January 7, 2021

MEMORANDUM

TO: Hospital Administrator/CEO

VIA: Associate Administrator, Clinical Services

FROM: Personnel Services Administrator

SUBJECT: Creation of Positions

RE: Chief of Clinical Pharmacy & Clinical Pharmacist

Hafa Adai! Attached for your review and approval is the HR Office's recommendation to create the Chief of Clinical Pharmacy and Clinical Pharmacist positions for the Pharmacy Department.

On July 20, 2020, a memorandum was submitted to the HR Office from the Pharmacy Department requesting to create two new positions under pharmacy services. The pharmacy profession has undergone significant change since the inception of a doctorate pharmacy degree (PharmD) program. Graduates are now equipped to perform patient-centered quality care and work as part of an interdisciplinary team to provide safe and effective use of medications. The traditional dispensing role of a pharmacist has evolved into specialized medication experts with unique clinical knowledge of rational and safe medication use. The duties and responsibilities have outpaced the current Hospital Pharmacist position causing the need to create the Clinical Pharmacist position. To identify, organize, and prioritize the goals of clinical services; efficiently integrate clinical pharmacy services within the hospital; and serve as a team leader for the Clinical Pharmacists, the creation of a Chief of Clinical Pharmacy is also necessary.

Upon your approval, the HR staff will meet with the HR BOT sub-committee to begin the process of creating the above-mentioned positions pursuant to 4 GCA, Chapter 6, § 6303(d) - Creation of Positions in the Autonomous Agencies and Public Corporations, and pursuant to 4 GCA, Chapter 6, § 6303.1 - Transparency and Disclosure requirements.

Please note that upon establishment of these positions, they will be filled following merit system requirements. Should you have any questions, please feel free to call on me. Si Yu'os Ma'ase!

[Signature]

RAMON Y. LIZAMA, Acting

APPROVED:

[Signature]

LILLIAN Q. PEREZ-POSADAS, MN, RN

Date

for

Hospital Administrator/CE

Attachments
January 7, 2021

MEMORANDUM

TO: Chairperson and Members of the Board of Trustees

FROM: Hospital Administrator/CEO

SUBJECT: Petition for Creation of Positions
Re: Chief of Clinical Pharmacy & Clinical Pharmacist

Buenas yan Hafa Adai! This is to request your approval to establish the Chief of Clinical Pharmacy and the Clinical Pharmacist positions in the classified service within GMHA pursuant to Title 4 Guam Code Annotated, Chapter 6, § 6303(d) – Creation of Positions in the Autonomous Agencies and Public Corporations. A copy of the proposed job standards for the above-mentioned positions are attached (Exhibits A-B).

On July 20, 2020, a memorandum was submitted to the HR Office from the Pharmacy Department (Exhibit C) requesting for the creation of two new positions under pharmacy services. It was explained that the pharmacy profession has undergone significant changes with the inception of the doctorate in pharmacy degree (PharmD) program. The traditional dispensing role of a pharmacist has evolved into specialized medication experts with unique clinical knowledge of rational and safe medication use. The new duties and responsibilities have outpaced the traditional duties of the current Hospital Pharmacist position causing the need to create the Clinical Pharmacist position. In addition, to help identify, organize, and prioritize the goals of clinical services; efficiently integrate clinical pharmacy services within the hospital; and to serve as a team leader for the Clinical Pharmacists, the creation of a Chief of Clinical Pharmacy is necessary.

The proposed positions are being created in accordance with all requirements stated under 4 GCA, Chapter 6, § 6303(d) as follows:

(A) **The justification for the new position:** The Guam Memorial Hospital Authority acknowledges and recognizes that the Pharmacy profession has undergone significant change with the inception of the doctorate in pharmacy degree (PharmD) program. The new duties and responsibilities, and the clinical pharmacy knowledge to be applied by the new positions is anticipated to bring the pharmacy profession at GMHA up to date with national standards of clinical practice (Exhibit D).

(B) **The essential details concerning the creation of position:** The “benchmark” classification methodology was followed which involved reviewing the proposed Position Description of the position, proposed job standards, and comparable job standards. The pricing for the position was determined by staff evaluation using the Hay Guide Chart-Profile Method. For comparison purposes, the Department of Labor, Bureau of Labor Statistics May 2019 wage data for Pharmacists was also used in determining pay grade.

(C) **An analysis of the similarities and differences between the positions to be created and positions listed pursuant to 4 GCA § 4101.1(d):** Section 4101.1(d) refers to the government
of Guam Classification Plan which lists all established civil service positions (and their pay grade) actively being utilized by the Department of Administration. The Chief Hospital Pharmacist and Hospital Pharmacist positions were reviewed and compared. The creation of the positions proposed reveals one major difference being the inception of the Doctorate of Pharmacy (PharmD) degree as minimum qualifications whereas the established positions do not. Another difference would be how the job duties and responsibilities of the created positions have outpaced the current established positions. The Clinical Pharmacist competencies from the American College of Clinical Pharmacy published in 2017 were also reviewed (Exhibit D).

(D) **The position descriptions:** A copy of the completed Position Description Questionnaires (PDQ) for the positions are attached (Exhibit E-F). The PDQs confirm the additional duties and responsibilities performed and the minimum knowledge, abilities and skills necessary to satisfactorily perform those essential functions.

(E) **The proposed pay range and demonstration of compliance with § 6301 (Compensation Policy) of this Title:** The government of Guam’s Compensation Policy is administered by the Department of Administration. The Department of Administration uses the Hay Guide Chart-Profile Method for assigning pay grades and determining the relative pay and value of government of Guam positions. To determine the appropriate pay grade for the proposed positions, the Human Resources Division conducted an evaluation using the Hay Guide Chart-Profile Method – hay points were determined based on the factors of Know-How, Problem Solving, and Accountability. The hay points and proposed pay grade for the new positions are as follows: Chief of Clinical Pharmacy (657 hay points = Pay Grade Q) with a starting salary of $60,482.00 per annum; Clinical Pharmacist (551 hay points = Pay Grade P) with a starting salary of $55,488.00 per annum. A brief description of the hay evaluation can be found attached to include national wage mean information and the proposed organizational chart of the new positions (Exhibits G-G3). **The U.S. National Annual Mean Wage Estimate (from the U.S. Department of Labor – Bureau of Labor Statistics, May 2019 data) for Pharmacists is $125,510.00 per annum.** Pay Grade Q Step 7 = $75,602.00 per annum and Pay Grade P Step 7 = $69,360.00 are used to compare with the national wage mean. It is obvious that pharmacists are market premium positions, meaning the competitive salaries are determined primarily by market movement and not by the Hay job evaluation points.

(F) **A fiscal note as that term is described in 2 GCA § 9101 et seq.; and any other pertinent information.** Section 9101 refers to restrictions on filling unfunded positions. If the positions were to be created, they would have to be budgeted for as there are no current vacancies comparable to the recommended pay grade for the new positions. The current staffing pattern of the department is attached (Exhibit H) which display potential candidates and suggested budgeted salary amounts based on existing per annum salaries.

Based on the information given and supporting documents provided, this office requests your approval to create the Chief of Clinical Pharmacy at Pay Grade Q and Clinical Pharmacist at Pay Grade P. Si Yu’os Ma’a’se!

Respectfully,

LILLIAN Q. PEREZ-POSADAS, MN, RN

Attachments
CHIEF OF CLINICAL PHARMACY
(Proposed Creation)

NATURE OF WORK IN THIS CLASS:

This position is administrative and professional clinical pharmacy work involved in the administration of the clinical pharmacy programs and services at Guam Memorial Hospital Authority. Work is performed under general direction following the practices and procedures of hospital pharmacy. This position reports to the Assistant Administrator of Professional Support Services.

ILLUSTRATIVE EXAMPLES OF WORK: (These examples do not list all the duties which may be assigned; any one position may not include all the duties listed.)

Performs direct supervision of clinical pharmacists who provide patient-focused pharmaceutical care including: training and staff development, scheduling and assignments, team building and recruitment, performance evaluations of clinical pharmacists.

Provides oversight and support for the development and advancement of clinical pharmacy services with a focus on standardization and optimization of clinical workflow, identification of staff competency needs, process improvements that optimize clinical efficiency and medication utilization and staff education and communication.

Provides direction for prioritization of clinical pharmacy projects.

Provides drug information and in-services to physicians, nursing staff and other health professionals.

Interacts with physicians and nursing staff to maintain interdisciplinary relationships.

Assists in the development and implementation of best practice standards, established clinical guidelines and quality improvement initiatives.

Assists in prioritizing daily workflow of unit-based pharmacists to achieve departmental goals.

Arranges site coordination of pharmacy experiential (APPE) and residency training programs.

Develops and revises/updates hospital clinical pharmacy policies and procedures.

Performs related work as assigned.

MINIMUM KNOWLEDGE, ABILITIES AND SKILLS:

Knowledge of best practice standards and clinical guidelines for acute and chronic disease management, as well as concepts of modern pharmacology and pharmacotherapeutics.

Knowledge of the laws and regulations that govern all aspects of hospital pharmacy operations.

Knowledge of the principles and practices of administration, supervision and management including budgeting, personnel management, and quality assessment and performance improvement.
Chief of Clinical Pharmacy

Ability to ensure compliance with state and federal regulatory requirements related to medication use systems.

Ability to implement new systems and procedures, develop and implement clinical protocols and policies.

Ability to communicate effectively both written and verbal.

Ability to analyze, think critically, and solve problems.

Skill in prioritization, problem solving, team building, decision making, time management and strategic planning.

MINIMUM EXPERIENCE AND TRAINING:

Doctor of Pharmacy degree from an accredited or recognized college or university, five (5) years of hospital pharmacy experience, one (1) year of direct patient care experience, and one (1) year of supervisory or managerial experience.

NECESSARY SPECIAL QUALIFICATION:

Must be a registered Pharmacist with a current license to practice in Guam.

Completion of an accredited American Society of Health-system Pharmacists (ASHP) Clinical Residency Program is preferred.

Board Certification by the Board of Pharmacy Specialties (BPS) is preferred.

ESTABLISHED:

<table>
<thead>
<tr>
<th>PAY GRADE/PLAN:</th>
<th>Q (GPP)</th>
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<tbody>
<tr>
<td>HAY EVALUATION</td>
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<tr>
<td>KNOW HOW:</td>
<td>FI3 350</td>
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<tr>
<td>PROBLEM SOLVING:</td>
<td>E3 (38%) 132</td>
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<td>ACCOUNTABILITY:</td>
<td>E2P 175</td>
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<td>TOTAL POINTS -</td>
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</table>

THERESA OBISPO, Chairperson
Board of Trustees
CLINICAL PHARMACIST
(Proposed Creation)

NATURE OF WORK IN THIS CLASS:

Implements, maintains, and provides clinical pharmacy services including: clinical, educational, informational, and distributional functions for patients of the Guam Memorial Hospital Authority.

ILLUSTRATIVE EXAMPLES OF WORK: (These examples do not list all the duties which may be assigned; any one position may not include all the duties listed.)

Demonstrates comprehensive clinical competence including clinical problem solving, judgment, and decision making.

Assesses and prioritize patient-specific medical problems and organize, interpret and analyzed patient-specific data in order to implement and manage patient pharmacotherapy and educate patients and other providers.

Assists in the development and implementation of best practice standards, established clinical guidelines and quality improvement initiatives.

Monitors drug therapy and consult with other patient care providers to improve patient outcomes.

Designs a comprehensive drug therapy plan for patient specific problems, select optimal drug dose, route, frequency, and duration of therapy, select strategies for prevention of disease, incorporate significance of potential drug interactions into the recommended plan, and persuasively justify recommendations based on pharmacokinetic, pharmacoeconomic, ethical, legal, and evidence-based medicine.

Assists the Chief of Clinical Pharmacy in developing clinical pharmacy services, critical pathways, and clinical policies and procedures in accordance with the guidelines of the Joint Commission and CMS.

Performs medication use evaluations and adverse drug reaction reporting.

Participates in preceptorship coordination of pharmacy experiential (APPE) and residency training programs.

Provides drug information and in-services to physicians, nursing staff and other health professionals.

Interacts with physicians and nursing staff to maintain interdisciplinary relationships.

Performs related work as assigned.

MINIMUM KNOWLEDGE, ABILITIES AND SKILLS:

Knowledge of best practice standards and clinical guidelines for acute and chronic disease management, as well as concepts of modern pharmacology and pharmacotherapeutics.

Knowledge of laws and regulations that govern all aspects of pharmacy operations.
Clinical Pharmacist

Ability to ensure compliance with state and federal regulatory requirements related to medication use systems.

Ability to implement new systems and procedures, develop and implement clinical protocols and policies.

Ability to communicate effectively both written and verbal.

Ability to analyze, think critically, and solve problems.

Ability to work effectively with patients, employees, and the public.

Ability to maintain records and prepare reports.

MINIMUM EXPERIENCE AND TRAINING:

Doctor or Pharmacy degree from an accredited or recognized college or university and three (3) years of hospital pharmacy experience.

NECESSARY SPECIAL QUALIFICATION:

Must be a registered Pharmacist with a current license to practice in Guam.

Possession of a current Basic Life Support (BLS) certification.

Possession of a current Advanced Cardiac Life Support) certification.

DESIRABLE CERTIFICATIONS:

Completion of an accredited American Society of Health-system Pharmacists (ASHP) Clinical Residency Program is preferred.

Board Certification by the Board of Pharmacy Specialties (BPS) is preferred.

ESTABLISHED:

PAY GRADE/PLAN: P (GPP)
HAY EVALUATION
KNOW HOW: FI2 304
PROBLEM SOLVING: E3 (38%) 115
ACCOUNTABILITY: E2C 132
TOTAL POINTS: 551

THERESA OBISPO, Chairperson
Board of Trustees
Guam Memorial Hospital Authority  
Aturidåt Espeåtåt Mimuriåt Guåhan  
850 GOV. CARLOS CAMACHO ROAD  
OKA, TAMUNING, GUAM 96911  
TEL: 647-2444 or 647-2330  
FAX: (671) 649-0145  

July 20, 2020

PHARMACY DEPARTMENT MEMO

TO: Human Resources Department  
Board of Trustees

FROM: Chief Hospital Pharmacist  
Associate Administrator of Clinical Services

SUBJECT: 2 NEW POSITION REQUESTS – CHIEF OF CLINICAL PHARMACY AND CLINICAL PHARMACIST

This memo serves as a formal request for the creation of 2 new positions in the pharmacy department, Chief of Clinical Pharmacy and Clinical Pharmacist. The Chief of Clinical Pharmacy shall be primarily focused on directing clinical pharmacy responsibilities and goals, serve as the direct supervisor to the Clinical Pharmacists, under the supervision of the Assistant Administrator of Professional Support.

The pharmacy profession has undergone significant change since the inception of a doctorate pharmacy degree (PharmD). Graduates are equipped to perform patient-centered quality care and work as part of an interdisciplinary team to ensure safe and effective use of medications. The traditional dispensing role of a pharmacist has evolved into specialized medication experts with unique clinical knowledge of rational and safe medication use.

Since 2010, the pharmacy department has expanded from 6 FTE to 14 FTE: 2 with residency training, and 3 with national Board Certification in Pharmacotherapy. The pharmacy department currently provides the following clinical services: specialized pharmacy consults, policy and protocol development, patient-specific dosing, antimicrobial stewardship, unit-dedicated clinical services, participation in Code Blue and RRT activations, participation in clinical committees, discharge planning, anticoagulation management, and parenteral nutrition management. These duties and responsibilities have far outpaced the only current position at GMH which is Hospital Pharmacist. We hope to bridge this gap by creating the position of Clinical Pharmacist. This would reflect the current clinical pharmacy services provided by the department and our collective vision of our department goals.

Additionally, the role of a Chief of Clinical Pharmacy would be to identify, organize, and prioritize the goals of our clinical services, efficiently integrate clinical pharmacy services, and serve as a team leader for the Clinical Pharmacists. Please consider our request for the creation of these positions, it will bring the pharmacy profession at GMH up to date with national standards of clinical practice.
ACCP Clinical Pharmacist Competencies


American College of Clinical Pharmacy, Lenexa, Kansas

The purpose of the American College of Clinical Pharmacy (ACCP) is to advance human health by extending the frontiers of clinical pharmacy. Consistent with this mission and its core values, ACCP is committed to ensuring that clinical pharmacists possess the knowledge, skills, attitudes, and behaviors necessary to deliver comprehensive medication management (CMM) in team-based, direct patient care environments. These components form the basis for the core competencies of a clinical pharmacist and reflect the competencies of other direct patient care providers. This paper is an update to a previous ACCP document and includes the expectation that clinical pharmacists be competent in six essential domains: direct patient care, pharmacotherapy knowledge, systems-based care and population health, communication, professionalism, and continuing professional development. Although these domains align with the competencies of physician providers, they are specifically designed to better reflect the clinical pharmacy expertise required to provide CMM in patient-centered, team-based settings. Clinical pharmacists must be prepared to complete the education and training needed to achieve these competencies and must commit to ongoing efforts to maintain competence through ongoing professional development. Collaboration among stakeholders will be needed to ensure that these competencies guide clinical pharmacists' professional development and evaluation by educational institutions, postgraduate training programs, professional societies, and employers.

Key Words: American College of Clinical Pharmacy, clinical pharmacist, competencies.


A long-standing priority of the American College of Clinical Pharmacy (ACCP) is the assurance of an appropriately educated and skilled clinical pharmacy workforce. In 2008, the College published five clinical pharmacist competency statements that set forth the requisite knowledge and skills of individuals actively engaged in clinical pharmacy practice.¹ These were consistent with ACCP's definition of clinical pharmacy and were designed to serve as a foundation for the development and assessment of clinical pharmacists.²

The 2008 clinical pharmacist competencies were reviewed and updated by the 2016 ACCP Certification Affairs Committee. In developing these updates, committee members reviewed the literature related to competencies within the profession of pharmacy and the scope of practice of clinical pharmacists who provide comprehensive medication management (CMM) in team-based, direct patient care settings. The committee then prepared draft competencies for review by the ACCP Board of Regents. Following board

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feedback, the competencies were finalized and approved.

Background

Clinical pharmacists are licensed professionals who have completed accredited postgraduate clinical training (or obtained equivalent postgraduate clinical experience), have achieved board certification in a Board of Pharmacy Specialties (BPS) clinical specialty, and are practicing in team-based, direct patient care environments. Clinical pharmacists achieve competence by acquiring additional knowledge, skills, and experience during postgraduate clinical training and/or after entering clinical practice.

Discussion within the pharmacy academy and the profession is ongoing regarding whether Pharm.D. graduates are prepared to engage in direct patient care in team-based environments if they have not completed an accredited postgraduate clinical training or obtained an equivalent postgraduate clinical experience. Nonetheless, clinical pharmacists generally agree that the competence necessary to practice in these settings and provide CMM requires postgraduate clinical training or equivalent experience. The ACCP definition of clinical pharmacy presumes that clinical pharmacists provide care to patients as members of interprofessional patient care teams, assuming responsibility and accountability for optimizing medication-related outcomes. Many pharmacists provide fundamental services that are core components of pharmacy practice (e.g., drug order fulfillment, patient education, drug information, public health-related services), although such activities may not require postgraduate clinical training. Therefore, it is important to distinguish the competencies necessary to provide fundamental pharmacy services from the competencies necessary to deliver CMM in direct patient care settings.

Clinical Pharmacist Competencies

The six ACCP core clinical pharmacist competencies described below and summarized in Table 1 apply to practitioners engaged in CMM in team-based, direct patient care environments. They are analogous to the competency expectations for practicing physicians. Therefore, they align with the competencies embraced by the Accreditation Council for Graduate Medical Education (see Table 2). Although the competencies of clinical pharmacists are similar to those of physician providers, clinical pharmacist competencies more aptly reflect a focus on pharmacotherapy and ensuring optimal medication-related outcomes. These competencies are intended to ensure that a practitioner can provide CMM as outlined in the ACCP Standards of Practice. Clinical pharmacists may need to master additional areas of competence as they progress through their careers (e.g., leadership, research, or professional education). Therefore, this document is not intended to set forth every competency that clinical pharmacists may acquire over time or that is needed to succeed in specific professional pursuits.

Direct Patient Care

Direct patient care is not just any type of direct interaction with a patient. Rather, ACCP has defined direct patient care as "the direct observation and evaluation of the patient and his/her medication-related needs; the initiation, modification, or discontinuation of patient-specific pharmacotherapy; and the ongoing pharmacotherapeutic monitoring and follow-up of patients in collaboration with other health professionals." Furthermore, ACCP states that clinical pharmacists should possess the education, training, and experience necessary to function effectively, efficiently, and responsibly in the direct patient care role. Therefore, ACCP believes that clinical pharmacists engaged in direct patient care should be board certified or board eligible if a [BPS] certification does not exist in their area of practice) and have established a valid collaborative drug therapy management (CDTM) agreement or have been formally granted clinical privileges by the medical staff or credentialing system within the health care environment in which they practice.

Competence in direct patient care is initially developed during the clinical pharmacist's residency training (or through equivalent experience). Practitioners should be proficient in carrying out the clinical pharmacist's process of patient care. They should be able to accurately assess patients, evaluate drug therapy, develop and initiate a therapeutic plan, and follow up on and monitor the outcomes of the plan. Clinical pharmacists should have the experience and skills necessary to educate patients, families, and caregivers from diverse socioeconomic and cultural backgrounds. Clinical pharmacists should also be able to collaborate confidently as members of interprofessional

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
<table>
<thead>
<tr>
<th>Competency Domain</th>
<th>Elements of the Competency</th>
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| **Direct patient care** | • Assess patients, including identifying and prioritizing patient problems and medication-related needs.  
• Evaluate drug therapy for appropriateness, effectiveness, safety, adherence, and affordability.  
• Develop/initiate therapeutic plans and address medication-related problems.  
• Follow up on and monitor the outcomes of therapeutic plans.  
• Collaborate with other members of the health care team to achieve optimal patient outcomes across the continuum of care.  
• Apply knowledge of the roles and responsibilities of other health care team members to patient care. |
| **Pharmacotherapy knowledge** | • Demonstrate and apply in-depth knowledge of pharmacology, pharmacotherapy, pathophysiology, and the clinical signs, symptoms, and natural history of diseases and/or disorders.  
• Locate, evaluate, interpret, and assimilate scientific/clinical evidence and other relevant information from the biomedical, clinical, epidemiological, and social-behavioral literature.  
• Use scientific/clinical evidence as the basis for therapeutic decision-making.  
• Possess the knowledge and experience commensurate with certification in one or more BPS specialties.  
• Maintain and enhance pharmacotherapy knowledge, including recertification or other appropriate methods of self-assessment and learning. |
| **Systems-based care and population health** | • Use health care delivery systems and health informatics to optimize the care of individual patients and patient populations.  
• Participate in identifying systems-based errors and implementing solutions.  
• Resolve medication-related problems to improve patient/population health and quality metrics.  
• Apply knowledge of pharmacoconomics and risk/benefit analysis to patient-specific and/or population-based care.  
• Participate in developing processes to improve transitions of care.  
• Design quality improvement processes to improve medication use. |
| **Communication** | • Communicate effectively with:  
  ○ Patients, caregivers, families, and laypersons of diverse backgrounds.  
  ○ Other health professionals and stakeholders.  
• Provide clear and concise consultations to other health professionals.  
• Develop professional written communications that are appropriate to the audience.  
• Use verbal communications tailored to varied clinical and patient-specific environments.  
• Communicate with appropriate levels of assertiveness, confidence, empathy, and respect. |
| **Professionalism** | • Uphold the highest standards of integrity and honesty.  
• Commit to a fiduciary relationship with patients, always working in their best interests.  
• Serve as a credible role model/leader for students, trainees, and colleagues by exhibiting the values and behaviors of a professional.  
• Advance clinical pharmacy through professional stewardship, training of future clinical pharmacists, and active engagement in professional societies. |
| **Continuing professional development** | • Commit to excellence and lifelong learning.  
• Demonstrate skills of self-awareness, self-assessment, and self-development.  
• Identify and implement strategies for personal improvement through continuing professional development.  
• Provide professional education to students, trainees, or other health professionals.  
• Maintain BPS certification to ensure that therapeutic knowledge is up-to-date. |

*These competencies are necessary to provide OHS in team-based, direct patient care environments. Other competencies should be acquired as the clinical pharmacist progresses through his/her career and engages in additional professional activities.  
*bThese elements of competency help describe each competency but are not intended to be all-inclusive. Other, related elements may apply, depending on the clinical pharmacist's practice setting and activities.
Table 2. Comparison of ACGME Physician Competencies and ACCP Clinical Pharmacist Competencies

<table>
<thead>
<tr>
<th>ACGME Physician Competencies</th>
<th>ACCP Clinical Pharmacist Competencies</th>
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<tbody>
<tr>
<td>1. Patient care and procedural skills</td>
<td>1. Direct patient care</td>
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<tr>
<td>2. Medical knowledge</td>
<td>2. Pharmacotherapy knowledge</td>
</tr>
<tr>
<td>4. Interpersonal and communication skills</td>
<td>4. Communication</td>
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<tr>
<td>5. Professionalism</td>
<td>5. Professionalism</td>
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<tr>
<td>6. Practice-based learning and improvement development</td>
<td>6. Continuing professional development</td>
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health care teams and apply knowledge of the roles and responsibilities of other team members to accomplish individualized, patient-centered care.\textsuperscript{18} This should occur in all patient care settings and during transitions of care.\textsuperscript{19}

Pharmacotherapy Knowledge

Clinical pharmacists must possess an in-depth knowledge of pharmacology and pharmacotherapy and the scientific/c clinical evidence that forms the basis for rational drug therapy. This knowledge is critical in making decisions that optimize patients' medication-related outcomes. Clinical pharmacists must also possess an extensive knowledge of medicine (e.g., pathophysiology and mechanisms of diseases/disorders, clinical presentation, diagnostic tests, and natural history of disease). This knowledge contributes to effective and efficient patient assessment and the evaluation, monitoring, and optimization of pharmacotherapy. Clinical pharmacists must be able to understand, analyze, critically evaluate, and apply knowledge from the biomedical, clinical, epidemiological, and social-behavioral sciences to patient care. Without such knowledge, they cannot fully contribute to ensuring optimal medication-related outcomes.

ACCP maintains that clinical pharmacy practitioners providing direct patient care should be board-certified specialists.\textsuperscript{13} Certification as a specialist through BPS provides evidence of an individual clinical pharmacist's knowledge related to pharmacotherapy, evidence-based medicine, systems-based standards and population-based pharmacotherapy, and other domains, depending on the specialty. At a minimum, the breadth and depth of the clinical pharmacist's knowledge should be commensurate with that of a Board Certified Pharmacotherapy Specialist (BCPS).\textsuperscript{13, 20, 21}

Systems-Based Care and Population Health

Clinical pharmacists' contributions to public health, global health, and population health directly and indirectly affect medication management, including chronic disease prevention and treatment.\textsuperscript{22} \textsuperscript{25} This has been facilitated by the expansion of health informatics, which has become an important, multidimensional health care tool. Clinical pharmacists use health informatics to optimize patient care at both the health system and population levels by engaging in developing, implementing, and disseminating system-wide protocols, clinical pathways, and clinical decision support systems.\textsuperscript{26, 27} Health informatics data allow opportunities to improve health care metrics/outcomes and reduce costs. Clinical pharmacists should be able to conduct pharmacotherapy-related evaluations and critically interpret data to improve health within a population.

Clinical pharmacists should also possess a multifaceted understanding of how different health care systems and settings function. This should include the flow of clinical care from the emergency department through admission, transition of care to home or a postcare facility, and care in the ambulatory environment. Not only should clinical pharmacists understand the potential complications that may arise as patients transition between health care systems or settings, but they should also be able to participate in the development of processes to promote safe and effective medication use during these transitions.\textsuperscript{28}

An understanding of health care metrics and accreditation of health care systems is also important.\textsuperscript{29, 30} Clinical pharmacists often serve as members of interprofessional teams charged to help review, analyze, and document the institutional achievement of performance standards set forth by accreditation, recognition, or certification bodies such as the Joint Commission and the National Committee for Quality Assurance (NCQA). Together with physicians, physician assistants, nurse practitioners, and other health professionals, clinical pharmacists participate in documenting institutional compliance with Joint Commission National Quality Core Measures and other metrics.\textsuperscript{31, 32} In addition, clinical pharmacists contribute to similar activities through NCQA's Healthcare Effectiveness Data and Information Set (HEDIS) measures and Patient-Centered Medical Home (PCMH) recognition program.\textsuperscript{33} The competent clinical pharmacist
should exhibit the abilities necessary to engage in these activities.

Communication

Clinical pharmacists must communicate effectively with patients, caregivers, families, and laypersons of diverse backgrounds; other health professionals; staff of health-related agencies; and other stakeholders. All forms of communication should conform to the professionalism expectations cited in the following paragraphs.

Clinical pharmacists must be able to develop professional written communications ranging from formal, peer-reviewed documents to less-formal daily communications in professional settings. Documenting direct patient care activities appropriately in the medical record is an essential expectation. Clinical pharmacists are required to use writing styles appropriate to the context of the communication. For example, accurate, clear, and concise messages are necessary for follow-up medical record notations and e-mail communications; more detailed and extensive writing may be required for consultative, admission, or discharge medical record entries. Regardless of their purpose, clinical pharmacists' written communications must be accurate, appropriate in tone, suitable for the audience, and as clear and concise as possible.

Verbal communications should be tailored to the clinical and patient-specific environment. Clinical pharmacists are often expected to provide formal presentations that are well planned, well prepared, and well practiced. The ability to think and effectively communicate "in the moment," with little planning, is also expected. This skill is essential when clinical pharmacists make patient-specific recommendations in clinical settings. Like their written communications, clinical pharmacists' verbal communications must be clear and concise. These communications must also balance appropriate levels of assertiveness, confidence, empathy, and respect. Finally, when communicating with patients, caregivers, families, and laypersons, clinical pharmacists should use reflective, patient-centered listening while establishing the individual's or audience's level of understanding.

Professionalism

The oath of a pharmacist declares a commitment to serve patients, pursue optimal health outcomes, and act according to the highest moral, ethical, and legal conduct. Professionalism is expected of all health care providers and should be central to pharmacists' practices over their lifetime. As professionals, clinical pharmacists must make it their primary obligation to establish a "fiducial" relationship with those they serve. In exchange for this "gift of trust," they promise to work in the patient's best interests. This covenantal relationship lies at the core of the clinical pharmacist's relationship with the patient.

Teaching and demonstrating professionalism are essential components of the postgraduate training competency areas, goals, and objectives. Postgraduate clinical trainees are expected to have been thoroughly inculcated with the values of professionalism. Clinical pharmacists must serve as credible role models for students and trainees by both exhibiting and providing guidance on the values and behaviors of a professional.

Continuing Professional Development

Engaging in continuing professional development (CPD) is a core competency of any professional because it reflects a commitment to excellence and an awareness of the need for lifelong learning. Clinical pharmacists are expected to possess the skills of self-awareness, self-assessment, and self-development. These skills are often acquired through the evaluation and mentorship provided during their postgraduate training and then developed further throughout their careers. Ongoing self-assessment should inform the areas of priority for individual CPD.

An important component of the clinical pharmacist's CPD is the pursuit of board certification through BPS. BPS board certification is an effective means of accomplishing CPD. Board certification also provides evidence of competence to stakeholders and facilitates opportunities for clinical pharmacists to practice at a level reflective of their education, training, and experience. Other activities and certification processes may also effectively promote CPD. Providing professional education to students, trainees, or other health professionals can enhance the clinical pharmacist's professional development. Engaging in professional organizations to gain exposure to contemporary clinical practice innovations/advances, learn about best practices, and forge collaborative relationships is also an effective means of accomplishing CPD.
Conclusions

The six competencies outlined above describe the requisite knowledge, skills, attitudes, and behaviors of clinical pharmacists who provide CMM. Individual practitioners can be assessed using the criteria outlined in the updated ACCP Template for Evaluating a Clinical Pharmacist. The ACCP's goal is to ensure that clinical pharmacists possess the core competencies necessary to contribute meaningfully to the optimal use of medications. Commitment by individual clinical pharmacists, postgraduate training programs, and health care institutions/organizations to achieving and maintaining these competencies will be necessary to attain this goal.

References

Clinical Pharmacist Competencies

American College of Clinical Pharmacy

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competencies.
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The American College of Clinical Pharmacy (ACCP) strategic plan summarizes its core
ideology, envisioned future, core purpose and
mission, and critical issues for the organization
and the profession. A longstanding critical issue
of the college’s plan is how ACCP can contribute
to ensuring an appropriately educated and skilled
clinical pharmacy workforce. Toward that end,
the college sought to publish a definition of
clinical pharmacy and establish the competencies
of a clinical pharmacist. Coincident with the
development of its definition of clinical
pharmacy, the ACCP Board of Regents charged a

task force to develop a complete set of competency
statements for the clinical pharmacist. These
statements were to be assessable and able to serve
as a foundation for the development of future
clinical pharmacist assessment tools.

In developing the competency statements for
this paper, the authors reviewed a number of
documents that addressed competencies within
the profession of pharmacy, including the
Accreditation Council for Pharmacy Education
(ACPE) Accreditation Standards for the Doctor of
Pharmacy degree, the American Association
of Colleges of Pharmacy (AACP) Center for the

Advancement of Pharmaceutical Education
(APE) Education Outcomes, the American
Society of Health-System Pharmacists (ASHP)
and ACCP joint statement on learning objectives
for residency training in pharmacotherapy, and
the Board of Pharmaceutical Specialties content
outline for the Pharmacotherapy Specialty
Certification examination. Consensus
competencies of a clinical pharmacist were
identified. Draft competencies and associated
content knowledge components were then
prepared for review by the ACCP Board of Regents.
After extensive deliberations, the authors
identified key differences between the competencies
of a clinical pharmacist and today’s pharmacy
generalist.

Background

The ACCP’s vision for the profession is that
“pharmacists will be recognized and valued as
the preeminent health care professionals
responsible for the use of medicines in the
prevention and treatment of disease.” The

vision articulated by the Joint Commission of
Pharmacy Practitioners also calls for future
pharmacists to be responsible for rational
medication use. Today, few pharmacists are
viewed by the public, government, payers of
health care, physicians, nurses and other health
professionals, or patients as the preeminent
health care professionals responsible for the use
of medicines in the prevention and treatment of
disease or rational medication use. However, the
profession has reason for optimism because a
growing number of clinical pharmacists and
clinical pharmacy specialists practicing in a
variety of institutional and ambulatory care settings are viewed by other health professionals as essential to ensuring rational medication use. To achieve the ACCP’s vision, the profession must ensure that there will be an adequate supply of appropriately educated and skilled clinical pharmacists practicing as both clinical pharmacy generalists and specialists. Among the strategies that will help address this issue is to clearly define and promote the core competencies of a clinical pharmacy practitioner. Hence, the ACCP sought to publish a definition of clinical pharmacy and the core competencies of a clinical pharmacist.

The ACCP definition of clinical pharmacy states that “clinical pharmacy is that area of pharmacy concerned with the science and practice of rational medication use.” The AACP, through CAPE, has published educational outcomes to serve as a “target towards which the evolving pharmacy curriculum should be aimed.” The ACPE doctor of pharmacy accreditation curricular standards state that “graduates must possess the basic knowledge, skills and abilities to practice pharmacy, independently, at the time of graduation.” This implies that pharmacy graduates upon entry to the profession are capable of independently providing pharmacotherapy to patients. The ASHP postgraduate year one (PGY1) residency standard states that a “first-year residency program enhances general competencies in managing medication-use systems and supports optimal medication therapy outcomes for patients with a broad range of disease states.” The standard goes on to state that the purpose of PGY1 residencies is to provide residents with “the opportunity to accelerate their growth beyond entry-level professional competence in patient-centered care and in pharmacy operational services and to further the development of leadership skills... PGY1 residents acquire substantial knowledge required for skillful problem solving, refine their problem-solving strategies, strengthen their professional values and attitudes, and advance the growth of their clinical judgment.” The postgraduate year two (PGY2) standard states that PGY2 programs “increase the resident’s depth of knowledge, skills, attitudes, and abilities to raise the resident’s level of expertise in medication therapy management and clinical leadership” in a specific and focused area of practice.

After review of the AACP, ACPE, and ASHP papers related to pharmacy education and training, and the competencies of today’s pharmacy graduates upon entry into the profession, the authors reached the following conclusions:

1. Competency lists and statements by each organization are similar. All of the statements are aimed at producing graduates of Pharm.D. or residency programs who can independently provide patient care and manage pharmacotherapy.

2. There are different competence levels that reflect the amount of experience that a pharmacy graduate has obtained in a doctor of pharmacy degree program or from completion of a PGY1 or PGY2 residency program. The PGY1 residency programs are, in most cases, aimed at producing pharmacy generalists. The PGY2 programs are aimed at producing pharmacy specialists or pharmacists who practice in well-differentiated areas of clinical pharmacy practice.

3. A key factor in developing competence is the continual learning of new knowledge and the enhancement of critical thinking and problem-solving skills through practice. Repetition is essential in the development of practice skills, and thus the average levels of performance of doctor of pharmacy and residency program outcomes vary depending on the amount of patient care practice included in the program. Upon entry into the profession, pharmacy graduates are novices at managing pharmacotherapy. Entry-level pharmacy graduates usually gain some clinical pharmacy practice experience during their educational programs. This experience prepares them for entry into the profession, but not as fully competent clinical pharmacists.

Pharmacy graduates are often able to competently perform basic clinical activities such as routine patient counseling, provision of drug information, and targeted drug monitoring, but are not competent at providing more complex clinical services. Graduates of PGY1 residency programs are minimally competent to provide general clinical services (e.g., patient counseling, routine drug monitoring) but often are not prepared to independently assume responsibility for the more complex decision making involved in drug therapy selection and drug therapy management. The PGY2 programs allow residents to develop more in-depth knowledge and skills by working in specialized or differentiated areas of practice.

Focusing on specific patient care populations (e.g., critical care, oncology, and pediatrics) allows graduates of PGY2 programs to enter practice...
as entry-level clinical pharmacists. Through continued clinical and additional learning opportunities they become proficient clinicians and eventually experts in a field of practice. In summary, clinical pharmacists develop proficiency through formal training and practice experience.

4. The term clinical pharmacist is used in many different contexts. Some pharmacy leaders view all of today’s pharmacists as clinical pharmacists. Although this viewpoint is consistent with the future vision for the profession, we find this to be an unrealistic assessment of today’s practitioners. Similarly, some educators maintain that all graduates of doctor of pharmacy programs are prepared to be clinical pharmacists. We feel that this is not a realistic assessment of the outcomes of today’s doctor of pharmacy programs. In addition, we agree with this future vision for the profession but feel that future manpower needs will determine if today’s clinical pharmacists actually become the pharmacy generalists of the future.13

5. Reporting of the outcomes achieved by many doctor of pharmacy and residency programs is based predominantly on subjective data. Current pharmacy licensure board examinations evaluate only minimal practice competency. Advancement of pharmacy education and residency training could be enhanced by educational research that focuses on objective measures of clinical performance.

6. A number of important qualities define the clinical pharmacist.2,14 Although a majority of today’s pharmacists perform some clinical functions as part of their practice, they are not necessarily clinical pharmacists, just as all physicians who perform heart auscultations to assess cardiac disease are not cardiologists. The authors conclude that the following key qualities define the clinical pharmacist:

- Clinical pharmacists have a broad scope and depth of pharmacotherapy knowledge and clinical skills. Knowledge is obtained and clinical skills are developed through formal education and training programs, including doctor of pharmacy degree and postgraduate residency programs, lifelong learning, and continuing professional development. Clinical pharmacist competence is achieved when one possesses the knowledge, skills, and attitudes required to provide direct care to patients and to ensure rational medication use. Although many pharmacists possess some clinical knowledge or skills and perform some clinical functions or tasks, they must demonstrate comprehensive clinical competence in order to be clinical pharmacists.

- Clinical pharmacists spend the majority of their time providing pharmacotherapy independently or in collaboration with other health care providers. Clinical pharmacists must be engaged in the provision of patient care for a sustained period of time to become fully competent and proficient. Although a number of pharmacists have been educated and trained in some aspects of clinical pharmacy, their current work responsibilities may not be characterized as practicing clinical pharmacy because they are not fully engaged in providing direct patient care and do not provide complex, in-depth clinical services. Functions associated with medication order fulfillment continue to prevent pharmacists from becoming fully competent and proficient clinical pharmacists. There are a number of other barriers that continue to prevent pharmacists from practicing as clinical pharmacists, such as inadequate leadership and management, failure to establish collaborative relationships with physicians and nurses, lack of reimbursement for clinical services, and provider status. Time in practice beyond pharmacy education and training is required to allow one to gain experience with a wide range of medical problems and therapies, and to develop the necessary scope and depth of knowledge and clinical skills required to proficiently function as a clinical pharmacist.

- Clinical pharmacists have completed postgraduate residency training. Although there are excellent clinical pharmacists in practice today who have not completed residency training, in most cases the preferred method for acquiring the competencies of a clinical pharmacist is through formal residency training. This will become increasingly important in the future. Individuals who satisfactorily complete PGY1 (and ideally PGY2) accredited residencies that focus on clinical practice should have sufficient knowledge and practice experience to be competent clinical pharmacists with sound clinical judgment.
Although experience may be obtained outside of a structured residency program, any experience deemed to be equivalent to residency training must allow for involvement in the direct care of a sufficient number of patients over a period of time long enough to foster the development of clinical judgment. Without the necessary level of judgment, practitioners are limited in their ability to make patient-specific decisions and to know when a situation extends beyond their limits of knowledge and expertise.

- Clinical pharmacists maintain and further develop competence through practice and continued professional development. Although many pharmacists assume some direct patient-care responsibilities, they may not have received comprehensive, systematic clinical training. Achieving and maintaining clinical competence is a responsibility of all health care professionals. Although pharmacists have been required to obtain continuing education credit to maintain their licensure, the value of this method of education, which is often unfocused and noncurricular, has been questioned. The specific needs of the clinical pharmacist are often not addressed through these noncurricular programs. Hence, the profession is evaluating alternate approaches of continuing professional development to meet these needs.

If clinical pharmacists are to effectively evaluate their own abilities to carry out clinical responsibilities, they must have a defined list of competencies against which they can measure performance. There are many competencies that apply to all pharmacists. However, this document addresses those competencies that must be achieved by a clinical pharmacist.

Establishing specific clinical pharmacist competencies is important. First, they describe the abilities necessary to practice as a clinical pharmacist. Second, they can be used by practitioners to perform a self-assessment and thereby determine what areas need to be strengthened in order to enter clinical practice or maintain clinical competence. Although these competencies will undoubtedly evolve over time, this paper describes the competencies of today's clinical pharmacist. Therefore, we provide below a set of clinical pharmacist competencies for contemporary clinical practice and a framework in which to apply them.

Clinical Pharmacist Competencies

Specific clinical pharmacist competencies are summarized in Appendix 1.5.8-10 The following sections describe each major competency area and its respective rationale. We acknowledge that some clinical pharmacists may function primarily as researchers or administrators and that these responsibilities may require a different set of competencies. However, this paper focuses only on those competencies required for clinical practice.

Clinical Problem Solving, Judgment, and Decision Making

A combination of comprehensive therapeutic knowledge, experience, problem-solving skills, and judgment is necessary in order to be a competent clinical pharmacist. Clinical problem solving and decision making are the processes by which patient-specific data are collected, interpreted, and analyzed; medical problems are assessed; current drug therapy is evaluated; and therapeutic plans are developed. These processes are critical to optimizing medication therapy.

Clinical pharmacists must be able to identify patient problems, implement and manage patient pharmacotherapy, dispense and administer medications as needed, educate patients, monitor drug therapy, and consult with other patient care providers to improve patient outcomes.

Although monitoring of therapy is often taught as the final step in the patient care process, it must occur before, during, and after the start of drug therapy. To effectively monitor therapy, the clinical pharmacist must be able to collect and interpret patient data from a variety of sources. Recognizing and identifying important information, and then interpreting and analyzing it in the context of complex clinical situations, require practice and repetition. Only after sufficient experience is acquired can a clinician know which situation demands urgent attention and which merely requires ongoing monitoring. Although students often associate monitoring with a list of specific parameters to follow in patients who have particular medical problems or who are receiving specific therapies, patient monitoring is actually much more complex. It is an active, ongoing process of patient assessment that promotes changes in therapy in order to optimize therapeutic outcomes and avoid or correct drug-related problems. Only after a clinical pharmacist has cared for many patients in a variety of situations will he or she be able to
monitor patients efficiently and effectively.

Similarly, assessing medical problems is an important clinical ability that must be developed and practiced. Although pharmacists are not responsible directly for establishing a patient's medical diagnosis, it is essential that the pharmacist be able to define patient-specific problems and effectively evaluate current therapy for those problems. Hence, clinical pharmacists cannot focus only on medications, but must take into account all patient-specific medical problems as well.

Designing and individualizing comprehensive drug therapy regimens also requires clinical experience. Observing patient-specific responses to medications is critical to anticipating potential outcomes of initiating and adjusting drug therapy. Sound clinical judgment should be based on a combination of in-depth knowledge of diseases, expertise in drug therapy, and practical experience involving patients' use of medications.

Collaborating with patients, caregivers, and other health professionals is another essential ability that deserves attention. Clinical pharmacists must be able to work with patients and other health care professionals to determine which treatments will best meet the patient's therapeutic needs. They must understand their roles, and the roles of collaborators, in the clinical problem-solving process.

Communication and Education

The ability to effectively communicate with and educate patients and health care professionals is integral to ensuring optimal patient outcomes. As with other abilities, communication is developed and refined throughout a pharmacist's career. Educating with patients and other health professionals about a particular issue at the appropriate level of complexity can be challenging, and pharmacists must be aware of barriers to effective communication. Because effective communication and education are so fundamental to the provision of patient care, it is imperative that these abilities be well developed.

The clinical pharmacist must identify those issues that are particularly pertinent for patients and physicians to help optimize drug therapy. Providing accurate information alone is not sufficient. As with clinical problem solving, experience and judgment are required to advocate for a needed intervention or change in therapy. The same recommendation that was rejected when delivered by a pharmacy student or resident may be accepted when delivered by an experienced clinician. Also, in communicating with patients, a monologue of detailed information can serve to confuse rather than educate. Assessment of a patient's level of understanding, identification of issues important to the patient, and delivery of information and advice in an understandable fashion are necessary.

Written communication is also important. One of the core tenets of clinical pharmacy is assuming responsibility for patient care. Like other health care providers, it is the clinical pharmacist's responsibility to document medication reconciliation, clinical problemsolving activities, therapeutic interventions, and patient education activities in the medical record. Although this may appear to be a relatively easy task, experience is required to know what information to include and how to communicate it in a manner appropriate for the patient medical record. As with verbal communication, practice is required to become proficient at writing notes in the medical record.

Medical Information Evaluation and Management

Providing quality patient care requires a knowledge base that is continuously expanding and being updated. A clinical pharmacist must be able to identify situations beyond his or her own expertise or that require new information to reach a decision. This necessitates carefully defining the question and using a variety of information sources to derive the answer. New information is then incorporated into one's existing knowledge base and integrated with prior clinical experiences to help develop sound clinical judgment.

Of course, young clinicians, students, and residents can sometimes become discouraged when they realize how much they do not know. However, recognizing the limits of one's knowledge base is an important step in the development of a mature clinician. Experience with a wide variety of information resources is essential. The new clinician may rely heavily on a limited number of resources rather than identifying the best sources of information for a given question. Fortunately, this skill is readily developed over time.

The clinical pharmacist must keep abreast of current medical and therapeutic information. A strong foundational knowledge base must first be
developed so that new information can be readily combined with prior knowledge. Students and trainees often lack the clinical experience necessary to recognize new information that should be incorporated into their knowledge base. Skills in interpreting and evaluating biomedical literature assist the clinical pharmacist in effectively integrating new information with prior knowledge. These skills, which are often discounted as unimportant by students and trainees, provide the basis not only for keeping up with the literature but also for making evidence-based decisions.

Management of Patient Populations

Many clinical pharmacists not only are involved in providing care to individual patients, but work within a health system or other organization to develop protocols and critical pathways that optimize the care of patient populations. These efforts may include analyzing drug utilization evaluations, composing protocols for disease state management, and developing organizational policies and procedures that improve patient care and resource utilization.\textsuperscript{9,10} For instance, the Institute of Medicine has highlighted the importance of identifying processes within health systems that can predispose to medication errors.\textsuperscript{19,20} Clinical pharmacists can apply their therapeutic knowledge and clinical experience to identify and correct problems that contribute to adverse events in patients. This may involve the collection and evaluation of information regarding how a particular medication or class of medications is being used such that changes can be implemented to improve care. Drug therapy protocols can be developed to ensure the proper use and monitoring of medications. A clinical pharmacist must possess sufficient experience and clinical judgment in the care of individual patients to effectively contribute to this process.

Clinical pharmacists routinely contribute to the development and implementation of critical pathways.\textsuperscript{9,10} Because critical pathways are evidence based, the clinical pharmacist must be able to recognize and interpret relevant biomedical literature to formulate and justify valid drug therapy recommendations. Educating others about a critical pathway requires an in-depth understanding of the pathway, the evidence on which it is based, and the clinical implications for both health care professionals and patients. These skills are clearly beyond those acquired in a doctor of pharmacy program and require development during postgraduate training and practice.

Therapeutic Knowledge

Clinical pharmacists must possess a therapeutic knowledge base of sufficient breadth and depth to effectively promote rational medication use. Appendix 1 includes a list of diseases and pharmacotherapeutic principles intended to serve as a guideline for the identification, assessment, and development of clinical pharmacist competencies. In general, to be considered a clinical pharmacist, one must be sufficiently knowledgeable about the diseases and principles in this list to effectively assess and treat these problems in the patient population one serves. It is important to emphasize that a clinical pharmacist must be competent in the therapeutic management of the many disease states that may affect a given patient, not simply those currently identified as active problems. To optimize a patient’s therapy, the clinical pharmacist must be able to identify and solve new problems as they arise.

Doctor of pharmacy degree programs provide broad but relatively superficial coverage of disease states, pharmacotherapy, and general therapeutic principles. The PGY1 residencies are structured to deepen one’s knowledge of many disease states, provide a supervised environment for the application of this knowledge, and promote the development of patient care skills and clinical judgment. Although preferred, a PGY1 residency is not the only way to develop the required skills and knowledge to be a clinical pharmacist. However, the content and structure of a residency should serve as a model for individuals seeking to become clinical pharmacists but who are unable to pursue formal residency training.

Although some clinical pharmacists may distinguish themselves by developing a subspecialty area of expertise (e.g., cardiology, infectious diseases), the maintenance of a sound foundation of therapeutic knowledge over a wide range of topics is necessary to meet their professional demands. Other clinical pharmacists may have a practice that focuses on a specific patient population (e.g., pediatrics). A list of therapeutic knowledge areas with similar breadth and depth to that described in Appendix 1 could be identified for those clinical pharmacists. Recognizing that such knowledge will grow and
evolve with changes in medicine, the guiding principle is that a clinical pharmacist who possesses a sufficient breadth and depth of therapeutic knowledge and experience is capable of comprehensively managing pharmacotherapy in the patient population he or she serves. If an individual’s knowledge is limited to a few therapeutic classes of drugs, one’s experience and clinical judgment will also be limited. This paper’s goal is not to provide a definitive checklist of knowledge areas, but rather to characterize the breadth of knowledge minimally required for clinical practice.

Conclusion

These competency statements represent a current assessment of the requisite knowledge and skills of an individual actively engaged in the practice of clinical pharmacy. The knowledge areas describe the breadth of knowledge necessary for practitioners to provide appropriate levels of care for patients. Changes and advances in medicine will require periodic reevaluation and modification of therapeutic knowledge areas. Although there may be multiple paths for the development of clinical competence, further clarification of both the ideal career path and means to assess competence are needed. Then, once a practitioner has developed these competencies, methods and processes for self-assessment of clinical competence can be used to guide continuous professional development.

References

Appendix 1. Clinical Pharmacist Competencies

1. Clinical problem solving, judgment, and decision making
   A. Monitor patients in the health care setting.
      1. Collect patient-specific data to identify problems and individualize care.
      2. Perform relevant physical assessment.
      3. Interview patient, family, and other health care professionals to complement patient's medical history, medication therapy history, and review of systems.
      4. Identify additional data needed.
      5. Identify patient specific goals of therapy.
      6. Prospectively develop a plan for ongoing evaluation of progression of disease, development of disease-related complications, efficacy of drug therapy, and development of drug-related adverse effects.
   B. Assess patient-specific medical problems.
      1. Organize, interpret, and analyze patient-specific data.
      2. Synthesize patient data to form an assessment.
      3. Develop a comprehensive medical problem list.
      4. Assess the status, etiology, risk factors, and complications of the patient's medical problems.
      5. Prioritize medical problems based on urgency and severity.
      6. Identify preventive and health maintenance issues.
      7. Persuasively communicate a justification for one's assessment.
   C. Evaluate patient-specific drug therapy and therapeutic problems.
      1. Evaluate the appropriateness of drug therapy, including the choice of drug, and the dose, route, frequency, and duration of therapy.
      2. Evaluate the efficacy of current drug therapy.
      3. Identify potential or actual drug-induced adverse effects.
      4. Identify potential or actual drug interactions.
      5. Identify contraindications to therapy.
      6. Identify untreated problems.
      7. Assess patient compliance and factors that may influence compliance.
   D. Design a comprehensive drug therapy plan for patient-specific problems.
      1. Select nonpharmacologic therapeutic measures.
      2. Select optimal drug, dose, route, frequency, and duration of therapy.
      4. Incorporate the significance of potential drug interactions and adverse effects into the recommended plan.
      5. Persuasively justify recommendations based on patient-specific pharmacologic, pharmacokinetic, pharmacodynamic, pharmacogenomic, pharmacoeconomic, ethical, legal, and evidence-based information.
   E. Collaborate with patients, caregivers, and other health care professionals.
      1. Take responsibility for patient care duties.
      2. Reliably complete tasks and assignments.
      3. Manage time appropriately to be well prepared for clinical activities.

II. Communication and education

   A. Educate patients.
      1. Identify appropriate patient educational needs.
      2. Recognize patient education barriers.
      3. Use appropriate educational methods to educate patients regarding drug therapy.
      4. Use language appropriate for the patient.
      5. Assess patient's level of knowledge and skill acquisition.
   B. Educate other health care professionals.
      1. Identify the educational needs of health care professionals.
      2. Establish rapport with other health care professionals.
      3. Communicate recommendations or relevant information to health care professionals in a manner appropriate to their training, skills, and needs.
      4. Provide background information and primary literature to health care professionals as needed.
   C. Communicate effectively.
      1. Effectively communicate at a level appropriate to the audience.
      2. Interpret: verbal and nonverbal cues.
      3. Use specific, clear, and appropriate terminology.
      4. Maintain appropriate eye contact.
      5. Communicate in an organized, logical, and concise manner.
      6. Display an appropriate level of confidence.
      7. Demonstrate tact.
      8. Answer questions clearly and completely.
   D. Document interventions in the patient medical record.
      2. Effectively communicate assessment, including supporting subjective and objective data.
      3. Effectively communicate the therapeutic plan.
   III. Medical information evaluation and management

   A. Demonstrate the motivation and commitment to become a lifelong learner.
      1. Effectively self-assess knowledge and limitations.
      2. Define the question to be answered or problem to be solved.
      3. Demonstrate habits of self-learning.
   B. Retrieve biomedical literature using appropriate search strategies.
   C. Interpret biomedical literature with regard to study design, methodology, statistical analysis, significance of reported data, and conclusions.
   D. Integrate data obtained from multiple sources to derive an overall conclusion or answer.
IV. Management of patient populations
A. Patient safety and drug therapy evaluation
1. Collect data to characterize or identify health system-related problems in providing optimal health care.
2. Interpret data to characterize health system-related problems.
3. Design a plan to improve the delivery and quality of pharmacotherapy.
4. Develop a justification for and garner support for implementation of the plan.
5. Design measures to monitor the success of the plan during and following implementation.
6. Collaborate to implement the plan.
7. Monitor the plan and implement appropriate modifications.
8. Educate appropriate audiences on results of health system-related pharmacotherapy problem assessment and recommended solutions.
B. Critical pathways
1. Identify diagnoses, procedures, or drugs that involve high risk, high patient volume, high process variability, and/or high cost.
2. Select a multidisciplinary health care team based on likelihood of involvement in the pathway.
3. Identify appropriate outcome measures based on review of the current medical literature and assessment of current processes.
5. Elucidate discrepancies between current literature-based standards and current practice.
6. Develop the pathway with clearly defined goals and outcomes, patient education criteria, patient safety documentation, and monitoring.
V. Therapeutic knowledge areas
A. Apply disease-oriented knowledge of the following areas.
1. Anatomy, physiology, and pathophysiology
2. Epidemiology, etiology, risk factors, and signs and symptoms
3. Natural course and prognosis
4. Laboratory and diagnostic test interpretation
B. Demonstrate competence in the pharmacotherapy of the following medical problems.
1. Bone and joint
   a. Degenerative joint disease
   b. Osteoporosis
   c. Gout
2. Cardiovascular
   a. Hypertension
   b. Heart failure
   c. Coronary artery disease
   d. Acute coronary syndromes
   e. Atrial fibrillation
   f. Thromboembolic disorders
   g. Dyslipidemias
   h. Cardiopulmonary resuscitation
   i. Peripheral arterial disease
   j. Shock (hypovolemic, cardiogenic, and septic)
   k. Stroke

3. Dermatologic
   a. Acne
   b. Urticaria
   c. Psoriasis
   d. Eczema
4. Endocrine
   a. Diabetes mellitus
   b. Hypothyroidism, hyperthyroidism
   c. Adrenal disorders
   d. Hormonal contraception
5. Gastrointestinal
   a. Gastroesophageal reflux disease
   b. Nausea and vomiting
   c. Stress ulcer disease
   d. Peptic ulcer disease
   e. Upper gastrointestinal hemorrhage
   f. Hepatitis
   g. Cirrhosis
   h. Pancreatitis
   i. Inflammatory bowel disease
   j. Cholelithiasis
   k. Diarrhea and constipation
6. Genitourinary
   a. Prostate hyper trophy
   b. Urinary incontinence
7. Hematologic
   a. Anemias
   b. Clotting factor deficiencies
   c. Sickle cell disease
   d. Disseminated intravascular coagulopathy
   e. Thrombocytopenias
8. Immunologic
   a. Hypersensitivity reactions
   b. Allergic rhinitis
   c. Organ transplantation
   d. Human immunodeficiency syndrome
9. Infectious diseases
   a. Meningitis
   b. Endocarditis
   c. Fungal infections
   d. Gastrointestinal infection
   e. Intraabdominal infection
   f. Opportunistic infection
   g. Osteomyelitis
   h. Otitis media
   i. Peritonitis
   j. Pneumonia
   k. Prostatitis
   l. Septic arthritis
   m. Sexually transmitted diseases
   n. Sinusitis
   o. Skin and soft tissue infections
   p. Surgical prophylaxis
   q. Tuberculosis
   r. Upper respiratory tract infections
   s. Urinary tract infections
   t. Viral infections
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<td>10. Neurologic</td>
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<td>a. Epilepsy, status epilepticus</td>
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<td>b. Pain management</td>
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<td>c. Stroke</td>
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<td>d. Headache, migraine</td>
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<td>e. Peripheral neuropathy</td>
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<td>f. Parkinson's disease</td>
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<td>h. Delirium</td>
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<td>11. Oncologic</td>
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<td>a. Melanoma</td>
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<td>b. Breast cancer</td>
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<td>c. Colorectal cancer</td>
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<td>e. Lung cancer</td>
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<td>12. Psychiatric</td>
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<td>a. Drug and alcohol abuse</td>
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<td>b. Anxiety disorders</td>
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<td>13. Pulmonary</td>
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<td>b. Chronic obstructive pulmonary disease</td>
</tr>
<tr>
<td>c. Respiratory distress syndrome</td>
</tr>
<tr>
<td>d. Respiratory failure</td>
</tr>
<tr>
<td>e. Cystic fibrosis</td>
</tr>
<tr>
<td>f. Pulmonary hypertension</td>
</tr>
<tr>
<td>14. Renal</td>
</tr>
<tr>
<td>a. Acute renal failure</td>
</tr>
<tr>
<td>b. Chronic renal failure</td>
</tr>
<tr>
<td>c. Renal replacement therapies (hemodialysis, peritoneal dialysis, continuous renal replacement)</td>
</tr>
<tr>
<td>d. Nephrotinosis</td>
</tr>
<tr>
<td>e. Glomerulonephritis</td>
</tr>
<tr>
<td>f. Fluid and electrolyte disorders</td>
</tr>
<tr>
<td>15. Rheumatologic</td>
</tr>
<tr>
<td>a. Polymyositis</td>
</tr>
<tr>
<td>b. Scleroderma</td>
</tr>
<tr>
<td>c. Systemic lupus erythematosus</td>
</tr>
<tr>
<td>d. Sarcoidosis</td>
</tr>
<tr>
<td>e. Rheumatoid arthritis</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Appendix 1. (continued)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C. Apply the following principles in the setting of each disease state, patient population, and/or therapeutic category:</td>
</tr>
<tr>
<td>1. Pharmacokinetics</td>
</tr>
<tr>
<td>2. Pharmacodynamics</td>
</tr>
<tr>
<td>3. Pharmacoeconomics</td>
</tr>
<tr>
<td>4. Pharmacogenomics</td>
</tr>
<tr>
<td>5. Toxicology</td>
</tr>
<tr>
<td>6. Empiric antibiotic therapy</td>
</tr>
<tr>
<td>7. Health screening</td>
</tr>
<tr>
<td>8. Health maintenance</td>
</tr>
<tr>
<td>10. Nondrug therapies and nonprescription remedies</td>
</tr>
<tr>
<td>11. Herbal products</td>
</tr>
<tr>
<td>12. Immunizations</td>
</tr>
<tr>
<td>13. Geriatric consideratons</td>
</tr>
<tr>
<td>14. Pediatric consideratons</td>
</tr>
<tr>
<td>15. Nutrition (enteral and parenteral)</td>
</tr>
<tr>
<td>16. Fluids, electrolytes, acid-base balance</td>
</tr>
</tbody>
</table>
**GUAM MEMORIAL HOSPITAL AUTHORITY**

**POSITION DESCRIPTION QUESTIONNAIRE**

### I. IDENTIFICATION

<table>
<thead>
<tr>
<th>Official</th>
<th>Position Title: Chief of Clinical Pharmacy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Official Position No.:</td>
</tr>
<tr>
<td>Job</td>
<td></td>
</tr>
<tr>
<td>Location: Guam Memorial Hospital Authority Professional Support Pharmacy</td>
<td></td>
</tr>
<tr>
<td>(Department/Agency) (Division) (Section/Unit)</td>
<td></td>
</tr>
<tr>
<td>Name:</td>
<td></td>
</tr>
<tr>
<td>Last</td>
<td>First</td>
</tr>
<tr>
<td>Pay Grade: [x] Classified [ ] Unclassified [ ] Position Vacant</td>
<td></td>
</tr>
<tr>
<td>Supervisor: Assistant Administrator Professional Support</td>
<td></td>
</tr>
<tr>
<td>(Name of Direct Supervisor) Title of Supervisor</td>
<td></td>
</tr>
</tbody>
</table>

### II. DESCRIPTION OF DUTIES

**ESSENTIAL FUNCTIONS:** Organize and list duties and responsibilities that MUST be performed. List duties in one of the formats below.

1. The daily work assignments, beginning with the first duty and ending with the last duty for the day.
2. Percentage of time and show % for each (total % equals 100%).
3. Order of importance, beginning with the most important.

Mark (Y or X) one format only: [ ] (1), [ ] (2), [X] (3)

- Perform direct supervision of clinical pharmacists who provide patient-focused pharmaceutical care including: training and staff development, scheduling and assignment, team building and recruitment, performance evaluations of clinical pharmacists.
- Provide oversight and support for the development and advancement of clinical pharmacy services with a focus on standardization and optimization of clinical workflow, identification of staff competency needs, process improvements that optimize clinical efficiency and medication utilization and staff education and communication.
- Participate in hospital clinical committees that require clinical pharmacy involvement.
- Assist in the development and implementation of best practice standards, established clinical guidelines and quality improvement initiatives.
- Promote clinical pharmacist presence in patient care areas.
- Collect and evaluate data to identify potential medication use problems, identify trends and areas of improvement and assess need for new clinical services.
- Assist in prioritizing daily workflow of unit-based pharmacists to achieve department goals.
- Develop and revise/update hospital clinical policies and procedures.
- Perform medication use evaluations and adverse drug reaction reporting.
- Provide direction for prioritization of clinical pharmacy projects.
- Arrange site coordination of pharmacy experiential (APPE) and residency training programs.
- Ability to ensure compliance with state and federal regulatory requirements related to medication use systems.
- Provide drug information and in-services to physicians, nursing staff and other health professionals.
- Serve as a resource to the organization on clinical pharmacy matters.
- Interact with physicians and nursing staff to maintain interdisciplinary relationships.
- Attend/participate in HIPPA, IC, QAPI, and SLS activities and training.

**NON-ESSENTIAL OR ADDITIONAL FUNCTIONS:** List duties and responsibilities not listed above that may be performed, as assigned.

- Precept pharmacy students or residents who are on clinical rotations at Guam Memorial Hospital.
- Educate staff on various clinical initiatives and assure staff competency.
- Oversee the work schedules and personnel assignments to best meet departmental needs.
- Perform regular audits and shadow employees to ensure standardized clinical workflow, staff comprehension and execution of drug use guidelines/procedures.
- Participate in multidisciplinary team rounds and provide unit-specific clinical pharmacy coverage as needed.

Revised: GMHA April 2018
III. CONTACTS: Departments, agencies and individuals you deal with during the course of your daily activities.

A. Within your department / agency. Mark (X) or ( ) one box:
   [ ] None  [ ] Up to 15% of total working hours
   [ ] 15 - 50% of total working hours  [X] Over 50%

B. Outside your department / agency. Mark (X) or ( )
   [ ] None  [ ] Up to 15% of total working hours
   [X] 15 - 50% of total working hours  [ ] Over 50%

IV. SUPERVISION RECEIVED: How closely is the employee's/jobholder's work reviewed by the direct supervisor? Mark (X) or ( ) one correct response.

[ ] Detailed and specific instructions / procedures received or followed for each assignment.

[X] General Supervision – Routine duties are performed with minimal supervision. Standard practices or procedures allow employee to function alone at routine work. Supervisor makes occasional check of work while in progress. Work is reviewed upon completion.

[ ] Direction – Receives guidance about general objectives in most of the tasks and projects assigned; determines methods, work sequence, scheduling and how to achieve objectives of assignments; operates within policy guidelines. (Generally applicable to skilled professionals, supervisors and managers.)

[X] General Direction – Receives very general guidance about overall objectives; work is usually quite independent of others; operates within division or department policy guidelines, using independent judgment in achieving assigned objectives. (Generally applicable to managers / administrators in large and complex organizations and to department / agency heads and their first assistants.)

V. SUPERVISION EXERCISED: The employee/jobholder supervises other employees. List the number of employees supervised, their position titles, and a brief description of their responsibilities.

<table>
<thead>
<tr>
<th>Number Supervised</th>
<th>Position Title</th>
<th>Description of Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Clinical pharmacist</td>
<td>Provide various clinical services hospital-wide</td>
</tr>
</tbody>
</table>

VI. EQUIPMENT: List the equipment (pickup truck, welder, crane, etc.), office machines (word processor, calculator, copying machine, etc.), or any other machines, tools or devices that are used on a regular and continuing basis. Show what percentage of the regular workday is spent using each.

<table>
<thead>
<tr>
<th>TOOLS / EQUIPMENT</th>
<th>PERCENT (%) OF TIME FOR EACH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer / Laptop</td>
<td>95%</td>
</tr>
<tr>
<td>Calculator</td>
<td>1%</td>
</tr>
<tr>
<td>Fax Machine</td>
<td>1%</td>
</tr>
<tr>
<td>Copy Machine</td>
<td>1%</td>
</tr>
<tr>
<td>Pyxis machine</td>
<td>1%</td>
</tr>
<tr>
<td>B-Braun Pumps</td>
<td>1%</td>
</tr>
</tbody>
</table>

Revised: GMHA April 2018
JOY REQUIRMENTS

Mark (✓ or X) here if jobholder is unable to complete this section. The direct supervisor will then complete this section for the jobholder.

A. MINIMUM QUALIFICATION REQUIREMENTS: List the minimum experience and training a qualified applicant must have before employment.

1. WORK EXPERIENCE: List the general, specialized and/or supervisory / management work experience needed and how much (in months and/or years). If none, mark (✓ or X) "No work experience required."

   [ ] No work experience is required.

   General: (REQUIRED)
   
   Doctor or Pharmacy Degree or equivalent.
   Minimum Five (5) years of hospital pharmacy experience.
   Minimum One (1) year of direct patient care experience.
   Active Pharmacist licensure in Guam.

   Specialized: (PREFERRED)
   Completion of an accredited American Society of Health-System Pharmacists (ASHP) Clinical Residency Program
   Board Certification by the Board of Pharmacy Specialties (BPS)
   Supervisor / Management: Demonstrated ability to supervise / manage clinical staff effectively. Supervisory or managerial experience is preferred.

   If no work experience is required, list the knowledge, abilities and skills a qualified applicant needs before employment to perform the essential job functions.

2. FORMAL EDUCATION OR TRAINING:
   Mark (✓ or X) the most applicable education level required.

   a. [ ] Below High School -- Show Number of Years
   b. [ ] High School Graduation / GED
   c. [ ] Vocational / Technical School

   Show specific training that is required by this position.

   ________________________________________________
   ________________________________________________
   ________________________________________________
   ________________________________________________
   ________________________________________________
   ________________________________________________
   ________________________________________________
   ________________________________________________

   d. [ ] Some College

   Show number of [ ] Semester Hours ______ or [ ] Quarter Hours ______.
   Show specific courses required by the essential functions of this job.

   ________________________________________________
   ________________________________________________
   ________________________________________________
   ________________________________________________
   ________________________________________________
   ________________________________________________
   ________________________________________________
   ________________________________________________

Revised: GMHA April 2018
e. College Degree (Show major area of study required.)

[ ] Associate's:

[ ] Bachelor's:

[ ] Master's:

[ X ] Beyond Masters: Doctor of Pharmacy (PharmD)

3. CRITICAL SKILLS / EXPERTISE: List specialized skills or specialization needed to perform essential functions.

Knowledge of best practice standards and clinical guidelines for acute and chronic disease management, as well as concepts of modern pharmacology and pharmaco therapeutics.

Knowledge of laws and regulations that govern all aspects of pharmacy operations.

Knowledge of principles and concepts of administration and management including budget, personnel, etc.

Skill in prioritization, problem solving, team building, decision making, time management and strategic planning.

Ability to implement new systems and procedures, develop and implement clinical protocols and policies.

Ability to communicate effectively both written and verbal.

Ability to think critically and analyze and solve problems.

4. LICENSE, REGISTRATION OR CERTIFICATION:

List possession of required license, professional registration/certification needed to perform essential functions.

Active Guam pharmacist license

B. MENTAL / VISUAL, PHYSICAL, AND ENVIRONMENTAL JOB REQUIREMENTS:

1. Mark (✓ or X) the most appropriate physical requirement(s) for the job.

[ X ] Sitting

The job requires the employee to sit in a comfortable position most of the time. The employee can move about.

[ ] Sitting

Employee is required to sit for extended periods or time without being able to leave the work area.

[ ] Sitting/Standing/Walking

The employee is required to sit, stand, walk most of the time.

[ ] Climbing

Employee is required to climb ladders or scaffolding or to climb and work in overhead areas.

[ ] Lifting

Employee is required to raise or lower objects from one level to another regularly.

[ ] Pulling and/or Pushing

The job requires exerting force up to _____ pounds on a regular basis to move the object to or away from the employee.

[ ] Carrying

The employee is required, on a regular basis, to carry objects in his or her arms or on the shoulder(s).

[ ] Reaching

The employee is regularly required to use the hands and arms to reach for objects.

[ ] Stooping and Crouching

The employee is regularly required to bend forward by bending at the waist or by bending legs and spine.

[ ] Crawling

Employee is required to work in a confined space and/or to crawl and move about on his or her hands and knees.

[ ] Speaking

The job requires expressing ideas by the spoken word.

[ ] Listening

The job requires the perception of speech or the nature of sounds in the air.

[ ] Other

Describe the requirement.

Revised: GMHA April 2018
2. Mark (✓ or X) the most appropriate mental / visual requirement for the job.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ]</td>
<td>General Intelligence (typical requirement for machine operators, office staff, etc.)</td>
</tr>
<tr>
<td>[ ]</td>
<td>Motor Coordination Skills (typical for automotive mechanic, painter, etc.)</td>
</tr>
<tr>
<td>[ ]</td>
<td>Coordination of Eyes, Hands, and Feet (typical for tractor trailer driver, fire fighter, line electrician, etc.)</td>
</tr>
<tr>
<td>[X]</td>
<td>Verbal Intelligence (typical for counselors, customer service representatives, etc.)</td>
</tr>
<tr>
<td>[X]</td>
<td>Numerical Intelligence (typical for an accounting clerk, cargo checker, etc.)</td>
</tr>
<tr>
<td>[ ]</td>
<td>Other:</td>
</tr>
</tbody>
</table>

3. The job’s most appropriate work environment and the weather exposure.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>Indoors in a comfortable temperature-controlled environment (for instance, in an office).</td>
</tr>
<tr>
<td></td>
<td>Indoors in a non-temperature-controlled environment (such as an open garage, storerooms and warehouses, etc.).</td>
</tr>
<tr>
<td></td>
<td>Outdoors exposed to changing weather conditions (for instance, rain, sun, wind, etc.).</td>
</tr>
<tr>
<td></td>
<td>Outdoors but in an enclosed vehicle protected from extreme weather conditions.</td>
</tr>
</tbody>
</table>

4. Other physical working conditions

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ]</td>
<td>Mark (X or ✓) if none of the following is applicable.</td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Show what percent of a typical workday this position is exposed to:</td>
</tr>
<tr>
<td></td>
<td>Air contamination (i.e., dust, fumes, smoke, toxic conditions, disagreeable odors).</td>
</tr>
<tr>
<td></td>
<td>Vibration (i.e., operating jackhammer, impact wrench).</td>
</tr>
<tr>
<td></td>
<td>Noise (Exposure at a level enough to cause hearing loss or fatigue).</td>
</tr>
<tr>
<td></td>
<td>An improperly illuminated or awkward and confining work space.</td>
</tr>
<tr>
<td></td>
<td>Working above ground level where the chance of falling exists (i.e., on ladders, rooftops, bucket trucks, scaffolding).</td>
</tr>
<tr>
<td></td>
<td>Lifting or carrying items or objects. Describe item/object and weight:</td>
</tr>
<tr>
<td></td>
<td>Heat. (Hot or Cold) Describe source and degree of high or low temperature.</td>
</tr>
<tr>
<td>100%</td>
<td>Medication accessibility: This position may be expose to areas where medication is accessible.</td>
</tr>
<tr>
<td></td>
<td>Other hazards. Describe:</td>
</tr>
</tbody>
</table>
5. Describe the working conditions that are irregular or unusual for the job and show frequency of exposure.
   [ ] Mark (X or \( \checkmark \)) if not applicable.
   
<table>
<thead>
<tr>
<th>CONDITION</th>
<th>FREQUENCY OF EXPOSURE</th>
</tr>
</thead>
</table>

C. Work Schedule/Hours – Mark (✓ or X) the most appropriate work schedule/hours for the job.

   [X] Regular – Standard Eight (8) hours daily, Monday – Friday
   [ ] Irregular – Shift work – A 24-hour work operation.
   [ ] Regular / Irregular – Overtime hours with overtime pay entitlement

   State Purpose and Total Hours required per pay period:
   
   40

   [ ] Regular / Irregular – Overtime hours without overtime pay entitlement

   State Purpose and Total Hours required per pay period:

   The information given on this position is complete and correct.

   ____________________________________________  __________________________
   Signature of Employee                        Date
### VIII. SUPERVISOR'S REVIEW

**IMPORTANT: This Block To Be Filled Out Only By The Direct Supervisor**

<table>
<thead>
<tr>
<th>a. (1) Has the employee correctly stated his or her official payroll position title?</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] Yes  [ ] No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(2) If not, what is the correct title?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>b. (1) Are the employee's statements about the duties of his/her position and the supplementary information complete and accurate?</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] Yes  [ ] No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(2) If not, what additions, deletions or corrections should be made? (Refer to block and page)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>c. What positions under your supervision perform the same essential functions Give name and title:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name  Title</td>
</tr>
<tr>
<td></td>
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<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>d. Does this position require (mark one)</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] Immediate supervision on a regular basis,</td>
</tr>
<tr>
<td>[ ] Immediate supervision only for new/complex tasks, or</td>
</tr>
<tr>
<td>[ ] Little immediate supervision.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>e. Does the employee participate in (mark those appropriate) the</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] Formulation,  [ ] Interpretation,  and/or  [ ] Application of Agency/Department policy. Give examples:</td>
</tr>
<tr>
<td></td>
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<td></td>
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<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>f. The employee (mark one)</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] Performs routine, well-defined tasks,</td>
</tr>
<tr>
<td>[ ] Performs moderately complex tasks requiring moderate knowledge of Agency's/Department's work; or</td>
</tr>
<tr>
<td>[ ] Performs complex tasks requiring extensive knowledge of Agency's/Department's work.</td>
</tr>
</tbody>
</table>

I certify to the accuracy of the description of duties, responsibilities and organizational relationships provided herein; further, that the position is necessary to carry out government functions for which I am responsible. This certification is made with the knowledge that this information is to be used for statutory purposes on the use of public funds. The false or misleading statement may constitute violations of such statutes or their implementing regulations.

---

Signature of Immediate Supervisor Date

Signature of Department Manager Date

Signature of Agency Head Date

Signature of Division Manager Date

Revised: GMHA April 2018
IX.

Human Resources Office Review:

Date: ____________________

Reviewed by: ____________________

Position Title ____________________

Name ____________________

Classification Correct: [ ] Yes [ ] No

If not, corrective action taken: (Attach copy of review made)

________________________________________________________________________

________________________________________________________________________

Approved by: ____________________

Personnel Services Administrator ____________________

Date ____________________

________________________________________________________________________

Post-Audit:

Date: ____________________

Reviewed by: ____________________

Position Title ____________________

Name ____________________

Classification Correct: [ ] Yes [ ] No

If not, corrective action taken: (Attach copy of review made)

________________________________________________________________________

________________________________________________________________________

Revised: GMHA April 2018
I. IDENTIFICATION

<table>
<thead>
<tr>
<th>Official Position Title:</th>
<th>Clinical Pharmacist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location:</td>
<td>Guam Memorial Hospital Authority</td>
</tr>
<tr>
<td>(Department/Agency)</td>
<td>Professional Support Pharmacy</td>
</tr>
<tr>
<td>(Division)</td>
<td>(Section/Unit)</td>
</tr>
<tr>
<td>Name:</td>
<td>Last</td>
</tr>
<tr>
<td>First</td>
<td></td>
</tr>
<tr>
<td>Middle Initial</td>
<td></td>
</tr>
<tr>
<td>Pay Grade:</td>
<td>[x] Classified</td>
</tr>
<tr>
<td>[ ] Unclassified</td>
<td>[ ] Position Vacant</td>
</tr>
<tr>
<td>Supervisor:</td>
<td>Chief of Clinical Pharmacy</td>
</tr>
<tr>
<td>(Name of Direct Supervisor)</td>
<td>Title of Supervisor</td>
</tr>
</tbody>
</table>

II. DESCRIPTION OF DUTIES

**ESSENTIAL FUNCTIONS:** Organize and list duties and responsibilities that MUST be performed. List duties in one of the formats below.

1. The daily work assignments, beginning with the first duty and ending with the last duty for the day.
2. Percentage of time and show % for each (total % equals 100%).
3. Order of importance, beginning with the most important.

Mark (✓ or X) one format only: [ ] (1), [ ] (2), [X] (3)

- Implements, maintains, and provides clinical pharmacist services including: clinical, educational, informational, and distributional functions for patients of GMHA.
- Demonstrate comprehensive clinical competence including clinical problem solving, judgement, and decision making.
- Attend hospital clinical committees as assigned by the Chief of Clinical Pharmacy.
- Assist in the development and implementation of best practice standards, established clinical guidelines and quality improvement initiatives.
- Ability to assess and prioritize patient-specific medical problems and organize, interpret and analyze patient-specific data in order to implement and manage patient pharmacotherapy and educate patients and other providers.
- Ability to monitor drug therapy and consult with other patient care providers to improve patient outcomes.
- Ability to effectively and professionally document medication reconciliation, clinical problem-solving activities, therapeutic interventions, and patient education activities in the medical record.
- Design a comprehensive drug therapy plan for patient specific problems, select optimal drug dose, route, frequency, and duration of therapy, select strategies for prevention of disease, incorporate significance of potential drug interactions into the recommended plan, and persuasively justify recommendations based on pharmacokinetic, pharmacoeconomic, ethical, legal, and evidence-based medicine.
- Manage time appropriately to reliably complete tasks and assignments.
- Assist the Chief of Clinical Pharmacy in developing clinical pharmacy services, critical pathways, and clinical policies and procedures in accordance with the guidelines of the Joint Commission and CMS.
- Perform medication use evaluations and adverse drug reaction reporting.
- Participation in preceptorship coordination of pharmacy experiential (APPE) and residency training programs.
- Ability to ensure compliance with state and federal regulatory requirements related to medication use systems.
- Provide drug information and in-services to physicians, nursing staff and other health professionals.
- Serve as a resource to the organization on clinical pharmacy matters.
- Interact with physicians and nursing staff to maintain interdisciplinary relationships.
- Ability to provide support whenever necessary for pharmacy department operations under guidance of the Chief of Clinical Pharmacy.

**NON-ESSENTIAL OR ADDITIONAL FUNCTIONS:** List duties and responsibilities not listed above that may be performed, as assigned.

- Precept pharmacy students or residents who are on clinical rotations at Guam Memorial Hospital.
- Educate staff on various clinical initiatives and assure staff competency.
Participate in multidisciplinary team rounds and provide unit-specific clinical pharmacy coverage as needed.
Perform regular audits and shadow employees to ensure standardized clinical workflow, staff comprehension and execution of drug use guidelines/procedures.

III. CONTACTS: Departments, agencies and individuals you deal with during the course of your daily activities.

A. Within your department/agency. Mark (X or √) one box:

[ ] None  [ ] Up to 15% of total working hours
[ x ] 15 – 50% of total working hours  [ ] Over 50%

B. Outside your department/agency. Mark (X or √)

[ ] None  [ ] Up to 15% of total working hours
[ ] 15 – 50% of total working hours  [ x ] Over 50%

IV. SUPERVISION RECEIVED: How closely is the employee's/jobholder's work reviewed by the direct supervisor? Mark (X or √) one correct response.

[ ] Detailed and specific instructions/procedures received or followed for each assignment.

[ X ] General Supervision – Routine duties are performed with minimal supervision. Standard practices or procedures allow employee to function alone at routine work. Supervisor makes occasional check of work while in progress. Work is reviewed upon completion.

[ ] Direction – Receives guidance about general objectives in most of the tasks and projects assigned; determines methods, work sequence, scheduling and how to achieve objectives of assignments; operates within policy guidelines. (Generally applicable to skilled professionals, supervisors and managers.)

[ ] General Direction – Receives very general guidance about overall objectives; work is usually quite independent of others; operates within division or department policy guidelines, using independent judgment in achieving assigned objectives. (Generally applicable to managers/administrators in large and complex organizations and to department/agency heads and their first assistants.)

V. SUPERVISION EXERCISED: The employee/jobholder supervises other employees. List the number of employees supervised, their position titles, and a brief description of their responsibilities.

<table>
<thead>
<tr>
<th>Number Supervised</th>
<th>Position Title</th>
<th>Description of Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

VI. EQUIPMENT: List the equipment (pickup truck, welder, crane, etc.), office machines (word processor, calculator, copying machine, etc.), or any other machines, tools or devices that are used on a regular and continuing basis. Show what percentage of the regular workday is spent using each.

<table>
<thead>
<tr>
<th>TOOLS / EQUIPMENT</th>
<th>PERCENT (%) OF TIME FOR EACH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer / laptop</td>
<td>95%</td>
</tr>
<tr>
<td>Calculator</td>
<td>1%</td>
</tr>
<tr>
<td>Fax Machine</td>
<td>1%</td>
</tr>
<tr>
<td>Copy Machine</td>
<td>1%</td>
</tr>
<tr>
<td>Pyxis machine</td>
<td>1%</td>
</tr>
<tr>
<td>B-Braun Pumps</td>
<td>1%</td>
</tr>
</tbody>
</table>

Revised: GMHA April 2018
VII. JOB REQUIREMENTS

[ ] Mark (✓ or X) here if jobholder is unable to complete this section. The direct supervisor will then complete this section for the jobholder.

A. MINIMUM QUALIFICATION REQUIREMENTS: List the minimum experience and training a qualified applicant must have before employment.

1. WORK EXPERIENCE: List the general, specialized and/or supervisory / management work experience needed and how much (in months and/or years). If none, mark (✓ or X) "No work experience required."

[ ] No work experience is required.

General: (REQUIRED)

- Doctor or Pharmacy Degree or equivalent
- Minimum Three (3) years of hospital pharmacy experience
- Active Pharmacist licensure in Guam
- Active ACLS (Advanced Cardiac Life Support) certification
- Active BLS (Basic Life Support) certification

Specialized: (PREFERRED)

- Completion of an accredited American Society of Health-System Pharmacists (ASHP) Clinical Residency Program
- Board Certification by the Board of Pharmacy Specialties (BPS)
- Ability to serve as preceptor for pharmacy interns or residents
- Clinical hospital pharmacist experience with rounding with a medical team, monitoring of patient drug therapy, pharmacokinetic dosing and patient counseling and education

If no work experience is required, list the knowledge, abilities, and skills a qualified applicant needs before employment to perform the essential job functions.

2. FORMAL EDUCATION OR TRAINING:

Mark (✓ or X) the most applicable education level required.

a. [ ] Below High School – Show Number of Years
   [ ] High School Graduation / GED

b. [ ] Vocational / Technical School

Show specific training that is required by this position.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

C.

d. [ ] Some College

Show number of [ ] Semester Hours _____ or [ ] Quarter Hours _____

Show specific courses required by the essential functions of this job.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Revised: GMHA April 2016
e. College Degree (Show major area of study required.)

[ ] Associate’s: ____________________________

[ ] Bachelor’s: _____________________________

[ ] Master’s: _______________________________

[ X ] Beyond Masters: Doctor of Pharmacy (PharmD)

3. CRITICAL SKILLS / EXPERTISE: List specialized skills or specialization needed to perform essential functions.

Knowledge of best practice standards and clinical guidelines for acute and chronic disease management, as well as concepts of modern pharmacology and pharmacotherapeutics.

Knowledge of laws and regulations that govern all aspects of pharmacy operations.

Skills in prioritization, problem solving, team building, decision making, and time management.

Ability to implement new systems and procedures, develop and implement clinical protocols and policies.

Ability to communicate effectively both written and verbal.

Ability to think critically and analyze and solve problems.

4. LICENSE, REGISTRATION OR CERTIFICATION:
List possession of required license, professional registration/certification needed to perform essential functions.

Active Guam pharmacist license

B. MENTAL / VISUAL, PHYSICAL, AND ENVIRONMENTAL JOB REQUIREMENTS:

1. Mark (✓ or X) the most appropriate physical requirement(s) for the job.

[ X ] Sitting/Standing/Walking The employee is required to sit, stand, walk most of the time.

[ ] Sitting The job requires the employee to sit in a comfortable position most of the time. The employee can move about.

[ ] Sitting Employee is required to sit for extended periods or time without being able to leave the work area.

[ X ] Climbing Employee is required to climb ladders or scaffolding or to climb and work in overhead areas.

[ ] Lifting Employee is required to raise or lower objects from one level to another regularly.

[ ] Pulling and/or Pushing The job requires exerting force up to _____ pounds on a regular basis to move the object to or away from the employee.

[ ] Carrying The employee is required, on a regular basis, to carry objects in his or her arms or on the shoulder(s).

[ ] Reaching The employee is regularly required to use the hands and arms to reach for objects.

[ ] Stooping and Crouching The employee is regularly required to bend forward by bending at the waist or by bending legs and spine.

[ ] Crawling Employee is required to work in a confined space and/or to crawl and move about on his or her hands and knees.

[ ] Speaking The job requires expressing ideas by the spoken word.

[ ] Listening The job requires the perception of speech or the nature of sounds in the air.

[ ] Other Describe the requirement.

Revised: GMHA April 2018
2. Mark (√ or X) the most appropriate mental / visual requirement for the job.

[ ] General Intelligence (typical requirement for machine operators, office staff, etc.)

[ ] Motor Coordination Skills (typical for automotive mechanic, painter, etc.)

[ ] Coordination of Eyes, Hands, and Feet (typical for tractor trailer driver, fire fighter, line electrician, etc.)

[X] Verbal Intelligence (typical for counselors, customer service representatives, etc.)

[X] Numerical Intelligence (typical for an accounting clerk, cargo checker, etc.)

[ ] Other: __________________________________________________________________________
___________________________________________________________________________________

3. The job's most appropriate work environment and the weather exposure.

Show what percent of a typical workday is spent.
(Select one response only)

100% Indoors in a comfortable temperature-controlled environment (for instance, in an office).

____% Indoors in a non-temperature-controlled environment (such as an open garage, storerooms and warehouses, etc.)

____% Outdoors exposed to changing weather conditions (for instance, rain, sun, wind, etc.)

____% Outdoors but in an enclosed vehicle protected from extreme weather conditions.

4. Other physical working conditions

[ ] Mark (X or √) if none of the following is applicable.

Show what percent of a typical workday this position is exposed to:

____% Air contamination (i.e., dust, fumes, smoke, toxic conditions, disagreeable odors).

____% Vibration (i.e., operating jackhammer, impact wrench).

____% Noise (Exposure at a level enough to cause bearing loss or fatigue).

____% An improperly illuminated or awkward and confining work space.

____% Working above ground level where the chance of falling exists (i.e., on ladders, rooftops, bucket trucks, scaffolding).

____% Lifting or carrying items or objects. Describe item/object and weight:
____________________________________________________________________________________

____% Heat. (Hot or Cold) Describe source and degree of high or low temperature.
____________________________________________________________________________________

100% Medication accessibility: This position may be expose to areas where medication is accessible.
____________________________________________________________________________________

Revised: GMHA April 2018
5. Describe the working conditions that are irregular or unusual for the job and show frequency of exposure.  
   [ ] Mark (X or √) if not applicable.

<table>
<thead>
<tr>
<th>CONDITION</th>
<th>FREQUENCY OF EXPOSURE</th>
</tr>
</thead>
</table>

C. Work Schedule/Hours – Mark (√ or X) the most appropriate work schedule/hours for the job.

   [ X ] Regular – Standard Eight (8) hours daily, Monday – Friday
   [ ] Irregular – Shift work – A 24-hour work operation.
   [ ] Regular / Irregular – Overtime hours with overtime pay entitlement

   State Purpose and Total Hours required per pay period:
   40

   [ ] Regular / Irregular – Overtime hours without overtime pay entitlement

   State Purpose and Total Hours required per pay period:

The information given on this position is complete and correct.

_________________________  ______________________
Signature of Employee      Date
VIII. SUPERVISOR'S REVIEW

IMPORTANT: This Block To Be Filled Out Only By The Direct Supervisor

| a. (1) Has the employee correctly stated his or her official payroll position title? |
|------|------|
| [ ] Yes [ ] No |

(2) If not, what is the correct title?

| b. (1) Are the employee's statements about the duties of his/her position and the supplementary information complete and accurate? |
|------|------|
| [ ] Yes [ ] No |

(2) If not, what additions, deletions or corrections should be made? (Refer to block and page)

| c. What positions under your supervision perform the same essential functions Give name and title: |
|------|------|
| Name | Title |

| d. Does this position require (mark one) |
|------|------|
| [ ] Immediate supervision on a regular basis, |
| [ ] Immediate supervision only for new/complex tasks, or |
| [ ] Little immediate supervision. |

| e. Does the employee participate in (mark those appropriate) the |
|------|------|
| [ ] Formulation, [ ] Interpretation, and/or [ ] Application of Agency/Department policy. Give examples: |

| f. The employee (mark one) |
|------|------|
| [ ] Performs routine, well-defined tasks, |
| [ ] Performs moderately complex tasks requiring moderate knowledge of Agency's/Department's work; or |
| [ ] Performs complex tasks requiring extensive knowledge of Agency's/Department's work. |

I certify to the accuracy of the description of duties, responsibilities and organizational relationships provided herein; further, that the position is necessary to carry out government functions for which I am responsible. This certification is made with the knowledge that this information is to be used for statutory purposes on the use of public funds. The false or misleading statement may constitute violations of such statutes or their implementing regulations.

Signature of Immediate Supervisor: ___________________________ Date: ___________________________

Signature of Agency Head: ___________________________ Date: ___________________________

Signature of Department Manager: ___________________________ Date: ___________________________

Signature of Division Manager: ___________________________ Date: ___________________________

Revised: GMHA April 2018
IX.

Human Resources Office Review:

Date: ______________________

Reviewed by: ___________________________ Position Title ___________________________ Name ___________________________

Classification Correct: [ ] Yes [ ] No

If not, corrective action taken: (Attach copy of review made)

__________________________________________________________________________________________

Approved by: ___________________________ Personnel Services Administrator ___________________________ Date ___________________________

__________________________________________________________________________________________

Post-Audit:

Date: ______________________

Reviewed by: ___________________________ Position Title ___________________________ Name ___________________________

Classification Correct: [ ] Yes [ ] No

If not, corrective action taken: (Attach copy of review made)

__________________________________________________________________________________________

Revised: GMHA April 2018
CLASSIFICATION REVIEW:

Chief of Clinical Pharmacy – Summary of Proposed Position

**Position Title:** This is a managerial position and provides oversight and support for the development and advancement of clinical pharmacy services.

**Nature of Work:** The nature of work reflects training and staff development, team building and recruitment, performance evaluations of clinical pharmacists with a focus on standardization and optimization of clinical workflow.

**Illustrative Examples of Work:** The examples given reflect the additional duties and responsibilities of clinical pharmacy services, process improvements, and medication utilization and staff education and communication.

**Minimum Knowledge, Abilities, and Skills:** The minimum knowledge, abilities and skills reflect the work characteristics necessary to best practice standards and clinical guidelines for acute and chronic disease management and concepts of modern pharmacology and pharmacotherapeutics.

**Minimum Experience and Training:** The quantity and quality of training and experience take into consideration the minimum knowledge, abilities and skills required for hospital pharmacy and direct patient care in a hospital setting.

**Hay Evaluation:** The staff evaluated the position of Chief of Clinical Pharmacy using the Hay Guide Chart-Profile Method to reassess the Pay Grade. The Know-How (KH), Problem-Solving (PS), and Accountability (ACCT) points of the job are as follows:

<table>
<thead>
<tr>
<th>KH</th>
<th>PS</th>
<th>ACCT</th>
<th>PROFILE</th>
<th>TP</th>
<th>PG</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1</td>
<td>3</td>
<td>350</td>
<td>E2P</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>E3</td>
<td>(38%)</td>
<td>132</td>
<td>+2</td>
<td>657</td>
</tr>
</tbody>
</table>

The job entails overseeing and supporting the development and advancement of clinical pharmacy services. The Know-How is placed at level “F” which is characterized as “Seasoned Professional”. This means that knowledge at this level is broad and/or deep in a field of expertise requiring a command of diverse practices acquired through very deep experience, typically combined with an academic/professional qualification. The managerial skill is “I” or involves performance or supervision of multiple activities which are specific as to objective and content. The position’s human relation skill is at “3”. The job involves different types of relationships with multiple audiences that require well developed abilities to persuade others and to create commitments for getting things accomplished.

With respect to problem solving (PS), the evaluation is “E” or clearly defined since the position has latitude to consider whether new procedures may have to be developed, consistent with current policies, or existing principles, in order to achieve required end results. The thinking challenge is “3” or variable since the situations differ and require the identification of issues, the application of judgment, and selection of appropriate solutions based on past experiences.

On the factor of Accountability (ACCT), the freedom to act is “E” or clearly directed. Incumbents have the degree of independence needed to achieve annual results, provided
that activities are consistent with approved operating plans and objectives, and within established functional policies and precedents. This position determines how and when results are to be achieved. The area of impact is “2” or small, units limited to their department or program areas and the nature of impact of the position is “P” or prime where the position has controlling impact on end results at a particular level in the organization. Such impacts are commonly found in jobs/roles that exercise direct control over the resources used.

The position’s profile is +2 up which means that the job’s accountability is higher than its problem-solving. The +2 up profile indicates that the position is a results or action oriented line job in a management setting. The evaluation resulted in the total hay points of 657 which is at Pay Grade Q under the General Pay Plan (GPP).

In comparison, the job evaluation for Chief Hospital Pharmacist (Health Care Administrator) is shown below. The change in total points for the new position is due to the increased know how because the inception of the minimum qualification of Doctorate of Pharmacy (PharmD) degree, increased problem-solving, and increased accountability.

<table>
<thead>
<tr>
<th>Position</th>
<th>KH</th>
<th>PS</th>
<th>ACCT</th>
<th>TOTAL POINTS</th>
<th>PROFILE</th>
<th>PAY GRADE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief Hospital Pharmacist</td>
<td>F1 3 304</td>
<td>E 3 (38%) 115</td>
<td>E 2 P 152</td>
<td>571</td>
<td>+2</td>
<td>P</td>
</tr>
</tbody>
</table>

**Clinical Pharmacist – Summary of Proposed Position**

*Position Title:* This position implements, maintains, and provides clinical pharmacist services including: clinical, educational, informational, and distributional functions for patients of GMHA.

*Nature of Work:* The nature of work reflects comprehensive clinical competence including clinical problem solving, judgment, and decision making.

*Illustrative Examples of Work:* The examples given reflect the additional duties and responsibilities of clinical pharmacy services in a hospital setting.

*Minimum Knowledge, Abilities, and Skills:* The minimum knowledge, abilities and skills reflect the work characteristics necessary to best practice standards, established clinical guidelines and quality improvement initiatives, and concepts of modern pharmacology and pharmacotherapeutics.

*Minimum Experience and Training:* The quantity and quality of training and experience take into consideration the minimum knowledge, abilities and skills required for hospital pharmacy and direct patient care in a hospital setting.

*Hay Evaluation:* The staff evaluated the position of Clinical Pharmacist using the Hay Guide Chart-Profile Method to reassess the Pay Grade. The Know-How (KH), Problem-Solving (PS), and Accountability (ACCT) points of the job are as follows:
The job entails implementing, maintaining and providing clinical pharmacist services in a hospital setting. The Know-How is placed at level “F” which is characterized as “Seasoned Professional”. This means that pharmacy knowledge or education and training at this level is similar to the proposed Chief of Pharmacy Services. The managerial skill is “I” or involves performance or supervision of multiple activities which are specific as to objective and content. The position’s human relation skill is at “2”. The job involves interacting regularly with other people within and outside the organization to cause understanding, as well as to influence the way people behave by developing logical and well-reasoned arguments.

With respect to problem solving (PS), the evaluation is “E” or clearly defined since the position has latitude to consider whether new procedures may have to be developed, consistent with current policies, or existing principles, in order to achieve required end results. The thinking challenge is “3” or variable since the situations differ and require the identification of issues, the application of judgment, and selection of appropriate solutions based on past experiences.

On the factor of Accountability (ACCT), the freedom to act is “E” or clearly directed. Incumbents have the degree of independence needed to achieve annual results, provided that activities are consistent with approved operating plans and objectives, and within established functional policies and precedents. This position determines how and when results are to be achieved. The area of impact is “2” or small, units limited to their department or program areas and the nature of impact of the position is “C” or contributory where this position is interpretative, advisory or facilitating services for use by others to achieve results.

The position’s profile is +1 up which means that the job’s accountability is higher than its problem-solving. The +1 up profile indicates that the position is a results or action oriented line job. The evaluation resulted in the total hay points of 551 which is at Pay Grade P under the General Pay Plan (GPP).

In comparison, the job evaluation for Hospital Pharmacist is shown below. The change in total points for the position is due to the increased know how because of the minimum qualification of a Doctorate of Pharmacy (PharmD) degree, increased problem-solving, and increased accountability.

<table>
<thead>
<tr>
<th></th>
<th>KH</th>
<th>PS</th>
<th>ACCT</th>
<th>TOTAL POINTS</th>
<th>PROFILE</th>
<th>PAY GRADE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital Pharmacist</td>
<td>F 1 2 264</td>
<td>E 3 (33%) 87</td>
<td>E 1 C 100</td>
<td>451</td>
<td>+1</td>
<td>O</td>
</tr>
</tbody>
</table>
Occupational Employment Statistics

Occupational Employment and Wages, May 2019

29-1051 Pharmacists

Dispense drugs prescribed by physicians and other health practitioners and provide information to patients about medications and their use. May advise physicians and other health practitioners on the selection, dosage, interactions, and side effects of medications.

National estimates for this occupation
Industry profile for this occupation
Geographic profile for this occupation

National estimates for this occupation: Top
Employment estimate and mean wage estimates for this occupation:

<table>
<thead>
<tr>
<th>Employment (1)</th>
<th>Employment RSE (2)</th>
<th>Mean hourly wage</th>
<th>Mean annual wage (2)</th>
<th>Wage RSE (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>311,200</td>
<td>1.2%</td>
<td>$60.34</td>
<td>$125,510</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

Percentile wage estimates for this occupation:

<table>
<thead>
<tr>
<th>Percentile</th>
<th>10%</th>
<th>25%</th>
<th>Median (50%)</th>
<th>75%</th>
<th>90%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hourly Wage</td>
<td>$42.50</td>
<td>$53.91</td>
<td>$61.58</td>
<td>$71.47</td>
<td>$79.32</td>
</tr>
<tr>
<td>Annual Wage</td>
<td>$88,400</td>
<td>$112,140</td>
<td>$128,090</td>
<td>$148,660</td>
<td>$162,900</td>
</tr>
</tbody>
</table>

Industry profile for this occupation: Top
Industries with the highest published employment and wages for this occupation are provided. For a list of all industries with employment in this occupation, see the Create Customized Tables function.

Industries with the highest levels of employment in this occupation:

<table>
<thead>
<tr>
<th>Industry</th>
<th>Employment (1)</th>
<th>Percent of industry employment</th>
<th>Hourly mean wage</th>
<th>Annual mean wage (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health and Personal Care Stores</td>
<td>133,410</td>
<td>12.59</td>
<td>$59.43</td>
<td>$123,620</td>
</tr>
<tr>
<td>General Medical and Surgical Hospitals</td>
<td>77,200</td>
<td>7.38</td>
<td>$61.24</td>
<td>$127,370</td>
</tr>
<tr>
<td>Food and Beverage Stores (4451 and 4452 only)</td>
<td>24,480</td>
<td>2.39</td>
<td>$61.00</td>
<td>$126,870</td>
</tr>
<tr>
<td>General Merchandise Stores</td>
<td>17,730</td>
<td>1.67</td>
<td>$62.04</td>
<td>$129,040</td>
</tr>
<tr>
<td>Merchant Wholesalers, Nondurable Goods (242 and 246 only)</td>
<td>7,530</td>
<td>1.98</td>
<td>$59.21</td>
<td>$123,150</td>
</tr>
</tbody>
</table>

Industries with the highest concentration of employment in this occupation:

<table>
<thead>
<tr>
<th>Industry</th>
<th>Employment (1)</th>
<th>Percent of industry employment</th>
<th>Hourly mean wage</th>
<th>Annual mean wage (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health and Personal Care Stores</td>
<td>133,410</td>
<td>12.59</td>
<td>$59.43</td>
<td>$123,620</td>
</tr>
<tr>
<td>Merchant Wholesalers, Nondurable Goods (242 and 246 only)</td>
<td>7,530</td>
<td>1.98</td>
<td>$59.21</td>
<td>$123,150</td>
</tr>
<tr>
<td>Socially Except Psychiatric and Substance Abuse Hospitals</td>
<td>3,170</td>
<td>0.34</td>
<td>$50.43</td>
<td>$125,690</td>
</tr>
<tr>
<td>Electronic Shopping and Mail-Order Houses</td>
<td>5,500</td>
<td>0.61</td>
<td>$61.55</td>
<td>$128,930</td>
</tr>
<tr>
<td>General Medical and Surgical Hospitals</td>
<td>77,200</td>
<td>7.38</td>
<td>$61.24</td>
<td>$127,370</td>
</tr>
</tbody>
</table>

Top paying industries for this occupation:

<table>
<thead>
<tr>
<th>Industry</th>
<th>Employment (1)</th>
<th>Percent of industry employment</th>
<th>Hourly mean wage</th>
<th>Annual mean wage (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outpatient Care Centers</td>
<td>6,640</td>
<td>0.73</td>
<td>$68.82</td>
<td>$143,150</td>
</tr>
<tr>
<td>Management of Companies and Enterprises</td>
<td>2,810</td>
<td>0.11</td>
<td>$63.80</td>
<td>$132,710</td>
</tr>
<tr>
<td>Residential Intellectual and Developmental Disability, Mental Health, and Substance Abuse Facilities</td>
<td>50</td>
<td>0.01</td>
<td>$63.45</td>
<td>$131,970</td>
</tr>
<tr>
<td>Warehousing and Storage</td>
<td>1,300</td>
<td>0.02</td>
<td>$63.21</td>
<td>$131,460</td>
</tr>
<tr>
<td>Local Government, excluding schools and hospitals (OES Domestic)</td>
<td>1,720</td>
<td>0.02</td>
<td>$62.93</td>
<td>$130,890</td>
</tr>
</tbody>
</table>

Geographic profile for this occupation: Top
States and areas with the highest published employment, location quotients, and wages for this occupation are provided. For a list of all areas with employment in this occupation, see the Create Customized Tables function.

Employment of pharmacists, by state, May 2019

States with the highest employment level in this occupation:

<table>
<thead>
<tr>
<th>State</th>
<th>Employment</th>
<th>Employment per thousand jobs</th>
<th>Location quotient</th>
<th>Hourly mean wage</th>
<th>Annual mean wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>32,150</td>
<td>1.85</td>
<td>0.87</td>
<td>$69.21</td>
<td>$144,050</td>
</tr>
<tr>
<td>Texas</td>
<td>22,770</td>
<td>1.23</td>
<td>0.86</td>
<td>$61.22</td>
<td>$127,320</td>
</tr>
<tr>
<td>New York</td>
<td>20,180</td>
<td>2.12</td>
<td>1.00</td>
<td>$58.44</td>
<td>$121,480</td>
</tr>
<tr>
<td>Florida</td>
<td>19,890</td>
<td>2.26</td>
<td>1.07</td>
<td>$58.43</td>
<td>$121,530</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>14,750</td>
<td>2.50</td>
<td>1.18</td>
<td>$57.59</td>
<td>$119,880</td>
</tr>
</tbody>
</table>
Location quotient of pharmacists, by state, May 2019

States with the highest concentration of jobs and location quotients in this occupation:

<table>
<thead>
<tr>
<th>State</th>
<th>Employment (1)</th>
<th>Employment per thousand jobs</th>
<th>Location quotient (2)</th>
<th>Hourly mean wage</th>
<th>Annual mean wage (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhode Island</td>
<td>1,520</td>
<td>3.14</td>
<td>1.48</td>
<td>$59.30</td>
<td>$123,350</td>
</tr>
<tr>
<td>Montana</td>
<td>1,420</td>
<td>3.04</td>
<td>1.43</td>
<td>$55.42</td>
<td>$115,270</td>
</tr>
<tr>
<td>West Virginia</td>
<td>2,100</td>
<td>2.99</td>
<td>1.41</td>
<td>$59.15</td>
<td>$123,030</td>
</tr>
<tr>
<td>Arizona</td>
<td>8,240</td>
<td>2.88</td>
<td>1.36</td>
<td>$60.25</td>
<td>$125,320</td>
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<td>North Dakota</td>
<td>1,200</td>
<td>2.83</td>
<td>1.33</td>
<td>$48.35</td>
<td>$100,560</td>
</tr>
</tbody>
</table>

Annual mean wage of pharmacists, by state, May 2019

Top paying States for this occupation:
<table>
<thead>
<tr>
<th>State</th>
<th>Employment (1)</th>
<th>Employment per thousand jobs</th>
<th>Location quotient (2)</th>
<th>Hourly mean wage</th>
<th>Annual mean wage (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>32,150</td>
<td>1.05</td>
<td>0.87</td>
<td>$69.25</td>
<td>$144,060</td>
</tr>
<tr>
<td>Alaska</td>
<td>460</td>
<td>1.45</td>
<td>0.68</td>
<td>$68.56</td>
<td>$142,610</td>
</tr>
<tr>
<td>Vermont</td>
<td>620</td>
<td>2.01</td>
<td>0.95</td>
<td>$65.22</td>
<td>$135,650</td>
</tr>
<tr>
<td>Oregon</td>
<td>4,100</td>
<td>2.15</td>
<td>1.01</td>
<td>$64.98</td>
<td>$135,150</td>
</tr>
<tr>
<td>Maine</td>
<td>1,290</td>
<td>2.10</td>
<td>0.99</td>
<td>$64.75</td>
<td>$134,670</td>
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</tbody>
</table>

Employment of pharmacists, by area, May 2019

Metropolitan areas with the highest employment level in this occupation:

<table>
<thead>
<tr>
<th>Metropolitan area</th>
<th>Employment (1)</th>
<th>Employment per thousand jobs</th>
<th>Location quotient (2)</th>
<th>Hourly mean wage</th>
<th>Annual mean wage (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York, Newark-Jersey City, NY-NJ-PA</td>
<td>21,310</td>
<td>2.21</td>
<td>1.04</td>
<td>$58.61</td>
<td>$121,900</td>
</tr>
<tr>
<td>Los Angeles-Long Beach-Anaheim, CA</td>
<td>13,070</td>
<td>2.40</td>
<td>0.99</td>
<td>$68.06</td>
<td>$141,070</td>
</tr>
<tr>
<td>Chicago-Naperville-Evanston, IL-IN-WI</td>
<td>9,000</td>
<td>1.92</td>
<td>0.91</td>
<td>$59.84</td>
<td>$124,460</td>
</tr>
<tr>
<td>Philadelphia-Camden-Wilmington, PA-NJ-DE-MD</td>
<td>7,850</td>
<td>2.73</td>
<td>1.29</td>
<td>$60.86</td>
<td>$126,590</td>
</tr>
<tr>
<td>Dallas-Fort Worth-Arlington, TX</td>
<td>6,850</td>
<td>1.87</td>
<td>0.88</td>
<td>$57.88</td>
<td>$120,390</td>
</tr>
<tr>
<td>Phoenix-Mesa-Scottsdale, AZ</td>
<td>6,080</td>
<td>2.87</td>
<td>1.35</td>
<td>$59.21</td>
<td>$123,160</td>
</tr>
<tr>
<td>Miami-Fort Lauderdale-West Palm Beach, FL</td>
<td>5,770</td>
<td>2.18</td>
<td>1.03</td>
<td>$58.68</td>
<td>$122,060</td>
</tr>
<tr>
<td>Houston-The Woodlands-Sugar Land, TX</td>
<td>5,420</td>
<td>1.78</td>
<td>0.84</td>
<td>$61.09</td>
<td>$127,070</td>
</tr>
<tr>
<td>Boston-Cambridge-Nashua, MA-NH</td>
<td>5,100</td>
<td>1.82</td>
<td>0.86</td>
<td>$57.84</td>
<td>$120,310</td>
</tr>
<tr>
<td>Atlanta-Sandy Springs-Buckhead, GA</td>
<td>4,880</td>
<td>1.78</td>
<td>0.84</td>
<td>$56.72</td>
<td>$114,350</td>
</tr>
</tbody>
</table>
Metropolitan areas with the highest concentration of jobs and location quotients in this occupation:

<table>
<thead>
<tr>
<th>Metropolitan area</th>
<th>Employment (1)</th>
<th>Employment per thousand jobs</th>
<th>Location quotient (2)</th>
<th>Hourly mean wage (3)</th>
<th>Annual mean wage (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bloomsburg-Berwick, PA</td>
<td>260</td>
<td>6.36</td>
<td>3.00</td>
<td>$49.56</td>
<td>$103,080</td>
</tr>
<tr>
<td>Fargo, ND-MN</td>
<td>750</td>
<td>5.35</td>
<td>2.53</td>
<td>$41.43</td>
<td>$86,180</td>
</tr>
<tr>
<td>Iowa City, IA</td>
<td>420</td>
<td>4.53</td>
<td>2.14</td>
<td>$56.52</td>
<td>$117,560</td>
</tr>
<tr>
<td>Danville, IL</td>
<td>130</td>
<td>4.41</td>
<td>2.08</td>
<td>$60.58</td>
<td>$126,010</td>
</tr>
<tr>
<td>Springfield, MO</td>
<td>910</td>
<td>4.34</td>
<td>2.05</td>
<td>$63.26</td>
<td>$131,580</td>
</tr>
<tr>
<td>Johnson City, TN</td>
<td>320</td>
<td>4.15</td>
<td>1.96</td>
<td>$56.31</td>
<td>$117,130</td>
</tr>
<tr>
<td>Morgantown, WV</td>
<td>270</td>
<td>4.09</td>
<td>1.93</td>
<td>$54.23</td>
<td>$112,800</td>
</tr>
<tr>
<td>Kingsport-Bristol, TN-VI</td>
<td>460</td>
<td>3.99</td>
<td>1.88</td>
<td>$63.74</td>
<td>$132,580</td>
</tr>
<tr>
<td>Huntington-Ashland, WV-KY-OH</td>
<td>510</td>
<td>3.94</td>
<td>1.86</td>
<td>$57.36</td>
<td>$119,310</td>
</tr>
<tr>
<td>Hot Springs, AR</td>
<td>140</td>
<td>3.83</td>
<td>1.81</td>
<td>$56.33</td>
<td>$117,170</td>
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</tbody>
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Annual mean wage of pharmacists, by area, May 2019

Top paying metropolitan areas for this occupation:

<table>
<thead>
<tr>
<th>Metropolitan area</th>
<th>Employment (1)</th>
<th>Employment per thousand jobs</th>
<th>Location quotient (q)</th>
<th>Hourly mean wage</th>
<th>Annual mean wage (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tyler, TX</td>
<td>270</td>
<td>2.62</td>
<td>1.24</td>
<td>$77.18</td>
<td>$161,790</td>
</tr>
<tr>
<td>Vallejo-Fairfield, CA</td>
<td>380</td>
<td>2.69</td>
<td>1.27</td>
<td>$76.68</td>
<td>$158,250</td>
</tr>
<tr>
<td>Santa Maria-Santa Barbara, CA</td>
<td>270</td>
<td>1.40</td>
<td>0.66</td>
<td>$75.89</td>
<td>$157,850</td>
</tr>
<tr>
<td>Madera, CA</td>
<td>120</td>
<td>2.55</td>
<td>1.20</td>
<td>$75.12</td>
<td>$155,250</td>
</tr>
<tr>
<td>San Jose-Sunnyvale-Santa Clara, CA</td>
<td>1,700</td>
<td>1.49</td>
<td>0.70</td>
<td>$73.48</td>
<td>$152,840</td>
</tr>
<tr>
<td>San Luis Obispo-Paso Robles-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arroyo Grande, CA</td>
<td>210</td>
<td>1.76</td>
<td>0.83</td>
<td>$73.27</td>
<td>$152,410</td>
</tr>
<tr>
<td>Salinas, CA</td>
<td>210</td>
<td>1.50</td>
<td>0.71</td>
<td>$73.07</td>
<td>$151,980</td>
</tr>
<tr>
<td>Bakersfield, CA</td>
<td>620</td>
<td>1.95</td>
<td>0.92</td>
<td>$72.90</td>
<td>$151,620</td>
</tr>
<tr>
<td>McAllen-Edinburg-Mission, TX</td>
<td>420</td>
<td>1.59</td>
<td>0.75</td>
<td>$72.57</td>
<td>$150,950</td>
</tr>
<tr>
<td>Yuba City, CA</td>
<td>80</td>
<td>1.77</td>
<td>0.83</td>
<td>$72.52</td>
<td>$150,830</td>
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</table>

Nonmetropolitan areas with the highest employment in this occupation:

<table>
<thead>
<tr>
<th>Nonmetropolitan area</th>
<th>Employment (1)</th>
<th>Employment per thousand jobs</th>
<th>Location quotient (q)</th>
<th>Hourly mean wage</th>
<th>Annual mean wage (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southeast Coastal North Carolina nonmetropolitan area</td>
<td>920</td>
<td>3.71</td>
<td>1.75</td>
<td>$56.34</td>
<td>$117,190</td>
</tr>
<tr>
<td>Kansas nonmetropolitan area</td>
<td>840</td>
<td>2.14</td>
<td>1.01</td>
<td>$63.63</td>
<td>$132,350</td>
</tr>
<tr>
<td>South Central Kentucky nonmetropolitan area</td>
<td>670</td>
<td>3.92</td>
<td>1.85</td>
<td>$65.21</td>
<td>$135,640</td>
</tr>
<tr>
<td>Piedmont North Carolina nonmetropolitan area</td>
<td>580</td>
<td>2.24</td>
<td>1.06</td>
<td>$62.53</td>
<td>$130,070</td>
</tr>
<tr>
<td>North Texas Region of Texas nonmetropolitan area</td>
<td>560</td>
<td>2.02</td>
<td>0.95</td>
<td>$62.43</td>
<td>$129,860</td>
</tr>
</tbody>
</table>

Nonmetropolitan areas with the highest concentration of jobs and location quotients in this occupation:

<table>
<thead>
<tr>
<th>Nonmetropolitan area</th>
<th>Employment (1)</th>
<th>Employment per thousand jobs</th>
<th>Location quotient (q)</th>
<th>Hourly mean wage</th>
<th>Annual mean wage (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southern West Virginia nonmetropolitan area</td>
<td>340</td>
<td>4.55</td>
<td>2.15</td>
<td>$70.06</td>
<td>$145,730</td>
</tr>
<tr>
<td>East Kentucky nonmetropolitan area</td>
<td>450</td>
<td>4.45</td>
<td>2.10</td>
<td>$69.32</td>
<td>$125,460</td>
</tr>
<tr>
<td>South Central Kentucky nonmetropolitan area</td>
<td>670</td>
<td>3.92</td>
<td>1.85</td>
<td>$65.21</td>
<td>$135,640</td>
</tr>
<tr>
<td>Nonmetropolitan area</td>
<td>Employment (1)</td>
<td>Employment per thousand jobs</td>
<td>Location quotient (2)</td>
<td>Hourly mean wage</td>
<td>Annual mean wage (2)</td>
</tr>
<tr>
<td>----------------------------------------------------------</td>
<td>----------------</td>
<td>------------------------------</td>
<td>-----------------------</td>
<td>------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Southwest Alabama nonmetropolitan area</td>
<td>140</td>
<td>2.07</td>
<td>0.98</td>
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<tr>
<td>Alaska nonmetropolitan area</td>
<td>90</td>
<td>0.81</td>
<td>0.38</td>
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<td>$159,760</td>
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<tr>
<td>North Valley: Northern Mountains</td>
<td>90</td>
<td>0.89</td>
<td>0.42</td>
<td>$75.43</td>
<td>$156,900</td>
</tr>
<tr>
<td>Region of California nonmetropolitan area</td>
<td>280</td>
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<td>0.77</td>
<td>$75.25</td>
<td>$156,520</td>
</tr>
<tr>
<td>West Central Illinois nonmetropolitan area</td>
<td>60</td>
<td>0.98</td>
<td>0.46</td>
<td>$72.08</td>
<td>$149,920</td>
</tr>
</tbody>
</table>

About May 2019 National, State, Metropolitan, and Nonmetropolitan Area Occupational Employment and Wage Estimates

These estimates are calculated with data collected from employers in all industry sectors, all metropolitan and nonmetropolitan areas, and all states and the District of Columbia. The top employment and wage figures are provided above. The complete list is available in the downloadable XLS files.

The percentile wage estimate is the value of a wage below which a certain percent of workers fall. The median wage is the 50th percentile wage estimate: 50 percent of workers earn less than the median and 50 percent of workers earn more than the median. More about percentile wages.

(1) Estimates for detailed occupations do not sum to the totals because the totals include occupations not shown separately. Estimates do not include self-employed workers.

(2) Annual wages have been calculated by multiplying the hourly mean wage by a "year-round, full-time" hours figure of 2,080 hours; for those occupations where there is not an hourly wage published, the annual wage has been directly calculated from the reported survey data.

(3) The relative standard error (RSE) is a measure of the reliability of a survey statistic. The smaller the relative standard error, the more precise the estimate.

(4) The location quotient is the ratio of the area concentration of occupational employment to the national average concentration. A location quotient greater than one indicates the occupation has a higher share of employment than average, and a location quotient less than one indicates the occupation is less prevalent in the area than average.

Other OES estimates and related information:

May 2019 National Occupational Employment and Wage Estimates

May 2019 State Occupational Employment and Wage Estimates

May 2019 Metropolitan and Nonmetropolitan Area Occupational Employment and Wage Estimates

May 2019 National Industry-Specific Occupational Employment and Wage Estimates

May 2019 Occupation Profiles

Technical Notes

Last Modified Date: July 6, 2020
**Proposed Re-allocation GMHA Pharmacy Services**

*Asst. Admin. Professional Support*

- **Chief of Clinical Pharmacy**
  - Clinical Pharmacists

- **Chief of Inpatient Pharmacy**
  - Hospital Pharmacists
  - Technicians

---

<table>
<thead>
<tr>
<th>Coordinate clinical services</th>
<th>Team rounding</th>
<th>APPE Preceptor</th>
<th>Anticoagulation Medication Reconciliation</th>
<th>TPNs Consults Clinical Committees</th>
<th>Code-Blue RRT Policies &amp; Protocols</th>
<th>PK/renal dosing monitoring</th>
<th>Order verification</th>
<th>Answering nursing unit phone calls</th>
<th>Compound sterile products</th>
<th>Pyxis Medication delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage Clinical Pharmacists</td>
<td>Provide Education</td>
<td>Discharge planning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td>Antimicrobial Stewardship</td>
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<td></td>
</tr>
</tbody>
</table>

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**Technician**

**Hospital Pharmacist**

**Clinical Pharmacist**

**Chief of Clinical Pharmacy**
<table>
<thead>
<tr>
<th>POSN NO</th>
<th>NAME</th>
<th>DEPT_NAME</th>
<th>FT</th>
<th>CR ST</th>
<th>BDOаниз_TITLÉ</th>
<th>RATE PER HOUR</th>
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<tbody>
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<td>6705</td>
<td>Adkins, Alexandra Perez</td>
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<td>HOSPITAL PHARMACIST</td>
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<tr>
<td>2303</td>
<td>Aguilar-Molleno, Nickie L.</td>
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<tr>
<td>6708</td>
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<td>Cummings, Verosa R.</td>
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<td>Lanquin, Eleanore L.</td>
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