

# Hospital Pharmacy Placements: Personal Experiences

## Three Pharmacy students with APPEL, and their Trainers, share their placement experiences with Hospital Professional News

**Laura Johnson is a 5th Year Pharmacy Student at Trinity College Dublin and is completing her final experiential learning placement in the Mater Misericordiae University Hospital (MMUH).**



I chose to complete this placement in a hospital setting because I was fascinated by the diversity of specialities and services within hospital pharmacy. I was particularly eager to complete my placement in the MMUH due to the vast array of specialities that are cared for and its strong academic and research focus.

When I began placement in the MMUH, I received a timetable for my rotation through the Pharmacy services over the eight months. I had limited knowledge of what these would involve, but was excited to learn! My first rotation was within the MMUH Dispensary. This enhanced my understanding of the processes for medication supply within the MMUH and the collaboration between pharmacists and pharmacy technicians. While processing pharmacy ward requisitions, I became increasingly aware of the vitality of this service to ensure continuity of care for patients, particularly in the case of medication shortages. I especially enjoyed dispensing parenteral nutrition, and shadowing the pharmacist during the verification of clozapine prescriptions.

My next rotation was within the Medicines Information (MI) service. The key function of this service is to provide up-to-date and accurate information to healthcare professionals within the hospital. I completed UKMI workbook training across areas such as drug interactions, adverse drug reactions, and drugs in

pregnancy, breastfeeding, renal disease and liver disease. This enhanced my clinical knowledge and competence in utilising resources to address complex enquiries. I had the opportunity to promote evidence-based practice through the update of institutional guidelines on the use of direct oral anticoagulants and enteral drug administration. My involvement in producing a monograph comparison for generic substitution and processing a drug approval application increased my awareness of the role hospital pharmacists play in promoting the cost-effective use of medicines.

During my time in Clinical Pharmacy services, I have had exposure to the acute care of patients in the Emergency Department and the care of patients within specialities such as orthopaedics, cancer care and stroke services. Clinical pharmacists play a vital role in optimising the care of patients by reviewing the prescribing, monitoring and administration of medications, and performing appropriate interventions. This has enhanced my ability to apply patient-specific factors, (e.g. weight for enoxaparin dosing), for medication optimisation. I had the opportunity to attend a multidisciplinary meeting with the Frailty Intervention Team (FIT) pharmacist, and learned how health professionals collaborate to optimise the care of older people.

Over the next five months, I will experience several other Pharmacy services. My next rotation is within the Drug Safety (DS) services, which will involve reviewing medication variances and producing a medication safety alert. I will spend one month in the Aseptic Compounding service, with exposure to the preparation of chemotherapy and cancer clinical trials. I will also work within the Infectious Diseases (ID) service, which provides multidisciplinary care to patients with HIV and hepatitis C.

A key highlight of my experience on placement in the MMUH is the supportive learning environment. I attend a pharmacy journal club every Thursday, where a different pharmacist delivers an educational presentation each week. My placement in the MMUH has provided me with a variety of experiences across different Pharmacy services, and this



diversity has delivered extremely rewarding learning opportunities. I am thoroughly enjoying my placement in the MMUH, and would highly recommend a placement within hospital pharmacy to anyone with an interest in clinical pharmacy.

**Ellen Holmes is Laura's Senior Preceptor, and Senior Pharmacist, in the Mater Misericordiae University Hospital.**



I qualified as a registered pharmacist back in 2019 and began working as a basic grade pharmacist in the Dispensary of the Mater Misericordiae University Hospital (MMUH). After a year of working in the Dispensary, I started training as a clinical pharmacist on the wards, where I worked mainly on the GI surgical ward and the Respiratory medical ward. After about six months, I started to work with the Satellite Infectious Diseases Pharmacy alongside my clinical pharmacy duties. There, I received training in counselling patients on their medications for

the treatment of HIV, Hepatitis C, and TB. In August 2022, I became a Senior Pharmacist when I received the position of Acting Deputy Dispensary Services Manager and have since been promoted to the permanent Deputy position. I have also just completed a Masters in Clinical Pharmacy with UCC.

Last year I was delighted to be presented with the opportunity to become a Senior Preceptor to our incoming 5th year student. Given my experience in many of the services within the Pharmacy Department, I felt I was an excellent candidate to guide the student through their placement. Having also completed a hospital-based placement for my pre-registration year in Our Lady's Hospice, I understood the value that these placements offer students.

Patient-centred hospital placements allow the student to see and work through "real-world" scenarios with the support of an experienced team of pharmacists behind them. These opportunities are invaluable and prepare the student to manage similar challenges as qualified professionals. The range of pharmacy services that large acute hospitals provide also demonstrates the scope of practice available for newly qualified pharmacists. By allowing pharmacy students to explore specialised areas, such as MI, DS, ID and Aseptic Compounding services, students will also expand their knowledge of these areas and get an appreciation for the key role that pharmacists play within the health system.

**Kate Walsh is a fifth-year pharmacy student completing her final experiential learning placement in the South Infirmary Victoria University Hospital, Cork (SIVUH).**



I spent my first few weeks in the dispensary utilising the dispensing software system. This gave me a good base to learn about the patient profile in the hospital and the critical role that the Pharmacy Department plays.

I had the opportunity to extemporaneously prepare eye drops for patients in the ophthalmology ward. Wearing sterile PPE, I followed the compounding protocol to prepare antimicrobial eye drops. Utilizing a closed system approach, I ensured the sterility of the compounding process, applying the aseptic techniques that I had learned in college laboratories.

Away from the dispensary, I began a series of ward rounds, initially to complete medication reconciliations. This involves engaging with patients to accurately gather their medication histories, often contacting community pharmacies to clarify past prescriptions and address queries. The process isn't just about reconciling medications; it's about connecting the dots between a patient's medications and their health conditions, to ensure maximum patient data is available to the entire clinical team.

My responsibilities have expanded to include screening patients starting zoledronic acid treatment, an infusion aimed at slowing down bone breakdown, commonly prescribed to many of our patients with fragile bones post-fracture. Assessing their suitability for this bisphosphonate therapy involves analysing lab results, reviewing drug charts, and confirming medication history with pharmacies.

I have also helped assess patients starting anticoagulants, such as

apixaban. This involves evaluating patient parameters including renal function, and subsequently making dosage adjustments tailored to each patient.

After head and neck surgeries, many patients encounter challenges with swallowing. I was tasked with conducting assessments of medication crushability to ensure optimal administration for these individuals. This process involves consulting various sources and confirming the size of their enteral tube to ensure blockages are prevented. In instances where crushability information is absent from guidelines or the SPC, contacting the pharmaceutical company becomes essential for accurate guidance.

I often shadow my preceptor, Lydia, during her ward rounds as an antimicrobial pharmacist. This gives me a unique insight into the rationale behind each antibiotic selection. Whether it involves factors like blood brain barrier penetration or MRSA coverage, each case offers a learning opportunity.

I have participated in a variety of educational events at the hospital. I recently attended a Medical Grand Rounds session where the focus was on stroke treatment. Our monthly Lunch and Learn sessions provide a platform for interdisciplinary learning. Recent topics have ranged from vitamin D education led by dietitians to the Pharmacy Department's presentation on the evolution of anticancer drugs. Furthermore, I regularly attend student training sessions conducted by pharmacists, covering essential topics such as opioid prescribing and anticoagulation strategies. These opportunities not only broaden my knowledge but also keep me up-to-date with the latest advancements in healthcare.

Currently, I'm involved in conducting the VTE audit, a task that takes me to every ward monthly to ensure doctors are diligently completing VTE assessments. VTE assessments are crucial as they assess patients for the risk of developing blood clots in veins, known as Venous Thromboembolism (VTE). A properly conducted assessment enables the doctors to determine the most appropriate anticoagulant therapy.

I am also working on an opioid audit, ensuring adherence to the WHO Analgesic Ladder in prescribing pain relievers. This endeavour emphasizes the importance of proper pain management protocols in enhancing patient care.

I have also worked with the oncology pharmacists. During this time, I calculated chemotherapy doses, tailored to factors such as body surface area or renal function, ensuring they aligned with dose bands. I was particularly impressed by the efficiency of the NCIS system, which is the National Cancer Information System that facilitates e-prescribing and e-administration of the cancer drugs.

I have learned so much in my first three months in the South Infirmary Victoria University Hospital. Mentoring, sharing of knowledge and continuous professional development are all part of the ethos of the student placement. The dynamic and challenging environment is firmly built around patient need and I hope that I can make my own small contribution over the remainder of my placement.

**Lydia Duggan is Kate's Senior Preceptor in South Infirmary Victoria University Hospital (SIVUH).**



At SIVUH we are fortunate to be able offer both 4 and 8-month APPEL placements. Our aim is to provide a placement which allows pharmacy students to experience all that hospital pharmacy has to offer. Facilitating placements is a real team effort and planning begins well in advance of the placement start date. Training generally begins in the dispensary and our technicians ensure each student becomes comfortable with, what can be, a fast paced environment.

Each preceptor will check-in with their pharmacy student regularly; placement is a collaboration and if an student has a particular preference or interest we adapt the programme to suit them. Clinical training involves shadowing ward pharmacists and includes activities such as completing medicines reconciliations, dealing with medicines information queries, attending ward rounds etc. We are part of a very inclusive

multidisciplinary team (MDT) and students have the opportunity to shadow some of these team members including nurses on medication rounds, Speech and Language Therapists performing video fluoroscopy, dietitians reviewing clinic patients and anaesthetists in theatre. Pharmacy students often say this is the most unique part of the placement and that it adds context to our role and responsibilities as clinical pharmacists. For example; after shadowing the dietician it is easier to understand why it's important to inform the MDT if a medication, which requires a significant alteration of an enteral feed schedule, is commenced for a patient.

If possible, each pharmacy student takes part in our audit schedule and is responsible for developing or continuing an audit. Kate is currently running our venous thromboembolism audit and provides monthly feedback to both pharmacy and the MDT. Pharmacy students also complete placements in our specialist areas like oncology and med safety. By the end of each placement our students are very much part of the fabric of the pharmacy team. Every student adds something new to our department and we learn as much from them as they (hopefully!) do from us.

**Lucy Moran is a 5th Year Pharmacy Student at Trinity College Dublin and is completing her final experiential learning placement in the Beacon Hospital.**



Having started my experiential learning placement in the Beacon hospital in January, I have already learned so much about the potential roles of a pharmacist in the hospital setting. The Beacon, like many other hospitals, have a structured programme for their pharmacy students. Within this, the student undergoes rotations through different departments of the hospital. My Senior Preceptor is responsible for coordinating

all of this and keeping a general eye on me. However, within each rotation I am allocated a mentor who is experienced in that area, and who orients me to their particular role. At the same time, I have the autonomy to manage my own workload throughout the placement.

I began my placement in the dispensary, which was imperative for learning the lay of the land. It was the best way to become familiar with the hospital environment and it gave me a chance to get to know some of the staff. I had no prior experience in a hospital, so areas like total parenteral nutrition (TPN) orders from dieticians and orders of anaesthesia for theatre were things I had never seen before. I now understand that a major part of a pharmacist's role in the dispensary is checking these items for accuracy and clinical appropriateness. However, I've also seen that it's rarely ever that simple, and that all of this must also fit into the hospital system as a whole. It's about doses and quantities, but also stock levels on wards, who has ordered the medicine, and more. All of this was entirely different to my experience in community pharmacy.

I'm now finishing up my rotation in the Clinical Pharmacy office. I had the brilliant opportunity of working with somebody different every 2 weeks, starting with the Medicine's Information Pharmacist. She gave me a host of online clinical resources to use to answer queries from the wards. This was often complex and multi-dimensional, and required a certain degree of assertiveness, confidence, and the ability to think ahead. I have learned the importance of the role, as there is rarely ever a simple answer to a complex issue which involves a unique patient each time. An example of a query I answered is how a patient should be administered their medication when they have a temporary swallowing difficulty after surgery. We accessed patient files for this, and at one point it was necessary to contact the manufacturer of a medicine for advice.

I then sat with the Antimicrobial Stewardship (AMS) Pharmacist. I went with her to ward rounds and meetings alongside the microbiology consultant. I was also shown the lab where the micro team test and evaluate samples taken from patients. The AMS pharmacist works closely with them to make sure that patients are given the antimicrobials to which the bug is most sensitive. It was demonstrated to me the profound impact this has on the safety, cost,



and protection of antibiotics in the hospital as a whole.

Now I'm working alongside my Senior Preceptor, who is the manager of Clinical Pharmacy Services and Medication Safety. Together we are working on one of the many audits I have been involved in so far. This time, the focus is on the clinical and administrative accuracy of discharge prescriptions. Audits seem to be a win-win for the preceptor and the pharmacy student. Students can allocate more time to them, whilst they also provide a great opportunity for learning. They can have a big impact, highlighting areas which need to be refined to enhance the patient experience.

In terms of what the next few months will look like for me, I have a three-week slot in the aseptic unit coming up in the summer. I'm looking forward to doing some hands-on work and understanding of compounding medicines such as chemotherapy. But first, I'm working alongside clinical pharmacists up on the wards. I'll be regularly switching between different pharmacists and wards. I think my experience on placement so far will enable me to extract the absolute most from this experience. It's important to have a solid understanding on how the pharmacy department works in the hospital, and I think it's easy to underestimate the complexity of the workflow. I hope I'll be able to make some genuine contributions!

**Keira Hall is Lucy's Senior Preceptor, and Clinical Pharmacy Services Manager, in the Beacon Hospital.**



Arranging a 5th Year placement can be challenging. As a Senior Preceptor, you have a responsibility to ensure the most comprehensive experience of Hospital Pharmacy possible. This involves giving the student exposure to learn experientially within all specialities as well as some exposure to the wider hospital and multi-disciplinary working.

I find working with a competency document and pre-planned timetable, with sections aligned to the broader APPEL competencies, provides a good base for the 8-month placement. Prior to the placement, the timetable is populated with the student's specific breaks and the first parts of the placement discussed

with the relevant teams. This is followed throughout and gives clarity to all involved. Of course, it may not always be possible to stick exactly to the timetable and occasionally, there may need to be some amendments, given the nature of the areas of work but these can be easily managed provided effectively communicated to the team.

Competency-based learning is particularly effective within the dispensary and within the clinical ward rotation. Setting standards to achieve week-by-week allows the student to show progression, especially within the 10-week clinical ward block. These allow consistency regardless of which clinical pharmacist is providing the training which is also important as it allows the training resource to be shared and develops the student to be a contributory member of the team at an early stage.

Having a structured, multimodal programme allows the right person to be providing the optimal experience throughout and facilitates progression towards the end aim of developing a Pharmacist ready to practice. The programme being competency based and well defined gives me the confidence as the preceptor responsible for completing the summative assessments, to do so regardless of who delivered the individual components of the training.