

Administrative Roles of the Consultant Pharmacist in the Hospital

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Disclosure Statement

John M. Allen, PharmD, CPh, BCPS, BCCCP, FCCM (content creator) has disclosed that he has no relevant financial disclosures. No one else in a position to control content has any financial relationships to disclose.

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Objectives

At the completion of this activity, the participant will be able to:

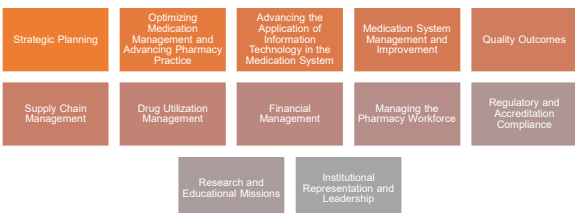
- Describe the administrative and clinical role of the consultant pharmacist in the hospital system
- Discuss the consultant pharmacists role on the inter-professional health care team
- Describe the impact of the presence of the consultant pharmacist on hospital committees that determine how and when drugs are appropriately used.
- Assess the value of a consultant pharmacist providing input into the development and implementation of medication use system processes (formulary, emergency medications, CQI, etc.)

Florida Law requires that all Institutional Pharmacies be under the Professional Supervision of a Consultant Pharmacist

- Chapter 465.019
 - (5) **All institutional pharmacies shall be under the professional supervision of a consultant pharmacist**, and the compounding and dispensing of medicinal drugs shall be done only by a licensed pharmacist. Every institutional pharmacy that employs or otherwise uses registered pharmacy technicians shall have a written policy and procedures manual specifying those duties, tasks, and functions that a registered pharmacy technician is allowed to perform.

2019 Florida Statutes
<http://www.flsenate.gov/legislation/statutes/default.aspx? statute=465.019>

Administrative Duties



Administrative Duties

- Strategic Planning
 - Assess healthcare environment for emerging trends that will influence the pharmacy enterprise.
 - Identify opportunities to leverage pharmacy expertise to improve quality, safety, the patient's experience, patient access to quality healthcare across the continuum of care, and the economic performance of the organization.
- Optimizing Medication Management and Advancing Pharmacy Practice
 - Ensure that pharmacists participate as the interdisciplinary team members who are responsible for patients' medication-related outcomes.
- Advancing the Application of Information Technology in the Medication System
 - Provide leadership at the organizational level regarding planning, purchasing, implementing, and maintaining information systems that support patient care.

An. J Health-Syst Pharm. 2016; 73:329-32.



Administrative Duties

- Medication System Management and Improvement
 - Overseeing the design, implementation, and management of a safe and effective medication management system,
 - Ensure pharmacy services meet patient care needs and that drug therapy is as safe, effective, and economical as possible.
 - Particular attention to patients in high-risk areas
- Quality Outcomes
 - Responsible for leveraging pharmacy expertise in support of value-based purchasing,
 - Leading core measures initiatives involving medication therapy,
 - Playing an active role in reducing readmissions, and owning the process for medication-related customer satisfaction indicators.

An. J Health-Syst Pharm. 2016; 73:329-32.



Administrative Duties

- Drug Utilization Management
 - Collaborates with peers to develop drug utilization and formulary initiatives that optimize therapeutic outcomes
 - Reduce the risk of drug-related problems
 - Ensure the use of cost-effective pharmacotherapy throughout the health system.
- Supply Chain Management
 - Oversight of all pharmaceutical contracting, procurement, receiving, security, inventory control, diversion prevention, and distribution policies across the continuum
 - Includes outsourced sterile products, alternative distribution channels used during drug shortages, reverse distribution, and other methods of pharmaceutical waste disposal

An. J Health-Syst Pharm. 2016; 73:329-32.



Administrative Duties

- Financial Management
 - Develops budgets aligned with organizational and departmental objectives and monitors financial performance appropriately.
- Managing the Pharmacy Workforce
 - Determining the appropriate number, type, and qualification of staff required to meet patient care needs
 - Satisfy regulatory and accrediting requirements
 - Achieve the organization's mission
 - Advance pharmacy practice

Am J Health-Syst Pharm. 2016; 73:329-32.



Administrative Duties

- Regulatory and Accreditation Compliance
 - Ensures continued compliance with all national, state, and local regulations related to medications and their management.
- Research and Educational Missions
 - Plays an integral role in supporting the organization's research and educational missions by overseeing investigational drug services
 - Fostering staff and resident research
 - Participating in organizational grant funding applications
 - Managing student and residency educational programs

Am J Health-Syst Pharm. 2016; 73:329-32.



Administrative Duties

- Institutional Representation and Leadership
 - Demonstrates the personal leadership qualities and business acumen essential to operate effectively within the health system and to advance the profession and practice of pharmacy.
 - Assumes a leadership role within the profession through active participation in local, state, and national professional associations.

Am J Health-Syst Pharm. 2016; 73:329-32.



Assessment Question

1. Which of the following is an administrative duty of a hospital consultant pharmacist?
- a) Advertising for recruitment
 - b) Optimizing medication management
 - c) Cleaning of the sterile compound area

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Formulary Development

- Formulary system decisions are based on scientific and economic considerations that achieve appropriate, safe, and cost-effective drug therapy.

Factors Affecting Formulary Development
Assessing peer-reviewed medical literature
Employing published practice guidelines
Comparing the efficacy as well as the type and frequency of side effects and potential drug interactions among alternative drug products.
Impact of a drug product on patient compliance when compared to alternative products.
Benefits, risks, and potential outcomes for patients (i.e., adverse drug events)
Cost factors only after the safety, efficacy, and therapeutic need have been established.
Evaluating drug products and therapies in terms of their impact on total health care costs.

Formulary Development

- Formulary system decisions are based on scientific and economic considerations that achieve appropriate, safe, and cost-effective drug therapy. (continued)
 - Assessing the likely impact of a drug product on patient compliance when compared to alternative products.
 - Basing formulary system decisions on a thorough evaluation of the benefits, risks, and potential outcomes for patients; risks encompass adverse drug events (adverse drug reactions and medication errors, such as those caused by confusing product names or labels).

Formulary Development

- Formulary system decisions are based on scientific and economic considerations that achieve appropriate, safe, and cost-effective drug therapy. (continued)
 - Basing formulary system decisions on cost factors only after the safety, efficacy, and therapeutic need have been established.
 - Evaluating drug products and therapies in terms of their impact on total health care costs.

Medication Use

Medication use policies are critical in the management of medications in the health care settings. Such policies should include the following:

- Formulary management
- P&T Committee
- Medication prescribing, dispensing, and administration



Case Study

- A surgical patient was ordered perioperative antibiotics. These were discontinued by policy within 24 hours after surgery completion.
- The clinical pharmacist, reviewing the patient's chart the next day on the med-surg unit, noticed that the surgeon had documented that the procedure was debridement for osteomyelitis.
- The surgeon was contacted and an order for appropriate antimicrobial coverage was obtained.

Automatic Stop Orders

- Automatic stop-order policies can help safeguard patients against unnecessary and prolonged drug therapy, they can also inadvertently add to the risk for drug-related problems.
- Stop orders are often established for medications that require additional evaluation after a specific time.
- Process must include a method to require that the prescriber is notified so that the order being discontinued can be reevaluated.

Automatic Stop Orders

- Incorporate the duration of drug therapy in diagnosis-specific protocols and standardized orders.
- Each day, clinical pharmacists should review the patient's drug therapy and take a leading role in contacting prescribers, when necessary, to confirm the continuation or the discontinuation of an order.
- Computer systems (and MARs) should be configured in such a way that drugs are not automatically discontinued without notice.

Inventory Management

- A systematic approach to planning and prioritizing specific drug cost management strategies is essential when implementing initiatives that will influence drug expenditures in a health system.
- A systematic approach to drug-cost containment requires specific and detailed data on both health-system drug purchases and actual drug-use patterns.

Am J Health-Syst Pharm. 2008; 65:1368-84.

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Inventory Management

- When selecting drug-cost-containment initiatives, purchasing and inventory management procedures should be considered first.
- Components of a Cost-Management Program include:
 - Pharmacy-Directed Activities
 - Interdisciplinary Activities
 - Reimbursement and Charging

Am J Health-Syst Pharm. 2008; 65:1368-84.

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Inventory Management

- Inventory management and Clinical Pharmacy Services:
 - The director of pharmacy provides leadership by facilitating the efforts of the medical staff, setting priorities for the clinical pharmacy staff, and cultivating the support of senior leadership.
 - Clinical pharmacists with advanced training and education must have dedicated time to develop and implement the cost management initiatives.

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Personnel Management

- Recruitment
 - Recruitment plan should be developed for each position being filled
 - Continuous recruitment is effective for organizations that recruit frequently or have very limited candidate pools
- Selection
 - Preinterview information is used to determine suitability of the candidate
 - An initial screening interview may be necessary if several qualified candidates have been identified. This interview is often conducted by telephone

Am J Health-Syst Pharm. 2003; 60:587-93.



Personnel Management

- Selection (continued)
 - Individual interviewer and group of interviewers
 - Human resources departments can usually assist in developing questions
 - The interviewer should give the candidate a realistic view of the position, including both favorable and unfavorable information.
 - Background verification - The accuracy of information provided by the candidate should be verified by the human resources department.
 - Job offer - The job offer should be made as quickly as possible after the interview process is completed. Offers should be made to candidates with enthusiasm and should include a deadline for response.

Am J Health-Syst Pharm. 2003; 60:587-93.



Personnel Management

- Retention
 - Staff turnover is costly.
 - Each organization should identify and assess retention factors by examining the unique aspects of the respective department and organization.
 - Employee surveys
 - May help determine the need of employees to include in retention plans.
 - Pay and benefits
 - The value of specific benefits to an employee will likely change over time.
 - Many organizations offer a benefits plan that gives the employee the option of choosing benefits individually suited to stages in his or her life and career.
 - Performance management
 - Performance appraisal is only one step in a performance management process that includes appraisal, ongoing feedback, goal setting, and development.

Am J Health-Syst Pharm. 2003; 60:587-93.



Personnel Management

- Recognition and awards
 - Formal employee of the month or year
 - Thank you notes
 - Acknowledgement at departmental meetings



Am J Health-Syst Pharm. 2003; 60:587-93.

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Fiscal Control

- The Consultant Pharmacist develops budgets aligned with organizational and departmental objectives
- Monitors financial performance appropriately, performing financial audits and analyses to ensure accurate, appropriate, and timely recording and classification of actual revenue capture and expenses.
- Evaluates medication expenditure patterns and reimbursement trends, including the potential development of value-based approaches to pharmaceutical reimbursement.
- Ensures pharmacy department has the expertise to manage the clinical and financial implications of specialty pharmaceutical products.

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Keys to Fiscal Control

- Pharmacists are central figures in decreasing healthcare expenditure through cost savings on medicines and cost avoidance.
- Traditional
 - Cost savings due to reductions in current spending due to changes in the expense on a patient's treatment, (e.g., IV to PO conversion)
 - Cost avoidance refers to an intervention that reduces potential future spending that may have occurred without the intervention (e.g., ADE prevention)
- Non-traditional
 - Guidance in areas outside of the traditional pharmacy arena
 - Management of drug expenditures in the self-insured employee population,
 - Payer shared-risk arrangements that include medication management incentives

1. Dalton K, Byrne S. Role of the pharmacist in reducing healthcare costs: current insights. *Innov Pharm Res Pract.* 2017;6:37-46. Published 2017 Jan 25. doi:10.2147/INPP.S106047

2. American Society of Health-System Pharmacists. ASHP statement on the roles and responsibilities of the pharmacy executive. *Am J Health-Syst Pharm.* 2016; 73:329-32.

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Keys to Fiscal Control

- The pharmacy executive may be called on to provide guidance in areas outside of the traditional pharmacy arena, including management of drug expenditures in the self-insured employee population and in payer shared-risk arrangements that include medication management incentives.

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P&T Committee

- The P&T committee is responsible for managing the formulary system.
- The P&T committee should serve in an evaluative, educational, and advisory capacity to the medical staff and organizational administration in all matters pertaining to the use of medications.
- The P&T committee should be responsible for overseeing policies and procedures related to all aspects of medication use within an institution.

Am J Health-Syst Pharm 2006; 63:1272-83

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P&T Committee

- Other responsibilities of the P&T committee include:
 - Medication-use evaluations (MUEs)
 - Adverse-drug-event monitoring and reporting
 - Medication-error prevention
 - Development of clinical care plans and guidelines
- The pharmacy executive ensures that there is pharmacist representation on the pharmacy and therapeutics committee of the health system as an active voting participant.

Am J Health-Syst Pharm 2008; 65:1272-83
Am J Health-Syst Pharm 2010; 73:329-32

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Infectious Disease Committee

- The Pharmacist's Role in Antimicrobial Stewardship and Infection Prevention and Control
 - Promoting Optimal Use of Antimicrobial Agents.
 - Encouraging multidisciplinary collaboration to ensure prophylactic, empirical, and therapeutic uses of antimicrobial agents result in optimal patient outcomes.
 - Working within the P&T committee (or equivalent) structure, to ensure that the number and types of antimicrobial agents available are appropriate for the patient population served.

Assessment Question

2. Which is a function of the Infectious Disease Committee?
- a) Selection of sterile compounding area cleaning solutions
 - b) Antibiotic Protocol development
 - c) Inspection and testing of sterile compounding areas

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Infectious Disease Committee

- The Pharmacist's Role in Antimicrobial Stewardship and Infection Prevention and Control
 - Reducing the Transmission of Infections
 - Participating in the infection prevention and control committee (or its equivalent).

Quality Assurance

- The pharmacy executive (or designee) should be a member of all of the institution's key committees responsible for performance-improvement activities related to medication management and patient safety.

Quality Assurance

- **64B16-27.300 Standards of Practice - Continuous Quality Improvement Program.**
 - See handout. This is required reading.
 - Each pharmacy shall establish a Continuous Quality Improvement Program which program shall be described in the pharmacy's policy and procedure manual and, at a minimum shall contain:

Quality Assurance

- Provisions for a Continuous Quality Improvement Committee may be comprised of staff members of the pharmacy
 - Pharmacists, registered pharmacy interns, registered pharmacy technicians, clerical staff, and other personnel deemed necessary by the prescription department manager or the consultant pharmacist of record
- Provisions for the prescription department manager or the consultant pharmacist of record to ensure that the committee conducts a review of Quality Related Events **at least every three months**.
 - Planned process to record, measure, assess, and improve the quality of patient care
 - Procedure for reviewing Quality Related Events.

ADHP Discussion Guide on The Pharmacist's Role in Quality Improvement. <https://www.adhp.org/media/assets/pharmacy-practice/resource-centers/leadership/leadership-of-profession-pharmacists-role-quality-improvement-guide.pdf>



Investigation Medication

- The pharmacy executive has an integral role in supporting the organization's research and educational missions by overseeing **investigational drug services**, fostering staff and resident research, participating in organizational grant funding applications, and managing student and residency educational programs.

ADHP Discussion Guide on The Pharmacist's Role in Quality Improvement. <https://www.adhp.org/media/assets/pharmacy-practice/resource-centers/leadership/leadership-of-profession-pharmacists-role-quality-improvement-guide.pdf>



Investigation Medication

- Responsibilities regarding investigation medication are multi-faceted
- Receipt, accountability, storage, handling, preparation, dispensing, and final disposition of investigational drug products to ensure inspection readiness and compliance with approved clinical study protocols and regulations
 - Code of Federal Regulations (CFR), 21 CFR, Part 312.1
 - International Conference on Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH)
 - Good Clinical Practice (GCP) (described in 21 CFR Part 312, section 120)
 - Good Manufacturing Practice (GMP) (described in 21 CFR Part 211).
- Staff involved in the management of these products must have knowledge and documented training
 - ICH GCP, the Health Insurance Portability and Accountability Act, institutional review board (IRB) review and protection of human subjects, the Belmont Report, and all other competencies and policies required by the institution of the pharmacy.

Am J Health-Syst Pharm. 2018; 75:561-73.



Interprofessional Relationships

- The pharmacy executive is responsible for ensuring that pharmacists participate as the interdisciplinary team members who are responsible for patients' medication-related outcomes.
- Other members of the interdisciplinary team include physicians, nurses, IT professionals, respiratory therapists, administrators, quality managers, risk managers, medical residents, supply chain managers, comptrollers, infection control professionals, and many more.
- Interactions with these vital members of the team will occur not only in committee meetings, but in many daily encounters in the hospital setting.
- In each of these interactions, the Consultant Pharmacist will be looked to as the medication expert.

Am J Health-Syst Pharm. 2016; 73:329-32.

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Intraprofessional Relationships

- In an effective hospital pharmacy, pharmacists and technicians collaborate to provide care
- **64B16-27.420 Pharmacy Technician – Delegable and Non-Delegable Tasks.** See handout.

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Intraprofessional Relationships

- The 10 Golden Rules of Effective Management
 - Be consistent.
 - Focus on clarity, accuracy, and thoroughness in communication.
 - Set the goal of working as a team.
 - Publicly reward and recognize hard work.
 - Be the example.
 - Never go with 'one-size-fits-all.'
 - Remain as transparent as possible.
 - Encourage all opinions and ideas.
 - Help people enjoy work.
 - Listen and ask questions.



DeMars, J. The 10 Golden Rules of Effective Management. 2016. <https://www.entrepreneur.com/article/254547>

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Educating Others

- Education of pharmacy staff:
 - Ensures effective and timely staff recruitment, orientation, training, education, mentoring, career development, performance review, and retention efforts.
- Education of patients:
 - Leadership role in program development to reduce drug-related hospital readmissions through patient education.
- Education of students and residents:
 - Integral role in managing student and residency educational programs.

Am J Health-Syst Pharm. 2016; 73:329-32.



Educating Others

- Pharmacists of today are actively teaching physician assistants, nurses, and physicians various techniques of prescribing medications and issues related to the drug use process.

American Public Health Association. The Role of the Pharmacist in Public Health. 2016. <https://www.apha.org/policies-and-advocacy/public-health-policy-statements/policy-database/2014/03/01/121028/the-role-of-the-pharmacist-in-public-health>



Technology

- Pharmacists currently use Health Information Technology (HIT) in several different ways:
 - Documentation of clinical information in pharmacy management systems.
 - Access to electronic health records (EHRs).
 - Electronic care plans integrated into the clinical workflow.
 - Electronic platforms for Chronic Care Management.

Pharmacy Today. 2016; 24 (5), 58-68.



Technology

- Clinical decision support (CDS) technology has many uses, including:
 - Dosing guidance,
 - Computerized physician order entry (CPOE) alerts and reminders,
 - Clinical practice guidelines,
 - Workflow support.
- Uses algorithms that connect patient data to a knowledge base.
 - The greatest benefit of CDS is improved processes.
 - CDS has the power to guide therapy choices and reduce medication errors.
- Potential adverse effect if inadequate alert filters are incorporated → Alert fatigue

Pharmacy Today, 2018, 24 (2), 56-68.

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Technology and Medication Delivery

- Automated dispensing cabinets
 - Nurses have increased access to drugs in patient-care areas and can facilitate administration in a timely way.
 - The medications are locked up in patient-care units, and controlled substances and other drugs are electronically tracked.
 - The stocking and distribution of medications are tracked to improve inventory control.

P.T. 2012, 37(9):490-530.

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Technology and Medication Delivery

- Automated dispensing cabinets
 - When ADCs are interfaced with the pharmacy systems, they support the clinical review of medication orders by a pharmacist before administration.
 - ADCs can be interfaced with other external databases
 - Admission/discharge/transfer system and billing systems → efficiency of drug dispensing and billing is enhanced.
 - Barcode technology → Automate the restocking process and to track dispensing of medications
 - Point-of-care bar-coding systems → Ensures electronic match between the prescribed and selected medication.

P.T. 2012, 37(9):490-530.

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Technology

- Technology's role in team-based care:
 - Instant messaging
 - Smart phones



Pharmacy Today, 2018; 24 (5), 58-68.

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Technology

- Technology's role in reducing errors contributed to by manual verification of intravenous admixture ingredients.
 - IV Workflow Management Solutions
 - ISMP recommends the use of barcode scanning and other technologies to assist in verification of compounded sterile preparations.

Benefits for Safe Medication Practices: Maximize Benefits of IV Workflow Management Systems by Addressing Workarounds and Errors, 2017. <https://www.ismp.org/resources/inpatient/benefits-iv-workflow-management-systems-addressing-workarounds-and-errors>

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Technology

- A new generation of infusion devices—so-called “smart pumps”—can reduce medication errors, improve workflow, and provide a new source of data for continuous quality improvement.
 - These commercially available infusion systems perform a “test of reasonableness” to check that programming is within pre-established institutional limits before infusion can begin.

Rovins, JG. "Smart Pump" Technology Reduces Errors. Anesthesia Patient Safety Foundation, 2002. <https://www.apsf.org/articles/smart-pump-technology-reduces-errors/>

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