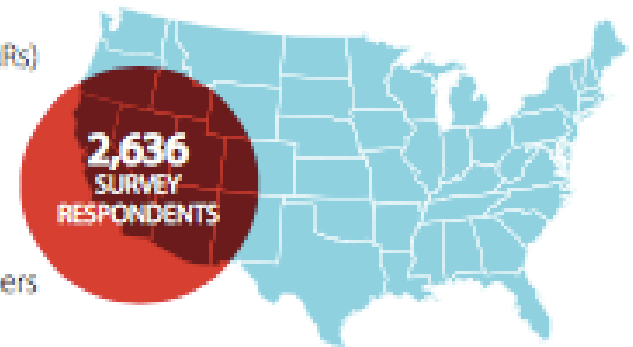
# Outcomes of MTM

## PROGRAM OVERVIEW

To understand how members experience Comprehensive Medication Reviews (CMRs) and to identify ways to improve effectiveness of this member touch point, Blue Shield of California (BSC) deployed a survey in 2015 to Medicare members who received a CMR. Overall, members reported high satisfaction and value in reviewing their entire medication regimen with their pharmacists.

## SURVEY OBJECTIVES

- Evaluate the usefulness and acceptance of CMRs delivered to BSC members
- Learn how members assess their CMR experience
- Determine whether BSC members who received a CMR also received the required Patient Takeaway



# 83%

of members who completed the survey rated the CMR at a 4/5 or a 5/5, with 61% of all members rating the service as a 5/5

# 78%

of members found the CMR service to be helpful

# 68%

of members planned to share the results of the CMR with his/her doctor

# 86%

of members who reported receiving a recommendation from their pharmacist intend to follow it

# PATIENT PROFILE CREATED BY OPL





# OPL Patient Profile

Dr. Georges Sili

- Patient's Information
- Medication History
- Patient's Medical Record
- Current medication
- Pharmacist Medication Counseling
- Management tools

## Add New Patient

LOGOUT

### Patient's Information

Last name	Middle name	First name	ID#	Date of Birth mm/dd/yyyy
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Gender	Address	District	City	Mobile number
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Land Line	Weight(KG)	Height(CM)	Race	Email address
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Physician's name	Physician's Clinic Number	Physician's LOP number	Pregnant	Breastfeeding
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
BMI	IBW	Scr(μmol/L)	CrCl	Renal function
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Hepatic function	Chief Complaint	Diagnosis		
<input type="text"/>	<input type="text"/>	<input type="text"/>		

RESET

SAVE



# OPL Patient Profile

**Dr. Georges Sili**

- Dr. Georges Sili
- Patient's Information
- Medication History
- Patient's Medical Record
- Current medication
- Pharmacist Medication Counseling
- Management tools

## Medication History

Medication

Name	Dose	Route Of Administration	Indication	Status	
<input type="text" value="Génélique"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="ADD ROW"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	

Do you take medicines outside your prescription like OTC, if yes name it and why ?

Yes

NO

Why?

- Antifussive
- Analgesic
- Cold Medicine

- Laxatives
- Booster
- Anxiolytic

- Antidiarrheal
- Antiacid
- Aspirin

- Vitamin
- Hypnotic

## Patient Allergies

Allergy to drugs

- None
- Aspirin
- Codeine
- Penicillin
- Sulfa
- Tetracyclin
- Others

Allergy to food, if yes name it

<input type="text"/>
<input type="text"/>
<input type="text"/>
<input type="text"/>
<input type="text"/>
<input type="text"/>
<input type="text"/>
<input type="text"/>
<input type="text"/>
<input type="text"/>

Allergy to animals, if yes name it

<input type="text"/>
<input type="text"/>
<input type="text"/>
<input type="text"/>
<input type="text"/>
<input type="text"/>
<input type="text"/>
<input type="text"/>
<input type="text"/>
<input type="text"/>



# OPL Patient Profile

**Dr. Georges Sili**

- Patient's Information
- Medication History
- Patient's Medical Record
- Current medication
- Pharmacist Medication Counseling
- Management tools

## Social History

<b>Tobacco use</b> <input type="radio"/> Yes <input type="radio"/> NO	<input type="radio"/> 0-1 packs per day <input type="radio"/> >1 packs per day <input type="radio"/> Previous history of smoking	<b>Other recreational use:</b> <input type="radio"/> Yes <input type="radio"/> No
<b>Alcohol use</b> <input type="radio"/> Yes <input type="radio"/> NO	<input type="radio"/> <2 drinks per week <input type="radio"/> 2-6 drinks per week <input type="radio"/> >6 drinks per week, history of alcohol dependence	List
<b>Caffeine use</b> <input type="radio"/> Yes <input type="radio"/> NO	<input type="radio"/> <2 Cups per day <input type="radio"/> 2-6 Cups per day <input type="radio"/> >6 Cups per week, history of Caffeine dependence	

Which of the drugs listed above in the table, you feel uncomfortable with, specify

Specify which?


Add comments

Add comments


RESET

SAVE





# OPL Patient Profile

**Dr. Georges Sili**

- Patient's Information
- Medication History
- Patient's Medical Record
- Current medication
- Pharmacist Medication Counseling
- Management tools

## Patient's Medical Record

### Past Medical History

Past Medical History


### History Patient Illness

History Patient Illness


### Laboratory data

Date	Normal Values	mm/dd/yyyy	mm/dd/yyyy	mm/dd/yyyy	mm/dd/yyyy	mm/dd/yyyy	mm/dd/yyyy
Bun (mg/dl)	Adults(7-20 mg/dl)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Children(5-18 mg/dl)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Na (mEq/l)	135-145 mEq/l	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>



# OPL Patient Profile

**Dr. Georges Sili**

- Patients Information
- Medication History
- Patients Medical Record
- Current medication
- Pharmacist Medication Counseling
- Management tools







### Laboratory data

Date	Normal Values	mm/dd/yyyy	mm/dd/yyyy	mm/dd/yyyy	mm/dd/yyyy	mm/dd/yyyy	mm/dd/yyyy
Bun (mg/dl)	Adults(7-20 mg/dl) Children(5-18 mg/dl)						
Na (mEq/l)	135-145 mEq/l						
K (mEq/l)	3.5-5 mEq/l						
CL (mEq/dl)	97-107 mEq/l						
CO2 (mEq/dl)	23-29 mEq/l						
Glucose (mEq/dl)	< 140 mEq/dl						
Alb (g/dl)	3.5-5.5 g/dl						
LDH ( U/L)	140-280 U/L						
SGOT/ASAT ( U/L)	5-40 U/L						
SGPT/ALT ( U/L)	7-56 U/L						
γGT ( U/L)	0-45 U/L						
Bili (mg/dl)	0.3-1.9 mg/dl						
Hb (g/dl)	Men(13.5-17.5 g/dl) Women(12-15.5 g/dl)						
Ht (%)	Men(38.8-50%) Women(34.9-44.5%)						
PH (µL)	150,000-450,000 µL						
WBC (µCL)	4500-11000 µCL						
Seg(ANC) (mm <sup>3</sup> )	1500-8000 mm <sup>3</sup>						
Neutrophil (%)	45% -70%						
Lymphocytes (%)	28 -55%						
Notes							



# OPL Patient Profile

**Dr. Georges Sili**

-  Patient's Information
-  Medication History
-  Patient's Medical Record
-  Current medication
-  Pharmacist Medication Counseling
-  Management tools

Physical Examination

Date	mm/dd/yyyy	mm/dd/yyyy	mm/dd/yyyy	mm/dd/yyyy	mm/dd/yyyy
TA					
Temp (°C)					
Pulse					

Impression/Plan/Diagnosis

Impression

---

---

---

---

---

---

---

---

---

---

Plan

---

---

---

---

---

---

---

---

---

---

Diagnosis

---

---

---

---

---

---

---

---

---

---

Progress note

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---


---

---

---



# OPL Patient Profile

 Dr. Georges Sili  
 Patient's Information  
 Medication History  
 Patient's Medical Record  
 Current medication  
 Pharmacist Medication Counseling  
 Management tools


Treatment

Description	Indication	Dose	Frequency	Duration of therapy	Side effects	Monitoring parameters	Starting Date	End Date
							mm/dd/yyyy	mm/dd/yyyy
							mm/dd/yyyy	mm/dd/yyyy
							mm/dd/yyyy	mm/dd/yyyy
							mm/dd/yyyy	mm/dd/yyyy

[ADD ROW](#)

Evaluation of therapy: appropriateness, interaction, SE, cost / effectiveness, ...


[SAVE](#)
[RESET](#)

Current medication for compliance versus adherence program

Antibiotic use in past 3 months: Hepatitis     
 Influenza     
 Immunization



# OPL Patient Profile

Dr. Georges Sili

- Patient's Information
- Medication History
- Patient's Medical Record
- Current medication
- Pharmacist Medication Counseling
- Management tools

## Current medication for compliance versus adherence program

Antibiotic use in past 3 months:

- Hepatitis
- BCG
- Tetanus

- Influenza
- Diphtheria
- Polio

Immunization

Description	Indication	Dose	Frequency	Duration of therapy	Side effects	Monitoring parameters	Starting Date	End Date	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="ADD ROW"/>

RESET

SAVE

## Pharmacist Medication Counseling

Current DTP (provide rationale for selection):

---

---

---

---

---

---

---

---

---

---

Goals:

---

---

---

---

---

---

---

---

---

---



# OPL Patient Profile

Dr. Georges Jini

- Patient's Information
- Medication History
- Patient's Medical Record
- Current medication
- Pharmacist Medication Counseling
- Management tools

<p>Current DTP (provide rationale for selection):</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<p>Goals:</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<p>Therapeutic Alternatives</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	
<p>Recommendation</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<p>Monitoring Plan</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

RESET

SAVE

SUBMIT

RESET



# OPL Patient Profile

Dr. Georges Sili

- Diabetic
- Blood Pressure
- Asthma
- Review System
- Patient Profile

## Diabetic Information

### First Day

Date:

	Finger Print Testing(Unit)	Time	Meal Size
Before breakfast	<input type="text"/>	<input type="text" value="--:--"/>	<input type="text"/>
2h after breakfast	<input type="text"/>	<input type="text" value="--:--"/>	<input type="text"/>
Before lunch	<input type="text"/>	<input type="text" value="--:--"/>	<input type="text"/>
2h After lunch	<input type="text"/>	<input type="text" value="--:--"/>	<input type="text"/>
Before dinner	<input type="text"/>	<input type="text" value="--:--"/>	<input type="text"/>
2h after dinner	<input type="text"/>	<input type="text" value="--:--"/>	<input type="text"/>
Before sleep	<input type="text"/>	<input type="text" value="--:--"/>	<input type="text"/>

### Second Day

Date:

	Finger Print Testing(Unit)	Time	Meal Size
	<input type="text"/>	<input type="text"/>	<input type="text"/>



# OPL Patient Profile

Dr. Georges Sili

- Diabetic
- Blood Pressure
- Asthma
- Review System
- Patient Profile

Before sleep

## Second Day

Date:

	Finger Print Testing(Unit)	Time	Meal Size
Before breakfast	<input type="text"/>	<input type="text"/>	<input type="text"/>
2h after breakfast	<input type="text"/>	<input type="text"/>	<input type="text"/>
Before lunch	<input type="text"/>	<input type="text"/>	<input type="text"/>
2h After lunch	<input type="text"/>	<input type="text"/>	<input type="text"/>
Before dinner	<input type="text"/>	<input type="text"/>	<input type="text"/>
2h after dinner	<input type="text"/>	<input type="text"/>	<input type="text"/>
Before sleep	<input type="text"/>	<input type="text"/>	<input type="text"/>

## Third Day

Date:

	Finger Print Testing(Unit)	Time	Meal Size
Before breakfast	<input type="text"/>	<input type="text"/>	<input type="text"/>
2h after breakfast	<input type="text"/>	<input type="text"/>	<input type="text"/>





# OPL Patient Profile

Dr. Georges Sili

- Diabetic
- Blood Pressure
- Asthma
- Review System
- Patient Profile

before sleep

## Third Day

Date:   
mm/dd/yyyy

	Finger Print Testing(Unit)	Time	Meal Size
Before breakfast	<input type="text"/>	<input type="text"/>	<input type="text"/>
2h after breakfast	<input type="text"/>	<input type="text"/>	<input type="text"/>
Before lunch	<input type="text"/>	<input type="text"/>	<input type="text"/>
2h After lunch	<input type="text"/>	<input type="text"/>	<input type="text"/>
Before dinner	<input type="text"/>	<input type="text"/>	<input type="text"/>
2h after dinner	<input type="text"/>	<input type="text"/>	<input type="text"/>
Before sleep	<input type="text"/>	<input type="text"/>	<input type="text"/>

RESET






SUBMIT

## Blood Pressure Information





# OPL Patient Profile

-  Diabetic
-  Blood Pressure
-  Asthma
-  Review System
-  Patient Profile

## First Day

Date:

	Test Results	Time
Morning	<input type="text"/>	<input type="text" value="--:--"/>
Afternoon	<input type="text"/>	<input type="text" value="--:--"/>
Evening	<input type="text"/>	<input type="text" value="--:--"/>

## Second Day

Date:

	Test Results	Time
Morning	<input type="text"/>	<input type="text" value="--:--"/>
Afternoon	<input type="text"/>	<input type="text" value="--:--"/>
Evening	<input type="text"/>	<input type="text" value="--:--"/>

## Third Day

Date:

	Test Results	Time
Morning	<input type="text"/>	<input type="text" value="--:--"/>
Afternoon	<input type="text"/>	<input type="text" value="--:--"/>
Evening	<input type="text"/>	<input type="text" value="--:--"/>

RESET

SUBMIT

## Review System

Signs, Symptoms, lab values	List deviation from normal (and relevant baseline values)						if abnormal, can it be caused by patient's medication?
Date	<input type="text" value="mm/dd/yyyy"/>	<input type="text" value="mm/dd/yyyy"/>	<input type="text" value="mm/dd/yyyy"/>	<input type="text" value="mm/dd/yyyy"/>	<input type="text" value="mm/dd/yyyy"/>	<input type="text" value="mm/dd/yyyy"/>	<input type="text"/>
<b>Vital Signs</b>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Temp	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
BP	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
HR	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>



# OPL Patient Profile

Dr. Georges Shi

- Diabetic
- Blood Pressure
- Asthma
- Review System
- Patient Profile

<b>EENT</b>							
Voice change							
Swallowing							
Taste change							
<b>CVD</b>							
T.cholesterol							
LDL/HDL							
CO							
SOB							
Edema							
Palpitation							
<b>PULMONARY</b>							
SOB							
Wheezing							
coughing Phlem/Blood							
Peak flow							
<b>FLUID &amp; ELECTROLYTE</b>							
Na <sup>+</sup>							
K <sup>+</sup>							
Ca							





# OPL Patient Profile

Dr. Georges Sili

Diabetic

Blood Pressure

Asthma

Review System

Patient Profile

FLUID & ELECTROLYTE								
Na <sup>+</sup>								
K <sup>+</sup>								
Ca								
Cl <sup>-</sup>								
HCO <sub>3</sub>								
Mg <sup>2+</sup>								
RENAL								
Se. Cr.								
CrCl								
LIVER								
AST								
ALT								
Albumin								
Bruising								
Bleeding								
GI								
GU/REPRODUCTION								
ENDOCRINE								
Se. Glucose								





# OPL Patient Profile

**Dr. Georges Sili**

- Diabetic
- Blood Pressure
- Asthma
- Review System
- Patient Profile

<b>GU/REPRODUCTION</b>								
<b>ENDOCRINE</b>								
Se. Glucose								
HgA1c								
TSH								
T4								
<b>MSK</b>								
<b>DERMATOLGY</b>								
Hgb								
Platelets								
WBC								
Neutrophils								
INR								
PTT								
<b>DRUG LEVELS</b>								
Digoxin								
Theophylline								
Lithium								
<b>CULTURES</b>								





# OPL Patient Profile

Dr. Georges Sili

- Diabetic
- Blood Pressure
- Asthma
- Review System
- Patient Profile

## Asthma Information

### Green Zone

#### Doing Well

- No cough, wheeze, chest tightness, or shortness of breath during the day or night
- Can do usual activities

And, if a peak flow meter is used, peak flow more than (80% or more of my best peak flow)

My best peak flow is: \_\_\_\_\_

Before Exercise

#### Take these long-term control medicines each day (include an anti-inflammatory)

Medicine	How much to take	When to take it
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

### Yellow Zone

#### Asthma Is Getting Worse

- Cough, wheeze, chest tightness, or shortness of breath during the day or night
- Waking at night due to Asthma, or can do some, but not all usual activities

Peak flow: \_\_\_\_\_

My best peak flow is: \_\_\_\_\_ to \_\_\_\_\_

Before Exercise

#### Add quick-relief medicine and keep your Green Zone

- Short acting beta-agonist \_\_\_\_\_
- 2 Puffs
  - 4 Puffs, every 20 minutes for up to 1 hour
  - Nebulizer, Once

If your symptoms (and peak flow, if used) return to Green Zone after 1 hour above Treatment

- Continue monitoring to be sure you stay in your green zone

If your symptoms (and peak flow, if used) do not return to Green Zone after 1 hour above Treatment

- Take: \_\_\_\_\_
- 2 Puffs
- 4 Puffs, every 20 minutes for up to 1 hour
- Nebulizer, Once

Add Oral steroid \_\_\_\_\_ mg per day for  days

Call the doctor  Hours after taking the oral steroid





# OPL Patient Profile

Dr. Georges Sili

- Diabetic
- Blood Pressure
- Asthma
- Review System
- Patient Profile



## Red Zone

### Medical Alert

- Very short of breath
- Quick -relief medicines have not helped
- can not do usual activities
- Symptoms are same or get worse after 24 hours in Yellow zone

Peak flow less than 50% of my best peak flow \_\_\_\_\_



### Danger Signs

- Trouble walking and talking due to shortness of breath
- Lips or fingernails are blue

### Take this medicine

Short acting beta-agonist \_\_\_\_\_

- 4 Puffs
- 6 Puffs
- Nebulizer

Oral steroid \_\_\_\_\_ mg

### Then call your doctor now go to the hospital or call an ambulance if

- You are still in the red zone after 14 minutes
- You have not reached your doctor

Take: \_\_\_\_\_

Go to the hospital or call for an ambulance now

- 4 Puffs
- 6 Puffs of your quick-relief medicine
- Go to the hospital or call for an ambulance now

## Asthma Action Plan

### When my Asthma is well controlled

- No regular wheeze, or cough or chest tightness at night time, on waking or during the day
- Able to take part in normal physical activity without wheeze, cough or chest tightness
- Need reliever medication less than three times a week (Except if it used before exercise)
- Peak flow above \_\_\_\_\_

### What should i do?

Continue my usual treatment as follows:

Preventer \_\_\_\_\_

Reliever \_\_\_\_\_

Combination medication \_\_\_\_\_

Always carry my reliever puffer \_\_\_\_\_



# OPL Patient Profile

Dr. Georges Sili



- Diabetic
- Blood Pressure
- Asthma
- Review System
- Patient Profile

## When my Asthma is Getting Worse

- At the first sign of worsening Asthma symptoms associated with a cold
- Waking from sleep due coughing, wheezing are chest tightness
- Using reliever puffer more than three times a week (not including before exercise)
- Peak flow between \_\_\_\_\_ and \_\_\_\_\_

## What should i do?

Increase my treatment as follows:

---



---



---



---

See my doctor to talk about my Asthma getting worse \_\_\_\_\_

## When my Asthma is Severe

- At the first sign of worsening Asthma symptoms associated with a cold
- Waking from sleep due coughing, wheezing are chest tightness
- Using reliever puffer more than three times a week (not including before exercise)
- Peak flow between \_\_\_\_\_ and \_\_\_\_\_

## What should i do?

Start oral prednisolone(or other steroid) and increase my treatment as follows:

---



---



---



---

See my doctor for advice \_\_\_\_\_

## Blood Pressure Information



**THANK YOU**



Quality  
ISO 9001





# References

---

- ▶ Nace DK, Grundy P, Neilson M, et al. Integrating Comprehensive Medication Management to Optimize Patient Outcomes. Patient-Centered Primary Care Collaborative. 2012;2:1-25. Accessed Dec 6 2016.
- ▶ APhA MTM Central What is Medication Therapy Management?. American Pharmacists Association. 2016. Accessed Dec 6 2016.
- ▶ Medication Therapy Management: Improving care for your patients by optimizing medication use. American Pharmacists Association. 2016. Accessed Dec 6 2016.
- ▶ Medication Therapy Management Services. Center for Pharmacy Practice Accreditation. 2016. Accessed Dec 6 2016.
- ▶ 2016 MTM Trend Reports. Outcomes MTM. Website: <http://www.outcomesmtm.com/documents/2016MTMTrendsReport.pdf>. 2016. Accessed Dec 6 2016.
- ▶ Medication Therapy Management (MTM): Making MTM a core competency in all practice settings. Arkansas Pharmacist Association. June 6 2013. Accessed Dec 7 2016.