Todd D. Sorensen, Chair (University of Minnesota)  
Anandi Law, Chair-elect (Western University)  
Steve Scott, Past Chair (Purdue University)  
Stuart Haines, Chair-Elect Designate (University of Maryland)  
Margarita DiVall, Secretary (Northeastern University)  
Cecilia Plaza, ex officio (AACP Staff)

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AACP Interim Meeting COF Forum

The Council of Faculties (COF) held a Forum at the AACP Interim Meeting on Sunday, February 21, 2016 in Tampa, FL. The agenda included the following items:

- COF Committee and BOD Updates
- Dialogue on work of AACP Academic Affairs Standing Committee on EPAs
- Reflections on draft AACP Strategic Plan Priorities
- Discussion on recommendations of the COD/COF Task Force on Accelerating Change

The session lasted ~1.5 hours and included ~50 COF members.

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Council of Faculties Standing Committee and Task Force Charges and Updates

Rules and Resolutions Committee

Per the Council of Faculties Standing Rules of Procedure this committee “shall be responsible for keeping the standing rules up to date and suggesting changes which may be necessary and shall be responsible for stimulating and reviewing resolutions submitted to the Council of Faculties.”

Members:
Jeff Evans, University of Louisiana-Monroe (Chair)
Giuseppe Gumina, Presbyterian College
Joel Marrs, University of Colorado
Eunjoo Pacifici, University of Southern California
Alexandra Perez, Nova Southeastern University
Martha Rumore, Touro University (New York)
Alok Shushan, Thomas Jefferson University

During 2015-2016, no resolutions were received for consideration by the COF Resolutions Committee.

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Nominations Committee: Per the Council of Faculties Standing Rules of Procedure this committee “shall prepare a slate of candidates for the offices of Chair-elect and Secretary.”

Members:
Steve Scott, Purdue University (Chair)  
Naser Alsharif, Creighton University  
Jeff Cain, University of Kentucky  
Brian Crabtree, Wayne State University  
Daniel Kennedy, Western New England University  
Deanna McEwen, University of Georgia  
Jennifer Trujillo, University of Colorado
Due to election cycles, the committee was not required to prepare a slate of candidates for the office of COF Secretary. For the office of COF Chair Elect, the committee has confirmed the following slate of candidates:

Daniel A. Brazeau, Ph.D.
Department of Biomedical Sciences
University of New England

John M. Rimoldi, Ph.D.
Department of BioMolecular Sciences, Division of Medicinal Chemistry
University of Mississippi

COF Quorum Committee

Members:
Matthew R. Dintzner, Western New England
Shafiqur Rahman, South Dakota
Shannon Reidt, University of Minnesota

Per the COF Standing Rules of Procedure this committee “functions only at the Annual Meeting to take the roll of members at this business meeting.” The members of this Committee will be required to provide service for the 2016 Annual Meeting.

Faculty Affairs Committee

Background
In May 2014, the Joint Commission of Pharmacy Practitioners, a convening point for 11 national pharmacy organizations, released a document that defines a specific patient care process for pharmacists. The intent of this resource is to 1) enhance consistency within the profession regarding the approach to delivering patient care services and 2) enhance awareness among stakeholders external to the profession that pharmacists utilize a consistent patient care process that relies on their unique training and expertise. This document increases the visibility of previous work on patient care models (most recently a resource guide produced by the Patient-Centered Primary Care Collaborative1) and represents the first time that national pharmacy organizations have collectively described and endorsed a common approach to patient care within the profession.

Colleges and Schools of pharmacy represent a critical source of influence with respect to achieving widespread adoption of the patient care process by the profession. AACP was a key contributor to JCPP’s work and is promoting the model described. ACPE’s Standards 2016 includes an expectation (Standard 10.8) for schools to demonstrate that they “prepare students to provide patient-centered collaborative care as described in the Pharmacists’ Patient Care Process model endorsed by JCPP.” But ultimately success in adoption and spread will be dependent on the work of faculty at individual member institutions integrating this patient care process across their educational programs, clinical practices and practice-based research initiatives. The 2015 AACP Professional Affairs Committee has reinforced this notion by recommending adoption of the following policy statement: “Administrators, faculty members, preceptors and student pharmacists at all colleges and schools of pharmacy share responsibility for stimulating

change in pharmacy practice consistent with the JCPP Vision for Pharmacy Practice and the Pharmacists’ Patient Care Process.2

The Council of Faculties will lead efforts to accelerate the adoption of the pharmacists patient care process within and beyond the academic pharmacy. Workgroups will address this theme from the perspective of AACP, programs managed by individual schools, and academic pharmacy’s ability to influence adoption across the profession.

**Workgroup #1: AACP Policy and Programming**

1. Review existing AACP policy regarding recognition and adoption of a consistent patient care process by the academic pharmacy community.
2. Submit a report to the AACP Bylaws and Policy Development Committee, outlining findings of the review and providing any recommended new policy statements or revisions to existing statements.
3. Evaluate the needs for AACP sponsored programming aimed at enhancing the ability of schools to inculcate the pharmacists patient care process in learners. Consider potential programming delivered via Annual/Interim meetings, webinars, and/or the annual AACP Teacher’s Seminar.

Questions to Consider

- What role will AACP play in achieving a vision for academic pharmacy’s engagement on adoption of the Pharmacists’ Patient Care Process within the profession?
- How can AACP accelerate adoption of a consistent patient care process among its member schools?
- What are the faculty development initiatives that will support effective instruction, modeling, coaching and clinical practice application of the patient care process.

**Workgroup #2: Curricular Adoption and Integration**

1. Establish recommendations for schools of pharmacy for integration of the pharmacists’ patient care process in classroom, simulated and experiential learning activities.
2. Define assessment strategies for ensuring learners have achieved competency in application of the pharmacists’ patient care process.
3. Develop a self-assessment tool that allows a school to determine its level of adoption and integration of the pharmacists’ patient care process across its curricular and clinical service initiatives.

Questions to consider:

- What does it look like when learning focused on the Pharmacists’ Patient Care Process spans classroom, simulated and experiential settings?
- How can faculty lead efforts to integrate the patient care process across the teaching, learning and assessment continuum?
- How do we ensure that faculty practices model the patient care process and inform the curriculum regarding instruction on practice management systems that ensure quality of the care process?

**Workgroup #3: Influencing Refinement and Adoption in the Profession**

1. Consider possible enhancements to the JCPP Pharmacists’ Patient Care Process document that would support understanding and adoption on the part of student pharmacists, pharmacists and audiences external to pharmacy.
2. Evaluate the potential role of supplemental materials that describe the relationship of the patient care process to a philosophy of practice and a practice management system.
3. Produce a proposal for collaborating with JCPP to advance adoption of the patient care process across the profession.

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Questions to consider:

- How can we enhance our ability to convey what differentiates how pharmacists apply a general patient care process (collect, assess, plan, implement and follow up) compared to other health disciplines?
- How can the dissemination of the JCPP Pharmacists’ Patient Care Process stimulate a broader understanding of all elements of a professional practice (philosophy of practice, patient care process and practice management system)?
- What will drive adoption of these principles in the profession and how can AACP, schools and faculty partner with JCPP to accelerate change.

Membership of COF Faculty Affairs Workgroups:

Workgroup #1 (Policy and Programming)
Nicole Paolini Albanese, University of Buffalo (Chair)
Betsy Blake, South Carolina College of Pharmacy
Patrick Chan, Western University
Michael DeBisschop, Manchester University
Mike Gonyeau, Northeastern University
Mary Gurney, University of Midwestern-Glendale
Cynthia Sanoski, Thomas Jefferson University
Whitney White, Samford University
Bethany Von Hoff, University of Minnesota (Graduate Student, ex officio)

Workgroup #2 (Curricular Adoption and Integration)
Nicole Lodise, Albany College of Pharmacy (Chair)
Rachel Eyler, University of Connecticut
Beverly Hamilton, South College
Scott Hanes, Rosalind Franklin University
Erika Klepping, Auburn University
Kalen Manasco, University of Georgia
Joe Saseen, University of Colorado
Angela Stewart, Washington State University
Claire Kolar, University of Minnesota (Graduate Student, ex officio)

Workgroup #3 (Refinement and Adoption in the Profession)
Pam Heaton, University of Cincinnati (Chair)
Brian Cross, East Tennessee University
Christopher Alan Guillano, Wayne State University
Stefanie Ferreri, University of North Carolina
Keri Hager, University of Minnesota
Anne Marie Liles, University of Mississippi
Terry O’Sullivan, University of Washington
Rich Segal, University of Florida
Debbie Pestka, University of Minnesota (Graduate Student, ex officio)

Each of the COF Faculty Affairs Workgroup submitted reports and are presented as appendices at the end of this report.

COD/COF Task Force on Accelerating Change in Pharmacy

A joint COD/COF task force was convened to explore, critically review, identify and propose strategies that could be employed by AACP and its member schools to accelerate the implementation of change within pharmacy curricula and practice innovation. The purpose of this work is to allow AACP and its member schools to be more responsive to the rapidly evolving opportunities and challenges present in
today’s health care environment, most of which have been stimulated by the passage of the Affordable Care Act.

**Task Force Members**

<table>
<thead>
<tr>
<th>Council of Deans</th>
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<tr>
<td>Patricia Kroboth (Pitt), Co-Chair</td>
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<tr>
<td>Eric Boyce (U of Pacific)</td>
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<tr>
<td>Marie Chisolm-Burns (Tennessee)</td>
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<td>Myron Jacobson (North Texas)</td>
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<td>Leigh Ann Ross (Mississippi)</td>
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<td>Bob Blouin (UNC, ex officio)</td>
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<th>Council of Faculties</th>
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<tr>
<td>Marie Smith (UConn), Co-Chair</td>
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<tr>
<td>Mary Roth McClurg (UNC)</td>
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<tr>
<td>Aisha Morris Moultry (Texas Southern)</td>
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<td>Andrew Traynor (Concordia)</td>
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<td>Susanna Wu-Pong (VCU)</td>
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<td>Todd Sorensen (UMN, ex officio)</td>
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The task force prepare and submitted a report to the AACP Board of Directors in January 2016 (attached as an appendix). The report was included in deliberations of the AACP Strategic Planning Committee and influenced the proposed strategic plan, as represented in the third theme of the draft plan.

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**2016 Teachers Seminar**

Design and facilitation of the Teachers Seminar that precedes the AACP Annual Meeting is the responsibility of the COF. The title of the 2016 offering is “Dialogues on Foundations of Teaching.” Two tracks were defined for the program: 1) Building a Foundation to be a Great Teacher (which is designed for Walmart Scholars pairs and early career faculty, and 2) Preparing Students with a Foundation for Great Patient Care (which focuses on curricular integration of the JCPP Pharmacists Patient Care Process. The outline of the program is as follows.

8:30 am Welcome/Framing the Day  
Speaker: Todd Sorensen, Chair, Council of Faculties

8:45 am Keynote Address: *Why Teaching a Common Patient Care Process Across all Pharmacy Schools is Critical to Employers*  
Speaker: Allyson Schlichte, Pharm.D., MBA, BCACP, MTM Operations Lead, Fairview Health Services

9:30 am Break, then reconvene in tracks

**Building the Foundation to be a Great Teacher**  
*Walmart Scholars Program Track*  
Program Moderator: Todd Sorensen (Minnesota), Chair, Council of Faculties

9:45 am World Café  
Organizers: Kristin Janke, Claire Kolar (Minnesota)

10:45 am Embracing the Mindset of a Scholarly Teacher (15/15 presentation and table discussion)  
Speaker: Peggy Piascik (Kentucky)

11:15 am Being an Innovator in Pharmacy Education (15/15)  
Speaker (confirmed): Susan Meyer (Pitt)

11:45 am Lunch

12:45 pm Balancing Great Teaching and Quality Scholarship (15/15)  
Speaker: Joseph Saseen (Colorado)

1:15 pm How do We Know Learning has Occurred? – The Case for Assessment (15/15)  
Speaker: Lauren Schlesselman (UConn)
1:45 pm  Career Planning for Success in Academic Pharmacy
   Work in Walmart Scholar (mentors/mentees), followed by harvesting lessons from full
   group

2:15  Break, then reconvene as full group
Preparing Students with a Foundation for Great Patient Care
Pharmacist’s Patient Care Process Track
Program Moderator: Nicole Albanese (Buffalo), Co-Chair, COF Faculty Affairs Committee

9:45  Inculcating the Patient Care Process into your Didactic Curriculum
      Speakers: Eric Bryce (UPacific) and Beth Phillips (UGeorgia)

11:45 Lunch (1 hour, start time can flex between 11:30 and noon)

12:45 Inculcating the Patient Care Process into your Experiential Curriculum
      Speakers: Melissa McGivney (UPitt) and Keri Hager (UMinnesota)

2:15  Break, reconvene as full group

Closing Session

2:30  Reflections from Dual Tracks
      Moderator: Todd Sorensen
      Speakers: Walmart Scholars Track – Michael Gonyeau (Northeastern)
                Patient Care Process Track: Stuart Haines (Maryland)

3:15  Adjourn
Final Report
Workgroup #1 (Policy and Programming)

Members:
Nicole Paolini Albanese, Buffalo (Chair)
Betsy Blake, South Carolina
Patrick Chan, Western
Michael DeBisschop, Manchester
Mike Gonyeau, Northeastern
Mary Gurney, Midwestern-Glendale
Cynthia Sanoski, Jefferson
Whitney White, Samford
Bethany Von Hoff, Minnesota (Graduate Student, ex officio)

Charges:
1. Review existing AACP policy regarding recognition and adoption of a consistent patient care process by the academic pharmacy community.

   The group had a conference call on 10/5/2015 to discuss the charges and found that there is an existing policy related to the recognition and adoption of the JCPP Patient Care Process. The current statement reads “Administrators, faculty members, preceptors and student pharmacists at all colleges and schools of pharmacy share responsibility for stimulating change in pharmacy practice consistent with the JCPP Vision for Pharmacy Practice and the Pharmacists’ Patient Care Process.”

2. Submit a report to the AACP Bylaws and Policy Development Committee, outlining findings of the review and providing any recommended new policy statements or revisions to existing statements.

   I was added as and “ad hoc” member of the Bylaws and Policy Development Committee to keep a line of communication open between what that group was moving forward and any potential to add policy about the patient care process. I never received any emails about this group, and therefore nothing ever really happened, but my workgroup was pretty clear about not spending time and effort on this part of it and spending time/effort on the programming part.

3. Evaluate the needs for AACP sponsored programming aimed at enhancing the ability of schools to inculcate the pharmacists patient care process in learners. Consider potential programming delivered via Annual/Interim meetings, webinars, and/or the annual AACP Teacher’s Seminar.

   The Teacher’s Seminar has 2 tracks one for the Walmart Scholars and one for the JCPP Patient Care Process. The workgroup helped to identify the basic framework for what should be covered (didactic and experiential) and helped to provide some names of potential speakers. In the end, the speakers were determined to be Eric Boyce, Beth Phillips, Keri Hager, and Melissa McGivney. All slides have been finalized and submitted to AACP for CE review. This sub-group of speakers worked cohesively to ensure a solid message about the urgent need to make a change at your institution about the JCPP Patient Care Process. An outline of the agenda for this track is as follows:
Preparing Students with a Foundation for Great Patient Care
Pharmacist’s Patient Care Process Track
Program Moderator: Nicole Albanese (Buffalo), Co-Chair, COF Faculty Affairs Committee

9:45 am  Nicole Albanese discusses the framework for the day and introduces Eric
9:50 am  Incorporating the Patient Care Process in the Curriculum: Ready, Set, Go??
Speaker: Eric Boyce (UPacific)

10:40 am  Nicole Albanese will introduce Beth
10:40 am  Capitalizing on Opportunities and Resources to Implement the Patient Care Process
Speaker: Beth Phillips (UGeorgia)

11:30 am  Nicole Albanese introduces Nicole Stack from workgroup #2
Nicole Stack discusses the list her group has developed

11:45 am  Lunch (1 hour)

12:45 pm  Nicole Albanese introduces Keri and Melissa
12:50pm  Practicing and Teaching the Patient care process
Speaker: Keri Hager (UMinnesota)
Creating an action plan to integrate the patient care process in both classroom and experiential learning
Speakers: Melissa McGivney (UPitt)

2:15  Break, reconvene as full group
Council of Faculties- Faculty Affairs Committee

Workgroup #2 Curricular Adoption and Integration

June 2016

Workgroup #2 Report

Nicole M. Lodise, Pharm.D., TTS
REPORT OF WORKGROUP #2
Nicole M. Lodise, Pharm.D., TTS

I. Charges

1. Establish recommendations for schools of pharmacy for integration of the pharmacists’ patient care process in classroom, simulated and experiential learning activities.
2. Define assessment strategies for ensuring learners have achieved competency in application of the pharmacists’ patient care process.
3. Develop a self-assessment tool that allows a school to determine its level of adoption and integration of the pharmacists’ patient care process across its curricular and clinical service initiatives.

II. Workgroup Membership

1. Nicole Lodise - Albany College of Pharmacy and Health Sciences
2. Joseph Saseen - University of Colorado Skaggs School of Pharmacy and Pharmaceutical Sciences
3. Kalen Manasco - University of Georgia College of Pharmacy
4. Beverly S. Hamilton - South College School of Pharmacy
5. Scott Hanes - College of Pharmacy at Rosalind Franklin University of Medicine and Science
6. Angela Stewart - Washington State University
7. Rachel Eyler - University of Connecticut School of Pharmacy
8. Erika Kleppinger - Auburn University Harrison School of Pharmacy
9. Claire Kolar - University of Minnesota College of Pharmacy

III. Meetings: 6 Conference Calls were held (Full workgroup and as subgroups)

1. October 2015
2. November 2015
3. December 2015
5. April 2016 - Two conference calls were held

IV. Outcomes of the Workgroup:

1. Please see attachments 1-4 for specific recommendations and self-assessment tools developed to address charges.

V. Next Steps:

1. Initial step is to distribute recommendations and self-assessment tools live at the AACP Teachers’ Seminar in addition to possible distribution through the COF list serve.
2. Recommendations and resources may also be posted and made available on the AACP website.

Respectfully submitted,
Nicole M. Lodise, Chair
Workgroup #2 Curricular Adoption and Integration
Attachments:
Appendix 1- Charge #1 Recommendations

Appendix 2- Charge #2 Recommendations

Appendix 3- Charge #3 Pharmacists’ Patient Care Process Self-Assessment Tool- Primary Tool

Appendix 4- Charge #3 Pharmacists’ Patient Care Process Self-Assessment Tool- Supplementary Tool
Appendix 1

Charge #1
Establish recommendations for schools of pharmacy for integration of the pharmacists’ patient care process in classroom, simulated and experiential learning activities.

Recommendation(s):
1. General:
   a. All schools are advised to identify where the teaching component of the process takes place
   b. Adoption of the process:
      i. All schools should include the process within their curriculum assuring that they are covering it and assessing student competence on the aspects of the patient care process. The way the process is covered may be customized within each respective institution.
      ii. The process may be reviewed in increments such as reviewing/introducing (Collect then Analysis, etc.) throughout the curriculum OR may be reviewed as a whole process.
   c. Description of Process:
      i. Recommend the description of the process to be introduced when the approach to patient care or the institution specific process is introduced (whichever the course)
      ii. Include a description and reference to the process within every related course syllabi
      iii. Standardized language on the process within all related Assessment Tools to ensure competence
   d. Knowledge and Application of the Process in each setting: (Defining the Courses where the process will be covered; Being able to practice the process and demonstrating competence of the process)
      i. Classroom: Teaching the Process (Knowledge Level)- If a different thought process is used within an institution, be consistent with that process still while also highlighting the pharmacists’ patient care process to complement.
         1. Example(s) may include:
            a. Incorporate the process as required reading for students and faculty to review the process in (For example, within the first therapeutic course or a Pharmacy Skills course) (Rosalind Franklin University)
            b. Introduce the course within first therapeutics course (ACPHS)
            c. Students introduced to concepts through lecture and discussion within P1 orientation (Auburn University)
            d. Introduction and review of the process included in pre-lab lectures (Auburn University)
            e. Pharmacotherapy and/or Clinical pharmacokinetics courses where students are presented with cases/scenarios to work through the process as appropriate. (Auburn University)
            f. Student workshop focused on the process as a whole to provide an overview and opportunity to practice the process. (Auburn University)
      ii. Simulation: Building upon the knowledge of the process while focusing on the application/practicing the use of the process
         1. Example(s) may include:
            a. Within small group classes, provide patient cases for students to practice the assessment and planning. (Rosalind Franklin University)
b. Use of interprofessional patient cases where students review the case to determine what information is needed from patient history, what they are looking for on physical exam and what labs and diagnostics need to be ordered. Information is then provided and students are required to come up with a differential diagnosis and treatment plan. Students are then required to submit a plan and/or a prescription that they would give the patient. (Rosalind Franklin University)

c. Use of mannequins with acute and/long term care conditions to practice the use of the process. (Rosalind Franklin University)

d. Practice the process within pharmacy skills lab courses. (ACPHS)

e. In skills labs, students role play case scenarios increasing in complexity while in groups and with facilitators during P1-P3 years. Emphasis is mostly on collecting in the P1 fall semester, but all steps of the process are reinforced beginning with the P1 spring semester. Standardized formats are utilized including QuEST. (Auburn University)

f. Within lab courses, students complete an OSCE at the end of each semester and are evaluated on the process through the use of a checklist and communication rubric. (Auburn University)

g. Students complete a Milestone OSCE (simulation with standardized patients) in which steps of the process are assessed. Students must pass this assessment prior to starting P4 APPE rotations. (Auburn University)

iii. Experiential: Utilize the process to implement patient care

1. Example(s) may include:

a. Use of direct patient care activities to incorporate and assess competency of the process through the inclusion of the process with APPE evaluation tools.
Appendix 2

Charge #2
Define assessment strategies for ensuring learners have achieved competency in application of the pharmacists’ patient care process.

Recommendation(s):
1. Possible strategies may include:
   i. Classroom:
      i. Utilize the tagging of exam questions through electronic exam software (For example, ExamSoft) or hard copy exams to assess knowledge of the components of the process.
      ii. Incorporate the pharmacist patient care process as part of course mapping to ensure coverage in the classroom, simulated and experiential settings while identifying gaps.
      iii. Complete a Gap Analysis:
           1. Identify courses that introduce the process, allow students to practice each component of the process and provide opportunities for students to implement the full process to ensure competence.
           2. Assess the competence level within each course covering the process.
   ii. Simulation:
      i. Develop/incorporate assessment rubrics specific to the process for use by faculty/preceptors in the simulation/experiential setting
   iii. Experiential:
      i. Incorporate assessment of the full implementation of the process within the experiential setting through inclusion of questions specific to the process within an institution’s experiential evaluation tool utilized (For example, use of E-Value)
      ii. Develop/incorporate assessment rubrics specific to the process for use by faculty/preceptors in the simulation/experiential setting
Appendix 3

Charge #3
Develop a self-assessment tool that allows a school to determine its level of adoption and integration of the pharmacists’ patient care process across its curricular and clinical service initiatives.

Pharmacists’ Patient Care Process Self-Assessment Tool- Primary Tool (To be completed by all institutions)

Goal: The self-assessment tool is to be used by colleges and schools of pharmacy to determine to what extent the Pharmacists’ Patient Care Process (PPCP) is familiar to, taught, and assessed by faculty and administrators with the hope of identifying gaps and opportunities for implementation regarding incorporation of the PPCP into curriculum.

Familiarity

1. In May 2014, the Joint Commission of Pharmacy Practitioners published a document defining a specific patient care process for pharmacists, the Pharmacists’ Patient Care Process (PPCP), also known as the Wheel.

Please state the extent to which you are familiar with the PPCP.

- I have not heard of the PPCP
- I have heard of the PPCP
- I have read the PPCP document
- I am using the PPCP in my teaching/precepting role

2. Standard 10.8, in ACPE’s 2016 Standards document, states:

The curriculum prepares students to provide patient-centered collaborative care as described in the Pharmacists’ Patient Care Process model endorsed by the Joint Commission of Pharmacy Practitioners.

Please state the extent to which you are familiar with Standard 10.8

- I did not know Standard 10.8 referenced the PPCP
- I have heard Standard 10.8 referenced the PPCP
- I have read Standard 10.8 and its reference to the PPCP
- I am actively incorporating Standard 10.8 in my teaching/precepting role

3. To what extent has the PPCP been introduced to faculty at our institution?

- The PPCP has not been introduced and there is no plan to introduce it to faculty
- The PPCP has not been introduced, but there is a plan to introduce it to faculty
- The PPCP has been introduced to some faculty at my institution
- The PPCP has been introduced to all faculty at my institution

4. To what extent is there a plan for incorporation of the PPCP at our institution?
There is not a plan for incorporation of the PPCP at our institution
There is a plan for incorporation of the PPCP at our institution, but it has not begun yet
There is a plan for incorporation of the PPCP at our institution and it has begun
The PPCP is being incorporated in select areas at our institution
The PPCP is being comprehensively incorporated at our institution

Teaching the PPCP

5. Are students exposed to the PPCP at our institution?

   Yes
   No

When in the curriculum are students first exposed to the PPCP?

   First Year
   Second Year
   Third Year
   Fourth Year

When in the curriculum are students learning the PPCP (check all that apply)?

   First Year
   Second Year
   Third Year
   Fourth Year

6. Please state your knowledge of teaching the PPCP in the classroom.

   I teach the PPCP (or components of it) in the classroom
   I know the PPCP (or components of it) is taught in the classroom
   I do not know if the PPCP is taught in the classroom

7. Please state your knowledge of teaching the PPCP in a lab setting.

   I teach the PPCP (or components of it) in a lab setting
   I know the PPCP (or components of it) is taught in a lab setting
   I do not know if the PPCP is taught in a lab setting

8. Please state your knowledge of teaching the PPCP in an experiential setting.

   I teach the PPCP (or components of it) in an experiential setting
   I know the PPCP (or components of it) is taught in an experiential setting
   I do not know if the PPCP is taught in an experiential setting

9. Please state your knowledge of the integration of the PPCP across our curriculum
The PPCP is intentionally integrated across our curriculum
The PPCP is taught, but not integrated across our curriculum
The PPCP is not integrated across our curriculum
I do not know if the PPCP is integrated across our curriculum

10. I teach the following components of the PPCP in any setting (classroom, lab, experiential). Check all that apply.

   Step 1: Collect
   Step 2: Assess
   Step 3: Plan
   Step 4: Implement
   Step 5: Follow-up: Monitor and Evaluate
   I do not teach any component of the PPCP.

11. How thoroughly do you teach Step 1: Collect of the PPCP?

   I teach Step 1: Collect in-depth
   I teach Step 1: Collect moderately in-depth
   I touch on Step 1: Collect lightly
   I do not teach Step 1: Collect

   How thoroughly do you teach Step 2: Assess of the PPCP?

   I teach Step 2: Assess in-depth
   I teach Step 2: Assess moderately in-depth
   I touch on Step 2: Assess lightly
   I do not teach Step 2: Assess

   How thoroughly do you teach Step 3: Plan of the PPCP?

   I teach Step 3: Plan in-depth
   I teach Step 3: Plan moderately in-depth
   I touch on Step 3: Plan lightly
   I do not teach Step 3: Plan

   How thoroughly do you teach Step 4: Implement of the PPCP?

   I teach Step 4: Implement in-depth
   I teach Step 4: Implement moderately in-depth
   I touch on Step 4: Implement lightly
   I do not teach Step 4: Implement

   How thoroughly do you teach Step 5: Follow-up of the PPCP?

   I teach Step 5: Follow-up in-depth
   I teach Step 5: Follow-up moderately in-depth
   I touch on Step 5: Follow-up lightly
   I do not teach Step 5: Follow-up
12. Please select the techniques you use to teach the PPCP. Check all that apply.

- Lecture
- Demonstration
- Simulation
- Authentic Practice/Experiential Experiences
- Other ________________
- I do not teach the PPCP

Assessment

13. Please state how you assess the PPCP.

- I use formative assessment techniques
- I use summative assessment techniques
- I use both formative and summative assessment techniques
- I teach the PPCP, but do not have specific assessment techniques
- I do not teach the PPCP
Appendix 4

Charge #3
Develop a self-assessment tool that allows a school to determine its level of adoption and integration of the pharmacists’ patient care process across its curricular and clinical service initiatives.

Pharmacists’ Patient Care Process Self-Assessment Tool- Supplementary Tool (Optional completion by institutions interested in expanding beyond Appendix 3- Primary Tool)

Goal: The self-assessment tool is to be used by colleges and schools of pharmacy to determine to what extent the Pharmacists’ Patient Care Process (PPCP) is familiar to, taught, and assessed by faculty and administrators at an individual institution, with the hope of identifying gaps and opportunities for implementation regarding incorporation of the PPCP into the curriculum.

Overview

1. To what extent are administrators, faculty, and preceptors familiar with the Pharmacists’ Patient Care Process (PPCP), or Wheel, published by the Joint Commission of Pharmacy Practitioners?

2. To what extent are administrators, faculty, and preceptors familiar with ACPE’s Standard 10.8 which states:
   
   The curriculum prepares students to provide patient-centered collaborative care as described in the Pharmacists’ Patient Care Process model endorsed by the Joint Commission of Pharmacy Practitioner?

3. Have the faculty and/or preceptors been intentionally introduced to the PPCP? Is there a plan to introduce faculty and/or preceptors to this process?

4. Has the PPCP been incorporated into the curriculum as a whole? Is there a plan to incorporate the PPCP into the curriculum as a whole?

5. Are there policies at our institution related to teaching the PPCP? Are there plans to develop policies related to teaching the PPCP?

Teaching the PPCP

6. To what extent are our students being taught the PPCP comprehensively? To what extent are our students being taught each of the five components of the PPCP:
   
   Step 1: Collect
   Step 2: Assess
   Step 3: Plan
   Step 4: Implement
   Step 5: Follow-up: Monitor and Evaluate?

7. When in the curriculum are our student first exposed to the PPCP as a whole? When in the curriculum do our student first begin to learn the individual components of the PPCP?
8. What are all the points in the curriculum our students learn the PPCP as a whole? What are all the points in the curriculum our students learn components of the PPCP?

9. To what extent is teaching of the PPCP intentionally integrated across our curriculum? To what extent is teaching of the PPCP intentionally sequenced across our curriculum? To what extent is teaching of the PPCP random in our curriculum?

10. What different settings is the PPCP, or components of it, taught in our curriculum (e.g. classroom, lab setting, experiential)?

11. How thoroughly is each step of the PPCP taught in our curriculum? Does student learning of the PPCP progress to higher levels of cognition (e.g. utilizing Bloom’s taxonomy)?

12. What techniques are used to teach the PPCP, or components of it (e.g. lecture, demonstration, simulation, authentic practice, etc)?

13. How is documentation of patient care experiences taught in our curriculum? How does our teaching of the PPCP relate to documentation teaching activities?

14. Do students have extracurricular opportunities to utilize or learn the PPCP, or components of it?

**Assessment of the PPCP**

15. To what extent are our students being assessed on the PPCP as a whole? To what extent are our students being assessed on the components of the PPCP?

16. To what extent are formative methods being used when assessing the PPCP, or components of it? To what extent are summative methods being used?

17. To what extent do the assessment methods being used to assess the PPCP align with the instructional methods, settings, and techniques? To what extent do the assessment methods align with the level of cognition expressed by learning objectives (e.g. following Bloom’s Taxonomy)?

**The Future of the PPCP**

18. What gaps have been uncovered by this self-assessment of the PPCP in our curriculum?

19. What actionable items have been uncovered by this self-assessment of the PPCP in our curriculum?

20. What recommendations need be made to administrators, faculty, curriculum committees, etc regarding the information uncovered by this self-assessment of the PPCP in our curriculum?
Workgroup #3: Influencing Refinement and Adoption in the Profession

Summary: In May 2014, JCPP authored a document which defines a specific patient care process for pharmacists. The purpose of the workgroups is to accelerate adoption of the patient care process within academic pharmacy and with other important external stakeholders.

Committee Members: Pam Heaton, Cincinnati (Chair), Brian Cross, East Tennessee, Chris Guiliano, Wayne State, Stefanie Ferreri, North Carolina, Keri Hager, Minnesota, Anne Marie Liles, Mississippi, Terry O’Sullivan, Washington, Rich Segal, Florida, Debbie Pestka, Minnesota (Graduate Student, ex officio).

Committee Meeting Dates: 10/12/15, 11/16/15, 12/4/15, 1/14/16, 3/11/16, 4/8/16, 5/13/16, and 6/7/16

Charges: Workgroup #3 received 3 charges which are listed. Accomplishments and recommendations for each charge are below.

1. Consider possible enhancements to the JCPP Pharmacists’ Patient Care Process (PPCP) document.

Recommendation 1: We discussed at length the JCPP document and what could strengthen it. We decided that what is unique to the Pharmacists’ Patient Care Process is our approach to assessing a patient’s medication regimen to ensure medications are appropriately indicated, effective, safe, and the patient can take them as intended (adherence/convenience). We decided that more details about a pharmacist’s unique approach would be helpful. We discussed the Patient-Centered Primary Care Collaborative (PCPCC) Integrating Comprehensive Medication Management to Optimize Patient Outcomes (see Appendix 1). We felt that section 2 of this document showed a level of detail that would be helpful to the JCPP document. Therefore, using information from this document, we added suggestions to the JCPP document (see Appendix 2). These modifications were discussed with Lynette Bradley-Baker (Vice President of Public Affairs and Engagement at AACP and AACP’s liaison to JCPP), who is willing to take the recommendations back to JCPP.

2. Evaluate the potential role of supplemental materials that describe the relationship of the patient care process to a philosophy of practice and a practice management system.

Our thinking about this charge evolved over time. Originally, we thought to develop a toolkit for student learners in the experiential setting. We thought that providing a toolkit to help students work through the patient care process would help them make the connection to the philosophy of practice. In the process, we realized that the PPCP did not really address practice management systems except the importance of documentation. So, we offer below the resources that we found, realizing that there is still a gap in the PCPP. Two members of our workgroup wrote a commentary to discuss the gap that practice management systems is lacking in the PPCP.

We discussed resources that learners can use in an experiential setting to implement the patient care process. There are several resources that exist that may help preceptors and student learners in the experiential setting to consistently utilize the patient care process in practice and to address the specific components of the patient care process.

- Overall Implementation
How to Implement the Pharmacists’ Patient Care Process by Marialice S. Bennett, Mary Ann Kliethermes, published by the American Pharmacist’s Association – This publication introduces the steps of the patient care process and how to apply them in all patient care settings. In addition, it includes case studies in six different patient care settings that demonstrate how the patient care process can be implemented.

Pharmaceutical Care Practice: The Patient-Centered Approach to Medication Management Services, 3e by Robert J. Cipolle, Linda M. Strand, Peter C. Morley - This publication provides guidance for practitioners on how to develop and maintain medication management services. As an appendix, the publication provides Pharmacotherapy Work-up Notes. These may be helpful to practitioners and students in guiding their thought processes through the patient care process in addition to helping with documentation of the steps.

The following resources can help address particular points included in each of the steps of the patient care process. While they do not address all of the points included in the patient care process, they are additional resources that can help practitioners and students in providing patient-centered care according to the patient care process.

- Collect – Involves obtaining subjective and objective information necessary to understand the clinical status of the patient including collection of a medication history. A resource to help with this is How to Conduct a Comprehensive Medication Review: A Guidebook for Pharmacists by Lauren B. Angelo and Jennifer Cerulli which provides a stepwise approach to conducting a medication review as part of a medication therapy management encounter.

- Assess – Points included in the “Assess” step are to assess medication related problems, assess health literacy and assess the need for immunizations. Tools to help with these points include:
  - Medication Related Problems
    - The PCPCC document (Appendix 1) and the Chipolle text mentioned above are excellent resources.
  - Health literacy tools
    - Newest Vital Sign – This tool requires a patient to read and answer questions about a food label in order to provide an assessment of a patient’s ability to understand and follow a healthcare provider’s instructions.
    - Rapid Estimate of Adult Literacy in Medicine—Short Form (REALM-SF) and Short Assessment of Health Literacy (SAHL) are 2 tools that assess a patient’s ability to read and understand common health terms. These are both available in Spanish as well.
    - The US National Libraries of Medicine has a website that includes several other health literacy assessment tools and can be found at - http://healthliteracy.bu.edu/
  - CDC Immunization schedules – gold standard for determining immunization needs and schedules

- Plan/Implement - Developing and implementing plans are specific to the disease state, drug-related problem, etc; however, according to the patient care process, all plans should involve
engaging the patient through education, empowerment and self-management. A method to help with this includes motivational interviewing. A resource available is Motivational Interviewing for Health Care Professionals: A Sensible Approach by Bruce A. Berger, William A. Villaume.

- Follow-up – In addition to monitoring for appropriateness, efficacy, and safety of medications and progress toward clinical goals/endpoints, this step involves monitoring for adherence. Several tools exist to help measure adherence. Two examples are:
  - Morisky Medication Adherence Scales
  - Million Hearts Pharmacist Drug Adherence Work-up (DRAW) tool

Recommendation 1: We discussed that perhaps AACP could develop pocket cards, as they have done for other topics of interest. There could be 6 total cards, with one card for the summary of the process and then one card for each step. Each card should describe the step, what the process should include, potential questions to ask patients (if applicable), websites/links for additional resources.

Recommendation 2: Debbie Pestka and Stefanie Ferreri, reviewed the literature to see what was published about how to implement and sustain the patient care process in practice. They concluded that while the JCPP document defines the process, it does not define how to build and sustain a patient care practice which incorporates this important aspect of pharmacist-provided care. They have written a commentary for JAPhA that will soon be submitted.

3. Produce a proposal for collaborating with JCPP to advance adoption of the patient care process across the profession, supporting understanding and adoption on the part of student pharmacists, pharmacists and audiences external to pharmacy.

Recommendation 1: We conducted an environmental scan to identify what CE activities currently exist about the JCPP Patient Care Process. We have found that the implementation varies broadly. Listed below are the findings. We believe that more CE is warranted in this area.

The Pharmacists’ Letter does not currently have a CE program on this process, but they state that they are planning to offer such program at some point in the future. The Collaborative Education Institute (CEI) does not offer a program on this topic. ASHP does not appear to have a program on this topic in their online offerings. APhA did offer a 2-hour program on it as recently as March 2016; this CE was a videotape of a live program presented at the 2014 APhA Annual Meeting prior to release of the final report. Several of the comments made by people at the meeting were obviously incorporated into the final report. The program was not contemporary and was modestly useful. A recent search of the APhA CE programs failed to locate the program, so it must have been retired. It has been a year since APhA published “How to implement the pharmacist’s patient care process,” so it is likely that APhA is now referring people to this new publication.

An informal query of members of the Experiential Education (EE) section of AACP about how EE programs are rolling this out to their preceptors yielded several replies:

University of Kansas: At University of KS, faculty have presented at the state association (KPhA) and the Hospital pharmacy (KCHP) annual meetings. They also had a preceptor conference where this topic was presented.
Texas Tech: They are discussing developing a patient care process video series (showcasing implementation of the process) in different practice settings which they hope to accomplish this summer. At minimum, they plan on sending out educational materials regarding the process and discussing at webinar events throughout the year to get preceptors to recognize/understand process.

VCU: The upcoming "Preceptor" newsletter will have an article and diagram about the process. However, the process is pertinent for ALL pharmacists, so the school's CE office has the item as an agenda for future programming offered to pharmacists. Faculty have anticipated that info and CE programming offered by state and national pharmacists associations are a natural point for distribution.

University of Michigan: They just completed their annual preceptor symposium, and at one of the sessions, Doug Schekelhoff from ASHP was their speaker. He explained why the model was developed and provided ways for implementation. Doug was asked to consider developing a webinar for their preceptors. They have also included information in their preceptor manual and revised the verbiage of APPE and some IPPE evaluation forms to reflect JCPP language.

Roseman University: They have an annual preceptor development night and this year the topic was including Interprofessional Education at your practice site. The speaker included a slide and discussed the JCPP Patient Care Process with their attendees.

Ferris State University: They are planning to include a 30 min session on introducing the Pharmacists Patient Care Process (PPCP) to their preceptors at their annual preceptor development conference this June. Other thoughts they had for future dissemination is to create a webcast (via YouTube or Adobe Connect) to send out to preceptors to view on their own time. The PPCP is already embedded into their new APPE evaluation form, but it is not readily apparent. They will brainstorm on how to revise the patient care section on their evaluation to showcase the PPCP more visibly.

University of Washington: Last year’s preceptor program was on evaluating student performance and it covered the preceptor’s role in the JCPP Patient Care Process as well as information from CAPE 2013. The students see the “colorful wheel” as it is called on the evaluation instrument for their hospital IPPE, where they have to submit a patient work-up. They have incorporated the steps into 3 of the 10 performance areas on the new APPE evaluation instrument developed by the Northwest Pharmacy Experiential Consortium and will include a link to the steps embedded in the evaluation instrument itself.

Other announcements on the Process: On the JCPP web site, there is a presentation titled “Pharmacy Collaborating for a Healthy America” which is a slide show available in pdf form. Some of these slides have been used in CE presentations posted online. For example, there was a presentation in January 2016 at the American Society for Automation in Pharmacy. Most of the major pharmacy organizations provide a link to the JCPP web site or have featured it in their news. For example, there is a link to the document on the State Pharmacy Association of Kansas, Minnesota, Colorado, Virginia, and Ohio. There have been a few publications (e.g., Bennett MS, Kliethermes MA, Derr S, Irwin A. APhA Academies reflect on pharmacist’s patient care process of the Joint Commission of Pharmacy Practitioners. J Amer Pharm Assoc 2015;55(3):230-3.), but most of the professional organizations (AMCP, NASPA, ACCP, NABP, ACCP, CPNP) published an announcement about it through their news feeds in 2014.
Recommendation 2: A vital part of advancing practice is communicating with audiences *external to pharmacy*. Public education campaigns may be one way to communicate the patient care process on a broader level. A recent quasi-experimental study in 382 undergraduate business students in Canada explored if public opinion could be changed after viewing an education video that provided an explanation of the pharmacist's role.¹ Prior to viewing the video most students had a poor/fair understanding of pharmacist training (52.1%), pharmacists role in medication verification (55.5%), counseling session content (49.7%), and pharmacist scope of practice (60.5%). After watching the video all fair/poor categories dropped to less than 5%. Although there are weaknesses to the study, it shows that videos could be part of a multimodal public education campaign. Other strategies could use social media, pamphlets, stickers, etc.

We believe this topic should be considered for a full workgroup in the following year. We could not find any data on public education campaigns related to the pharmacists care process in the United States. As was stated at the recent AACP Interim meeting, pharmacy has a public relations problem. Designing a public education campaign to support JCPP and describe the patient care process to the public could have a major impact on the profession. Collaboration with other pharmacy organizations is a necessity along with measuring outcomes of the campaign. We even discussed that perhaps students should be challenged with video competitions to explore this topic. We note that nursing had a national campaign that seemed effective: “Nurses put the care in healthcare.” Pharmacy needs such an effort. We liked the slogan “We are so much more!”

Recommendation 3: We recommend that the group remain in contact with AACP and JCPP. Lynette has suggested that this is possible and we could continue to provide information.

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The Patient-Centered Medical Home:
Integrating Comprehensive Medication Management to Optimize Patient Outcomes

RESOURCE GUIDE

SECOND EDITION | JUNE 2012
Dear Colleagues:

Founded in 2006, the Patient-Centered Primary Care Collaborative (PCPCC) is a coalition of more than 1,000 organizations and individuals. It includes employers, physicians and other health professionals, consumer and patient/family advocacy groups, patient quality organizations, health plans, hospitals and unions, all of whom have joined together to advance an effective and efficient health system built on a strong foundation of primary care and the patient-centered medical home (PCMH). The Collaborative serves as a broad-based national advocacy organization for the primary care patient-centered medical home, providing timely information and networking opportunities to support transformation of the US health system.

The goal of this resource guide, developed by the PCPCC’s Medication Management Task Force, is to provide information that facilitates the appropriate use of medications in order to control illness and promote health, which are critical elements to the PCMH’s success. Too often patients simply do not understand what their medications are for or how to take them. Improving communication with patients will change that. Health literacy is the capacity to understand basic health information and make appropriate health decisions. It ties directly to the PCMH because the care delivery team is focused on improving communication to engage the patient and family and enhance care coordination. According to one comprehensive national study, only 12 percent of US adults have proficient health literacy, and more than a third have difficulty with common health tasks, such as following directions on a prescription drug label or adhering to a childhood immunization schedule. Information from health professionals is one of the most important sources of information for patients on health topics, regardless of their respective health literacy level.

This guide outlines the rationale for including comprehensive medication management services in integrated patient-centered care. It also delineates the key steps necessary to promote best practices and achieve meaningful quality improvements for patients while reducing costs associated with poor-quality outcomes. We encourage you also to review the PCPCC’s Meaningful Connections, which explores current uses of health information technology and covers many of the elements necessary for appropriate medication management. In addition, A Purchaser Guide, also from the PCPCC, provides information on benefit designs that encourage better alignment of incentives for providers and patients while removing financial barriers to better patient engagement and quality care.

The PCPCC leadership is pleased to offer another practical resource that can be broadly used in putting the patient at the center of care in a team-based approach—one that includes all providers, such as pharmacists working at the top of their licenses—as we transform our delivery system.

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Acknowledgements

We would like to thank the members of the PCPCC Medication Management Task Force for all of their efforts and comments on these collaborative documents and Foong-Khwan Siew as our consultant facilitator.

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APPENDIX B
What Is the Patient-Centered Medical Home?

The patient-centered medical home (PCMH) strives to provide care to patients that is structured, delivered, and coordinated around the specific needs of each patient. The care is based on an effective, sustained relationship between patients and their physicians and other health care practitioners on the PCMH team. The PCMH offers significant promise for improving health care value. When consumers or patients have this type of relationship and coordination with their health care practitioner and practice, they have a PCMH.1

A critical factor in the success of the PCMH for both adults and children is maximizing the benefits medications offer in improving outcomes related to chronic conditions. Therefore, the health care reform and delivery system changes now underway must include the comprehensive management of medications to identify, resolve, and, most importantly, prevent medication-related problems. This document presents the rationale for including comprehensive medication management services in integrated patient-centered care within the structure of the PCMH.

The Need for Comprehensive Medication Management Services

More than 3.5 billion prescriptions are written annually in the United States,2 and four out of five patients who visit a physician leave with at least one prescription.3 Medications are involved in 80 percent of all treatments and impact every aspect of a patient’s life. The two most commonly identified drug therapy problems in patients receiving comprehensive medication management services are: (1) the patient requires additional drug therapy for prevention, synergistic, or palliative care; and (2) the drug dosages need to be titrated to achieve therapeutic levels that reach the intended therapy goals.4 According to the World Health Organization, adherence to therapy for chronic diseases in developed countries averages 50 percent, and the major consequences of poor adherence to therapies are poor health outcomes and increased health care costs.5

Drug therapy problems occur every day and add substantial costs to the health care system. Drug-related morbidity and mortality costs exceed $200 billion annually in the U.S., exceeding the amount spent on the medications themselves.4-8 For example, Medicare beneficiaries with multiple chronic illnesses see an average of 13 different physicians, have 50 different prescriptions filled per year, account for 76 percent of all hospital admissions, and are 100 times more likely to have a preventable hospitalization than those with no chronic conditions.9 The Institute of Medicine noted that while only 10 percent of total health care costs are spent on medications, their ability to control disease and impact overall cost, morbidity, and productivity—when appropriately used—is enormous.10

Pharmaceuticals are the most common medical intervention, and their potential for both help and harm is enormous. Ensuring that the American people get the most benefit from advances in pharmacology is a critical component of improving the national health care system.11

This resource guide was developed to provide a framework for integrating comprehensive medication management within the PCMH as part of the practice redesign that needs to occur when individual and group practices transform into the PCMH. This guide also reinforces the need for payment reform to support the PCMH to include payment for comprehensive medication management as an essential professional activity for effective integrated care.

While the processes of writing and filling a prescription are important components of using medications, the technical aspects of these activities are not addressed in this document. It should be clear that both activities need to occur with timeliness and accuracy for patients to be well served. This document focuses on the
decisions surrounding the comprehensive management of a patient’s medications, regardless of source, method of delivery, or form of administration of the medications themselves.

**Comprehensive Medication Management in the PCMH: What Is It and Why Does It Matter?**

Comprehensive medication management is defined as the standard of care that ensures each patient’s medications (whether they are prescription, nonprescription, alternative, traditional, vitamins, or nutritional supplements) are individually assessed to determine that each medication is appropriate for the patient, effective for the medical condition, safe given the comorbidities and other medications being taken, and able to be taken by the patient as intended. Comprehensive medication management includes an individualized care plan that achieves the intended goals of therapy with appropriate follow-up to determine actual patient outcomes. This all occurs because the patient understands, agrees with, and actively participates in the treatment regimen, thus optimizing each patient’s medication experience and clinical outcomes.12-14

The concept and definition of comprehensive medication management has evolved over the years. The term medication (therapy) management became most widely used when the Centers for Medicare & Medicaid Services (CMS) adopted it in January 2003 legislation to refer to the new, additional service required for certain patients receiving Medicare Part D benefits.15 Medication management has expanded since then as state Medicaid programs have recognized and provided payment for the service, employers have added the service as an employee benefit, and the service has been added to medical homes functioning in North Carolina, Minnesota, and some other states. Comprehensive medication management is accepted and provided around the world, resulting in a new standard for medication use in our societies.

Medication management now occurs at varying levels in all patient care practices on a daily basis. However, medication regimens are becoming very complex and specialized, particularly in patients who may often have as many as five comorbidities and take an average of eight medications concurrently. To achieve better outcomes from the use of medications in such patients, the systematic and comprehensive management of medications is necessary. For the purposes of this document, we refer to comprehensive medication management in the context of the medical home, where it is delivered as a service to an individual patient and is fully integrated with work of the PCMH team to achieve coordinated patient care.

We use the common elements of two definitions that describe this service in the medical home—the definition offered by the American Medical Association (AMA) when it provided current procedural terminology (CPT) payment codes for the delivery of medication management services12 and the definition provided by legislation for Minnesota Medicaid recipients.14 These definitions have the following five elements in common relevant to the needs of patients being cared for in the medical home:

1. The service (medication management) needs to be delivered directly to a specific patient.

2. The service must include an assessment of the specific patient’s medication-related needs to determine if the patient is experiencing any drug therapy problems. A care plan is developed to resolve the problems, establish specific therapy goals, implement personalized interventions and education, and follow up to determine the actual outcomes the patient experienced from taking the medications.

3. The care must be comprehensive because medications impact all other medications and all medical conditions.

4. The work of pharmacists and medication therapy practitioners needs to be coordinated with other team members in the PCMH.

5. The service is expected to add unique value to the care of the patient.

A core principle of the PCMH is the team approach, and the composition of the PCMH team will vary based on a range of factors, including the specific needs of patients and the scope of services to be offered and/or coordinated. For patients on multiple or chronic medications, pharmacists, who are trained to provide comprehensive medication management services, have the necessary expertise to help them and their health care team in the PCMH maximize the benefits from the effective medications available to them.16-17

Comprehensive medication management is best accomplished when the PCMH is flexible in its design, allowing access to this expertise for complex patients or those not at clinical goal when it is needed.
Patients with less-complex drug regimens who are at clinical goal may have their medications effectively managed by their primary care providers using the steps in this document. For more complex regimens when patients are not at goal or are experiencing adverse effects, however, the primary care physician or a member of the medical home team may seek medication management services to achieve clinical goals and minimize adverse events. Such services optimally require a clinically oriented pharmacist trained to work directly with patients. The work and service delivered are described in this document.

What Specific Procedures Are Performed in Medication Management in the Medical Home?

Medication management in the medical home needs to be a comprehensive, systematic service to produce positive patient outcomes and add value to patient care. Therefore, all of the steps described below must be completed for each patient receiving medication management services. Incomplete provision of the service—by completing selected steps only or partially fulfilling the responsibilities described—will not optimize the patient’s medication experience, achieve therapy goals in a predictable manner, or lead to positive patient outcomes.

The following process leads to optimal outcomes from drug therapy:

1. **An assessment of the patient’s medication-related needs**

   This comprehensive assessment includes all of the patient’s medications (prescription, nonprescription, alternative, traditional, supplements, vitamins, samples, medications from friends and family, etc.), regardless of who prescribed them, and where they were dispensed, purchased, or obtained. This is necessary because current electronic systems of dispensing and e-prescribing miss a significant number of medications purchased and taken by patients. Further, these systems contain “idealized” prescription information (i.e., how the prescription was written), but do not contain information about how the medications are actually being taken.

   The assessment begins with uncovering the patient’s medication experience. That includes the patient’s beliefs, concerns, understanding, and expectations about his or her medications. This experience helps define how patients make decisions about a) whether to have a prescription filled, b) whether to take it, c) how to take it, and d) how long to take it. The goal of medication management is to positively impact the health outcomes of the patient, which necessitates actively engaging them in the decision-making process. Therefore, it is necessary to first understand the patient’s medication experience.

   The assessment includes the patient’s medication history. The following questions need to be answered: Which medications have been taken in the past and for which medical conditions? Which have worked and which have not worked? Which medications have caused the patient problems or concerns? Which medications would the patient like to avoid in the future? Why?

   The assessment includes the patient’s current medication record. The primary focus is how the patient actually takes his or her medications and why. Changes, discrepancies, and any concerns or questions about the medications are noted. Each medication is assessed for the medical condition or indication for which it is taken. To produce clinically useful data, the indication for the medication must be electronically linked with the product being used, dose, duration, manner in
which the medication is being taken, therapy goals, clinical parameters that will determine progress toward these goals, and actual outcomes. This allows for a comprehensive service to be delivered and new, clinically useful data to be generated.

2. Identification of the patient’s medication-related problems

Once the assessment (described above) is completed, a determination can be made as to whether any medication-related problems are interfering with the patient achieving the intended therapy goals. This determination must be completed in logical order; it must be done systematically; and it must be comprehensive to be of value to the team. The following medication-related categories are evaluated (in order) for each medication being taken:

A. Appropriateness of the medication
   i. Is the medication appropriate for the medical condition being treated?
   ii. Does the patient have an indication for a medication that is not being treated or prevented?

B. Effectiveness of the medication
   i. Is the most effective drug product being used for the medical condition?
   ii. Is the dose appropriate and able to achieve the intended goals of therapy?

C. Safety of the medication
   i. Is the patient experiencing an adverse event from the medication?
   ii. Is the dose so high it could cause toxicity in the patient?

D. Adherence to the medication
   Is the patient able and willing to take the medication as intended?

There are many reasons patients may experience one or more of the medication-related problems described above. It is necessary to determine whether medication-related problems are present and the causes of the problems so that each can be resolved and the therapy goals can be met in an efficient and effective manner. These medication-related problems will be prioritized to reflect the patient’s preferences, clinical needs, and logistical realities of the patient’s situation.

3. Development of a care plan with individualized therapy goals and personalized interventions

The care plan is developed in conjunction with the patient and the patient’s health care providers. The care plan allows a provider to do the following:

A. Intervene to solve the patient’s medication-related problems (interventions include initiating needed drug therapy, changing drug products or doses, discontinuing medications, and educating the patient).

B. Establish individualized therapy goals for each medical condition. Although national guidelines dictate population-level goals, each therapy goal must be individualized for each patient based on risk, comorbidities, other drug therapies, patient preferences, and physician intentions.

C. Design personalized education and interventions that will optimize each patient’s medication experience.

D. Establish measurable outcome parameters that can be monitored and evaluated at follow-up to determine the impact of the therapies and the service itself.

E. Determine appropriate follow-up time frames to ensure the interventions were effective and determine if any safety issues have developed since the last evaluation.

4. Follow-up evaluation to determine actual patient outcomes

The follow-up evaluation allows the practitioner to determine the actual outcomes resulting from the interventions. The outcome parameters are evaluated against the intended outcomes (individualized therapy goals) and the patient is reassessed to determine if any new medication-related problems have developed that might interfere with the safe and effective use of the medications. This follow-up occurs 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. These follow-ups should be coordinated with the medical team to minimize interference with other care activities.
Measurable parameters are determined for each medical condition. Clinical, economic, and behavioral parameters are created for each condition because outcomes in patient care cannot be measured accurately without establishing an individualized therapy goal for each patient. Examples of these parameters include hemoglobin A1C levels in patients with diabetes, international normalized ratio (INR) levels in anticoagulation management, asthma control test (ACT) score for asthma control, and depression scales. Economic measures may include hospitalizations prevented, emergency room visits eliminated, clinical visits avoided, fewer sick days used, and any impact on drug costs.

How Does Medication Management Help Engage the Patient and Address Drug-Related Morbidity and Mortality?

The patient and his or her medication experience is the starting place for managing medications. An active process of identifying medication-related problems occurs so that specific, effective interventions can be designed. Measurement of actual outcomes allows determination of what is and is not effective in practice. Assessments of need are done on an individual basis and personal solutions are provided. Comprehensive medication management in the medical home is based on this principle.

Which Patients Benefit Most From Comprehensive Medication Management?

Significant evidence is accumulating to establish the positive impact that comprehensive medication therapy management has on patient outcomes. Patients who benefit most include:

- Those who have not reached or are not maintaining the intended therapy goal
- Those who are experiencing adverse effects from their medications
- Those who have difficulty understanding and following their medication regimen
- Those in need of preventive therapy
- Those who are frequently readmitted to the hospital

Although the data suggest that many patients are able to benefit from comprehensive medication management, patients with greater numbers of medical conditions and taking greater numbers of medications have the potential to benefit the most. Data accumulated to date are not able to identify predictors of medication-related problems (patient variables, disease variables, or drug variables) because so many drug therapy problems are present. However, it stands to reason that the medical conditions that are the most costly and are associated with the use of multiple medications (diabetes, cardiovascular disease, chronic obstructive pulmonary disease (COPD), asthma (in children), cancer chemotherapy, depression, pain, and hypothyroidism) are great candidates with which to begin the service.

What Is the Value of Comprehensive Medication Management in the Medical Home?

The value of this service can be measured in a number of ways. First, the patient benefits from improved outcomes. In addition, the patient benefits directly from the
increased individualized attention to medications and the role they play in his or her daily life. Third, physicians and other care team members benefit when pharmacists apply their pharmacotherapeutic expertise in a collaborative process to help manage complex drug therapies. Physicians are able to dedicate more time to the diagnostic and treatment selection process, enabling them to be more efficient, see more patients, and spend more time providing medical care.24

In general, health plans, employers, and payers benefit tremendously when they pay only for medications that are safe, appropriate, and effective for the patient and his or her medical problem, and are used as intended. Keeping patients out of the hospital is one of the most important—and cost-effective—goals of the PCMH. Providing comprehensive medication management to complex patients is one way to help accomplish this goal.25

Another way to measure value is through the calculation of return on investment (ROI), or how much value the service adds compared to the cost of delivering the service. ROI data are frequently difficult to obtain and vary significantly, depending on the patient population being evaluated. However the ROI of medication management services has been established. The data from the delivery of this service are positive, with a demonstrated ROI of as high as 12:126 and an average of 3:1 to 5:1.27 ROI reflects an ability to decrease hospital admissions, physician visits, and emergency room admissions and reduce the use of unnecessary and inappropriate medications. This is a conservative estimate. The ROI is likely to be much greater because practitioners routinely underestimate the impact on a patient’s life and it is not easy to put a number on high patient satisfaction and physician acceptance.
How Does This Service Integrate With the Service of the Medical Home Team?

The services provided in medication management integrate well with the services provided by other health care providers. Just as the services of physical therapists, behavioral health workers, dieticians, and others are necessary to provide the patient with coordinated, comprehensive care, medication management strengthens the ability of the team and makes everyone more effective. Medication management, when delivered in the manner described, contributes unique data, quality decisions, and new solutions for patients and important new knowledge about the effectiveness and safety of medications for the medical home team.

Specifically, the following medication management services represent added value that will help the PCMH meet its patient care goals and control health care costs. To control costs and improve patient outcomes in the PCMH, each medication management encounter should include the following:

1. **A description of the patient’s medication experience.** This includes a description of how a patient makes decisions about the medications he or she takes in a cultural and holistic context.

2. **A list of medication-related problems that need to be addressed.** These problems interfere with the achievement of the patient’s therapy goals. Without a clear definition of the issues a patient is experiencing or might be at risk to experience, it is not possible to individualize the interventions in a manner that will optimize the desired outcomes. When no medication-related problems are determined to be present, the medical team can be assured that all of the patient’s medications are appropriate, effective, safe, and being taken as intended.

3. **Care plan goals of therapy individualized to the patient.** Even though most care plans begin with goals from national guidelines, they may not be appropriate or achievable if they are not based on patient-specific information (risk factors, comorbidities, other concurrent medications, etc.).

4. **Measurable outcome parameters personalized for each patient** so he or she can participate in the care plan in a patient-centered approach. Appropriate parameters for both effectiveness and safety are determined, such as laboratory values, quality metrics, symptom alleviation, improvement or prevention, daily living activities, and any other parameter deemed by the patient or health care team to be representative of improvement.

5. **Interventions personalized for each patient (i.e., education, tools, etc.).** A major reason why patients are not adherent (after the medication has been determined to be appropriate, effective, and safe) is because the patient is not able to understand the instructions or physically accomplish the delivery of the drug product. This can be overcome when the patient participates in determining how the goals will be met.

6. **Routine follow-up evaluation of actual outcomes related to medication use.** Specific follow-up is necessary to determine if appropriate progress is being made toward the therapy goal, any safety issues have arisen, and the patient has any concerns about taking the medication as intended. The follow-up evaluation also adds new data to the use of medications in practice. The level of information
collected in medication management is critical to post-marketing surveillance of new products and continued evaluation of medications in practice.

Why Would a Primary Care Provider Consider the Need for Additional Medication Management Services From a Pharmacist in Clinical Care?

Most physicians and providers have the training and experience to manage medications effectively within their area of general or specialist knowledge, but they may seek additional consultation in managing medications outside their usual scope of care or when patients do not reach clinical therapy goals. Primary care providers frequently refer patients to a medical specialist for medication adjustments, although the diagnosis is well established. Common examples include referral to a pulmonologist for worsening asthma or COPD or a cardiologist for poorly controlled hypertension. In the absence of newly suspected disease or interventions, drug therapy problems could be effectively resolved with comprehensive medication management services delivered by a pharmacist.

In addition, the need to coordinate medications prescribed by multiple specialists and the ever-increasing use of herbs, supplements, nutriceuticals, and foods that interfere or enhance a drug’s effect in complex patients may result in a request for a more comprehensive medication review. Adverse reactions and interactions are seen frequently with multiple medications and are compounded by the effects of chronic disease on organ systems. For example, the primary care provider may seek a comprehensive medication review from a clinical pharmacist to determine medication interactions and adjustments in a patient undergoing chemotherapy for cancer, a patient taking antiseizure medications, or even a patient on multiple medications to treat a condition such as high blood pressure who is still not at goal. As the team approach in the PCMH evolves, this focus on chronic disease management, as well as an emphasis on preventive therapies with documented evidence of improved outcomes, will result in more comprehensive medication management as a cornerstone of high quality care.

What Are the Electronic Therapeutic Record Requirements for This Practice?

Meaningful Connections, a health information technology document prepared by the PCPCC, includes many of the information items that need to be included for comprehensive medication management. However, a number of items deserve special consideration here because they are specific to medication management or are not routinely included in electronic health records. The comprehensive management of a patient’s medications requires an electronic therapeutic record that supports these functions.

The following information items are necessary for comprehensive medication management:

1. A record of the patient’s medication experience (understanding, concerns, preferences, beliefs, behavior)
2. Medication allergies (along with a description of the allergy, time frame, and severity) and adverse reactions (separated into dose-related and preventable)
3. Medication history (including immunizations), complete with dates, effectiveness information, record of issues, problems, etc.
4. Current medication record (including all medications regardless of source, mode of administration, or prescriber), indication for use, product, dose, duration, and how the medication is actually being taken
5. Active drug therapy problem list, complete with the cause of each problem (associated with the medical condition and medications relating to the drug therapy problem)
6. Therapeutic treatment plans for the patient and practitioner (a patient and prescriber version of the treatment plan needs to be available). The following specific functionality must be available in the electronic therapeutic record to provide medication management services:

A. Connect indication for medication (reason for use) to specific drug product, dose, duration, and actual outcomes for each medical condition.

B. Identify, resolve, and prevent drug therapy problems:

   i. Appropriateness
      Eliminate unnecessary medications.
      Initiate necessary medications not being taken.

   ii. Effectiveness
      Identify most effective medication in specific patient.
      Increase dosages to effective levels.
iii. Safety
   Eliminate toxicities.
   Identify adverse reactions.

iv. Adherence
   Increase patient’s willingness to adhere to medication regimen.

The cause of each of the drug therapy problems described above also needs to be documented.

C. Record and evaluate actual outcomes from drug therapy.
   Record personalized therapy goals and evaluate against outcome measures for each medical condition.
   Graph laboratory levels against changes in drug therapy and doses.
   Record outcome changes with changes in medication details.

D. Provide post-marketing surveillance on appropriateness, effectiveness, safety, and adherence variables.

E. Record drug therapy problems specific to drug product, medical condition, and patient parameters.

F. Offer clinical decision support and analysis.

G. Support patient participation and decision making in drug therapy (i.e., adherence tools, record keeping, etc.).

H. Provide patients with medication information that is individualized and complements the therapeutic care plan.

Electronic therapeutic records are available that support the functions described above.

How Is This Service Requested and Delivered?

When a prescriber identifies a patient in need of comprehensive medication management, a referral is made to the qualified pharmacist/medication-management practitioner. The way the service is delivered depends on the proximity of the practitioner, the specific structure of the PCMH, and the service delivery design of the practitioner providing the service. In many practices, the medication management practitioner is employed by the medical home and resides full time or part time in the clinic or practice. In this scenario, the practitioner is available at any time to deliver the service and functions inside the medical home structure.

Other medication management practices are established outside the PCMH (associated with a community pharmacy, health plan, or hospital entity) where the referral is made to the practitioner. After a patient appointment is set, the patient meets with the practitioner delivering medication management services off the premises, who then provides the referring physician with documentation of the assessment, details on the need for any changes, and a record of all of the clinical outcomes achieved. The patient is followed until the therapy goals are met or until the physician determines this level of care is no longer necessary. This structure frequently involves the use of collaborative practice agreements between the physician and the practitioner providing medication management. Such agreements are allowed in 46 states.

Another structure allows the patient to request the medication management service directly and set an appointment with the pharmacist practitioner. Even in this situation, communication between the medication management practitioner and the primary care physician occurs after each patient encounter. Medication management cannot be done effectively unless all of the patient’s providers are informed and care is coordinated with the team.

Medication management services can also be provided by telephone or through a virtual clinic structure. The medication management practitioner must be in direct communication with the patient (in person, by telephone, or through telemedicine or a virtual clinic) to deliver the services as described. Information technology systems necessary to support telephonic or telemedicine/virtual clinic arrangements must include accurate and reliable ways to identify medications and dosages the patient is taking as well as a clear means to determine the patient’s response to the medications. When this service is provided by telephone or through a virtual clinic structure, it should be done by medication management practitioners who have experience with these media, skill in interview techniques, and who use standardized methods to ensure a quality service is delivered.

The schedule and means of follow-up are determined by the drug therapy problems identified and the need to modify or evaluate the effects of the therapy recommendations. In all of the scenarios described above, continual written (and, when necessary, verbal) communication occurs with the patient, the prescriber (and/or
referring primary care clinician), and the medication management practitioner. This occurs electronically when those facilities are available and in writing when they are not available. (See the section above on electronic record system requirements.)

**How Will Service Quality Be Evaluated?**

Documentation of the service and reported results will allow the quality of services to be evaluated. National and international data are now available on the number and type of drug therapy problems that exist, so a practitioner’s ability to identify these problems can be compared to national averages. In addition, outcome measures reflect the quality of the services provided. Quality metrics, such as the number of patients whose hypertension, diabetes, cholesterol, and other medical conditions are controlled, all reflect the outcomes of the care provided. Patient and physician acceptance of the service is important as well. Outcome measures are a necessary and significant part of the quality evaluation of medication management services in the PCMH.

**What Are the Business and Cultural Implications for Key Stakeholders When a Clinical Pharmacist Delivers Medication Management for Complex Patients?**

**Patients:** The practitioner providing medication management addresses patients’ questions, concerns, preferences, wants, and needs as they relate to medications because patients’ beliefs and concerns play a major role in their behavior and must be understood. Patients are educated and collaborate in their care plan, following individualized goals and personalized interventions to meet their needs. Fewer adverse reactions and side effects occur and positive clinical outcomes and better health are realized. Patients gain confidence in the medications and the practitioner, which leads to increased adherence and persistence.

**Physicians and clinicians:** Effective medication management provides physicians and clinicians with more time to diagnose and effectively manage patient problems and formulate treatment goals because they are reassured that the patient better understands his or her medication regimen and is taking the medications as prescribed. Physicians and clinicians frequently change or add medications, not realizing in some cases that patients are not taking the medication as prescribed. Prescribers also are frequently unaware of other prescriptions or diagnoses that involve other physicians and lack a complete picture of the patient’s situation and risk profile when prescribing new medications. With informed and educated patients and a comprehensive medication list coupled with therapeutic recommendations from the pharmacist, the physician/clinician can be more effective in moving a patient toward clinical therapy goals and achieving performance outcomes.

**Health plans:** Effective medication management has been linked to lower total health care costs. Although medication costs typically rise as appropriate adherence increases, hospital and emergency room services decrease as patients more often reach clinical therapy goals. The substitution of less-costly medications and elimination of duplicate and unnecessary medications decrease medication costs. This service is recognized by patients as effective and positive, and quality indicators such as the Healthcare Effectiveness Data and Information Set (HEDIS) measures improve with the service.

**Employers and payers:** In addition to lower total health care costs, patients experience fewer emergency room visits and hospitalizations, so they lose fewer workdays. Side effects such as drowsiness or decreased mental alertness are minimized, so productivity, workplace safety, and quality of life improve. This is a health care benefit patients relate to personally and benefit from individually. It is a very popular benefit when it is offered to employees.

**Pharmacists:** Pharmacists are able to contribute measurable value directly to the care of patients. This occurs because they are using their expertise in medications to educate patients and help minimize interactions and side effects, while recommending drug therapy regimens to physicians and clinicians that move patients more quickly toward clinical goals. The health care system benefits from the pharmacist’s expertise, and comprehensive medication management provides the structure that enables patients and physicians to gain from it.

The level of drug-related morbidity and mortality patients experience in the health care system has reached the point at which something must be done to better manage how medications are used. Incorporation of comprehensive medication management services within the PCMH is a rational and effective solution to the problem, benefiting everyone.
Is a Well-Prepared Workforce Available to Deliver This Service? How Can It Be Delivered Broadly in a Reasonable Amount of Time?

The delivery of comprehensive medication management requires academic preparation and professional experience in pharmacology, pharmacokinetics, and biopharmaceutics, to mention a few of the many knowledge areas relevant to drug therapy decision making. Health professionals that possess this knowledge, an understanding of the comprehensive taxonomy of drug therapy problems, and the ability to apply the rational and systematic decision-making process for drug therapy are capable of providing medication management as described in this resource guide.

The current academic preparation of pharmacists qualifies them to deliver medication management services. All practicing pharmacists are capable of providing this service, although additional training may be required to meet the standards described in this resource guide. Many pharmacists now provide this service and are being paid by federal and state governments and private insurers. No longer a “new” or “non-traditional” service, comprehensive medication management is scalable and can be delivered in a PCMH when appropriate financial support exists in the organizational structure.

What Is the Business Impact of Adding the Pharmacist to the Medical Home Team?

Using pharmacists who can manage difficult, complex patients with medication problems will make the entire patient care team more effective and efficient. Medical homes now must absorb some of the costs associated with drug-related morbidity and mortality, and this can be significant. Medication management optimizes drug therapy in patients who need additional time and attention, which results in better management of health care costs.

Producing better clinical results in patients is always a positive reflection on the PCMH itself. Documented improvement in clinical measures, such as diabetes and hypercholesterolemia, occurs even when the service is delivered for only a short time period. All therapeutic outcomes can be improved with medication management because goals are individualized, all medications are assessed, drug therapy problems are identified and solved, and actual outcomes are continuously evaluated until appropriate outcomes are achieved.

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<table>
<thead>
<tr>
<th>The 10 Steps to Achieve Comprehensive Medication Management</th>
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<tbody>
<tr>
<td>1. Identify patients that have not achieved clinical goals of therapy.</td>
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<tr>
<td>2. Understand the patient’s personal medication experience/history and preferences/beliefs.</td>
</tr>
<tr>
<td>3. Identify actual use patterns of all medications including OTCs, bioactive supplements, and prescribed medications.</td>
</tr>
<tr>
<td>4. Assess each medication (in the following order) for appropriateness, effectiveness, safety (including drug interactions), and adherence, focused on achievement of the clinical goals for each therapy.</td>
</tr>
<tr>
<td>5. Identify all drug therapy problems (the gap between current therapy and that needed to achieve optimal clinical outcomes).</td>
</tr>
<tr>
<td>6. Develop a care plan addressing recommended steps, including therapeutic changes needed to achieve optimal outcomes.</td>
</tr>
<tr>
<td>7. Patient agrees with and understands care plan, which is communicated to the prescriber/provider for his/her consent/support.</td>
</tr>
<tr>
<td>8. Document all steps and current clinical status versus goals of therapy.</td>
</tr>
<tr>
<td>9. Follow-up evaluations with the patient are critical to determine effects of changes, reassess actual outcomes, and recommend further therapeutic changes to achieve desired clinical goals/outcomes.</td>
</tr>
<tr>
<td>10. Comprehensive medication management is a reiterative process—care is coordinated with other team members and personalized (patient-unique) goals of therapy are understood by all team members.</td>
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One of the core principles of the PCPCC’s framework for health care reform involves changing payment policies and realigning payment incentives to more appropriately recognize and reward primary care health services provided by physicians and other health professionals whose services are or may be delivered in a PCMH. One such payment model encompasses a three-part methodology (www.pcpcc.net):32

- A monthly care coordination payment for the physician’s work that falls outside of a face-to-face visit and the health information technologies needed to achieve better outcomes
- A visit-based fee-for-service component for services recognized and paid for under the existing fee-for-service payment system
- A performance-based component that recognizes achievement of service, patient-centeredness, quality, and efficiency goals

This blended-payment model aligns effectively with recommendations for payment reform for medication management services contained in a jointly developed document on integration of pharmacists’ services in the PCMH in 2009:

Payment policies should be aligned to (1) effectively support the medical home, (2) provide reasonable and adequate payment for pharmacists’ clinical services as an element of the scope of services that are eligible for payment to either the providers or the [medical home] practice, and (3) promote the achievement of higher quality, safer, and more effective therapeutic outcomes from medication use through enhanced provider collaboration.33

Realigning payment incentives to promote care coordination among providers can be particularly important in the process of comprehensive medication management because of (1) the central role of medication management in the treatment of chronic conditions, (2) the likelihood of multiple prescribers involved in the patient’s care, and (3) the need for patients to occasionally transition from one care setting to another, even when their care is being coordinated by the PCMH.

As described in this document, the activities associated with effective medication management are expected to be key elements in the ability of the PCMH to provide comprehensive and coordinated care. Effective medication management contributes to enhanced clinical outcomes, patient safety, cost effectiveness, and better patient involvement in and understanding of medications and their appropriate use to achieve desired clinical outcomes and care goals. Comprehensive medication management, especially for patients with complex medication regimens or multiple diseases that require the effective management of multiple medications, has the potential to contribute substantially to the achievement of these objectives. Accordingly, coverage and payment for such services should be a component of payment reform efforts that seek to promote collaborative, patient-centered care.

How Are Medication Therapy Management Services Recognized Through Payment?

Payment approaches for medication therapy management services have expanded substantially in recent years as the value of these services, commonly provided by pharmacists as members of interprofessional teams, has been more fully recognized.34

Both private sector (Asheville Project, Diabetes Ten-City Challenge, Kaiser Permanente) and public sector (Medicare Part D, state Medicaid programs such as
Minnesota, Community Care of North Carolina, Veterans Administration programs have stimulated the development of coverage and payment approaches that recognize and reward the clinical outcomes, enhanced safety, cost management, and patient satisfaction that effective medication management services can provide. All use payment or cost management strategies that are consistent with one or more of the primary care payment reform elements described in this document.

Background on Established Approaches for Medication Therapy Management Payment

Medication therapy management and CPT codes. The AMA Current Procedural Terminology Editorial Panel has approved three CPT codes for use when pharmacists provide face-to-face medication therapy management services to patients. The codes may be used to document service delivery and bill any health plan that provides a medication therapy management benefit, including those covered under Medicare Part D.

The time-based codes are designated for use for medication management services performed face-to-face for a patient. As now constructed, the codes do not incorporate practice expense or liability components of the typical physician/provider evaluation and management (E&M) CPT codes. Appendix B provides a description of the CPT codes available for use by pharmacists in providing comprehensive medication management services.

Some payers have adapted these CPT codes in ways that can account for various additional factors, such as patient complexity, number of medication-related problems identified or addressed, number of chronic diseases, or other criteria. For example, the Minnesota Medicaid program has developed a framework for documentation and payment for medication therapy management services that expands on this basic framework (see Appendix B).

Coverage and payment for medication therapy management services in integrated or capitated care systems. Because of the greater alignment of financial incentives in integrated health care delivery systems in the private (e.g., Kaiser Permanente) and public (e.g., Veterans Administration, Indian Health Service) sectors that seek to address “all-cost” health care expenditures, the incorporation (“coverage”) of medication management services, frequently provided by pharmacists as part of the clinical team, has advanced more rapidly in such settings than in the fee-for-service payment environment.

This has been strongly aided by the use of shared and accessible health records (increasingly electronic) and information systems that support team-based work in patient care.

Capitated approaches to payment for management services take several forms. One approach employers are accepting is to pay a capitated per-member-per-month fee for employees actually receiving the service (not the total covered lives or the eligible lives). Another approach, used by at least one state government, pays for medication management on an annual capitated basis for employees receiving the service.

Importance of aligning payment approaches for medication management services with the core purposes of the PCMH. Reasonably effective and recognized payment methodologies and procedures for coverage and provision of medication management services have been developed and can be adapted to a PCMH practice, but they, like other aspects of health care provider payment in primary care, need substantial reform to be effective.

It is likely that the breadth and depth of medication management services an individual PCMH can provide to patients will vary, based on factors such as practice size and location, patient needs and complexities, and the clinical goals, quality objectives, and other parameters the practice has agreed to be accountable for both qualitatively and economically.

Nevertheless, the integral place of medications in effectively serving the needs and goals of most patients likely to be cared for in a PCMH suggests that it is essential to include the medication management services of pharmacists as members of the PCMH team. Whether through direct staffing structures, consultation arrangements, virtual or shared providers, or other types of community linkages, medication management services should be recognized, incorporated, and appropriately compensated in a reformed payment structure that supports the full scope of services necessary for the highly performing PCMH.
The Patient-Centered Medical Home: Integrating Comprehensive Medication Management to Optimize Patient Outcomes

This document provides essential information that demonstrates the value and importance of a comprehensive approach to team-based medication management services in a successful PCMH. These services are necessary for patients who experience drug therapy problems that prevent them from achieving the intended therapy goals desired by the patient and the PCMH team.

Significant evidence has accumulated to demonstrate that medication management services, frequently provided by pharmacists as part of the interprofessional team, improve clinical outcomes, generate a positive ROI, are accepted by patients and physicians, and need to be expanded to all patients who can benefit from the service. The federal government requires that the service be provided to certain Medicare Part D recipients, and the service is recognized and paid for by many Medicaid programs. Some Fortune 500 companies provide the service as an employee benefit because of the positive impact it has on productivity and clinical outcomes. It is appropriate for the PCMH to integrate comprehensive medication management into the mix of services required to achieve the seven principles outlined in the Joint Principles of the Patient-Centered Medical Home.

The table below provides a clear illustration of how comprehensive medication management services are not only consistent with the PCMH Joint Principles, but are necessary to achieve the full potential of these principles.

<table>
<thead>
<tr>
<th>Principle</th>
<th>Description of Principle</th>
<th>Contribution of Medication Management</th>
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<tbody>
<tr>
<td>Personal Relationship With Physician or Other Licensed Practitioner</td>
<td>Each person has an ongoing relationship with a personal physician or other licensed health care practitioner.</td>
<td>The therapeutic relationship is established and the patient’s medication experience is revealed and used to improve care.</td>
</tr>
<tr>
<td>Team Approach</td>
<td>The personal physician leads a team at the practice level that collectively takes responsibility for ongoing patient care, including disease and/or case management.</td>
<td>The rational decision-making process for drug therapy is used and the assessment, care plan, and follow-up of drug therapy is integrated with the team’s efforts.</td>
</tr>
<tr>
<td>Comprehensive/Whole-Person Approach</td>
<td>The personal physician or other licensed health care practitioner is responsible for providing for all of the patient’s health care needs or taking responsibility for appropriately arranging for them.</td>
<td>Patients are engaged and empowered in their use and understanding of the medications prescribed in their therapy. All patient medications (regardless of source) are coordinated, evaluated, appropriate, effective, safe, convenient, and linked to clinical outcomes and improved health.</td>
</tr>
<tr>
<td>Coordination and Integration of Care</td>
<td>Care is coordinated and integrated across all domains of the health care system.</td>
<td>The intended therapeutic goals, which are measurable and individualized to the patient, serve to coordinate and integrate the patient’s care with other team members.</td>
</tr>
<tr>
<td>Quality and Safety Hallmarks</td>
<td>Quality and safety are hallmarks of the medical home.</td>
<td>Drug therapy problems are identified, resolved, and prevented in a systematic and comprehensive manner so everyone is working most effectively to realize appropriate, effective, safe, and convenient drug therapy for the patient.</td>
</tr>
<tr>
<td>Expanded Access to Care</td>
<td>Enhanced access to care is available.</td>
<td>Physicians are extended and made more efficient and effective through the optimal management of a patient’s medications.</td>
</tr>
<tr>
<td>Recognition of Added Value</td>
<td>Payment of physician practices appropriately recognizes added value.</td>
<td>Clinical outcomes are improved, ROI is positive, acceptance by patients is high, and physicians support the practice.</td>
</tr>
</tbody>
</table>


21. Roughead EE, Barratt JD, Ramsay E, et al. The effectiveness of collaborative medicine reviews in delaying time to next hospitalization for patients.


32. Proposed Hybrid Reimbursement Model.” Available at http://www.pcpcc.net/content/proposed-model.


APPENDIX A: Guidelines

Guidelines for the Practice and Documentation of Comprehensive Medication Management in the Patient-Centered Medical Home

Based on Information Contained in the PCPCC Resource Guide: “Integrating Comprehensive Medication Management to Optimize Patient Outcomes”

Background

The Patient-Centered Primary Care Collaborative (PCPCC) provides an open forum for the full range of health care stakeholders seeking to advance the quality of care for all Americans through the implementation of the patient-centered medical home (PCMH) as the principal platform for a reformed system for the delivery of primary care health services. More than 1,000 stakeholders now participate in the work of the PCPCC, representing essentially all health professions, patients and patient advocacy groups, employers, policy-makers, and public and private payers.

As part of its activities, the PCPCC develops informational materials and Resource Guides on a wide range of topics in health care (e.g., health information technology integration, payment policy reform, building and sustaining successful team-based care structures, and continuity and coordination of care) as they relate to the PCMH, Accountable Care Organizations (ACOs), and other coordinated care systems. The Resource Guides are developed with input from all interested parties who wish to engage. The goal is to promote a better understanding of how these topics relate to the broad purpose and objectives of the PCMH.

The topic of “comprehensive medication management” (CMM) within the PCMH is fully described in a Resource Guide developed by the PCPCC Medication Management Task Force and first made available by the PCPCC in 2010. The guide—“Integrating Comprehensive Medication Management to Optimize Patient Outcomes”—has proved to be among the most popular of all the guides developed thus far by the PCPCC. A second printing, released in 2012 with only minor editorial updates, incorporates the information presented here as an Appendix to highlight suggested guidelines for the practice and documentation of CMM services. The information is derived directly from the Resource Guide and intended to be used with it for a more complete understanding of the practice of comprehensive medication management.

As efforts to transform America’s health care delivery system continue, patients must be both informed and actively engaged in decisions concerning the medications that represent the best choices for them in preventing and controlling disease. These decisions can best be made when the cultural needs and beliefs of the patient are considered and incorporated with the best knowledge and recommendations of the PCMH team members, particularly prescribers, pharmacists, care managers, and others, who provide and are responsible for the patient’s medication-related care.

As outlined in the Resource Guide, a consistently delivered and validated approach to the provision of CMM services is necessary to assure appropriate and optimized medication therapy in a patient-centered fashion. A consistent process of care, together with access to (and the ability of patients to afford) the “best” medications, i.e., those that best meet a patient’s individual, specific needs and clinical goals of therapy, has been shown to result in vastly improved clinical outcomes and reduced overall health care costs, while also addressing “patient safety” related to adverse drug reactions, interactions, and toxicities.

Patients who are at clinical goal with their medication regimens often have their therapy effectively managed by their primary care providers and will find the
application of the information found in the Resource Guide helpful in assuring clinical goals of therapy are met and maintained. For more complex regimens when patients are not at goal or are experiencing adverse medication effects, however, the primary care physician or a member of the medical home/coordinated care team may seek medication management services to achieve clinical goals and minimize adverse events. Such services optimally require a clinically oriented pharmacist trained to work directly with patients and collaboratively with other members of the PCMH team through the application of these principles.

The guidelines that follow provide more explicit explanation regarding the essential components of the practice and documentation processes that are part of the practice of CMM as described in the Resource Guide. Those seeking a more in-depth delineation and explanation of the practice of comprehensive medication management may wish to consult *Pharmaceutical Care Practice—The Clinician’s Guide* which served as a primary, evidence-based reference in the development of the PCPCC Resource Guide.

Health plans, government payers, employers, integrated delivery systems, medical providers, pharmacists, and patients should find this document useful as a companion document to the existing Resource Guide, upon which all the following information is based. Both documents should be considered together in seeking to better understand the practice and documentation of comprehensive medication management services.

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**Guidelines for the Practice of Comprehensive Medication Management in the Patient-Centered Medical Home**

1) **An assessment of the patient’s medication-related needs**

   a) All medications are reviewed and documented with the patient including prescription/OTC’s/herbals/etc.

   b) The medication experience of the patient is discussed and recorded. (The patient’s attitudes, beliefs, and preferences about drug therapy, which are shaped by experiences, culture, traditions, religious beliefs, etc., apply here).

   c) The patient’s medication history, including allergies/reactions is taken (include what medications have been taken for which medical conditions in the past, which have worked and not worked, which have caused the patient concerns or problems and should be avoided).

   d) All current medications, their doses (the way they are actually being taken by the patient) are reviewed with the patient and documented.

   e) Each medication is assessed for the medical condition or indication for which it is taken. (To produce clinically useful data, the indication for the medication must be electronically linked with the product being used, dose, duration, manner in which the medication is being taken, therapy goals, clinical parameters that will determine progress toward these goals, and actual outcomes.)

   f) The clinical status of the patient is assessed/determined for each drug/condition treated/prevented (e.g., current BP level and cholesterol levels for hypertensive and hyperlipidemic patients, respectively). Without a determination of the current clinical status of a patient, the indication, appropriateness, and effectiveness of most medications **cannot** be determined.

   g) The clinical goals of therapy for each medication—national guidelines, prescriber goals, and whenever applicable, patient goals are ascertained and documented.

2) **Identification of the patient’s medication-related problems**

   All drug therapy problems (DTPs) related to indication, effectiveness, safety, and adherence are determined and documented for each medical condition or preventive therapy, based on the accepted clinical pharmaceutical taxonomy of drug therapy problems. The following questions serve to determine if any of the seven major categories of drug therapy problems are identified:

   a) Appropriateness of the medication

      1) Is the medication appropriate for the medical condition being treated?

      2) Does the patient have an indication for a medication that is not being treated or prevented?
b) Effectiveness of the medication
   3) Is the most effective drug product being used for the medical condition?
   4) Is the dose appropriate and able to achieve the intended goals of therapy?

c) Safety of the medication
   5) Is the patient experiencing an adverse event from the medication?
   6) Is the dose so high it could cause toxicity in the patient?

d) Adherence to the medication
   7) Is the patient able and willing to take the medication as intended?

Significant drug therapy problems identified from the preceding questions are systematically documented in the same framework:

INDICATION:
   (1) The drug therapy is unnecessary because the patient does not have a clinical indication at this time.
   (2) Additional drug therapy is required to treat or prevent a medical condition in the patient.

EFFECTIVENESS:
   (3) The drug product is not being effective at producing the desired response in the patient.
   (4) The dosage is too low to produce the desired response in the patient.

SAFETY:
   (5) The drug is causing an adverse reaction in the patient.
   (6) The dosage is too high, resulting in undesirable effects experienced by the patient.

COMPLIANCE/ADHERENCE:
   (7) The patient is not able or willing to take the drug therapy as intended.

3) Develop a Care Plan with individualized therapy goals and personalized interventions

The medication care plan is developed by the pharmaceutical care practitioner directly with the patient and in collaboration with the PCMH team or the patient’s other health care providers. The care plan allows a provider to do the following:

a) Intervene to solve the patient’s medication-related problems (interventions include initiating needed drug therapy, changing drug products or doses, discontinuing medications, and educating the patient).

b) Establish individualized therapy goals for each medical condition. Although national guidelines dictate population-level goals, each therapy goal must be individualized for each patient based on risk, co-morbidities, other drug therapies, patient preferences, and physician/PCMH team intentions.

c) Design personalized education and interventions that will optimize each patient’s medication experience.

d) Establish measurable outcome parameters that can be monitored and evaluated at follow-up to determine the impact of the therapies and the service.

e) Determine appropriate follow-up time frames to ensure the interventions were effective and determine if any safety issues have developed since the last evaluation.

4) Follow-up evaluation to determine actual patient outcomes

The follow-up evaluations allow the pharmaceutical care practitioner in collaboration with the PCMH team to determine the actual outcomes resulting from the recommended interventions. The outcome parameters are evaluated against the intended outcomes (individualized therapy goals) and the patient is reassessed to determine if any new medication-related problems have developed that might interfere with the safe and effective use of the medications. These follow-up evaluations occur in a timeframe that is clinically appropriate for the specific patient, the medical conditions being monitored, and the drug therapy being taken. They may well vary with each patient, but should be coordinated with the PCMH team to minimize interference with other care activities, and are particularly important when major care transitions (such as hospitalization admission/discharge) occur.
Guidelines for the **Documentation** of Comprehensive Medication Management in the Patient-Centered Medical Home

**Background**

This section outlines the essential components of documentation that support the practice of comprehensive medication management in the PCMH. The information is drawn from various PCPCC sources, primarily the *PCPCC CMM Resource Guide* (pp 11-12) and the *PCPCC Meaningful Connections Resource Document*, as well as the Minnesota MTM Medicaid Law provisions. A discussion of the relationship of these documentation parameters to the evolving development of standards for electronic health records (EHR), HIT meaningful use criteria, e-prescribing standards, clinical data exchange/integration, and related technological issues that impact the PCMH and pharmacists’ practice is beyond the scope of the Resource Guide. However, as these systems continue to evolve, the effective integration of CMM-related data and documentation parameters will be an important and ongoing objective for the PCPCC and its Medication Management Task Force.

In addition, documentation activities should be supportable through electronic billing functions consistent with current CPT codes established for Pharmacists’ Medication Management Services, Evaluation and Management (E&M) CPT Codes, and other widely utilized codes, such as the Minnesota DHS, MHCP Provider Manual, Medication Management Therapy Services, HIPAA—Compliant MTMS CPT Codes, Revised 1/5/2010, in settings that require fee-for-service billing.

1. A record of the patient’s medication experience (understanding, concerns, preferences, beliefs, behavior)
2. Medication allergies (along with a description of the allergy, time frame, and severity) and adverse reactions (separated into dose-related and preventable)
3. Medication history (including immunizations), complete with dates, effectiveness information, record of issues, problems, etc.
4. Current medication record (including all medications regardless of source, mode of administration, or prescriber), indication for use, product, dose, duration, and how the medication is actually being taken
5. Active drug therapy problem list, complete with the cause of each problem (associated with the medical condition and medications relating to the drug therapy problem)
6. Therapeutic treatment plans for the patient and practitioner (a patient and prescriber version of the treatment plan needs to be available and provided/communicated). The following specific functionality must be available in the electronic therapeutic record to provide medication management services:
   (a) Connect indication for medication (reason for use) to specific drug product, dose, duration, and actual outcomes for each medical condition.
   (b) Identify, resolve, and prevent drug therapy problems:
      - **APPROPRIATENESS:**
        - Eliminate unnecessary medications
        - Initiate necessary medications not being taken.
      - **EFFECTIVENESS:**
        - Identify most effective medication in specific patient.
        - Increase dosages to effective levels.
      - **SAFETY:**
        - Eliminate toxicities.
        - Identify adverse reactions.
      - **ADHERENCE:**
        - Increase patient’s willingness to adhere to medication regimen.
   The cause of each of the drug therapy problems described above also needs to be documented.
   (c) Record and evaluate actual outcomes from drug therapy.
      - Record personalized therapy goals and evaluate against outcome measures for each medical condition.
      - Graph laboratory levels against changes in drug therapy and doses.
      - Record outcome changes with changes in medication details.
(d) Provide post-marketing surveillance on appropriateness, effectiveness, safety, and adherence variables.

(e) Record drug therapy problems specific to drug product, medical condition, and patient parameters.

(f) Offer clinical decision support and analysis.

(g) Support patient participation and decision making in drug therapy (adherence tools, recordkeeping, etc.).

(h) Provide patients with medication information that is individualized and complements the therapeutic care plan.

References:


Medication Management Services: Resource-Based Relative Value Scale

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<th>Level of Service Provided</th>
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<th>Level #2</th>
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<td>Detailed 3–5 Medications</td>
<td>Expanded Detailed 6-8 Medications</td>
<td>Comprehensive ≥9 Medications</td>
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<td>Identification of Drug Therapy Problems</td>
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<td>Expanded Problem 1 Drug Therapy Problems</td>
<td>Detailed 2 Drug Therapy Problems</td>
<td>Expanded Detailed 3 Drug Therapy Problems</td>
<td>Comprehensive ≥4 Drug Therapy Problems</td>
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<td>Straight-forward 1 Medical Condition</td>
<td>Low Complexity 2 Medical Conditions</td>
<td>Moderate Complexity 3 Medical Conditions</td>
<td>High Complexity ≥4 Medical Conditions</td>
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<td>Evaluation</td>
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<td>99605 (or 99606) and 2 X 99607</td>
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Pharmacists’ Patient Care Process
May 29, 2014
Joint Commission of Pharmacy Practitioners

The Joint Commission of Pharmacy Practitioners (JCPP) was established in 1977 and serves as a forum on matters of common interest and concern to national organizations of pharmacy practitioners and invited liaison members. JCPP Members are: the Academy of Managed Care Pharmacy, the Accreditation Council for Pharmacy Education, the American Association of Colleges of Pharmacy, the American College of Apothecaries, the American College of Clinical Pharmacy, the American Pharmacists Association, the American Society of Consultant Pharmacists, the American Society of Health-System Pharmacists, the National Alliance of State Pharmacy Associations, the National Association of Boards of Pharmacy, and the National Community Pharmacists Association.

Organizations participating on the Pharmacists’ Patient Care Process Workgroup include:

- Academy of Managed Care Pharmacy
- Accreditation Council for Pharmacy Education
- American Association of Colleges of Pharmacy
- American College of Clinical Pharmacy
- American Pharmacists Association
- American Society of Consultant Pharmacists
- American Society of Health-System Pharmacists
- Food Marketing Institute
- National Association of Chain Drug Stores
- National Alliance of State Pharmacy Associations
- National Community Pharmacists Association

The Pharmacists’ Patient Care Process is supported by the following organizations:

- Academy of Managed Care Pharmacy
- Accreditation Council for Pharmacy Education
- American Association of Colleges of Pharmacy
- American College of Apothecaries
- American College of Clinical Pharmacy
- American Pharmacists Association
- American Society of Consultant Pharmacists
- American Society of Health-System Pharmacists
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- National Alliance of State Pharmacy Associations
- National Association of Boards of Pharmacy
- National Association of Chain Drug Stores
- National Community Pharmacists Association
Pharmacists’ Patient Care Process

The goal of high quality, cost-effective and accessible health care for patients is achieved through team-based patient-centered care. Pharmacists are essential members of the health care team. The profession of pharmacy is continuing its evolution from a principal focus on medication product distribution to expanded clinically-oriented patient care services. As a result of this professional evolution, the importance of, and need for, a consistent process of care in the delivery of patient care services has been increasingly recognized by the profession at large.

Pharmacists have unique training and expertise in the appropriate use of medications and provide a wide array of patient care services in many different practice settings. These services reduce adverse drug events, improve patient safety, and optimize medication use and health outcomes. Pharmacists contribute to improving patients’ health by providing patient care services as authorized under their scope of practice and facilitated by collaborative practice agreements. The foundation for the pharmacist’s patient care process is embedded within the pharmaceutical care model developed by Hepler and Strand in the 1990s. However, there is variability in how this process is taught and practiced. To promote consistency across the profession, national pharmacy associations used a consensus-based approach to articulate the patient care process for pharmacists to use as a framework for delivering patient care in any practice setting.

The pharmacists’ patient care process described in this document was developed by examining a number of key source documents on pharmaceutical care and medication therapy management.1-6 Patient care process components in each of these resources were catalogued and compared to create the following process that encompasses a contemporary and comprehensive approach to patient-centered care that is delivered in collaboration with other members of the health care team.

Pharmacists’ Patient Care Process

Pharmacists use a patient-centered approach in collaboration with other providers on the health care team to optimize patient health and medication outcomes. An essential first step is the establishment of a patient–pharmacist relationship that supports engagement and effective communication with patients, families, and caregivers throughout the process. In addition, at the core of the process, pharmacists continually collaborate, document, and communicate with physicians, other pharmacists, and other health care professionals in the provision of safe, effective, and coordinated care. This process is enhanced through the use of interoperable information technology systems that facilitate efficient and effective communication among all individuals involved in patient care. (Figure 1).

Using principles of evidence-based practice, pharmacists:

A. Collect
The pharmacist assures the collection of necessary subjective and objective information about the patient in order to understand the relevant medical/medication history and clinical status of the patient. Information may be gathered and verified from multiple sources including existing patient records, the patient, and other health care professionals. This process includes collecting:

- A current medication list and medication use history for prescription and nonprescription medications, herbal products, and other dietary supplements
- Relevant health data that may include medical history, health and wellness information, biometric test results, and physical assessment findings
- Patient lifestyle habits, preferences and beliefs, health and functional goals, and socioeconomic factors that affect access to medications and other aspects of care

Figure 1: Pharmacists’ patient care process
B. 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. This process includes assessing:

- Each medication for appropriateness, effectiveness, safety, and patient adherence
- Health and functional status, risk factors, health data, cultural factors, health literacy, and access to medications or other aspects of care
- Immunization status and the need for preventive care and other health care services, where appropriate

Each medication should be assessed to determine if it is appropriate for the given condition, effectively treating the condition, safe and that the patient is not experiencing any undesirable side effects, and that the patient is taking the medication as intended. It is important to assess each medication in that order (appropriateness, effectiveness, safety, adherence), as it is irrelevant to focus on adherence to a medication that is not appropriately indicated, effective, and safe, for example. If, during the assessment, one of these criteria is not met, it should be labeled as a medication-related problem (MRP). When assessing a patient’s medications MRPs fall under the following categories:

### Appropriateness of medication
- Medication is not appropriate for the condition
  - No medical indication
  - Duplicate therapy
  - Nondrug therapy indicated
  - Treating avoidable ADR
  - Addictive/Recreational

- Needs additional therapy
  - Untreated condition
  - Preventive/prophylactic
  - Synergistic/potentiating

### Effectiveness of medication
- The dose of the medication is too low
  - Wrong dose
  - Frequency inappropriate
  - Drug interaction
  - Duration inappropriate

- Needs a different drug product
  - More effective drug available
  - Condition refractory to drug
  - Dosage form inappropriate
  - Not effective for condition

### Safety of medication
- The dose of the medication is too high
  - Wrong dose
  - Frequency inappropriate
  - Duration inappropriate
  - Drug interaction
  - Incorrect administration

- The patient is experiencing an undesirable effect from their medication
  - Undesirable effect
  - Unsafe drug for patient
Drug interaction
Dosage administered/changed too rapidly
Allergic reaction
Contraindications present

Adherence to medication
The patient is not taking their medication as intended
Directions not understood
Patient prefers not to take
Patient forgets to take
Drug product too expensive
Cannot swallow/administer
Drug product not available

C. 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. This process includes establishing a care plan that:

- Addresses medication-related problems and optimizes medication therapy
- Sets goals of therapy for achieving clinical outcomes in the context of the patient’s overall health care goals and access to care
- Engages the patient through education, empowerment, and self-management
- Supports care continuity, including follow-up and transitions of care as appropriate

The plan aligns directly with resolving the medication-related problem identified during the assessment.

- Appropriateness
  - Eliminate unnecessary medications
  - Initiate necessary medications not being taken
- Effectiveness of medication
  - Identify most effective medication in specific patient
  - Increase dosages to effective levels
- Safety of medication
  - Eliminate toxicities
  - Identify adverse reactions
- Adherence to medication
  - Increase patient’s willingness to adhere to medication regimen.

D. Implement
The pharmacist implements the care plan in collaboration with other health care professionals and the patient or caregiver. During the process of implementing the care plan, the pharmacist:

- Addresses medication- and health-related problems and engages in preventive care strategies, including vaccine administration
- Initiates, modifies, discontinues, or administers medication therapy as authorized
- Provides education and self-management training to the patient or caregiver
- Contributes to coordination of care, including the referral or transition of the patient to another health care professional
- Schedules follow-up care as needed to achieve goals of therapy
The schedule for follow-up evaluation should align directly with the timeframe expected to achieve the goal of therapy that is defined in C. Plan.

E. Follow-up: Monitor and Evaluate
The pharmacist monitors and evaluates the effectiveness of the care plan and modifies the plan in collaboration with other health care professionals and the patient or caregiver as needed. This process includes the continuous monitoring and evaluation of:

- Medication appropriateness, effectiveness, and safety and patient adherence through available health data, biometric test results, and patient feedback
- Clinical endpoints that contribute to the patient’s overall health
- Outcomes of care, including progress toward or the achievement of goals of therapy
AACP as Catalyst for Accelerating Change in Pharmacy Education and Practice
A Proposal to the AACP Board of Directors
February 2016

Background
In order to achieve the improvements in quality, access and affordability envisioned in health care reform efforts, all stakeholders must work individually and collaboratively. AACP is well-positioned to take a leadership role, in partnership with its member institutions, to improve the safe, effective, and affordable use of medications. This collaboration has the potential to create a national model through which colleges and schools of pharmacy advance the contributions of pharmacists to high quality care through changes in both Pharm.D. education and pharmacy practice in local communities and nationally. Capitalizing on these opportunities will require a commitment on the part of academic pharmacy to:

- Work collaboratively with partners and key stakeholders inside and outside of pharmacy who will influence change;
- Transform pharmacy education in order to best prepare pharmacists for the priorities and subsequent rapid adaptations of the U.S. health care system;
- Develop, implement, evaluate, and bring to scale best practices in optimizing medication effectiveness and safety;
- Collaborate with other health care professional organizations to establish team-based models of care and the payment systems and regulatory changes that will allow this approach to sustain and thrive.

The urgency for markedly enhancing AACP’s role in accelerating change is based on needs in health care noted above, opportunities available to pharmacists with a shift to value-based payment models that emphasize measurement of quality, the trend of decreased applications to pharmacy schools, and competition from other health professions in the delivery of medication management services. This urgency points to needs for innovation in both education and practice. Schools must adopt curricula that are focused on the contemporary skills required for pharmacists to deliver services that will be valued in an evolving health care system. Schools must also play a leadership role in practice development, both for the purposes of informing the progression of curricula as well as establishing roles that will utilize the advanced skills of their graduates.

Creation of Accelerating Change Task Force
A joint COD/COF task force was convened in June 2015 to explore, critically review, identify and propose strategies that could be employed by AACP and its member schools to accelerate the implementation of change within pharmacy curricula and practice innovation. The purpose of this work is to allow AACP and its member schools to be more responsive to the rapidly evolving opportunities and challenges present in today’s health care
environment, most of which have been stimulated by the passage of the Affordable Care Act. The Task Force met at the July 2015 AACP Meeting and held bi-weekly conference call meetings between August and December 2015.

**Task Force Members**

**Council of Deans**
- Patricia Kroboth (Pitt), Co-Chair
- Eric Boyce (U of Pacific)
- Marie Chisolm-Burns (Tennessee)
- Myron Jacobson (North Texas)
- Leigh Ann Ross (Mississippi)
- Bob Blouin (UNC)

**Council of Faculties**
- Marie Smith (UConn), Co-Chair
- Mary Roth McClurg (UNC)
- Aisha Morris Moultry (Texas Southern)
- Andrew Traynor (Concordia)
- Susanna Wu-Pong (VCU)
- Todd Sorensen (UMN)

**Sources of Inspiration**

The Task Force reviewed and considered several resources and change management models in its deliberations. These included, but were not limited to the following:

- Kotter’s 8-Step change model
- Appreciative Inquiry
- Disruptive innovation
- SWOT Analysis
- Social marketing

**Proposal to the Board of Directors**

The proposal presented is centered on the opinion of the Task Force that AACP should assume a bold and stronger strategic position as a champion and facilitator for the accelerated spread of innovations in education and practice across the academic pharmacy community (referred to as the “academy”).

As the Task Force explored both how and why AACP should assume this bolder role and considered documented principles for effectuating change across the academy, four core strategies emerged.

1. **Establish the required infrastructure to name and lead “change campaigns”** in priority areas aligned with emerging opportunities for pharmacists in the health care system. These campaigns should be designed to inspire academy engagement and create the urgency that will prioritize resource allocation. This would be led by a new leadership entity within AACP, the “Accelerating Change and Transformation Team” (ACT²).

2. **As a community convener, adopt principles demonstrated to accelerate change across communities**, embracing social marketing strategies and building action and learning collaboratives. These efforts will rapidly test and share innovations, measure and report academy-wide progress, and celebrate the successes of leading edge performers to further inspire progress of the academy as a whole.
3. **Align relevant existing AACP operations and processes** to support the campaign, engage member schools and drive change locally and nationally.

4. **Increase the development of tools and resources that will build the leadership abilities of school-level change champions**, recognizing that innovation occurs locally and the ultimate key to academy-wide success rests with the actions and engagement of faculty and administrators at individual member institutions.

Figure 1 illustrates the Task Force’s vision for the relationship between the four strategies outlined above.

**Figure 1: Strategies for AACP’s Role as a Catalyst for Change in Pharmacy Education and Practice**

![Diagram of AACP's role in change management](image)

**Review of Four Strategies for Leading Change**

The 8-step model for leading change described by Harvard Professor John Kotter (Figure 2) is the resource that produced the most influence with the Task Force. It is believed that the steps outlined in this model have great relevance for AACP in its convening role, as well as with change champions at individual institutions. The Task Force is following this model by first indicating the urgency for AACP’s enhanced role in accelerating change. AACP should build coalitions with...
colleges and schools of pharmacy, other pharmacy organizations, and other health care organizations. AACP, through these partnerships, would champion a vision for innovation in pharmacy education and practice. Additional steps in Kotter’s model will then be applied as AACP convenes and coordinates the work of its member schools to accelerate transformation. These steps are clearly embedded across the four strategies highlighted. A brief description of the four strategies and their relationship to Kotter’s model is presented below.

**Strategy 1: Establish the required infrastructure to name and lead “change campaigns.”**
The need for change in health care and education, and the future roles of pharmacists, must be the driving force for AACP to accelerate change in practice and education. AACP has an important opportunity to build an awareness among the academy that the need for change in education and practice is critical to the success of schools and the profession. AACP and its member institutions must adopt a shared philosophy for accelerating transformation to enhance pharmacy practice and education. In Kotter’s model, this is described as **creating a sense of urgency for change**. Building a bold, public campaign that inspires commitment, engagement and action across the academy in an area deemed a priority for innovation is an initial component of building urgency.

We believe that pockets of innovation and opportunities for transformation exist within groups within the organization and within member schools; however, these opportunities are not fully realized throughout the organization or utilized/acted upon or scaled in ways to accelerate change in curricula or practice. AACP’s current infrastructure and ways of working could be modified to drive innovation and transformation. While the current infrastructure has important functions operationally to meet the needs of the organization and can be enlisted to support the change champion work envisioned by the Task Force, it is proposed that AACP should establish the **needed infrastructure (separate from the existing operations of the organization) and processes (ways of working) to drive organizational change** (See Note #1).

To accomplish the goal of creating the infrastructure to drive change in the academy, the Task Force proposes that AACP establish a new “think tank” entity that is core to the organization (tentatively titled **Accelerating Change and Transformation Team or the ACT²**) to:

- Identify and outline priority areas in which accelerated approaches to innovation and change are critical (in practice and education) and present these to the Board of Directors for endorsement;
- Design and facilitate a campaign that establishes urgency within the academy and inspires engagement and action (see Strategy #2);
• Identify pockets of excellence throughout the organization and throughout member schools that can be highlighted and serve as a source of influence within the academy;
• Present recommendations to the Board regarding alignment and mobilization of existing AACP infrastructure to support efforts to accelerate change (see Strategy #3).

In Kotter’s model, this group would act as a guiding coalition for change. ACT² would be comprised of thought leaders who will:

• Engage in efforts to accelerate transformation and change in health care and education;
• Commit to ensuring a process of collaboration, communication and transparency;
• Identify opportunistic initiatives and adapt accordingly to ensure AACP can best capitalize on the opportunity; and
• Guide and inspire teams toward change.

The Task Force envisions a group no larger than 8 individuals appointed for a three-year terms, with terms staggered to ensure continuity, sustainability and focus.

**Strategy #2: Adopt principles demonstrated to accelerate change across communities.**
The Task Force considered how the work of accelerating change across the academy of AACP member institutions. Kotter’s model was developed largely in the context of leading change within an organization. The lessons learned from groups that have lead national efforts producing extraordinary changes in health care delivery and quality were reviewed (see Appendix 1). These lessons reflect principles associated with social marketing, which seeks to develop and integrate marketing concepts with other approaches to influence behaviors that benefit individuals and communities for the greater social good. It suggests that success in leading wide-scale change across a community is dependent on realizing that the leadership work is rooted in a social intervention, not a technical intervention.

AACP cannot be the primary source of innovation. It can facilitate an environment that accelerates innovation and facilitates adoption across the academy. This is a key role of ACT² - positioning AACP as a convener and facilitator, applying principles of social marketing to produce important innovations for the good of pharmacy practice and education. We envision this work being comprised of two broad roles: 1) building a campaign for change and 2) facilitating a learning and action community that produces academy-wide collaboration. In doing so, ACT² will address several of Kotter’s 8 steps, including:

• Establish a strategic vision and initiatives that will produce the desired change;
• Communicate the vision across the academy for buy-in and action;
• Empower individual entities across the academy to act;
• Plan for, create and celebrate short-term wins.

Through its research, the Task Force became aware of an initiative of the American Medical Association that appears to be focused on work similar to that outlined in this proposal – an initiative to accelerate change in medical education. Full evaluation of the design and current performance of the AMA initiative was not possible in the time frame available to the Task
Note #2: Recommendations for the organization could include directed work or charges for committees or work groups, considerations for strategic plan and/or organizational initiatives, planning for the annual and interim meetings, changes in governance, structure, process, and services provided by AACP. Presidential initiatives may be influenced by and aligned with the environmental scan and subsequent recommendations of the ACT².

Strategy #3: Mobilize existing AACP operations and processes.
Once priority areas for innovation are established and a guiding coalition is in place to lead a campaign that includes specific aims for change, AACP should provide a means to rapidly test and share innovations and is committed to measuring and reporting academy-wide progress, AACP’s existing infrastructure can be mobilized to support the campaign from multiple angles and across many venues. The Task Force envisions that ACT² will produce a set of recommendations for the AACP Board and staff that will align existing activities with the efforts of the campaign (Note #2).

While the scope of the Task Force’s work was not to delve deeply into specific operations of a change campaign, a number of examples were identified where existing AACP infrastructure could be mobilized to support efforts to produce innovations in education and practice. Examples included:

- Use of existing communication platforms, such as list serves, social media, school mailing lists to achieve frequency of messaging;
- Employ communications expertise to engage storytelling shared through videos or other dynamic media to enhance clarity and impact of messaging;
- Strategically align programming at meetings, institutes or expanded use of webinars, or other venues and platforms that engage stakeholders;
- Seek to establish small grant programs that stimulate rapid testing of innovations;
- Align awards and recognitions with themes of the change campaign;
- Enhance the advocacy ability of administrators and faculty within colleges and schools of pharmacy.

Strategy #4: Produce tools and resources that will build the leadership abilities of school-level change champions.
The success of change efforts in education and practice are ultimately tied to the commitment and action of faculty and administrators across AACP’s member institutions. AACP’s efforts can establish priorities for innovation, provide inspiration for action, and connect the community to facilitate adoption and scaling of successful practices. The degree of action and commitment achieved at the local school-level is highly dependent on the leadership abilities of local change champions and supportive structures and processes. Kotter’s 8-step change model can guide AACP’s academy-level efforts, but it is equally important that local leaders understand and apply the model within their own institutions.
Thus, the Task Force proposes that AACP seek to collect, develop and distribute resources that will enhance the leadership skills of local change champions. It is envisioned that these efforts may include, in part, the Academic Leadership Fellows Program, but that additional opportunities and programming needs to be in place to increase accessibility and focusing specifically on traits, skills and strategies required to successfully lead change.

Brining It All Together – An Illustration
To assist the Board with envisioning the work of the proposed ACT², school-level activities and the national facilitation of a learning community, the Task Force has outlined a specific example in Appendix 2. This illustration includes a potential priority area for innovation (adoption of the JCPP Pharmacist's Patient Care Process by AACP schools), a measurable aim to drive change, descriptions of local institutional activities, and description of a national learning and pacing structure that would engage member schools and faculty to accelerate change across the academy.
Appendix 1
Principles for Accelerating Change Across a Community

**Source:** The following principles have been gleaned and adapted from lessons shared by individuals recognized for leading national campaigns that achieved extraordinary changes in health care delivery and quality. These lessons are shared via the book *All In: Using Healthcare Collaboratives to Save Lives and Improve Care* by Bruce Spurlock and Patricia Teske. While the principles presented have come from initiatives specifically focused on improving health care outcomes, they are reflective of principles associated with the broader work of *social marketing*. Social marketing seeks to develop and integrate marketing concepts with other approaches to influence behaviors that benefit individuals and communities for the greater social good.

**Key Concept:** Success in leading wide-scale change across a community is dependent on realizing that the leadership work is rooted in a *social intervention*, not a *technical intervention*.

**Principles for Success** – These are presented as distinct principles and are not intended to represent a sequential process, although some will be more critical for kicking off a change process and others are more relevant when the community is actively working towards its stated vision.

1. *Convene the community and employ quantifiable aims that all participants can share.* Convene leaders who can produce an expectation for meaningful participation across the entire community. The convening entity needs to establish a critical mass of influential leaders at the community level who are engaged and visible. Success is dependent on producing action at all levels of the community – the entire community is focused on the same aim. This aim will be a quantifiable statement of the desired change and be bound by time. Naming the change in a quantifiable manner is essential to clarity. Placing a parameter of time around the named change creates urgency and raises the stakes on progress.

2. *Make the change urgent by linking it to a core value.* Without linking the change to a core value, the community’s entities may produce effort that temporarily achieves a metric but doesn’t achieve changes in the underlying systems and culture that will create permanence of the desired change after the energy of the campaign wanes.

3. *Expect authorities to actively remove barriers.* The campaign must engage positional leaders within the campaign’s convening organization and within the community-level participants. These leaders must demonstrate commitment in voice and action in order to inspire the “front line” participants that will carry out the work of identifying and testing strategies that will achieve the aim. Positional leaders cannot distance themselves from the work through traditional progress reporting activities – they must be in collaboration with front-line participants so that they can understand barriers to progress and remove those barriers to the full extent of their ability.
4. **Rapid iterative testing and adjustment.** Creating innovation and spreading it across a community is challenging because, by nature, it is work that has not been done before. A blueprint for success doesn’t exist. Thus, participants must experiment in order to identify strategies that will make progress to the aim. These tests of change need to be systematic and subject to frequent analysis to rapidly identify those which hold promise while quickly rejecting those that do not.

5. **Use data to see and compare change as it happens.** Producing data that compares the current reality against the bold vision is critical to maintaining accountability. Reporting must occur in real time, as the community is engaging in its work. This is true for measurement at the local level as well as data that describes the currently reality across the community as a whole. Real time measurement and reporting allows conveners to quickly identify high performers, explore “what is making it work” for those participants and then disseminate successful strategies across the community. Likewise, real-time measurement can assist in identifying low performers, providing an opportunity to identify support strategies important to the challenges faced by those participants.

6. **Facilitation of tacit knowledge exchange.** Often knowledge is not fully valued if it has not been vetted through a rigorous process of review, categorization and cataloguing before being widely disseminated to a community. In a rapidly changing world, it is critical to not lose sight of the value of practical knowledge and experience and how it can stimulate and support progress toward an aim. Conveners seeking to accelerate change across a community need to invest in and facilitate strategies that put the community in action together, building a dynamic exchange of ideas and experiences.

7. **Pace the community and count commitments.** To keep a focus on the desired aim and maintain energy and enthusiasm during the difficult work of producing change, conveners must create pacing activities for participants. These should be high energy events that reinforce sharing and learning across the community. These pacing events should generate public commitments for the next action period until the next pacing event. Counting and tracking commitments is the foundation for producing accountability for testing, learning and measuring progress on the part of individual participants in the community.

8. **Acknowledge leaders and regularly celebrate progress.** To keep the community engaged in producing change positively energized, conveners must regularly and strategically celebrate progress publicly through the stories that describe progress and successes. This provides venues through which participants who have had success can share their leadership concepts for change. Regularly celebrating successes and those that have produced changes that are achieving the aim achieves three important goals – acknowledging high performers, spreads successful innovations across the community and inspires all participants to continue to adapt, test and share through periods when energy may wane.
Appendix 2 – AACP as Accelerating Change Catalyst

Illustration of Roles, Actions and Timelines

Figure 3 provides an overview of the national and local actions that will result in an environment that accelerates change. The narrative details how a specific Change Campaign could be identified, build momentum and produce adoption of innovations across the academy within a defined period of time. In this scenario, accreditation systems are already established to require schools to create curricular changes within the area identified for innovation. However, left only to the accreditation process, achievement of the stated aim may require 6-8 years to accomplish. The Task Force proposes that with leadership from AACP, the stated aim could be achieved in 2.5 years or less.

Figure 3: Overview of National/Local Actions to Produce Rapid Change

Innovation and Spread of Change – Pharmacists Patient Care Process Illustration

Urgency Building and Enrollment (Spring/Summer 2016): The ACT² convenes and identifies 2-3 areas of high priority in which it is envisioned that a coordinated effort focused on innovation and rapid adoption of promising changes could propel pharmacy practice or education forward. The AACP Board, through conversations with the ACT² and AACP staff select one aim that will be the focus of the change campaign.

Aim: All schools of pharmacy will teach and assess competencies associated with the JCPP Pharmacist’s Patient Care Process (PPCP) across classroom, simulation and experiential education settings by Annual Meeting 2018.

A series of steps focused on building urgency, creating a guiding coalition and communicating a vision will occur over Phase I:
• The ACT\textsuperscript{2} will lead efforts, with AACP staff, to communicate a vision for change through a variety of communication strategies over the two-month period prior to the 2016 Annual Meeting.
• The ACT\textsuperscript{2} will recruit a national faculty of thought leaders with expertise in curricular change and experience with integration of the JCPP Pharmacist's Patient Care Process (PCPP).
• ACT\textsuperscript{2} and National Faculty identify existing best practices with curricular integration of PPCP and produces resources to share existing experience with participants.
• Schools will identify a faculty lead for their local effort and formally enroll in the campaign. The CEO Dean of the school will formally pledge support for the institution’s participation.
• A kick-off event will be held during the 2016 AACP Annual Meeting to establish a common vision, create energy for the campaign and establish an “all teach, all learn” environment among the participants.
  o Employs high-energy, positive visioning systemic change processes, which may include Appreciative Inquiry, Open Space, or other engagement strategies.
• The ACT\textsuperscript{2}/Campaign faculty establishes measures of success on which institutions will regularly report. Examples could include:
  o Hours of instruction/assessment focused on PPCP
  o # of experiential education sites with PPCP integrated
  o # of faculty integrating PPCP into coursework
• Parallel presidential charges and community work in AACP that support the continuing of themes of work related to addressing change in health care, market, finances, and post-secondary and possibly graduate education.

**Local Innovations and Action (Fall 2016 - Spring 2017)** – *Action periods producing local innovation and testing (Figure 4).*

Engaging institution level activities that establish a local vision for change, establish buy-in with faculty, establish strategies to create and test innovations, and create short term wins that can be leveraged for greater success.

• National Faculty facilitate understanding of Kotter’s model and other strategies to lead change in their organization with local campaign leads.
• Local performance measures of progress on PPCP implementation are defined and vetted with the institution’s senior leadership team.
• Each action period begins with the local team engaging in planning for producing curricular innovations and changes and testing those changes in real time. This may include:
  o Identifying courses that will teach foundations of the PPCP;
  o Development and testing of simulation assessment strategies measuring competence with the PPCP;
  o Selecting a small number of practice sites to model adoption of the PPCP and integration into experiential learning
• Each action period ends with progress reporting to institutional senior leadership team (local measures) and to Campaign Faculty on nationally defined measures.
• Annual and Interim meetings bookend each action period, creating opportunities for in-person events for participants that create energy and facilitate greater sharing across the community. Small teams from participating organizations attend for inspiration, learning and dedicated planning time.

National Learning, Sharing and Scaling (Fall 2016 - Spring 2017) – Building a national community of learning with frequent learning events and reporting points framing action periods (Figure 4). National efforts that reinforce the organizational change principles of maintaining a vision for change, provide a pacing structure that ensures development of strategies for innovation and adoption, providing support to enable local leaders to act, share short term wins that can be leveraged for greater success and keeps the momentum of the community present.

• Annual and Interim meetings bookend each action period, creating opportunities for in-person events for participants that create energy and facilitate greater sharing across the community.
  o ACT2 organizes a “meeting within the meeting” focused on PPCP innovation and spread.
  o Keynote for learning community and release of National Performance Report on community progress.
  o Poster session for participants reporting local efforts with PPCP.
  o Celebration of high performing organizations.
• Between live events, ACT2/Faculty facilitates monthly webinars to highlight local successes, surface questions from the community, and connect participants.
• Reporting of local results rolled up into a national performance report on a bi-annual basis.
• Employ use of list serves or other communication strategies to link participants and create continuous dialogue within the community.

Figure 4: National Action and Learning Community Supporting a Change Campaign
Adjourning the Community (Summer 2017)
As the community accomplishes its aim, the focus of efforts shifts to ensuring that the culture around teaching and practicing in a way that is consistent with the PPCP becomes **embedded in the culture** of AACP and its member institutions.

- The ACT² prepares recommendations for PPCP-related activities to live on through other AACP policies and programs.
- Adjourning event creates an opportunity for member institutions to define ongoing actions beyond the close of the campaign.
- Celebration of national progress and acknowledgement of the impact on pharmacy practice created through the academy’s efforts.
- ACT² identifies the next priority area for a Change Campaign.