



# Condensed Self-Study Report of University of Maryland

University of Maryland

School of Pharmacy

20 North Pine Street

Baltimore

Maryland - 21201

Submitted to the Accreditation Council for Pharmacy Education 6/15/2011 at 11:23 a.m. Eastern time

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## Pharmacy College or School Profile

University of Maryland

University of Maryland / School of Pharmacy

20 North Pine Street

Baltimore

Maryland - 21201

## Departmental/Divisional Structure

Pharmaceutical Health Services Research (PHSR)

Pharmaceutical Sciences (PSC)

Pharmacy Practice & Science (PPS)

## Branch/Distance Campus

Baltimore Campus

Shady Grove Campus

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## University of Maryland / School of Pharmacy

## College or School's Overview

College or School's Overview (since last comprehensive on-site evaluation)

(School comments begin here)

Since ACPE's last comprehensive on-site evaluation in 2006, the University of Maryland School of Pharmacy has experienced fundamental changes in nearly every area of the six sections of the Standards.

Mission, Planning & Evaluation: We developed, with broad stakeholder input, a new strategic plan with targeted and measurable goals designed to propel the School toward leadership in education, research, practice, environment and entrepreneurship. This plan reflects the campus priorities and is, in turn, supported by complementary strategic plans in each academic department. A formal institutional Assessment Plan and Assessment Committee have also been implemented; annual reporting of strategic plan progress is raising awareness and buy-in among faculty, students and other constituencies. Efforts to communicate our substantial successes more effectively will be enhanced.

Organization and Administration: The School appointed Dean Natalie Eddington in 2007. Like our new president she has increased communication and transparency. The sense of identity and common cause among the School of Pharmacy extended community has never been stronger. Leadership in interprofessional education by the School of Pharmacy is evident at both campuses: the dean was recently appointed by President Perman to co-chair his strategic committee on interprofessional education and service, and UMSOP's assistant dean for Shady Grove chairs a prominent committee on interprofessional and interdisciplinary collaborations. It remains important to monitor staffing in potentially vulnerable areas such as computer services and multimedia instructional technology.

Curriculum: The PharmD curriculum was completely redesigned and implemented during an inclusive five-year process. The redesign facilitated integration of basic science and therapeutics starting in the P1 spring semester (in the past this happened in P3). We implemented six semesters of practical labs in P1-P3 (including OSCEs) to reinforce the skills students need to be competent and confident on advanced rotations in P4. Expansion to our satellite campus USG has resulted in annually graduating 40 additional students (+33%) since 2011. Students, faculty and staff have adapted to successfully use state-of-the-art instructional technology and pedagogical methods to meet the needs of all PharmD students at both locations. Programmatic assessment has become commonplace with students, faculty and administrators reviewing data summaries and responding to feedback. It is critical to continue to recruit and retain high-quality preceptors in advanced health system and acute care rotations, and continue efforts to improve performance on licensure exams.

Students: Assessment data shows we were able to expand to USG without compromising student quality or diversity. Student progression is scrutinized (individually, by campus, and class cohorts) to assure comparable achievements each semester and longitudinally. An early warning system which identifies "at risk" students has been fully implemented and changes were made to adequately support pharmacy students at the satellite campus socially and academically. In order to maintain a healthy learning and working environment, UMSOP monitors stress annually in students, faculty and staff using a validated psychological instrument. Pursuant to the dean's priorities of communication and transparency, the administration has built strong working relationships with and among the student

body (at both campuses), considers their perspectives and responds to issues of concern via numerous channels.

Faculty and Staff: The faculty has expanded commensurate with the class size. All three academic departments have welcomed talented new members with proven skills or potential in pharmacy practice, research and teaching. Faculty development at every career stage is a priority for the School. Due to reliance on distance learning augmented by a small faculty presence at USG, recent departures have resulted in a greater student-faculty ratio than in Baltimore. This ratio will decrease as the School hires 2 new USG faculty in ambulatory care and internal medicine. Impact on USG students is mitigated by their ability to choose an advisor from either campus.

Facilities and Resources: The School's chronic space shortage in Baltimore was alleviated by completion of a modern \$62 million addition in 2010, and expansion to USG in 2007. Major renovations were made to academic spaces on both campuses (such as OSCE suites and a practice lab); students at both campuses are able to interact and collaborate via technology. Access to electronic library resources has been enhanced. Four floors of new research space added to Pharmacy Hall in Baltimore support newly hired research faculty. Ensuring adequate capacity for advanced pharmacy practice sites is a high priority, as is systematizing recruitment and quality assurance of preceptors.

## University of Maryland / School of Pharmacy

## Summary of the College or School's Self-Study Process

## Summary of the College or School's Self-Study Process

(School comments begin here)

After being notified of a spring 2011 evaluation date by ACPE, the dean and associate dean of academic affairs organized all full time faculty and key staff into six subcommittees corresponding to each area of the self study. Most of the assignments aligned with existing School standing committee responsibilities. Each committee included student and staff representation. Each subcommittee's chair, and co-chair (where applicable) served on the steering committee together with the associate deans and department chairs. The group is chaired by the associate dean for academic affairs.

Starting in late 2009 there were monthly sub-committee meetings and by spring 2001 we had full participation in all four AACCP curriculum quality surveys. A well-organized Blackboard site was set up to centralize all documentation and data that we felt the subcommittees would need to do their work, including previous self study and interim reports, survey data and other potentially useful information accumulated by the Office of Academic Affairs. In July of 2010, the School was notified of a one-year delay in evaluation and sub-committee work was put on hold until summer 2011 when it was re-launched during an offsite faculty retreat.

Committees reformed, with the addition of newly hired faculty and new student representatives, and met monthly until late spring 2012 to review the latest data and changes. Use of AAMS commenced in 2011. Approximately half the members of each sub-committee were tasked to review data and draft the narrative, while the other half served as reviewers to examine the analysis with fresh perspective and offer suggestions for improvement. When the two groups came to consensus the compiled draft report was shared with faculty; the Board of Visitors were briefed and asked to review the draft, as were a number of preceptors and alumni. The Student Government Association reviewed the Curriculum and Student sections at their winter 2012 retreat. All comments were merged into the document that was shared with all faculty and key staff at a retreat on May 4, 2012 dedicated to refining the self study report, discussing any outstanding issues and orienting participants to the major findings, in preparation for a vote by the faculty assembly in mid-June. After this point the document was reviewed by the campus and then submitted to ACPE in advance of the evaluation visit in October 2012.

In 2005, "27 faculty members or almost forty percent of the faculty had direct involvement in the preparation of the self-study." This time there were a dozen key staff, a dozen students, the Board of Visitors, preceptors and alumni, as well as 100% of 86 full-time faculty including department chairs and associate deans. This process reflects the commitment of the School to an inclusive, transparent and thorough process of self study.



## Summary of Compliance Status

Standards	Compliant	Compliant With Monitoring	Partially Compliant	Non Compliant
<b>Mission, Planning, and Evaluation</b>				
1. College or School Mission and Goals	✓			
2. Strategic Plan	✓			
3. Evaluation of Achievement of Mission and Goals		✓		
<b>Organization and Administration</b>				
4. Institutional Accreditation	✓			
5. College or School and University Relationship	✓			
6. College or School and Other Administrative Relationships	✓			
7. College or School Organization and Governance	✓			
8. Qualifications and Responsibilities of the Dean	✓			
<b>Curriculum</b>				
9. The Goal of the Curriculum	✓			
10. Curricular Development, Delivery, and Improvement.		✓		
11. Teaching and Learning Methods	✓			
12. Professional Competencies and Outcome Expectations	✓			
13. Curricular Core - Knowledge, Skills, Attitudes and Values	✓			
14. Curricular Core - Pharmacy Practice Experiences		✓		
15. Assessment and Evaluation of Student Learning and Curricular Effectiveness		✓		
<b>Students</b>				
16. Organization of Student Services	✓			
17. Admission Criteria, Policies, and Procedures	✓			
18. Transfer of Credits and Waiver of Requisites for Admission with Advanced Standing	✓			
19. Progression of Students	✓			
20. Student Complaints Policy	✓			
21. Program Information	✓			
22. Student Representation and Perspectives	✓			
23. Professional Behavior and Harmonious Relationships	✓			
<b>Faculty and Staff</b>				
24. Faculty and Staff - Quantitative Factors	✓			
25. Faculty and Staff - Qualitative Factors	✓			
26. Faculty and Staff Continuing Professional Development and Performance Review	✓			
<b>Facilities and Resources</b>				
27. Physical Facilities	✓			
28. Practice Facilities		✓		
29. Library and Educational Resources	✓			
30. Financial Resources	✓			

## University of Maryland / School of Pharmacy

## 1. College or School Mission and Goals

The college or school of pharmacy (hereinafter "college or school") must have a published statement of its mission, its goals in the areas of education, research and other scholarly activities, service, and pharmacy practice, and its values. The statement must be compatible with the mission of the university in which the college or school operates. These goals must include fundamental commitments of the college or school to the preparation of students who possess the competencies necessary for the provision of pharmacist-delivered patient care, including medication therapy management services, the advancement of the practice of pharmacy and its contributions to society, the pursuit of research and other scholarly activities, and the assessment and evaluation of desired outcomes.

## 2. College or School's Self-Assessment

The college or school has a published statement of its mission; its long-term goals in the areas of education, research and other scholarly activities, service, and pharmacy practice; and its values.	Satisfactory
The mission statement is compatible with the mission of the university in which the college or school operates.	Satisfactory
The college or school's vision includes the development of pharmacy graduates who are trained with other health professionals to provide patient care services as a team.	Satisfactory
The college or school's vision and long-term goals include fundamental commitments of the program to the preparation of students who possess the competencies necessary for the provision of pharmacist-delivered patient care, including medication therapy management services, the advancement of the practice of pharmacy and its contributions to society, the pursuit of research and other scholarly activities, innovation, quality assurance and continuous quality improvement, and the assessment and evaluation of desired outcomes.	Satisfactory
The college or school's vision and goals provide the basis for strategic planning on how the vision and goals will be achieved.	Satisfactory
For new college or school initiatives, e.g., branch campus, distance learning, or alternate pathways to degree completion, the college or school ensures that: <ul style="list-style-type: none"> <li>the initiatives are consistent with the university's and the college or school's missions and goals</li> <li>the same commitment to the instillation of institutional mission and academic success is demonstrated to all students, irrespective of program pathway or geographic location</li> <li>resources are allocated in an equitable manner</li> </ul>	Satisfactory

## 3. College or School's Comments on the Standard

## Focused Questions

- ☒ How the college or school's mission is aligned with the mission of the institution
- ☒ How the mission and associated goals address education, research/scholarship, service, and practice and provide the basis for strategic planning

- ☒ How the mission and associated goals are developed and approved with the involvement of various stakeholders, such as faculty, students, preceptors, alumni, etc.
- ☒ How and where the mission statement is published and communicated
- ☒ How the college or school promotes initiatives and programs that specifically advance its stated mission
- ☒ How the college or school supports postgraduate professional education and training of pharmacists and the development of pharmacy graduates who are trained with other health professionals to provide patient care as a team
- ☒ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
- ☒ Any other notable achievements, innovations or quality improvements
- ☒ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

The University of Maryland (UM) School of Pharmacy (UMSOP) in Baltimore is part of Maryland's only public academic health, human services, and law center. Seven professional and graduate schools train the majority of the state's physicians, nurses, dentists, lawyers, social workers, and pharmacists. Today, this 61-acre research and technology complex encompasses 65 buildings in West Baltimore near the Inner Harbor. Sponsored research totaled \$567.1 million in FY2010. With 6,349 students and 6,717 faculty members and staff, the University is an economic engine that returns more than \$15 in financial activity for every \$1 invested in it by the state. The UM community gives more than 2 million hours a year in service to the public. Its mission is as follows:

***The University of Maryland in Baltimore is the state's public academic health and law university devoted to professional and graduate education, research, patient care, and public service. Using state-of-the-art technological support, UM educates leaders in health care delivery, biomedical science, social services, and law. By conducting internationally recognized research to cure disease and to improve the health, social functioning, and just treatment of the people it serves, the campus fosters economic development in the state. UM is committed to ensuring that the knowledge it generates provides maximum benefit to society, directly enhancing the community.***

In crafting the UMSOP's mission and vision statements, the UM mission and strategic goals were carefully considered. The University's new strategic goals include four foundational elements: streamlined information technology organization, enhanced two-way communication, increased training, and collaboration with government agencies. While much good work has been done in these areas to date, a challenge to the status quo can yield great opportunities. UM and the School are determined to identify and embrace these opportunities.

The School's mission statement aligns with the mission of the institution:

***The University of Maryland School of Pharmacy leads pharmacy education, scientific discovery, patient care, and community engagement in the state of Maryland and beyond.***

UMSOP's vision statement was developed through extensive research during the School's strategic planning process. The School's vision for education, research, and other scholarly activities encourages innovation through basic and applied research for the purposes of improving health care outcomes and

instructional methods. The vision also includes a commitment to participate with other stakeholders in the development of new and improved practice models, as stated:

***We will achieve our mission by***

- ***Inspiring excellence*** in our students through a contemporary curriculum, innovative educational experiences, and strategic professional relationships
- ***Advancing scientific knowledge*** across the spectrum of drug discovery, health services, and practice-based and translational research with significant focus on collaborative partnerships
- ***Expanding the impact of the pharmacist's role*** on direct patient care and health outcomes
- ***Building and nurturing relationships*** with all members of our community
- ***Capitalizing on our entrepreneurial spirit*** to improve pharmaceutical research, practice, and education in Maryland, the nation, and the world

In addition, UMSOP's pledge affirms our individual and collective commitment to the mission:

***We are proud to be critical thinkers, lifelong learners, and leaders who are sought for our expertise. We earn our reputation with the highest standards of personal ethics and professional conduct. Students and education are central to everything we do. We engage the community; together, we contribute to the improved health of society. We celebrate the distinctive talents of our faculty, staff, and students. We honor our traditions and advocate for dynamic changes in pharmacy practice, education, and research. We create the future of pharmacy.***

The School's mission statement and goals are consistent with the Educational Philosophy of our professional degree program in preparing graduates with a strong foundation in the biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences and providing multiple opportunities for their meaningful application to practice. Thus, our graduates are prepared to enter the pharmacy profession and to contribute positively to its evolution. The UMSOP is committed to providing a superior education through a comprehensive program that integrates science and practice, designed to develop outstanding pharmacists and pharmaceutical scientists. Students are taught by faculty who are progressive pharmacy practitioners and nationally renowned scientists, who have a commitment to direct patient care, and who are models of professionalism and leadership. Graduates pursue careers in every facet of health care, the pharmaceutical industry, academia, and the federal government.

UMSOP ensured that its 2007 expansion initiative to the Universities at Shady Grove (USG) is consistent with the University's and School's mission and goals; the same commitment is demonstrated to all students, irrespective of program pathway or geographic location. Resources are allocated in an equitable manner. This is discussed in detail in subsequent sections of this report including Section 3 – Curriculum, Section 4 – Students, and Section 6 – Facilities and Resources. The success of the USG initiative is affirmed by student academic performance data and the AACP survey feedback.

UMSOP's mission and goals were developed and approved with the involvement of key stakeholders including faculty, students, preceptors, alumni, and employers during the strategic planning process (January 2009-April 2010). Internal and external stakeholders were surveyed three times throughout the 16-month process. In addition, the dean led numerous focus groups to gather information and solicit feedback. Although the previous mission, vision and values of the institution were generally accepted by stakeholders, it was clear to the strategic planning steering committee that these statements did not echo the passion needed for the School to move forward. The committee took the months of October and November 2009 to completely revamp the mission and vision. The values were transformed into a

pledge with a more active tone and a promise to be upheld by all members of the School community. A curricular philosophy was written that conceptualized the fundamental role of the School and captured the pedagogical approach of the entire faculty across three academic degree programs: PharmD, PhD in Pharmaceutical Sciences (PSC), and PhD in Pharmaceutical Health Services Research (PHSR). The full strategic planning process is elaborated under Standard 2.

The School's mission statement is prominently featured on its web site, and is printed in each issue of its magazine for alumni and friends. The complete strategic plan is also available on the School's web site.

UMSOP supports postgraduate professional education and training through various mechanisms. In 2011, UMSOP had 44 postdoctoral fellows: 39 in PSC, three in PHSR, and two in the Dean's Office. Postdoctoral appointments at the SOP last between one and three years; however, departments may provide well thought-out postdoctoral experiences that are four or five years in duration. In addition, the Residency and Fellowship Training Program in the Department of Pharmacy Practice and Science (PPS) trains residents in clinical, research, teaching, and critical thinking skills to meet the demands and changes occurring in the profession of pharmacy. The School and the University of Maryland Medical Center (UMMC) Department of Pharmacy currently offer 16 different residency/fellowship opportunities; 11 are accredited by the American Society of Health-System Pharmacists (ASHP)\*. **Post Graduate Year 1 programs** include Managed Care, Pharmacy Practice with an Emphasis in Community Care\*, and Pharmacy Practice - UMMC\*. **Post Graduate Year 2 programs** include Ambulatory Care\*, Critical Care\*, Geriatric Pharmacy Practice\*, Oncology Pharmacy Practice\*, Palliative Care\*, Pediatric Pharmacy Practice\*, Pharmacotherapy\*, Psychiatric Pharmacy Practice\*, and Solid Organ Transplant\*. **Fellowships** include Clinical Toxicology, Instructional Design and Evaluation, Pharmacoepidemiology, and Pharmacoeconomics.

#### 4. College or School's Final Self-Evaluation

<input checked="" type="checkbox"/> Compliant	<input type="checkbox"/> Compliant with Monitoring	<input type="checkbox"/> Partially Compliant	<input type="checkbox"/> Non-Compliant
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#### 5. Recommended Monitoring

(School comments begin here)

## University of Maryland / School of Pharmacy

## 2. Strategic Plan

The college or school must develop, implement, and regularly revise a strategic plan to facilitate the advancement of its mission and goals. The strategic plan must be developed through an inclusive process that solicits input and review from faculty, students, staff, administrators, alumni, and other stakeholders as needed, have the support of the university administration, and be disseminated in summary form to key stakeholders.

## 2. College or School's Self-Assessment

The program is in the process of or has developed, implemented, and regularly revises a strategic plan to advance its mission and long-term goals.	Satisfactory
The strategic planning process is inclusive, soliciting input and review from faculty, students, staff, administrators, alumni, and other stakeholders as needed, has the support of the university administration, and is disseminated in summary form to key stakeholders.	Satisfactory
The strategic plan of the college or school is aligned with the university's strategic plan.	Satisfactory
Substantive changes are addressed through the strategic planning process, taking into consideration all resources (including financial, human, and physical) required to implement the change and the impact of the change on the existing program.	Satisfactory
Consultation with ACPE occurred at least six months before recruiting students into new pathways or programs.	
The college or school monitors, evaluates and documents progress toward achievement of strategic goals, objectives, and the overall efficacy of the strategic plan.	Satisfactory

## 3. College or School's Comments on the Standard

## Focused Questions

- ☒ How the college or school's strategic plan was developed, including evidence of the involvement of various stakeholder groups, such as faculty, students, preceptors, alumni, etc.
- ☒ How the strategic plan facilitates the achievement of mission-based (long-term) goals
- ☒ How the college or school's strategic plan incorporates timelines for action, measures, responsible parties, identification of resources needed, and mechanisms for ongoing monitoring and reporting of progress
- ☒ How the college or school monitors, evaluates and documents progress in achieving the goals and objectives of the strategic plan
- ☒ How the support and cooperation of University administration for the college or school plan was sought and achieved, including evidence of support for resourcing the strategic plan?
- ☒ How the strategic plan is driving decision making in the college or school, including for substantive changes to the program
- ☒ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard

- ☒ Any other notable achievements, innovations or quality improvements
- ☒ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms.

(School comments begin here)

Natalie D. Eddington, PhD, FAAPS, FCP, was appointed dean of the University of Maryland School of Pharmacy (UMSOP) in June 2007. She began to define the philosophical and strategic direction in which she wanted to lead the School in teaching, research, practice, outreach, and entrepreneurship. She expected all faculty and other stakeholders to be engaged in the strategic planning process starting in January 2009, while remaining mindful of the impact on faculty and staff time. Dr. Eddington set an ambitious timeframe of nine months from start to finish.

The steering committee was kept deliberately small for efficiency. The dean served as chair, with one faculty member from each of the three academic departments (one department faculty member also represented the satellite campus at the Universities of Shady Grove - USG), the director of experiential learning, one PharmD student, one PharmD/PhD student, and one staff administrator. The dean also gained valuable insight during the process from members of the Board of Visitors as external stakeholders. Committee members were directed to be transparent and gain feedback throughout the process with communication among their peers and with their department chair.

**STEP 1 - INTRODUCTION AND ENVIRONMENTAL SCAN:** Dr. Eddington sent a letter to all internal and external stakeholders introducing the strategic planning process. Background documents were posted on the School's website, including The Institute of Medicine report "Crossing the Quality Chasm: A New Health System for the 21st Century", the Joint Commission of Pharmacy Practitioners report "Future Vision of Pharmacy Practice", and the National Institutes of Health Roadmap for Medical Research. An environmental scan was taken via an online survey sent to all internal stakeholders (PharmD students, graduate students, residents, faculty, and staff) and external stakeholders (Board of Visitors, alumni, preceptors) in January/February of 2009. Open-ended survey questions simply asked for feedback on the School's strengths, weaknesses, opportunities, and threats. The survey was open for three weeks and there were 660 responses in that time, split nearly evenly between internal and external stakeholders.

The steering committee reviewed the environmental scan survey results, progress reports on the 2005-2008 Strategic Plan, peer schools' strategic plans, ACPE accreditation standards, literature on the future of health care, pharmacy workforce trends, the state of Maryland legislative climate, and other internal/external factors that would impact this public institution's strategic direction. Committee members were asked to read and review all documents prior to their meetings so that progressive discussions could take place. Several themes emerged in these early meetings.

**STEP 2 – LISTENING TOUR AND PRIORITIZATION:** Dr. Eddington and members of the steering committee then embarked on a "listening tour" during March/April 2009, meeting with groups and individuals including the Board of Visitors, the Alumni Association Executive Committee, the Student Government Association and student leaders, and standing faculty committees. The purpose was for each group to identify two to four areas of interest with the greatest potential for realistic achievement, considering emerging fields of practice and research as well as the concept of entrepreneurship. It is important to note that listening tour meetings were almost exclusively incorporated into existing committee and board meetings, so as to maintain efficiency of the strategic planning process.

In furtherance of transparency, a series of town hall meetings for faculty, staff, and students followed the listening tour to update internal stakeholders on the major themes that were identified and to introduce the second online survey that would help to prioritize the identified points of interest. Similar information was conveyed to external stakeholders via email. The second online survey in May of 2009 asked respondents to rank-order items within several major themes. There were 341 respondents to this survey, again with a fairly good distribution between internal and external stakeholders. The steering committee reviewed the second survey and grouped the priorities into an initial draft of the strategic plan. The dean met with the School's Executive Council (department chairs and standing faculty committee chairs) for feedback and to define metrics and responsibilities.

STEP 3 – EDITING: Dr. Eddington and the steering committee spent the entire summer and early fall of 2009 on deep introspective discussions and digesting all of the feedback gained throughout the process. The committee regrouped the strategic plan goals several times to balance the overlap among the main objectives, and defined benchmarks that are Specific, Measurable, Achievable, Realistic and Timely (SMART) and that reflected the dean's perspicacity. During that time, the committee also re-evaluated the mission, vision, and values/pledge (see Standard 1) and discussed an educational philosophy.

Due to pressures related to the end of the academic term and the calendar year, a third survey was held for launch until January 2010 to communicate the latest draft of the strategic plan and goals as well as the redrafted mission, vision, pledge, and educational philosophy. Stakeholders remained interested in the strategic planning process, with 505 respondents to the third survey.

The dean met again with faculty, staff, and Board of Visitors members to determine whether any major concept areas were not addressed in the plan. Dr. Eddington and the steering committee made some final edits with the professional assistance of the School's Director of Communications and Marketing. The Faculty Assembly approved the draft in February 2010, and the final version of the plan was published in April 2010.

Twenty-two sub-goals support the five themes. Although the process took longer than first anticipated, the depth and breadth at which all aspects of the institution were explored were extremely valuable to formulation of the final plan. Transparency of the process was instrumental in keeping all stakeholders energized about the new direction of the School under Dr. Eddington's leadership, and to gain buy-in from the UMSOP community as the real work begins.

Support and cooperation of University administration for the UMSOP plan was sought and achieved through regular communication with the President and campus leadership, University System of Maryland leadership, state legislature and others. These stakeholders have been supportive with resources; approximately 90% of the School's facilities have been renovated or newly constructed within the past 10 years, including \$16 million in renovations, \$158 million in new construction (including Pharmacy Hall Addition in Baltimore, which opened in Fall 2010), plus an additional \$24.9 million for furniture, fixtures, IT infrastructure/audio visual, and scientific equipment. Upon expanding to USG, the School invested heavily in IT infrastructure for instruction at both campuses.

Every department chair meets annually with each faculty member to set goals for teaching, research and service. In consultation with the dean, the departments align their goals with the School's, just as the School aligns with the University's strategic plan. Goals for education, research, practice, environment, and entrepreneurship are published and frequently discussed in various faculty and administrator meetings. Due to significant potential threats to virtually every traditional funding source in the current



economic climate, the School's focus has turned to philanthropic and entrepreneurial support for alternate and additional revenue in order to support achievement of the strategic plan.

Annual progress updates are published by the UMSOP's Office of Communications and Marketing in conjunction with the Assessment Committee, utilizing information from the standing faculty committees who have been charged with providing analysis and feedback on the relevant goals each year.

The strategic plan is driving the School's decision making, including for substantive changes to the program. An example of this is a strategic sub-goal for Education, **1.2. Complement strong learner-centered environments using best practices in educational methodologies and instructional technology with evidence-driven approaches to teaching and assessment**. The curriculum redesign centered around integrating the basic and clinical sciences in therapeutic decision making, reinforcing contemporary pharmacy practice skills and drug knowledge, and building a strong foundation of professionalism and life-long learning. This design, as well as the School's investment in state-of-the-art instructional technology, led to a shift in pedagogy to student-centered learning. According to the School's 2011 student survey, 96% of students under the new curriculum (P1-P2) agreed that "I was provided opportunities to engage in active learning (e.g., laboratories, recitations, student portfolios, problem-based learning, in-class activities),# compared to 86% of students under the old curriculum (P3).

#### 4. College or School's Final Self-Evaluation

<input checked="" type="checkbox"/> Compliant	<input type="checkbox"/> Compliant with Monitoring	<input type="checkbox"/> Partially Compliant	<input type="checkbox"/> Non-Compliant
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#### 5. Recommended Monitoring

(School comments begin here)

## University of Maryland / School of Pharmacy

**3. Evaluation of Achievement of Mission and Goals**

The college or school must establish and implement an evaluation plan that assesses achievement of the mission and goals. The evaluation must measure the extent to which the desired outcomes of the professional degree program (including assessments of student learning and evaluation of the effectiveness of the curriculum) are being achieved. Likewise, the extent to which the desired outcomes of research and other scholarly activities, service, and pharmacy practice programs are being achieved must be measured. The program must use the analysis of process and outcome measures for continuous development and improvement of the professional degree program.

**2. College or School's Self-Assessment**

The evaluation plan describes a continuous and systematic process of evaluation covering all aspects of the college or school and the accreditation standards. The plan is evidence-based and embraces the principles and methodologies of continuous quality improvement.	Satisfactory
Individuals have been assigned specific responsibilities in the evaluation plan.	Satisfactory
The evaluation plan uses surveys of graduating students, faculty, preceptors, and alumni from the American Association of Colleges of Pharmacy (AACCP).	Satisfactory
The evaluation plan includes assessments to compare and establish comparability of alternative program pathways to degree completion, including geographically dispersed campuses and distance-learning activities.	Satisfactory
The program assesses achievement of the mission and long-term goals.	Satisfactory
The analysis of process and outcome measures is used for continuous development and improvement of the professional degree program.	Satisfactory
The program measures the extent to which the desired outcomes of the professional degree program (including assessments of student learning and evaluation of the effectiveness of the curriculum) are being achieved.	Satisfactory
The program measures the extent to which the desired outcomes of research and other scholarly activities, service, and pharmacy practice programs are being achieved.	Satisfactory
The evaluation plan includes the college or school's periodic self-assessment using the accreditation standards and guidelines to assure ongoing compliance.	Needs Improvement

**3. College or School's Comments on the Standard****Focused Questions**

- ☒ How all components of the program's mission and goals are being followed and assessed
- ☒ How the college or school periodically self-assesses its program using the accreditation standards and guidelines to assure ongoing compliance.
- ☒ A description of the instruments used in assessment and evaluation of all components of the program's mission (e.g. in the areas of education, research and other scholarly activity, service, and pharmacy practice).
- ☒ How assessments have resulted in improvements in all mission-related areas

- ☒ Innovations and best practices implemented by the college or school
- ☒ Description of the members of the Assessment Committee (or equivalent structure/accountable person), charges and major accomplishments in the last academic year
- ☒ How the college or school makes available to key stakeholders the major findings and actions resulting from its evaluation plan
- ☒ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
- ☒ Any other notable achievements, innovations or quality improvements

(School comments begin here)

UMSOP has recently adopted a comprehensive assessment plan to measure key indicators of success in each area of the institutional mission, and to monitor progress toward strategic goals in an ongoing manner. The School's assessment activities are aimed at measuring effectiveness in three major domains: institutional, programmatic, and learning outcomes. Institutional assessment examines the effectiveness of the School as it pertains to its core mission as expressed by key stakeholders: faculty, staff, students, preceptors, alumni, employers, and the public. Programmatic assessment examines the educational program and its compliance with accreditation standards. Learning-outcomes assessment is conducted in order to understand how well students collectively are progressing toward the School's educational goals or terminal performance outcomes (TPOs). This includes ongoing comparisons of student performance and satisfaction at the Baltimore and Shady Grove campuses.

The School's institutional assessment plan is based on the strategic plan (updated every 3-5 years), the Doctor of Pharmacy curriculum's TPOs, and periodic ACPE self-study. The School's strategic plan was constructed with measurable goals and benchmarks. Data elements include, but are not limited to, the annual strategic plan report, the accreditation self-study, annual stakeholder surveys, NAPLEX test score analysis, course evaluations, student success data, objective structured clinical examination (OSCE) data, student performance during advanced practice experiences, and curricular mapping. Findings from assessment activities are compared to selected peer schools and national data where available. Peer schools are publically funded institutions with a similar institutional mission (e.g. comprehensive, research-oriented, international scope) and high national ranking; many of the peer schools have satellite campuses. Taken as a whole, these activities indicate how well the School is accomplishing its intended goals.

Institutional assessments have resulted in improvements in all mission-related areas. For example, the School's NAPLEX scores were below the national average for several years but had not, until recently, been formally addressed by the leadership. Investigation of data and student feedback supported the hypothesis that overconfidence and under-preparation were contributing factors to the lackluster performance. Town halls, emails and other communications, coupled with School sponsorship of a review course, resulted in a marked increase in the annual pass rate for 2011 (95.3%, up from 90.9% in 2010). The Assessment Committee will continue to monitor this.

Another example is under the Environment goal of the strategic plan when the Assessment Committee identified several outliers in the faculty and staff surveys pertaining to sense of community and satisfaction with the work environment. The committee notified the various department heads of issues requiring investigation and requested plans for monitoring and improvement. A teambuilding program

was implemented to improve communication among staff within an administrative department. Feedback was positive and interactions and workflow continues to improve.

Analysis of data for research and practice goals historically takes place within the respective departments in accordance with their departmental strategic plans. The Assessment Committee expects to review this part of the strategic plan in the spring of 2012.

Best practices implemented by UMSOP include standardization of course evaluations and academic data. Simple graphs and cross-course (or instructor) comparisons enable faculty to quickly analyze their results. Written feedback is required from both course managers and departmental vice-chairs for education, thus assuring systematic course review. Another example is curriculum mapping, which was done by individual faculty and content-related groups of faculty. Course managers became more aware of the role of each course's content within the curriculum and the material that precedes and is subsequent to each course. Integration and increasing complexity also improved. The maps also provide the Curriculum Committee with clear guidance for review of the new curriculum.

The Assessment Committee is chaired by a faculty member and composed of faculty from each academic department, a student representative, and members of the dean's leadership team: the Associate Deans of Academic Affairs, Student Affairs, Administration & Finance, and Graduate Studies & Research; Assistant Dean of Academic Affairs, and Assistant Dean of Instructional Technology. Members of this group are also charged as 'champions' of the strategic plan to ensure active oversight and implementation. Admittedly, a significant percentage of the Assessment Committee members hold administrative positions within the School. This was done purposely as any response or recommended change must be adequately resourced and implemented by the School's administrative team.

The Assessment Committee is charged each year by the dean with a specific list of tasks, but its overarching function is to implement a cycle of continuous quality improvement. This includes examining data and making recommendations that enable the School to achieve its strategic goals and ensuring that the School remains in compliance with accreditation standards. Thus, the Assessment Committee serves as a facilitator and catalyst of the School's assessment activities, both specific (as outlined in Assessment Plan) and general (e.g. engendering a culture of assessment, addressing issues that arise de novo during the course of the year). As such, a high level of interaction is necessary between the Assessment Committee and other committees and stakeholders within the School. In the past year, the Assessment Committee has identified the data points needed to measure achievement of the strategic plan goals, reviewed the first year of data, and made recommendations to stakeholders for implementation and evaluation in the next iterative cycle. The committee expects to evaluate the new curriculum next year in collaboration with the Curriculum Committee.

The findings, recommendations, and actions taken in response to these assessment processes are disseminated to the numerous stakeholders. The school's Executive Council is the primary forum for feedback on committee reports. The chairs of each department welcome the dean and School administrators at their faculty meetings to discuss assessment data as needed, and the dean also presents assessment-related findings, recommendations, and actions in her Wednesday Morning Memo (WMM) - an e-mail newsletter that is distributed to the internal School of Pharmacy community including faculty, staff, and students. However, much more communication is needed for the Assessment Committee to establish a clear role of perceived importance by the faculty.

The School relied heavily on the ACPE guidelines and sought input from peer institutions in order to formulate the Assessment Plan. There is substantial commitment among the School's leadership,

faculty, and staff to continuous quality improvement but, admittedly, the Assessment Committee isn't living up to its fullest potential. The current Assessment Plan has only recently been adopted, and efforts must continue to instill a culture of assessment and evidence-based decision making. The plan is comprehensive and examines all aspects of the School's mission. Data is collected from a wide array of sources and, when appropriate, examined longitudinally and/or compared to national and peer school data. After expanding the UMSOP PharmD program to USG in 2007, data regarding student performance, stress, and extra-curricular activities have been systematically collected, analyzed, and reported to stakeholders. The School also deploys annual standardized anonymous surveys through AACP. The response rate has been generally good (80%+), which may be evidence of increasing awareness of the importance of institutional assessment. Trends (both positive and negative) are analyzed to determine the underlying forces at play. Key findings of assessment activities are disseminated to stakeholders in the form of comprehensive annual reports issued by the School and individual departments as well as an annual Strategic Plan Report. These reports are available online through the UMSOP website. Thus, we believe that we are fully compliant with the intent and expectations of Standard 3.

#### 4. College or School's Final Self-Evaluation

<input type="checkbox"/> Compliant	<input checked="" type="checkbox"/> Compliant with Monitoring	<input type="checkbox"/> Partially Compliant	<input type="checkbox"/> Non-Compliant
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#### 5. Recommended Monitoring

(School comments begin here)

The complementary and vital role of the Assessment Committee has yet to gain traction among the other standing faculty committees. The Office of Academic Affairs, which is responsible for the assessment process, responded to loss of a statistician by streamlining the collection, dissemination and analysis of programmatic and curricular assessment data over the past two years. Focused data is now directed to individual instructors, course managers, vice chairs, chairs, faculty committees and the dean's office administration in an effort to drive on-going self-assessment and continuous quality improvement activities. The Assistant Dean for Academic Affairs has been able to hire a student and utilize the Shady Grove office manager for assistance with organization of data, which enabled the office to provide all of the supporting evidence for this self-study. It is anticipated that completion of the self-study will alleviate some of the workload.

## University of Maryland / School of Pharmacy

**4. Institutional Accreditation**

The institution housing the college or school, or the independent college or school, must have or, in the case of new programs, achieve full accreditation by a regional/institutional accreditation agency recognized by the U.S. Department of Education.

**2. College or School's Self-Assessment**

The institution housing the program, or the independent college or school, has full accreditation by a regional/institutional accreditation agency recognized by the U.S. Department of Education or it is in the process of seeking accreditation within the prescribed timeframe.	Satisfactory
The college or school reports to ACPE, as soon as possible, any issue identified in regional/institutional accreditation actions that may have a negative impact on the quality of the professional degree program and compliance with ACPE standards.	

**3. College or School's Comments on the Standard****Focused Questions**

- ☒ Any deficiencies from institutional accreditation that impact or potentially impact the college, schools or program (if applicable)
- ☒ Measures taken or proposed by the college or school to address any issues arising from institutional accreditation (if applicable)
- ☒ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard

(School comments begin here)

As the founding campus of the University System of Maryland, the University of Maryland in Baltimore (UMB) is fully compliant with eligibility requirements for accreditation by the Middle States Commission on Higher Education (MSCHE). The Final Report of the Accreditation Team from the campus's 2006 MSCHE self-study did not identify any deficiencies from institutional accreditation that would potentially impact the School or program. The campus's Periodic Review Report (PRR) to MSCHE was submitted by June 1, 2011 and is attached to this standard. MSCHE reaffirmed the campus's full accreditation status on November 30, 2011.

**4. College or School's Final Self-Evaluation**

<input checked="" type="checkbox"/> Compliant	<input type="checkbox"/> Compliant with Monitoring	<input type="checkbox"/> Partially Compliant	<input type="checkbox"/> Non-Compliant
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**5. Recommended Monitoring**

(School comments begin here)

## University of Maryland / School of Pharmacy

## 5. College or School and University Relationship

The college or school must be an autonomous unit within the university structure and must be led by a dean. To maintain and advance the professional degree program, the university president (or other university officials charged with final responsibility for the college or school ) and the dean must collaborate to secure adequate financial, physical (teaching and research), faculty, staff, student, practice site, preceptor, library, technology, and administrative resources to meet all of the ACPE accreditation standards.

## 2. College or School's Self-Assessment

The university president (or other university officials charged with final responsibility for the college or school) and the dean collaborate to secure adequate financial, physical (teaching and research), faculty, staff, student, practice site, preceptor, library, technology, and administrative resources to meet all of the ACPE accreditation standards.	Satisfactory
The college or school participates in the governance of the university, in accordance with its policies and procedures.	Satisfactory
The college or school has autonomy, within university policies and procedures and state and federal regulations, in all the following areas: <ul style="list-style-type: none"> <li>• programmatic evaluation</li> <li>• definition and delivery of the curriculum</li> <li>• development of bylaws, policies, and procedures</li> <li>• student enrollment, admission and progression policies</li> <li>• faculty and staff recruitment, development, evaluation, remuneration, and retention</li> </ul>	Satisfactory
The college or school's reporting relationship(s) is depicted in the university's organizational chart.	Satisfactory

## 3. College or School's Comments on the Standard

## Focused Questions

- ☒ How the college or school participates in the governance of the university (if applicable)
- ☒ How the autonomy of the college or school is assured and maintained
- ☒ How the college or school collaborates with university officials to secure adequate resources to effectively deliver the program and comply with all accreditation standards
- ☒ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
- ☒ Any other notable achievements, innovations or quality improvements

(School comments begin here)

The University of Maryland in Baltimore (UMB) welcomed Jay A. Perman, MD, to Baltimore as UMB president in July 2010. Dr. Perman followed David J. Ramsay, DM, DPhil, who retired in 2010 after serving 15 years as UM's president. Dr. Perman's appointment at UMB was a return to the university.

From 1999 to 2004 he chaired the Department of Pediatrics in the University of Maryland School of Medicine. Dr. Perman left Baltimore in 2004 to become dean and vice president for clinical affairs at the University of Kentucky College of Medicine from 2004 to 2010.

Dr. Perman's vision is to build bridges -- bridges among the schools on campus, bridges between the School of Medicine and the health care system, bridges to other campuses in the University System of Maryland. He emphasizes how important it will be in the years to come for UMB to develop interprofessional education and research programs, stating that "the problems we face today are often too complex to be solved by one discipline working in isolation."

Dr. Perman's first administrative action was to establish a new university-wide office – the Office of Planning and Accountability (OPA), to be headed by a Vice President for Planning and Accountability (VPPA). Establishment of the OPA was essential to achieve Dr. Perman's goals of meaningful, inclusive strategic planning, strengthening accountability, and enhancing institutional effectiveness. In June 2012 President Perman restructured his leadership team in an effort to streamline the organization for better productivity and functionality. This included naming a Chief Operating Officer/Senior Vice President, a Chief Academic and Research Officer/Senior Vice President and Dean of the Graduate School, a Chief Enterprise and Economic Development Officer/Vice President, and a Chief Accountability Officer/Associate Vice President. The latter position serves as the University's principal executive for identification and coordination of existing and future accountability initiatives across the University.

The University of Maryland School of Pharmacy (UMSOP) is an autonomous unit within the university structure and is led by Dean Natalie Eddington. Dr. Eddington represents the School's interests in semi-monthly meetings with Dr. Perman, the campus vice presidents, and the other school deans. The dean also meets monthly with the president one-on-one. Frequent communication with the campus leadership enables the dean to advocate for the SOP in terms of securing adequate financial, physical (teaching and research), faculty, staff, student, practice site, preceptor, library, technology, and administrative resources to meet all of the ACPE accreditation standards. Pharmacy faculty and administrative leaders represent the UMSOP on various campus and university committees.

UMSOP maintains a high degree of autonomy because the UMB campus is not organized around the chief academic officer or provost system. Each of the deans is the chief academic officer for his or her school and is responsible to the president for its academic integrity. Some administrative services such as procurement, human resources, parking, and financial services are structured within central administration, with the schools functioning primarily as users. Other central functions such as external affairs (which includes resource management, development and alumni relations, government and community affairs, and communications) work more closely with the schools.

#### 4. College or School's Final Self-Evaluation

<input checked="" type="checkbox"/> Compliant	<input type="checkbox"/> Compliant with Monitoring	<input type="checkbox"/> Partially Compliant	<input type="checkbox"/> Non-Compliant
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#### 5. Recommended Monitoring

(School comments begin here)



## University of Maryland / School of Pharmacy

**6. College or School and Other Administrative Relationships**

The college or school, with the full support of the university, must develop suitable academic, research, and other scholarly activity; practice and service relationships; collaborations; and partnerships, within and outside the university, to support and advance its mission and goals.

**2. College or School's Self-Assessment**

The college or school, with the full support of the university, develops suitable academic, research, and other scholarly activity; practice and service relationships; collaborations; and partnerships, within and outside the university, to support and advance its mission and goals.	Satisfactory
Formal signed agreements that codify the nature and intent of the relationship, the legal liability of the parties, and applicable financial arrangements are in place for collaborations and partnerships.	Satisfactory
The relationships, collaborations, and partnerships advance the desired outcomes of the professional degree program, research and other scholarly activities, service and pharmacy practice programs.	Satisfactory

**3. College or School's Comments on the Standard****Focused Questions**

- ☒ The number and nature of affiliations external to the college or school
- ☒ Details of academic research activity, partnerships and collaborations outside the college or school
- ☒ Details of alliances that promote and facilitate interprofessional or collaborative education
- ☒ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
- ☒ Any other notable achievements, innovations or quality improvements

(School comments begin here)

Faculty in the department of Pharmacy Practice and Science (PPS) deliver services in forty-three (43) clinical sites/clinics. Nearly all sites have various types of affiliation agreements; those sites without a signed agreement are involved at some level of negotiation. Prominent entities/sites include:

- Umbrella Agreement with University of Maryland Medical System (UMMS)
- The Veteran's Administration Health System (VA) and Other Health Care Systems
- Maryland Department of Health & Mental Hygiene agreements with UMSOP Mental Health Program
- Federally Qualified Health Centers (FQHC)
- Patients, Pharmacists, Partnerships (P3) Program Workplace and Community Pharmacy Locations

P3 Program employer agreements and the UMMS agreement are confidential in nature and have not been included as attachments for this standard. However, formal signed agreements are in place and have been reviewed by University counsel. These agreements codify the nature and intent of the relationship, the legal liability of the parties, and applicable financial arrangements.

UMSOP has the full support of the University to develop suitable academic, research, and other scholarly activities; practice and service relationships; collaborations; and partnerships, within and outside the university, to support and advance its mission and goals. A key example is Research @ UM. All faculty are affiliated with the schools; however, support for the research enterprise is central and available to all faculty regardless of their school through the Office of Research and Development (ORD). ORD is responsible for the entire spectrum of intellectual property development: identifying research funding sources and assisting faculty in obtaining funding from governmental, corporate, and foundation sponsors; managing the administrative aspects of contracts and grants on behalf of the University; analyzing the commercial potential of intellectual property developed by the faculty; and marketing promising technologies on behalf of the University and the faculty. Each of the schools has its own research office to mentor its faculty and to focus its research program. The school associate deans for research meet with ORD staff quarterly to discuss common issues.

UMSOP maintains research Centers and Programs that provide public education, conduct research, and link clinical and academic activities to help strengthen the public health infrastructure across the state of Maryland. While their areas of expertise vary, their common goal is to help provide quality health care and training to improve the health of the citizens of the state and across the nation. Faculty and staff employed in these centers and programs report to one of the three academic departments. Two new centers formed in 2012: the Center for Translational Medicine, with a goal to train future scientific leaders and apply insights from data already available to improve medical product development and health care efficiency; and the Center of Excellence in Regulatory Science and Innovation, a collaborative partnership between the University of Maryland College Park and UMB that focuses on modernizing and improving the ways drugs and medical devices are reviewed and evaluated. The other eight centers are Center for Drug Safety, Center on Drugs and Public Policy, Center for Innovative Pharmacy Solutions, Computer Aided Drug Design Center, Maryland Poison Center, Center for Nanomedicine and Cellular Delivery, Peter Lamy Center on Drug Therapy and Aging, and Pharmaceutical Research Computing. Other programs and facilities of importance to UMSOP are Patients, Pharmacists, Partnerships (P3) Program, Mental Health Program, Clinical Pharmacology Unit, Good Manufacturing Practice (GMP), Mass Spectrometry, Nuclear Magnetic Resonance (NMR), and X-Ray Crystallography.

Alliances that promote and facilitate collaborative or interprofessional education (IPE) include UM President Perman's IPE Task Force, charged with creating or broadening existing opportunities for interdisciplinary education <http://www.umaryland.edu/president/ipe/>. Membership includes representatives at the associate dean level from all schools on campus. This group meets several times a year, maintains frequent email contact regarding faculty conferences and student opportunities, and will oversee implementation of IPE initiatives as part of the campus strategic plan. Dean Eddington was recently appointed by President Perman to co-chair the campus strategic plan implementation committee on interprofessional education, clinical care and practice, and public service.

In addition, the Universities at Shady Grove (USG) has established a standing committee on Collaboration, Interprofessional and Interdisciplinary Education Strategies (CIPES). This group has been very active in planning electives, seminars and weekly faculty brown bag lunches, and is chaired by Dr. Heather Congdon, UMSOP's assistant dean for USG. The committee strives for interprofessional and interdisciplinary collaborations through educational coursework and laboratories, community outreach, and scholarship innovations; faculty development training in interprofessional and interdisciplinary education; and research on interprofessional and interdisciplinary education initiatives at USG. Lastly, it should be noted that UMSOP students have always had a strong interest in dual degrees, with at least 12% of graduating students in 2011 reporting their participation in dual degrees compared to 2% of

graduates from peer schools. Therefore UMSOP maintains strong relationships with other UM schools and local institutions to provide PharmD/JD, PharmD/MBA, and PharmD/MPH opportunities.

Standard 12 of this report describes how the curriculum is preparing graduates to work as members of an interprofessional team, including a description of the courses that focus specifically on interprofessional education. Noteworthy examples include new interdisciplinary electives with UMSOP and other schools on the Baltimore and Shady Grove campuses, such as Geriatric Imperative and Interdisciplinary Approaches to the Critically Ill Patient.

According to the 2011 AACP Curriculum Quality Surveys:

- 94% of UMSOP faculty (n=72) agreed that “curricular collaboration among disciplines is encouraged at my school.” This is 8% higher than peer institutions (86%).

In response to additional internal questions on the 2011 survey,

- 66% of faculty (n=59) agreed that “my scholarship and research regularly includes colleagues in other disciplines.” By department, PHSR=90%, PPS=46%, PSC=80%.
- 44% of faculty (n=59) agreed that “I socialize regularly with colleagues from other academic disciplines.” By department, PHSR=56%, PPS=36%, PSC=50%.

Of note, 96% of 2011 UMSOP graduating students (n=106) agree that “information was made available to me about additional educational opportunities (e.g., residencies, fellowships, graduate school).” This is slightly above peer institutions (95%) and the national average (94%). In addition, 86% of 2011 UMSOP graduating students agree that “I was aware of opportunities to participate in research activities with faculty.” This is 5% and 8% respectively above peer institutions (81%) and the national average (78%). This is also consistent with the results from an internal 2011 continuing student survey, where 89% of UMSOP P1-P3 students (n=429) agree that “the School encourages and makes available innovative interdisciplinary, interprofessional and international experiences in education, practice and research.”

#### 4. College or School's Final Self-Evaluation

<input checked="" type="checkbox"/> Compliant	<input type="checkbox"/> Compliant with Monitoring	<input type="checkbox"/> Partially Compliant	<input type="checkbox"/> Non-Compliant
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#### 5. Recommended Monitoring

(School comments begin here)

## University of Maryland / School of Pharmacy

**7. College or School Organization and Governance**

The college or school must be organized and staffed to facilitate the accomplishment of its mission and goals. The college or school administration must have defined lines of authority and responsibility, foster organizational unit development and collegiality, and allocate resources appropriately. The college or school must have published, updated governance documents, such as bylaws and policies and procedures, which have been generated by faculty consensus under the leadership of the dean in accordance with university regulations.

**2. College or School's Self-Assessment**

The college or school is organized and staffed to facilitate the accomplishment of its mission and goals.	Satisfactory
The college or school administrative leaders working with the dean have credentials and experience that prepare them for their respective roles.	Satisfactory
The college or school administration has defined lines of authority and responsibility, fosters organizational unit development and collegiality, and allocates resources appropriately.	Satisfactory
The college or school has established mechanisms to foster unity of purpose, effective communication, and collaboration among administrators.	Satisfactory
The college or school's administrative leaders - individually or collectively - are developing and evaluating interprofessional education and practice opportunities	Needs Improvement
The college or school has published, updated governance documents, such as bylaws and policies and procedures, which have been generated by faculty consensus under the leadership of the dean in accordance with university regulations.	Satisfactory
If the college or school organizes its faculty into subunits, such as departments or divisions, subunit goals and objectives align with the mission and goals of the college or school.	Satisfactory
The effectiveness of each organizational unit is evaluated on the basis of its goals and objectives and its contribution to the professional program.	Satisfactory
Programs are in place to hone leadership and management skills of college or school administrators, including department/division chairs (if applicable).	Satisfactory
Faculty meetings and committees established to address key components of the mission and goals are part of the system of governance of the college or school.	Satisfactory
Where appropriate, faculty committees include staff, students, preceptors, alumni, and pharmacy practitioners.	Satisfactory
Minutes of faculty meetings and committee actions are maintained and communicated to appropriate parties.	Satisfactory
The college or school has policies and procedures that address potential systems failures, whether such failures are technical, administrative, or curricular.	Satisfactory
Contingency planning includes creating secure backups of critical applications and systems data, providing mechanisms for making up lost course work and academic	Satisfactory

credit, securing alternate means for communication and information delivery, and creating exit strategies to protect students if part or all of a program loses viability.	
The college or school maintains an effective system of communication with internal and external stakeholders.	Satisfactory
Alternate program pathways are integrated into the college or school's regular administrative structures, policies, and procedures (including planning, oversight, and evaluation), and are supervised by an administrator who is part of the college or school.	Satisfactory
The college or school ensures that workflow and communication among administration, faculty, staff, preceptors, and students engaged in distance-learning activities are maintained.	Satisfactory
The college or school retains ultimate responsibility for the academic quality and integrity of distance-learning activities and the achievement of expected and unexpected outcomes, regardless of any contractual arrangements, partnerships, or consortia for educational or technical services.	Satisfactory

### 3. College or School's Comments on the Standard

Focused Questions
<input checked="" type="checkbox"/> A description of the college or school's organization and administration and the process for ongoing evaluation of the effectiveness of each operational unit
<input checked="" type="checkbox"/> A self-assessment of how well the organizational structure and systems of communication and collaboration are serving the program and supporting the achievement of the mission and goals
<input checked="" type="checkbox"/> How college or school bylaws, policies and procedures are developed and modified
<input checked="" type="checkbox"/> How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
<input checked="" type="checkbox"/> How the college or school's administrative leaders are developing and evaluating interprofessional education and practice opportunities
<input checked="" type="checkbox"/> How the credentials and experience of college or school administrative leaders working with the dean have prepared them for their respective roles.
<input checked="" type="checkbox"/> Any other notable achievements, innovations or quality improvements
<input checked="" type="checkbox"/> Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

UMSOP is organized and staffed to facilitate the accomplishment of its mission and goals. The administration has defined lines of authority and responsibility, fosters organizational unit development and collegiality, and allocates resources appropriately. Governance documents have been generated by faculty consensus under the leadership of the dean in accordance with university regulations. Both campuses provide excellent opportunities for interprofessional education and collaborative opportunities.

Dean Natalie Eddington has appointed a strong and experienced administrative team. The organizational chart attached to this Standard provides the overall administrative structure of the School. Each leader is well suited to his or her administrative position through their credentials and professional

experiences; the CVs of administrators, faculty and staff will be provided for on-site review (required per Standard 25). Faculty, staff and students are invited to comment on leadership effectiveness in annual surveys. More opportunities for constructive feedback to administration appear to be desired by some faculty and students.

Faculty report to one of three academic departments: Pharmacy Practice and Science (PPS), Pharmaceutical Sciences (PSC), and Pharmaceutical Health Services Research (PHSR). PPS promotes public health and well-being by advancing the practice of pharmacy and generating and disseminating new knowledge related to pharmacy practice and drug use. PSC conducts state-of-the-art research and discovery in the areas of cellular and chemical biology, neuroscience, pharmacology, biopharmaceutics and drug delivery. PHSR provides teaching, service, and scholarly activities related the behavioral sciences, pharmacoeconomics, pharmacoepidemiology, and regulatory issues. Each department chair is supported by a vice chair for education and a vice chair for research; PPS also has a vice chair for faculty clinical services. Department goals and objectives align with the mission and goals of the School, and each department's effectiveness is evaluated on achievement of its goals and objectives and its contribution to the professional program. Faculty recruitment is sometimes hindered by the downtown Baltimore location; however, the School's excellent reputation continues to attract top talent.

UMSOP established a distance learning program at The Universities at Shady Grove (USG) in Rockville, Maryland, in August 2007. By expanding to USG and using web-based technology to deliver the lecture component of the curriculum, the UMSOP increased its PharmD class size by a third. The founding Assistant Dean for the Shady Grove campus has provided a consistent presence and stability for the program. She manages all aspects of UMSOP academics and administration for the USG campus, reports directly to and meets monthly with Dean Eddington, and is in regular and frequent communication with the associate deans, department chairs, and faculty. The 160 UMSOP students (P1-P4) at USG are served by resident faculty members who facilitate small group activities, labs, and examinations. The UMSOP faculty at USG are members of the three departments and participate in meetings in Baltimore via conference call or synchronous video.

Across two campuses, the School has maintained effective communication. Communication can be problematic even in Baltimore because faculty and staff are spread across several buildings; however, concerted efforts are made to ensure that important information is disseminated in a timely manner. Since the last self-study, the UMSOP opened a satellite campus, invested in cutting edge technology, constructed a \$62 million building, and increased enrollment by 160 students. In order to maintain rigorous academic standards, the UMSOP also expanded its faculty by 30%. Because of overall budget reductions over the past several years, administrative staffing has not kept pace with growth in these other areas. It is notable that 81% of Maryland faculty agree or strongly agree that their support staff needs are being met compared to 73% of peers; however, potentially vulnerable administrative areas include student affairs and experiential learning (6 staff in 2005, 9 staff in 2012 including three recent hires), facilities (1 staff person since 2005), and computer network services-multimedia-instructional technology (10 staff since 2005). The leadership should study administrative staffing and workload, make clear decisions particularly on delivery systems for instruction and CE, and fund positions as appropriate.

There are various methods for developing and modifying School bylaws, policies and procedures, including faculty meetings and committee work. Faculty meetings and committees address key components of the mission and goals, and are part of the UMSOP system of governance. School bylaws, policies and procedures are developed and modified within the various areas of responsibility

within the faculty and administration. To promote shared governance, the Executive Council meets monthly to “advise the administration in all matters relating to the administration, budget, and implementation of policy within the School of Pharmacy.”# The Executive Council is chaired by the Dean and its membership consists of Department Chairs, Associate and Assistant Deans, Chairpersons of Standing Committees, and the President of the Faculty Assembly. The meetings are open to all faculty and key staff who wish to attend. In addition, the Faculty Assembly meets several times a year to “establish and supervise policy relating to the governance of the faculty and students of the University of Maryland School of Pharmacy within the limits established by the University System of Maryland.”# All full time faculty are voting members, as is the president of the Student Government Association. All of the School’s committees have key staff and student representation except for the Faculty Affairs Committee, due to the sensitivity of promotion and tenure discussions. Minutes of faculty meetings and committee actions are maintained on an internal “m-drive”, a shared network folder that all faculty can access, and communicated via Blackboard and/or email.

The dean’s open door policy has allowed her to remain in touch with student needs and problems. The associate deans are in close contact with each other and the dean to immediately address any issues that arise. The associate deans hold meetings with each class of students (synchronous to USG) twice a semester to hear any non- course related comments regarding academic policies, scheduling, facilities, etc. Faculty advisors provide additional avenues of communication between students and the administration. The students and faculty resolve problems through a system of course liaisons and grievances are handled through a process outlined in the student honor code; both detailed in the Student Standards of this report.

UMSOP faculty actively pursue additional practice and interprofessional opportunities. Some of these relationships start out as modest projects involving a specific type of research or service. Often, these efforts lead to more formal collaborations. Individual faculty arrangements are done with feedback from the Department chairs, who communicate these outside arrangements with the Dean. The work of Dr. Perman’s IPE taskforce to identify new areas for interprofessional education and practice opportunities has significantly increased awareness and communication among the schools on campus this year, which is expected to activate IPE collaborations in 2013.

The School has policies and procedures that address potential systems failures, whether such failures are technical, administrative, or curricular. Contingency planning includes creating secure backups of critical applications and systems data, providing mechanisms for making up lost course work and academic credit, securing alternate means for communication and information delivery, and creating exit strategies to protect students if part or all of a program loses viability. Due to a potential H1N1 pandemic in the Fall of 2009, the UMSOP Pandemic Plan was created to describe how instructional activities would be carried out in the event of cancellations due to an outbreak of H1N1 influenza. The School’s webpage on H1N1 Preparedness details how information will be communicated to the UMSOP community regarding continuity of operations including instructional activities, and health and safety messages related to H1N1. Luckily the School was not extensively impacted.

The true test of contingency planning occurred in early February 2010 with “Snowmagedon”,# when the School endured a week long closure due to record-breaking snow. Some faculty lectures that were recorded in 2009 were re-posted for the current semester; other faculty were able to record their lectures while homebound. Unfortunately not all recorded lectures were posted immediately, as day-by-day closing announcements and periodic loss of power complicated even the best-laid plans. Some students were without power for several days, so keeping up with Mediasite and Blackboard postings was not

possible. Therefore, administrators requested that faculty allow at least 5 calendar days between posting of lecture material and examinations, and that faculty be flexible with students suffering extenuating circumstances. The computer and network services staff were committed to making the transition to normalcy as fast and painless as possible, within the constraint of ensuring that students did not miss important learning opportunities. Students were encouraged to relay concerns via email to Class Presidents and Class Liaisons. Through professionalism and enormous efforts by the entire UMSOP community, the rescheduling pain melted away with the snow.

#### 4. College or School's Final Self-Evaluation

<input checked="" type="checkbox"/> Compliant	<input type="checkbox"/> Compliant with Monitoring	<input type="checkbox"/> Partially Compliant	<input type="checkbox"/> Non-Compliant
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#### 5. Recommended Monitoring

(School comments begin here)



## University of Maryland / School of Pharmacy

**8. Qualifications and Responsibilities of the Dean**

The dean must be qualified to provide leadership in pharmacy professional education and practice, including research, scholarly activities, and service. The dean must be the chief administrative and academic officer and have direct access to the university president or other university officials delegated with final responsibility for the college or school. The dean must unite and inspire administrators, faculty, staff, preceptors, and students toward achievement of the mission and goals. The dean is responsible for ensuring that all accreditation requirements of the ACPE are met, including the timely submission of all reports and notices of planning for substantive changes.

**2. College or School's Self-Assessment**

The dean is qualified to provide leadership in pharmacy professional education and practice, including research, scholarly activities, and service.	Satisfactory
The dean is the chief administrative and academic officer and has direct access to the university president or other university officials delegated with final responsibility for the college or school.	Satisfactory
The dean unites and inspires administrators, faculty, staff, preceptors, and students to achieve the mission and goals.	Satisfactory
The dean is responsible for ensuring that all accreditation requirements of the ACPE are met, including the timely submission of all reports and plans for substantive changes.	Satisfactory
The dean has the assistance and full support of the administrative leaders of the college or school's organizational units and adequate staff support. In instances where the dean is assigned other substantial administrative responsibilities within the university, arrangements for additional administrative support to the office of the dean are made to ensure effective administration of the affairs of the college or school.	Satisfactory
The dean is responsible for compliance with ACPE's accreditation standards, policies, and procedures. In the event that remedial action is required to bring the college or school into compliance, the dean takes the necessary steps to ensure compliance in a timely and efficient manner.	Satisfactory
<p>The qualifications and characteristics of the dean relate well to those called for in the standards, i.e.:</p> <ul style="list-style-type: none"> <li>• a degree in pharmacy or a strong understanding of contemporary pharmacy and health care systems</li> <li>• a scholarly concern for the profession, generally, and for the diverse aspects of pharmacy science and practice, in particular</li> <li>• publications in pharmacy and biomedical literature in areas relevant to the mission and goals of the college or school</li> <li>• appropriate leadership and managerial skills and experience in the academic (preferred) or health care sectors</li> <li>• recognition for career accomplishments by pharmacy or other health profession educators, researchers, and practitioners</li> <li>• strong written and interpersonal communication skills</li> </ul>	Satisfactory

<ul style="list-style-type: none"> <li>• experience with and a commitment to systematic planning, assessment, and continuous programmatic improvement</li> <li>• a thorough understanding of and a commitment to teaching and student learning, including pedagogy</li> <li>• evidence of a commitment to the advancement of research and scholarship</li> <li>• the ability and willingness to provide assertive advocacy on behalf of the college or school to the university administration</li> <li>• the ability and willingness to provide assertive advocacy on behalf of the college or school and the profession of pharmacy in community, state, and national health care initiatives</li> <li>• a record of and willingness to continue active participation in the affairs of pharmacy's professional and scientific societies</li> </ul>	
<p>The dean has the authority and accepts ultimate responsibility for ensuring:</p> <ul style="list-style-type: none"> <li>• development, articulation, and implementation of the mission and goals</li> <li>• acceptance of the mission and goals by the stakeholders</li> <li>• development, implementation, evaluation, and enhancement of the educational, research, service, and pharmacy practice programs</li> <li>• collaborative efforts to develop, implement, evaluate, and enhance interprofessional education, practice, service, and research programs</li> <li>• development and progress of the strategic plan and the evaluation plan, including assessment of outcomes</li> <li>• recruitment, development, remuneration, and retention of competent faculty and staff</li> <li>• initiation, implementation, and management of programs for the recruitment and admission of qualified students</li> <li>• establishment and implementation of standards for academic performance and progression</li> <li>• resource acquisition and mission-based allocation</li> <li>• continuous enhancement of the visibility of the college or school on campus and to external stakeholders</li> <li>• the effective use of resources to meet the needs and mission of the college or school</li> </ul>	Satisfactory
<p>The dean has ensured that ACPE has been notified in advance of the implementation of any substantive change, allowing sufficient time for evaluation of compliance with standards or the need for additional monitoring.</p>	Satisfactory

### 3. College or School's Comments on the Standard

Focused Questions
<input checked="" type="checkbox"/> How the dean provides leadership for the college or school and program and how the qualifications and characteristics of the dean support the achievement of the mission and goals
<input checked="" type="checkbox"/> The authority and responsibility of the dean to ensure all expectations of the standard and guidelines are achieved
<input checked="" type="checkbox"/> How the dean interacts with and is supported by the other administrative leaders in the college or school

- ☒ How the dean is providing leadership to the academy at large, and advancing the pharmacy education enterprise on local, regional, and national levels.
- ☒ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
- ☒ Any other notable achievements, innovations or quality improvements
- ☒ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

Natalie D. Eddington, PhD, became dean of the University of Maryland School of Pharmacy (UMSOP) in August 2007. Dr. Eddington graduated summa cum laude with a BS in pharmacy in 1982 from Howard University. She earned her PhD from the University of Maryland School of Pharmacy in 1989 and, after working as assistant director of new drug development at Pfizer Inc., joined the faculty in 1991. She was appointed director of the School of Pharmacy's Pharmacokinetics/Biopharmaceutics Laboratory in 1999, and became chair of the Department of Pharmaceutical Sciences in 2003. As chair, she guided the launch of the Center for Nanomedicine and Cellular Delivery, which brings together a collection of scientists to find new and better ways of providing pharmaceutical treatment. It is the UMSOP's first Organized Research Center.

Dr. Eddington is a nationally known expert in drug delivery and pharmacokinetics, the movement of drugs in the body. Her research focuses on cancer therapy and treatments for disorders of the central nervous system. Her work has been supported by funding from the National Cancer Institute, the National Institute of Mental Health, the National Institute on Drug Abuse, the U.S. Food and Drug Administration, and the pharmaceutical industry.

Select honors and awards include being named a Fellow of the American College of Clinical Pharmacology (2011); named a Fellow of the American Association of Pharmaceutical Scientists (2011); named Distinguished Alumnus of the Year by the Howard University School of Pharmacy (2011); named the American Association of Colleges of Pharmacy Council of Deans Representative to the Administrative Board (2011); named one of Maryland's Top 100 Women by the Daily Record newspaper (2010); elected as secretary of the Board of Directors of the National Institute of Pharmaceutical Technology and Education (2010); appointed by Maryland Governor Martin O'Malley to the state's Federal Facilities Advisory Board (2010); participated in Leadership Maryland (Class of 2009); "National Women of Color All Star Award# from the National Women of Color in Technology Conference (2006); "Mentor Recognition Award# from the Phi Kappa Phi Honor Society (2005); and "Outstanding Service as an External Scientific Advisory Committee Member Service Award# from the Florida Agricultural and Mechanical University Minority Biomedical Research Support Program (2004).

As described in Standard 5, Dr. Eddington enjoys a collegial relationship and frequent interactions with the campus president, vice presidents, and other school deans. Because of her long tenure at the SOP, she also has excellent working relationships with her associate deans, the three department chairs, as well as the faculty, staff and students. The dean encourages frequent email contact and has an open door policy, and meets regularly with her administration. The dean serves as Chairperson of the Executive Council, which consists of Department Chairs, Associate and Assistant Deans, Chairpersons of Standing Committees, and the President of the Faculty Assembly. In addition, she attends the Faculty Assembly and holds town hall meetings with staff and students to deliver updates on the state of the

School and to get feedback on important issues such as development of the strategic plan and the impact of recent budget cuts.

As described in Standard 2, the Dean led a comprehensive, transparent and inclusive strategic planning process in 2009-2010. This involved the entire UMSOP community and external stakeholders such as preceptors, alumni and employers. She now drives its implementation with regular communication of progress and annual reporting. Dr. Eddington has charged each of the standing faculty committees to offer comments and feedback on the strategic plan goals and implementation, and often attends committee meetings to emphasize her agenda. With regard to accreditation, the dean chairs the self-study steering committee and assigned membership to the various committees. She was frequently apprised of progress by the Associate Dean for Academic Affairs, and requested regular reporting to the Executive Council. Dr. Eddington also authorized a mandatory half-day faculty retreat in May 2012 to finalize the self-study and gain consensus on any issues that were uncovered during the process.

The dean enjoys very strong support among the UMSOP community; according to the 2011 Staff Survey, 99% (all but one person, n=106) agreed with the statement, "The Dean is an effective leader of the School." Similar support is evident on the 2011 Faculty Survey, with 94% (n=72) of faculty in agreement compared to 88% of peer institutions.

#### 4. College or School's Final Self-Evaluation

<input checked="" type="checkbox"/> Compliant	<input type="checkbox"/> Compliant with Monitoring	<input type="checkbox"/> Partially Compliant	<input type="checkbox"/> Non-Compliant
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#### 5. Recommended Monitoring

(School comments begin here)

## University of Maryland / School of Pharmacy

## 9. The Goal of the Curriculum

The college or school's professional degree program curriculum must prepare graduates with the professional competencies to enter pharmacy practice in any setting to ensure optimal medication therapy outcomes and patient safety, satisfy the educational requirements for licensure as a pharmacist, and meet the requirements of the university for the degree.

The curriculum must develop in graduates knowledge that meets the criteria of good science; professional skills, attitudes, and values; and the ability to integrate and apply learning to both the present practice of pharmacy and the advancement of the profession. Graduates must be able to identify and implement needed changes in pharmacy practice and health care delivery.

## 2. College or School's Self-Assessment

The curriculum prepares graduates with the professional competencies to enter pharmacy practice in any setting to ensure optimal medication therapy outcomes and patient safety, satisfies the educational requirements for licensure as a pharmacist, and meets the requirements of the university for the degree.	Satisfactory
The curriculum develops in graduates knowledge that meets the criteria of good science; professional skills, attitudes, and values; and the ability to integrate and apply learning to both the present practice of pharmacy and the advancement of the profession.	Satisfactory
The curriculum fosters the development of students as leaders and agents of change. The curriculum helps students embrace the moral purpose that underpins the profession and develop the ability to use tools and strategies needed to affect positive change in pharmacy practice and health care delivery	Satisfactory
In developing knowledge, skills, attitudes, and values in students, the college or school ensures that the curriculum fosters the development of professional judgment and a commitment to uphold ethical standards and abide by practice regulations.	Satisfactory
The college or school ensures that the curriculum addresses patient safety, cultural competence, health literacy, health care disparities, and competencies needed to work as a member of or on an interprofessional team.	Satisfactory
Curricular content, instructional processes, course delivery, and experiential education are documented, aligned, and integrated where appropriate.	Satisfactory

## 3. College or School's Comments on the Standard

## Focused Questions

- ☒ A description of the college or school's curricular philosophy
- ☒ A description of how the curriculum fosters the development of students as leaders and agents of change and helps students to embrace the moral purpose that underpins the profession and develop the ability to use tools and strategies needed to affect positive change in pharmacy practice and health care delivery
- ☒ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard

- ☒ Any other notable achievements, innovations or quality improvements
- ☒ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

Keeping pace with contemporary pharmacy practice has always been a priority for curricular change at the University of Maryland School of Pharmacy (UMSOP). During the last 2005-2008 Strategic Plan, published on the heels of the 2005 ACPE self study, a faculty committee led by Dr. Stuart Haines was appointed to address the strategic goal of “*Revitalize curriculum, pathways and methodologies to ensure relevance and quality*” (Goal 1.1). The strategic committee for Curriculum Redesign was charged to “take the curriculum to the next level – not to tweak it but to do big thinking on a macro / 30,000-foot level.” The curriculum had been in place and relatively unchanged since the school went to all-PharmD in 1993. The committee laid the foundation for a redesign, looking at the current curricular outcomes and goals first to decide what kind of pharmacist the school should produce and then decide how best to do it. A new curriculum was introduced during the 2009-2010 academic year, responding to recommendations made after the last accreditation visit as well as feedback from stakeholders (e.g. preceptors, alumni) and trends in pharmacy education. The revised outcomes are described under Standard 12.

During the development of the terminal performance outcomes (TPOs), the following guiding principles were approved by the Faculty Assembly in 2008:

- ***Our professional curriculum will be innovative and flexible, based on strong basic sciences, have extensive clinical content taught by practice-based faculty members and emphasize the development of problem solving and collaborative skills. The curriculum will include curricular pathways that enable students to gain more advanced knowledge, skills, and experience in a specific area of practice (e.g. acute care, long-term care, ambulatory care), attain an advanced degree (e.g. MPH, Ph.D.), or prepare for post-graduate training (e.g. residencies, fellowships).***
- ***Our students will be responsible for their own learning with guidance from the faculty and their peers.***
- ***Our instructional activities will be driven by the terminal performance outcomes. All graduates from our program will be able to perform, consistently and confidently, the abilities needed to competently practice pharmacy.***
- ***Our School will create an educational community that extends beyond the traditional classroom and offers students and faculty members a variety of learning environments. Learning will include cultural and interprofessional programs which broaden the experiences of our graduates.***

The ongoing process of redesigning the curriculum was and continues to be a team effort, initially undertaken by a special subcommittee and later by the curriculum committee and instructional planning teams. Phased-in implementation began in the Fall of 2009. Notable changes included establishing two key course series at the heart of the PharmD curriculum: Abilities Labs and Pathophysiology, Pharmacology and Therapeutics (PP&T). These course series form the foundation upon which students develop the ability to use tools and strategies needed to affect positive change in pharmacy practice and research as well as address many of the concerns identified by stakeholders.

Pathophysiology, Pharmacology, and Therapeutics (PP&T) is a 27-credit, nine-course, three-semester series beginning in the spring of the first professional year. This series is a system based approach to understanding pathologic mechanisms, the relationship of these mechanisms to subjective and objective

findings, disease progression, and potential targets of treatment. These courses introduce and reinforce the integration of the basic and clinical sciences in therapeutic decision making. This integration is further emphasized in complex disease cases in the Pharmacotherapy courses in the third year. This early integration of faculty and cutting edge clinical topics helps to introduce clinical management, which is reinforced later on in the curriculum both through didactic as well as experiential courses.

Abilities Lab is a series of 6 courses that occur each semester during the first three years of the curriculum. Self-directed activities include pre-lab readings and study in pharmaceutical calculations, medical terminology, and drug knowledge; live exercises include participating in lab sessions, discussions, reflective journaling, and self-development assignments such as building and maintaining a curriculum vitae (CV). The sequence includes Objective Structured Clinical Examinations (OSCEs), quizzes, high stakes practical examinations, and written exams to assess knowledge retention of self-paced study. This course series is designed to introduce and reinforce contemporary pharmacy practice skills and drug knowledge necessary for advanced rotations in the fourth professional year. In addition, these skills help to build the foundation of professionalism and life-long learning.

To ensure alignment of the new curriculum with the UMSOP's curricular philosophy, the Curriculum Committee drafted and then the Faculty Assembly approved the following statement:

***The Doctor of Pharmacy program at the University of Maryland equips our graduates with the knowledge, skills and abilities to enter practice prepared to meet the challenges of a dynamic health care environment. The curriculum is designed to provide an excellent foundation for those graduates who choose to gain additional training in residencies or fellowships, or choose to complete a graduate degree. Starting with the biomedical sciences, the curriculum progresses to patient care and expands to deal with system and population issues. The accompanying experiential curriculum begins with an emphasis on pharmacist's roles, progresses to a consideration of persons as patients and then focuses on population-based concepts in practice. As graduates transition into practice, they emerge as life-long learners prepared to advance the pharmacy profession to meet the current and future health care needs of society.***

Also during the 2010-2015 strategic planning process, the faculty drafted and approved a pledge that asserts their desire to foster the development of students as leaders and agents of positive change in pharmacy practice and health care delivery. This faculty pledge states the following:

***We are proud to be critical thinkers, life-long learners, and leaders who are sought for our expertise. We earn our reputation with the highest standards of personal ethics and professional conduct. Students and education are central to everything we do. We engage the community; together, we contribute to the improved health of society. We celebrate the distinctive talents of our faculty, staff, and students. We honor our traditions and advocate for dynamic changes in pharmacy practice, education, and research. We create the future of pharmacy.***

Maintaining professionalism is of the highest priority within the UMSOP community. Professionalism is emphasized with a dress code for lab and professional activities, encouraged with small group interactions, and evaluated in pharmacy practice experiences throughout the curriculum.

When asked if ***the school of pharmacy effectively managed professional misconduct by students***, in 2011, 90% of graduating students agree (6% higher than peer schools), and 91% of faculty agree (11% above peer schools). When asked if ***the school of pharmacy effectively managed***

**academic misconduct by students**, 93% of graduating students agree (12% above peer schools), and 87% of faculty agree (5% above peer schools).

When asked if **students in my class year act in an appropriately professional manner IN SCHOOL**, 89% of P1-P3 students and 93% of graduating students agreed. When asked if **students in my class year act in an appropriately professional manner ON ROTATION**, 97% of P1-P3 students and 95% of graduating students agreed. When asked if **students in my class year act in an appropriately professional manner IN SOCIAL SITUATIONS**, 74% of P1-P3 students and 78% of graduating students agreed. It is interesting to note that only 73% of Baltimore graduating students agreed compared to 90% of Shady Grove graduating students. There is clearly some room for improvement in student social behavior, and the School continues to emphasize professionalism in all situations.

#### 4. College or School's Final Self-Evaluation

<input checked="" type="checkbox"/> Compliant	<input type="checkbox"/> Compliant with Monitoring	<input type="checkbox"/> Partially Compliant	<input type="checkbox"/> Non-Compliant
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#### 5. Recommended Monitoring

(School comments begin here)



## University of Maryland / School of Pharmacy

**10. Curricular Development, Delivery, and Improvement.**

The college or school's faculty must be responsible for the development, organization, delivery, and improvement of the curriculum. The curriculum must define the expected outcomes and be developed, with attention to sequencing and integration of content and the selection of teaching and learning methods and assessments. All curricular pathways must have both required and elective courses and experiences and must effectively facilitate student development and achievement of the professional competencies.

The curriculum for the professional portion of the degree program must be a minimum of four academic years or the equivalent number of hours or credits. The curriculum must include didactic course work to provide the desired scientific foundation, introductory pharmacy practice experiences (not less than 5% of the curricular length) and advanced pharmacy practice experiences (not less than 25% of the curricular length).

**2. College or School's Self-Assessment**

The college or school's faculty is responsible for the development, organization, delivery, and improvement of the curriculum.	Satisfactory
The curriculum defines the expected outcomes and is developed with attention to sequencing and integration of content and the selection of teaching and learning methods and assessments.	Satisfactory
All curricular pathways have both required and elective courses and experiences and effectively facilitate student development and achievement of the professional competencies.	Satisfactory
The curriculum for the professional portion of the degree program is a minimum of four academic years or the equivalent number of hours or credits.	Satisfactory
Introductory pharmacy practice experiences are not less than 5% (300 hours) of the curricular length.	Satisfactory
The advanced pharmacy practice experiences are not less than 25% (1440 hours) of the curricular length.	Satisfactory
On behalf of the faculty, the Curriculum Committee (or equivalent) manages curricular development, evaluation, and improvement to ensure that the curriculum is consistent with the collective vision of the faculty and administration.	Satisfactory
Learning outcomes for curricular courses and pharmacy practice experiences are mapped to the desired competencies and gaps and inappropriate redundancies identified inform curricular revision.	Satisfactory
Curricular design allows for students to be challenged with increasing rigor and expectations as they matriculate through the program to achieve the desired competencies. The curriculum design enables students to integrate and apply all competency areas needed for the delivery of holistic patient care.	Satisfactory
The Curriculum Committee (or equivalent) is constituted to provide balanced representation from all departments, divisions, and/or disciplines within the college or school.	Satisfactory

Faculty members are aware of the content, competencies, and learning outcomes for each other's courses and use that information to optimize these elements within their own courses.	Needs Improvement
The curriculum complies with university policies and procedures and the accreditation standards.	Satisfactory
Student representation and feedback are integral parts of curricular development and improvement.	Satisfactory
The Curriculum Committee (or equivalent) has adequate resources to serve as the central body for the management of orderly and systematic reviews of curricular structure, content, process, and outcomes, based on assessment data.	Satisfactory

### 3. College or School's Comments on the Standard

#### Focused Questions

- ☒ A description of the curricular structure, including a description of the elective courses and experiences available to students
- ☒ How both the didactic and experiential components comply with Standards for core curriculum and IPPE and APPEs in regard to percentage of curricular length
- ☒ Any nontraditional pathway(s) leading to the Doctor of Pharmacy degree (if applicable)
- ☒ Data that link teaching-and-learning methods with curricular outcomes
- ☒ How the results of curricular assessments are used to improve the curriculum
- ☒ How the components and contents of the curriculum are linked to the expected competencies and outcomes through curricular mapping and other techniques and how gaps in competency development or inappropriate redundancies identified inform curricular revision
- ☒ How the curricular design allows for students to be challenged with increasing rigor and expectations as they matriculate through the program to achieve the desired competencies and how the curriculum design enables students to integrate and apply all competency areas needed for the delivery of holistic patient care.
- ☒ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
- ☒ Any other notable achievements, innovations or quality improvements
- ☒ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

UMSOP faculty are collectively responsible for the development, organization, delivery, assessment, and improvement of the curriculum. This was evident in the recent curriculum redesign, which involved the entire faculty in organizing instructional concepts within their areas of expertise and more broadly across the entire program. According to the 2011 AACP standardized surveys, the majority of faculty agreed with their having a role in curricular development, delivery and improvement (AACP questions 40-46). UMSOP results are comparable to peer schools.

The Curriculum Committee (CC) is the central body for the management of curricular activities to ensure that the curriculum is consistent with the mission and vision of the School and meets accreditation

standards. Each department is represented on the CC by one faculty member and its Vice Chair for Education (VC). Two students participate as voting members, and other faculty and staff members participate in ex officio roles as needed, including the Associate and Assistant Deans for Academic Affairs, the Assistant Dean for Instructional Design and Technology, and the Assistant Dean for the Experiential Learning Program.

The Faculty Handbook defines the duties of the CC as formulation of curriculum policy, review of professional curricula; approval of changes in the curricula and review and approval of new educational programs. There are explicit procedures for faculty to propose new courses and a systematic process for CC course review, including standardized forms and tracking mechanisms. The CC may propose changes/modifications in the course and must approve all changes (minor changes, such as modifications to learning activities or updates to the content, do not require a review).

Each department's VC is responsible for assigning teaching duties, assuring professional development in instructional methods, and overseeing the effectiveness of instruction. After the end of each semester, the VC reviews student feedback (e.g. course evaluations) for each course taught by faculty in their department and provides advice on improving both the course and the quality of the instruction. The Associate Dean for Academic Affairs and the Dean have oversight for the professional program, and meet with faculty members and/or the chairs if issues surrounding teaching effectiveness or student learning are identified.

The PharmD curriculum's didactic and experiential components comply with ACPE standards. Total credits required for graduation is 145, including 97 credits of required didactic coursework and at least 11 didactic elective credits. Almost 40 credits of didactic elective opportunities are offered each semester. Course descriptions can be found in the UMSOP's online catalog; course syllabi are available in a secure web-based portal. According to the School's 2011 surveys, the majority of UMSOP graduating students and alumni indicated either agreement or strong agreement with the selection of elective courses met their needs as a PharmD. These results are comparable to peer schools.

Due to the recent national focus on program accountability, a CC subcommittee was tasked in 2010 with researching and reporting on the definition and measurement of a credit hour. This was essential because credit hour calculations are used in curricular design, to verify course contact hours, to define equivalencies in faculty and student workload across courses, and to determine a student's GPA. The subcommittee recommended and the faculty adopted a policy for the determination of credit for institutionally established learning outcomes and verifiable student achievement in the UMSOP PharmD program. This policy conforms to the Code of Maryland Regulations § 13B.02.02.16D. As a result, student and faculty perceptions were supported by an objective assessment that four of the six Abilities Labs courses were "underweight" for their contact time, and an additional half-credit was allocated to each course.

UMSOP provides a comprehensive yet flexible curriculum to prepare competent pharmacy practitioners who can excel in a broad range of professional roles. Many courses are team-taught involving faculty from each department in order to integrate a wide range of subject matters. Course sequencing is designed to introduce students to the theoretical framework for contemporary practice in the classroom, while simultaneously providing opportunities to observe and apply these concepts in the professional pharmacy laboratory and during early professional experiences. Advanced didactic courses in Year 3 require students to integrate a broad range of knowledge and skills through a series of abilities-based activities and assessments, and prepare them for advanced practice experiences in Year 4.

Students are taught the critical thinking process through a variety of instructional methods. These include lectures, case studies, role play, demonstrations, group projects, problem-based learning, and experiential learning; delivery methods include recordings, synchronous video and web-based discussions. Overall, 2011 survey results indicate that the vast majority of students agreed that each year of the professional curriculum adequately prepared them for the subsequent year and future practice.

The results of various internal and external assessments were used to improve the curriculum during the recently completed redesign and are now integrated into an ongoing evaluation process. Several important recommendations for curriculum redesign had been identified through peer analysis, self-study and ACPE evaluations. These included “specific content areas &hellip;such as management and communication skills and public health issues# (Self Study 2005), “strategies and opportunities to enhance integration of content and skills# (Self Study 2005), “continued development of the School’s array of pharmacy practice facilities (Self Study 2005)#, “[development and monitoring of] introductory and advanced practice experiences to support both campuses# (Focused Visit 2007), “continue to evaluate curricular performance and achievement of professional competencies, especially as students progress through the advanced-practice experiences# (Focused Visit 2007), and “access to elective courses early in the curriculum# (Focused Visit 2007). The new curriculum and other programmatic changes have been implemented in response to the above-described recommendations. The changes are detailed in Standards 11-14.

The expected competencies and outcomes are defined in the curriculum. The ACPE Standards as well as the Report by the Center for the Advancement of Pharmaceutical Education (CAPE) Advisory Panel on Educational Outcomes have governed the UMSOP PharmD curricular design. Their influence is apparent in the School’s TPOs: there are 16 main outcomes, each with several sub-outcomes for a total of 63 items. The TPOs align with the 2004 CAPE Educational Outcomes as well as with the NAPLEX blueprint. Curriculum mapping enables the School to identify and monitor where the TPOs and the science foundation concepts listed in Appendix B of the ACPE Standards are taught and at what level of emphasis. By applying formulas to distribute the relative credit weight of each concept or outcome, the School has been able to visualize the shifts of a curricular revision. Notably, the distribution of Appendix B curricular content in the revised curriculum also aligns with the areas of focus of the National Board of Pharmacy’s (NABP’s) Pharmacy Curriculum Outcomes Assessment (PCOA), although this was not a goal of the redesign.

The PharmD curriculum challenges students with increasing rigor and expectations as they matriculate through the program. As described in Standard 9, there are two key course series at the heart of the revitalized PharmD curriculum: Pathophysiology, Pharmacology and Therapeutics (PP&T) and Abilities Labs. Together these courses integrate the basic and clinical sciences in therapeutic decision making and contemporary pharmacy practice skills. In combination with a public health course sequence, diverse clinical specialty electives, and a strong experiential program, the UMSOP PharmD coursework and training enables graduates to emerge as life-long learners prepared to advance the pharmacy profession to meet the current and future health care needs of society. Additional detail is provided in Standards 13 and 14.

UMSOP is committed to continuously updating and refining the professional curriculum to reflect the dynamic changes of the profession, as discussed further in Standard 15. The curriculum content and sequence will continue to be updated and balanced based on expected changes to the ACPE standards and changes in the field of pharmacy and medicine. It can be anticipated that additional external factors,

such as changing national competency requirements or emerging new technologies, will need to be reflected in adjustments to the core curriculum.

Overall, the students, faculty and alumni are satisfied with the curricular development, delivery and improvement efforts in the School as reflected by the AACCP surveys. One area identified for further effort during this self-study is that although course managers are aware of content, sequencing and outcomes in other courses through the mapping process, faculty instructors may be less aware and therefore may not be optimizing their lectures. To address this, the School held a mandatory half-day faculty retreat on accreditation in May 2012. Faculty and key staff participated in activities on curricular mapping, program assessment and what to expect when you're expecting a site visit. Agreement was 87% with "this retreat was effective for my understanding of the School's self-study report and evaluation visit." Understanding of the structure and content of the PharmD curriculum was 77% before the retreat, 88% after the retreat. Understanding of PharmD programmatic assessment was 72% before the retreat, 86% after the retreat.

#### 4. College or School's Final Self-Evaluation

<input type="checkbox"/> Compliant	<input checked="" type="checkbox"/> Compliant with Monitoring	<input type="checkbox"/> Partially Compliant	<input type="checkbox"/> Non-Compliant
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#### 5. Recommended Monitoring

(School comments begin here)

Currently the revised curriculum is in its early stages of implementation so the School will need to continue to monitor elements within this Standard, such as ensuring faculty's adequate integration of content taught across the curriculum. Multi-faculty involvement in most didactic courses, ongoing communication with course managers, and a specific session at the 2012 faculty retreat was effective in raising awareness of content and outcomes.

## University of Maryland / School of Pharmacy

**11. Teaching and Learning Methods**

The college or school, throughout the curriculum and in all program pathways, must use and integrate teaching and learning methods that have been shown through curricular assessments to produce graduates who become competent pharmacists by ensuring the achievement of the stated outcomes, fostering the development and maturation of critical thinking and problem-solving skills, meeting the diverse learning needs of students, and enabling students to transition from dependent to active, self-directed, lifelong learners.

**2. College or School's Self-Assessment**

The program, throughout the curriculum and in all pathways, uses and integrates teaching and learning methods that have been shown through curricular assessments to meet the diverse learning needs of students and produce the desired professional competencies and outcomes, including the development and maturation of critical thinking, problem-solving, and self-directed, lifelong learning skills.	Needs Improvement
Faculty members use a variety of teaching and learning techniques (e.g., active learning, case studies, etc.) that have been thoughtfully selected, designed, and/or tailored to help students achieve the learning outcomes articulated for their courses.	Satisfactory
The college or school evaluates the effectiveness of its curricular innovations through its assessment activities.	Needs Improvement
The outcomes of the distance-learning activities are appropriate for the student population and achievable through distance study.	Satisfactory
Teaching and learning methods used assure that learning experiences, opportunities, and outcomes are comparable for all pathways, branches or campuses.	Satisfactory

**3. College or School's Comments on the Standard****Focused Questions**

- ☒ A description of teaching and learning methods and strategies employed in the delivery of the curriculum, including nontraditional pathway(s) leading to the Doctor of Pharmacy degree (if applicable), and how those methods are expected to advance meaningful learning in the courses in which they are employed.
- ☒ Efforts of the college or school to address the diverse learning needs of students
- ☒ The formative and summative assessments used to evaluate teaching and learning methods used in the curriculum, including nontraditional pathway(s) leading to the Doctor of Pharmacy degree (if applicable)
- ☒ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
- ☒ Any other notable achievements, innovations or quality improvements
- ☒ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

In order to assure that students are able to learn using a variety of methods to match their own learning styles, the UMSOP PharmD curriculum is delivered through a variety of approaches including recorded and synchronously delivered lectures, case discussions, small group activities, interactions with standardized patients, laboratories, and a broad array of experiential education opportunities. Students also have opportunity for both individual and group learning. In order to assure that student knowledge, skills, and attitudes vertically and horizontally build towards achievement of the program's terminal outcomes, the curriculum purposefully escalates from a more dependent, lecture-based teaching style in year one to more student-directed, active-learning based teaching styles in year three. Examples of these active-learning methods include courses that are entirely case-based and courses that rely heavily on student debates. Expectations for level of knowledge and skill also increase over time. For example, students first learn the basics of therapeutics in single disease-state models during years one and two of the curriculum, then progress to more complex, multi-disease state, case-based learning of therapeutics in year three of the curriculum.

The curriculum has been thoughtfully designed to assure that learning experiences are as identical as possible for UMSOP students at both campuses. Academic performance and student opinion has been carefully tracked and has been found to be comparable between campuses. In spring 2011 course evaluations, 89% of continuing students agree or strongly agree that "the types of learning activities in this course were valuable to my understanding of the material# (Question #5) and 92% agree or strongly agree that "I have achieved the stated course goals/expected outcomes# (Question #12). Additionally, 93% of students note that they are given adequate opportunities for active learning, and there is evidence that this percentage increases each academic year within the new curriculum. This percent agreement is also higher than what was reported by students in the old curriculum, indicating that efforts to increase active learning have been successful despite the fact that faculty continue to debate the value of student attendance at recorded lectures, which has dropped substantially since the introduction of Mediasite technology.

In order to more effectively manage the delivery of the PharmD curriculum, in 2010 the dean formed an Instructional Technology Visioning Working Group to consider optimal teaching and learning strategies using technology. Their final report is attached to this standard. The committee recommended employing a mix of prerecorded lectures with required interactive sessions that solely utilize active learning to engage students in processing the prerecorded lecture material, (i.e., a hybrid model). Given that several courses in the current curriculum require modest content updates from one academic year to another, there could be a benefit from the efficiency and convenience of prerecorded lectures. This approach would allow faculty to hold students accountable for applying and synthesizing knowledge through focused interactive sessions and workshops.

Following this working group's efforts, the School applied for and was awarded a competitive University System of Maryland grant, funded by the Carnegie Foundation under the System-wide "Carnegie Course Redesign Initiative.# The purpose of the initiative is to redesign traditional large lecture courses using technology-supported active learning strategies with a goal of improvements in learning outcomes and reductions in instructional costs. The \$20,000 award, plus a \$20,000 commitment from the School itself, will support a large-scale redesign of the Pharmaceutics course in the Doctor of Pharmacy program. The redesign of Pharmaceutics will serve as a model for future PharmD courses. The new course will launch in the spring of 2013.

Students are assessed via a variety of methods in the curriculum. Although many didactic courses still rely on multiple choice examinations, there has been a concerted effort to increase the number

and variety of alternative assessment methods. Examples include open-ended case-based questions, debates, practical examinations, and Objective Structured Clinical Examinations (OSCEs). Many courses have incorporated lower-stakes quizzes and audience response questions into lecture that allow students to receive formative feedback about content mastery before the summative exam. In the abilities lab sequence, students are given numerous opportunities for formative feedback on critical skills prior to practical testing, and the course is passed once those critical skills are demonstrated at an acceptable level. In evaluating student perception of the appropriateness of course assessment methods as reflected in the spring 2011 didactic course evaluations, 77% agree or strongly agree that “exams and assessments accurately measured my understanding of the course content# (standard question #10).

One noted area for potential continued improvement is incorporation of curricular elements that help transition the student from a dependent learning to a self-directed learner. Across all AACCP surveys (faculty, student, alumni, and preceptor), the level of agreement is generally higher than our peers in this area, although between 7 – 17% of respondents disagreed. However, it must be noted that this data only reflect the perceptions of students and interactions with students who matriculated through our old curriculum. Consequently, whether this is a true continued deficiency of the new curriculum can only be made starting with surveys regarding the class that graduates in 2013. In the meantime, the continuing student survey indicates that 93% of current students also agree with the statement that the curriculum is preparing them for continued learning after graduation. This will be an area of curricular emphasis that should be closely scrutinized by the curriculum committee in upcoming years. A second identified area for improvement in meeting and exceeding this standard is continued improvement of the curricular assessment process. Currently, assessment data relies heavily on student reaction to learning via course evaluations – and to date this has been appropriate as the new curriculum has been implemented. At this point in time, additional outcomes should be examined to assure that curricular intent, student perceptions, and actual performance align. Please refer to Standard 15 for further discussion of this matter.

In the School's continued efforts to exceed the expectation of this standard, the purposeful inclusion and assessment of additional “innovative# teaching methods, such as problem-based learning, team-based learning, etc., can be expanded since the current curriculum still relies heavily at times on lecture-based and case-based methods. Recent discussions at the Assessment Committee level have addressed this issue. Faculty in elective courses with smaller enrollments will be encouraged to explore such methods first. If successful, piloting and testing within larger required coursework will be possible.

In summary, the UMSOP is proud of the improved variety of teaching, learning, and assessment methods that have been built into our new curriculum. Although continued innovation is desired, we are encouraged by the improving responses of students to these methods.

#### 4. College or School's Final Self-Evaluation

<input checked="" type="checkbox"/> Compliant	<input type="checkbox"/> Compliant with Monitoring	<input type="checkbox"/> Partially Compliant	<input type="checkbox"/> Non-Compliant
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#### 5. Recommended Monitoring

(School comments begin here)



## University of Maryland / School of Pharmacy

**12. Professional Competencies and Outcome Expectations**

Professional pharmacist competencies that must be achieved by graduates through the professional degree program curriculum are the ability to:

1. Provide patient care in cooperation with patients, prescribers, and other members of an interprofessional health care team based upon sound therapeutic principles and evidence-based data, taking into account relevant legal, ethical, social, cultural, economic, and professional issues, emerging technologies, and evolving biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences that may impact therapeutic outcomes.
2. Manage and use resources of the health care system, in cooperation with patients, prescribers, other health care providers, and administrative and supportive personnel, to promote health; to provide, assess, and coordinate safe, accurate, and timesensitive medication distribution; and to improve therapeutic outcomes of medication use.
3. Promote health improvement, wellness, and disease prevention in cooperation with patients, communities, at-risk populations, and other members of an interprofessional team of health care providers.

These professional competencies must be used to guide the development of stated student learning outcome expectations for the curriculum. To anticipate future professional competencies, outcome statements must incorporate the development of the skills necessary to become self-directed lifelong learners.

**2. College or School's Self-Assessment**

Professional Competencies 1, 2 and 3 guide the development of stated student learning outcome expectations for the curriculum.	Satisfactory
The curriculum prepared graduates to provide patient care in cooperation with patients, prescribers, and other members of an interprofessional health-care team based upon sound scientific and therapeutic principles and evidence-based data.	Satisfactory
The curriculum fosters an understanding of, and an appreciation for, the legal, ethical, social, cultural, economic, and professional issues, emerging technologies, and evolving biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences that may impact therapeutic outcomes.	Satisfactory
The curriculum prepares graduates to manage and use resources of the health care system, in cooperation with patients, prescribers, other health care providers, and administrative and supportive personnel, to promote health; to provide, assess, and coordinate safe, accurate, and time-sensitive medication distribution; and to improve therapeutic outcomes of medication use.	Satisfactory
The curriculum prepares graduates to promote health improvement, wellness, and disease prevention in cooperation with patients, communities, at-risk populations, and other members of an interprofessional team of health care providers.	Satisfactory
Outcome statements include developing skills to become self-directed lifelong learners.	Satisfactory
The curriculum prepares graduates to independently seek solutions to practice-based problems in the scientific and clinical literature.	Satisfactory

Graduates possess the knowledge, skills, attitudes, and values needed to enter practice pharmacy independently by graduation.	Satisfactory
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### 3. College or School's Comments on the Standard

Focused Questions
<input checked="" type="checkbox"/> A description of the professional competencies of the curriculum
<input checked="" type="checkbox"/> A description of the assessment measures and methods used to evaluate achievement of professional competencies and outcomes along with evidence of how feedback from the assessments is used to improve outcomes
<input checked="" type="checkbox"/> How the curriculum is preparing graduates to work as members of an interprofessional team, including a description of the courses that focus specifically on interprofessional education
<input checked="" type="checkbox"/> How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
<input checked="" type="checkbox"/> Any other notable achievements, innovations or quality improvements
<input checked="" type="checkbox"/> Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

**Terminal Performance Objectives (TPOs).** Professional Competencies 1, 2 and 3 guided the development of student learning outcomes during the UMSOP's recent curriculum revitalization. In 2005, a faculty committee began by reviewing the TPOs for currency; surveyed faculty and external stakeholders for feedback on whether the outcomes were consistent with CAPE Outcomes, ACPE Standards, and the school's own strategic direction; and ultimately published the current TPOs. Changes included reworking the outcomes from two Patient Level and System Level groupings into the three CAPE Outcomes areas (pharmaceutical care, health care system, public health), adding a statement on adhering to legal, ethical, social, economic and professional guidelines, as well as re-working the system management outcomes. The strategic committee noted that the curriculum should require student self-directed learning projects to address the need for students to know how to maintain professional competency.

Dr. Wendy Duncan-Hewitt was invited to campus in March 2006 to provide perspective on curriculum design and assessment to the Curriculum Committee, and the strategic committees on Curriculum Redesign and Program Delivery. Dr. Susan Meyer at AACP was also consulted for advice on benchmarking other schools of pharmacy that had unique / cutting edge curriculum – particularly those that emphasized careers in academics, research, and public health (the three areas the School wanted to enhance as part of the strategic plan). An Educational Advisory Board was formed by Dean Knapp to garner additional advice from local external stakeholders regarding the TPOs and how best to prepare students for the future of pharmacy practice.

To avoid redundancy of faculty effort and gain greater buy-in, the 2006-2007 Curriculum Committee (CC) was tasked “to review the entire curriculum in order to determine what revisions will be necessary to meet the proposed curricular outcomes developed by the strategic initiative task force.” The CC held a transition meeting with the Strategic Initiative Task Force on Curriculum in late summer 2006, and then the strategic committee was dissolved.

In 2008, the Office of Academic Affairs re-structured the CC's early mapping efforts into visually useful and quantifiable information. The list of 16 TPOs and numerous sub-outcomes (total = 63) was outline-numbered, and then sorted into the three CAPE Outcome areas. The numbering proved somewhat problematic because many of the TPOs contained multiple skills and were not written with mapping in mind. Simplifying an assessable list of skills is an area for improvement the next time the TPOs are updated.

In a broad sense, there are four cross-cutting abilities or curricular threads that “weave# the curriculum together in order to communicate the integration of material and activities. These are Pharmaceutical Care, Systems Management, Population/Public Health, and Continuing Professional Development. These curricular threads were woven into the terminal performance outcomes, which guided curriculum design, which in turn formed the roadmap for course development. Successful student progression through the curriculum can be defined as incremental achievement of each of these four abilities throughout the program's didactic and experiential learning activities. A competent graduate will possess the basic knowledge, skills, attitudes, and values to practice pharmacy independently and will be a self-directed lifelong learner.

TPOs that reflect CAPE Outcome 1 include participating in the development of and educating patients regarding patient-specific therapeutic plans; selecting the appropriate dosage form, formulation, route of drug administration, and /or drug delivery system; triaging patients; maximizing appropriate drug use behaviors; and participating in the process of monitoring patient outcomes. TPOs that reflect CAPE Outcome 2 include providing drug products to patients; using technology effectively to carry out professional functions; preparing medications for patient use and administering drug products; and identifying payment sources and mechanisms for professional services and products. TPOs that reflect CAPE Outcome 3 include participating in quality assurance processes related to drug use, health education, and health policy decision-making processes related to drug use; and maintaining professional competence.

Because knowledge and skill are not exclusive measures of ability, the Office of Academic Affairs surveys students annually on their self-confidence to execute the school's TPOs in various case-based scenarios. This provides valuable insight into student maturation and their development into becoming competent AND confident pharmacy practitioners.

**Interprofessional Education.** The UMSOP curriculum is preparing graduates to work as members of an interprofessional team. Several of the TPOs emphasize the importance of collaborating and communicating with physicians, other healthcare professionals, patients, and caregivers. Several required pharmacy courses include interprofessional communication, team decision making and care provision. For example, Context of Health Care provides a multidisciplinary view of the role of pharmacy and pharmacists in the context of the US health care system through examination of the social, legal, economic, public health, and professional implications of pharmacy practice. Other required courses include Abilities Lab V and Epidemiology & Medical Evidence.

New interdisciplinary electives have been developed over the last few years both within the UMSOP and in other schools on the Baltimore and Shady Grove campuses. This includes Geriatric Imperative and Interprofessional Approaches to the Critically Ill Patient. UMSOP students have always had a strong interest in dual degrees, with at least 12% of graduating students in 2011 reporting participation in dual degrees compared to 2% of graduates from peer schools.

UM President Jay A. Perman, MD, established an Interprofessional Education (IPE) task force that was charged with creating or broadening existing opportunities for interdisciplinary education. <http://www.umaryland.edu/president/ipe/>. Membership included representatives at the associate dean level from all schools on campus. This work informed the campus strategic plan, and President Perman selected Dean Eddington to co-chair the campus strategic plan implementation committee on interprofessional education, clinical care and practice, and public service. The dean has also recently spearheaded collaborations with Johns Hopkins Hospital (JHH) through their senior director of pharmacy to expand upon and enhance this relationship; interprofessional education and experiences is among the many potential opportunities that will be explored.

The Universities at Shady Grove (USG) has established a standing committee on Collaboration, Interprofessional and Interdisciplinary Education Strategies (CIPES). This group has been very active in planning electives, seminars and weekly faculty brown bag lunches, and is chaired by Dr. Heather Congdon, the UMSOP assistant dean for USG. The committee strives for interprofessional and interdisciplinary collaborations through educational coursework and laboratories, community outreach, and scholarship innovations; faculty development training in interprofessional and interdisciplinary education; and research on interprofessional and interdisciplinary education initiatives at USG.

In addition to coursework, students may experience a variety of professional and social interprofessional interactions. This is monitored via the annual AACP surveys of faculty and graduating students, and through internal surveys of staff and continuing (P1-P3) students.

On the 2011 AACP graduating student survey, 97% strongly agreed or agreed “the PharmD program prepared me to practice pharmacy in interprofessional and collaborative practice settings.” This is consistent with both peer and national data. Also, 99% strongly agreed or agreed “my pharmacy practice experiences allowed me to collaborate with other health care professionals.” Peer and national averages were 98%.

On the internal 2011 Continuing Student Survey, 89% of all students strongly agreed or agreed “the school encourages and makes available innovative interdisciplinary, interprofessional and international experiences in education, practice and research.” By class year, the level of agreement declines slightly: 91% of P1 students, 88% of P2 students, and 87% of P3 students. The level of agreement is consistent between campuses. Note that P3 students (Class of 2012) referenced in this report were on the old curriculum.

On the 2011 AACP faculty survey, 94% strongly agreed or agreed “curricular collaboration among disciplines is encouraged at my college/school.” This is 8% higher than peer institutions (86%). Also, 94% strongly agreed or agreed “the PharmD program prepares students to communicate with patients, caregivers, and other members of the interprofessional health care team” (14% of faculty were unable to comment on this item). This is 4% lower than peer institutions (98%).

The same set of ‘interprofessional’ questions was added to each of the School’s 2011 surveys. When asked whether they interact regularly with other academic/ professional backgrounds, 88% of staff agree, 66% of faculty agree, 32% of P1-P3 students and 40% of graduating students agree. When asked whether they socialize regularly with other academic/professional backgrounds, 58% of staff agree, 44% of faculty agree, and 36% of P1-P3 and graduating students agree. Increasing the opportunities for students to have interprofessional academic interactions and social experiences is noted as an area for improvement.

4. College or School's Final Self-Evaluation

<input checked="checked" type="checkbox"/> Compliant	<input type="checkbox"/> Compliant with Monitoring	<input type="checkbox"/> Partially Compliant	<input type="checkbox"/> Non-Compliant
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5. Recommended Monitoring

(School comments begin here)

## University of Maryland / School of Pharmacy

**13. Curricular Core - Knowledge, Skills, Attitudes and Values**

To provide the thorough scientific foundation necessary for achievement of the professional competencies, the curriculum of the professional degree program must contain the following:

- biomedical sciences
- pharmaceutical sciences
- social/behavioral/administrative sciences
- clinical sciences

Knowledge, practice skills, and professional attitudes and values must be integrated and applied, reinforced, and advanced throughout the curriculum, including the pharmacy practice experiences.

**2. College or School's Self-Assessment**

The curriculum contains at an appropriate breadth and depth the necessary elements within the following areas as outlined in Appendix B of the Standards:	Satisfactory
biomedical sciences	Satisfactory
pharmaceutical sciences	Satisfactory
social/behavioral/administrative sciences	Satisfactory
clinical sciences	Satisfactory
The content of curricular courses is mapped to Appendix B to assess where specific content foundations are addressed in the curriculum. Gaps in curricular content and inappropriate redundancies identified in the mapping process inform curricular revision.	Satisfactory
The didactic course work provides a rigorous scientific foundation appropriate for the contemporary practice of pharmacy.	Satisfactory
Knowledge, practice skills, and professional attitudes and values are integrated and applied, reinforced, and advanced throughout the didactic and experiential curriculum.	Satisfactory
The biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences are of adequate depth, scope, timeliness, quality, sequence, and emphasis to provide the foundation and support for the intellectual and clinical objectives of the professional degree program and the practice of pharmacy.	Satisfactory
The sciences provide the basis for understanding the development and use of medications and other therapies for the treatment and prevention of disease.	Satisfactory
Courses and other formal learning experiences are coordinated and integrated across disciplines.	Satisfactory
Where instruction is provided by academic units of the university other than the pharmacy program, these areas are developed in accordance with the professional degree program's curricular goals and objectives; and assessment liaison mechanisms ensure effective instructional delivery and achievement of the educational objectives of the program.	

### 3. College or School's Comments on the Standard

#### Focused Questions

- ☒ The curricular structure and content of all curricular pathways
- ☒ A description of the breadth and depth of the biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences components of the didactic curriculum, and the strategies utilized to integrate these components
- ☒ How the curricular content for all curricular pathways is linked to Appendix B of Standards 2007 through mapping and other techniques and how gaps in curricular content or inappropriate redundancies identified inform curricular revision
- ☒ Examples of assessment and documentation of student performance and the attainment of desired core knowledge, skills and values
- ☒ Evidence that knowledge, practice skills and professional attitudes and values are integrated, reinforced and advanced throughout the didactic and experiential curriculum
- ☒ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
- ☒ Any other notable achievements, innovations or quality improvements
- ☒ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

The PharmD curriculum contains the necessary elements within the four areas as outlined in Appendix B of the ACPE Standards, with adequate depth, scope, timeliness, quality, sequence, and emphasis to provide the foundation and support for the intellectual and clinical objectives of the professional degree program.

The Curriculum Committee (CC) mapped each curricular outcome through existing coursework and assessments to identify where aspects of each outcome were taught in the current courses. The CC then discussed how each outcome should evolve from the top down without regard to courses, which enabled them to identify any missing or duplicate concepts. The CC also reviewed Appendix B and CAPE Outcomes and listed any that were relevant to the School's outcomes. Once these lists were completed, the CC met with each course manager to determine what is being covered in their course and what non-required material is being covered.

As part of this early curriculum mapping process, the pharmaceutical sciences faculty were asked by the CC to discuss sequencing and content modifications to chemistry and biology courses in order to eliminate redundancies and still cover the material necessary to begin therapeutics earlier in the curriculum. There was a great deal of support among CC members for teaching pathophysiology, pharmacology and therapeutics (PP&T) simultaneously. The rationale is that students would review disease states and learn to integrate the pharmacology of the medications at the same time. The PP&T course series would be conducted over three semesters beginning with the spring semester of the P1 year. Benchmarking other institutions revealed that UNC starts therapeutics in the first year while VCU starts it in the fall of year two. Therefore, this concept was consistent with other schools of pharmacy.

Dr. Robert Blouin, Professor and Dean at the University of North Carolina Eshelman College of Pharmacy, was invited to campus in April 2007 to discuss the use of instructional technology to improve

student learning and create faculty efficiency in teaching. This was intended to spur innovative thinking during the curriculum redesign, particularly with knowledge-based courses.

In order to implement ACPE's requirement of completion of all didactic courses prior to beginning APPEs, two required didactic courses had to move from the P4 year. To make the shift, Pharmacy Law was taught to both P3 and P4 students in spring 2009 and subsequently became a P3 course. Senior Colloquium was abolished as a required course beginning with the Class of 2009. During 2007-2008, the CC approved an emerging curricular structure and sequencing of basic science concepts necessary for implementation of pathophysiology, pharmacology and therapeutics in the spring of the P1 year.

At the same time that the faculty were discussing huge curricular changes, Dean Knapp announced the June 2006 directive from the Board of Regents to increase enrollment which triggered the massive planning efforts for fall 2007 implementation of the Shady Grove initiative, as described in the school's submissions to ACPE in August 2006 and beyond. Dr. Knapp then announced stepping down as dean at the end of the 2006-2007 academic year. Natalie Eddington, PhD, was selected as dean in July 2007.

During the summer of 2008, a subcommittee of the CC was chaired by Dean Eddington, to focus on developing objectives and general content outlines for core didactic courses in the new curriculum. Throughout the summer, the subcommittee consulted Greg Williams, Ed.D., Director of the Instructional Systems Development master's program at the University of Maryland, Baltimore County. He also met with the faculty on instructional design and assessment approaches that enhance student engagement.

The subcommittee adhered to the following Guiding Principles:

- Focus scientific foundation on major concepts relevant to the practice of pharmacy;
- Challenge students to apply these concepts to pharmacy practice; and
- Provide opportunities for students to more deeply understand and apply scientific concepts once they have a greater appreciation of pharmacy practice and therapeutics.

These principles would be operationalized by moving therapeutics earlier in the curriculum; truly integrating pathophysiology, pharmacology and therapeutics to reduce "re-teaching"; emphasizing complex conditions and comorbidities by providing opportunities to apply therapeutics to realistic situations; tracking and assessing the development of practice skills longitudinally with a consistent skills (abilities) lab experience; and introducing structured opportunities to utilize science principles late in the didactic curriculum.

In October 2008, Dean Eddington appointed Dr. Raymond Love as Associate Dean of Curriculum, Instructional Design and Technology. As former chair of the Curriculum Committee (2006-2008), Dr. Love continued his efforts to oversee the course design and sequencing for the new curriculum. He formed interdisciplinary "instructional planning teams" (IPTs) of faculty for each course. Dr. Love led the IPTs through the design of measurable objectives, a catalog description, content areas, sequence and activities. The Curricular Redesign Steering Committee, consisting of the administrative leadership team and department chairs, provided oversight of faculty resources and assured that material was not duplicated. The Curriculum Committee received material for review in two stages: course objectives first; followed later by content areas, sequence, and activities. The Office of Academic Affairs then followed up with faculty to map the science content in each course to Appendix B of the ACPE Standards, using the "introduced/reinforced/emphasized" criteria that were also used to map the terminal performance outcomes, as described in Standard 12.



Knowledge, practice skills, and professional attitudes and values are integrated and applied, reinforced, and advanced throughout the curriculum, including the pharmacy practice experiences. Examples of concept integration and sequencing can be visualized in the attached concept maps for Diabetes, Hypertension and Professional Development.

To ensure that the courses are implemented as they were envisioned, research and clinical faculty continue to collaborate during course delivery. In many instances, faculty attend the lectures leading up to their own lectures to better understand where their material fits into the course structure. Junior faculty are especially encouraged to do so. This participation minimizes duplication and enhances both the student and teaching experiences. Course managers assess student performance and the attainment of desired core knowledge, skills and values through regular quizzes and examinations, as well as practical assessments in skills-based courses.

The Office of Academic Affairs performs a mid-semester check of major exam scores to identify students in early academic difficulty, for intervention by the Office of Student Affairs. At the end of each semester, course managers are provided with course evaluations and course grade updates and asked to document their reflection on the results. Course grade updates include data on major exam score averages and final letter grades, compared by campus to monitor equivalency and progress of students at both locations. NAPLEX and MPJE performance are reviewed as additional outcomes measurements.

Feedback on the 2011 Graduating Student Survey indicates that 94% of respondents, agreed that *"pharmacy related elective courses met my needs as a PharmD student,"* compared to 90% of peers and 86% nationally. Feedback on the 2010 Alumni Survey indicates a level of agreement consistent with or slightly below peers and national institutions 85% of UMSOP alumni agreed that *"pharmacy related elective courses met my needs as a PharmD student,"* compared to 90% of peers and 84% nationally. Note that some large electives in the old curriculum such as OTC and Pharmacotherapy are now required in the new curriculum; satisfaction with electives will continue to be monitored.

Graduating students are consistent with peers and nationally, with 97% agreement on *"the PharmD program prepared me to practice pharmacy in interprofessional and collaborative practice settings"* and *"the program included opportunities to develop professional attitudes, ethics and behaviors."*

#### 4. College or School's Final Self-Evaluation

<input checked="" type="checkbox"/> Compliant	<input type="checkbox"/> Compliant with Monitoring	<input type="checkbox"/> Partially Compliant	<input type="checkbox"/> Non-Compliant
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#### 5. Recommended Monitoring

(School comments begin here)

## University of Maryland / School of Pharmacy

**14. Curricular Core - Pharmacy Practice Experiences**

The college or school must provide a continuum of required and elective pharmacy practice experiences throughout the curriculum, from introductory to advanced, of adequate scope, intensity, and duration to support the achievement of the professional competencies presented in Standard 12.

The pharmacy practice experiences must integrate, apply, reinforce, and advance the knowledge, skills, attitudes, and values developed through the other components of the curriculum. The objectives for each pharmacy practice experience and the responsibilities of the student, preceptor, and site must be defined. Student performance, nature and extent of patient and health care professional interactions, where applicable, and the attainment of desired outcomes must be documented and assessed.

In aggregate, the pharmacy practice experiences must include direct interaction with diverse patient populations in a variety of practice settings and involve collaboration with other health care professionals. Most pharmacy practice experiences must be under the supervision of qualified pharmacist preceptors licensed in the United States.

**2. College or School's Self-Assessment**

The college or school provides a continuum of required and elective pharmacy practice experiences throughout the curriculum, from introductory to advanced, of adequate scope, intensity, and duration to support the achievement of the professional competencies presented in Standard 12.	Satisfactory
The pharmacy practice experiences integrate, apply, reinforce, and advance the knowledge, skills, attitudes, and values developed through the other components of the curriculum.	Satisfactory
Pharmacy practice experiences include periods for preparation and guided reflection.	Satisfactory
The objectives for each pharmacy practice experience and the responsibilities of the student, preceptor, and site are defined.	Satisfactory
Goals and outcomes for each pharmacy practice experience are mapped to activities listed in Appendix C to ensure that students' experience will cover, at a minimum, all the listed activities.	Needs Improvement
Student performance, nature and extent of patient and health care professional interactions, where applicable, and the attainment of desired outcomes are documented and assessed.	Satisfactory
In aggregate, the pharmacy practice experiences include direct interaction with diverse patient populations in a variety of practice settings and involve collaboration with other health care professionals.	Satisfactory
Most pharmacy practice experiences are under the supervision of qualified pharmacist preceptors licensed in the United States.	Satisfactory
The college or school ensures that all preceptors (especially first-time preceptors prior to assuming their responsibilities) receive orientation regarding the outcomes expected of students and the pedagogical methods that enhance learning, ongoing training, and development.	Needs Improvement

A quality assurance procedure is in place that facilitates standardization and consistency of experiences and outcomes while allowing for individualization of instruction, guidance, and remediation by the preceptor based on student needs.	Needs Improvement
Students do not receive remuneration for any pharmacy practice experiences (introductory or advanced) for which academic credit is assigned.	Satisfactory
The introductory pharmacy practice experiences involve actual practice experiences in community and institutional settings and permit students, under appropriate supervision and as permitted by practice regulations, to assume direct patient care responsibilities.	Satisfactory
Introductory pharmacy practice experiences account for not less than 300 hours over the first three professional years. The majority of students' time (minimum 150 hours) is balanced between community pharmacy and institutional health system settings.	Satisfactory
The length of the advanced pharmacy practice experiences is not less than 1440 hours (36 weeks) during the last academic year and after all pre-advanced pharmacy practice experience requirements (i.e., introductory pharmacy practice experiences and required core didactic course work) are completed.	Satisfactory
All <u>required</u> advanced pharmacy practice experiences in all program pathways are conducted in the United States or its territories and possessions (including the District of Columbia, Guam, Puerto Rico, and U.S. Virgin Islands).	Satisfactory
Required experiences include primary, acute, chronic, and preventive care among patients of all ages and develop pharmacist-delivered patient care competencies in the following settings: <ul style="list-style-type: none"> <li>• community pharmacy</li> <li>• hospital or health-system pharmacy</li> <li>• ambulatory care</li> <li>• inpatient/acute care general medicine</li> </ul>	Satisfactory
Simulation is used appropriately as a component of introductory pharmacy practice experiences; it does not account for greater than 20% of total introductory pharmacy practice experience time and does not substitute for the hours devoted to actual experiences in community pharmacy and institutional health system settings.	

### 3. College or School's Comments on the Standard

Focused Questions
<input checked="" type="checkbox"/> How student performance is assessed and documented, including the nature and extent of patient and health care professional interactions, and the attainment of desired outcomes
<input checked="" type="checkbox"/> How, in aggregate, the practice experiences assure that students have direct interactions with diverse patient populations in a variety of health care settings
<input checked="" type="checkbox"/> How the college or school ensures that the majority of students' IPPE hours are provided in and balanced between community pharmacy and institutional health system settings
<input checked="" type="checkbox"/> How the college or school uses simulation in the curriculum
<input checked="" type="checkbox"/> How the college or school establishes objectives and criteria to distinguish introductory from advanced practice experiences.
<input checked="" type="checkbox"/> How the college or schools assures, measures, and maintains the quality of site used for practice experiences

- ☒ How quality improvements are made based on assessment data from practice sites
- ☒ How the goals and outcomes for each pharmacy practice experience are mapped to the activities listed in Appendix C of Standards 2007 to ensure that students' experience will cover, at a minimum, all the listed activities
- ☒ How the college or school is applying the guidelines for this standard, and the additional guidance provided in Appendix C, in order to comply with the intent and expectation of the standard
- ☒ Any other notable achievements, innovations or quality improvements
- ☒ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

Throughout the curriculum, UMSOP provides a variety of required and elective pharmacy practice experiences to maximize student learning and achieve professional competencies presented in Standard 12. Students are assigned to a variety of preceptors and practice settings to ensure an optimal level of diverse patient and health care professional interactions. Pharmacy practice experiences include periods for preparation and reflection. Students are required to contact each assigned preceptor for each rotation three weeks in advance, to complete assigned readings and review rotation requirements. APPE rotations have defined activities (ie. Abilities lists) that are required for that experience and the students and completion is documented on the preceptor evaluation of the student in the E\*Value system. Students maintain a portfolio throughout all rotations, including patient encounters documentation (SOAP notes), drug information Q&A, presentation handouts, special projects, and evaluations. The course manager may review a student's portfolio at any time for quality assurance.

Responsibilities of the student, preceptor, and site are clearly defined in the syllabus. UMSOP uses the E\*Value system to facilitate course administration. Students complete an evaluation of self, preceptor and site at the end of each rotation. Each student is assessed by the preceptor on performance and professionalism at the midpoint and at the end of the rotation using a standardized assessment tool. The professionalism/behavioral items do not contribute toward the letter grade, but a final rating of "significant deficiency" on any of these items results in automatic course failure. The preceptor verbally reviews the midpoint and final assessment with the student and then completes the assessment forms electronically. Each form includes preceptor and student electronic verification signatures and comments.

In aggregate, the pharmacy practice experiences include direct interaction with diverse patient populations in a variety of practice settings and involve collaboration with other health care professionals. Diverse rotation sites allow students to encounter various types of patients and disease states. Most pharmacy practice experiences are under the supervision of qualified pharmacist preceptors licensed in the United States. For some non-direct patient care elective rotations, other health care professionals also serve as preceptors for students.

UMSOP students complete two one-week community and institution IPPEs in the first year and a longitudinal Healthy Aging IPPE in the second year, following a patient through a nine-month period and conducting a health promotion event at a local community or long-term care site. Between the second and third year, students complete two three-week IPPEs in community and health-system. IPPE hours are balanced between community pharmacy and institutional health-system settings.

Healthy Aging introduces students to the process of developing a patient-pharmacist relationship with older adults. Students use several core elements of the medication therapy management model to

identify health maintenance, psychosocial, and medication-related problems and to develop appropriate patient specific recommendations. Students practice basic physical assessment skills and data collection, as well as oral and written communication of health information to patients. Individualized care is developed and implemented in collaboration with the preceptor and/or other health care professionals.

IPPE rotations emphasize concepts introduced in the Abilities Lab courses. During the IPPE rotations, students perform skills under the observation of preceptors and receive feedback. The APPE rotations reflect again reinforcement of skills and knowledge obtained from the didactic curriculum as well as an evaluation of the student's ability to perform the identified skills independently. The extended time allowed in the practice site for APPE rotations allow for the student to perform skills and demonstrate knowledge numerous times to allow for reinforcement and continual feedback.

During the fourth year, students complete 4 required five-week APPEs (health-system, community, acute care general medicine, ambulatory care), 4 five-week electives and a 1 credit Pharmacy Practice Pinnacle. At least one elective rotation is required to be in a direct patient care specialty area (e.g. cardiology, geriatrics, etc.) and at least one is required in non-patient care administrative and general practice. These requirements ensure that students obtain a variety of experiences in both patient care and non-patient care areas. The Pharmacy Practice Pinnacle APPE functions as a capstone project and occurs during regular APPE rotations. Over a period of up to 20 weeks, student pharmacists identify a specific pharmacy practice issue, perform a needs assessment and literature search, evaluate data, develop potential interventions and an implementation plan, and orally present their proposal.

UMSOP advocates tirelessly for changes to state of Maryland Law or Regulations that expand the pharmacist's scope of practice or reduce the complexity of engaging in advanced practice. Successes in 2011 include legislation to allow pharmacists to vaccinate children between the ages of 9 and 17 for influenza, further expanding the pharmacist scope of immunizations, and to establish a Prescription Drug Monitoring Program (PDMP) in DHMH for Schedules II through V drugs. The School has also championed legislation on Collaborative Drug Therapy Management/Collaborative Practice (CDTM). CDTM is an agreement between a physician and a pharmacist that allows them to enter into a professional partnership, which enables the use of the pharmacist's unique skills as a medication expert to manage chronic diseases (diabetes, hypertension, hyperlipidemia), improve patient health, and decrease health care costs. UMSOP faculty helped to write the first Maryland CDTM legislation ten years ago, and have advocated for two legislative updates. In 2011, the sunset was removed making CDTM a permanent law; and in 2012 a bill to simplify the approval process passed the Maryland legislature and becomes effective on July 1, 2012.

By expanding the scope of pharmacy practice and other innovations, UMSOP is determined to lead pharmacy and prepares its students to emerge as leaders in contemporary pharmacy practice. Of note, preceptors selected for Maryland's advanced community pharmacy APPE must participate in and seek compensation for at least one of the following cognitive services: CDTM under protocols, immunizations, the Maryland P3 Program, and/or Medication Therapy Management (MTM) services including Outcomes, Mirixa and Humana platforms. On these rotations, students must be allowed to play a role in these services. Third year Abilities Labs courses prepare students to provide such services in the community setting with practice in MTM and students are required to complete immunization certificate training.

Additionally, most of Maryland's longitudinal ambulatory care APPE sites operate under protocol-driven and/or collaborative management agreements with either direct or indirect supervision by

physicians. Some sites may even allow for fully independent management by the pharmacist (e.g. VA Healthcare Systems). The majority (>80%) of patient interactions occur in person. UMSOP assures that its ambulatory care APPEs are truly in ambulatory care clinics, without any stretch in the classification of community sites due to site shortages as seen in other schools.

Another innovation is the School's focus on preparing students for interprofessional practice. Two interprofessional ambulatory care APPE clinic rotations have received local and national recognition, including the President's Clinic at the University of Maryland Medical Center where pharmacy students and faculty preceptors are on rotation with other healthcare professionals and students for a longitudinal weekly clinic of President Jay Perman of the University of Maryland Baltimore campus. Other examples are the Health Resources and Services Administration (HRSA) Patient Safety, and Clinical Pharmacy Services Collaborative (PSPC) MTM clinics in the Shady Grove area. Faculty and preceptors from these unique clinics have presented at multiple professional meetings and recently received three national awards.

Finally, UMSOP has worked with other large health-system institutions to develop rotation collaborations where students apply for and are selected to complete 4 rotations at a specific site. This allows the student to become oriented to a site in a more efficient manner, the student becomes familiar with site requirements reducing the time for transition between one rotation to the other, ultimately maximizing the opportunities for the students to apply knowledge and to perform skills at a higher level of independence.

Currently, the UMSOP has this agreement with Johns Hopkins Hospital, and is currently exploring opportunities to expand this format to other health systems.

Simulation does not count toward the required minimum number of hours for IPPEs, although simulation is incorporated in the didactic Abilities Lab 1-6 courses. The School has put considerable resources toward TOSCE and OSCE activities to assure that Maryland students practice and prepare for a variety of interactions that can be encountered during IPPE and APPE rotations.

The objectives for each pharmacy practice experience are mapped to the School's Terminal Performance Outcomes (TPOs), which align with the CAPE Educational Outcomes, as well as to ACPE Appendix C. Differentiation between IPPEs and APPEs is determined by the level of each outcome or concept as introduced, reinforced, or emphasized. The majority of general learning activities are offered throughout multiple APPE rotations.

During the process of curriculum mapping, it was clear that not all of the Appendix C pharmacy practice experience activities are consistently addressed in required APPEs, such as participating in purchasing activities and creating a business plan to support a patient care service. The required APPE course managers determined that unmapped Appendix C activities may not be feasible on five-week rotations and are reinforced in Abilities Labs. The APPE Pharmacy Practice Pinnacle experience may help address that gap identified in Appendix C activities (eg. business plan development for innovative patient care services, etc). Abilities Lab course managers verified that student training in the eleven Appendix D "pre-APPE competencies" was thoroughly reinforced by this course series. An example of concept integration is "Participating in discussions and assignments regarding the drug approval process and the role of key organizations in public safety and standards setting;" introduced in case discussions in the P1 course, PHAR 522 Context of Health Care, and emphasized in administrative and general elective rotations (APEX courses). Faculty participated in activities that reinforced the idea of concept integration at the May 2012 faculty retreat.

Quality assurance facilitates standardization and consistency of experiences and outcomes while allowing for individualization of instruction, guidance, and remediation by the preceptor based on student needs. Both scheduled and unannounced site visits are conducted for development and as needed for corrective actions. A site evaluation tool is utilized to document site visits, key points and recommendations. Quality assurance was recognized as an area for improvement during the self-study process, because staffing shortages prevented more frequent courtesy visits (currently every three years). A new strategic plan for preceptor recruitment and retention was designed and is now being implemented.

UMSOP ensures that all preceptors receive information regarding the outcomes expected of students and the pedagogical methods that enhance learning. The ELP website provides online preceptor orientation training with CE credits, and all syllabi with learning outcomes and assessment forms are available there and in E\*Value. Preceptors are given access to online databases including eFacts and Micromedex. The Academy of Preceptors, an annual preceptor development seminar provides live training and networking opportunities. Attendance by preceptors is incentivized with continuing education credit for the event. This event is also used as an opportunity to address global rotation issues and provide the preceptors with opportunities to interact with APPE course managers. This area was recognized as needing improvement during the self-study process, because online training is not always completed by first-time preceptors prior to being assigned students.

Preceptors apply and are appointed with UMSOP clinical faculty titles. Rotation categories are determined by site visits in-person, by phone, or by e-mail prior to appointment. Students do not receive remuneration for any pharmacy practice experiences for which academic credit is assigned. Based on assessment data from practice sites, quality improvements are made by communicating with preceptors and students, as well as conducting site visits as needed. Required course managers are provided summaries of student self-site-preceptor evaluations at the end of the academic year. Individual preceptors receive their evaluations each year or after at least two students have completed evaluations to allow for anonymity of feedback.

Overall, sites and preceptors earned high ratings from student evaluations. The average site rating for the 165 APPE rotation sites for the Class of 2012 was 3.78 on a 4-point Likert scale of Strongly Agree (4), Agree (3), Disagree (2), Strongly Disagree (1). No sites received an average rating below 3.0 (Agree). The average rating for 416 APPE preceptors was 3.76 out of 4, and only two of the 416 preceptors received a rating below 3.0.

Areas for continued focus include survey data where more than 10% of respondents disagree, and/or where the data is out of line with peer and national data. It is important to note that respondents to the graduating student and alumni surveys were enrolled in the old curriculum. Efforts continue to orient preceptors to the revised skills-based assessment tools, since most have been used to the letter grade system, and to review with preceptors the strengths and weaknesses of the existing tool.

#### 4. College or School's Final Self-Evaluation

<input type="checkbox"/> Compliant	<input checked="" type="checkbox"/> Compliant with Monitoring	<input type="checkbox"/> Partially Compliant	<input type="checkbox"/> Non-Compliant
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## 5. Recommended Monitoring

(School comments begin here)

The Experiential Learning Program office had been understaffed due to the resignation of its Executive Director in June 2011, but this was rectified in April 2012 with the appointment of Cherokee Layson-Wolf, PharmD, BCACP (current UMSOP associate professor) as assistant dean for experiential learning, and Toyin Tofade, MS, PharmD, BCPS, CPCC (former director of AHEC pharmacotherapy services for the University of North Carolina Eshelman School of Pharmacy) as associate director. Dr. Hoai An Troung, assistant director and interim executive director, left the School in June 2012 for a position at another school of pharmacy. A search for his replacement is underway.



## University of Maryland / School of Pharmacy

**15. Assessment and Evaluation of Student Learning and Curricular Effectiveness**

As a component of its evaluation plan, the college or school must develop and carry out assessment activities to collect information about the attainment of desired student learning outcomes. The assessment activities must employ a variety of valid and reliable measures systematically and sequentially throughout the professional degree program. The college or school must use the analysis of assessment measures to improve student learning and the achievement of the professional competencies.

The college or school must systematically and sequentially evaluate its curricular structure, content, organization, and outcomes. The college or school must use the analysis of outcome measures for continuous improvement of the curriculum and its delivery.

**2. College or School's Self-Assessment**

The college or school develops and carries out assessment activities to collect information about the attainment of desired student learning outcomes. The assessment activities employ a variety of valid and reliable measures systematically and sequentially throughout the professional degree program.	Needs Improvement
The college or school's evaluation of student learning determines student achievement at defined levels of the professional competencies, in aggregate and at the individual student level	Satisfactory
The college or school uses the analysis of assessment measures to improve student learning and the achievement of the professional competencies.	Satisfactory
The college or school systematically and sequentially evaluates its curricular structure, content, organization, pedagogy, and outcomes.	Satisfactory
The college or school uses the analysis of outcome measures for continuous improvement of the curriculum and its delivery.	Satisfactory
The college or school has developed a system to evaluate curricular effectiveness.	Needs Improvement
The college or school ensures the credibility of the degrees it awards and the integrity of student work.	Satisfactory
The college or school has mechanisms to assess and correct underlying causes of ineffective learning experiences.	Satisfactory
The college or school's assessments include measurement of perceived stress in faculty, staff, and students, and evaluate the potential for a negative impact on programmatic outcomes and morale.	Satisfactory

**3. College or School's Comments on the Standard****Focused Questions**

☒ A description of formative and summative assessments and measures used to evaluate teaching and learning methods and curricular effectiveness, including nontraditional pathway(s) leading to the Doctor of Pharmacy degree (if applicable)

- ☒ A description of the assessment measures and methods used to evaluate student learning and, achievement at defined levels of the professional competencies and educational outcomes, both in aggregate and at the individual student level
- ☒ How achievement of required competencies by all students is assessed and assured on completion of the program
- ☒ Comparisons with national data and selected peer-group programs (include a description of the basis for the peer-group selection) and trends over time
- ☒ How feedback from the assessments is used to improve student learning, outcomes, and curricular effectiveness
- ☒ The mechanisms in place to assess and correct causes of ineffective learning experiences, including the measurement of perceived stress in faculty, staff, and students and evaluation of the potential for a negative impact on programmatic outcomes and morale
- ☒ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
- ☒ Any other notable achievements, innovations or quality improvements
- ☒ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

PharmD students are engaged in problem solving, critical thinking, continuous peer evaluation and self-assessment. Most courses are team-taught to provide a diverse range of faculty perspectives. The curriculum is delivered with recorded and synchronous lectures, case discussions, small group activities, interactions with standardized patients, laboratories, and a broad array of experiential opportunities. UMSOP outlined the professional abilities expected of its PharmD graduates in its Terminal Performance Outcomes (TPOs); 16 main outcomes, each with several sub-outcomes for a total of 63 items. The TPOs align with the 2004 educational outcomes of the Center for Advancement of Pharmaceutical Education (CAPE).

Curriculum mapping enables the School to identify and monitor where the TPOs and the Appendix B science foundation concepts are taught and at what level of emphasis. By applying formulas to distribute the relative credit weight of each concept or outcome, the School has been able to visualize the shifts of a curricular revision. Notably, the distribution of Appendix B curricular content in the revised Maryland curriculum also aligns with the areas of focus of the National Board of Pharmacy's (NABP's) Pharmacy Curriculum Outcomes Assessment (PCOA), although this was not a goal of the redesign.

Questions on the PCOA are broken down into four areas:

- Basic biomedical sciences (16% of the assessment)
- Pharmaceutical sciences (30% of the assessment)
- Social, behavioral, and administrative sciences (22% of the assessment)
- Clinical sciences (32% of the assessment)

UMSOP's PharmD didactic curriculum is broken down as follows:

- Basic biomedical sciences (12.4%)

- & middot; Pharmaceutical sciences (32.4%)
- & middot; Social, behavioral, and administrative sciences (20.8%)
- & middot; Clinical sciences (34.4%)

Mapping the Abilities Labs course sequence to Appendix D (pre-APPE competencies) and the experiential curriculum to Appendix C (pharmacy practice experiences) also enables the School to monitor the incorporation of the required competencies. Discussions during this process were extremely valuable to heightening awareness among the faculty of programmatic assessment.

To reinforce awareness of curricular concept integration and programmatic assessment, the School held a mandatory half-day faculty retreat in May 2012. Faculty and key staff participated in team activities on curricular mapping, program assessment and what to expect when you're expecting a site visit. This was an incredibly informative and engaging retreat. Agreement was 87% with "this retreat was effective for my understanding of the School's self-study report and evaluation visit." Understanding of the structure and content of the PharmD curriculum was 77% before the retreat, 88% after the retreat. Understanding of PharmD programmatic assessment was 72% before the retreat, 86% after the retreat.

A variety of assessment measures and methods are used to evaluate student learning and achievement at defined levels of the professional competencies and educational outcomes, both in aggregate and at the individual student level. This includes an annual student confidence survey that affords an opportunity for self-reflection on student learning; feedback is provided in aggregate to class year and campus cohorts as they progress through the curriculum.

Although the School does not use a formal student portfolio process, the same concepts are interwoven throughout the PharmD program:

- Plan of Study goal reflection every semester
- P1 year APhA Career Pathway Assignment
- P1-P3 Individual and small group presentations
- Annual TPO self-assessment /confidence survey
- CV/resume workshops
- Tracking of awards, scholarships, academic distinctions, internships, etc.
- Certifications: CPR, HIPAA, blood-borne pathogens, immunization
- OSCE/TOSCE reflective pieces
- ELP self-site-preceptor evaluations

All syllabi include specific course outcomes and the TPOs to which each course contributes, to convey to students the relevance of basic science courses to professional competence. Exams and other assessments measure achievement of the course outcomes. Experiential syllabi utilize the TPOs as their course outcomes, which are evaluated at the midpoint and end of each rotation through the E\*Value system.

On the 2011 AACP Faculty Survey, 94% of UMSOP faculty agreed that "the curriculum is taught at a depth that supports understanding of central concepts and principles," compared to 87% nationally and 83% of peer school faculty. On supplemental school-specific questions, 95% of faculty agreed that "when I am teaching PharmD students, I reinforce curricular content by referring to basic science content and providing examples relevant to pharmacy practice." Also, 91% of faculty agreed that "I coordinate my PharmD teaching with other faculty who teach the earlier curricular content that supports my material." Teaching and learning methods are evaluated by faculty peers during the promotion and

tenure processes, and in conjunction with post-tenure review. The Curriculum Committee regularly reviews all courses for structure, content and methods.

Each semester, the Office of Academic Affairs (OAA) provides to faculty course managers (CMs), department chairs, and department vice chairs for education (VCs) the summary data and comments from student feedback (course evaluations) on course structure, content, administration, and instructors, along with summary data on student performance derived from Blackboard course sites and Banner. The CMs and VCs are required to sign off on the results, noting their interpretation of the data and any plans for improvement. OAA retains this documentation, and provides general feedback to students during class meetings. OAA follows up with chairs concerning persistent issues not successfully addressed in the process described above. Student performance and evaluations are an integral part of the Curricular Assessment and Improvement feedback loop. A visual representation of this feedback loop is in the Assessment Plan.

Each faculty also receives an individual instructor evaluation - numerical results and comments - for every PharmD course in which they taught that semester. This is helpful for faculty and their mentors to assess overall performance across courses with varying content and pedagogy, and plan for professional development. According to the 2011 AACP Faculty Survey, 73% of UMSOP faculty agreed or strongly agreed that “the school uses programmatic assessment data to improve the curriculum,” compared to only 65% of faculty at peer schools.

Finally, NAPLEX and MPJE scores represent the most basic measurement of curriculum effectiveness. Nearly all graduating students sign a waiver enabling NABP to release their identified scores to the school, which can then be compared to admission data, course grades, OSCE and APPE performance, and final GPA. Although the ultimate “predictor of success” has not yet been discovered, analysis of recent data indicates that UMSOP GPA may correlate to success on licensing exams. Among identified students who took both NAPLEX and MPJE (2011 n=117, 2010 n=70):

- • **GPA of 3.20 or lower:**
  - 2011, 29 students; 7% failed both NAPLEX and MPJE, 21% failed MPJE.
  - 2010, 13 students; 15% failed both NAPLEX and MPJE, 30% failed MPJE.
- • **GPA between 3.21 and 3.5:**
  - 2011, 36 students; 3% failed both NAPLEX and MPJE, 17% failed MPJE.
  - 2010, 24 students; none failed both NAPLEX and MPJE, 12.5% failed MPJE.
- • **GPA over 3.51:**
  - 2011, 52 students; all passed both exams.
  - 2010, 33 students; 1 student failed both NAPLEX and MPJE.

Note also that these students were on the ‘old’ curriculum; pass rates and scores will continue to be monitored as students complete the ‘new’ curriculum. NABP’s pathway analysis indicated that the 2011 NAPLEX pass rate for UMSOP was 97.08%; 97.17% for the Baltimore cohort and 96.77% for the Shady Grove cohort. The UMSOP MPJE pass rate for the Class of 2011 was 87.39%. Efforts are underway to improve the Pharmacy Law class with more application-type discussions and to work with Abilities Lab

course managers to integrate discussions of legal issues. The School also sponsored attendance at a recent MPJE review for graduating students. MPJE performance will continue to be monitored.

During the curricular revision process, the School developed four noncredit graduation requirements: the "Professional Development Graduation Requirement# (PDGR) was designed to develop in students an awareness of current events, contribute to student organizations, and appreciate the perspectives of others in the external community and health care environments. Throughout all four years, PharmD students self-report participation to earn points toward the PDGR in categories of Awareness, Engagement, and Service. In the P4 year and concurrent with APPEs, students had three additional noncredit graduation requirements: pass a formal case presentation and attend three others, perform and self-report 25 items of an Abilities Checklist, and achieve "Meets Competency# in a high-stakes P4 OSCE.

Noncredit graduation requirements proved administratively problematic due to scheduling and/or enforcement. Historic assessment data showed that students were broadly engaged in organizations and the professional community prior to the PDGR, and recent feedback indicates that it is competition in the current job market and not the PDGR that is motivating their pursuit of leadership and other opportunities. Case presentations took students away from APPEs and were duplicative of presentation requirements in APPE 451 Acute Care.

In March 2012 the dean appointed a task force to solve these issues led by the Associate Dean of Student Affairs, and including the Assistant Dean of Academic Affairs, Director of OSCEs, Assistant Director of ELP, Chair of Student Affairs Committee, Chair of ELP Committee, and ELP staff. This task force recommended eliminating the PDGR and the case presentation, and dividing the Abilities Checklist among the four required APPEs as pass/fail course requirements. The P4 OSCE was recognized by this group as valuable but no decision was made. The four required APPE course managers then met to address the Abilities Checklist recommendations. This group includes the Director of OSCEs and the Chair of ELP Committee. They discussed budgetary constraints for the OSCEs as well as the limited utility of a P4 OSCE for early warning, and recommended that earlier (P1-P3) OSCEs and TOSCEs are of more benefit to students. The P4 OSCE was eliminated.

Managing stress and relationships are also important to maintain a healthy learning and working environment. UMSOP monitors this annually in students by class year and campus, and in faculty and staff by department or reporting unit. UMSOP surveys utilize a validated psychological instrument known as the Perceived Stress Scale (PSS). Respondents are asked to rate how often they felt or thought a certain way during the last month, on a 0-4 scale (0=Never, 1=Almost Never, 2=Sometimes, 3=Fairly Often, 4=Very Often).

The 2011 stress score for P1-P3 continuing students in 2011 was 41%. This indicates a 16% reduction from the 2010 score of 49%, and is comparable to 2009's 40.5%. Nearly 35% of students reported a high level of stress with feelings of extreme fatigue and out of control at the time of this survey (March/April 2011). Students at Shady Grove reported slightly lower stress levels than those in Baltimore. The 2011 stress score for UMSOP faculty was 31%, compared to 41% in 2010 indicating that faculty enjoyed almost a 25% drop in stress level. By department, PSC faculty are the least stressed while PPS faculty are most stressed; nearly half of PPS faculty (46%) reported a high level of stress with feelings of extreme fatigue or loss of control, while only 20% of PHSR faculty and 14% of PSC faculty reported in this category. This could be attributed to the curricular transition and "double-teaching.# The majority (>80%) of faculty in PHSR and PSC reported low or manageable stress levels.

#### 4. College or School's Final Self-Evaluation

<input type="checkbox"/> Compliant	<input checked="" type="checkbox"/> Compliant with Monitoring	<input type="checkbox"/> Partially Compliant	<input type="checkbox"/> Non-Compliant
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#### 5. Recommended Monitoring

(School comments begin here)

Communication is key for more faculty to understand their role in programmatic assessment, and the value of assessment at the various levels of the enterprise is gaining traction among the faculty. Despite systematic reporting of course data and student evaluations leading to significant changes in teaching, faculty and student survey results indicate that communication can still be improved in this important area.

## University of Maryland / School of Pharmacy

**16. Organization of Student Services**

The college or school must have an organizational element(s) devoted to student services. The administrative officer responsible for this organizational element must oversee and coordinate the student services of the college or school.

**2. College or School's Self-Assessment**

The college or school has an organizational element(s) devoted to student services.	Satisfactory
The organizational element(s) devoted to student services has an administrative officer responsible for overseeing and coordinating them.	Satisfactory
The budget assigned to student services is sufficient to provide needed services.	Satisfactory
The college or school has an ordered, accurate, and secure system of student records which are confidential and maintained in compliance with the Family Educational Rights and Privacy Act (FERPA).	Satisfactory
Student services personnel are knowledgeable regarding FERPA law and its requirements.	Satisfactory
The college or school provides students with financial aid information and guidance, academic advising, career-pathway and other personal counseling, and information about post-graduate education and training opportunities, e.g., residencies, fellowships, and graduate school.	Satisfactory
The college or school offers access to adequate health and counseling services for students. Appropriate immunization standards exist, along with the means to ensure that such standards are satisfied.	Satisfactory
The college or school has policies in place so that students who have off-campus classes or pharmacy practice experiences fully understand their insurance coverage and where and how to access health and counseling services.	Satisfactory
The college or school has a policy on student services, including admissions and progression, that ensures nondiscrimination as defined by state and federal laws and regulations, such as on the basis of race, religion, gender, lifestyle, sexual orientation, national origin, or disability.	Satisfactory
The college or school ensures that students in all degree program pathways and geographic locations have equal access to and a comparable system of individualized student services (e.g., tutorial support, faculty advising, counseling).	Satisfactory

**3. College or School's Comments on the Standard****Focused Questions**

- ☒ A description of student services offered and, if applicable, how the college or school ensures that students in all degree program pathways and geographic locations have equal access to and a comparable system of individualized student services (e.g., tutorial support, faculty advising, counseling)
- ☒ A description of the sections of the student handbook that deal with specific requirements of the standard and guidelines

- ☒ How the college or school provides students with financial aid information and guidance, academic advising, career-pathway and other personal counseling, and information about post-graduate education and training opportunities
- ☒ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
- ☒ Any other notable achievements, innovations or quality improvements
- ☒ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

The University of Maryland School of Pharmacy (UMSOP) Office of Student Affairs has been led since 2005 by Dr. Jill Morgan, Associate Dean and Associate Professor of Pharmacy Practice. Staff includes the Associate Director of Admissions, Office Manager, Records and Registration Coordinator, Admissions Coordinator, and Director of Student Educational Services & Outreach. The office's Mission and Vision reflects the UMSOP commitment to recruit and retain excellent PharmD students. The office works closely with faculty members and with the School's Student Affairs and Admissions Committees. These standing faculty committees with student representation are appointed by the dean each year. The Student Affairs Committee oversees UMSOP policies and procedures on admissions and student promotions, supervises retention activities, reviews student grievances, and recruiting. The Admissions committee annually reviews prospective student applications and credentials, and makes admission decisions.

Student services such as tutoring are provided to students on both campuses. Peer tutors are hired for UMSOP students stationed at the Universities at Shady Grove campus (USG) and in Baltimore (UMB). Skype has also been utilized for tutoring during the implementation of the new curriculum and the campus at USG. Most students that use tutoring are satisfied.

All first year students are assigned to an advisor in the Student Affairs office, and are encouraged during their first year to choose a faculty advisor from either campus based on their practice or research interests. Faculty are trained on advising at a faculty assembly meeting, and there is a faculty advising website that details processes and resources for advising. The plan of study was put online when USG opened. It is used as an advising tool and allows for students to reflect on their career goals and plan elective coursework. Per the 2011 student survey, 85% of students agree that advising meets their needs. Students can switch advisors at any time.

Students can learn about post pharmacy opportunities through the School's new Job Ready program. In the past, an annual internship fair and career fair focused on graduating students were held. New for the fall of 2011, the Job Ready program included career roundtables, invited speakers from various backgrounds, an updated website, and a student video contest about the elevator speech, negotiating salary, and preparing for a job interview. Student feedback was overwhelmingly positive. Another CV workshop is planned for spring 2012 targeted at third year students before rotations begin. Preceptor feedback about the Job Ready program has been essential: "in reviewing students' applications for selection for rotations (very competitive), a clear statement of intent, as well as a great CV are a must.

Looking through CVs from other students nationwide, I believe our students can indeed benefit from this, and more importantly, encouraging students to make use of these services will be key.# (Mathilda Fienkeng PharmD, FDA).



Counseling services are included in UMSOP student fees and through student health insurance. The counseling center is located on the Baltimore campus. They have walk-in hours Monday-Friday. For students that do not want to travel to the counseling center or require more than 12 visits per year, a provider can be found through the student health insurance. For UMSOP students at USG, the Assistant Dean and other staff work one-on-one with students in need to identify local providers based on the student's health insurance. For USG students in crisis, the Montgomery County Crisis Center is utilized. Additionally, the USG campus plans to incorporate mental health services on-site by recruiting and hiring a Director of the Counseling Center, a licensed psychologist position expected to be on board by July 2012. This person will coordinate a new Counseling Center and work to deliver consultation, referral services and some counseling for all USG students.

About 65% of students agree (almost 30% do not use these services) that the student health services meet their needs. The student health center comes to both campuses to provide influenza vaccine and TB tests for students with student health insurance.

The Office of Student Affairs maintains an ordered, accurate, and secure system of student records in compliance with the Family Educational Rights and Privacy Act (FERPA). Student records are housed within the office suite in locked file cabinets, as well as on the school's secure web server. Students are provided information about their privacy rights during orientation; the FERPA policy appears in the campus Student Answer Book and is referenced in the PharmD Student Honor Code. Student services personnel are trained to be knowledgeable regarding FERPA law and its requirements by the campus. Faculty are informed about FERPA and are reminded at the end of each Fall semester as requests for letters of recommendation peak.

The UMB campus publishes a Student Answer Book, with information on student services, rules and regulations, public safety, and registration dates. School policies align with those of campus. UMSOP student services personnel work closely with Baltimore campus-level counterparts to assure that pharmacy students connect with the appropriate representatives for answers to questions regarding Financial Aid and Student Accounting (including online bill payment, health insurance, tuition, loan disbursements, and loan repayment), and other services as necessary. Although USG campus offers similar resources for UMSOP students stationed there, both UMB and USG students are advised on these matters by staff at the Baltimore campus in order to maintain oversight of all pharmacy students and resolve issues quickly and consistently.

Appropriate immunization standards exist, along with the means to ensure that such standards are satisfied. The UMB (campus) Immunization policy is linked on the school's policies web page, and is stated in both the PharmD Student Honor Code and the Course Catalog. Student fulfillment of the immunization policy is tracked for all students by the Student Health Center on the Baltimore campus.

UMB has policies in place so that SOP students who have off-campus pharmacy practice experiences fully understand their insurance coverage and where and how to access health and counseling services. Students can contact student accounting for any questions on health insurance.

UMSOP has a procedure on admissions that ensures nondiscrimination as defined by state and federal laws and regulations, such as on the basis of race, religion, gender, lifestyle, sexual orientation, national origin, or disability. The school's PharmCAS page and website contains the following statement: "The School seeks a student body that is diverse in terms of ethnicity, sex, age, geographic and economic background, and religion."

4. College or School's Final Self-Evaluation

<input checked="checked" type="checkbox"/> Compliant	<input type="checkbox"/> Compliant with Monitoring	<input type="checkbox"/> Partially Compliant	<input type="checkbox"/> Non-Compliant
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5. Recommended Monitoring

(School comments begin here)

## University of Maryland / School of Pharmacy

**17. Admission Criteria, Policies, and Procedures**

The college or school must produce and make available to students and prospective students criteria, policies, and procedures for admission to the professional degree program. Admission materials must clearly state academic expectations, required communication skills, types of personal history disclosures that may be required, and professional standards for graduation. As a component of its evaluation plan, the college or school must regularly assess the criteria, policies, and procedures to ensure the selection of students who have the potential for academic success in the professional degree program and the ability to achieve the professional competencies and to practice in culturally diverse environments.

Student enrollment must be managed in alignment with available physical, financial, faculty, staff, practice site, preceptor, and administrative resources. The dean and a duly constituted committee of the college or school must share the final responsibility for enrollment and selection of students.

**2. College or School's Self-Assessment**

The college or school produces and makes criteria, policies, and procedures for admission to the professional degree program available to students and prospective students.	Satisfactory
Admission materials clearly state academic expectations, required communication skills, types of personal history disclosures that may be required, and professional technical standards for graduation.	Satisfactory
As a component of its evaluation plan, the college or school regularly assesses the criteria, policies, and procedures to ensure the selection of students who have the potential for academic success in the professional degree program, the ability to achieve the professional competencies, and the disposition to practice in culturally diverse environments.	Satisfactory
Student enrollment is managed in alignment with available physical, financial, faculty, staff, practice site, preceptor, and administrative resources.	Satisfactory
The dean and a duly constituted committee of the college or school share the final responsibility for enrollment and selection of students.	Satisfactory
Written and verbal communication skills are assessed for student admissions in a standardized manner.	Satisfactory
Interviews are structured to consistently address key admission criteria for each applicant.	Satisfactory
Interviewers have appropriate credentials and are trained in successful interview strategies and techniques.	Satisfactory
Evaluation of professional attitudes and behaviors is a component of the student selection process.	Satisfactory
The college or school develops and employs admission criteria that set performance expectations for admission tests, evaluations, and interviews used in selecting students who have the potential for success in the professional degree program and the profession.	Satisfactory
The admission evaluation of students is documented and records are maintained by the college or school.	Satisfactory

Admission criteria, policies, and procedures are not compromised regardless of the size and quality of the applicant pool.	Satisfactory
In accordance with United States Department of Education regulations, the college or school has a process in place through which the college or school establishes that the student who registers in a distance education course or program is the same student who participates in and completes all course or program requirements and receives academic credit.	Satisfactory
Consultation with ACPE occurs at least six months before recruiting students into new pathways or programs.	
The college or school ensures that early assurance students are at least as well qualified as students accepted for direct entry into the first professional year. Early assurance agreements and policies allow the college or school to manage student enrollment in alignment with physical, financial, faculty, staff, practice site, preceptor, and administrative resources.	

### 3. College or School's Comments on the Standard

#### Focused Questions

- ☒ Admissions and enrollment Information, highlighting how specific requirements of the standards and guidelines are met, including those for early admission agreements or policies, if applicable
- ☒ How admission evaluations of students is documented and how records are maintained.
- ☒ A description of the college or school's recruitment methods
- ☒ A description of methods used to assess verbal and written communication skills of applicants to the program
- ☒ How enrollment is managed in alignment with available physical, financial, staff, faculty, practice site, preceptor and administrative resources
- ☒ How curricular outcomes data are correlated with admissions data
- ☒ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
- ☒ Any other notable achievements, innovations or quality improvements
- ☒ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

UMSOP criteria, policies, and procedures for admission to the professional degree program are available to students and prospective students on the school's PharmD Admissions website. Admission materials clearly state academic expectations, required communication skills, types of personal history disclosures that may be required, and professional standards for graduation. Basic admission criteria and deadlines are clearly defined. Prerequisites are accepted from any accredited two- or four-year college. Applicants must have completed at least one semester of coursework at an accredited institution in the United States, and have a minimum 2.5 cumulative grade point average. A bachelor's or associate's degree is not required. Applicants must complete a PharmCAS application, supplemental application, and participate in an in-person interview.

The School employs admission criteria that set performance expectations for the admission tests, evaluations, and interviews used in selecting students who have the potential for success in the professional degree program and the profession. Admission criteria, policies, and procedures are not compromised regardless of the size and quality of the applicant pool. A pre-screening scoring tool is used to evaluate applicants' GPA, PCAT scores, work experience and extracurricular activities. In 2009, UMSOP instituted technical standards. Candidates for the Doctor of Pharmacy degree must be able to satisfactorily and safely fulfill all technical standards including: observation, communication, sensory/ motor coordination or function, intellectual/ conceptual integrative and quantitative abilities, and behavior necessary to provide high quality pharmacy care.

One area identified for improvement during the self-study process was to better inform candidates about the early decision process. Only general information related to admissions criteria and important dates and deadlines appeared on the UMSOP website. While the early decision criteria are the same as the regular decision process, the School needed to clarify and inform students of their obligation if they are accepted during this process. The website was updated accordingly.

In 2010, a new process was implemented to electronically store and safeguard all sensitive personal information with access limited to the admissions staff and the admissions committee. Applicant documentation including PharmCAS application, essay, transcript, and notes regarding the evaluation of the application through the stages of the admissions process, is stored in a single file and maintained for a period of two years for all applicants and seven years for those enrolled in the program.

In addition to external communication and general marketing, the admissions staff attend 20-25 college career and graduate school fairs annually in Maryland and surrounding states. The School hosts several open houses and tours for prospective students each year. Over the past three years, the admissions group has also formed a student outreach program whereby current students visit other colleges and universities and offer presentations about a career as a pharmacist as well as informing potential applicants of opportunities which exist at UMSOP. Efforts to increase recruitment of minority students included attending minority conferences including the Student National Pharmaceutical Association (SNPhA), the National Association of Medical Minority Educators (NAMME), and the Hispanic Youth Symposium. SNPhA holds an undergraduate fair with prospective high school and undergraduates interested in pursuing pharmacy school. In addition, admissions staff visit undergraduate schools with minority populations and host middle and high school student visits. Efforts are also made to represent diversity with current students attending Open House and participating in the interview process. Discussions on targeted recruitment are currently underway with University of Maryland, Baltimore County (UMBC), named #1 in up-and-coming national universities by U.S. News & World Report America's Best Colleges Guide, and #2 in the nation by The Princeton Review on its "Most Diverse Student Population List." UMBC has substantially increased the number of female faculty in the sciences and engineering and the number of underrepresented minorities completing STEM Ph.D. degrees.

Oral and written communication skills are evaluated throughout the application process. Applicants' personal statements are evaluated by multiple reviewers for writing ability and other elements such as motivation for entering profession of pharmacy. The in-person interview process has several components: faculty interview, student interview, written essay, and teamwork exercise. During each of the oral components, the evaluators use a standardized rubric to score applicants in several categories including ethics, critical thinking and communication. Applicant essays are evaluated on several aspects

of written communication including organization, support and critical thought, focus and developing a thesis.

With the profession of pharmacy rapidly transforming from one of product delivery to service delivery, an applicant's ability to work in interdisciplinary healthcare models will be paramount to one's professional success. UMSOP recently added a teamwork component to the interview process, adapted from a best practice modeled by Auburn University. Applicants are randomly divided into groups of three to five individuals, offered a topic prompt related to the profession of pharmacy (e.g. ethical scenarios), and given a laptop with internet access and approximately thirty minutes during which they will prepare a presentation to give to the interviewers and other applicants. Applicants are evaluated on their contribution to the group effort with no weighting towards specific roles each applicant may play in their assigned group, as well as their critical thinking and oral presentation skills. As of this time there has been no formal assessment of this new interview process but there has been positive feedback from the candidates.

Student enrollment is managed in alignment with available physical, financial, faculty, staff, practice site, preceptor, and administrative resources. The Associate Dean of Student Affairs ably represents the Office of Student Affairs at regular meetings with the dean and administrative leadership, and there is a concerted effort to collaboratively plan and distribute limited resources for the primary benefit of the students. As promised in the School pledge, "Education and students are central to everything we do." The dean and a duly constituted committee of the School share the final responsibility for enrollment and selection of students. The Admission Committee consists of eight faculty representing the three academic departments and three students from both campuses. The Student Affairs Committee consists of faculty class advisors and student representation. This committee handles overall student policies and intercedes with students in academic difficulty. Both committees report periodically to the Executive Council.

The school regularly assesses the criteria, policies, and procedures to ensure the selection of students who have the potential for academic success in the professional degree program and the ability to achieve the professional competencies and to practice in culturally diverse environments. As one of the charges of the admissions committee in 2010, general abilities articulated in the terminal performance outcomes (TPOs) were linked to the admissions process.

Based on Question 64 of the AACP graduating student survey from 2007 – 2011, an average of 81% of students agreed or strongly agreed that the admissions process was well organized. This dipped slightly in 2010 (77.4%) although it is difficult to generalize causative factors due to low response rate to the survey (n=31). In 2011, there was a significant jump in agreement (90%) that the admissions process was well organized, although Baltimore Class of 2011 responded more positively (93%) than their Shady Grove counterpart (80%). The response rate was 119 and therefore more representative of student opinion. This is slightly below peer schools (90.7%) and efforts to improve the process will continue.

The School receives an average of 1200-1400 applications each year. In 2008 and 2009 applications decreased by 25%, due to imposition of a biochemistry pre-requisite requirement in the 2008-2009 admissions cycle that proved difficult for applicants to meet prior to admission. However, after the faculty voted to remove the requirement, applications increased to 1353 in the 2010-2011 cycle. Enrollment numbers have steadily increased over the past 4 years since the Shady Grove Campus opened in 2007.

The School has a diverse student population in regards to gender and ethnic background. Differences between Maryland and peer institutions on the 2011 Graduating Student Survey include:

- Slightly higher female to male ratio – 71%/29% UMSOP, 67%/33% peers.
- Older student population – aged 25 or under 36% UMSOP, 51% peers; aged 31 or older 20% UMSOP, 13% peers.
- Fewer entered without a degree prior to entering the program – 15% UMSOP, 31% peers.
- More entered with bachelor's degree – 73% UMSOP, 48% peers.
- More participated in dual degrees – 11% UMSOP, 2.5% peers.
- Fewer were not working (paid outside work) during P4 year – 26% UMSOP, 38% peers.

#### 4. College or School's Final Self-Evaluation

<input checked="" type="checkbox"/> Compliant	<input type="checkbox"/> Compliant with Monitoring	<input type="checkbox"/> Partially Compliant	<input type="checkbox"/> Non-Compliant
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#### 5. Recommended Monitoring

(School comments begin here)

## University of Maryland / School of Pharmacy

**18. Transfer of Credits and Waiver of Requisites for Admission with Advanced Standing**

The college or school must produce and make available to students and prospective students transfer credit and course-waiver policies, based on rational procedures and defensible assessments.

**2. College or School's Self-Assessment**

The college or school produces transfer credit and course-waiver policies, based on rational procedures and defensible assessments and makes that information available to students and prospective students.	Satisfactory
The college or school implements policies and procedures for the evaluation of the equivalency of educational courses (preprofessional or professional) prior to admission or transfer to the professional degree program.	Satisfactory
Requisites are only waived based upon an educationally sound assessment of the professional competencies (as set forth in Standard 12) that have been achieved through continuing pharmacy education, other postgraduate education and training, and previous pharmacy practice experience.	Satisfactory
The college or school has established and implemented policies and procedures for students who request to transfer credits or who wish to change from one program pathway to another.	Satisfactory

**3. College or School's Comments on the Standard****Focused Questions**

- ☒ The number of transfer students, including (if applicable) international students or graduates of other professional degree programs admitted with advanced standing, and an assessment of the correlation between the criteria in the transfer policy and success in the program. If applicable, comparative performance data should be provided
- ☒ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
- ☒ Any other notable achievements, innovations or quality improvements

(School comments begin here)

Currently, UMSOP admits no more than two transfer students and two international pharmacists per year. These students are admitted into the first year with some courses waived based on prior professional coursework completed.

From 2005-2007, four transfer students and international pharmacists were admitted; three have graduated on time with one withdrawal. Since 2009, 13 transfer students and international pharmacists were admitted and 12 are tracking on time with one student a year behind schedule.

The School complies with this standard by following written policies and reviewing the transfer applicants on a case by case basis depending on coursework taken and grades earned. The School implements policies and procedures for the evaluation of the equivalency of preprofessional educational courses



prior to admission or transfer to the professional degree program. Professional courses are evaluated once a person is admitted.

4. College or School's Final Self-Evaluation

<input checked="checked" type="checkbox"/> Compliant	<input type="checkbox"/> Compliant with Monitoring	<input type="checkbox"/> Partially Compliant	<input type="checkbox"/> Non-Compliant
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5. Recommended Monitoring

(School comments begin here)

## University of Maryland / School of Pharmacy

**19. Progression of Students**

The college or school must produce and make available to students and prospective students criteria, policies, and procedures for academic progression, academic probation, remediation, missed course work or credit, dismissal, readmission, rights to due process, and appeal mechanisms.

**2. College or School's Self-Assessment**

The college or school produces and makes available to students and prospective students criteria, policies, and procedures for academic progression, academic probation, remediation, missed course work or credit, dismissal, readmission, rights to due process, and appeal mechanisms.	Satisfactory
The college or school's system of monitoring student performance, based on formative assessments of learning outcomes provides for the early detection of academic difficulty.	Satisfactory
The college or school maintains a record of student retention, attrition, and on-time graduation, identifies and analyzes trends, and makes programmatic adjustments as needed.	Satisfactory
The college or school ensures that all students have comparable access to individualized student services such as comprehensive academic success counseling, tutoring and faculty advising.	Satisfactory

**3. College or School's Comments on the Standard****Focused Questions**

- ☒ How student matriculation, progression and graduation rates correlate to admission and transfer policies and the college or school's mission
- ☒ The academic counseling and/or student support staff available to work with students seeking to retain or regain good academic standing, and how extensively they are utilized
- ☒ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
- ☒ Any other notable achievements, innovations or quality improvements
- ☒ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

UMSOP admits qualified students in an attempt to attain a 100% on-time graduation rate. For the last three years the on-time graduation rate was 91% (2008 to 2010). Compared to national data, the School has lower attrition and dismissal rates which correlate to admitting students that are capable of making it through the program successfully, at both campuses. In addition, compared to national data, academic progression between campuses has been comparable since USG's inception (including APPEs).

For the class of 2010, 8 students did not graduate on time. There were two academic dismissals and six voluntarily withdrew from the school. Five students had academic difficulty; personal and medical reasons were contributing factors in the other three.

Early academic difficulty is assessed by Academic Affairs midway through the semester and reported to Student Affairs. Students scoring less than 70% on more than one exam are flagged in the report. A letter is sent to these students and their advisor as a warning and encouraging them to take advantage of student services such as tutoring.

In fall 2011, 34 students (27 UMB, 6 USG) received tutoring in 88 course subjects and in 2010-2011, 44 students (39 UMB, 5 USG) received tutoring in 142 course subjects. Per the 2011 graduating student survey, 94% of students agree that "tutoring services met my needs" (96% UMB and 86% USG). Last year it was identified that there were not enough tutors at USG. The process has been fixed to maintain a sufficient tutor pool at the USG campus.

The School ensures that all students have comparable access to individualized student services such as comprehensive academic success counseling, tutoring and faculty advising. Although the student/faculty ratio is higher at USG, students are free to choose a faculty advisor from either campus depending on their professional aspirations. UMSOP has policies that take into consideration assessments of professional behavior and academic integrity within the honor code. The Abilities Labs course sequence has incorporated professionalism components throughout the first three years to ensure that students are ready for this aspect of advanced rotations and ultimately their professional practice.

UMSOP maintains a longitudinal report on student retention and attrition. This report is available to all faculty and is shared with the curriculum committee or academic affairs as needed for assessment.

For areas of improvement, a remediation policy is currently under review the curriculum and student affairs committees in order to clarify the process. Also under review are academic policies to update criteria for students eligible for academic dismissal.

#### 4. College or School's Final Self-Evaluation

<input checked="" type="checkbox"/> Compliant	<input type="checkbox"/> Compliant with Monitoring	<input type="checkbox"/> Partially Compliant	<input type="checkbox"/> Non-Compliant
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#### 5. Recommended Monitoring

(School comments begin here)

## University of Maryland / School of Pharmacy

**20. Student Complaints Policy**

The college or school must produce and make available to students a complaints policy that includes procedures to be followed in the event of a written complaint related to one of the accreditation standards, student rights to due process, and appeal mechanisms. Students must receive information on how they can submit a complaint to ACPE for unresolved issues on a complaint related to the accreditation standards.

**2. College or School's Self-Assessment**

The college or school produces and makes available to students a complaints policy that includes procedures to be followed in the event of a written complaint related to one of the accreditation standards, student rights to due process, and appeal mechanisms.	Satisfactory
Students receive information on how they can submit a complaint to ACPE for unresolved issues on a complaint related to the accreditation standards.	Satisfactory
The college or school includes information about the complaint policy during student orientation.	Satisfactory
The college or school maintains a chronological record of student complaints related to matters covered by the accreditation standards and allows inspection of the records during on-site evaluation visits by ACPE.	Satisfactory
The college or school informs ACPE during an on-site evaluation if any of the student complaints related to the accreditation standards have led to legal proceedings, and the outcomes of such proceedings.	Satisfactory

**3. College or School's Comments on the Standard****Focused Questions**

- ☒ How the complaint policy is communicated to students
- ☒ The number of complaints since the last accreditation visit and the nature of their resolution
- ☒ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
- ☒ Any other notable achievements, innovations or quality improvements
- ☒ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

UMSOP produces and makes available to students a complaints policy that includes procedures to be followed in the event of a written complaint related to one of the accreditation standards, student rights to due process, and appeal mechanisms. The complaint policy is communicated to students in several formats and is communicated to students throughout their progression through the program. Each fall, beginning with the orientation sessions, the policy and procedures relating to complaints concerning ACPE Standards are presented to all students by the Associate Dean for Student Affairs. In addition, the policy and procedures document is available to students on the School's website.

To date, there have not been any complaints from students relating to the ACPE Standards.

#### 4. College or School's Final Self-Evaluation

<input checked="" type="checkbox"/> Compliant	<input type="checkbox"/> Compliant with Monitoring	<input type="checkbox"/> Partially Compliant	<input type="checkbox"/> Non-Compliant
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#### 5. Recommended Monitoring

(School comments begin here)

## University of Maryland / School of Pharmacy

## 21. Program Information

The college or school must produce and make available to students and prospective students a complete and accurate description of the professional degree program, including its current accreditation status.

## 2. College or School's Self-Assessment

The college or school produces and makes available to students and prospective students a complete and accurate description of the professional degree program, including its current accreditation status.	Satisfactory
Admissions policies, procedures, and practices fully and clearly represent the conditions and requirements related to distance learning, including full disclosure of any requirements that cannot be completed at a distance.	Satisfactory

## 3. College or School's Comments on the Standard

## Focused Questions

- ☒ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
- ☒ Any other notable achievements, innovations or quality improvements
- ☒ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

Required program information is available through the School's website, which is undergoing a major redesign to further improve access to information for current and prospective students. According to the 2011 graduating student surveys, agreement with the statement "the School provided timely information about news, events and important matters within the School# (Q58) increased to 94% from 85% in 2007. This is similar or better compared to the national average. In addition, students have consistently reported high awareness (98% in 2007 and 2011) of professional and academic expectations over this time period.

Communication has been of vital importance to Dr. Eddington since she became dean in 2007. Success in these key areas can be attributed to a number of new programs and initiatives, including: (1) the Dean's weekly "Wednesday Morning Memo# (WMM), (2) the Job Ready Program, (3) SPIN slides notices on the Baltimore Campus, (4) Tablet Newsletter on the Shady Grove Campus, and (5) regular Town Halls and State of the School addresses.

## 4. College or School's Final Self-Evaluation

<input checked="" type="checkbox"/> Compliant	<input type="checkbox"/> Compliant with Monitoring	<input type="checkbox"/> Partially Compliant	<input type="checkbox"/> Non-Compliant
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5. Recommended Monitoring

(School comments begin here)

## University of Maryland / School of Pharmacy

**22. Student Representation and Perspectives**

The college or school must consider student perspectives and include student representation, where appropriate, on committees, in policy-development bodies, and in assessment and evaluation activities.

**2. College or School's Self-Assessment**

The college or school considers student perspectives and includes student representation, where appropriate, on committees, in policy-development bodies, and in assessment and evaluation activities.	Satisfactory
The college or school involves student representatives on appropriate program committees, as well as in accreditation self-studies and strategic planning activities.	Satisfactory
The pharmacy students feel their perspectives are heard, respected, and acted upon in a fair and just manner.	Satisfactory
A clear process exists for students to follow to raise issues with the college or school administration.	Satisfactory
The college or school administration responds to problems and issues of concern to the student body.	Satisfactory

**3. College or School's Comments on the Standard****Focused Questions**

- ☒ The participation and contribution of students on college or school committees
- ☒ The organization, empowerment, and implementation of a student government association or council
- ☒ The other methods (e.g., focus groups, meetings with the Dean or other administrators, involvement in self study activities, review of student complaints) used to gather student perspectives
- ☒ Examples of quality improvements in the college or school that have been made as a result of student representation and perspectives
- ☒ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
- ☒ Any other notable achievements, innovations or quality improvements
- ☒ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

UMSOP considers student perspectives and includes student representation, where appropriate, on committees, in policy-development bodies, in assessment and evaluation activities, and in accreditation self-studies and strategic planning activities. Students are included in all school committees, with the exception of the Faculty Affairs Committee due to the sensitive nature of discussions. A Student Government Association representative (typically the president) is a voting member of Faculty Assembly. Students were surveyed three times during the development of the strategic plan and many participated in the dean's 'listening tour' focus groups as described under Standard 2, Strategic Plan. Course evaluations are a required activity each semester to obtain course-related feedback.



Managing stress and relationships is important to maintain a healthy learning and working environment. UMSOP monitors this annually in students by class year and campus, and in faculty and staff by department or reporting unit. UMSOP surveys utilize a validated psychological instrument known as the Perceived Stress Scale (PSS). Respondents are asked to rate how often they felt or thought a certain way during the last month, on a 0-4 scale (0=Never, 1=Almost Never, 2=Sometimes, 3=Fairly Often, 4=Very Often).

The 2011 stress score for P1-P3 continuing students in 2011 was 41%. This indicates a 16% reduction from the 2010 score of 49%, and is comparable to 2009's 40.5%. Nearly 35% of students reported a high level of stress with feelings of extreme fatigue and out of control at the time of this survey (March/April 2011). Students at Shady Grove reported slightly lower stress levels than those in Baltimore. For comparison, the 2011 PSS score was 31% for faculty and 32% for staff.

Student counseling services are available at both campuses (see Standard 16); 2011 graduating survey data revealed that almost 75% of students felt that student health and well services met their needs, and 15% did not utilize these services.

Overall, pharmacy students feel their perspectives are heard, respected, and acted upon in a fair and just manner. From 2010 to 2011 there was a slight increase in the number of students who were not aware of the process for raising issues with the school's administration, although the process is communicated regularly to students via email and class meetings. The dean has established an open door policy to discuss institutional issues of concern with any member of the school community. Students work through a course liaison (volunteer member of the class) to efficiently raise course-related issues with faculty. Each student organization has a faculty advisor who can liaise with administration when necessary; student organizations communicate with Student Government Association (SGA) officers if any general extracurricular matters need to be addressed by school leadership. The SGA Constitution and By-Laws are attached.

UMSOP administration responds to problems and issues of concern to the student body. Often the course liaison or SGA officer is tasked with reporting back to the student body. The associate deans for students, academic affairs, administration and finance, and course managers when appropriate meet with each class twice a semester to discuss any student or academic issues or questions, and will frequently email students as issues are resolved. These are synchronous meetings between both campuses. In addition, the dean holds occasional town hall meetings to discuss matters of significance with the appropriate audiences.

Examples of quality improvements that have been made as a result of student representation and perspectives include changes to courses and the admissions interview process. During the first course offering of Pathophysiology, Pharmacology and Therapeutics I-III the course managers met with students on several occasions throughout the semester that the course was offered and the following semester. After evaluating their concerns, course evaluations, and performance data, the course managers made major changes to the course schedule to redistribute the delivery of pharmacology content. The Admissions committee changed the format of one of the elements of the admissions interview from a panel interviewing a group of applicants to a group project; this was implemented to enhance our admissions selection. A *Job Ready Program* was also created for our students based on feedback from students, alumni and employers. Students have provided overwhelmingly positive comments about the opportunities including mock job interview session. They also appreciate the one-on-one guidance that they have received.

#### 4. College or School's Final Self-Evaluation

<input checked="checked" type="checkbox"/> Compliant	<input type="checkbox"/> Compliant with Monitoring	<input type="checkbox"/> Partially Compliant	<input type="checkbox"/> Non-Compliant
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#### 5. Recommended Monitoring

(School comments begin here)

At this time there are no specific elements that require further monitoring. However, the school will continue to evaluate and make adjustments when necessary to ensure that students perspectives are incorporated into policy development, assessment and evaluation activities. We find that their perspective is vital to the success of our school.

## University of Maryland / School of Pharmacy

**23. Professional Behavior and Harmonious Relationships**

The college or school must provide an environment and culture that promotes professional behavior and harmonious relationships among students, faculty, administrators, preceptors, and staff. Faculty, administrators, preceptors, and staff must be committed to developing professionalism and fostering leadership in students and to serving as mentors and positive role models for students.

**2. College or School's Self-Assessment**

The college or school provides an environment and culture that promotes professional behavior and harmonious relationships among students, faculty, administrators, preceptors, and staff.	Satisfactory
Faculty, administrators, preceptors, and staff are committed to developing professionalism and fostering leadership in students and to serving as mentors and positive role models for students.	Satisfactory
The college or school develops, via a broadly based process, a policy consistent with university policies on student, faculty, preceptor, and staff professionalism that defines expected behaviors and consequences for deviation from the policy, as well as due process for appeals.	Satisfactory
The activities undertaken by the college or school to promote professional behavior are effective.	Satisfactory
The activities undertaken by the college or school to promote harmonious relationships are effective.	Satisfactory
The activities undertaken by the college or school to promote student mentoring and leadership development are effective.	Satisfactory
Faculty receive support from peers to participate in student mentoring and leadership development activities, and these efforts are viewed favorably by college or school administration.	Satisfactory
The college or school supports students, faculty, administrators, preceptors, and staff participation, where appropriate, in pharmacy, scientific and other professional organizations.	Satisfactory

**3. College or School's Comments on the Standard**

Focused Questions
<input checked="" type="checkbox"/> Strategies that the college or school has used to promote professional behavior, and the outcomes
<input checked="" type="checkbox"/> Strategies that the college or school has used to promote harmonious relationships among students, faculty, administrators, preceptors, and staff; and the outcomes
<input checked="" type="checkbox"/> Strategies that the college or school has used to promote student mentoring and leadership development, and the outcomes
<input checked="" type="checkbox"/> How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
<input checked="" type="checkbox"/> Any other notable achievements, innovations or quality improvements

☒ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

UMSOP has many curricular and extracurricular initiatives in place to promote professional behavior. It is important to note at the outset that the School has also worked extremely hard to put into place policies that discourage unprofessional behavior or conduct. There have been a number of student discipline cases over the past several years and these have served to heighten student awareness of the necessity of maintaining a professional demeanor. While a few of the students' comments may reflect some disappointment that particular individual may still be enrolled, these are cases where the School has shown a real commitment to changing individuals where possible and turning them into professionals who realize and appreciate the necessity of good behavior and professionalism. Students come from many different environments, including those where bad behavior may have been tolerated, and the School works hard to see that this is not the case at the University of Maryland. Data show that virtually all of the 2011 graduating students are aware of expected behaviors with regard to professional and academic misconduct (Q 70), tracking very well with national data. They were slightly less positive about the School's management of academic and professional misconduct by students, yet over 80% agreed that it was effectively managed (Q 59 and Q 60). This level of agreement surpassed the national data.

The School has demonstrated repeatedly that it is committed to harmonious relationships among all who make up the academic community. Respect and civility are concepts that receive a great deal of attention. Over the years, seminars and other opportunities to instill this into the community have been offered and sometimes required. The activities of the School to promote harmonious behavior are generally quite positive. Each year a UMSOP faculty member is selected to be the incoming class advisor, and this carries through all four years until that class is graduated. The class advisor comes to know the class well; meeting regularly with them and working closely with their elected officers to guide them through various projects and events and help them to "stay out of harm's way." At the final commencement ceremony, the class advisor has the privilege of presenting the class to the convened audience of graduates, families, faculty, administrators and guests. Student organizational activities, usually with faculty oversight, provide opportunities for professional students to interact with one another toward a common goal. Students come to understand that they must learn to work collaboratively with their peers to accomplish their goals. When conflicts arise, as they do in any walk of life, students are encouraged to work through a solution and faculty guidance is offered. Each student organization has a faculty member who is official advisor to that organization. On the 2011 Continuing Student Survey of P1-P3 students (n=429):

- 96% are members of at least 1 organization and 35% are members in 4 or more
- 89% are active participants in at least 1 organization and 11% are active in 4 or more
- 55% are officers in at least 1 organization

Membership in at least one organization is comparable across class years and campus, except that only 72% of P1 USG students are active participants in at least 1 organization compared to 90% of P1 UMB students. Being actively involved in pharmacy school is not a huge time commitment: 92% of all students report spending ten or fewer hours/week on school sponsored activities (e.g. student organizations and social events). This level of involvement has helped the UMSOP to maintain a strong sense of community at and between both campuses. On the 2011 Continuing Student Survey, 81% of P1-P3

students (n=429) agree that the School of Pharmacy fosters a strong sense of community. On the same statement, 79% of faculty (n=59) and 72% of staff (n=106) also agree.

The School monitors student organizational activities very closely. We are mindful of the fact that students can become over extended and we try to monitor for that issue. If a student is on probation for academic difficulties, that student may not participate as an officer in any student organization until their probation is lifted. UMSOP promotes mentoring and belonging to organizations, and provides support and encouragement for leadership in those organizations (See Q74 where virtually all students agree with this). There are regular meetings of the student leadership and leadership retreats in the winter and spring of each year. At the retreat, officers of the various organizations convene along with a number of faculty members and discuss academic and organizational issues and their approaches or solutions. Additionally, the School encourages student participation in regional, state or national pharmacy meetings and encourages competition in some of these (e.g. patient counseling, formulary management/dossier), again tracking well with national data (Q73).

Occasionally a student's behavior requires disciplinary action on the part of the School. These cases are uncomfortable for everyone, but they are pursued in a very professional manner, leading to recommendations for action appropriate to the issue. The discipline and grievance committee is comprised of both students and faculty. Without mentioning any confidential information, the dean's office makes students and faculty aware of the general nature of cases brought before this committee.

The outcome of all of this is twofold: students come to realize that they must act and behave in an acceptable manner, and their fellow students and faculty have come to realize that it is not futile to report a problem to the dean's office. Approximately 70-80% of graduating and continuing students indicate they know how to utilize the process to effectively manage academic and professional misconduct.

The students and the School sponsor numerous social events throughout the year. Much of this ACPE review is focused on the fact that UMSOP now has two campuses about 45 miles apart for one pharmacy program. While it is not always possible, the School strives to hold events in areas that are geographically accessible to students from both the Baltimore and Shady Grove campuses. And, when the students are planning their own events, they either find some equally accessible location or they will be sure to rotate events in the Baltimore or Shady Grove vicinity. This alone speaks to the students' desire to exist as one student body. We have been touched over the years by their efforts to be all inclusive.

UMSOP has routinely endorsed strategies to promote student mentoring and leadership development. Noteworthy examples are the student chapter of Phi Lambda Sigma - the Pharmacy Leadership Society (PLS), and the Maryland Society of Health-System Pharmacists (MSHP) that consists of practitioners of health-system pharmacy, technicians, students, and other MSHP members. These organizations have instituted student mentorship programs, which match interested students with practitioners in a variety of pharmacy practice settings. These programs provide students the opportunity to meet with a role model and to set professional goals.

Other major accomplishments are generally reflected in our efforts to harmonize of the two campuses.

While much of this is noted in other sections of the overall report, our biggest challenge over the past several years relates to providing a first class education and academic experiences to students in both of our campuses, Baltimore and Shady Grove. Since Shady Grove is a distance learning campus where most of the lectures are provided via Mediasite, the socialization of students into the School and ultimately into the profession has been a major challenge. From the very outset the School's goal was to

not let any student slip through the cracks, so the faculty and administration have been very passionate about assuring that all students have an equal opportunity to participate in activities that will promote harmony, a sense of belonging, and successful grades and evaluations. The School is also committed to keeping all students informed about additional educational opportunities and this tracks well with national data. In summary, it is clear that the School of Pharmacy maintains the highest commitment to the well-being of its students collectively and as individuals.

#### 4. College or School's Final Self-Evaluation

<input checked="" type="checkbox"/> Compliant	<input type="checkbox"/> Compliant with Monitoring	<input type="checkbox"/> Partially Compliant	<input type="checkbox"/> Non-Compliant
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#### 5. Recommended Monitoring

(School comments begin here)

## University of Maryland / School of Pharmacy

## 24. Faculty and Staff - Quantitative Factors

The college or school must have a sufficient number of qualified full-time faculty and staff to effectively deliver and evaluate the professional degree program, while providing adequate time for faculty development, research and other scholarly activities, service, and pharmacy practice.

## 2. College or School's Self-Assessment

The college or school has a sufficient number of qualified full-time faculty to effectively deliver and evaluate the professional degree program, while providing adequate time to ensure that the following are achieved:	Satisfactory
effective organization and delivery of the curriculum through classroom, small group, laboratory, practice simulation, service learning, and oversight and provision of experiential education	Satisfactory
faculty mentoring	Satisfactory
student advising and mentoring	Satisfactory
research and other scholarly activities	Satisfactory
faculty development as educators and scholars	Satisfactory
professional/community service and pharmacy practice (where indicated by their position)	Satisfactory
participation in college or school and university committees	Satisfactory
assessment and evaluation activities	Satisfactory
The college or school has a sufficient number of qualified full-time staff to effectively support the delivery and evaluation of the professional degree program.	Satisfactory
Faculty receive adequate support staff resources.	Satisfactory
The college or school periodically conducts faculty workload and needs assessments, at appropriate intervals.	Satisfactory

## 3. College or School's Comments on the Standard

## Focused Questions

- ☒ A description of the process and interval for conducting faculty workload and needs assessments
- ☒ An analysis of teaching load of faculty members, including commitments outside the professional degree program
- ☒ The rationale for hiring any part-time faculty, and the anticipated duration of their contract
- ☒ Evidence of faculty and staff capacity planning and succession planning
- ☒ A discussion of the college or school's student-to-faculty ratio and how the ratio ties in with the college or school's mission and goals for the program
- ☒ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
- ☒ Any other notable achievements, innovations or quality improvements

<input checked="" type="checkbox"/> Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms.
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(School comments begin here)

Faculty workload and needs assessments are performed on an annual basis. The process involves faculty members submitting an annual effort report using an online reporting utility developed by the School. Following evaluation of the report, a meeting between the department chair and the individual faculty members occurs at which faculty productivity, development and goals are discussed. Additional discussion of individual faculty progress and needs are undertaken by the department chairs and the dean on an annual basis.

The Office of Academic Affairs generates preliminary teaching workload data from the online PharmD course schedules. Faculty add to the annual reports their graduate teaching information and additional teaching commitments that occur outside of the School of Pharmacy (UMSOP). Reports on funded research are generated from campus databases, and faculty supplement this information with a breakdown of unfunded research time, service and clinical activities, and other notable activities, in order to present a full picture of the faculty member's overall annual workload to the department chair.

Faculty capacity and succession planning is performed by the department chairs in consultation with the departments' research and education vice chairs concerning research and teaching, respectively. Strategic plan goals of the department and the School are also considered. Faculty opinion is gathered and buy-in is achieved for the strategic direction of capacity and succession planning through discussion at departmental faculty meetings, and supplemented with email exchanges as required. Staff capacity and succession planning is performed by the department chairs in consultation with the research and education vice chairs. Additional consultations are undertaken with administrators in the dean's office to facilitate evaluation of current administrative needs, help identify future administrative needs as well as identify appropriate candidates for upcoming positions.

Since the School's last self study in 2006, 24 new full time faculty have been hired, increasing the rolls from 62 to 86 and commensurate with the one-third increase in PharmD enrollment due to expansion to the Universities at Shady Grove (USG) location, phased in beginning in fall 2007. Of note, the three departments still maintain an appropriate distribution of ranks to support faculty mentoring and development (see Standard 26).

A 30% increase in the number of full time faculty has brought the student-faculty ratio down from 8.3 to 1 down to 7.4 to 1, which is competitive with peer institutions. A lower ratio enables the School to better achieve its mission, as stated in the current strategic plan to supply "superior practical experiences and professional engagement." Less than a dozen adjunct faculty are employed for specialized teaching, mostly in the PHSR department for their real-world pharmacy management expertise.

Due to the small USG faculty cohort the student-faculty ratio is greater than in Baltimore, although students are free to choose an advisor at either campus. In the spring of 2011, Dr. Sullivan was recruited by another school of pharmacy and Dr. Charneski was impacted by a spouse's job relocation (although the latter remains on faculty with a reduced FTE and was reassigned to Baltimore). Two pharmacists were immediately hired to support the practice lab and other clinical activities at USG; Dr. Amy Ives (part-time faculty position) and Dr. David Cannon (full time staff position). They joined assistant dean and PPS assistant professor Dr. Heather Congdon, PPS assistant professor Dr. Lauren Angelo, PSC instructor Wanda Williams, and former dean and PHSR professor Dr. David Knapp. Dr. Ives recently



became a full-time faculty after a competitive search. The School is determined to lower the USG student-faculty ratio, with two new practice faculty recently hired (Drs. Connie Yoon and Leah Sera, internal medicine and ambulatory care). In June 2012 Dr. Knapp announced his retirement and Dr. Angelo announced her departure; their replacements are under discussion.

On the 2011 Continuing Student Survey, 95% of P1-P3 students agreed or strongly agreed that *Faculty, administrators and staff were committed to serving as positive role models for students*. Comments from USG students revealed some concern about adequate USG faculty and limited contact with Baltimore faculty; however, the current faculty complement is meeting student needs and continual monitoring is in place to assure evolving student needs are taken into account.

According to the 2011 Graduating Student Survey, which included the School's first graduates from the USG campus, overall satisfaction with the student experience (including relationships with the faculty) was comparable overall to peers and national, and occasionally higher in USG than in Baltimore. This will continue to be monitored.

According to the 2011 Faculty Survey, almost 24% of faculty disagree with Question 27. *The college/school has a sufficient number of qualified faculty*. Further analysis by discipline (analogous to academic department) indicates that both the practice and basic science research faculty disagree with this question, with only the outcomes research faculty at a level of agreement commensurate to peers. After the self-study committee brought this to the dean's attention, Dr. Eddington met with faculty in each department to answer questions and clarify how salary "lines#" and "pools of funds#" are allocated. Several recent faculty hires that occurred after the survey period, as well as the full implementation of the new curriculum (and the end of double-teaching), may help to reverse this negative perception and it will continue to be monitored.

#### 4. College or School's Final Self-Evaluation

<input checked="" type="checkbox"/> Compliant	<input type="checkbox"/> Compliant with Monitoring	<input type="checkbox"/> Partially Compliant	<input type="checkbox"/> Non-Compliant
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#### 5. Recommended Monitoring

(School comments begin here)

## University of Maryland / School of Pharmacy

**25. Faculty and Staff - Qualitative Factors**

The college or school must have qualified faculty and staff who, individually and collectively, are committed to its mission and goals and respect their colleagues and students. Faculty must possess the required professional and academic expertise, have contemporary knowledge and abilities in current educational philosophy and techniques, and be committed to the advancement of the profession and the pursuit of research and other scholarly activities. Faculty whose responsibilities include the practice of pharmacy must satisfy all professional licensure requirements that apply to their practice. The college or school must foster the development of its faculty and staff, commensurate with their responsibilities in the program.

**2. College or School's Self-Assessment**

The college or school has qualified <u>faculty</u> who, individually and collectively, are committed to its mission and goals and respect their colleagues and students.	Satisfactory
The college or school has qualified <u>staff</u> who, individually and collectively, are committed to its mission and goals and respect their colleagues and students.	Satisfactory
Faculty possess the required professional and academic expertise, have contemporary knowledge and abilities in current educational philosophy and techniques, and are committed to the advancement of the profession and the pursuit of research and other scholarly activities.	Satisfactory
Faculty generate and disseminate knowledge through scholarship. Scholarship by faculty members, including the scholarship of teaching, is evident and demonstrated by productive research and other scholarly activities.	Satisfactory
Faculty whose responsibilities include the practice of pharmacy satisfy all professional licensure requirements that apply to their practice.	Satisfactory
Pharmacy practice faculty possess additional professional training (residency, fellowship, or equivalent experience)	Satisfactory
Pharmacy practice faculty either have or are working toward additional credentials (for example, specialty certification) relevant to their practice and teaching responsibilities.	Satisfactory
The college or school ensures that policies and procedures for faculty recruitment, promotion, tenure (if applicable), remuneration and retention are established and applied in a consistent manner.	Satisfactory
The college or school ensures that the faculty composition, including any contributions from internal and external relationships, encompasses the relevant disciplines within the biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences to meet the education and research needs as defined by the mission statement.	Satisfactory
Faculty, regardless of their discipline, have or are developing a conceptual understanding of current and proposed future pharmacy practice in a variety of settings.	Satisfactory
Faculty members have the capability and continued commitment to be effective teachers. Effective teaching requires knowledge of the discipline, effective	Satisfactory

communication skills, and an understanding of pedagogy, including construction and delivery of the curriculum, and a commitment to learning outcomes assessment.	
The college or school provides, or is affiliated with institutions that provide, postgraduate education and training, including accredited residency and fellowship programs.	Satisfactory
The college or school fosters an environment that encourages contributions by the faculty to the development and transmission of knowledge.	Satisfactory

### 3. College or School's Comments on the Standard

Focused Questions
<input checked="" type="checkbox"/> The process used to assess and confirm the credentials of faculty and staff, and to assure that faculty credentials are appropriate for their assigned teaching responsibilities
<input checked="" type="checkbox"/> How the college or school ensures that the faculty composition, including any contributions from internal and external relationships, encompasses the relevant disciplines within the biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences to meet the education and research needs as defined by the mission statement
<input checked="" type="checkbox"/> How the college or school ensures that faculty members, regardless of their discipline, have a conceptual understanding of current and future trends in the scientific basis of the biomedical, pharmaceutical social/administrative and clinical sciences
<input checked="" type="checkbox"/> How the college or school ensures that faculty members, regardless of their discipline, have a conceptual understanding of contemporary pharmacy practice and future trends in a variety of settings
<input checked="" type="checkbox"/> A description of the college or school's policy or expectations regarding research productivity for faculty, including timeline for new faculty
<input checked="" type="checkbox"/> Evidence that faculty are generating and disseminating knowledge through productive research and scholarship, including the scholarship of teaching
<input checked="" type="checkbox"/> A description, if applicable, of how faculty, instructors, and teaching assistants involved in distance education are qualified through training or experience to manage, teach, evaluate, and grade students engaged in distance learning
<input checked="" type="checkbox"/> How the college or school provides, or is affiliated with institutions that provide, postgraduate education and training, including accredited residencies and fellowship programs
<input checked="" type="checkbox"/> How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
<input checked="" type="checkbox"/> Any other notable achievements, innovations or quality improvements
<input checked="" type="checkbox"/> Interpretation of the data from the applicable AACCP standardized survey questions, especially notable differences from national or peer group norms.

(School comments begin here)

The faculty hiring process includes obtaining the current *curriculum vitae* and several letters of recommendation that attest to the candidate's qualifications. Discussion of the teaching interests and preferences is also part of the interview process. A newly hired faculty member provides the original documents pertaining to the academic credentials (e.g. highest earned degree diploma etc.). The assignment of teaching responsibilities is done by the vice chair for education of the corresponding

department, who both reviews the faculty academic credentials and discusses the assignments with the faculty, assuring that it matches the area of expertise.

The composition of the faculty is determined initially through hiring decisions made by each department with the concurrence of the Dean, followed by active policies to retain and promote qualified faculty in each discipline. All three departments maintain strong relationships with external stakeholders and with other schools on campus to both complement and expand the disciplinary expertise of the fulltime faculty.

The University of Maryland School of Pharmacy (UMSOP) applies an integrative approach to drug discovery and development, innovative patient care, and drug outcomes and their economic impact. Researchers in the Department of Pharmaceutical Sciences (PSC) are identifying new drug targets and chemical entities to treat drug abuse, cancer, neurodegenerative diseases, and bacterial and viral infections. The Department of Pharmacy Practice and Science (PPS) focuses on clinical research and is creating innovative programs to improve health care at lower costs by having pharmacists provide step-by-step guidance in medication adherence and lifestyle changes to patients with chronic diseases such as diabetes. Researchers in the Department of Pharmaceutical Health Services Research (PHSR) provide valuable information on the social, clinical, and economic aspects of pharmaceuticals that arise once medications are made available to the public.

All three academic departments conduct regular research seminars with presentations given by researchers from academia, government agencies and private industry. This covers a wide area of scientific disciplines. Faculty members are encouraged to participate in individual meetings with the speakers, where they have further opportunities to learn about the latest scientific research, clinical practice and public policy trends. School-wide and departmental retreats also contribute in this area. For example, the PSC retreat in 2006 focused on research collaboration and provided the opportunity to learn more about scholarly activities in the School. The faculty retreat in 2011 included the presentations by several School Centers on their activities. One area of improvement could be encouraging greater participation by faculty from all departments in departmental seminars. Typically the faculty attend such meetings only when the research interests match to a certain extent; however, cross-disciplinary dialogue may spur unexpected collaborations. Such seminars can be promoted through UMSOP Centers that comprise individuals from a variety of disciplines. The School's recent efforts to encourage interprofessional and interdisciplinary activities are further described in Standard 26.

Other opportunities that allow faculty members regardless of their disciplines to have a conceptual understanding of contemporary pharmacy practice and future trends include time during Faculty Assembly for faculty members to briefly describe their current practice or research and innovative work; a 2011 faculty retreat which included in-depth discussion of several faculty members' current practices, research and future plans; the annual SOP Research Poster Day where students, staff, faculty and guests can mingle and learn from their peers; and regular communications such as the school's newsletters and the Dean's weekly email (Wednesday Morning Memo), which often reports innovations and faculty successes.

One of the major contributions to the University is the School's research activity. UMSOP policy and expectations regarding research productivity for faculty members with various types of academic appointments have been clearly outlined in the Faculty Handbook. Generally, research productivity is evaluated by original research publications and extramural research funding. Different expectations for tenure track and non-tenure track faculty are described in the Faculty Handbook and are important

criteria for faculty and promotion. Department Chairs, faculty mentors, and the Faculty Affairs Committee will evaluate and assure that research development of junior faculty is achieved as expected.

With the opening of a distance learning program at the Universities of Shady Grove (USG) in 2007, UMSOP has expanded its PharmD program, using web-based technology to deliver lectures asynchronously and synchronously from Baltimore-based faculty. To ensure the quality of education, all faculty members, teaching assistants, and graduate students engaged in distance learning were trained in multiple workshops and orientations. The IT support team has done excellent work in facilitating this process. Students on both campuses demonstrated essentially no difference in their academic performance since the satellite campus's inception; and the first class of USG pharmacy students successfully graduated in May 2011.

UMSOP partners with the University of Maryland Medical Center (UMMC) to provide residency and fellowship training programs in 15 different specializations. The residents/fellows enhance their clinical, research, teaching, and critical thinking skills to meet the demands and changes that are occurring in the profession of pharmacy. These specializations include managed care, ambulatory care, critical care, oncology, geriatrics, psychiatry, pediatrics, community pharmacy practice, solid organ transplant, pain/palliative care, general pharmacy practice, pharmacotherapy, and health system practice and administration. Fellowships include clinical toxicology and instructional design and evaluation.

The School provides a PhD in pharmaceutical health services research which seeks to train scholars and researchers in four major research areas: economics, epidemiology, behavioral/social sciences, or policy as it relates to the delivery, use, costs, and safety of pharmaceuticals and other health care products. These opportunities are collaborative with the government (NIH, FDA, CMS), pharmaceutical industry, and other research institutions. In addition, the School provides a PhD in pharmaceutical sciences where graduate students, post-doctoral fellows, and faculty pursue a wide range of research interests, such as the underlying biology of infectious diseases both viral and bacterial, cancer, and drug abuse. Researchers with expertise in drug design, development and evaluation provide for a comprehensive research program.

UMSOP is committed to maintaining a highly qualified and dedicated faculty in accord with Standard 25. This goal is enumerated in the School's strategic plan and is achieved through specific procedures as delineated above. UMSOP prides itself on the size, diversity, and quality of its fulltime faculty. In 2011, the School had 86 fulltime faculty, 32 in PSC, 37 in PPS, and 17 in PHSR. Sixty-four percent have Associate or Full Professor status.

The graduating PharmD students' level of satisfaction with preceptors (defined as the percentage of those strongly agreeing and agreeing with the posed question; excluding respondents who had no comment on a particular question) has steadily improved in 2006-2011 (from 90% to 97%) and in 2011 was at the same level as observed nationally.

In faculty surveys, the level of satisfaction with effectiveness of the faculty recruitment process remained steady and the average value over the last five years (2006-2011) is slightly above the national average (84% vs 82%). Some improvement was observed in the area of guidance on career development, with the five-year average significantly above the national average (79% vs 72%). The surveys show the perceived lack of funds for faculty development - the level of satisfaction with funds availability dropped from 93% to 62% in five years and in 2011 was below the national average level of 71%. This likely reflects the financial difficulties experienced by the SOP due to budgetary constraints in recent years.

The 2010 preceptor survey showed a level of satisfaction with the support provided by the Experiential Learning Program at 95%, higher than the national average of 91%.

On the 2010 alumni survey, regarding faculty effectiveness as teachers, the level of satisfaction appears to be lower than the corresponding national average (87%/94% and 87%/93%, respectively). It must be noted that the difference is not statistically significant due to the small size of the surveyed group (on both questions the standard error of the difference is ~5%).

#### 4. College or School's Final Self-Evaluation

<input checked="" type="checkbox"/> Compliant	<input type="checkbox"/> Compliant with Monitoring	<input type="checkbox"/> Partially Compliant	<input type="checkbox"/> Non-Compliant
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#### 5. Recommended Monitoring

(School comments begin here)

## University of Maryland / School of Pharmacy

**26. Faculty and Staff Continuing Professional Development and Performance Review**

The college or school must have an effective continuing professional development program for full-time, part-time, and voluntary faculty and staff consistent with their responsibilities. The college or school must review the performance of faculty and staff on a regular basis. Criteria for performance review must be commensurate with the responsibilities of the faculty and staff in the professional degree program.

**2. College or School's Self-Assessment**

The college or school fosters the development of its faculty and has an effective continuing professional and career development program for full-time, part-time, and voluntary faculty consistent with their responsibilities.	Satisfactory
The college or school fosters the development of its staff and has an effective continuing professional and career development program for full-time and part-time staff consistent with their responsibilities.	Satisfactory
Faculty and staff are assisted in goal setting by their administrative reporting authority	Satisfactory
The college or school reviews the performance of faculty and staff on a regular basis.	Satisfactory
Criteria for performance review are commensurate with the responsibilities of the faculty and staff in the professional degree program.	Satisfactory
The college or school has or provides support for programs and activities for faculty and preceptor continuing professional development as educators, researchers, scholars, and practitioners commensurate with their responsibilities in the program.	Satisfactory
Faculty receive adequate guidance and support on career development.	Satisfactory
Faculty are able to attend one or more scientific or professional association meetings per year.	Satisfactory
Faculty development programs are available to enhance a faculty member's academic skills and abilities.	Satisfactory
The performance criteria for faculty are clear.	Satisfactory
Expectations on faculty for teaching, scholarship and service are appropriate and commensurate with academic and professional development.	Satisfactory

**3. College or School's Comments on the Standard****Focused Questions**

- ☒ A description of the performance review process for full-time, part-time and voluntary faculty (including preceptors) and staff
- ☒ A description of the relationship between faculty, preceptor, and staff continuing professional development activities and their performance review
- ☒ A description of faculty development programs and opportunities offered or supported by the college or school
- ☒ A description of staff development programs and opportunities offered or supported by the college or school
- ☒ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard

- ☒ Any other notable achievements, innovations or quality improvements
- ☒ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms.

(School comments begin here)

UMSOP places a priority on faculty and staff development; one of the 2010-2015 strategic plan goals for Environment is 4.3. Empower students, staff, faculty and alumni with formalized mentoring, continuing education and professional development, and leadership opportunities. Each of the three departments offers various professional and career development programs for full-time, part-time, and affiliate faculty and preceptors. Such programs span the gamut from one-on-one development mentoring programs (senior-junior faculty) to department-wide development activities, to encouragement and financial support to attend national conferences and meetings within the faculty member's field. PPS department includes benchmarks for faculty development in its strategic plan. Entrepreneurial sabbaticals/mini-sabbaticals to spur innovation are an important part of the school's strategic goals and the concept is strongly supported by the department chairs and dean.

Faculty complete annual effort reports that, in very detailed fashion, document their distribution to time and effort and highlight their achievements. Faculty are also asked to set goals for the coming year, which are reviewed annually. The reports are reviewed by the chair and the dean with an emphasis on the faculty member's development and continued growth. This allows for measurable outcomes to be assessed and areas of strength and weakness to be identified. Based on these reviews a plan of action can be laid out for the coming year.

The Faculty Affairs Committee also evaluates faculty portfolios during the major milestones of promotion, tenure and post-tenure review. For promotion and tenure this involves evaluation of the candidate by their peers within the department followed by an elected cross-departmental Faculty Affairs Committee; recommendations from both committees are sent to the chair and dean. Post-tenure review is performed through the Faculty Affairs Committee with a peer-review committee comprising a faculty appointed by the chair, a Faculty Affairs representative and a faculty member advocate chosen by the faculty member being evaluated. This process allows for a fair evaluation of the candidate which can be used to aid in career development, and if necessary retraining. On the 2011 faculty survey (n=72), 86% agreed or strongly agreed that *my performance assessment criteria are explicit and clear.*

Faculty receive guidance and support on career development from their department chairs as well as via mentoring programs within the departments. On the 2011 survey, findings are comparable to national results; however, the fact that almost a quarter of UMSOP faculty feel guidance on career development is inadequate suggests the need for individual departments to explore where additional guidance is needed, implement positive changes and continue to monitor this trend.

As mentioned, each department provides professional development programs for its faculty in the form of regularly scheduled seminars, special lectures and mini-retreats. Faculty, residents, graduate students and preceptors are invited to participate in the annual Teaching Excellence Day. There are numerous continuing education opportunities for preceptors and practitioners within specialty areas such as the mental health program and poison center. The Dean's Office and departments have sponsored faculty attendance at grant writing workshops. The departments also provide financial support for faculty to attend professional development courses offered by many of the major scientific organizations, as well as funds for junior faculty to attend national meetings in order to cultivate professional contacts.



Accordingly, the faculty satisfaction level is high overall; on the 2011 faculty survey, almost 90% of faculty agreed or strongly agreed that *Programs are available to me to improve my teaching and to facilitate student learning* and *Programs are available to me that help me develop my competence in research and/or scholarship*. The level of agreement on the latter statement exceeds peer institutions by 9%. According to the 2010 preceptor survey, most preceptors agreed or strongly agreed that *the school has an effective continuing professional development program*.

The campus and the School intend to lead the way in developing interprofessional and interdisciplinary education, practice and research. Dean Eddington has recently been selected by President Perman to co-chair the campus strategic plan implementation committee on interprofessional education, clinical care and practice, and public service. The dean is spearheading collaborations with Johns Hopkins Hospital (JHH) through their senior director of pharmacy to expand upon and enhance this relationship; innovative faculty practice, business models, and pharmacy services for physician practice settings are among the many potential opportunities that will be explored. In March 2012, the School successfully hosted, and provided development funds to sponsor the \$200 attendance fee for all SOP faculty, an Interdisciplinary Symposium on Next Generation Characterization Tools for Therapeutic Proteins. This symposium included presenters from a number of academic institutions, federal agencies and biotech companies, and its purpose was to assemble prominent researchers from various scientific and engineering fields to identify and freely discuss innovative approaches that can bridge the gap between scientific invention and development of therapeutics to advance discovery. In June 2011, the School's Center for Innovative Pharmacy Solutions (CIPS) hosted a National Leadership Roundtable with participants from all areas of government, academia, health care systems, pharmacy associations, private companies, and policy-makers, students, and elected officials, for a day of interdisciplinary dialogue about the pharmacist's role in health care reform. Maryland Lt. Governor Anthony Brown, JD, provided a keynote address on the status of health care reform in the state. Afternoon panels focused on innovations in pharmacist-delivered care, reimbursement issues, and accelerating effective pharmacy practice models.

A great deal of emphasis is placed on managing the workload of faculty so that they may develop in all three areas commensurate with achieving promotion and/or tenure. This may involve shifts in emphasis as the faculty advances through the ranks and is managed in part by mentoring, setting and evaluating goals. In January 2012, the School sponsored an interactive workshop for faculty by psychologist Susan Robison, PhD that focused on faculty productivity, peak performance, work-life balance, and work satisfaction, as well as the work habits and practices of the most successful and engaged academics. Approximately 40% of the faculty participated; the facilitator discussed development and corporation of a "Life Management System" aimed at enhancing both productivity and life/work balance. Using this system, all action items on a "to do" list are tied to the individual's purpose, mission, and goals. Participant feedback was very positive.

Staff are evaluated through annual Performance Development Program evaluations (PDPs), typically submitted by supervisors (more senior staff or faculty) and filed with Human Resources. On the 2011 staff survey (n=106), over 90% agreed or strongly agreed with each of the following statements: *I know what is expected of me at work*; *I have the materials and equipment to do my job well*; and *I am provided an adequate physical environment in which to do my job*.

A broad spectrum of staff development opportunities is available through SOP and campus seminars and programs including e-learning. The web-based e-learning portal from SkillPort is available to all UM employees and consists of a comprehensive searchable catalog of thousands of learning events

including courses, simulations, skill briefs, job aids, express guides and test prep exams. Users can peruse any learning event in the areas of business, desktop, and information technology while working at their own pace; users, training administrators or managers can also design formal learning paths with goals and completion dates. Chat rooms and message boards allow users to have online discussions with associates or hold real-time meetings. Supervisors encourage staff to undertake further training or refresher courses so as to aid in their career planning and advancement. It is noteworthy to mention that almost 80% of staff responding to the 2011 staff survey agreed or strongly agreed that *over the last year, I have had opportunities to learn and grow professionally.*

#### 4. College or School's Final Self-Evaluation

<input checked="" type="checkbox"/> Compliant	<input type="checkbox"/> Compliant with Monitoring	<input type="checkbox"/> Partially Compliant	<input type="checkbox"/> Non-Compliant
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#### 5. Recommended Monitoring

(School comments begin here)

## University of Maryland / School of Pharmacy

**27. Physical Facilities**

The college or school must have adequate and appropriate physical facilities to achieve its mission and goals. The physical facilities must facilitate interaction among administration, faculty, and students. The physical facilities must meet legal standards and be safe, well maintained, and adequately equipped.

**2. College or School's Self-Assessment**

The college or school has adequate and appropriate physical facilities to achieve its mission and goals.	Satisfactory
The physical facilities facilitate interaction among administration, faculty, and students.	Satisfactory
The physical facilities meet legal standards and are safe, well maintained, and adequately equipped.	Satisfactory
Physical facilities provide a safe and comfortable environment for teaching and learning.	Satisfactory
For colleges and schools that use animals in their professional course work or research, proper and adequate animal facilities are maintained in accordance with acceptable standards for animal facilities.	Satisfactory
Animal use conforms to Institutional Animal Care and Use Committee (or equivalent) requirements. Accreditation of the laboratory animal care and use program is encouraged.	Satisfactory
Space within colleges and schools dedicated for human investigation comply with state and federal statutes and regulations.	
All human investigations performed by college or school faculty, whether performed at the college or school or elsewhere, are approved by the appropriate Institutional Review Board(s) and meet state and federal research standards.	
Students, faculty, preceptors, instructors, and teaching assistants have access to appropriate resources to ensure equivalent program outcomes across all program pathways, including access to technical, design, and production services to support the college or school's various program initiatives.	Satisfactory
Commensurate with the numbers of students, faculty and staff, and the activities and services provided, branch or distance campuses have or have access to physical facilities of comparable quality and functionality as those of the main campus.	Satisfactory
Faculty have office space of adequate size and with an appropriate level of privacy.	Satisfactory
Faculty have adequate laboratory resources and space for their research and scholarship needs.	Satisfactory
Computer resources are adequate.	Satisfactory
Laboratories and simulated environments (e.g. model pharmacy) are adequate.	Satisfactory
Facilities encourage interprofessional interactions (e.g., simulation laboratories)	Satisfactory
Access to quiet and collaborative study areas is adequate.	Satisfactory
Common space for relaxation, professional organization activities and events, and/or socialization is adequate.	Satisfactory

### 3. College or School's Comments on the Standard

#### Focused Questions

- ☒ A description of physical facilities, including available square footage for all areas outlined by research facilities, lecture halls, offices, laboratories, etc.
- ☒ A description of the equipment for the facilities for educational activities, including simulation areas
- ☒ A description of the equipment for the facilities for research activities
- ☒ A description of facility resources available for student organizations
- ☒ A description of facilities available for student studying, including computer and printing capabilities
- ☒ How the facilities encourage and support interprofessional interactions
- ☒ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
- ☒ Any other notable achievements, innovations or quality improvements
- ☒ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

University of Maryland School of Pharmacy (UMSOP) facilities at both Baltimore campus (UMB) and the Universities at Shady Grove (USG) campuses are adequately equipped and maintained to meet the teaching, research and service objectives of the School. Approximately 90% of the School's facilities have been renovated or newly constructed within the past ten years, including \$16 million in renovations, \$158 million in new construction plus an additional \$24.9 million for furniture, fixtures, IT infrastructure/ audio visual and scientific equipment. Pharmacy Hall Addition opened in Baltimore in fall 2010. Upon expanding to USG, the School invested heavily in IT infrastructure for instruction at both campuses. The School has reached a tentative agreement with USG (to be formalized sometime in June 2012) to further improve a classroom for the School's use that will address issues related to displays, microphones and electrical outlets for laptops.

The UMSOP is housed in four buildings in Baltimore. The Pharmacy Practice & Science Department (PPS), located in Pharmacy Hall and Pharmacy Hall Addition, has a residency suite, kitchen area, multipurpose room and two conference rooms and lab space for its clinical science program. The Pharmaceutical Health Services Research (PHSR) Department is housed on the 12th floor of the Saratoga Building along with the Maryland Poison Center. This space provides offices, file-server space, well-apportioned work stations for 30 graduate students, conference rooms, a small library and some expansion space. The Maryland Poison Center facilities include a call center, meeting rooms, offices, a small kitchenette and lockers. The Pharmaceutical Sciences Department (PSC) is located in HSF II and Pharmacy Hall/Pharmacy Hall Addition. Four floors in the Addition contain state of the art research laboratories including a translational research floor and a new mass spec facility that is one of the largest in the region with 10 different systems. There is also a GMP facility in need of renovation. The open labs were designed in the new building to facilitate interprofessional and interdisciplinary collaborations.

The Addition houses two large and two small lecture halls designed for students to meet in small groups within the lecture hall. All lecture halls and most classrooms have asynchronous and synchronous capabilities. UMSOP student groups at both campuses can communicate with each other by

speakerphones or video conferencing. Students from other schools often use the building which encourages interdisciplinary interactions.

In 2011, the School completed a \$2 million renovation in Pharmacy Hall including construction of an Objective Structured Clinical Examination (OSCE) Suite of 10 examination rooms, a classroom, write up area, mini suite for the standardized patients and a technology control room; a Model Pharmacy with 30 workstations and robotics; a patient counseling suite; an Institutional Pharmacy with 7 vertical flow hoods; a double and single horizontal flow laminar hoods; and a Skills Laboratory for compounding and other activities. The OSCE Suite is operated in cooperation with the UM School of Nursing.

At USG there are study rooms in the library, a student lounge, printing stations and wireless network. The School constructed a new state of the art model pharmacy with robotic equipment, a patient counseling suite and an institutional pharmacy suite with horizontal and vertical laminar flow hoods. Recently constructed OSCE facilities are also shared with the School of Nursing which is located in the same building. Each pharmacy faculty member with a primary appointment at USG has his or her own office. There are also offices for UMSOP administration and conference room space. There is plenty of parking, a cafeteria, student facilities, restaurants and apartments nearby.

A complete list of facilities under the School's control and architectural drawings are attached to this standard. UM Vet Resources services the animal facility, which is accredited by the Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC). Compliance is overseen by the UMSOP Institutional Animal Care and Use Committee (IACUC).

The School has made a considerable investment in its IT and multimedia infrastructure. Faculty have up-to-date computers and the School's IT department is finishing a Windows 7/Office 2010 migration. The School has a funded computer replacement/upgrade process to replace regular faculty and staff computers every few years. The School maintains over 500 computers, several dozen servers in multiple datacenters, along with robust data networks supporting VOIP phones, wired and wireless clients. All network connections are 1 Gb switched connections with a 10Gb campus connection slated to come on line in the late Spring 2012 with 10Gb inter-buildings connections expected in FY13. The School also supports an inter-building LCD-based digital signage system and room schedule, TV and floor directory LCD displays in Pharmacy Hall. There are several specialized computer facilities that require critical support such as the Maryland Poison Center and the Computer-Aided Drug Design Center, which heavily leverages High Performance Computing clusters along with the Pharmaceutical Research Computing facility. The School also makes heavy use of a network of motion-triggered, IP security cameras along with environment monitors that send alerts if temperature, humidity, water, power and smoke alarms are triggered.

All primary classrooms in Baltimore have sophisticated AV systems that include ceiling mounted projectors or large LCDs with simple touch-screen podium controls for presenters and the option to use either a desktop computer in the podiums or to connect a laptop. Smart Sympodiums in all primary classrooms allow faculty to annotate lecture slides or draw/write freehand. The School's infrastructure for asynchronous lecture capture relies heavily on robust campus-run Mediasite infrastructure, used by other Schools on campus, for streaming lecture recordings reliably to students. The School's significant synchronous/videoconferencing infrastructure investment allows for the reliable delivery of IP-based H.239 (video and slide content) with Shady Grove on a day-in, day-out basis. Most 80-seat and smaller classrooms include tabletop push-to-talk microphones; 200-seat lecture halls have 8 wireless handheld microphones per lecture hall. Students are required to own laptops but the decision was made

several years ago to not mandate a specific model. IT support is provided by both the campus and School's Helpdesks. Students can take advantage of heavily discounted desktop software from vendors including Microsoft and Adobe. All students are provided email accounts and much more via Google's Google Apps for Education (GAE). GAE is a free suite of hosted email and collaboration applications exclusively for schools and universities. Students are able to leverage Single Sign-On (SSO) to GAE as well as Blackboard and other School and campus-provided services using their University of Maryland ID.

In addition to routine and ongoing IT services, advancements in the School's technology have greatly increased demand for additional services in three areas (Computer/Network Services, Multi Media, and Educational Technology-Scheduling-Web). In 2011 the dean formed an IT Steering Committee and charged them with reviewing IT services and needs, and recommending priorities based on available human and financial resources. The committee produced a three-year plan to to meet the demands and manage associated costs and human efforts (attached).

Survey results for UMSOP facilities are generally positive due to the new buildings and extensive renovations that have taken place. Baltimore student concerns about classrooms, lounge space and other facilities issues that were discussed with ACPE in previous self-study evaluations have been alleviated.

Results on the 2011 Graduating Student Survey (n=119) include the first graduating class from Shady Grove. USG students were 20-25% more positive than UMB students regarding the facilities because UMB graduating students endured noise and other construction inconveniences of the new building during their P3 year, but did not get to enjoy the completed facilities due to being on rotation during the P4 year. UMB students were also less positive about safety of the campus; this is because the USG campus is a lush suburban environment while Baltimore is an urban academic health center. Continuing students (P1-P3) are given an annual internal survey similar to the AACCP surveys, and in 2011 over 93% (n=429) agreed or strongly agreed that the campus learning environment is safe.

Faculty are also concerned about safety; analysis of the 2011 Faculty Survey data by discipline indicated that the Baltimore faculty located farthest from the two main buildings are most concerned. These faculty typically have to walk for 3 blocks to teach and attend meetings in the main buildings. Safety and security in Baltimore remain a top priority for the UMSOP and campus.

#### 4. College or School's Final Self-Evaluation

<input checked="" type="checkbox"/> Compliant	<input type="checkbox"/> Compliant with Monitoring	<input type="checkbox"/> Partially Compliant	<input type="checkbox"/> Non-Compliant
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#### 5. Recommended Monitoring

(School comments begin here)

## University of Maryland / School of Pharmacy

**28. Practice Facilities**

To support the introductory and advanced pharmacy practice experiences (required and elective) and to advance collaboratively the patient care services of pharmacy practice experience sites (where applicable), the college or school must establish and implement criteria for the selection of an adequate number and mix of practice facilities and secure written agreements with the practice facilities.

**2. College or School's Self-Assessment**

The college or school collaboratively advances the patient-care services of its practice sites.	Satisfactory
The college or school establishes and implements criteria for the selection of an adequate number and mix of practice facilities.	Needs Improvement
The college or school establishes and implements criteria to secure written agreements with the practice facilities.	Satisfactory
Before assigning students to a practice site, the college or school screens potential sites and preceptors to ensure that the educational experience would afford students the opportunity to achieve the required competencies.	Satisfactory
At a minimum, for all sites for required pharmacy practice experiences and for frequently used sites for elective pharmacy practice experiences, a written affiliation agreement between the site and the college or school is secured before students are placed.	Satisfactory
The college or school identifies a diverse mixture of sites for required and elective pharmacy practice experiences.	Satisfactory
The college or school has sites that provide students with positive experiences in interprofessional team-based care.	Satisfactory
The academic environment at practice sites is favorable for faculty service and teaching.	Satisfactory
There is adequate oversight of practice sites and efficient management and coordination of pharmacy practice experiences.	Satisfactory
The college or school periodically assesses the quality of sites and preceptors in light of curricular needs and identifies additional sites when needed. The college or school discontinues relationships that do not meet preset quality criteria.	Needs Improvement

**3. College or School's Comments on the Standard****Focused Questions**

- ☒ Capacity assessment (surplus or shortage) of the required and elective introductory pharmacy practice experiences (IPPEs) and advanced pharmacy practice experiences (APPEs) sites and preceptors for present and, if applicable, proposed future student enrollment
- ☒ Strategies for the ongoing quantitative and qualitative development of sites and preceptors and formalization of affiliation agreements
- ☒ How the college or school is collaborating with practice sites to advance patient care services

- ☒ How the college or school assesses the quality of sites and preceptors in light of curricular needs and discontinues relationships that do not meet preset quality criteria
- ☒ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
- ☒ Any other notable achievements, innovations or quality improvements
- ☒ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

The departure in June 2011 of the Executive Director of the Experiential Learning Program (ELP) provided an opportunity for critical reassessment. Some deficiencies were identified, specifically with expired affiliation agreements, personnel shortage, and incomplete required orientation for new preceptors. Steps have been taken to rectify these situations. A part-time paralegal was hired to update expired affiliation agreements to prevent rotation cancellations and ensure compliance with accreditation standards. The School has recently appointed an Assistant Dean and hired an Associate Director and additional staff, and expects to have some or all of these in place by July 2012. The ELP is in the early stages of implementing a Preceptor's Quality Assurance, Assessment and Advisory Council (PQAAA) whose responsibilities will include development of a robust process of ensuring preceptor quality and augmentation of site visit quantity and quality.

The School has sufficient capacity and surplus for required community pharmacy practice experiences. However, institutional site recruitment and retention has been negatively impacted by three significant factors:

- the approval by ACPE of two new schools of pharmacy in Maryland since our last accreditation in 2006 and consequently the near-doubling of preceptor need in the state;
- a necessary reallocation of IPPE preceptors to comply with accreditation standards for required APPE acute care general medicine and health system rotations; and
- an increase in residency programs in the region which decreased preceptor availabilities for PharmD students.

Capacity is seriously strained for APPEs in health-system, ambulatory clinic, and patient care electives. Immediate priorities are to increase clinic sites in the Shady Grove area and within other local health systems. At Shady Grove, two ambulatory care clinics have recently been established as full time faculty practice sites and two more practice faculty members have just been hired to increase internal medicine and ambulatory care rotation opportunities in the area by next year. With UMMS, negotiation is taking place at the CEO level to increase capacity for APPE health-system at the other UMMS partner institutions and advanced practice patient care sites in the system.

UMSOP is determined to lead pharmacy and to prepare its students to emerge as leaders in contemporary pharmacy practice. Notably, the School enjoys a comfortable surplus of advanced community pharmacy APPE sites. These sites must participate in and seek compensation for at least one of the following cognitive services: CDTM under protocols, immunizations, the Maryland P3 Program, and/or Medication Therapy Management (MTM) services including Outcomes, Mirixa and Humana platforms. On these rotations, students must be allowed to play a role in these services.



Additionally, most of Maryland's ambulatory care APPE sites operate under protocol-driven and/or collaborative management agreements with either direct or indirect supervision by physicians. Some sites may even allow for fully independent management by the pharmacist (e.g. VA Healthcare Systems). UMSOP assures that its ambulatory care APPEs occur in true ambulatory care settings, not in community settings as some other schools have done due to health system site shortages. Finally, the longitudinal structure of this rotation (1/2 day per week for 12 weeks) is the School's innovative solution to ensure a high quality student experience.

Further efforts to advance patient care services include placement of full-time faculty preceptors in a large number of acute care general medicine and the majority of ambulatory clinic rotation sites. UMSOP preceptors receive a discounted registration for the 100+ continuing education opportunities sponsored by the School annually, including national certificate training programs such as Medication Therapy Management, Immunizations, Diabetes, and Hypertension. The Assistant Dean and Associate Director of ELP also provide preceptors with on-site consultation to facilitate advanced patient care services.

Also of note, two interprofessional ambulatory care APPE clinic rotations have received local and national recognition: the President's Clinic at the University of Maryland in Baltimore is a longitudinal weekly clinic of President Perman where pharmacy students are on rotation with preceptors, other healthcare professionals and students. The Health Resources and Services Administration (HRSA) Patient Safety and Clinical Pharmacy Services Collaborative (PSPC) Medication Therapy Management (MTM) clinics, part of the Primary Care Coalition (PCC) of Montgomery County, MD, are the first and only two interprofessional ambulatory care sites in the Shady Grove area. Faculty and preceptors have presented at multiple professional meetings and received three national awards.

A quality assurance procedure has been developed and implemented to facilitate standardization and consistency of experiences and outcomes, while allowing for individualization of instruction, guidance, and remediation by the preceptor based on student needs. Site visits are conducted regularly for courtesy meetings with preceptors/directors, preceptor/site development, and as needed for affiliation agreements or corrective actions, and a standard site evaluation tool is utilized. Previously, site visits were conducted at least every 3 years by the Executive Director or Assistant Director of ELP. With the change in leadership of ELP, site visits will be conducted more frequently (1-2 years). During these visits, evaluation data will be reviewed with site preceptors as discussion points for areas of strengths and opportunities.

Affiliation agreements are typically facilitated and formalized through correspondence between the ELP office staff and legal personnel of the School and site. Non-standard affiliation agreements are reviewed by the Assistant Dean in consultation with the University Counsel. The affiliation agreement database is maintained in the E\*Value online system. Where possible, umbrella or corporate agreements are sought to cover multiple locations (e.g. chain pharmacies, health systems). Site-specific requirements are provided to students in E\*Value.

Preceptors receive ongoing training and development regarding the outcomes expected of students and the pedagogical methods that enhance learning. All syllabi with learning outcomes and assessment forms are accessible on the ELP website and in E\*Value for preceptors. An online "basic training" with continuing education (CE) credit is available on the ELP website, and a live annual seminar – Academy of Preceptors – provides preceptors with development and networking opportunities. Preceptors are also given access to online databases including eFacts and Micromedex. The School's annual Teaching Excellence Day provides separate resident and preceptor tracks with 6 hours of CE; weekly

free Pharmacotherapy Rounds offer 1 hour of CE and can now be accessed remotely. Finally, on-site preceptor development programs have been offered at a variety of hospitals and health-system sites throughout the year. Preceptors are informed of these continuing education opportunities through preceptor emails and the Maryland Mentor newsletter.

Before appointing preceptors and assigning students to a practice site, the School screens potential sites and preceptors to ensure that the educational experience would fulfill the required competencies. The School periodically assesses the quality of sites and preceptors in light of curricular needs and identifies additional sites when needed. The ELP Office has recently begun working with the Office of Academic Affairs to analyze data and provide feedback to preceptors on the self-site-preceptor evaluations; course managers and the Assistant Dean and Associate Director of ELP evaluate these data and take appropriate actions. In the event that a preceptor or site has been identified as not optimal for experiential learning rotations, remediation plans (e.g. reviewing rotation evaluations and identifying areas for improvements) are provided and monitored for compliance. If the preceptor and/or site still does not meet the expectations within 3-6 months, the preceptor and/or site is inactivated based on criteria clearly articulated in both preceptor applications and course syllabi.

Suggestions for improvement to the quality assurance procedure were identified during the self-study process, including actions the ELP Office must take place prior to placing students: conduct quality assurance visits to all new sites, ensure fully executed affiliation agreements, verify that first-time preceptors complete the online basic training, and confirm with the Board of Pharmacy that preceptors are in good standing. A strategic plan for improvement is being implemented.

Overall the data from the applicable AACP standardized survey questions is similar to national and peer comparisons. A notable difference is that 94% of 2011 graduating students strongly agreed or agreed that the process for assignment of IPPE sites was fair as compared to 89% for both peer and national comparisons. On the 2010 preceptor survey, although it was comparable to national and peer cohorts, an opportunity for improvement is in communicating with preceptors the policies and process to address professional misconduct by students.

#### 4. College or School's Final Self-Evaluation

<input type="checkbox"/> Compliant	<input checked="" type="checkbox"/> Compliant with Monitoring	<input type="checkbox"/> Partially Compliant	<input type="checkbox"/> Non-Compliant
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#### 5. Recommended Monitoring

(School comments begin here)

Full staffing and participation of an advisory board will enable the School to reach out more effectively with preceptor recruitment, monitoring and mentoring. Establishing faculty clinics in the Shady Grove area and reaching an agreement with UMMS and other area health systems will help to improve capacity in IPPE and APPE health system rotations.

## University of Maryland / School of Pharmacy

## 29. Library and Educational Resources

The college or school must ensure access for all faculty, preceptors, and students to a library and other educational resources that are sufficient to support the professional degree program and to provide for research and other scholarly activities in accordance with its mission and goals. The college or school must fully incorporate and use these resources in the teaching and learning processes.

## 2. College or School's Self-Assessment

The college or school ensures access for all faculty, preceptors, and students to a library and other educational resources that are sufficient to support the professional degree program and to provide for research and other scholarly activities in accordance with its mission and goals.	Satisfactory
The college or school fully incorporates and uses library and other educational resources in the teaching and learning process.	Satisfactory

## 3. College or School's Comments on the Standard

## Focused Questions

- ☒ The relationship that exists between the college or school and their primary library, including the level of responsiveness of the Director and staff to faculty, student, staff needs, and any formal mechanisms (e.g., committee assignments) that promote dialog between the college or school and the library.
- ☒ A description of how the college or school identifies materials for the library collection that are appropriate to its programs and curriculum and assesses how well the collection meets the needs of the faculty and students
- ☒ A description of computer technology available to faculty and students
- ☒ A description of courses/activities throughout the curriculum in which students learn about the available educational resources
- ☒ A description of library orientation and support for faculty and preceptors
- ☒ A description of how remote access technologies and mechanisms that promote use of library information from off-campus sites by faculty, students, and preceptors compare with on-campus library resources
- ☒ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
- ☒ Any other notable achievements, innovations or quality improvements
- ☒ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

The University of Maryland Health Sciences and Human Services Library (HS/HSL) is the second largest health sciences library building on the East Coast. It is a regional medical library for the southeast as part of the National Library of Medicine's National Network of Libraries of Medicine, which grants the library a 5-year competitive contract with an annual budget of approximately \$11.2 million. Currently, HS/HSL has 30 faculty librarians, with accredited master's level degrees. This facility supports the

faculty, staff, students and preceptors of the campus. Since the last accreditation visit, HS/HSL facilities have been updated to provide 120 study carrels and 45 group study rooms. HS/HSL is technologically advanced with ready access and personal assistance by library staff for serial print searches and access to over 90 electronic databases in health sciences disciplines. Off-site electronic access to HS/HSL's databases, e-reserve, e-journals, are available to faculty, students, preceptors including pharmacy students and faculty at Shady Grove. Library resources are electronically accessible anytime, anywhere from HS/HSL's website.

In addition to HS/HSL, the Universities at Shady Grove (USG) library opened in 2007 with a new 22,500 square feet facility. It contains 8 group study rooms, more than 116 study seats, individual study carrels, 18 computer stations with state of the art technology and wireless access in the building. Together with HS/HSL, the USG Library supports the teaching and research needs for pharmacy faculty and students stationed at this campus.

UMSOP has significantly enhanced the communication and cooperation with HS/HSL staff since the last accreditation self-study. The School has a formal library liaison on each campus; these individuals are routinely available to address any concerns that may arise from faculty, students and preceptors. The HS/HSL liaison holds regular office hours in Pharmacy Hall for one-on-one assistance and to answer questions. The liaison provides course related instructions and orientation sessions to UMSOP departments and programs. A LibGuide page including pharmacy focused content has been specifically created by the HS/HSL liaison.

HS/HSL utilizes a variety of methods for maintaining book, journal, and electronic collections. The liaison is instrumental in working with the faculty and student body to develop and update library resources. This is accomplished by a variety of methods including usage statistics, faculty surveys, recommendations from faculty and students, liaison reviews from various publishers, and journal and digital review committees. The HS/HSL no longer has a Library Advisory Committee (consisted of two faculty members from each school and met once per semester to advise the Executive Director of the library in matters relating to services and resources), due to the close and personal relationships the liaisons have established with the faculty and staff of each school on the Baltimore campus.

The library liaison at each campus orients first year pharmacy students to educational resources and issues such as plagiarism during the fall course, Professional Ethics and Pharmacy Practice. The 6-semester Abilities Lab course sequence is an innovative component of the new curriculum that was designed to enhance the knowledge and skills of students in drug information. The library liaison assists these and other course managers to develop activities to enhance literature search and evaluation skills. Students work in small groups to develop newsletters, answer a variety of different types of drug information inquiries, present news items, write drug monographs, etc.

A notable achievement in this standard is the School's recent collaboration with HS/HSL to invest in AccessPharmacy, a new model in textbook provision. The University System of Maryland Board of Regents' 2009 Policy on Textbook Affordability Measures required institutions to "seek ways to lessen the financial hardship of college textbook purchases, such as targeted scholarship and financial aid funds, consideration of textbook rentals for introductory courses, consideration of placing selected course materials on reserve in campus libraries when practicable, and development of customized course materials."

<http://www.usmd.edu/regents/bylaws/SectionIII/III1000.html>

UMSOP began to explore the most affordable methods of textbook delivery; meanwhile, the leadership of the HS/HSL was looking for funding partners to help augment its budget in an effort to provide requested resources to the campus. Working with the Library's liaison, the UMSOP's Office of Academic Affairs identified two potential eBook packages and polled faculty members on the current and potential use of the included texts in their courses. A working committee was formed, consisting of the Associate Dean and Assistant Dean for Academic Affairs from UMSOP, and from HS/HSL the Executive Director, Head of Collection Management, and Liaison to UMSOP. The committee decided to conduct a trial of McGraw-Hill's AccessPharmacy for the 2011-2012 academic year to see if it met the needs of UMSOP's faculty and students. The trial of AccessPharmacy was greeted with much enthusiasm by pharmacy students and faculty, and the decision was made to move ahead with a one-year pilot during which the database will be provided to the entire campus. Toward the end of the pilot, usage will be reviewed and other potential partners identified.

Fall 2011 course evaluations have been positive on AccessPharmacy's ease of use, and the School and HS/HSL are working with McGraw-Hill representatives to respond to some of the issues identified in student comments.

#### 4. College or School's Final Self-Evaluation

<input checked="" type="checkbox"/> Compliant	<input type="checkbox"/> Compliant with Monitoring	<input type="checkbox"/> Partially Compliant	<input type="checkbox"/> Non-Compliant
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#### 5. Recommended Monitoring

(School comments begin here)

The HS/HSL liaison to the School of Pharmacy has provided a clear voice to HS/HSL in a matter that shapes the collections, and improves the training of faculty and staff to use the available resources. Some barriers still exist for BlackBoard technology, as these technologies cannot link directly to HS/HSL. This is a software issue, not an HS/HSL service issue.

## University of Maryland / School of Pharmacy

## 30. Financial Resources

The college or school must have the financial resources necessary to accomplish its mission and goals. The college or school must ensure that student enrollment is commensurate with its resources.

## 2. College or School's Self-Assessment

The college or school has the financial resources necessary to accomplish its mission and goals.	Satisfactory
The college or school ensures that student enrollment is commensurate with its resources. Enrollment is planned and managed in line with resource capabilities, including tuition and professional fees.	Satisfactory
Tuition for pharmacy students is not increased to support unrelated educational programs.	Satisfactory
The college or school has input into the development of and operates with a budget that is planned, developed, and managed in accordance with sound and accepted business practices.	Satisfactory
Financial resources are deployed <u>efficiently</u> and <u>effectively</u> to:	Satisfactory
support all aspects of the mission, goals, and strategic plan	Satisfactory
ensure stability in the delivery of the program	Satisfactory
allow effective faculty, administrator, and staff recruitment, retention, remuneration, and development	Satisfactory
maintain and improve physical facilities, equipment, and other educational and research resources	Satisfactory
enable innovation in education, interprofessional activities, research and other scholarly activities, and practice	Satisfactory
measure, record, analyze, document, and distribute assessment and evaluation activities	Satisfactory
ensure an adequate quantity and quality of practice sites and preceptors to support the curriculum	Satisfactory
The dean reports to ACPE, in a timely manner, any budget cuts or other financial factors that could negatively affect the quality of the professional degree program or other aspects of the mission of the college or school.	
Business plans, including revenue and expense pro forma for the time period over which the change will occur and beyond, are developed to provide for substantive changes in programmatic scope or student numbers.	Satisfactory
The college or school ensures that funds are sufficient to maintain equivalent facilities (commensurate with services and activities) across all program pathways.	Satisfactory

## 3. College or School's Comments on the Standard

## Focused Questions

- ☒ How the college or school and university develop annual budgets (including how the college or school has input into the process) and an assessment of the adequacy of financial resources to efficiently and effectively deliver the program and support all aspects of the mission and goals.
- ☒ An analysis of federal and state government support (if applicable), tuition, grant funding, and private giving
- ☒ A description of how enrollment is planned and managed in line with resource capabilities, including tuition and professional fees
- ☒ A description of how the resource requirements of the college or school's strategic plan have been or will be addressed in current and future budgets
- ☒ How business plans were developed to provide for substantive changes in the scope of the program or student numbers, if applicable
- ☒ An assessment of faculty generated external funding support in terms of its contribution to total program revenue
- ☒ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
- ☒ Any other notable achievements, innovations or quality improvements

(School comments begin here)

The School's annual FY 12 operating budget is adequate to accomplish its mission and goals despite reductions in the School's state appropriation. Planned increases to the School's budget funded by the state and tuition revenues have fully materialized per the plan presented to ACPE during the last accreditation visit. The Student/Faculty ratio is in line with comparable institutions. Budget reductions have been achieved by reducing operating costs and a few faculty and staff reductions through attrition. Despite these strategic reductions and reallocation of workloads, School operations remain relatively unaffected by reductions to date.

The School has a Contingency Planning Group (CPG) with cross departmental and faculty assembly representation that dialogues on ways to raise revenues or reduce costs across the school. The CPG reviewed nearly every School-funded (state appropriation/tuition) staff position in the school and made recommendations to the dean on reductions or realignments to meet anticipated budget cuts. Like many state funded institutions, the outlook for FY 13 is very uncertain. The CPG is looking at several ways to increase revenues and reduce costs with a mindful eye toward faculty workload and the School's core mission.

Resources to deliver the program are sufficient to allow the School to achieve the stated mission and make continued progress. The School has uncommitted reserves should unexpected issues arise. The use of these reserves may require campus approval in some circumstances. Pharmacy Hall Addition has eroded some resources due to fundraising shortfalls.

The School ensures that student enrollment is commensurate with its resources. Enrollment is planned and managed in line with resource capabilities, including tuition and professional fees. The School developed a business plan in 2007 for the expansion of enrollment at Shady Grove. This Business Plan has generally been followed. Planned resources (\$6.1 million) have materialized according to the plan. Budget reductions of \$1.2 million have not enabled the School to add the full complement of faculty outlined in the plan. Payments to the Shady Grove facility are approximately \$1.0 million.

Tuition for pharmacy students has not increased to support unrelated educational programs, and enrollment is planned and managed in line with resource capabilities. The School has a diverse pool of revenues to support operations including tuition, state appropriation, gifts and endowments, contracts and grants and Designated Research Initiative Funding (DRIF). The School has invested heavily in its Development and Alumni Group to lay the foundation to acquire extramural funds through private giving and other fund-raising mechanisms. The School anticipates that these investments will bear fruit in the coming years as reformed relationships mature. The CPG is in discussions to further diversify revenue streams that are not dependent upon state appropriations. In general the School has control over tuition revenues, but does have a “reverse differential tuition# situation where the campus takes a large amount of rate increases to help fund the campus structural deficit.

The School operates with a budget that is planned, developed, and managed in accordance with sound and accepted business practices. In addition to the CPG, there is an Annual Budget Meeting with School leadership. While funding for technology upgrades could be more, the School budget does have funds designated for infrastructure and basic workstation upgrades. While the campus infrastructure was cut over two decades ago, forcing the schools to be self-sufficient, it has been providing more and more reliable services.

The School’s financial resources are well managed. All technological and programmatic initiatives are reviewed by the Associate Dean for Administration and Finance who has nearly 30 years of experience in higher education and has extensive business planning experience.

Financial resources are deployed efficiently and effectively to support all aspects of the mission, goals, and strategic plan; ensure stability in the delivery of the program; allow effective faculty, administrator, and staff recruitment, retention, and development; maintain and improve physical facilities, equipment, and other educational and research resources; enable innovation in education, research and other scholarly activities, and practice; measure, record, analyze, document, and distribute assessment and evaluation activities; and ensure an adequate quantity and quality of practice sites and preceptors to support the curriculum. The School receives DRIF from indirect cost recovery that is reinvested in research/scholarly activity. The School also has made significant progress in institutional assessment headed up by an Assistant Dean.

With regard to faculty contribution to the program compared to financial support provided for instruction, the School has dedicated 6-8 Full-Time Faculty Equivalents (FTEs) that support advanced pharmacy practice sites for students. Because preceptor honorarium rates have not increased in nearly two decades, the School increased FTEs directly supporting practice sites for students proportionate with enrollment increases. This accounts for the large number of clinical faculty relative to other schools.

#### 4. College or School's Final Self-Evaluation

<input checked="" type="checkbox"/> Compliant	<input type="checkbox"/> Compliant with Monitoring	<input type="checkbox"/> Partially Compliant	<input type="checkbox"/> Non-Compliant
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#### 5. Recommended Monitoring

(School comments begin here)