Process of Care Change Package

June 2017

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Introduction to this Change Package

This change package focuses on the changes that need to occur within the community pharmacy in order to improve patient clinical outcomes and quality of care. It is designed to help community pharmacies implement process changes that lead to measureable improvements for patient care. Using the Model for Improvement (Figure 1) and the common language for community pharmacy care management (CPCM), pharmacies are encouraged to select and test changes to determine if they result in improvement. If you are not familiar with these strategies, you can learn more by visiting the Institute for Health Improvement website (IHI.org) and clicking on "Knowledge Center".

The idea is to start small, assess, adjust, and gradually tweak or build new processes that allow your pharmacy to fulfill the core components of CPCM. Much of the success or failure will have to do with appropriately assigning roles and responsibilities within the practice. One of the first steps is to assess your pharmacy processes for patient care. One of the next steps is to then assign roles and responsibilities in your pharmacy.

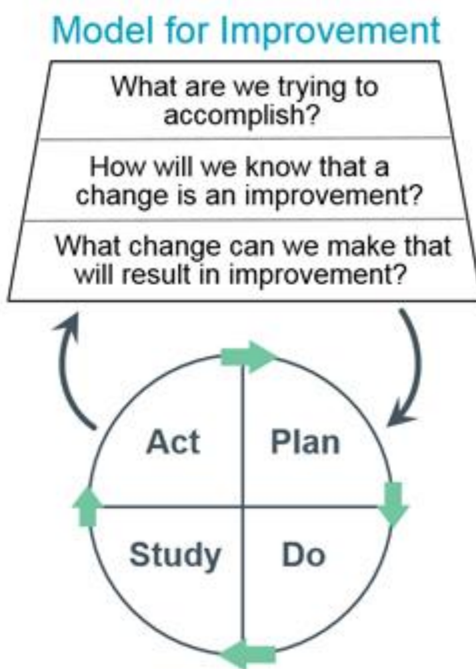

Figure 1

How to Use this Change Package

1. This change package is intended to help those who need:
    a. Quick reference to methods and tools that would help them re-think community pharmacy practice model design and implement strategies that build toward sustainable change.
    b. Tools and methods that would help integrate CPCM within current workflow.
2. How to use this change package if you are a pharmacy that **has not implemented CPCM**:
    a. This change package is made up of a progression of step-by-step exercises that will help you begin CPCM in your pharmacy. This change package can be read cover to cover as an introductory text on the steps towards successfully implementing CPCM in your pharmacy
3. How to use this change package if you are a pharmacy that has **partially or fully implemented CPCM**:
    a. You can take the self-assessment tool to gauge specific what level of CPCM activities you have implemented in your pharmacy practice. You can then use the methods for change section to gather change tactics to implement certain CPCM activities in your practice.
    b. This change package can be used in segments for specialized content in a specific area. Through the tools and links provided in this document, it also can serve as a jumping-off point for accessing other resources related to the process of patient care.

Delivery of CPCM in Community Pharmacy Practice: A Self-Assessment Tool

Instructions for Use: This tool can be distributed to multiple members of your pharmacy team as long as they are involved in the daily operations of your pharmacy. It could be useful to have different team members take the assessment independently to better understand how they feel the process of care is being practiced. To take the assessment, simply place a check next to the category that you feel represents a component of your current process of patient care. Tally the total number of checks made in each column. The more checks in the medium and high columns the higher the current performance of your current process of patient care. If you find that there are many checks only in the low column, look at some of the methods for change located in the next section for ways to improve.

CPCM Self-Assessment Tool

<table>
<tr><td colspan="3">Core Component 1 of 5 – Collect: The pharmacist assures the collection of the necessary subjective and objective information about the patient and is responsible for analyzing the data in order to understand the relevant medical/medication history and clinical status of the patient.</td></tr>
<tr><th>Low</th><th>Medium</th><th>High</th></tr>
<tr>
<td>☐ Gather information from pharmacy management system
☐ Conduct medication history interview gathering prescription and nonprescription medications only</td>
<td>☐ Gather information from multiple sources including existing patient records and other health care professionals
☐ Conduct medication history interview gathering the following:
• Allergies and adverse effects
• Access to medications
☐ Gather information from the patient on effectiveness as well as potential side effects of each medication the patient is taking
☐ Gather information regarding whether the medication can be taken as intended</td>
<td>☐ Conduct medication history interview gathering the following:
• Patient’s questions or concerns for the visit
• Past medical history
• Use of alcohol, tobacco, caffeine
• Immunizations
☐ Gather information on adherence of each medication the patient is taking
☐ Inquire as to who primarily manages the patient’s medications and how this process works (e.g., pill boxes, calendars, reminders).
☐ Ask about patient goals
☐ Obtain lab values, if appropriate
☐ Conduct physical assessment, if appropriate</td>
</tr>
</table>

Core Component 2 of 5 - Assess: The pharmacist assesses the information collected and analyzes the clinical effects of the patient's therapy in the context of the patient's overall health goals in order to identify and prioritize problems and achieve optimal care.		
Low	**Medium**	**High**
☐ Assess the appropriateness (i.e., indication) of each medication ☐ Assess the effectiveness of each medication and consider if the dose and duration is appropriate for the patient ☐ Assess the safety of each medication and consider if the dose is high enough to cause adverse event(s)	☐ Assess the effectiveness of each medication and consider: • If the patient is meeting clinical goals • If the most effective drug is being used for the medical condition ☐ Assess the safety of each medication and consider: • If safer alternatives exist • Potential drug-disease, drug-drug, or drug-food interactions ☐ Assess the patient for potential barriers to meeting goal(s) which includes: • Language or literacy needs • Lack of or limited access to reliable transportation • Understanding of condition(s) • Financial or insurance issues • Visual or hearing impairment	☐ Assess the effectiveness of each medication the patient is taking and consider: • If the patient is meeting BOTH patient and clinical goals. • If labs are needed to monitor drug therapy ☐ Assess the safety of each medication and consider: • If labs are needed to monitor therapy ☐ Assess the patient for potential barriers to meeting goal(s) which includes: • Level of motivation • Cultural or spiritual beliefs • Psychological impairment • Inadequate housing or food resources ☐ Identify and classify the patient's drug therapy problems based on indication, effectiveness, safety, and adherence ☐ Assess each medical condition and drug therapy problem by establishing clinical goals, based on evidence-based guidelines and desired patient goals

Core Component 3 of 5 - Develop the Care Plan: The pharmacist develops an individualized patient-centered care plan, in collaboration with other health care professionals and the patient or caregiver, that is evidence-based and cost-effective.		
Low	**Medium**	**High**
☐ Develop a care plan to manage the patient's medical conditions, support goals, and resolve the identified drug therapy problems. ☐ Determine the appropriate timeframe for follow-up ☐ Determine the appropriate mode for follow-up (i.e., phone, face-to-face)	☐ Prioritize the patient's medical conditions and drug therapy problems ☐ Identify the monitoring parameters important to assess ongoing effectiveness, safety, and adherence, including frequency of follow-up monitoring ☐ Provide patient with non-personalized education and interventions ☐ Reconcile all medication lists to arrive at a final recommendation for the medication regimen	☐ Design personalized education and interventions that engage the patient through empowerment and self-management ☐ Determine appropriate enhanced services that will help achieve goals by considering potential barriers and determine if an enhanced service would be beneficial ☐ Work with the primary care provider and other health care team members to reach consensus on the proposed care plan ☐ Determine who will implement components of the care plan (e.g., patient, pharmacist, other provider) ☐ Coordinate care, where applicable, including the referral or transition of the patient to another health care professional

Core Component 4 of 5 - Implement the Care Plan: The pharmacist implements the care plan in collaboration with other health care professionals and the patient or caregiver.		
Low	**Medium**	**High**
☐ Provide patient with non-specific education regarding the care plan (e.g., adherence education, disease state education or other education) ☐ Provide updated medication list to patient ☐ Implement the recommendations that you as the pharmacist have the ability to implement	☐ Assure patient understanding of care plan ☐ Document all drug therapy problems that need to be addressed. Document in pharmacy management system or other platform ☐ Arrange follow-up in a time frame that is clinically appropriate for the specific patient ☐ Communicate instructions for follow up with the patient	☐ Provide patient-specific education regarding the care plan ☐ If you cannot implement recommendation(s) on your own, communicate the care plan to the rest of the care team ☐ Document the encounter, including your assessment, drug therapy care plan, rationale, monitoring, and follow-up in an electronic medical record, pharmacy system or other platform ☐ Coordinate with other providers to ensure that patient follow-up and future encounters are aligned with the patient's medical and medication-related needs ☐ Coordinate with the patient's provider office to reconcile all medication changes and ensure an accurate and updated medication list

Core Component 5 of 5 - Follow-up with the Patient: The pharmacist provides ongoing monitoring and follow-up to evaluate the effectiveness of the care plan, and modifies the plan, when needed, in collaboration with other health care professionals and the patient or caregiver.		
Low	**Medium**	**High**
☐ Resolve outstanding drug therapy problems ☐ Update the patient's active medication list at each encounter	☐ Obtain updates on the patient's clinical status ☐ Reinforce the care plan, make any necessary referrals and coordinate care as needed	☐ Conduct ongoing assessments (whether face-to-face or via phone) and refine care plan to optimize medication therapy and ensure that individual patient goals are achieved ☐ Document the identification of new drug therapy problems and the resolution of previously identified drug therapy problems ☐ Repeat the essential functions of CPCM to ensure consistency in process and continuity of care

A Common Language for the Delivery of Community Pharmacy Care Management (CPCM) in Community Pharmacies: The CPCM Patient Care Process

Introduction

Health policy innovators have searched for ways to improve the quality of patient care and reduce health care costs in the United States. National interest in pharmacists playing a key role in this reform is increasing and generally met with support by the greater medical community. Community pharmacists have the opportunity to serve a vital role by assessing and monitoring patients' medication-related needs with each dispensed prescription. Including community pharmacists in a patient-centered care model can reduce hospitalizations and lower overall health care costs. The community pharmacy is a healthcare setting positioned to support efforts related to population health and management of patients, in part because it offers patients accessibility. Patients visit their community pharmacy an average 35 times per year compared with visiting their primary care provider an average of 2-3 times per year, and the average American lives within 5 miles of a community pharmacy.[1] When patients obtain medications, purchase supplements, and acquire medical devices, they have the opportunity to interact with various community pharmacy personnel, including pharmacists and technicians. Each of these interactions offers the opportunity to deliver one or more components of community pharmacy care management (CPCM). CPCM involves frequent, intensive intervention and follow-up that are coordinated with other care team members. The coordination is managed via regular updates to a care plan that is focused on the patient's medication use, medication-related health concerns, health goals, and need for enhanced pharmacy services. As we work to advance the delivery of CPCM in community pharmacies, this will require that we articulate and carry out a consistent approach to delivering CPCM, build the business case that integrates CPCM into value-based payment models, and support community pharmacists in their ability to integrate these services into their workflow, business model, and interactions with the medical neighborhood.

The CPCM Patient Care Process

CPCM is a set of services provided locally by a community pharmacy in close coordination with other care team members. The objective of CPCM is to procure, update and re-enforce a team-based, patient-centered pharmacy care plan over time. This service line is longitudinal and coordinated with the rest of the care team. This document describes the essential functions of CPCM, which follow the pharmacists' patient care process but include important components that can be conducted by non-licensed pharmacy personnel.

To bring consensus and consistency to the pharmacist patient care process, the Joint Commission of Pharmacy Practitioners released the Pharmacists' Patient Care Process (PPCP) in May, 2014. The PCPP was the result of the collaboration of a vast array of pharmacy organizations representing many facets of pharmacy practice. The resulting PPCP describes a pharmacist's patient care process that is applicable to most pharmacy settings.[2-3]

CPCM begins with a "comprehensive" assessment. The PPCP can be comprehensive but can also be abbreviated which is advantageous, especially in a community pharmacy setting where time is of the essence. The PCPP is a cyclical, on-going process (figure 2). Note how the process begins with collecting information. The information is then assessed. A plan of care is developed, and then implemented. The last step is follow-up that includes monitoring and evaluating the patient's response to the plan. This is

not really the “last” step as the process starts over with the collection of information again (figure 3). The cycle continues throughout the patient care process as progress is made toward achievement of health care goals and outcomes.

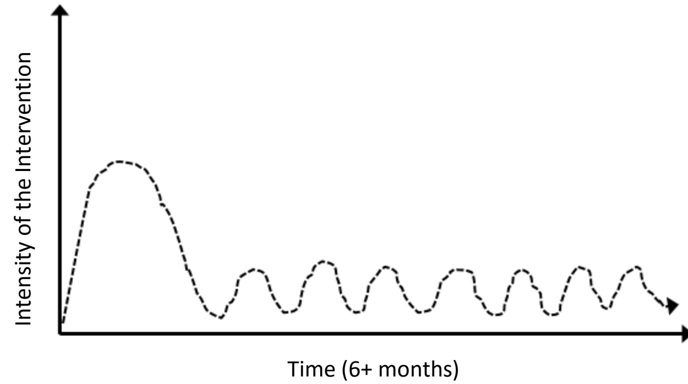

Figure 2. JCPP Patient Care Process

Figure 3. CPCM Model

A Common Language for the Delivery of Community Pharmacy Care Management (CPCM) in Community Pharmacy Practice: The CPCM Patient Care Process[4-5]

Core Components of CPCM	Activities*
Collect: The pharmacist assures the collection of the necessary subjective and objective information about the patient and is responsible for analyzing the data in order to understand the relevant medical/medication history and clinical status of the patient.	1a. Gather information from multiple sources including existing patient records and other health care professionals: • Pharmacy fill history **at a minimum.** • Notes from pharmacy management system patient profile and other various sources *if applicable*. • Primary care provider active medication list *if possible*. • Notes from patient's primary care provider's medical record (electronic or otherwise) *if possible*. • Discharge medication list and summary *if a transitional care patient*. 1b. Conduct a medication history interview with the patient to: • Inquire about any questions or concerns for the visit. • Inquire about use of alcohol, tobacco, caffeine *as needed*. • Inquire about immunizations. • Inquire about history of allergies and adverse effects. • Gather all prescription and nonprescription medications as well as complementary and alternative medicine the patient is taking (e.g., name, indication, strength and formulation, dose, frequency, duration, and response to medication). • Gather past medication history, *if pertinent*. 1c. Gather information on effectiveness and potential side effects (i.e., safety) of each medication the patient is taking by asking the patient: • Does the medication appear to be working for the patient? • Is the patient experiencing any adverse event(s)? 1d. Gather information on adherence of each medication the patient is taking by asking the patient: • Is the patient able and willing to take the medication as prescribed? • Is the patient taking the medication as prescribed? • On average throughout the week, how often is the patient missing doses of a medication? If they are, why? 1e. Gather information regarding whether the medication can be taken as intended (e.g., access and affordability) by asking the patient: • Can the patient access and obtain the medication?

	• Does the patient have trouble getting to the pharmacy to pick up medications? • Can the patient afford the medication, and how does the patient pay for their medications? • How does the patient manage his/her medications (i.e., what is their system/process of medication administration)? 1f. Inquire as to who primarily manages the patient's medications and how this process works (e.g., pill boxes, calendars, reminders). • What is the patient's preferred method of contact? • What is the best time to contact? • What are non-traditional ways to reach hard to contact patients (i.e., neighbors, brothers/sisters, preacher, etc)? 1g. Ask what the patient's own goals are for his/her health. • Goals should be patient-centered (e.g., start checking blood sugars or start walking 3 times/week). • Goals may differ from clinical (e.g., goal of HbA1c ≤ 7.0). • *Motivational interviewing techniques may be helpful with this conversation.* 1h. Obtain any necessary lab values and/or measurements (e.g., cholesterol values, A1c), *if applicable*. 1i. Conduct any necessary physical assessments (e.g., blood pressure), *if applicable*.
Assess: The pharmacist assesses the information collected and analyzes the clinical effects of the patient's therapy in the context of the patient's overall health goals in order to identify and prioritize problems and achieve optimal care.	2a. Assess the appropriateness (i.e., indication) of each medication the patient is taking and consider: • Is the medication appropriate for the medical condition being treated? • Does the patient have an indication for each medication? • Does the patient have a medical condition that is not being treated or prevented? 2b. Assess the effectiveness of each medication the patient is taking and consider: • Is the patient meeting their goals (patient-specific and clinical)? • Is the most effective drug product being used for the medical condition? • Is the dose and duration appropriate and effective?? • Are labs needed to monitor drug therapy? 2c. Assess the safety of each medication the patient is taking and consider:

	• Is the dose high enough to cause adverse events? • Do safer alternatives exist? • Are there drug-disease, drug-drug, or drug-food interactions? • Are labs needed to monitor drug therapy? 2d. Assess the convenience (e.g., administration, access, affordability) of each medication and consider: • If the patient is not able to access the medications, what strategies are needed to improve access? • Do less expensive alternatives exist? • Are the medications taken at appropriate times during the day to optimize effectiveness and minimize harm? 2e. Assess the patient for potential barriers to meeting the desired patient goal(s) which may include, but are not limited to: • Language or literacy needs • Lack of or limited access to reliable transportation • Level of understanding of a condition • Level of motivation • Financial or insurance issues • Cultural or spiritual beliefs • Visual or hearing impairment • Cognitive impairment • Inadequate housing or food resources • Lack of caregiver or other in-home supports 2f. Identify and classify the patient's drug therapy problems based on indication, effectiveness, safety, and adherence. • Examples to classify drug therapy problems could include SNOMED CT, PQA endorsed Classification of Drug Therapy Problems, etc. 2g. Assess each medical condition and drug therapy problem. • This includes establishing clinical goals, based on a combination of evidence-based guidelines and desired patient goals.
Develop the Care Plan: The pharmacist develops an individualized patient-centered care plan, in	3a. Develop an appropriate care plan to manage the patient's medical conditions, support patient-centered goals, and resolve the identified drug therapy problems. This includes prioritizing the patient's medical conditions and drug therapy problems.

collaboration with other health care professionals and the patient or caregiver.	3b. Identify the monitoring parameters important to assess ongoing effectiveness, safety, and adherence, including frequency of follow-up monitoring.
	
	3c. Design personalized education and interventions that engage the patient through empowerment and self-management.
	
	3d. Determine appropriate enhanced services that will help achieve goals.
	• Consider potential barriers identified in 1d, 1e, and 2e and determine if an enhanced service would be beneficial.
	    o If the patient has a lack of access to reliable transportation, would home delivery be beneficial?
	    o If the patient has visual impairment, would adherence packaging be beneficial?
	• Consider whether enhanced services such as medication synchronization, specialized packaging, or enrollment in an adherence program would assist the patient with adherence.
	    o Explain these services to the patient and identify his/her interest in receiving them.
	
	3e. Reconcile all medication lists to arrive at a final recommendation for the medication regimen.
	
	3f. Coordinate care with the primary care provider and other health care team members to reach consensus on the proposed care plan.
	
	3g. Determine who will implement components of the care plan (e.g., patient, pharmacist, other provider).
	
	3h. Coordinate care, where applicable, including the referral or transition of the patient to another health care professional.
	
	3i. Determine the appropriate timeframe and mode (i.e., phone, face-to-face) for follow-up.

Implement the Care Plan: The pharmacist implements the care plan in collaboration with other health care professionals and the patient or caregiver.	4a. Provide patient-specific education regarding the care plan (e.g., adherence education, disease state education or other education as dictated by patient-centered goals) and assure understanding. 4b. Provide updated medication list to patient. 4c. Implement the recommendations that you can implement, and communicate recommendation(s) you cannot implement to the rest of the care team. • Consider whether patients with numerous interventions should have the most important and urgent ones implemented at this time, with the remainder planned in future months. 4d. Document all drug therapy problems that need to be addressed in an electronic medical record, pharmacy management system or other platform. 4e. Document the encounter, including your assessment, drug therapy care plan, rationale, monitoring, and follow-up, in an electronic medical record, pharmacy management system or other platform. 4f. Arrange follow-up in a time frame that is clinically appropriate for the specific patient, the medical conditions being monitored, and the drug therapy being taken. This will vary with each patient. 4g. Coordinate with the patient's provider office and other providers to reconcile all medication changes, ensure an updated medication list, and ensure that follow-up is aligned with the patient's medical and medication-related needs. 4h. Communicate instructions for follow-up with the patient or patient's caregiver.
Follow-up with the Patient:	5a. Obtain updates on the patient's clinical status and goals.

The pharmacist provides ongoing monitoring and follow-up to evaluate the effectiveness of the care plan, and modifies the plan, when needed, in collaboration with other health care professionals and the patient or caregiver. *The time frame for follow-up is dependent on the specific patient, the medical conditions being monitored, and the drug therapy being taken. This will vary with each patient.*	5b. Conduct ongoing assessments (whether face-to-face or via phone) and refine care plan to optimize medication therapy and ensure that individual patient goals are achieved. • Resolve outstanding drug therapy problems, reinforce the care plan, make any necessary referrals and coordinate care as needed. • Determine if any new medical conditions, patient goals, or drug therapy problems have developed. 5c. Document the identification of new drug therapy problems and the resolution of previously identified drug therapy problems. 5d. Update the patient's active medication list at each encounter if changes have been made. 5e. Repeat the core components of CPCM to ensure consistency in process and continuity of care.

*The order in which one carries out the activities within a category may vary depending on the patient and the encounter. Some steps (e.g., reviewing the medical record, physical assessment, inquiring about immunizations, alcohol, tobacco, caffeine) may not be necessary at each encounter, but are important steps that should occur when appropriate (i.e., typically always at the initial visit and subsequently, when needed).

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Stages for New Pharmacy Service Implementation

The purpose of this document is to provide a tool that can be used by pharmacies to plan their process for implementing a new pharmacy service. Pharmacy service implementation occurs in four different stages including explore, prepare, launch and maintain. The definitions of these stages are below. Three core elements exist across each of these stages which includes use of a pharmacy champion(s), continuous improvement and sustainability. The tables below the definitions outline key questions to ask for each of the three core elements throughout the four stages of implementation.

Definition of Implementation Stages

1. **Stage 0 (Explore)**
   a. This stage involves identification of a pharmacy champion(s), conducting a SWOT (Strengths, Weakness, Opportunities and Threats Analysis Worksheet) analysis for the new pharmacy service, assessing the implementation needs to support pharmacy personnel, identifying resources needed for implementation, and creating readiness for change in pharmacy personnel.
   b. The results of this stage are a common understanding and acceptance of the service with required buy-in for implementation and support from relevant stakeholders for the new service.
2. **Stage 1 (Prepare)**
   a. This stage involves acquiring or developing the resources needed to fully and effectively engage in the new ways of work.
   b. Resources and activities during installation are focused on creating new job descriptions, employing people to do the work, developing data collection sources and protocols, and access to timely training.
3. **Stage 2 (Launch)**
   a. This stage requires pharmacy personnel to use newly learned skills. This is the most fragile stage where the awkwardness associated with implementing a new service and the difficulties associated with changing old ways of work are strong motivations for giving up.
4. **Stage 3 (Maintain)**
   a. This stage requires the new ways of providing a pharmacy service to become standard where pharmacists and pharmacy personnel routinely provide a high-quality service to patients.

Questions for Stages of Implementation

Explore Stage		
Pharmacy champion(s)	**Continuous improvement**	**Sustainability**
Identify Champion • Is the champion knowledgeable about the process of care? • Is the champion a respected member of the pharmacy team? • Does the champion represent technician, pharmacist and patient interests? • Will a team be developed to assist the champion?	Needs Assessment (SWOT Analysis Worksheet) • Needs: What are the needs of our patient population? • Fit: Does this service fit with current projects, context, organization and philosophies? • Resources: What resources will be available to the pharmacy to implement the service? What resources will we need to implement the service? • Evidence: What is the evidence that the service will work? What outcomes can we expect if we implement the service well? • Readiness: How well-defined is the service? Do we know the core components of the service? Will service development be necessary or will it be provided? • Capacity: Will pharmacy personnel need additional qualifications/training for implementation? Can we make the necessary structural and financial changes for implementation? • Sustainability: Are there sufficient resources and capacity to sustain this service through full implementation and beyond?	Planning for Implementation • Infrastructure to support the service: Is pharmacy personnel open to the new service? Will personnel with necessary qualifications/training be available? Are qualifications/training available and affordable? Who will provide coaching and supervision? What steps we will we need to take to ensure a coaching plan is in place? How will personnel performance be assessed? What steps are need to ensure a performance assessment system is in place? • Infrastructure of how the service aligns with the organization: What questions will we need to answer to ensure that implementation is happening as planned? Where will we get this data? What technology needs do we have? What changes need to occur to support this implementation? What policies, procedures or processes need to be developed or revised?
Develop Communication Strategy • Has the champion/team developed a strategy for communication to	Decisions Teams Make During Exploration • Will the proposed service meet the pharmacy's needs? • Do we have "what it takes" to move forward? Is moving	

educate personnel on the service? • Does the champion/team have authority to make decisions and provide feedback? If not, who is accountable for making decisions and what is the mechanism for communication?	forward both desirable and feasible? • How will we communicate these desires to others?	

Prepare Stage		
Pharmacy champion(s)	**Continuous improvement**	**Sustainability**
Development of Personnel to Support Implementation • Do the champions know and apply the service? • Do the champions know and apply improvement cycles? • Do the champions know and apply changes to the service?	Troubleshooting and Continuous Improvement • Are the communication strategies developed during exploration in place and occurring? How can communication be improved? Is leadership effectively engaged in the process? • In the event of personnel turnover, how can we ensure that team competencies are maintained? • What changes are needed before we initiate the new service? Are changes to the service necessary? Are changes to implementation supports (training, coaching) necessary? Are changes to data collection processes necessary? • Has the implementation infrastructure planned for during exploration been developed and installed? Are general capacities in place? Are service specific capacities in place?	Installing the Implementation Infrastructure • Infrastructure to support the service: Have readiness plans for personnel increased openness to the service? Has initial training occurred? Have coaching plans been developed to support personnel in the new way of work? • Infrastructure of how the service aligns with the organization: Has leadership expressed commitment to the new way of work? How has this been demonstrated? Have partners been engaged? Have agreements with community partners been established? Are partner expectations clear?
Development of Policy Practice Feedback Loops • Have the champion(s) developed processes to gather practice-level	Decisions Teams Make During Installation • Is implementation infrastructure good enough to move forward	

information (e.g. barriers to implementation) • Is practice-level information fed to leadership? • Have the champion(s) developed active processes to ensure that leadership decisions are incorporated into the new way to deliver the service?	into initial implementation with patients? • How might we improve the implementation infrastructure before we initiate the new service or way of working?	
Frequency of Meetings • Do the champion(s) meet weekly? • Do the champion(s) meet with leadership twice a month? • How often do ancillary teams meet? Is this enough to support service implementation?		

Launch Stage		
Pharmacy champion(s)	**Continuous improvement**	**Sustainability**
Improvement Cycles • Has the pharmacy champion(s) engaged in different types of improvement cycles (i.e., usability testing, rapid cycle problem solving, etc)?	Pharmacy Personnel Intervention Knowledge • How satisfied are pharmacy personnel with the support they have received to implement the new way of work? • What are data telling us about what is working or not working regarding pharmacy personnel selection, training and coaching? • What changes might we need to make to strengthen pharmacy personnel competency?	Infrastructure to Support Personnel • What is being done to support ongoing readiness of pharmacy personnel? • Has there been staff turnover? How has this been addressed? • Has follow-up or booster training occurred? Is this needed? • Are pharmacy personnel receiving coaching as planned?

Frequency of Meetings • Do the champion(s) meet monthly or less often? If less often, has this affected implementation negatively or is the innovation stable enough for less frequent meetings? • Do the champion(s) meet with leadership bi-weekly or at least monthly?	Troubleshooting Organizational Supports • What are the data telling us about what is working or not working regarding organizational supports? • What are early outcomes telling us about the potential efficacy of the new service?	Infrastructure to Support Organization • Does leadership continue to support the new way of work? How is this demonstrated? • Are data systems operable? Are data reports usable? Is data entry and review built into regular practice routines? • Are additional interventions needed (e.g., policy, legislative, funding, community partners)?
Communication Strategy • Has communication between the champion(s) and leadership been effective?	Decisions Teams Make During Initial Implementation • How can we continue to support the implementation infrastructure? • How can we more effectively problem solve? • Are we asking the right questions? • Are we collecting the data we need to guide our decision-making? • What changes might we need to make to the service, implementation supports, or data collection processes?	

Maintain Stage		
Pharmacy champion(s)	**Continuous improvement**	**Sustainability**
Improvement Cycles • Does the champion(s)/team continue to use data and feedback mechanisms to support and improve the service? Please note that it is recommended that	Improving Personnel Competency • Are personnel implementing the service with fidelity? • How might the service be enhanced to reduce burden or increase efficiency of developing personnel	Infrastructure to Support Personnel • Can readiness be sustained and extended to new personnel? • Has there been turnover? How are new members on-boarded?

the service infrastructure is formally assessed every 6 months (minimum of annually).	competency without compromising outcomes?	• Are there more efficient or effective ways to train and coach personnel? • If the service is scaled, would training or coaching components need to be redesigned?
Develop and Test Enhancements • Has the champion(s)/team assessed whether enhancements to the service may reduce burden or increase efficiency with similar outcomes? • Has the champion(s)/team assessed whether enhancements to the service might improve outcomes?	Improving Organizational Supports • Are we getting the intended outcomes? • How might the service be enhanced to improve outcome for patients further?	Infrastructure to Support Organizations • What role can leadership play in replicating or scaling the service if outcomes are achieved? • How can data systems become more efficient and practical for helping to solve implementation challenges? • If the service is scaled, would the data system need to be altered to support more robust analysis or information sharing? • Are additional interventions needed (e.g., policy, legislative, funding, community partners)?
Frequency of Meetings • Do the champion(s) meet monthly or at least bi-monthly? Would it be more beneficial to meet more frequently? • Do the champion(s) meet with leadership bi-monthly or quarterly?	Decisions Teams Make during Full Implementation • How will this service be sustained? • Is this service ready for large-scale implementation and/or scale up? • Can we scale the service? • Should we develop and test an enhancement to the service? • What data will we collect to assess the enhancement? • What results will we need to make the enhancement permanent?	
Communication Strategy		

• What are personnel and leadership saying about the kinds of supports in place for the service? • How are feedback loops functioning? Does personnel feel like they are head? Is leadership getting the information they need?		

Community Pharmacy Care Management Methods for Change

Core Component 1 of 5: **Collect** necessary information about the patient in order to understand the relevant medical/medication history and clinical status of the patient.	
Activities	**Change Tactics**
Gather information from multiple sources including existing patient records and other health care professionals.	• Develop a relationship with at least one of your local hospitals, medical practices, specialists, and other providers to establish a method for obtaining information after a patient's discharge from the hospital. • Assign roles and responsibilities in your pharmacy. Who will be responsible for obtaining certain information from particular sources. • Consider signing necessary agreements and going through credentialing processes if needed in order to obtain remote, read only access to hospital/health system EHRs. Sometimes this type of access includes a limited ability to direct message providers, which is helpful. • Develop relationships with local primary care practices and establish a method to receive prescribed medication lists, laboratory data, and notes from recent visit(s). • For medical practices that have an onsite pharmacist, establish a relationship with the pharmacist and consider how information can be shared from the ambulatory care pharmacist's care plan that would allow the community pharmacy to assist with monitoring, education, and care plan reinforcement. • Consider whether a statewide or regional health information exchange could be a source of information. Obtain information about how a community pharmacy can access it and whether there are any associated fees. Sometimes free access is related to the ability to provide data into the exchange.

Conduct a medication history interview with the patient.	• Ask open ended questions. • Develop a template to be used while conducting a medication history interview. • Maintain multi-lingual staff; contract for translation services where staff cannot be used. • Use recent and available medication lists, such as hospital discharge orders, pharmacy fill history, or physician prescribed medication lists as sources of information. If there is a medication on the list(s) that the patient does not address, ask the patient if/how he/she takes it. • Find out how often the patient uses PRN medications in order to evaluate control of chronic diseases.
Gather information on effectiveness and potential side effects of each medication the patient is taking.	• Consider obtaining lab values for disease states related to each medication. • For disease states where control can be assessed with vital signs (e.g., blood pressure), standardized assessments (e.g., PHQ-2 or PHQ-9 for depression), or simple physical exam (e.g., lower extremity edema), consider administering those assessments during the patient encounter.
Gather information on adherence of each medication the patient is taking.	• Use active listening to understand patients' unique barriers to adherence. • Obtain prescription fill history from pharmacy management system.
Gather information regarding whether the medication can be taken as intended (e.g., access and affordability).	• Use active listening to understand patients' unique barriers to adherence.

Inquire as to who primarily manages the patient's medication and how this process works (e.g., pill boxes, calendars, reminders).	• Involve current support systems. Asking patients how they get certain needs met may reveal that they have a case manager that helps them. They may also mention a friend or family member that provides support. This support system may be very helpful at assisting the patient with achieving goals.
Ask what the patient's own goals are for his/her health.	• Always ask patients what their personal goals are; don't assume. • Train staff in motivational interviewing approaches.
Obtain any necessary lab values and/or measurements (e.g., cholesterol values, A1c).	• Develop a standardized form to request specific lab values from primary care provider. Work with the practice to understand the communication vehicle that works best for these types of request (e.g., phone, fax, EHR direct message, etc.).
Conduct any necessary physical assessments (e.g., blood pressure).	• Take an Advanced Training Program from APhA (APhA Advanced Training Programs). • View online tutorials on physical assessment. • If you are site that precepts student pharmacists, have student pharmacists conduct physical assessments under your supervision.
Resources and Tools	
Tips for Engaging Patients in Medication Therapy Management Services Using Relationship Marketing to Expand Pharmacy Services Appendix 1: Script for Patient Interview	

<table>
<tr><th colspan="2">Core Component 2 of 5: Assess the information collected and clinical effects of the patient's therapy on the overall health goals in order to identify and prioritize problems and achieve optimal care.</th></tr>
<tr><th>Activities</th><th>Change Tactics</th></tr>
<tr><td>Assess the appropriateness (i.e., indication), effectiveness, safety, and convenience of each medication the patient is taking.</td><td>For a list of questions to think through with each medication in order to comprehensively identify drug therapy problems, see Appendix 2 at the end of the change package.</td></tr>
<tr><td>Assess the patient for potential barriers to meeting desired patient goal(s).</td><td>For patients with frequent "no shows", ask patients about reasons and develop potential solutions to address them.
Query technicians and other support staff about things patients and families say to identify potential barriers for meeting goals.</td></tr>
<tr><td>Identify and classify the patient's drug therapy problems based on indication, effectiveness, safety, and adherence.</td><td>Consider using SNOMED CT or PQA Drug Therapy problems categories when classifying identified patient problems.</td></tr>
<tr><th colspan="2">Resources and Tools</th></tr>
<tr><td colspan="2">Clinical Guidelines

A Primer on Systematized Nomenclature of Medicine "Clinical Terms" Documentation (for Pharmacist and Pharmacy Services)

Medication Therapy Problem Categories Framework for PQA Measures

A Beginners Guide to Implementing SNOMED CT in Practice

Documenting Comprehensive Medication Management in Team-Based Models Using SNOMED CT Codes

Appendix 2: Framework for Assessing Drug Therapy Problems</td></tr>
</table>

Core Component 3 of 5: **Develop** an individualized patient-centered care plan, in collaboration with other health care professionals and the patient or caregiver.	
Activities	**Change Tactics**
Develop an appropriate care plan to manage the patient's conditions, support patient-centered goals, and resolve the identified drug therapy problems.	• Drug therapy problems that could acutely result in a worsening condition, an ED visit, or hospitalization should be given the highest priority for resolution. • All identified drug therapy problems should have an associated plan of action/intervention. • Prioritize delivery of the interventions based on the stability of the patient's medical conditions and the nature of the medication and problem involved. • Consider using a care plan template in your pharmacy management system. • See Appendix 3 for a Care Plan Template Example or Appendix 4 for an Ideal CPCM Example.
Identify the monitoring parameters to assess ongoing effectiveness, safety, and adherence, including frequency of follow-up monitoring.	• Patients should understand signs and symptoms of their condition worsening and know from whom and how they should obtain assistance. Keep the red flag messages simple to understand.
Design personalized education and interventions that engage patient through empowerment and self-management.	• Develop a community resources list. You can contact your local Chamber of Commerce for a list of services and programs in the area. Ask these agencies to send pamphlets to your pharmacy so you understand their services, referral process, and know a contact person. • Train staff in self-management goal-setting. • Consider the use of patient assessments that identify the patient's level of motivation to address and manage his/her health issues.

Determine appropriate enhanced services that will help achieve goals.	• Review Appendix 5: Definitions of Enhanced Services to determine if any of the enhanced services would benefit your patient(s).
Reconcile all medication lists.	
Coordinate care with the primary care provider and other health care teams to reach consensus on proposed care plan.	• Having an initial "meet n' greet" with local care managers and medical practices fosters relationship building and assists with setting mutual expectations. • Each primary care practice may have a different time frame in which they can reasonably respond to questions or requests from the pharmacy; this is important to establish up front. • Similarly, each primary care practice may have different communication preferences. Many prefer phone calls, but others like faxes or emails; again it is best to establish these preferred communication patterns up front.
Determine who will implement components of the care plan.	• Consider what types of health care professionals are a part of the patient's care team and which care team members are optimal to implement certain interventions.
Coordinate care, where applicable, including referral to another health care professional.	• Developing relationships with community partners is a crucial element of successful CPCM. Partner with care management staff from health plans; evaluate whether efforts are duplicative and whether a better division is possible. Engage with primary care providers to educate them on the scope of your services. Develop a communication plan for management of shared patients. • Identification of a single point person at the pharmacy who can receive inbound referrals and calls from care managers may assist with building relationships and learning how to effectively collaborate with one another. • When initially establishing communication patterns and workflows, it may be best for the pharmacy to collaborate with providers and

	care managers on patients that are already shared between or among you. Referrals come later – once providers and care managers have a comfortable, working relationship with the pharmacy. • Visit local medical practices to meet with the office manager and a provider champion or lead provider, if one is available. Explain enhanced services, use opportunity for "show and tell" with adherence packaging, ask them to refer one or two of their most complex/difficult patients and see what happens. A strong practice relationship includes at least one physician/provider champion and a working relationship with the office manager or nurse. The office manager / clinical manager or nurse is often the "gatekeeper" of what gets through to providers so it is important to get to know that person and understand how information flows within the practice. • Practice visits are not a "one and done" kind of thing. Instead, visiting the practice regularly is necessary in order to stay "top of mind", partly because of staff turnover within the practice. • Many people don't understand that some community pharmacies are different from others. Proactive education to the practice about the different types of care and service that your pharmacy provides is important to help them understand what is uniquely beneficial about collaborating with your pharmacy. • Some practices have an embedded clinical pharmacist. Communication between the ambulatory care pharmacist and community pharmacist can be an important practice linkage, as the clinic-based pharmacist is often tasked with being the first line review of all inbound communications from community pharmacies.

	• Assign responsibility for care coordination and referral management.
Determine appropriate timeframe and mode for follow-up	
Resources and Tools	
Innovative Community Pharmacy Practice Models in North Carolina	

Core Component 4 of 5: **Implement** the care plan in collaboration with other health care professionals and the patient or caregiver.	
Activities	**Change Tactics**
Provide patient-specific education regarding the care plan and ensure understanding.	• Using the “teach-back” method is one of the easiest ways to make sure you know you have communicated clearly with the patient. With this method, the patient confirms their understanding by explaining it back to you. • With complex topics, like blood sugar monitoring, insulin injections, and overall self-management for a patient with newly diagnosed diabetes, plan to review or re-enforce the information with the patient across several educational sessions.
Provide updated medication list to patient.	• It is difficult for a provider to make it through all of the acute and chronic medical conditions a complex patient may have in 15 minutes let alone address a complex medication list. Educate practices on how the pharmacist can help “tee up” provider visits by reviewing all of their meds and identifying drug therapy problems ahead of the provider encounter. • Meaningful use measures require providers to keep an active med list in their EHR, but this can be easier said than done. Some providers may find it helpful if the pharmacist shares a reconciled med list with them periodically.
Implement recommendations that you can implement and communicate recommendation(s) you cannot implement to the rest of the care team.	• Develop a standard form to communicate interventions and drug therapy problems to providers via the mechanism of the provider’s choice (e.g., fax, phone, EHR message, etc.). • Identify staff interest and talents and align these with enhanced service offerings. • Inventory the work to be done prior to a patient visit, during the visit, and after the visit, and determine who in the organization can do each part of the work by matching their training and skills set. Use available technologies in the pharmacy to “task” staff

	members with their action items so that they don't get lost to follow up or forgotten.
Document all drug therapy problems.	• Document significant problems found in real time as part of the patient profile, ideally in a field that will flag if not completed or follow-up is needed.
Document the encounter, including assessment, drug therapy care plan, rationale, monitoring, and follow-up.	• Consider using Appendix 3: CPESN Comprehensive Initial Pharmacy Assessment – Pharmacy Care Plan; Appendix 6: Drug Therapy Problem Identification Pharmacist Form and Appendix 7: Drug Therapy Problem Identification Technician Form to assist with documentation.
Arrange follow-up in a time frame that is clinically appropriate for the specific patient.	• Consider how often a patient refills his/her meds (30 versus 90 day fills), disease state stability, frequency of medical visits, and type of enhanced services being provided when determining follow up intervals.
Coordinate with the patient's provider offices and other providers to reconcile all medication changes, ensure an updated medication list, and ensure that follow-up is aligned with the patient's needs.	• Identify the best way to coordinate care with patient's primary care provider (fax, phone, secure email, EHR messaging). • Identify a point of contact for your pharmacy at each medical practice with whom you interact frequently. • Arrange a meeting with local medical practices to agree on a strategy for communication.
Communicate instructions for follow-up with the patient or patient's caregiver.	• Assign responsibility for documenting and for communicating to patients/families. • Consider contracting with telephonic translation services or hiring multi-lingual pharmacy staff to improve communication with non-English speaking patients or caregivers. • Take into account the patient's overall literacy level and health literacy when selecting written materials for patient/caregiver

	education (use materials that include pictures, illustrations, and text with a 6th grade or lower reading level whenever possible). • When possible, provide disease state and self-management educational material that goes above and beyond medications.
Resources and Tools	
The Health Literacy Universal Precautions Toolkit Teach-Back Method Video How to Implement "Teach-Back" Method.	

<table>
<tr><th colspan="2">Core Component 5 of 5: Follow-up with the patient to evaluate the effectiveness of the care plan and modify the care plan if needed.</th></tr>
<tr><th>Activities</th><th>Change Tactics</th></tr>
<tr><td>Obtain updates on patient’s clinical status and goals.</td><td>Identifying, following up on, and resolving drug therapy problems (DTPs) are frequently collaborative care team activities. Said differently, any one person on the team can identify the DTP, but different people may be involved in follow up and closure; the keys are coordination across care team members and follow up after DTP identification.</td></tr>
<tr><td>Conduct ongoing assessments and refine care plan to optimize medication therapy and ensure that patient goals are achieved.</td><td>Some pharmacies assign a pharmacy technician to call patients once a month prior to refilling all medications. Calls can focus on a range of topics, including questions about the status of the patient’s chronic illnesses, utilizing a script.
Consider pharmacists’ comfort level with assigning various tasks to pharmacy technicians based on pharmacy technician scope of practice.
Make a plan for how to handle “wait and see” responses (e.g., pop up notes or alert system to remind you of issue at a future time, add calendar reminders, set reminders/tasks in your pharmacy management system, use your fill system vendor’s notes section, create an index card with each unresolved issue and review weekly then have technicians do follow-up calls when they have time available, encourage patient to take responsibility for seeing their provider)
Prioritize patients with “red flag” or higher concern DTPs.
Follow up on all referrals to assure loop closure on information flow to care team and to patients</td></tr>
</table>

Document the identification of new drug therapy problems and the resolution of previously identified drug therapy problems.	
Update the patient's active medication list at each encounter.	
Repeat the core components of CPCM to ensure consistency in process and continuity of care.	
Resources and Tools	
Chronic Care Management (CCM): An Overview for Pharmacists	

Appendix 1: Script for Patient Interview

Caller:
This is _______________ with _____________ Pharmacy. May I speak to *(patient name*)?

Verify that you are speaking with the patient or their caregiver

If patient was recently discharged from the hospital or ED:

> **Caller:**
> **I understand you were recently in the hospital/ED. How are you feeling today?**

This may help with engagement as well as allowing a chance for them to tell you if they are in pain, missing a prescription, etc.

If no recent hospital/ED visit:

> **Caller:**
> **How are you doing today?**

Caller:
I am calling because our pharmacy is participating in a new program where our pharmacist can meet with you to review all of your medications and answer any questions you may have. This is at no additional cost to you. This usually takes about 30 minutes but it is sometimes longer depending on the number of medications you take.

Pause for response from patient…

The focus of this program is on quality. Often people have questions about their medications but do not get a chance to ask their doctor or pharmacist. We want to make sure you are comfortable with the medications you are taking and help you make progress toward becoming healthier. Our pharmacist can address any questions or concerns you may have about your medications. If any changes need to be made we can work directly with your doctor to address those requests.

…pause for recognition, comments or questions from the patient.

The patient should recognize the pharmacy as the place where they typically have their prescriptions filled since patients are attributed to a pharmacy based on the fact that they filled 80% of their prescriptions at that location in the past 3 months.

Avoid comments such as:

1- *Medicaid requires we do this (this is not a Medicaid requirement)*
2- *You are on "our list"*
3- *We have your information*
4- *You are in our system*

Comments such as these may be disconcerting to the patient and arouse undue suspicion.

Caller:
Could we schedule a time to meet privately at the pharmacy?
…pause for response.

If yes then schedule a date and time to meet.

Caller:
Please remember to bring all of your medications with you whether you filled them at this pharmacy or elsewhere. Also bring any vitamins, herbals or over-the-counter products you take.

Thanks for taking time to talk with me today. I look forward to seeing you *(repeat the date/time chosen)*. Good-bye.

If unable to schedule a face-to-face meeting, then

Caller:
Would you like to schedule a time when we could review your medicines over the telephone?

If yes then schedule a date and time for the call.

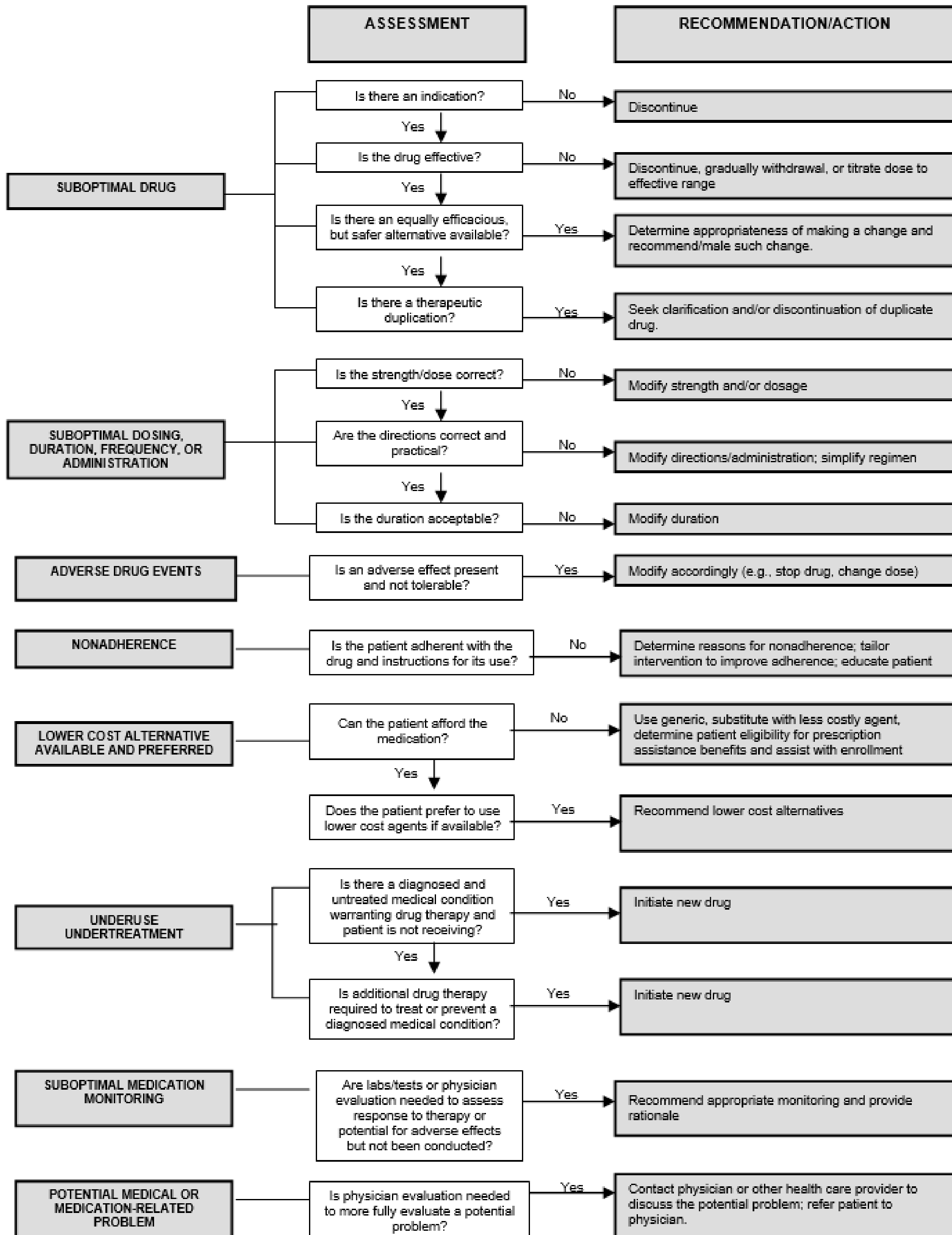
Caller:
Please remember to have all of your medications with you whether you filled them at this pharmacy or elsewhere. Also gather any vitamins, herbals or over-the-counter products you take.

Thanks for taking time to talk with me today. I look forward to talking *with you further on (repeat date/time chosen)*. Good-bye.

If patient declines to meet with the pharmacist in person or to review medications over the telephone then

Caller:
Thanks for taking time to talk with me today. If you decide later that you would like to go over your medications, or if there is anything else I can do to assist, please feel free to call me (*restate your name here*) at the pharmacy at (XXX) XXX-XXXX. Good-bye

Appendix 2: Framework for Assessing Drug Therapy Problems



Appendix 3: CPESN Comprehensive Initial Pharmacy Assessment – Pharmacy Care Plan

Header

CMR Date:	
Patient Name and DOB:	
CIPA Type (check one):	☐ Face-to-face ☐ Telephonic
Pharmacist Providing CIPA:	
Pharmacy Site:	
Phone Number to reach RPh:	

Patient Information

PCP:	
PMH:	
Medications:	See attached patient interview medication list
B/P:	/ mmHg Date: Location:
Weight:	lbs or kg (circle one)
SCr:	Date:
A1c (if DM dx):	Date:
SMBG readings (if DM dx):	
Lipid panel:	TC: LDL: HDL: Trigs: Date:
ASCVD risk:	
TSH:	Date:
AST/ALT:	Date:
LVEF (if CHF dx):	Date:
K+:	Date:

Drug Therapy Problems Identified

Drug	Problem Type	Priority	Response	Notes

Patient Education Provided

1. ____
____
____
2. ____
____
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3. ____
____
____
4. ____
____
____
5. ____
____
____

Care Coordination and Follow-Up

1. ____
____
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2. ____
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3. ____
____
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4. ____
____
____
5. ____
____
____

Appendix 4: Ideal CPCM Example

The pharmacist receives a referral from UNC Family Medicine for blood pressure monitoring, blood glucose self-monitoring and insulin dose titration. The pharmacy technician calls the patient and asks if he would be interested in making an appointment to meet with the pharmacist at the request of his family physician for the reasons stated above. The patient agrees and the appointment is set.

Prior to the visit, the pharmacy technician prints out the medications in the pharmacy fill system, contacts the medical office for a copy of the medication list from the office as well as the last set of progress notes and lab reports. The technician calls the patient to remind him of the appointment and asks him to bring in all medications he takes along with over-the-counter medicines and any herbals or supplements.

The pharmacist reviews the collected information. During the patient visit the pharmacist reviews all the medications with the patient asking him how he takes each one and noting any questions or concerns the patient has.

The pharmacist records the results of the comprehensive initial pharmacy assessment:

RC is a 57-year-old male who presents today for a Comprehensive Initial Pharmacy Assessment. The patient was referred to XYZ Pharmacy from UNC Family Medicine at Hillsborough by the primary care provider for blood pressure monitoring and self-monitoring of blood glucose (SMBG)/insulin dose titration. The patient has a past medical history of Hypertension (blood pressure at office visit on 6/1/16 of 134/74 mmHg), Type 2 Diabetes Mellitus (A1c of 10.2% on 4/19/16), Chronic Kidney Disease stage III (SCr 1.35, eGFR 57, BUN/Cr 27 on 6/2/16), and Hyperlipidemia (cannot tolerate statin therapy due to myalgias, elevated CK for past couple months, CK 557 on 6/1/16).

Checked blood pressure during visit today: 115/73 mmHg and pulse 82.

Drug Therapy Problems:

1. 6/2/2016 Additional therapy required METFORMIN HCL 500 MG TABLET

Notes: Pt with recent A1c of 10.2% on 4/19/16. Pt is not currently taking metformin and is unsure if he has taken this medication in the past. PCP started metformin 500mg 1 tab BID with meals during appointment on 6/1/16.

Received new prescription for metformin 500mg BID. PLAN: Counseled patient on side effects and dose. Will follow up with patient in 1 week to check and see if patient has had any side effects with medication.

If FBG levels are still >150, plan to recommend physician increase dose to metformin 500mg 1 tab QAM and 2 tabs QPM x 1 week and then potentially increase to 2 tabs BID.

2.	5/6/2016	Potential alternative available	ENALAPRIL MALEATE TAB 10MG	LISINOPRIL TAB 40MG

Notes: Pt referred to XYZ Pharmacy to have BP monitored every week with results and recommendations to be sent to PCP. BP on 6/1/16 of 115/72 mmHg. Reports adherence to BP med regimen.

3.	5/1/2016	Opportunity for dose optimization	LANTUS INJ 100/ML	NOVOLOG 100 UNITS/ML VIAL

Notes: Pt referred from UNC FM @ Hillsborough from PCP for SMBG log monitoring and insulin dose titration. Pt stated that he does not have a log to track his BG levels and insulin doses.

PLAN: Gave patient a log book to use to record BG levels and insulin doses. Asked patient to bring log book to the pharmacy every week when he comes and washes his clothes at the laundry mat next door. Patient in agreement with plan.

Enhanced Services Assessment:

1. Discussed adherence packaging and medication synchronization with patient. Patient declined either of these services at this time. Patient denies use of a pill box – states that he keeps all of his medications in a basket on his kitchen counter. Plan to reassess patient's need for adherence packaging and medication synchronization with patient in 2-3 months.
2. Patient denies any transportation issues. Reports that he can either ride his bike or drive his car to the pharmacy. States that he comes to the laundry mat next door to the pharmacy every week to wash his clothes.
3. Collected vital signs (BP and pulse) during pharmacy visit and sent vitals to patient's PCP.

Patient Education:

1. Reviewed insulin injection technique and SMBG monitoring regimen. (see above DTP)
2. Educated patient on lifestyle modifications to help decrease blood pressure (i.e., weight loss, decrease sodium intake)
3. Counseled patient on new prescription for metformin (see above DTP)

Coordination of Care and Follow-Up:

1. EPIC Carelink message to patient's PCP regarding patient's BP and pulse during visit to the pharmacy.
2. Plan to follow up with patient in 1 week for blood pressure monitoring and SMBG log check.
3. As patient's BUN/Cr ratio and SCr were slightly elevated at PCP appointment on 6/1, plan to encourage patient to stay hydrated. Plan to continue to monitor patient's kidney function labs via EPIC Carelink as patient is now taking metformin.

Next is an "abbreviated" PPCP which might be used for follow-up:

In keeping with the plan of care created during the CIPA, the pharmacist follows up with the patient in 1 week as planned.

An abbreviated PPCP might look like this:

Collect information – The technician asks the patient how he is doing with metformin. The patient reports he is tolerating it well with no effects. His fasting blood sugars are averaging around 175according to the log book. The technician checks the patient's blood pressure and it is 120/74. The technician relays this information to the pharmacist.

Assessment – The pharmacist assesses that the metformin should be increased and blood pressure control is adequate

Plan – Contact the doctor to report the BP and to recommend increasing metformin to 1 tablet QAM and 2 tablets QPM. The pharmacist will call the patient when the PCP responds to the request. Patient to return to pharmacy in 1 week for BP check.

Implement – Pharmacists advises the patient to continue his BP medicines at the current dose. The pharmacist sends an EPIC Carelink message to the patient's PCP requesting an increase in the metformin dose and records today's BP.

Follow-up: Monitor/evaluate – will follow up with patient in 1 week to check BP and to check on status of metformin.

The abbreviated PPCP took about 10 minutes of technician time and 5 minutes of pharmacist time. This abbreviated PPCP might take place at each patient visit until such time that a comprehensive visit might be needed (annually, quarterly or due to a change in condition).

Appendix 5: Enhanced Services Definitions

Customer Service

- **24 hour Emergency Service/On Call, Dispensing** - medication dispensing services offered after the normal business hours in urgent situations or special circumstances
- **24 hour Emergency Service/On Call, Non-Dispensing** - non-medication dispensing services offered after the normal business hours such as Drug Therapy Problem resolution or medication reconciliation in urgent situations or special circumstances
- **DME billing** - ability to supply and bill both Medicare and Medicaid for durable medical equipment (DME)
- **Home Delivery** - pharmacy-provided delivery service; call pharmacy for details
- **Multi-Lingual Capability** - employs a pharmacy staff member who is able to fluently speak languages other than English or has a contracted service with a vendor who can translate between the pharmacist/pharmacy representative and the patient or patient representative
- **Medical Disposal/Take Back Site** *(Does not accept controlled substances)* - offer drop-box on-site to dispose of non-controlled substance medications at no charge (Prohibited items: Aerosols, batteries, chemicals, hazardous materials, illegal drugs, medical waste, trash, used sharps)
- **Medical Disposal/Take Back Receptacle** *(accepts controlled substances)* - offer DEA-registered drop-box on site to dispose of both controlled and non-controlled substance medications at no charge (Prohibited items: Aerosols, batteries, chemicals, hazardous materials, illegal drugs, medical waste, trash, used sharps)

Dispensing and Compounding

- **Compounding, Non-Sterile -** art and science of creating personalized, non-sterile medications
- **Compounding, Sterile** - art and science of creating personalized, sterile medications
- **Presumptive Eligible (Medicaid) Medication Dispensing** - willingness to dispense medication based on "good faith" belief that the patient is eligible for Medicaid and is in the application process to be billed to Medicaid once actual eligibility obtained
- **Specialty Pharmacy Dispensing** - ability to dispense medications deemed "specialty drugs" based on the fact that they require specialized care due to cost, treatment of a rare condition, requirement of special handling, use of a limited distribution network, or ongoing clinical assessment
- **Topical Pain Protocol:** Recommends adjunctive pain management therapy to patients on chronic oral pain medications, when appropriate and cost effective, by recommending topical pain medications such as lidocaine or diclofenac which can reduce the amount of oral pain medications a patient takes or keeps the patient from having to increase dose due to tolerance.

- **Adherence Packaging** - unit dose packaging designed to assist patients with medication organization by incorporating date and time into the unit dose device; call pharmacy to determine whether or not fee applies. This service may include the pharmacist working with the patients and/or their caregivers to determine an appropriate adherence packaging system such as bubble packing, medication strips, med planners, or automated medication planners. The pharmacist will work closely with patient, caregivers, and prescribers to make sure that the medications including dosing regimens are up-to-date routinely.

- **Clozapine Dispensing and Monitoring** - ability to dispense clozapine through registration with the Clozapine Patient Registry database and on-going monitoring of labs for applicable patients
- **Naloxone Dispensing** - ability and willingness to dispense naloxone and deliver proper counseling

Wellness and Health Monitoring

- **Adherence Program** – a continuous service whereby the pharmacist facilitates a comprehensive medication review to determine an optimal regimen working in collaboration with the patient's prescriber(s), synchronizes medications, develops a schedule to take them at the correct time of the day and improve patient adherence and at minimum monthly encounters with the patient to determine any changes with the medication regimen or health status. This service may include the pharmacist working with the patients and/or their caregivers to determine an appropriate adherence packaging system which may include Medication Synchronization, Adherence Reminder Calls, Strip Packaging, Blister Packaging, or other special adherence packaging to promote adherence with utilization of appropriate labeling as determined by the Board of Pharmacy.
- **Collection of Vital Signs** - ability to collect heart rate, respiration rate, temperature and blood pressure in your pharmacy for patients
- **In Depth Counseling/Coaching** - additional counseling offered in the pharmacy, requiring a pharmacist or qualified staff member to step out of traditional pharmacy workflow in order to complete the activity
- **Hepatitis C, Not Currently Receiving Treatment -** sell clean needles in packs of 10 or less (without a prescription for a medication that requires injection) and provide education about proper disposal of used needles (note: at least one pharmacist employed with the pharmacy is wiling to sell clean needles, but there is no guarantee that the pharmacist is on site all hours the pharmacy is open)
- **Hepatitis C, Currently Receiving Treatment** - provide the following supports to a patient immediately before and during hepatitis C course of therapy: -Conduct a pre-treatment comprehensive review of the patient's full medication regimen to assess for drug-drug interactions, etc. and share results with prescriber of hepatitis C regimen
    - Immediately before treatment begins, provide face-to-face detailed education to the patient about their hepatitis C medications (conducted in the patient's home if possible)
    - Dispense hepatitis C medications to the patient
    - Maintain up-to-date contact information for the patient, including family members and other close contacts who could assist with reaching the patient, as needed
    - Conduct weekly calls (or delivery driver check ins) with the patient throughout the course of treatment using standardized set of questions, alert the prescriber about reported side effects or barriers to adherence
    - Provide community pharmacy care management as needed (e.g. arrange for local transportation to provider visits or to obtain laboratory monitoring)
- **Immunizations** – Act of screening patients for ACIP recommended immunizations, educate patients about needed immunizations and administer immunizations when appropriate.
- **Medication Injections -** Ability to administer injections in the pharmacy (i.e. long-acting antipsychotics, B12, testosterone, birth control injections, osteoporosis treatment, etc.)
- **Nutritional Counseling** - delivery of education to help patients develop balanced diets that also may be tailored to individual chronic conditions

- **Pharmacogenomics Testing** - act of using a patient's specific genome to determine how medications will be metabolized to improve patient outcomes; should include performing the test, counseling/follow up with the patient, and communication of results to the provider for necessary medication changes
- **Standardized Assessments** - ability and willingness to administer questionnaire-based surveys to patients (e.g., pain assessments, PHQ-9)
- **Travel Health** - The ability to provide or refer to local health consultations and applicable vaccinations for patients interested in international travel. Please contact pharmacy for prices and vaccinations provided.
- **Targeted Disease State Programs** - educational programs offered in your pharmacy to enhance patient knowledge about chronic diseases and ensuring that patient are achieving desired therapeutic outcomes for those specific conditions through appropriate medication management and monitoring:
    - **COPD Management** - COPD-specific training via education and outreach to reduce COPD exacerbations and improve control of the disease state
    - **Heart Failure Management/Education** - Heart Failure-specific training via education and outreach. Involves, appropriate use of medications, frequent weight monitoring, education and more
    - **Smoking Cessation** - educational program offered in your pharmacy designed to assist patients who desire to stop smoking utilizing motivation interviewing and health coaching techniques in addition to use of nicotine replacement therapy.
    - **Asthma Management/Education** – Asthma-specific training and monitoring methods for the patient, parents, and teachers in effort to recognize triggers of an exacerbation and reduce asthmatic events/exacerbations through appropriate use of rescue and controller therapy.
    - **Pain Management/Education** - Training and monitoring methods that ensures proper pain control and safety of the medication. The pharmacist works closely with patients and other providers to ensure that pain is being controlled with the appropriate medication, dose, duration of use, and ongoing monitoring to determine step down therapy when appropriate.
- **Vitamin and Nutritional Supplementation:** The ability to consult and recommend beneficial vitamins and nutritional supplements based on a patient's specific need in order to reduce medication side effects to increase adherence and/or reduce the risk of long term diseases.

Review of Medications

- **Bedside Delivery** - A patient-specific service that aids in transitions of care by delivering medications to the patient before hospital discharge. Includes counseling, education about proper administration and side effects, an opportunity to answer questions from the patient or their caretaker and appropriate follow up post-discharge
- **Comprehensive Medication Reviews** - a systemic assessment of medications, including prescription, over-the-counter, herbal medications and dietary supplements to identify medication-related problems, prioritize a list of medication therapy problems and create a patient-specific plan to resolve medication therapy problems working with the extended healthcare team.

- **Home Visits** - act of sending a pharmacist or other qualified pharmacy staff member into a patient's home to complete a medication reconciliation/review or other medication-related service
- **Medication Synchronization Program** - aligning a patient's routine medications to be filled at the same time each month. The pharmacists will provide clinical medication management and monitoring for progression toward desired therapeutic goals during the patient appointment at time of medication pick-up or delivery.
- **Medication Reconciliation** - The process of comparing a patient's medication orders to all of the medications that the patient has been taking (active, chronic, as needed and OTC including herbal) to avoid medication errors. This service is especially important during transitions of care when patients are most vulnerable to medication errors or mishaps.
- **Personal Medication Record** - ability to create a comprehensive list of current patient medications manually or from dispensing software
- **Transitional Care Management -** A patient-specific service that aids in transitions of care by providing medications to the patient following hospital discharge within 24 hours. This service will include medication reconciliation, counseling, education about proper medication administration and side effects, as well as an opportunity to answer the patient or their caretaker's questions. This service also includes appropriate follow up with patient and/or caregiver within 2 days post-discharge.
- **Care Plan Development/Reinforcement** - document detailing patient information pertinent to helping a patient reach to a particular healthcare goal
- **Point of Care Testing** - ability to perform medical testing and deliver results with appropriate education in the pharmacy (e.g. HbA1c, cholesterol, blood glucose). Information will be shared with the patient and their other providers (when appropriate) to ensure continuity of care

Appendix 6: Drug Therapy Problem Identification Pharmacist Form

Patient Name:	
DOB:	ID:
Medication:	RX #:
☐ Moderate ADR present	
☐ Opportunity for dose optimization	
☐ Duration or frequency outside of labeling	
☐ Drug interaction/requires monitoring	
☐ Monitoring needed to assess efficacy	
☐ Monitoring needed to prevent ADE	
☐ Generic alternative available	
☐ More affordable OTC alternative	
☐ Potential alternative available	
☐ Preferred formulary alternative	
☐ Polypharmacy	
Response:	
☐ Clarified ☐ Implemented ☐ Modified	☐ Declined by provider ☐ Pending ☐ Not implemented by pt
Comments:	
Date Identified:	

Appendix 7: Drug Therapy Problem Identification Technician Form

<table>
<tr><td colspan="3">Patient Name:</td></tr>
<tr><td>DOB:</td><td colspan="2">ID:</td></tr>
<tr><td colspan="2">Medication:</td><td>Rx #:</td></tr>
<tr><td>☐ Need additional refills

☐ System failure (i.e. rejected claim, eligibility)

☐ Order unclear or incomplete

☐ Concern for side effects

☐ Felt better

☐ Felt worse

☐ Low health literacy</td><td colspan="2">☐ Lost prescription

☐ Memory/cannot remember

☐ Pt unaware of med change

☐ Med changed

☐ Med discontinuation

☐ Pt not taking med (write reason below)

☐ Other (write below)</td></tr>
<tr><td colspan="3">Response:</td></tr>
<tr><td>☐ Clarified
☐ Implemented
☐ Modified</td><td colspan="2">☐ Declined by provider
☐ Pending
☐ Not implemented by pt</td></tr>
<tr><td colspan="3">Comments:</td></tr>
<tr><td colspan="3">

</td></tr>
<tr><td colspan="2">DTP Date:</td><td>Initials:</td></tr>
</table>