

## Introduction

This document gives an overview of defined tasks that student pharmacists could carry out under supervision to meet specified University Learning Outcomes for EL Placements in the hospital setting. These have been categorised as follows:

- Safe Supply of Medicines
- Medicines Reconciliation
- Care Planning and Prioritisation
- Calculations
- DOAC Patient Education
- Discharge Screening and Patient Education

The framework gives an overview of specific tasks within each category and map to relevant stages of the MPharm curriculum depending on complexity and underpinning knowledge and skills. It demonstrates how tasks build in complexity throughout the years and allows for planning of EL placement activities to allow student pharmacists to demonstrate learning outcomes and GPhC Professional Standards during their EL placements. The individual category frameworks also contain information on suggested supervision for named tasks and give direction on possible SLE tools that can be used to support reflective practice at each stage.

SLE tool templates can be found on the Pharmacy Turas Learn pages, under Supervision.  
<https://learn.nes.nhs.scot/61754>

Each specific task has been mapped to show the level of engagement expected from the student pharmacist and can be defined as follows:

- OBS: student pharmacist should be actively engaged in observing this task take place as it will provide context and information that will be built on throughout their EL placements. It may be possible to delegate parts of the task to the student pharmacist to complete, but this will be decided by the EL facilitator on an individual basis.
- OBS/X: student pharmacists should be actively engaged in observing this task take place and contribute to aspects of the task depending on knowledge and skills. It is acknowledged that some student pharmacists may need more support in being able to actively participate in the task.
- X: student pharmacists should be actively participating and taking responsibility for carrying out the defined task under supervision. It should be noted that supervision may be direct or indirect, and this will be decided by the EL facilitator on an individual basis.

The framework is not exhaustive and there may be other opportunities for learning during EL placements that are appropriate for student pharmacists to be involved in and that will continue to support their learning in practice.

## Framework for EL Placement Activities in the Hospital Setting

Activity	Second Year Student Pharmacist (RGU Stage 2/ UoS Year 3)	Third Year Student Pharmacist (RGU Stage 3/ UoS Year 4)	Fourth Year Student Pharmacist (RGU Stage 4/ UoS Year 5)
<b>SAFE SUPPLY OF MEDICINES</b>			
Check the validity of prescriptions	X	X	X
Accurately dispense medicinal products	X	X	X
Accuracy check dispensed medicinal products	X	X	X
Clinically check prescribed medicinal products	OBS	OBS/X	X
Accurately complete near miss and error logs	X	X	X
Accurately maintain pharmacy records eg CD Register	X	X	X
Provide patient education for medicines	OBS/X	X	X
Provide patient education for high risk medicines	OBS	X	X
<b>MEDICINES RECONCILIATION</b>			
Gather information from patient and at least one other source	X	X	X
Identify discrepancies from information gathered	X	X	X
Discuss and resolve any issues identified with MDT	OBS	X	X
Provide patient education relating to any issues identified	OBS	X	X
<b>CARE PLANNING AND PRIORITISATION</b>			
Identify care issues	OBS	X	X
Prioritise care issues for individual patients	OBS	X	X
Identify appropriate monitoring needs for individual patients	OBS	X	X
Identify RAG rating for individual patients	OBS	X	X
Make suggestions on how to resolve care issues	OBS	X	X
Discuss and resolve any issues identified with MDT	OBS	OBS/X	X
Prioritise and manage care for groups of patients	OBS	OBS/X	X
<b>CALCULATIONS</b>			
Undertake dispensary calculations	X	X	X
Accurately calculate doses for safe administration of medicines	X	X	X
Undertake pharmacokinetic calculations	X	X	X
Undertake ward based calculations	OBS/X	X	X
Calculate renal clearance	OBS/X	X	X
Undertake calculations for high risk medicines (eg gentamicin & vancomycin)	OBS/X	X	X
<b>DOAC PATIENT EDUCATION</b>			
Provide patient education relating to DOAC prescribing	OBS	X	X
<b>DISCHARGE SCREENING &amp; PATIENT EDUCATION</b>			
Undertake discharge screening for individual patients	OBS	OBS/X	X
Provide patient education (as appropriate)	OBS	OBS/X	X
Discuss and resolve any issues identified with MDT	OBS	OBS/X	X
Consider and make recommendations on the continuity of care for individual patients	OBS	OBS/X	X

### Safe Supply of Medicines

Dispensing as a process is relevant to all stages of the undergraduate MPharm course as student pharmacists move from undertaking the technical and process driven aspects of dispensing through to applying their clinical and professional knowledge in clinical and screening activities.

Safe Supply of Medicines	Second Year Student Pharmacist (RGU Stage 2/ UoS Year 3)	Third Year Student Pharmacist (RGU Stage 3/ UoS Year 4)	Fourth Year Student Pharmacist (RGU Stage 4/ UoS Year 5)	Supportive SLEs	Staff supervision
Check the validity of prescriptions	X	X	X		<ul style="list-style-type: none"> <li>Pharmacy Technician</li> <li>Pharmacist</li> </ul>
Accurately dispense medicinal products	X	X	X	<ul style="list-style-type: none"> <li>DONCS</li> <li>Reflective account (reflect on approach e.g. develop accuracy checking checklist)</li> </ul>	<ul style="list-style-type: none"> <li>Pharmacy support worker</li> <li>Pharmacy Technician</li> <li>Trainee pharmacist</li> <li>Pharmacist</li> </ul>
Accuracy check dispensed medicinal products	X	X	X		<ul style="list-style-type: none"> <li>Pharmacy Technician</li> <li>Pharmacist</li> </ul>
Clinically check prescribed medicinal products	OBS	OBS/X	X	<ul style="list-style-type: none"> <li>Case based discussion</li> </ul>	<ul style="list-style-type: none"> <li>Pharmacist</li> </ul>
Accurately complete near miss and error logs	X	X	X	<ul style="list-style-type: none"> <li>Reflective account (reflect on use and importance of error logs)</li> </ul>	<ul style="list-style-type: none"> <li>Pharmacy Technician</li> <li>Pharmacist</li> </ul>
Accurately maintain pharmacy records eg CD Register	X	X	X		<ul style="list-style-type: none"> <li>Pharmacy Technician</li> <li>Pharmacist</li> </ul>
Provide patient education for medicines	OBS/X	X	X	<ul style="list-style-type: none"> <li>Mini-Cex</li> </ul>	<ul style="list-style-type: none"> <li>Pharmacy Technician (specifically trained for eg Roaccutane)</li> <li>Pharmacist</li> </ul>
Provide patient education for high risk medicines	OBS	X	X	<ul style="list-style-type: none"> <li>Mini-Cex</li> </ul>	<ul style="list-style-type: none"> <li>Pharmacist</li> </ul>

### Medicines Reconciliation

Medicines Reconciliation can be broken down into 3 distinct processes for student pharmacist placements. In the early stages of the undergraduate course, this will focus on gathering information and identifying, moving on to resolving issues and patient education in the latter stages of the course. It may be that this links with care planning activities for the final two stages of the course depending on the case being worked on.

Medicines Reconciliation	Second Year Student Pharmacist (RGU Stage 2/ UoS Year 3)	Third Year Student Pharmacist (RGU Stage 3/ UoS Year 4)	Fourth Year Student Pharmacist (RGU Stage 4/ UoS Year 5)	Supportive SLEs	Staff supervision
Gather information from patient and at least one other source	X	X	X	<ul style="list-style-type: none"> <li>Mini-CEX</li> </ul>	<ul style="list-style-type: none"> <li>Pharmacy Technician</li> <li>Pharmacist</li> <li>signed off Trainee Pharmacist</li> </ul>
Identify discrepancies from information gathered	X	X	X	<ul style="list-style-type: none"> <li>Case based discussion</li> </ul>	<ul style="list-style-type: none"> <li>Pharmacy Technician</li> <li>Pharmacist</li> <li>signed off Trainee Pharmacist</li> </ul>
Discuss and resolve any issues identified with MDT	OBS	X	X	<ul style="list-style-type: none"> <li>Case based discussion</li> <li>Mini-CEX</li> </ul>	<ul style="list-style-type: none"> <li>Pharmacist</li> </ul>
Provide patient education relating to any issues identified	OBS	X	X	<ul style="list-style-type: none"> <li>Mini-CEX</li> </ul>	<ul style="list-style-type: none"> <li>Pharmacist</li> </ul>

### Care Planning and Prioritisation

Student pharmacists in the final two years of the undergraduate curriculum will be expected to consider care planning, firstly for individual patients and then for groups of patients. This should include consideration of how to prioritise patients both individually and as groups. In the final stage of the course, student pharmacists would be expected to have discussions with member of the MDT to resolve care issues.

Care Planning and Prioritisation	Second Year Student Pharmacist (RGU Stage 2/ UoS Year 3)	Third Year Student Pharmacist (RGU Stage 3/ UoS Year 4)	Fourth Year Student Pharmacist (RGU Stage 4/ UoS Year 5)	Supportive SLEs	Staff supervision
Identify care issues	OBS	X	X	<ul style="list-style-type: none"> <li>Case based discussion</li> </ul>	<ul style="list-style-type: none"> <li>Pharmacist</li> </ul>
Prioritise care issues for individual patients	OBS	X	X	<ul style="list-style-type: none"> <li>Case based discussion</li> </ul>	<ul style="list-style-type: none"> <li>Pharmacist</li> </ul>
Identify appropriate monitoring needs for individual patients	OBS	X	X	<ul style="list-style-type: none"> <li>Case based discussion</li> </ul>	<ul style="list-style-type: none"> <li>Pharmacist</li> </ul>
Identify RAG rating for individual patients	OBS	X	X	<ul style="list-style-type: none"> <li>Case based discussion</li> </ul>	<ul style="list-style-type: none"> <li>Pharmacist</li> </ul>
Make suggestions on how to resolve care issues	OBS	X	X	<ul style="list-style-type: none"> <li>Case based discussion</li> </ul>	<ul style="list-style-type: none"> <li>Pharmacist</li> </ul>
Discuss and resolve any issues identified with MDT	OBS	OBS/X	X	<ul style="list-style-type: none"> <li>Case based discussion</li> <li>DONCS</li> </ul>	<ul style="list-style-type: none"> <li>Pharmacist</li> </ul>
Prioritise and manage care for groups of patients	OBS	OBS/X	X	<ul style="list-style-type: none"> <li>Case based discussion</li> <li>ACAT</li> </ul>	<ul style="list-style-type: none"> <li>Pharmacist</li> </ul>

### Calculations

Calculations are a fundamental skill required at all levels of practice. Suggested activities move from simple calculations to more complex calculations and should be included in all EL placements.

Calculations	Second Year Student Pharmacist (RGU Stage 2/ UoS Year 3)	Third Year Student Pharmacist (RGU Stage 3/ UoS Year 4)	Fourth Year Student Pharmacist (RGU Stage 4/ UoS Year 5)	Supportive SLEs	Staff supervision
Undertake dispensary calculations	X	X	X		<ul style="list-style-type: none"> <li>Pharmacy Technician</li> <li>Pharmacist</li> </ul>
Accurately calculate doses for safe administration of medicines	X	X	X		<ul style="list-style-type: none"> <li>Pharmacist</li> </ul>
Undertake pharmacokinetic calculations	X	X	X		<ul style="list-style-type: none"> <li>Pharmacist</li> </ul>
Undertake ward based calculations	OBS/X	X	X		<ul style="list-style-type: none"> <li>Pharmacist</li> </ul>
Calculate renal clearance	OBS/X	X	X	<ul style="list-style-type: none"> <li>Case based discussion</li> </ul>	<ul style="list-style-type: none"> <li>Pharmacist</li> </ul>
Undertake calculations for high risk medicines (eg gentamicin & vancomycin)	OBS/X	X	X	<ul style="list-style-type: none"> <li>Case based discussion</li> </ul>	<ul style="list-style-type: none"> <li>Pharmacist</li> </ul>

### DOAC Patient Education

Local guidance is available for DOAC patient education and student pharmacists in the final two years of the course should undertake this as appropriate.

DOAC patient education	Second Year Student Pharmacist (RGU Stage 2/ UoS Year 3)	Third Year Student Pharmacist (RGU Stage 3/ UoS Year 4)	Fourth Year Student Pharmacist (RGU Stage 4/ UoS Year 5)	Supportive SLEs	Staff supervision
Provide patient education relating to DOAC prescribing	OBS	X	X	<ul style="list-style-type: none"> <li>Mini-CEX</li> </ul>	<ul style="list-style-type: none"> <li>Pharmacy Technician</li> <li>Pharmacist</li> <li>signed off Trainee Pharmacist</li> </ul>

### Discharge Screening and Patient Education

Discharge screening and patient education encourages students to consider professional responsibilities in the context of the final pharmacy processes prior to discharge. This should consolidate student pharmacists' knowledge and skills and encourage responsibility for clinical checking, screening and professional decisions.

Discharge Screening and Patient Education	Second Year Student Pharmacist (RGU Stage 2/ UoS Year 3)	Third Year Student Pharmacist (RGU Stage 3/ UoS Year 4)	Fourth Year Student Pharmacist (RGU Stage 4/ UoS Year 5)	Supportive SLEs	Staff supervision
Undertake discharge screening for individual patients	OBS	OBS/X	X	<ul style="list-style-type: none"> <li>Case based discussion</li> </ul>	<ul style="list-style-type: none"> <li>Pharmacist</li> </ul>
Provide patient education (as appropriate)	OBS	OBS/X	X	<ul style="list-style-type: none"> <li>Mini-CEX</li> </ul>	<ul style="list-style-type: none"> <li>Pharmacist</li> </ul>
Discuss and resolve any issues identified with MDT	OBS	OBS/X	X	<ul style="list-style-type: none"> <li>Case based discussion</li> </ul>	<ul style="list-style-type: none"> <li>Pharmacist</li> </ul>
Consider and make recommendations on the continuity of care for individual patients	OBS	OBS/X	X	<ul style="list-style-type: none"> <li>Case based discussion</li> </ul>	<ul style="list-style-type: none"> <li>Pharmacist</li> </ul>