

FIP HOSPITAL PHARMACY SECTION

FIP Basel Statements on the Future of Hospital Pharmacy, revised 2024

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Overarching and governance statements

1. The overarching goal of hospital pharmacists is to provide patient centred care that optimises patient outcomes through collaborative, interprofessional, responsible use of medicines and medical devices.
 - a. The responsible use of medicines means:
 - i. That medicine is only used when necessary, considers patient preferences, makes the best use of limited healthcare resources, and that the choice of medicine is appropriate based on what is proven by scientific and/or clinical evidence to be most effective and least likely to cause harm.
 - ii. There is timely and equitable access to, and the availability of, quality medicine that is properly procured, stored, prepared, distributed, administered, and monitored for quality, effectiveness, and safety.
 - iii. A multidisciplinary collaborative approach is used that includes patients, caregivers, substitute decision makers, and health professionals assisting in a patient's care.



2. At a national level, evidence-based hospital pharmacy practice standards should be developed to define the extent and scope of hospital pharmacy services, clearly state hospital pharmacy best practices, and set a minimum benchmark for the continued growth of hospital pharmacy practice. These standards should reference global hospital pharmacy standards, provide evidence where available, and should include corresponding human resources, workforce, and training requirements needed to practice in the hospital setting.
3. Hospital pharmacists should engage health authorities and hospital administrators to ensure appropriate resources for, and design of, the hospital medicines-use process (i.e., procurement, storage, prescribing, transcribing, documenting, preparing, dispensing, administering, and monitoring), including a plan for continuous evaluation of this process.
4. Each hospital should be serviced by a pharmacy department staffed and supervised by pharmacists and pharmacy support staff (e.g., assistants, technicians, purchasers, etc.) who have completed advanced education and/or training in hospital pharmacy practice.
5. The chief pharmacist/director of pharmacy/chief pharmacy officer should be the accountable professional, overseeing the coordination of medication use within the hospital. This role involves the development, implementation, evaluation, and continuous updating of plans and activities that support the department's mission, vision, goals, and scope of service. These efforts must be patient-centred and aligned with the broader mission, vision, and objectives of the hospital. This professional must be a licensed pharmacist, maintain impartiality free from conflicts of interest, and possess advanced education or training in management, leadership, pharmacy operations, and financial management.
6. Hospital pharmacists should be accessible to patients, families, and caregivers as an expert point of contact for all aspects of medicine use. To achieve this goal, pharmacy departments must ensure provision of updated resources, information-handling, and technology, to facilitate the provision of medicine information.
7. Prescriptions should be legal, reviewed, interpreted, and validated prospectively by a hospital pharmacist prior to the

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- medicine being dispensed and administered. Medicines should be prescribed via a standardised method, assessed in relation to patient and clinical information in the medical record, and when able, prescribed via computerised provider order entry.
8. Hospital pharmacists should monitor all patients taking medicines to ensure safety, appropriate medicine use, and optimal patient outcomes. This starts with the medicines reconciliation process. Patient selection criteria should be established to guide pharmacists to prioritise high-risk patients or patients taking high-risk medicines for timely service provision.
 9. Hospitals should have a policy and procedure for pharmacists accessing and documenting within the full patient record in alignment with legislation and local processes. Documentation should be standardised within a specific institution both by format and documentation reasoning and should reflect all recommendations made by pharmacists, the actions taken in response to recommendations, and where possible, the outcome.
 10. Hospital pharmacists should ensure that patients and/or caregivers are educated and provided written information, when necessary, on appropriate medicines. Resources should be reviewed by pharmacy staff to ensure accuracy, relevance, appropriateness, completeness, are contemporary, and are in consideration of health literacy, cultural background, language, and sensory deficits. Pharmacists should ensure education is tailored to specific needs of patients or caregivers.
 11. Hospital pharmacists should provide orientation, drug information, and education to nurses, physicians, and other hospital staff regarding best practice for medicine use and should be accessible to healthcare providers around-the-clock, as an expert point of contact for all aspects of medicines.
 12. Pharmacy curricula should include hospital-relevant content. In addition, post-graduate training programmes and specialisations in hospital pharmacy should be offered (e.g., residencies, fellowships, etc.). These programmes should be standardised and accredited nationally and per subspecialised pharmacy practice area.
 13. Hospital pharmacists should actively engage in research and disseminate research in peer-reviewed journals when able.



14. Hospital pharmacists should take responsibility for the safe management and disposal of waste related to the medicines-use process, including hazardous medicines, through the development of written policies and procedures for handling and documentation of drug waste, recalled medicines, expired medicines, and unused medicines in alignment with local regulations and evidence-based practice. Hospital pharmacists should advise on disposal of and handling precautions for human waste from patients receiving medicines and the environmental sustainability of disposed medicines.
15. Hospital pharmacists should take responsibility for all aspects of selection, implementation, maintenance, and monitoring of technologies that support the medicines-use process, including distribution technologies, administration technologies, analytics systems, and any other equipment, hardware, or software used in the medicines-use process.
16. Hospital pharmacists must be involved in supply chain security and ensure proper storage, inspections, and monitoring in each part of the pharmacy supply chain to maintain the integrity of medicines to ensure quality, safety, and security. This includes medicines purchased by the department but also any other medicine administered to a patient at the hospital (e.g., patient's own medicines, non-formulary medicines, experimental medicines, etc.).
17. Hospital pharmacists should ensure appropriate assessment, development, implementation, maintenance, and validation of clinical decision support tools and systems, electronic medical records, artificial intelligence/machine learning systems, and informatics that guide therapeutic decision-making, improve the medicines-use process, and improve health outcomes. Hospital pharmacists should ensure this is done via interdisciplinary collaboration.
18. Each pharmacy should have a medicine inventory management system designed to detect subminimum inventory levels, track lot number and expiration dates, detect diversion, and alert the pharmacy of potential shortages. Each department should have contingency and emergency preparedness plans for medicine shortages which describe the role of pharmacy staff in the response.



19. The “seven rights” (i.e., right patient, medicine, dose, route, indication, documentation, and time) should be fulfilled in all medicine-related activities in the hospital. In addition, all medicine-related activities should include appropriate patient and family communication for shared decision making.

Theme 1 — Procurement

20. Hospital pharmacists should be involved in the complex process of procurement of medicines, health products, and medicine specific technology, promoting value for cost-effectiveness, accountability, integrity, scalability, equity, access, and environmental sustainability. Pharmacists should ensure transparent procurement processes are in place, aligned with best practice and national legislation, are free from conflict of interest, and are based on the principles of safety, quality, and efficacy.
21. Procurement practices must be supported by strong quality assurance principles, regularly reviewed, and adapted to fit the hospital setting, patient population, healthcare provider needs, and emerging opportunities, in an appropriate and cost-effective way. Pharmacists who are responsible for procurement should ensure there are strong quality assurance principles and conduct risk assessments, which are regularly reviewed and adapted to prevent the introduction of substandard or falsified medicines into the supply chain.
22. Procurement should not occur in isolation, but rather be guided by a well-controlled formulary of approved medicines managed by a multidisciplinary committee including pharmacy representation. This includes the procurement of standard concentrations of high-risk medicines, such as electrolytes, according to the institution's risk assessment.
23. Procurement must be supported by a reliable inventory management system accessible by all pharmacy staff providing accurate, timely, and accessible information.



Theme 2 — Influences on prescribing

24. Hospitals should utilise a medicine formulary system (local, regional, and/or national) linked to standard treatment guidelines, protocols, and treatment pathways based on the best available evidence for your patient population.
25. Hospital pharmacists should be key members of pharmacy and therapeutics committees to oversee all medicines management policies and procedures, including those related to off-label use, dietary supplements, herbal, non-formulary, generic substitution, therapeutic substitution, and investigational medicines.
26. Hospital pharmacists should have a key role in educating prescribers at all levels of training, on the access to and evidence for responsible use of medicines. This includes the required monitoring parameters, therapeutic drug monitoring, subsequent prescribing adjustments, and medicines-use process.
27. Hospital pharmacists should be an integral part of the multidisciplinary team and contribute to therapeutic decision making and the patient's medicine management plan, which should be documented in the patient's medical record at every step of the decision-making process.
28. Hospital pharmacists should promote seamless care by contributing to the transfer of information and history about medicines whenever patients move between and within healthcare settings, by performing medicines reconciliation and other transition of care services (e.g., understanding how patients historically use and obtain medicines, recommending safe and quality pharmacies to obtain future medicines, educating how to best use prescribed medicines, appropriate use of nonprescribed or over the counter medicines, etc.).
29. Appropriately trained and credentialed hospital pharmacists should participate in collaborative prescribing or a collaborative practice agreement.

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Theme 3 — Preparation and delivery

30. Hospital pharmacists should assume responsibility for the storage, cold chain management, preparation, dispensing, and distribution of all medicines, including investigational, patient's own, and non-formulary medicines in accordance with best practice, local policy, and in the recommended manner per the manufacturer.
31. Hospital pharmacists should assume responsibility for the appropriate labelling and control of medicines stored throughout the facility. Hospital pharmacists should have written policies, addressing look-alike-sound-alike medicines and high-risk medicines at a minimum.
32. Hospital pharmacists should be involved in determining which medicines are included in ward stock by standardising the storage, security, ordering, and handling of ward medicines to ensure clinical areas have timely and safe access to routinely required medicines. This includes strategies for the safe storage of medicines such as screening of look-alike sound-alike medicines and implementing tall man lettering. Supply systems should ensure medicines needed urgently and outside of core pharmacy service hours can be obtained.
33. Hospital pharmacists should ensure that compounded medicines are consistently prepared to comply with quality standards. This includes taking responsibility for ensuring medicines not commercially available in a suitable formulation, are prepared to accepted practice standards, and ensuring that injectable admixture services comply with accepted practice standards. When possible, compounded medicines should be made by the pharmacy department and done in environmental conditions that minimise the risk of contaminating the product. Components needed to make high-risk medicines (e.g., hazardous medicines) should only be stored in the pharmacy.
34. The preparation of hazardous medicines, including cytotoxics, should be the responsibility of the hospital pharmacist. Medicines should be prepared under environmental conditions that minimise the risk of contaminating the product or environment while minimising exposure of hospital personnel to harm using accepted practice standards. There should be policies and procedures that describe special precautions, correct equipment,



and training for preparation, handling, storage, and disposal of products. Appropriate personal protective equipment (PPE) should be available for all staff members when handling, preparing, or administering hazardous and/or cytotoxic medicines.

35. Hospital pharmacists should participate in the development of and lead the implementation of evidence-based systems or technologies (e.g., automated prescription-filling, unit dose distribution, machine-readable coding systems, automated dispensing cabinets, etc.) to decrease the risk of medication errors. When new systems are implemented, pharmacists should evaluate if the system is performing to the desired evidence-based outcomes. In addition, systems should be continuously monitored to ensure performance within the desired specifications.
36. Hospital pharmacists should support the development of policies regarding the appropriate use of medicines brought into the hospital by patients. Patient's own medicine(s) for use in hospital should be restricted to complementary and alternative medicines and non-formulary medicines. All medicines brought into the hospital by patients should be identified by trained pharmacy staff, with the medicine source determined and evaluated for safety, appropriateness documented in the patient chart, locked away and stored safely, and administration should be done in accordance with local policies.
37. Hospital pharmacists should implement systems for tracking medicines dispensed by the pharmacy, allowing transparent tracking from the pharmacy to patient administration (e.g., to facilitate recalls, expirations, recording medicines administered, reordering, etc.).
38. Hospital pharmacists should introduce strategies to reduce risks associated with institutionally or regionally identified high-risk medicines. (e.g., look-alike-sound-alike medicines, hazardous medicines, and concentrated electrolyte products). High-risk medicines should be dispensed in ready-to-administer dilutions and stored in secure, separate areas with distinct labels.
39. Hospital pharmacists should develop robust governance structures and processes for identifying high-risk practices and advancing patient safety to mitigate potential risks associated



with adverse outcomes (e.g., when a large number of dosage units are needed to give a dose, that is more than two tablets, capsules, vials, or any other dosage form, the prescription should be verified prior to preparation or dispensing).

Theme 4 — Administration

40. Hospital pharmacists should play a leadership role in the selection of drug information resources on medicine selection, dosing, preparation, and administration for use by all healthcare providers in the hospital. The assessment process should ensure the information is objective, accurate, and contemporary.
41. Hospital pharmacists should ensure that clinically relevant allergies, drug interactions, contraindications, past adverse events, and other relevant medical history details including patients' previous experiences with each medicine are accurately recorded in a standard location and format in patient records and evaluated prior to medicine use.
42. Hospital pharmacists should ensure that medicines are packaged and labelled to ensure identification and to maintain integrity, until immediately prior to administration to the patient.
43. Medicine labels should be clear and have sufficient information to ensure appropriate tracking of medicines and safe administration, including at least two patient identifiers, the name of the medicine, prescribed route, dose in mass, the expiration date or beyond use date, and, where appropriate, volume and rate of administration.
44. Hospital pharmacists should ensure that no medicine is administered to a patient unless the administering medical and/or nursing personnel are appropriately trained in the medicine's therapeutic use, method of administration, dosage, potential hazards, and/or adverse effects.
45. All chemotherapy and other regionally or institutionally identified high-risk medicines should be independently checked against the original prescription at any point prior to administration by at least two specially trained healthcare professionals, one of whom should be a pharmacist while the other can be any licensed and institution-accepted healthcare professional.



46. Hospital pharmacists should develop and implement evidence-based policies and practices that prevent route errors (e.g., use of oral syringes that are distinctly different from hypodermic syringes to prevent injection of enteral or oral medicines).
47. Hospital pharmacists should ensure the development of quality assurance strategies for medicine administration, including the detection of errors and identifying priorities for improvement (e.g., reporting programmes, direct observation methods, trigger warnings, use of information technology, etc.).
48. The medicine administration process should be designed such that transcription steps between the original prescription and the medicines administration record are eliminated. Where additional transcription is needed, a second-check system should be implemented in a manner to minimise errors.

Theme 5 — Monitoring of medicines use

49. An easily accessible system for monitoring, detecting, reporting, reviewing, and analysing recalled, expired, and substandard and falsified medicines and medical devices should be established and maintained. Reports of defective or substandard and falsified medicines should be reviewed internally and sent promptly to regional or national pharmacovigilance and/or regulatory reporting programmes and the manufacturer.
50. Hospitals should have a designated pharmacist trained as a medication safety officer/medication safety leader. This pharmacist should be responsible for coordinating the safe use of medicines, investigating medicine-related safety events, educating staff on best practices, discussing safety events with staff, ensuring a non-punitive just culture, and making recommendations for the improvement of medicines safety.
51. An easily accessible, ongoing, sustainable, non-punitive reporting system for preventing, monitoring, and resolving medication errors, including near misses, adverse reactions, and unsafe practices, should be established, and maintained. Reports of these incidents should be documented, reviewed internally, and sent to regional/national medication error reporting programmes, pharmacovigilance programmes, and/or regulatory programmes. This data should be regularly reviewed to improve the quality and safety of medicine use practices.



52. Hospital pharmacists should actively participate in appropriate organisational committees and work with physicians, nurses, administrators, and others to examine and improve systems to ensure that the medicines-use process is aligned with benchmarks and best practices related to safety, clinical effectiveness, and cost-effectiveness. Examples of such committees include stewardship programmes such as antimicrobials, opioid analgesics, anticoagulation, deprescribing, or other institutionally identified areas of risk.
53. The medicines-use process should be frequently reviewed through an external accreditation or quality improvement programme. Hospitals should act on reports to improve the quality and safety of their practices.
54. Pharmacist's clinically relevant activities that significantly impact individual patient care should be documented via standardised methods and templates. These activities should be collected and analysed to improve the quality and safety of medicines use and patient outcomes.
55. Systematic approaches (e.g., trigger tools, digital systems, etc.) should be used to provide quantitative data on adverse events and optimal medicines use. The data should be regularly reviewed to improve the quality and safety of medicine practices.

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Theme 6 — Human resources, training and development

56. At a national level, competency frameworks are defined, established, and regularly assessed. Hospital pharmacy departments and chief pharmacist/director of pharmacy/chief pharmacy officer should use these nationally accepted competency frameworks to assess individual human resource and workforce training needs and performance.
57. At a national level, hospital pharmacists should engage health authorities to bring together stakeholders to collaboratively develop evidence-based hospital pharmacy human resource and workforce plans that supports responsible use of medicines including those in rural and remote areas.
58. Hospital pharmacists should collaborate with key stakeholders to ensure that workforce education, training, competency, size, and



- capacity are appropriate to the scope of services, coverage, and responsibilities of all cadres providing pharmacy services.
59. Hospital pharmacy workforce plans should describe strategies for human resource education and training, recruitment and retention, competency development, remuneration and career progression pathways, diversity-sensitive policies, equitable deployment and distribution, management, staff burnout, mental health, and roles and responsibilities of stakeholders for implementation.
60. Hospitals should maintain human resource information systems that contain quantitative and qualitative data for planning, training, appraising, and supporting the pharmacy workforce. Data should be collated at a national level to improve pharmacy workforce planning and should be available for continuous tracking.
61. The training programmes of pharmacy support staff (e.g., assistants, technicians, purchasers, etc.) should be nationally formalised, harmonized, and credentialed within a defined scope of practice.
62. Hospital human resource policies should be founded in ethical principles, equity, and human rights, and be compliant with labour regulations, guidelines, and hospital pharmacy professional practice standards.
63. Hospital pharmacy leadership must ensure all hospital staff, patients, visitors, and pharmacy staff are safe from the risk of potential harm caused by medicines. Pharmacy staff should have safe working conditions provided to them when receiving medicines, including for specific manual handling requirements (e.g., heavy loads, opioids, hazardous, etc.), maintenance of a safe working environment (e.g., temperature, lighting, clean air, etc.), and an environment free from any undue harm. The chief pharmacist/director of pharmacy/chief pharmacy officer should ensure hospital staff, patients, and visitors are safe from harm caused by medicines by ensuring medicines are stored, prepared, transported, and administered in a way that minimises exposure to the medicine or any trace of such medicine.
64. To promote interprofessional education and team-based care, the role and activities of hospital pharmacists, including



collaborative prescribing, should be included in the curriculum of other healthcare professionals and likewise, the roles and activities of other healthcare professionals should also be included in the pharmacy curricula. This should be promoted via interprofessional education sessions and activities both for pre- and postgraduates.

65. Postgraduate courses should be developed to prepare hospital pharmacists for advancing hospital pharmacy practice, including courses in specific clinical specialties, collaborative prescribing of medicines, pharmacy operations, administration/management, leadership, finance, and guidance on legal and professional accountability.