Seven day working in Hospital Pharmacies

The Royal Pharmaceutical Society (RPS) understands the need to change healthcare practice in order to address the changing demographics in society as people live longer with more long term conditions. The variation in outcomes for people admitted to hospital at weekends and the requirement to provide the same levels of patient care throughout the week is now well recognised. The Royal College of Physicians estimates that mortality rates rise by 10% at weekends.¹

Pharmacy is the third largest profession in the NHS and medicines are the commonest form of treatment; the second most expensive intervention after staffing costs.² All medicines carry risk as well as benefit and pharmaceutical care aims to maximise patient benefit and minimise avoidable harm. Clinical pharmacist input is now an established part of patient care. In hospitals across Scotland some pharmacists now spend around 80% of their time in patient facing roles, with increasing numbers of prescribers and specialist input into specific therapeutic areas.

High quality clinical input has become an integral part of the ward multidisciplinary team and this expertise is now missed if not available at weekends. Without clinical pharmacy input at weekends medication problems and pharmaceutical care issues normally identified on weekdays within 24 hours of admissions may not be identified or resolved until Monday, when the clinical service resumes. The lack of pharmacist input to multidisciplinary clinical teams at the weekend means that medical and nursing staff may be without pharmaceutical advice to assist with complex cases affecting prescribing decisions and patient care.

The requirement to work together as a multidisciplinary team to ensure treatment is optimised for patients cannot be over emphasised. Within an integrated approach, pharmacy teams should provide the leadership, systems support, and expertise for medicines policies and pharmaceutical care.³

We know that studies have found between 1.4% and 15.4% of hospital admissions were drug related and preventable⁴ and this rises in the frail elderly. A study for the General Medical Council in 2012⁵ suggested that around one in eight patients have prescribing or monitoring errors, involving around one in 20 of all prescription items. Pharmacist expertise in medication review and medicines reconciliation, particularly in admitting and receiving units plays an increasingly important role in initial assessment and ensuring continuity of patient care.

It is therefore essential that pharmacy is represented when strategically planning seven day working to ensure clinical input is integrated into the ward teams, providing pharmaceutical care and targeting resources to improve inpatient care where it is most required, and not simply to extend dispensary opening hours.
Key Points to Note

The RPS professional standards for hospital practice recommend that medicines review and reconciliation is carried out within 24 hours of admission. The NHS England Seven Days a Week Forum has reiterated this requirement and The Future Hospitals Commission has stated that patients in acute care should have access to the same interventions at weekends as on weekdays.6

Over the last twenty years, as medical treatment has become increasingly complex, emphasis has shifted from supply to clinical care and pharmacists are found less frequently in the dispensary, routinely working on the wards delivering pharmaceutical care as part of the multidisciplinary team.

The limited availability of this pharmaceutical input at weekends has been noted to result in:

- an increase in missed doses
- prescription errors
- lack of medicines reconciliation
- delayed discharge due to waiting for discharge medication

Over four weekends in Glasgow a clinical pharmacy service was provided to acute receiving wards, high dependency and cardiology departments as a pilot study to assess the impact on patient care. The pharmacists saw approximately 80% of the patients admitted at weekends and on reconciliation changes were made to medications in 54% of these. On the wards, reviews of drug charts identified changes averaging at one per patient admitted, with drugs omitted or wrong doses being the most common reasons for change (Figure 1)

*Figure 1. Therapy Problems Identified*
On discharge just over half (57%) of patients required a change to medication mostly to adjust doses, and half of these interventions were clinically significant. Feedback from senior medical colleagues commenting on the pilot programme was very positive.

“Useful for complex pharmacy advice…freed up time for the junior doctors” - consultant

“Provides the same high quality care that patients receive during the week” - consultant

Questionnaires to nursing and medical staff showed the service was successful and used for:

- complex patient medication queries
- medicines reconciliation
- prescribing
- medication review
- improving the discharge experience
- improving patient flow through the hospital
- patient education
- speedy resolution of medicine related issues over the weekend.

Data from elsewhere in Scotland mirrors that of the Glasgow pilot with multidisciplinary teams in admissions units fully supporting the clinical presence of pharmacists at weekends where they have to provide a seven day service. Gaps in patient care are identified when this resource is not available and this clinical input is currently only available for short periods using extra winter pressure resource. Pharmacists were seeing the same clinically significant pharmaceutical care issues at weekends as on weekdays, including regular medicines not prescribed and discontinued medicines prescribed. Some patients had not been given preventative treatments for venous thromboembolism with potential serious consequences for patient outcomes and length of hospital stays. In addition, it was found that on medical and surgical admission units Health, Efficiency, Access and Treatment (HEAT) targets for antibiotic prescribing were only consistently achieved after input from a pharmacist.

Challenges, Issues and Solutions

We must be careful not to introduce seven day working for supply issues which should be managed by efficient working practices in normal office hours. For example, the discharge of patients can be planned in many cases allowing dispensed medicines to be made available prior to the patient being ready to leave the hospital.

It is important to identify pharmaceutical care problems on admittance, or on the wards, before discharge prescriptions reach the pharmacy where valuable time can be used, having to contact prescribers to make adjustments and so disrupting patient flow.

The use of patients’ own medicines during their inpatient stay and near patient dispensing across Scotland facilitates rapid discharge with minimal changes to medication at the end of hospital stays and continuity of supply. Electronic prescribing systems speed up the discharge process and enhance patient flow providing a more person centred approach to care. Missed doses, prescription errors and delayed medicines reconciliation can affect
patient outcomes and clinical input is required, but delayed discharge should be addressed by good discharge planning and not only through extending pharmacy opening hours.

We know that patients are more vulnerable when they transfer between care settings. Planning for discharge should include community pharmacists who could be used more to ensure continuity of supply and to improve patient safety, for example by reinforcing information about medicines initiated or stopped in hospital, and ensuring only updated prescriptions are supplied with no duplication of items. This requires the community pharmacist to be included in the discharge process and for efficient transfer of patient information via secure NHS networks.

Unlike medical and nursing colleagues pharmacist NHS contracts are currently Monday to Friday. Extended hours and weekend working are covered by flexible working by higher grade pharmacists and staff volunteering to work overtime. For higher grade posts no payment is allowed and time in lieu is the only method of recompense. This is not sustainable in the longer term without severely disrupting and removing clinical input to the established services from Monday to Friday. There is an increasing consultant presence at weekends in some wards making Saturdays and Sundays ever more like weekdays and therefore in order to implement a substantive seven day clinical service, additional posts and seven day contracts would be required.

Skill mix and technology, including remote access such as tele-health solutions should be fully utilised to provide both dispensing and clinical input, with variations in service design, depending on local needs and resources.

Models of care need to be explored to decide on the optimum levels of experience required to provide the clinical input for the patient caseload being admitted at weekends. Recent evidence has highlighted that patient outcomes are better in Accident and Emergency (A and E) departments when more experienced medical staff are available and pharmacy must also evaluate outcomes to ensure that any extended working provides the same high standard of pharmaceutical care offered to patients from Monday to Friday.

There are also other ways to improve patient care and reduce pressure on A and E departments by involving pharmacists more in triage and making more use of existing resources such as community pharmacies. Studies have shown that about 5% of patients in A and E could be seen by community pharmacies. Thought should be given to revising and extending the minor ailment service to allow community pharmacies to be the initial entry to the NHS for as many people as possible with more structured referral systems building on the national Patient Group Direction and direct referral arrangements already in place. Some A and E departments are trialling having a pharmacist prescriber in post to triage patients and manage medicines related issues.

Prescription for Excellence, The Scottish Government Vision and Action Plan aims to increase the numbers of pharmacist independent prescribers and to break down the barriers between professional sectors. This will increase pharmacists’ capacity to take on more varied clinical roles, including to relieve pressures on both A and E departments and GP appointment waiting times. Thought should be given to widening scope of practice to encourage cross-sectoral work experience between hospital, community and primary care pharmacists to promote understanding of primary and secondary care systems, help bridge
the recognised gap between secondary and primary care services and make best use of local resources, with services built around the needs of patients.

In 2013, RPS held a summit bringing together hospital pharmacists from across Great Britain to discuss the issues and challenges around seven day working. Several themes emerged from the intelligence gathered.

- Hospital pharmacies already provide some limited services at weekends; these are generally restricted to three or four hours on Saturdays and Sundays for the dispensing of discharge prescriptions and supply of urgently required medicines only, and do not include clinical pharmacy services to wards or emergency admission units etc. Thought needs to be given as to how to provide pharmaceutical care and expand services for patient benefit. Priority areas are seen to be emergency, admitting and receiving units. A multidisciplinary approach will be required for success.
- There is an urgent need for workforce planning and benchmarking of the level of staffing required to provide additional resource, particularly at weekends. New staff need to be employed on seven day contracts similar to nursing and medical colleagues. This cannot be addressed adequately with the current workforce and additional posts will be required.
- Skill mix should be examined to ensure appropriate level of experienced generalist input as well as specific specialist input as required. There is evidence of better patient outcomes when more senior staff are available1. Targeting extended services to support more complex patients during admission can smooth transfer through the various care settings.
- Pharmacist independent prescribers can support medical teams and are necessary to achieve the desired changes.
- Technology innovation is required to create capacity. Single electronic patient records available appropriately to health and social care professionals are necessary for patient safety as prescribing is now carried out by medical and non-medical personnel and in a variety of settings. Robotics, tele-health, electronic prescribing, electronic discharge and other innovative solutions will be vital components as we move forward.

Summary

There is a clinical gap in pharmacy input at weekends which cannot be managed within current resources and staffing levels. Any strategy for seven day working should be patient based, focusing on providing pharmaceutical care to improve patient outcomes and the patient experience, with pharmacists integrated into the multidisciplinary weekend teams and community pharmacies included in discharge arrangements. Workforce planning is required to better understand capacity needs and to resource new services adequately. Business plans should include a review of current practice and skill mix and pharmacy management must be included in any strategic planning. Local situations will require local solutions and consideration needs to be given to consulting the current workforce to manage change successfully with new staff employed on seven day contracts.
About us

The Royal Pharmaceutical Society (RPS) is the professional body for pharmacists in Great Britain. We represent all sectors of pharmacy in Great Britain and we lead and support the development of the pharmacy profession including the advancement of science, practice, education and knowledge in pharmacy. In addition, we promote the profession’s policies and views to a range of external stakeholders in a number of different forums.

References

1. Harriet Gordon, Director – Medical Workforce Unit, Royal College of Physicians.