



**SENIORPHARMACY**  
**SOLUTIONS**  
**MEDICATION THERAPY**  
**MANAGEMENT SERVICES**

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**Innovative Pharmacists  
Services:  
Improving Health  
Outcomes  
and  
Controlling Costs**



# Innovative Pharmacists Services



**Today's cost of healthcare .....**

**Untenable, escalating out-of-control**

- One of the largest reoccurring costs - cost of prescriptions
- The use of these costly medications can lead to further escalation of other healthcare services
- Medication Related Problems (MRPs) are both a costly component of today's healthcare and a challenge for today's patients.

## THE PROBLEM



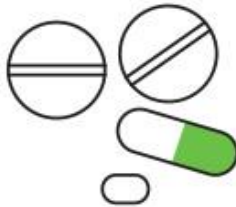
Americans spend over

**\$300B** PER YEAR

on prescription meds

**\$41B**

is spent on readmissions



**66%**

of readmissions are medication related

**56M**

Americans lack adequate access to primary care despite the majority being insured



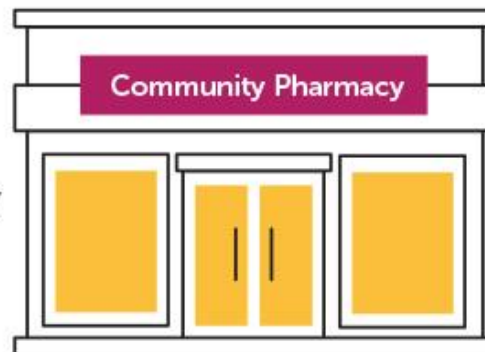
## THE SOLUTION

**90%**

of Americans live within

**5 MILES**

of a community pharmacy



Integrating pharmacists into direct patient care results in **favorable outcomes across health care settings and disease states.**

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**Today's Patients are increasing taking more medications**

- Kentucky - even more so.....
- More comorbid diseases at earlier ages
- High Tobacco Use
- Weight Control Issues
- Use of Controlled Substances

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**Today's Pharmacists just don't dispense medications**

- Provide services to support the optimal use of medications
- Supports better health, healthcare decisions and outcomes resulting in lower costs for patients and for payers.



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## **Examples of non-dispensing services provided at many pharmacies**

- Vaccinations
- Synchronization program/Automatic refills
- Blood Pressure & Blood Sugar screens
- Diabetes training
- Classes for Allergies, Cardiovascular, Diabetes
- Drug disposal options

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**When medications are dispensed, patients are asked if they have questions.....**

- Many patients say no, ignore the question
- Many don't read the medication guide
- Many don't read the extra labels on the prescription bottle
- Many don't read the label..... at all



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A background graphic featuring a stylized purple human figure with arms and legs outstretched, centered within a light green circle. The figure is positioned behind the text, creating a subtle watermark effect.

**Additionally medications are not always used correctly**

- 80-85% not refilled on schedule
- 70-75% not taken properly
- 34-52% not picked up patient
- 30-50% not taken to the pharmacy for dispensing

Indication without  
drug therapy

Drug without  
indication

Improper drug  
selection

Subtherapeutic  
dosage



Overdosage

Adverse drug  
reaction

Drug interaction

Failure to  
receive drug

Improper Drug  
Usage

Inappropriate  
laboratory  
monitoring

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## Potential of Medication Related Problems

- 6% when seniors take 2 medications
- 50% when seniors take 5 different medications
- 100% when seniors take 8 or more different medications

**(Larsen and Martin, 1999)**

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**Medication Related Problems can be caused by any and all medications**

- ✓ **Prescriptions, OTCs, non-prescriptions**
- ✓ Samples, starter doses
- ✓ Supplements, herbals, nutraceuticals
- ✓ Nutritionals, alternative therapies
- ✓ Office administered medications
- ✓ Street drugs

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A faint background graphic featuring a stylized purple human figure with arms and legs extended, centered within a light green circular outline.

## Potential of Medication Related Problems

**The biggest contributing factor to falls in  
the sicker/older population  
are their medications**

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**In Kentucky, Medications Related Problems (MRPs) are more prevalent at an earlier age**

- More diseases at earlier ages
- Multitude of prescribers/specialists
- Challenging transitions of care/information
- Lack of patient/caregiver engagement



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- **In patients over 65, the cost of Medication Related Problems rivals the economic impact of**
  - ✓ Alzheimer's disease
  - ✓ Cancer
  - ✓ Cardiovascular Disease
  - ✓ Diabetes

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## What is America's Other Drug Problem

Providing extensive resources  
for medications that fail to provide improve  
outcomes and/or  
cause more problems,  
further escalating the cost of healthcare

Falls are the #1 preventable  
accident in the elderly

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**Real cost of covered medications is not just the copay**

- Medical Insurance – State Budget (SB)
- Drug Insurance – State Budget (SB)
- Prescribers Visits, Copays – State Budget (SB)
- Labs – State Budget (SB)
- RX & copay – State Budget (SB) & Patient
- Investment of time, travel, productivity, etc.

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## A Comprehensive Pharmacist MTM Service can ...

- ✓ Clarify use of a patient's unique group of medications
- ✓ Develop a plan for the optimal use of all "medications"
- ✓ Answer and address questions about use or side effects of a patient's unique combination of medications
- ✓ Improve the use and understanding of all medications

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## Implementing Comprehensive Pharmacist MTM Services can .....

- ✓ Reduce or minimize side effects
- ✓ Improve compliance, organization and follow-up
- ✓ Improve the overall outcomes of the patient
- ✓ Decrease healthcare costs by addressing medication related problems

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**Implementing Comprehensive Pharmacist MTM Services can reduce overall healthcare costs by...**

Avoiding the

- ✓ suboptimal outcomes/problems
- ✓ healthcare provider appointments
- ✓ emergency rooms visits
- ✓ hospital admissions



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**Implementing Comprehensive Pharmacist MTM Services can contribute to.....**

- ✓ patient safety
- ✓ continued well-being
- ✓ improved overall patient health
- ✓ reduction/improved use of medication

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**Implementing Comprehensive Pharmacist MTM Services can results in.....**

- **Patient specific information for other healthcare providers to consider**
  - ✓ more detailed
  - ✓ more accurate
  - ✓ more complete

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## **Implementing Comprehensive Pharmacist MTM Services can provide solutions and support**

- Enabling patients, their family, caregivers and healthcare providers to optimize the healthcare investments of the patient.
- **This can be a win-win for both the patient and the state's budget.**

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**Our healthcare system must operate as we would operate any successful endeavor, with a...**

- Root cause analysis, we know the problem...
- Plan
- Outline of needs/actions
- Team of key people/resources

**Pharmacists must absolutely  
be on that team of care providers  
and**

**compensated for the specialized services we can provide**

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## Patient Centered Care

Individuals who have more knowledge, skills and confidence to manage their health and health care are more likely to engage in positive health behaviors and to have better health outcomes.

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## Patient Centered Care

Supporting patients with long-term conditions to manage their health and care can improve clinical outcomes. When people play a more collaborative role in managing their health and care, they are less likely to use emergency hospital services. They are also more likely to stick to their treatment plans and take their medicine correctly .



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**Implementing Pharmacist Comprehensive MTM Services can reduce overall healthcare costs by working with the patient, family, prescribers to.....**

- ✓ maximize the benefits of medications  
and
- ✓ Minimize/reduce medication problems, concerns or complaints

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[Watch Special Committee on Aging October 16 committee hearing video](#)

## Comprehensive Pharmacist MTM Services Can Prevent Falls

- 0:14 - Collins - Cost of Falls**
- 0:21 - Casey - Fall Report Overview**
- 0:47 - Cameron - Impact of Falls**
- 1:11 - Cameron - Private Approach**
- 1:23 - Traumatic Brain Injury**
- 1:33 - Cameron - Pharmacist Role**

Testimony video starts at 0:13

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**Reference Slides**

# ADDRESSING MEDICATION COMPLEXITY THROUGH COMMUNITY-BASED STRATEGIES

Juggling medications can be overwhelming for people with complex needs — individuals who often struggle with low health literacy, unstable housing, isolation, and other unmet issues. This population is often prescribed **multiple medications** from **numerous providers** taken on **different schedules** with no overall provider oversight.



## WHAT DOES MEDICATION COMPLEXITY LOOK LIKE?



**29% OF AMERICANS**  
take **five or more**  
prescriptions **daily**



**30% OF ELDERLY**  
take **eight or more**  
prescriptions **daily**



**119K ANNUAL DEATHS**  
in the U.S. from prescription  
**medication-related issues**



**1 MILLION ED VISITS** **280K HOSPITALIZATIONS**  
each year from **avoidable complications**  
caused by drugs or drug interactions



## RISKS OF MEDICATION COMPLEXITY:



**adverse  
drug events**



**failure to accomplish  
treatment goals**



**drug  
interactions**

...ALL OF WHICH CAN LEAD TO WORSE HEALTH, HOSPITALIZATIONS, AND PREMATURE DEATH

## MEDICATION COMPLEXITY CAN CAUSE:

**/med-i-ca-tion trau-ma/ noun**

"Medication complexity and lack of coordination that **overwhelm** the patient, caregiver, and provider, creating **fear, confusion, and error**, which lead to **poor adherence and outcomes**."

- Jim Slater, PharmD, CareOregon

## COMMUNITY MANAGEMENT OF MEDICATION COMPLEXITY

Shift from the traditional one-way model of prescribing and dispensing to a patient-centered approach.



### IDENTIFY

Identify people at risk for **medication complexity** through social determinants of health screening tools and risk algorithms/ data segmentation.



### SIMPLIFY

Simplify and optimize medication use through comprehensive medication management, enhanced discharge planning, and de-prescribing medications.



### DEPLOY

Deploy **non-traditional workforce strategies**, such as community paramedics, specially trained pharmacy technicians, or community health workers.



### EMPOWER

Empower patients to take ownership of their medication regimens by incorporating their stories and hopes in designing care goals.

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**“ When you see someone  
taking 14 drugs,  
the last 7 are usually  
treating the side effects  
of the first 7.”**



Albert Wertheimer,  
Director of Pharmaceutical Health Services Research,  
Temple University

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**"Any symptom in an elderly patient should be considered a drug side effect until proved otherwise."**

J Gurwitz, M Monane, S Monane, J Avorn  
Brown University Long-term Care Quality Letter  
1995



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## Symptoms

- **Confusion**
- **Depression**
- **Delirium**
- **Insomnia**
- **Falls**
- **Incontinence**
- **Changes in speech**
- **Loss of appetite**
- **Weakness or lethargy**
- **Parkinson's-like symptoms**



# When it comes to healthcare, *ONLY the highest quality care will do.*

We offer **personalized evaluation** of your prescriptions and supplements and **careful guidance** to help you **maximize the benefits** and **minimize the side effects.**

**Good health starts**  
with **good information.**

*Improving quality of life through better medication management.*



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# Senior Pharmacy Solutions Medication Therapy Management Services

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