



SENIOR CARE PHARMACY STUDENT ROTATIONS

GUIDELINES

A. Introduction

General Background on Rotations

Pharmacy students interested in providing services to seniors must realize that it takes time and the right combination of skills, experience, and attitude to become proficient in this field of pharmacy. It is essential for those considering this area of specialty to pursue geriatric pharmacotherapy and gerontology as part of their studies. Currently, most colleges of pharmacy do not offer extensive coursework in geriatrics and senior care practice. By completing a focused rotation in geriatrics, such as an ASCP Foundation-approved Senior Care Pharmacy Student Rotation, pharmacy students will be able to strengthen their knowledge base and obtain clinical experience critical for success in the field upon graduation.

Evolution of Consultant and Senior Care Pharmacy

Pioneering pharmacists began providing comprehensive pharmacy services to nursing facilities as early as the 1950s. The term “consultant pharmacist” was coined by George F. Archambault, who sometimes is referred to as the “founding father” of consultant pharmacy. An official of the U.S. Public Health Service, Archambault promoted the concept of consultant pharmacists in nursing homes. Later, in his position as pharmacy administrator at the U.S. Department of Health, Education and Welfare, Archambault advocated for the consultant pharmacist’s role in Medicare programs. (Simonson, 1997)

For millions of older adults and individuals with chronic illnesses, consultant pharmacists play a vital role in ensuring optimal drug therapy. In their role as medication therapy experts, consultant pharmacists take responsibility for their patients’ medication-related needs; ensure that their patients’ medications are the most appropriate, the most effective, the safest possible, and are used correctly; and identify, resolve, and prevent medication-related problems that may interfere with the goals of therapy. Consultant pharmacists manage and improve drug therapy and improve the quality of life of the senior population and other individuals residing in a variety of environments, including hospitals, nursing facilities, subacute care facilities, assisted living facilities, psychiatric hospitals, hospice, and home- and community-based care.

For many people, “Consultant Pharmacist” still means “nursing home pharmacist.” And while that narrow definition describes a field of practice that is among the most complex, challenging, and rewarding in the entire pharmacy profession, it no longer accurately defines what consultant pharmacy practice

has evolved into over the past 30 years. Today, the practice environments and potential roles for consultant pharmacists have progressed far beyond what the most optimistic consultant pharmacist would have predicted 20 years ago. Advanced services offered by some consultant pharmacists include innovations such as the development of disease-based and geriatric problem-based management protocols, clinical research, software development, laboratory services, and nutrition services.

What distinguishes consultant pharmacy practice today isn't government regulations or institutional settings, but rather the uniqueness and complexity of the health care needs of the patients they serve. Senior care pharmacists are expanding their consultant pharmacy practice further, regardless of where older adults reside.

Need for Senior Care Pharmacists

On February 27, 2002, the unique health care needs of those aged 65 and older and the demand for and short supply of geriatric specialists were discussed by the U.S. Senate's Special Committee on Aging. The chairman of the Senate Special Committee on Aging stated, "the shortage of geriatric-trained health care professionals is reaching crisis levels. These shortages are not only a threat to an increasing number of elderly Americans, but also to the economic health of our nation. We in Congress must work with the medical community to ensure that doctors and other health care professionals have the necessary training to care for our nation's seniors."

Michael Martin, Executive Director of the Commission for Certification in Geriatric Pharmacy (CCGP), also testified "there are a number of reasons why geriatrics has not been a popular specialty for health care providers. These include: the complexity of care for older patients; an unfortunate lack of interest in individuals approaching the end of their lives; and, most significantly, a lack of payment mechanisms that address the unique medical approach required to effectively manage older patients."

Today there are 35 million individuals over age 65 in the United States, but that number will rise to 77 million by 2030. (Administration on Aging, 2000) While many seniors today enjoy good health, due in large part to modern prescription drugs, millions are unaware that they are at high risk for illness, disability, and death due to preventable medication-related problems. Medication-related problems are the nation's \$200 billion public health threat, resulting in 200,000 deaths per year. (Bates et al. 1997; Bootman, Harrison, and Cox 1997; Ernst and Grizzle 2001) Seniors have more chronic diseases and multiple conditions, so they must use more prescription and over-the-counter drugs. (Hwang et al. 2001) In addition, the physiological changes of aging can alter how a body processes and reacts to specific medications.

Narrowing the gap in the demand and supply of senior care pharmacists must involve identifying niche opportunities that will draw pharmacists into the senior care pharmacy specialty and equip them with the skills and expertise to diversify their practice. Colleges of pharmacy play a critical role in this regard.

Currently, there are 80+ colleges of pharmacy in the U.S. and 10 pharmacy programs in Canada. Students enrolled in these institutions receive professional training in the field of pharmacy, but do not always learn about or are not exposed to the varied employment and research opportunities in consultant and senior care pharmacy or, for that matter, understand the unique medication needs of the population over age 65.

Senior Care Pharmacy Rotations during the fourth professional year of pharmacy school provide much needed experiential training for pharmacy students interested in geriatric pharmacotherapy and the unique medication-related needs of the older adult population, and exposure to the variety of consultant and senior care pharmacy opportunities available to them. Senior Care Pharmacy Rotations also create a first step for colleges of pharmacy to move towards a curriculum with greater emphasis on the medication needs of the geriatric population.

Overview of Senior Care Pharmacy Student Rotations

The ASCP Foundation facilitated the establishment of Senior Care Pharmacy (SCP) Student Rotations to address the shortage of geriatric pharmacy specialists proactively.

The mission of the SCP Student Rotations Program is to increase opportunities for experiential training for pharmacy students interested in geriatric pharmacotherapy and the unique medication-related needs of the older adult population.

Rotation sites and preceptors were solicited from the ASCP membership and other senior care pharmacists from throughout the United States and Canada.

The SCP Student Rotations expand opportunities for experiential training in senior care pharmacy during the fourth professional year of pharmacy school. The rotations are intended to expose pharmacy students to a variety of senior care pharmacy opportunities available to them by matching them with preceptors from senior care and consultant pharmacy practices. The SCP Student Rotations model also serves as a barometer by which colleges of pharmacy and preceptors can measure the rigor of their established geriatric pharmacy rotations.

The ASCP Foundation convened a meeting of the SCP Student Rotations Planning Committee, comprised of pharmacy academicians in geriatrics and practicing consultant and senior care pharmacists representing 10 U.S. states and Canada. This committee defined the goals, objectives, criteria for preceptor and participant selection, and experiential requirements of the rotations. The result of the committee's work is guidelines for establishing SCP Student Rotations. The guidelines are intended to facilitate the establishment of senior care pharmacy rotations by providing guidance and assistance to:

- Colleges of pharmacy interested in developing senior care/geriatrics focused rotations.

- Individual ASCP members and other consultant and senior care pharmacists interested in becoming rotation preceptors.
- ASCP chapters wishing to forge relationships with colleges of pharmacy in their states or provinces.
- Pharmacy students considering experiential training in geriatric pharmacotherapy.

The SCP Student Rotations Guidelines are available to colleges of pharmacy, senior care pharmacists, and ASCP Chapters interested in establishing this unique experiential program in their area.

B. Goal of the SCP Student Rotations Program

The overall goal of each senior care pharmacy student rotation is to further develop clinical knowledge and skills in:

- Senior care/geriatric pharmacy.
- Prevention and management of disability in older adults.
- Collaboration with other health and social services disciplines.
- Communication with and advocacy for older adults in one or more settings across the continuum to improve health outcomes.

C. Objectives of the SCP Student Rotations

Each SCP Student Rotation should fulfill the following objectives:

1. Apply knowledge of aging and geriatric pharmacotherapy to care for older patients and make professional recommendations regarding appropriate, effective, and safe medication therapy.
2. Provide on-going medication therapy monitoring, assessments, and recommendations for individual patients.
3. Identify seniors who may be at high risk for medication-related problems and formulate potential solutions to identify, resolve, and prevent medication-related problems.
4. Participate in and demonstrate skill in communicating with older patients by obtaining detailed medication histories, interviewing for potential medication-related problems, and ongoing counseling of patients regarding their medication regimens and their health.

5. Engage in collaboration with other health/social service disciplines and non-health professionals, including caregivers, in planning and providing care for older adults; appreciate the unique contributions of each member of the interdisciplinary team and the expanded role of the pharmacist on the team.
6. Engage and demonstrate skill in verbal and written communications with other health professionals by making medication therapy recommendations and in-service presentations and by providing medication information to nurses and physicians on a frequent, informal basis.
7. Demonstrate sensitivity to the social and psychological aspects of the aging process and understand how they impact medication use.
8. Observe, understand, and appreciate the medication use process in different settings of care and the scope of pharmacy services (administrative and clinical) needed by patients and facilities and have firsthand familiarity with methods of providing such services.
9. Describe the economic and financial aspects of providing pharmacy services for individual older adults while considering the issues of access and culture/language for this growing segment of the population.
10. Identify geriatric focused professional organizations and resources within those organizations.

D. Rotation Structure

The structure of the SCP Student Rotations should offer flexibility to provide opportunities for students to participate in a variety of settings of care for older adults. Minimum requirements for the structure of these rotations include:

- No less than four (4) weeks in duration.
- Accommodate full-time or part-time rotation placements, provided other minimum standards are met.
- Offer the opportunity for placements throughout the year.
- Exposure to a variety of settings within the continuum of care is provided during rotations.
- Consider placement of students from more than one college of pharmacy.
- Provide opportunities for pharmacy students to interact with geriatric patients, family caregivers, members of the interdisciplinary team, pharmacy staff/department, and preceptor on a one-on-one basis.

E. Suggested Rotation Activities

The following suggested activities are linked to the rotation objectives listed above. Since some of these activities may not be practical for all sites; other activities may be used to meet these objectives.

1. *Apply knowledge of aging and geriatric pharmacotherapy to care for older patients and make professional recommendations regarding appropriate, effective, and safe medication therapy.*

Suggested student activities:

- Cite evidence from the geriatric literature to support therapeutic decisions while cases are being presented to preceptor.
- Participate in therapeutic drug monitoring and application of pharmacokinetic and/or pharmacodynamic principles in medication dosing in the geriatric population.
- Complete formal write-up of geriatric-related drug information questions.
- Review and possibly revise existing protocols for monitoring medication use in the older adult;

2. *Provide ongoing medication therapy monitoring, assessments, and recommendations for individual patients.*

Suggested student activities:

- Follow a predetermined number of geriatric patients over the rotation period.
- Complete a pharmaceutical care plan for a predetermined number of patients.
- Provide predetermined number of written consultations based on actual or potential medication-related problems from the geriatric patients monitored.
- Provide individual consultation to community or facility dwelling older adults.

3. *Identify seniors who may be at high risk for medication-related problems and formulate potential solutions to identify, resolve, and prevent medication-related problems.*

Suggested student activities:

- Review and interpret patient information to identify active problems, (e.g., past medical history, pertinent physical examination findings, nutritional status, and laboratory results).
- Describe common clinical manifestations of disease and adverse drug events that are unique to older individuals.
- Identify, resolve, or prevent actual or potential medication-related problems and provide documentation of the problem and interventions for a determined number of geriatric patients.

- Report and assess adverse events in a manner consistent with the facility's policies, including use of a national or regional adverse drug reaction reporting program.
4. *Participate in and demonstrate skill in communicating with older patients by obtaining detailed medication histories, interviewing for potential medication-related problems, and ongoing counseling of patients regarding their medication regimens and their health.*

Suggested student activities:

- Meet with and monitor selected patients on a frequent basis until discharged from facility or service, (e.g., chart reviews, consultation with professional staff, patient interview and assessment, and maintenance of concise but sufficiently complete records, including copies of written consultations and outcomes and appropriate notations in the patient charts).
 - Review medication histories on selected newly admitted patients and those patients identified to be managed longitudinally.
 - Assess appropriateness, safety, and effectiveness of all drug therapies (prescription and over-the-counter), formulate optimal pharmacotherapy plans, and make corresponding interventions as appropriate for a predetermined number of patients.
 - Provide education and wellness programs to elderly individuals.
5. *Engage in collaboration with other health/social service disciplines and non-health professionals, including caregivers, in planning and providing care for older adults; appreciate the unique contributions of each member of the interdisciplinary team and the expanded role of the pharmacist on the team.*

Suggested student activities:

- Assignment to medicine, pharmacy, or long-term care service and interface with that service as applicable.
 - Participate in rounds with the designated medical/geriatric service and attend patient care plan team meetings.
 - Interact with other health care personnel in a manner consistent with the philosophy and policies of the institution.
 - Include interdisciplinary activities or other ongoing programs that occur onsite (e.g., accompany patient to physician's office, observe physical or occupational therapy, participate in nutritional educational sessions, attend support group meetings, collaborate on research initiatives).
 - Explain resident assessment tools and instruments (e.g., the Minimum Data Set (MDS)) and how they are used for interdisciplinary care planning purposes and monitoring medication therapy in skilled nursing facilities.
6. *Engage in and demonstrate skill in verbal and written communications with other health professionals by making medication therapy recommendations and*

in-service presentations and by providing drug information to nurses and physicians on a frequent, informal basis.

Suggested student activities:

- Conduct in-service presentations for professional staff or patient groups with a handout for distribution.
 - Provide to the health care team drug information that is reviewed by the preceptor before presentation and/or dissemination.
 - Write up and present one patient for a formal case presentation and lead a discussion.
 - Participate in interdisciplinary care conferences, including pharmacist assessment and joint treatment planning with other disciplines.
 - Interview the resident/patient or caregiver to obtain a medication history and assessments when appropriate.
 - Communicate therapeutic recommendations to other health professionals and patients and their caregivers.
 - Present articles for the pharmacy or geriatric journal club or similar group at the primary rotation site.
7. *Demonstrate sensitivity to the social and psychological aspects of the aging process and understand how these impact medication use.*

Suggested student activities:

- Provide patient counseling to self-medicating patients or patients being discharged, taking into account the special needs of the older adult patient in regard to vision, hearing and functional disabilities.
 - Record anticipated goals for the rotation and perceptions about older adults and the setting of care throughout the duration of the rotation, which can be utilized to discuss with the preceptor what the student has learned about him/herself, if goals were attained, and why or why not; note any changes in perceptions throughout the process.
 - Interact with others who serve as patient advocates, such as a long-term care ombudsman.
8. *Observe, understand, and appreciate the medication use process in different settings of care and the scope of pharmacy services (administrative and clinical) needed by patients and facilities and have firsthand familiarity with methods of providing such services.*

Suggested student activities:

- Observe and/or participate in the day-to-day operations of the internal dispensing pharmacy for distribution of medications from the pharmacy to the facilities in a timely manner.
- Observe and participate in the procedures for medication order, medication acquisition, medication security, storage and control procedures, quality assurance procedures, and stat order procedures in skilled nursing and assisted living facilities and how these must conform to state/provincial and federal/national regulations.

- Describe the role of computerization in the drug distribution system and medication order processing.
 - Describe licensure and accreditation standards of the pharmacy and facilities.
 - Describe the importance of a policy and procedure manual and its implementation at facilities.
 - Discuss the role of state health inspections for licensure of facilities and their impact on pharmaceutical services.
9. *Describe the economic and financial aspects of providing pharmacy services for individual older adults while considering the issues of access and culture/language for this growing segment of the population.*

Suggested student activities:

- Price the medications on a monthly basis for the patients followed.
 - Observe application of national, state/provincial, regional, local, and corporate financial procedures and resources when delivering pharmaceutical care to seniors.
 - Conduct a needs assessment for patients and caregivers.
 - Describe the role of payment for medications and for consultant pharmacy services.
 - Discuss with patients the issues of access, such as transportation, physical ability, and language barriers, as they relate to attaining pharmacy services.
10. *Identify geriatric focused professional organizations and resources within those organizations.*

Suggested student activities:

- Utilize library and other resources within setting of care for assignments throughout the rotation period.
- Research and access the Web sites of geriatric focused professional organizations.
- Discuss the benefits of joining geriatric focused professional associations with the preceptor(s).

F. Special Projects

At least one major project or activity should be undertaken by the student. The project or activity should address a specific need of the pharmacy or the targeted patient population unique to each student and permit the student to make an important contribution to that need.

Suggested student activities:

- Develop a proposal for a new pharmacy service;
- Review of the literature on a particular topic and present to staff;

- Design a methodology and collect data for a research project;
- Compose a patient information leaflet on a common disease, condition or problem;
- Write an article(s) to be included in the facility newsletter;
- Review medication use process, compare to other facilities and develop a plan to address any identified areas of concern;
- Expand upon a topic that has arisen as a result from a provision of care issue for an older patient;
- Complete a drug utilization review or drug utilization examination
- Develop a quality improvement initiative;
- Access or develop a resource on a medication access program available in the local community / state;

G. Preceptor Selection Criteria

The SCP Student Rotations Program adheres to the standards adopted by the Professional Experience Programs Special Interest Group (PEP SIG) of the American Association of Colleges of Pharmacy (AACP), specifically those that provide guidance for colleges of pharmacy as they select appropriate preceptors (part-time/volunteer faculty) and their respective sites for a rotation. The SCP Student Rotations Planning Committee applied the PEP SIG standard and accompanying guidelines for part-time/volunteer faculty to draft the Preceptor Selection Criteria. The standard reads:

The PEP faculty are synonymous with the experiential faculty. The principal divisions of experiential faculty are 1) the full-time faculty, and 2) the part-time/volunteer faculty. Experiential faculty serve both as clinical instructors and as exemplary professional role models for students.

The rotation preceptors serve both as clinical instructors and as exemplary professional role models for students. Therefore, the rotation preceptor should meet the following criteria:

1. The rotation preceptor actively practices pharmacy and has a minimum of three years in practice. One year of experience at the practice site is required.
2. The rotation preceptor exhibits a thorough understanding of geriatrics and the unique medication needs of older adults, which are the framework for the preceptor's practice.
3. The rotation preceptor conducts a high quality pharmacy practice that is well received by health professionals and patients. Evidence of such practice is demonstrated by, but not limited to, services such as: interactions with patients through provision of drug information, medication teaching, and medication history interview; interaction with health professionals through the provision of drug information, in-service,

- teaching, and consults regarding appropriate drug selection and use; and medication monitoring, e.g., adverse drug reporting program and pharmacokinetic therapeutic dosing.
4. Training in instructional methods or comparable experience is required of the rotation preceptor.
 5. The rotation preceptor engages in professional growth and life-long learning via participation in professional organizations and continuing education programs.
 6. The rotation preceptor meets student(s) at regularly scheduled times for direction and guidance. The rotation preceptor should identify, establish, and discuss the expectations for the rotation with the pharmacy student no later than the first day of the rotation. These expectations should follow the guidelines established by the student's college of pharmacy and, when appropriate, be expanded to include the student's personal interests and/or the expectations of the site.
 7. Creative scholarship is expected of a rotation preceptor.
 8. The rotation preceptor adheres to all policies for communicable diseases prevention, liability risk management, and injury risk management and carries appropriate insurance coverage.

H. Rotation Site Qualifications

The sites are held by the following standard adopted by the AACP PEP SIG:

The PEP sites are teaching sites representing contemporary ideals and displaying high standards of pharmacy practice.

In addition, the rotation site meets standards set by government agencies, including the State Board of Pharmacy, Drug Enforcement Agency, and Food and Drug Administration. If the site is part of an institution, such as a nursing facility or hospital, the institution shall be appropriately accredited (i.e., by the Joint Commission on Accreditation of Healthcare Organizations).

The rotation site qualifications outlined below provide explicit guidelines for this standard and serve as the barometer by which sites can determine their appropriateness for services as a SCP Student Rotation site.

1. The rotation site is free of any violations of state and/or federal law by the site and/or any of its staff.
2. Library and/or reference materials, including Web-based resources, for supporting student learning are provided or readily accessible.

3. Patient data are readily accessible for providing pharmaceutical care to patients.
4. Sufficient opportunity and time for interaction with patients is provided.
5. Direct interactions with other health care professionals (e.g., physicians, nurses, dietitians, and physical therapists) are provided.
6. The rotation site provides pharmaceutical care on an ongoing basis.
7. The rotation site demonstrates involvement in teaching health care professionals and /or patients, such as in-service presentations.
8. The rotation site maintains adequate staffing during the instructional period to allow the student a rewarding and meaningful experience.

I. Evaluation Requirements

SCP Student Rotations will adhere to the “Evaluation of Sites and Part-Time/Volunteer Faculty” which is part of the “Standards and Guidelines for Pharmacy Practice Experience Programs” adopted by the AACP PEP SIG. This standard states:

To ensure quality in the practice experience program, evaluations of sites and their corresponding part-time/volunteer faculty should be conducted regularly.

This standard also provides specific guidelines for evaluating potential and affiliated sites and part-time/volunteer faculty, according to a procedure established by the individual college of pharmacy for this purpose, and sharing of a written copy with the faculty and site administrator.

In addition to the PEP Standards and Guidelines, the SCP Student Rotation Program offers the following specific recommendations for fulfilling the evaluation requirements below.

Site and Preceptor Evaluation

An evaluation of the site and preceptor by the participating pharmacy student(s) will occur at the end of each SCP Student Rotation, and changes will be made accordingly. The primary areas of evaluation include:

- Adherence to the predetermined and agreed upon learning objectives for the site.
- Diversity of practice settings available to the pharmacy student as part of the experiential learning.
- Interactions with geriatric patients, family caregivers, interdisciplinary team, preceptor, and pharmacy staff.

Student Evaluation

An evaluation of the pharmacy student will occur midway through the SCP Student Rotation and at the end of the rotation. This evaluation will include the student's clinical knowledge, presentation and communication skills, ability to research and present information, understanding of senior care pharmacy practice, professional behavior, completion of learning objectives, and ability to identify social, moral, and ethical issues that occur in practice.

References

Administration on Aging (AOA). Profile of age characteristics for the United States: 2000 and 1990. Compiled from U.S. Census Bureau, Census 2000. Available at www.aoa.gov/aoa/STATS/Census2000/2000-1990-Pop.html.

Bates DW, Spell N, Cullen DJ, et al. The costs of adverse drug events on hospitalized patients. *JAMA* 1997;227:303-11.

Bootman JL, Harrison LD, Cox E. The health care cost of drug-related morbidity and mortality in nursing facilities. *Arch Int Med* 1997;157:2089-96.

Ernst FR, Grizzle AJ. Drug-related morbidity and mortality: updating the cost-of-illness model. *J Am Pharm Assoc* 2001;41:192-9.

Hwang W, Weller W, Ireys H, Anderson G. Out of pocket medical spending for care of chronic conditions. *Health Affairs* 2001;6:267-78.

Simonson, W. Consultant Pharmacy Practice. 2nd edition.