

# MPharm Interim Visit

De Montfort University

January 2015

# Master of Pharmacy degree course (MPharm) interim visit

## De Montfort University

Report of an interim visit, 20 January 2015

### Introduction

The General Pharmaceutical Council (GPhC) is the statutory regulator for pharmacists and pharmacy technicians and is the accrediting body for pharmacy education in Great Britain. The GPhC is responsible for setting standards and approving education and training courses which form part of the pathway towards registration for pharmacists. The UK qualification required as part of the pathway to registration as a pharmacist is a GPhC-accredited Master of Pharmacy degree course (MPharm). The GPhC's right to check the standards of pharmacy qualifications leading to annotation and registration as a pharmacist is the *Pharmacy Order 2010*.

The Pharmacy Order 2010 requires that the 'nature, content and quality' of education and training provision is reported to the GPhC by its accreditation panel. As such the GPhC has incorporated interim visits within its accreditation methodology to provide suitable opportunities for the accreditation panel to review MPharm course provision in this way. The GPhC carried out a series of pilot interim visits in the early part of the 2013-14 academic year to help inform the development of the structure and content of the interim visits to ensure that they would be fit for purpose. Five schools of pharmacy took part in the pilot phase.

The purpose of an interim is to allow an accreditation team to:

- Monitor progress of delivery of the accredited MPharm degree since the accreditation or reaccreditation to the *GPhC Standards for initial education and training of pharmacists*.
- Evaluate a selection of the educational activities on the accredited course in conjunction with information provided at the main accreditation visit. The accreditation team will wish to satisfy itself of the quality, particularly of the practice opportunities available, and to ensure that they continue to meet the *GPhC Standards for initial education and training of pharmacists*. In particular, the accreditation team will be evaluating how well the accredited MPharm degree meets standard 5.6, which states:  
*The MPharm/OSPAP curriculum must include practical experience of working with patients, carers and other healthcare professionals. We are not suggesting that off-site placement visits are the only way to achieve this. Schools should articulate their strategy for meeting this criterion, which may include off-site placement visits, using patients, carers and other healthcare professionals' in-class, and simulation.*
- Evaluate these practice activities in relation to the student's ability to demonstrate the relevant outcomes in Standard 10.

Interim visits take place three years after a main successful accreditation or reaccreditation visit and the report of the visit goes on to form an appendix to the main accreditation report. Prior to the visit, a School is provided with the document 'MPharm degree interim visits: guidance for providers' and asked to submit the necessary documentation and to describe, and give dates for, a range of student activities that will be taking place both on-site at the university as well as off-site. The visit date is selected as being a day where there are suitable opportunities for the accreditation team to observe activities that had been timetables to take place that day, without the need to make special arrangements. Prior to the visit, a number of satellite visits are arranged to allow one or more members of the accreditation team to observe the off-site activities. Findings from the satellite visit, as well as information and observations gleaned on the day of the visit, help to inform the accreditation team's overall view on developments since the last visit as well as the quality of education and training being delivered.

This document summarises the visit activities and accreditation team's conclusions following the interim visit to the School of Pharmacy at De Montfort University.

## **Background**

The MPharm degree at De Montfort University is delivered by the Leicester School of Pharmacy, which, along with three other Schools, forms part of the Faculty of Health and Life Sciences. The School teaches two other undergraduate degrees, the BSc (Hons) Pharmaceutical and Cosmetic Science, which is not recognised for registration purposes by the General Pharmaceutical Council, and the BSc (Hons) Forensic Science. In addition to the undergraduate degrees, the School offers a taught Masters in Pharmaceutical Biotechnology and Quality by Design. These supplement the post-graduate distance learning clinical pharmacy programmes for pharmacists.

The last accreditation visit took place in March 2012 and the accreditation team agreed to recommend to the Registrar of the General Pharmaceutical Council that the MPharm degree delivered at De Montfort University should be reaccredited for a full period of 6 years. There were no conditions or recommendations.

The team agreed that the following strengths were exhibited by the provision:

- The exceptional inter-professional education opportunities
- The introduction of ISED as an innovative tool for providing diagnostic and formative feedback.
- The level of engagement with service users and patients in the stakeholder groups.

Prior to the interim visit the University submitted documentation to the GPhC and a pre-visit meeting took place between via teleconference on 9 January 2015. The purpose of a pre-visit meeting is to help the School of Pharmacy to prepare for the visit, allow for the GPhC and School to ask any questions or seek clarification, and to finalise arrangements for the visit.

## Satellite visits

In advance of the interim visit 3 satellite visits took place to allow team members to observe 3 on-site activities in advance of the main visit plus an informal meeting with students:

<b>Meeting no.</b>	<b>Date</b>	<b>Time</b>	<b>Activity</b>	<b>Activity no.</b>	<b>Accreditation team member/s</b>
1.	8 December 2014	09:00 – 11:00	Communication Skills 2 Workshop	<b>1</b>	Helen Howe and Surinder Bassan
2.	8 December 2014	11:00 – 13:00	Gastrointestinal Small Group Session Workshop	<b>2</b>	Helen Howe and Surinder Bassan
3.	8 December 2014	14:00 – 16:00	Endocrinology Small Group Session Workshop	<b>3</b>	Helen Howe and Surinder Bassan

## The interim visit

The interim visit itself took place on site at De Montfort University on 20 January 2015.

### 20 January 2015

	<b>Time</b>
4. Presentation by De Montfort University MPharm staff team on progress to date	07:45 – 08:45
5. Accreditation team and GPhC representatives split into two groups and observed activities 4 and 5 which ran concurrently:	09:00 – 10:50
6. Activity 4 - Skills for Practice - Pharmacy Practice Skills practical (Year 3) Activity 5 - Skills for Practice - Responding to symptoms PBL and iSED (Year 3)	
7. Accreditation team and GPhC representatives observed activity 6: Activity 6 - Skills for Practice - Responding to symptoms PBL and iSED (Year 3)	11:00 – 12:50
8. Private meeting of accreditation team and GPhC representatives (including working lunch)	12:00 – 12:30
9. Meeting with students	12:30 – 14:00
10. Accreditation team and GPhC representatives split into two groups and observed activities 7 and 8 which ran concurrently: Activity 7 - Hospital visit – Glenfield General Hospital (Year 3)	14:00 – 15:30
11. Activity 8 - Hospital visit – Leicester Royal Infirmary (Year 4)	
12. Accreditation team and GPhC representatives observed Activity 9: Activity 9 - Inflammation, Cancer and infection – Debate (Year 3)	15:00 – 16:00
13. Private meeting of accreditation team and GPhC representatives ( including review of all documentation provided (see Appendix 2)	15:30 – 16:30
14. Feedback to De Montfort University MPharm staff team	16:30 – 17:15

## Accreditation team

The GPhC's accreditation team ('the team') comprised:

Name	Designation at the time of accreditation event	Meetings attended
Professor Ian Marshall *	Accreditation team leader, Emeritus Professor of Pharmacology, University of Strathclyde Proprietor, Caldervan Research (Educational and Writing Services)	4, 8, 9, 12, 13, 14
Professor Chris Langley	Accreditation team member (Academic), Professor of Pharmacy Law & Practice and Deputy Head of the School of Pharmacy, Aston University	4, 5, 7, 8, 9, 12, 13, 14
Dr Katie Maddock	Accreditation team member (Academic), Senior Lecturer in Clinical Pharmacy, Keele University	4, 6, 8, 9, 10, 13, 14
Professor Helen Howe	Accreditation team member (Pharmacist), Retired hospital Chief Pharmacist	1, 2, 3, 4, 5, 7, 8, 9, 10, 13, 14
Ms Anne Watson	Accreditation team member (Pharmacist), Assistant Director of Pharmacy, NHS Education for Scotland	4, 5, 7, 8, 9, 11, 13, 14
Mr Surinder Bassan	Accreditation team member (Pharmacist), Pharmaceutical Consultant	1, 2, 3, 4, 6, 8, 9, 11, 13, 14

along with:

Name	Designation at the time of visit	Meetings attended
Ms Joanne Martin *	Quality Assurance Manager, General Pharmaceutical Council	4, 8, 9, 13, 14
Miss Jenny Clapham *	Rapporteur, Quality Assurance Officer, General Pharmaceutical Council	4, 5, 7, 8, 9, 12, 13, 14

\*attended pre-visit teleconference, 9 January 2015

## Course provider

Representatives of De Montfort University MPharm degree. The team met with the following:

Name	Designation at the time of accreditation event	Meeting attended
Ms Susan Allen	Lecturer in Pharmacy Practice	1, 4, 6, 7, 14
Prof Larry Goodyer	Head of School	4, 10, 14
Dr Geoff Hall *	Associate Head of School	Pre-visit only
Mrs Karen Pitchford	Principal Lecturer in Pharmacy Practice	4, 6, 7, 14
Dr Peter Taylor	Principal Lecturer in Pharmaceutics	4, 14
Dr Jon Waterfield	Principal Lecturer in Pharmacy Practice	4, 5, 14
Dr Tania Webb *	MPharm Programme Leader	2, 4, 12, 14

In addition, the accreditation team held two meetings with students, the first during the satellite visit and the second during the main visit. In the first meeting, the accreditation team met with a group of six students, including two from year 2 and four from year 3 of the MPharm course. In the second meeting, the accreditation team met with a group of 19 students, including three from year 1, two from year 2, seven from year 3, and seven from year 4.

## The visit

### 1. Overview and progress to date:

In meeting 4, the team was told that the aim of the MPharm degree is to give students an integrated experience which balances theory with practice, providing a real context to their learning through working directly with patients, careers and other healthcare professionals. The approach is student-centred, utilising problem-based learning, group work, reflection and peer assessment. In response to student feedback, there has been a shift in the balance of summative assessment, with a greater emphasis on formative assessment and a reduction in the number of summative assessments. In this context, the students (meeting 9) acknowledged the value of the diagnostic and formative assessments and the mock examinations for identifying areas where improvement was needed. However, they were critical of the timetabling of assessments, as the deadlines for coursework tended to come together, putting considerable pressure on the students. The School had acted upon student feedback in this regard, and some steps had been taken to spread out the coursework deadlines. However, students explained that certain assignments cannot be completed until the associated activity has taken place, for example, the clinical placements and IPE events. As these are often scheduled for later in the year, this still resulted in competing deadlines. In general, the students (meeting 9) were satisfied that the School staff actively sought feedback and acted upon this; for example, the year 3 students had requested more support for mathematics, and more sessions had subsequently been provided for students in years 1-3. In addition to the Staff Student Committee, there are student representatives on the Programme Management Board; both of these forums can be used to raise issues and concerns and the students (meeting 9) agreed that responses to these issues had been satisfactory, although more student engagement with the representatives would be beneficial.

The team was told (meeting 4) that the course is divided into three broad themes; these are 'Body Systems and Clinical Studies', 'Practice and Health Care', and 'Pharmaceutical Sciences'. Each level includes a zero credit Professional and Scientific Skills (PaSS) module which focuses on the skills needed for practice, personal development planning and reflective practice. The use of these themes and PaSS modules facilitate integration across modules and levels, and the spiral curriculum ensures that topics are revisited and knowledge and understanding is built on year on year. The students (meeting 9) commented favourably on the PaSS modules, finding them useful in bridging the gap between A-Level and undergraduate study, as well as for developing them as professionals and preparing them for practice. The earlier PaSS modules involved considerable support from tutors, but as the course progressed, the focus shifted more towards independent study and self-directed learning. In response to the team's wish to learn how the varied approach to teaching and learning was communicated to students, and how they knew what was expected of them, the staff (meeting 4) explained that the module guides provide detailed information and learning outcomes, and that students are supported by their personal tutors throughout the programme. Quality assurance mechanisms included the Staff Student Committee, the Faculty Academic Committee, monthly programme team meetings and regular year group meetings with students. In meeting 9, the team sought feedback on the students' experience of the integrated course and was told that years 1 and 2 were more theory-based, but in year 3 they saw how the course fitted together and how the modules related to one another. The links between science and practice were reported to be good, with sessions such as the Pharmacy Practice Skills involving a teacher from each discipline; students recognised the complementary strengths of the teaching in this context.

Noting from the last accreditation that funding was to follow student numbers and that a new pharmacy practice suite was to be built, the team enquired about current resourcing. The Head of School (meeting 4) confirmed that resources still follow student numbers, and while the School had been accredited for an intake of 170, the actual intakes had varied from 150 to 170. The staff-student ratio remains at approximately 1:17 having lost only one part-time post, although there had been some staff turnover. The new practice suites are now operational following big investment in 2012. The team acknowledge the practice suites as being impressive and fit for purpose. In meeting 9, the students reported that resources were good, including 24 hour/7 days a week library access with a designated librarian for pharmacists, plus provision of on-line resources and guidance on how to use them. The team enquired about the personal tutor system and received mixed feedback, with some students (meeting 9) describing their tutor as very approachable and others experiencing less engagement. However, the PaSS modules were valuable, as they involved timetabled sessions with personal tutors.

During meeting 4, the staff highlighted a number of features of the programme.

- i. *Preparing students for practice:* The staff (meeting 4) reiterated the focus on preparing students for practice and described the role of hospital placements, community placements and opportunities for inter-professional education (IPE). In year 1, students begin the first strand of IPE and attend community placements, progressing to observational hospital placements and further community placements in year 2. Year 3 involves the second strand of IPE and 'hands on' hospital placements, while year 4 incorporates all three elements, with 5 hospital placements of ½ a day each and 5 days in community and the final strand of IPE. The staff also described the introduction of an IPE Challenges Programme for year 4 students, which aims to explore the social demographics and health needs of families living in a specific ward of Leicester. Students (meeting 9) described how the course embedded professionalism particularly through IPE which was valued for exposing them to the different views and approaches of the multidisciplinary healthcare team. The students particularly enjoyed the recently introduced IPE Challenge events, which they described as reaching an advanced level. The programme draws on a wide range of professions including pharmacists, nurses, social workers, police and youth workers, with the focus being on developing models of multi-disciplinary working to tackle these complex health and social needs. Concerning placement numbers, the team was reassured that there were sufficient places for the

current student population; should more be required, one staff member chairs the local LPC and there is buy-in from local community pharmacy. Students in all years also engage in on-campus activities to prepare them for practice; these include patient interviews, simulated scenarios and the use of patient-focused workbooks, where students can apply their knowledge in the context of a patient with support from joint teaching from both science and practice. In collaboration with the University of Leicester, the School is also piloting Patient Knows Best (PKB), a patient-controlled online medical records system where members of the public are employed to act as patients and undergo online consultations with student healthcare professionals. Students take it in turns to respond to enquiries building up a patient profile and working in close collaboration with other healthcare students. In response to the team's wish to gain a student perspective on the amount of patient interaction they experienced, the students (meeting 9) reported that there was a range of activities involving patients on campus including patient interview and simulated scenarios as well as the placements and visits. The year 4 students acknowledged that there appeared to be significantly more patient interaction than they had experienced on the previous programme. There was also a number of meaningful IPE activities with medical, nursing, and social care students that they found invaluable in building their communications skills and understanding the roles of the healthcare team. Overall, students reported that the focus of the course was much more practice based than before and this has helped them build their confidence. When asked about their placements, the students explained that they were expected to introduce themselves to the ward nurse or doctor-in-charge and were then tasked with identifying patients and preparing a clinical care plan. Some students reported feeling nervous when approaching patients but overall they were well-supported by the staff on the wards.

- ii. *Feedback*: There are several mechanisms through which students receive feedback; these include feedback from patients, standardised tutor feedback, as well as discussions with personal tutors. There is also a feedback tutorial with the medical students. The team alerted the School to the negative comments received from students about the nature, level and timeliness of feedback. In response, the staff explained that while students receive feedback, this is not always individual; moreover, timely feedback can be delayed by the structure of the course and the need to wait until work has been completed. The team identified this as area in which improvement should be made to better meet the needs of students. The team learned of the introduction of 'gallery critique' for providing peer feedback; here, students work in groups of three and analyse six pieces of work, each student giving focused feedback on one specific area. Students have found these sessions helpful. In response to the team's concern about the time-intensive nature of this approach, the staff explained that this is undertaken using specific, timetabled sessions. In response to the team's enquiry about the feedback they received, the students stated that feedback was variable, especially for practical work. The students described using iSED (see below) and found it very useful. They explained that it is used in all of the practice stream modules of the new course. At the time of the visit year 1 students hadn't started these classes yet and year 4 were studying on the old course. The students reported that the gallery critique method was useful for peer-feedback on their written work. The students also described how reflective learning had been embedded in the course since year 1; they recognised this as an important skill, particularly in preparing them for CPD in their future careers.
- iii. *iSED*: The team was told about the iSED (Individual Skills Evaluation and Development) software which was originally prototyped in 2012 and has been undergoing development. iSED objectively evaluates an individual's skills in communication, information retrieval, recommendation and follow up. The staff described how iSED is used in the 'Responding to Symptoms' workshops (see Activities 5 and 6), beginning with a simulated patient brief. Students then engage in role play and video one another, before observing the videos and rating both themselves (self-review) and each other (peer review). The purpose of the software is to put learning into practice in a role play scenario and enable immediate feedback that indicates areas requiring improvement and signposting to further learning and resources. The tool can be used both in class and at home; it can provide formative feedback as well as being used for



summative assessment. The team enquired how the summative assessment works and was reassured that for the purpose of assessment, the ISED tool can be set to only allow the ratings to be made by a member of staff.

## **2. Other observations**

The School provided a variety of additional documentation which the team reviewed during the visit. This included external examiner reports, examination papers, module handbooks and examples of student work. The team identified a number of areas of concern including the lack of integration in several modules, the need for more consistent moderation of assessments, poor student engagement in some modules and the number of high marks in coursework. The team agreed that while year 3 and 4 appear well integrated there could be better integration in years 1 and 2; the School should not rely on the PaSS modules to ensure integration. Furthermore, the team would like to see work on the standardisation of the project marking. It was noted that the Programme Aims within the Programme Guide did specifically address areas of patient safety along with the integration of science and practice; the aetiology of disease, diagnosis and therapy; recognition of common symptoms and disease; rational and ethical and evidence-based decision making; interpretation and evaluation of data; pharmaco-economics; evaluation of high quality healthcare; provision of pharmacy services and safety and accuracy of pharmaceutical calculations. The team also recognised that the School has demonstrated excellent practice in the development of inter-professional education.

## **3. Observation of student activities:**

In addition to satellite visits (Meetings 1-3, December 8 2014), during the interim visit itself, various members of the team observed a number of activities, some of which ran concurrently. The date of the interim visit was selected to coincide with timetabled activities which would best demonstrate a range of sessions/activities and allow the accreditation team to review examples of student learning experiences and how the MPharm course had progressed. These activities are summarised below and further detail of each is provided in Appendix 2.

### **Activity 1: Communication Skills 2 Workshop (satellite visit)**

This session was the second of three workshops on communications skills and focussed on developing students' 'questioning skills' for gathering relevant information from patients. It was delivered as a small-group interactive session, with one tutor and approximately 20 students; the session followed a lecture on the topic and students were also required to complete a pre-workshop activity before attending. Students worked in pairs or small groups to explore and practise different questioning strategies and there was opportunity for tutor and peer feedback. The team found this to be a useful session that provided a comprehensive approach to types of questions, including their value and relevance to different contexts. Students were very engaged throughout and the small group size of enabled the facilitator to give support on a one-to-one basis. Most of the questions related to a non-clinical context and the team noted that more work will be required to develop questioning strategies that integrate listening skills (covered by workshop 1). The team also suggested integration with the Small Group Sessions case work to indicate how questioning of patients could improve the information available to address the cases concerned. Overall, the team agreed that this session introduced important skills that will be built upon as the course progresses.

### **Activity 2: Gastrointestinal Small Group Session Workshop (satellite visit)**

This was a team-based learning activity delivered to 75 students in groups of 5-6 across two rooms and facilitated by a pharmacologist in each room and a practice pharmacist moving between the two rooms. The aim of the session was to develop students' understanding of the clinical topic in the context of an individual patient and their experience of illness. This session followed on from 2 lectures on the topic and students were provided with a workbook and links to resources in advance of the class. The session began with a diagnostic multiple choice test followed by a discussion; students then worked in their groups to complete the workbook with further questions set for self-directed study outside the class. The team agreed that the workbook addressed all the planned objectives of the session and showed links to pharmacology, microbiology and relevance to clinical practice in terms of appropriate treatment strategies. It was noted that students may benefit from clearer links between these activities and the other parts of the programme. Furthermore, the students were unable to complete the work during the session and were advised to complete any remaining work in their own time. The team was concerned that a considerable amount of the material was not covered, and that some students may struggle to find sufficient time to finish this outside of the class. The facilitator informed the team that students were expected to prepare for the session based on the lectures and resources provided. However, it was clear that not all students had prepared, leaving those who had to take the lead in the group work. This resulted in differing levels of student engagement with those who hadn't prepared being less engaged. It emerged that there was a small number of year 2 students who were not aware of the need to prepare and the team would therefore expect better communication with year 2 students in advance of future sessions. The team acknowledged from the other students that they had been advised to prepare via Blackboard announcements and in classes prior to the sessions.

### **Activity 3: Endocrinology Small Group Session Workshop (satellite visit)**

This session introduced students to working with simplified clinical case histories. It followed the same format as Activity 2 with approximately 80 students across two rooms with a member of the pharmacology team in each room and a member of the practice team moving between the two. Students were given access to the workbook in advance via the VLE and worked in small groups of 5-6 to complete the workbook. There were also whole group discussions during the session. The team agreed that overall the session met the aims and objectives but considered that the scope for mapping the session to the GPhC outcomes was limited. The team would expect this to be addressed through spiral learning as the students progress through the course. The case study was well-developed and showed links across other aspects of the programme, including pharmacology and chemistry. The session employed a range of learning styles and utilised a variety of resources including lecture notes, reference books and the internet. The majority of students showed good levels of engagement, although the team noted that a small minority made few contributions and simply copied the work of their fellow students. The session included an MCQ test in which the team was disappointed to learn that the highest mark was only 50% (3 of the 6 questions answered correctly), while some students answered only 1 out of 6. The tutor gave formative feedback on the MCQ test during the session. In relation to the case study, students worked in small groups to answer 49 questions. The tutor moved amongst the groups, questioning and directing the students, and providing clarification where needed. The team was surprised that answers to the 49 questions were not provided, and was concerned that students may not know that their answers were incorrect. However, the team was reassured that students could seek clarification via the intranet at any time and that tutors were reported to respond quickly and comprehensively.

### **Activity 4: Skills for Practice - Pharmacy Practice Skills practical (Year 3) (interim visit)**

This session was based on a BNF therapeutic section, focussing on the central nervous system. It was delivered to a small group of 20 students split into four groups and was facilitated by two members of staff. This session involved completion of four workstations that centred on four key areas: information gathering (workstation WS1), information giving (workstation WS2), responding to symptoms case work (workstation WS3), and assessing the work of others (workstation

WS4). The staff role played on two of the work stations and students self-manage the other two stations. The team reported that all the students understood the activities and what was expected of them. They were familiar with the format of the session which worked well and high levels of student engagement were observed throughout the session. The team agreed that the session met the learning objectives and students understood how the session related to other parts of the course. The relevant learning outcomes from Standard 10 were detailed on the student's worksheets and were deemed relevant and appropriate by the team. During role play sessions, students appeared confident when interacting with tutors, although it was commented that they had limited experience of dealing with real patients at this stage. Students worked well both in groups and individually on the self-managed tasks.

#### **Activities 5 and 6: Skills for Practice - Responding to symptoms PBL and iSED (Year 3) (interim visit)**

This workshop was the last of four PBL workshops in year 3 and was delivered to a small group of 20 students and facilitated by one member of staff. The session began with an instructor-led presentation and was followed by small group discussions. Students then prepared for a role play activity and were split into two groups, with half of the group engaging in the role play and scoring it using iSED, and the remainder of the group writing a simulated patient-brief using a standard template and reviewing their iSED feedback. There was also a group discussion and reflection on the activities of the class. The session ran twice during the visit and was observed by different team members on each occasion. The team agreed that the session was of a high standard and had clear aims and objectives. Students displayed good levels of engagement, were enthusiastic and had all prepared in advance of the session. Discussion with students revealed that the groups had used different options when preparing with some using a Wiki (an information-sharing platform available through the university) and others using email or Drop Box. Those using a Wiki appeared to be the best prepared for the activities. Students worked independently in small groups and were clear what was expected of them. The team was impressed by the facilitator's level of input and support during the session. The iSED system was highly commended and appeared to be a unique and valuable asset, with students reporting that the videos and feedback through iSED had helped them develop self-confidence and communication skills. The team would like to see the expansion of iSED to other modules. The team observed a second 'responding to symptoms' PBL and iSED session and found this group of students had all prepared in advance of the session and also demonstrated high levels of engagement. The team was given a demonstration of iSED and was impressed with the software, recognising its value in assisting students with their learning. The facilitator began with a discussion of the clinical situation, in this case haemorrhoids, making links to previous sessions to reinforce prior learning. The students who took part in the iSED session received formative feedback through peer-assessment. The team suggested that the work of the other group in developing simulated patient scenarios should be used by the university to build up a bank of cases for each 'responding to symptoms' topic. The team agreed that the session met its objectives and addressed the relevant learning outcomes from Standard 10.

#### **Activity 7: Hospital visit – Glenfield General Hospital (Year 3) (interim visit)**

This activity was a hospital placement visit facilitated by one teacher practitioner. Students were assigned in pairs to wards in the base hospital and completed a workbook with a section for each week of their placement. Students were expected to manage their own time with the teacher practitioner circulating between the wards where the students were based. Students on this placement were engaged, demonstrated confidence in working independently and were clearly comfortable working on the ward. The activity had clear aims and objectives and students were required to work through structured tasks in their workbooks requiring both reflective and reflexive learning. The team agreed that the supervision provided by the teacher practitioner was of a high standard and that the students knew when to seek advice and when to refer. The students were well-accepted by the patients on the ward. The activity mapped to outcomes in Standard 10 and students were aware that they would be required to link their work to prior learning through the reflective activities.

#### **Activity 8: Hospital visit – Leicester Royal Infirmary (Year 4) (interim visit)**

As in activity 7, this was a hospital placement visit facilitated by one teacher practitioner. Students were assigned in pairs to wards in the base hospital and completed a workbook with a section for each week of their placement. Students were expected to manage their own time with the teacher practitioner circulating between the wards where the students are based. The aims and objectives of the placement were made clear to students in their workbooks which also gave structured guidance to activities. Support was provided by a rotating teacher practitioner but supervision was kept to a minimum and students were expected to take responsibility for identifying their own patients and obtaining consent. The activity facilitated inter-professional learning as the students interacted with other healthcare professionals. The team found the students to be very engaged, well-prepared and confident in dealing with patients. In their group discussions when developing a pharmaceutical care plan, knowledge and information was drawn from a range of studies and prior learning. The team agreed that the completion of the placement would meet the aims and objectives and the relevant outcomes from Standard 10.

#### **Activity 9: Inflammation, Cancer and infection – Debate (Year 3) (interim visit)**

This session was an interactive debate for approximately 40 students and was facilitated by a member of the microbiology team and a member of the pharmacy practice team. The topic of the debate was “*Do Pharmacists have a role to play in antibiotic resistance?*” and students were asked to consider and debate both sides of the argument utilising their scientific knowledge and applying their understanding of the pharmacist’s role in communicating and interacting with patients. The team agreed that the levels of preparation and participation varied with some students showing evidence of having prepared and a willingness to contribute to the debate. Others were reluctant to participate and did not demonstrate the level of knowledge of the subject that would be expected by year 3 of an integrated programme. The facilitators were enthusiastic and did well at keeping the debate going, posing questions and encouraging contributions. Overall the team agreed that the session met its learning objectives.

## **4. Conclusions**

The accreditation team advised the School that the team’s conclusions from this visit were based on both what team members had been told, what they had observed, and documents they had read, over the course of the visit and the satellite visits.

The accreditation team looked at the progress made in meeting the Education and Training Standards and was confident that these are still being met. There was good evidence that standard 1, standard 2, standard 3, standard 4, standard 6, standard 7 and standard 8 and standard 9 all continue to be met. The team recognised that the School continues to meet the standards of education and training of the GPhC and also recognises the tremendous efforts made so far. The team expressed confidence that the School will continue to develop towards its goal of producing DMU graduates that are fit for the profession of pharmacists.

#### *Feedback on individual standards*

- i. With regard to standard 5 and 10, the activities observed allowed the team to understand what stage the students are at in their development. The hospital visits proved to be extremely useful to observe. At Glenfield General Hospital the students were engaged in their work. They interacted well with the teacher-practitioner and had fully prepared for the activity; the students were working independently. At the Leicester Royal Infirmary, the students had to do a drug history to develop a pharmaceutical plan. Again the students were fully engaged and understood what they needed to achieve. On the satellite visits, the team saw the level of engagement of students with the activities. Team members had been concerned about the level of supervision;

however, after speaking with the students during the main interim visit, the team was satisfied that the year 3 and 4 students are at a stage where they are competent to work in a clinical environment with minimal supervision. The students had explained how professional and trusted they were made to feel in the hospital ward environment. On reading the external examiner's report and review of the examinations, there was concern raised that this programme was not as integrated as it might be. The team was satisfied that although year 1 has a traditional module framework, the PaSS modules do provide a mechanism where students pull their learning together in an integrated way. There is clear evidence that modules and assessment become fully integrated towards the end of year 2 and from year 3 onwards.

- ii. The team observed a range of sessions relating to responding to symptoms and using the iSED to aid their learning (standard 5). There is no doubt the students benefit enormously from these sessions, particularly using iSED as a developmental tool. The 'skills for practice' practical also demonstrated a high level of engagement. The students understood the aims and objectives of these sessions and worked well in small groups. However, the team's view was that there was inconsistency in the level of preparedness of the students.
- iii. The students articulated well how they understood their responsibility for their own learning (standard 5) and saw this as helping them develop as professionals. The team acknowledge the practice suites as being impressive and fit for purpose. They saw the inter-professional education opportunities as being of huge benefit in their understanding of multi-disciplinary team working in the interests of patients. They were clear on how they were being assessed and on what they were to be assessed. Overall, they were content with the level of feedback, while acknowledging that feedback on laboratory work was sometimes delayed.
- iv. The team discussed the personal tutor system (standard 6) which the students described as being satisfactory but there were inconsistencies across the level of engagement they have with the tutors. Some students acknowledged that they didn't need a 'hands-on' tutor because they were independent and confident enough to progress without this input. The students confirmed that they have scheduled mandatory tutorial sessions three times a year.
- v. The students are clearly appreciative of the responsiveness of the university when students raise concerns around provision. Overall, the team agreed that the students they met were very engaged with the programme and were clear about what was expected of them.

### **Areas for consideration**

The team encourages the School to continue with its plans to address the levels of student feedback and student engagement that have started to be implemented.

## Appendix 1 – Documentation made available to the accreditation team for review before and during the visit

### Documentation provided in advance of the pre-visit:

- i. Completed MPharm degree interim visit submission document (Section 1: Activities for observation and Section 2: Commentary)
- ii. Performance Data
- iii. Programme Enhancement Plans
- iv. The Responding to Symptom (RTS) programme and use of iSED at each level of the MPharm
- v. Course level Student Feedback
- vi. National Student Survey Data
- vii. Module Enhancement Plans
- viii. National Student Survey 2013 / 2014 Student Comments
- ix. Module Feedback 2012 /2013
- x. Module Feedback 2013 /2014

### Documentation provided following pre-visit and in advance of the main visit:

- i. Flow chart and schematic of the MPharm degree
- ii. Uniform and Dress code policy for hospital visits

### Documentation provided during the visit:

- i. Destination Survey Data (2001/12, 2012/13)
- ii. Session/lesson plans of sessions being observed
- iii. External examiners' reports (2012/13, 2013/14)
- iv. MPharm Programme Guides (both programmes) 2014/15
- v. MPharm Year Overview for Year 1, Year 3 and Year 4
- vi. A selection of Module Handbooks from across all 4 years
- vii. A sample of Exam Papers from across all 4 years
- viii. Handbook and Regulations for Undergraduate Awards 2014/15

- ix. Individual Module Achievement
- x. IPE documentation for Strands 1-3 including:
  - Student workbooks (2013/14, 2014/15)
  - Assessment Guide criteria and guidelines (2013/14, 2014/15)
  - Examples of student work (2012/13, 2013/14)
  - Stakeholder Evaluation and Feedback (2011/12, 2013/14)
  - Inter-professional learning on polypharmacy - An Evaluation
- xi. Community placement documentation for Year 1 and Year 2 including:
  - Portfolio (2014/15)
  - Mentors Handbook
  - Assessment Guide (2012/13, 2013/14)
  - Examples of student work
- xii. A range of other samples of student work including:
  - PaSS Assignments (Year 2)
  - Clinical Visit Workbooks (Years 2, 3 and 4)
  - Law, Ethics and Practice Study Pack (Year 2)
  - Workbooks (Years 2 and 3)
  - Final Year Projects (Year 4)

The team was also given access to University virtual learning platform on the day of the visit.

## Appendix 2 – Activities observed by the Accreditation team

### Activity 1:

#### **Communication Skills 2 Workshop (CS2)**

#### **PHAR1605 - Foundation Skills in Pharmacy Practice**

Level 4 (year 1)

**Facilitators:** Ms Susan Allen

#### **Session Outline:**

20 students are timetabled for this professional skills workshop on communication. The class is facilitated by one member of staff.

The aim of this workshop is to explore and develop a suitable questioning strategy for information gathering.

The learning objectives for the workshop are that, by the end of the session, the student should:

- Be able to list and describe the different types of questions
- Have identified examples of these different types of questions
- Have developed a “Questioning strategy” to gain information
- Have practised using different types of question to gain information
- Have practiced testing understanding

The tutor will introduce, conclude and facilitate the activities within the workshop. Students will take part in these activities in pairs or in a sub-group. The activities will include exploring different types of questions and examples. They will then go onto developing a questioning strategy and putting it to the test.

This is the second of three workshops on communication skills; in the first workshop students explore the importance of listening skills and in the final workshop they consider the individual in the giving of information.



## Activity 2:

### Small Group Session

#### PHAR2602 - Principles of Physiology and Pharmacology

Level 5 (year 2)

**Facilitators:** Dr Tania Webb / Dr Ken McKechnie / Dr Peter Rivers

#### Session Outline:

Half of the year group are timetabled for this class as two groups with the session taking place concurrently in classrooms that are close together. Each class is facilitated by one member of the Pharmacology team with a member of the Practice team moving between the two rooms.

The aim of this session is to develop students' understanding of the clinical topic in the context of an individual patient and their experience of illness. The topic of this session is irritable bowel syndrome, constipation and diarrhoea.

The objectives for the session are to:

- Understand the triggers for irritable bowel syndrome (IBS) and describe the symptoms
- Understand why visceral hypersensitivity can give rise to symptoms of IBS
- Be able to outline treatment strategies for diarrhoea-predominant IBS and constipation-predominant IBS.
- Understand the mechanisms of action of anti-spasmodics, anti-diarrhoea agents and laxatives, and appreciate how their mechanisms of action relate to their different patterns of use.

### Activity 3:

#### Small Group Session

#### PHAR2603 - The Central Nervous System, Endocrinology and Immunity

Level 5 (year 2)

**Facilitators:** Dr Benjamin Gronier / Dr Tyra Zetterstrom / Dr Peter Rivers

#### Session Outline:

Two groups of 40 students are timetabled for this class. The sessions take place in 2 classrooms that are close together. Each class is facilitated by one member of the Pharmacology team with a member of the Practice team moving between the two rooms.

The aim of this session is to contextualise student learning of the scientific principles underpinning drug use in the treatment of diabetes in the clinical situation.

The objectives for the session are to:

- Understand the classification and diagnostics of diabetes mellitus and glucose intolerance.
- Understand the action of insulin and the control of its secretion.
- Appreciate the general metabolic alterations associated with diabetes and the clinical consequences.
- Understand the principles of insulin and oral hypoglycaemic treatments.

#### Activity 4:

##### Pharmacy Practice Skills Practical (PPS)

##### PHAR3605 - Skills for Practice

Level 6 (year 3)

**Facilitators:** Dr Jon Waterfield (accompanying the team) / Ms Nilam Jussab / Dr Nicola Ward

##### Session Outline:

20 students are timetabled for this Practice Skills session. Students are split into 4 groups to complete the 4 workstations. Each class is facilitated by two members of staff, (in this session it is 2 members of the practice team but non-pharmacists also take part in role plays in Practice Skills practicals earlier in the programme). The staff role play on two of the work stations and students self-manage the other two stations.

All PPS sessions have a common format and are based on objective structured clinical exercises (OSCEs) that centre on four key areas: information gathering (workstation WS1), information giving (workstation WS2), responding to symptoms case work (workstation WS3) and assessing the work of others (workstation WS4).

Each session is based on a BNF therapeutic section and the observed class will focus on the **central nervous system**. The session is set within the context of student-centred preparatory work on the BNF, reference to previous and current work in other modules and the completion of a reflective log after the session.

The outcomes for the session are that students will be able to demonstrate:

- A systematic process of gathering information when a patient requests an emergency supply of a medicine (WS1)
- The accurate provision of information to a prescriber who requests information on the change of dose form of an opioid analgesic (WS2)
- Interaction with colleagues to add value to a patient case involving the request for Saint John's Wort (WS3)
- A personal standard operating procedure for checking the work of others including calculations, register entries and the final product. (WS4)

## Activities 5 and 6:

### A problem based learning (PBL) Responding to symptoms workshop

#### PHAR3605 - Skills for Practice

Level 6 (year 3)

**Facilitators:** Ms Susan Allen / Mrs Karen Pitchford (accompanying the team)

#### Session Outline:

20 students are timetabled for this PBL Responding to Symptoms (RTS) workshop which is facilitated by one member of staff.

The observed workshop (RTS4) is the last of the four PBL workshops in Year 3. Each workshop follows the same structure. The class begins with an instructor led presentation on issues relating to responding to symptoms in a pharmacy. This is followed by small group discussions about the investigations related to the workshop topic with these discussions being fed back to the whole group. Students then have preparation time for the RTS role play. The group is then split into two with half of the group engaging in the role play and scoring of it using iSED\*. The remainder of the group write a simulated patient brief. This patient brief (for the student role-playing the patient) is written on a standard template and provides information for the student about the opening query and responses to potential questions by the 'pharmacist'. Students can also use this time to access their previous iSED feedback. The session is brought to a close with reflection on the activities of the class. Reflection includes reference to the learning outcomes (both class learning outcomes for the session and small group learning outcomes for the topic under investigation.) The reflective process is ongoing as students have an individual iSED account so can access individualised feedback on their role play and engage with the suggested development activities generated by the iSED learning tool. The PHAR3605 module includes an online reflective journal so students can also record reflective action points in this journal.

The topic for this workshop is haemorrhoids.

The learning outcomes for this session are that by the end of the workshop, students will:

- be able to describe factors for consideration when making clinical decisions in an over the counter setting
- have reviewed, discussed and identified areas for future investigation relating to the symptom of haemorrhoids
- have taken part in a role play relating to the symptom of haemorrhoids, viewed the video of this performance, scored it online using iSED and viewed feedback (50% of group)
- have written a simulated patient brief relating to the symptom of haemorrhoids (50% of group)
- have reflected on their learning from the 4 Responding to Symptoms workshops

\*Individualised Skills Evaluation and Development (iSED) learning tool developed at DMU.

## Activity 7:

### Hospital Placement (Glenfield General Hospital)

#### PHAR3605 - Skills for Practice

Level 6 (year 3)

**Facilitators:** Miss Anisha Patel / Professor Larry Goodyer (accompanying the team)

#### Session Outline:

10-12 students are timetabled for the hospital placement in level 6 and level 7. The placement in each year is facilitated by one teacher practitioner. They meet the students at the beginning of the visit and assign them (in pairs) to wards in the base hospital. Not all students will be on the same ward, the students have a workbook with a section for each week which they are expected to complete over the course of the visit. Students are expected to manage their own time; the teacher practitioner circulates between the wards where the students are based.

#### Level 6 placement

As the assessment involves all aspects of the year 3 placements the descriptions given in this document aggregate all aspects of the year 3 hospital placements.

The session that will be observed is **week 2** of the five week programme. The Learning Outcomes for the five weeks of the third year hospital visits are:

#### Week 1

Students should be able to:

- Appreciate the importance of confidentiality
- Be familiar with abbreviations found in medical documentation
- Understand the roles and responsibilities of different members of staff
- Be familiar with a hospital in-patient chart
- Be familiar with the layout of medical notes
- Interpret basic biochemistry results and understand the management/correction of imbalances i.e. hyperkalaemia

#### Week 2

Students should be able to:

- Understand the importance of taking an accurate drug history

#### Week 3

Students should be able to:

- Recognise which biochemical tests are of clinical and diagnostic importance
- Understand the clinical significance of biochemical results
- Recognise abnormal data and explain possible causes for these
- Estimate a patient's renal function from creatinine concentration.
- Describe the difference between pharmacokinetic and pharmacodynamic drug interactions
- Research the significance of a drug interactions
- Identify different routes of administration available
- Apply knowledge of formulations of drugs

#### **Week 4 and 5**

Students should be able to:

- Identify a patient's drug related needs
- Construct a pharmaceutical care plan

### **Activity 8:**

#### **Hospital Placement (Leicester Royal Infirmary)**

#### **PHAR4501 - Evidence Based Medicine**

Level 7 (year 4)

**Facilitators:** Mrs S Simpson / Mr Brian Simon (accompanying the team)

#### **Session Outline:**

10-12 students are timetabled for the hospital placement in level 6 and level 7. The placement in each year is facilitated by one teacher practitioner. They meet the students at the beginning of the visit and assign them (in pairs) to wards in the base hospital. Not all students will be on the same ward, the students have a workbook with a section for each week which they are expected to complete over the course of the visit. Students are expected to manage their own time; the teacher practitioner circulates between the wards where the students are based.

#### **Level 7 placement**

The observed placement occurs in the final year of the previous version of the MPharm and will migrate to the final year of our new delivery where it will be delivered as part of the Practice and Health Care Stream with PHAR4603 (Evidence Based Medicine).

As the assessment involves all aspects of the year 4 placements the descriptions given in this document aggregate all aspects of the year 4 hospital placements.

The session that will be observed is **week 2** of the five week programme. The Learning Outcomes for the five weeks of the fourth year hospital visits are:

### **Week 1**

Students should be able to:

- Locate relevant patient information on the ward
- Appreciate the importance of confidentiality
- Familiarise themselves with a hospital in-patient chart and patient's medical records
- Be able to take an accurate drug history
- Use a variety of resources to help establish a patient's drug history
- Communicate effectively with medical/non-medical staff members and patients on the ward
- Recognise which biochemical tests are of clinical and diagnostic importance
- Recognise abnormal data and explain possible causes for these
- Estimate a patient's renal function from creatinine concentration.
- Research the significance of drug interactions
- Identify different routes of administration available
- Apply knowledge of formulations of drugs

### **Weeks 2-4**

Students will have a selection of disease states to choose from in weeks 2, 3 and 4.

Students should be able to :

- Produce a patient profile for each disease state
- Produce a list of drugs used in the chosen disease state, including their place in therapy and mode of action
- Document test results relevant to the chosen disease state, and be able to identify relevant abnormal results
- Construct a pharmaceutical care plan for the chosen disease state

### **Week 5**

Students should be able to:

- Present one of their pharmaceutical care plans to the rest of the group
- Answer relevant questions on their pharmaceutical care plan

- Complete a piece of reflective writing based on the placement experience

### Activity 9:

#### Debate

#### PHAR3603 - Inflammation, Cancer and Infection

Level 6 (year 3)

**Facilitators:** Mr Ahmed Aboo / Dr Katie Laird / Dr Tania Webb (accompanying the team)

#### Session Outline:

40 students are timetabled for this debate with the students split into two groups of 20 for the session. Each class is facilitated by a member of the microbiology team and a member of the pharmacy practice team.

This activity is associated with the PHAR 3603 module learning outcomes:

- Evaluate strategies for infection control and limiting the occurrence of resistance to chemotherapy in the context of the molecular mechanisms involved in its acquisition

The topic of the debate is *“Do Pharmacists have a role to play in antibiotic resistance?”*

The aim of the class is to contextualise students learning of scientific knowledge of antibiotic resistance in bacteria and how pharmacist communication and interaction with the patient can potentially reduce antibiotic resistance, through ensuring correct usage of antibiotics.

Objectives of the session:

- Understand the mechanisms of action of bacterial antibiotic resistance
- Appreciate the implication of the impact or misuse of antibiotics by patients
- Understand the effects of mass prescribing antibiotics for viral infections
- Have an awareness of the need for education of the lay public on antibiotic resistance.



## Appendix 3 – Accreditation team member observation forms

### **Activity 1: Communication Skills 2 Workshop (satellite visit)**

**Team member(s): Surinder Bassan & Helen Howe**

#### **Observation/findings:**

The observers had a comprehensive set of papers provided ahead of the sessions and the satellite visit (3 days' notice) which described the sessions, what would be addressed and the pace and expected outcomes. These can be referred to for any detail of the academic work observed.

There was no mapping to Standard 10 but this was not a problem.

The session was a second in a series and followed a listening workshop held earlier. The session started with a refresher of that first session. There was no assessment of the first session. This will be done as a summative assessment of communication skills at the end of the module.

#### **Guidance:**

- **Did the session/s meet the aims and objectives of the activity being observed?**

Mostly. It certainly provided a comprehensive approach to types of questions and their value, relevance in different contexts and efficiency in determining the issues to be addressed. Mostly in non-clinical contexts.

Some work on practising types of questions and their value but again will need more.

The students did some work on a questioning strategy. Will be built on in later sessions in the spiral curriculum.

They did not practice understanding of situation. Will come from patient sessions where the students will integrate listening skills from a previous workshop with this second one on questioning skills.

This was a great session with really good student engagement throughout. Apparently it will be delivered multiple times as there were only 20ish in the group.

This worked well and enabled the facilitator to support on a 1 to 1 level.

- **How did the activity relate to the outcomes in Standard 10?**

The session was a contribution to the early building blocks 'knows how' in Standard 10.2.4d. Did some 'shows how' in a non-clinical context.

Not completed any aspect fully at this early stage in the degree which was the first semester Year 1

- **How did the students understand the activity in relation to other aspects of the programme?**

Not sure this can be linked to science aspects on the course. Could be linked across to Small Group Sessions case work. There this could be integrated to indicate

how questioning of patients could improve the information available to address the Issues in the cases considered in the SGSs.

- **Level of student engagement**

Excellent. Probably needs more familiarity to apply the communication strategy approach.

- **How were/are students assessed in this activity. Did you observe any assessment?**

The facilitator said not planned at this stage. Will need all elements of communication learning to be completed first.

Before the session started there was a separate unrelated assessment exercise to check understanding of terminology. Each student had to offer their understanding of a page of terms.

- **Any additional relevant information**

Nil

### **Activity 2: Gastrointestinal Small Group Session Workshop (satellite visit)**

**Team member(s): Surinder Bassan & Helen Howe**

**Observation/findings**

A comprehensive outline of the session and all associated papers were provided by the University and these can be considered for the detail. All were clear and well presented.

This session was a small group session. Students were in pre-arranged groupings of 5/6 students; 75 in all, in two large rooms with a facilitator in each (pharmacologists) and a practice pharmacist working across the two rooms. The arrangements worked well. The facilities were good. The support seemed to meet the needs of the students.

**Guidance:**

- **Did the session/s meet the aims and objectives of the activity being observed?**

Yes. The workbook addressed all the planned objectives.

The students did not manage to complete all the work in the session and were advised to complete it- in their groups in their own time. This must be difficult with a packed timetable, and if students are living at home and less available.

There was probably at least twice the amount of material to address than they could cope with, without considerable preparation. Ideally they should complete ahead of the session based on the lecture and texts/references offered. The facilitator saw this as a student responsibility. In the afternoon session on a different subject we discussed the same issue- which arose again- and the facilitator said he would promote increased preparation.

- **How did the activity relate to the outcomes in Standard 10?**

It was relevant to 10.2.2. Essentially it is a year 2 session and the students are developing the underpinning knowledge of IBS and its relationship to IBD, its treatment and there was a great deal relevant to clinical practice in terms of appropriate treatment strategies..

- **How did the students understand the activity in relation to other aspects of the programme?**

Would link to communications and all clinical aspects of pharmacy. Lots of links to pharmacology and microbiology. The workbook also included some pharmaceutical science self-study questions. The anti-cholinergic aspects of TCAs for instance- also used for IBS. Also linked into science through some aspects of the mechanisms of action.

Not sure if the students understood the links- they receive a holistic product and the links are not underlined.

- **Level of student engagement**

Mixed level of engagement in the groups. The subject was new and some students had not reviewed the workbooks before arriving at the session. Discussion with students over lunch revealed that year 3s had worked this out and were doing more preparation to ensure they used these sessions to explore what they had not been able to address in self-directed study. It seemed this was not apparent to the second years. A discussion with Session 3 tutor on this matter resulted in his saying he would expect 2<sup>nd</sup> years to come prepared in future and he would communicate this to them.

- **How were/are students assessed in this activity. Did you observe any assessment?**

The students baseline understanding of an earlier lecture that provided the basic building blocks to address this consolidating session were tested by around 10 questions. Many got less than 50% correct. But this was formative to teach them as much as anything where they were in their understanding and what the gap was.

- **Any additional relevant information**

### **Activity 3: Endocrinology Small Group Session Workshop (satellite visit)**

**Team member(s): Surinder Bassan & Helen Howe**

- Did the session/s meet the aims and objectives of the activity being observed?

Overall the session did meet the aims and objectives. The diabetes mellitus session started with the students having to write down answers to a set of six MCQs. The questions were designed to draw out students' understanding about the role and actions of glucose, sulphonylureas, biguanides, glycogen like peptides and insulin.

- How did the activity relate to the outcomes in Standard 10?

Overall the sessions met the aims and objectives but the scope for mapping the sessions to outcomes of standard 10 in the sense of 'knows how, shows how and does' was limited. One got the impression that this may get addressed through spiral learning as the students progressed through their course. Outcome 10.1.g was clearly being achieved in group learning sessions. Questioning, clarifying, coaching and feedback amongst some members was evident, particular in one case where the students seem to have hardly any answers to the questions. Even outcomes in 10.2.4 (working with patients and public) could only be mapped to 10.2.4.c 'knows how' (employ appropriate diagnostic and testing techniques in decision making). However, the remainder of the elements a to h 'shows how' and elements 10.2.2 a, b, e and g were being achieved through 'virtual' patient in the absence of a real patient.

- How did the students understand the activity in relation to other aspects of the programme?

This was a well designed case study which brought out key anatomical, neurological, physiological and pharmacological aspects of diabetes mellitus and impact on various organs and consequences on a patient's life as the disease progressed. The patient's presenting symptoms, history (medical, drug and social), current medication, examination and biochemistry results were provided and discussed. Students were occasionally referred to their pharmacology and chemistry lectures when discussing drug action and molecular structure.

- Level of student engagement

A range of learning styles was observed. Similarly a variety of resources were in use - from lecture notes, reference textbooks to internet (e.g. to access current NICE guidance). Most of the students were actively engaged in reviewing the case, asking questions of each other and using reference material. An occasional student in a group made little contributions, but merely copied down the answers of fellow colleagues, apparently neither having little recall even from the lectures of the previous week. Nor did they show any inclination to find the answers from the learning resources provided. In contrast, one of the students answered as many questions as he could without any help. Only afterwards did he discuss them with his colleagues or check the reference material to confirm his answers and note down those that he could not answer. When questioned, he explained that he had a good memory and knew most of the answers to the case. He found that by working in that fashion he tested himself and enhanced his memory.

- How were/are students assessed in this activity. Did you observe any assessment?

The test was self-marked by the students. The tutor went over the various answer options and explained the reasons for the correct answers for each of the questions.

Disappointingly, a show of hands revealed that the best of the students achieved only 3 out of 6 correct answers. Some students managed to only get one correct answer. In subsequent discussions with the students, some of them explained that they had only just finished the topic on Friday and thus had not had time over the week-end for follow-up studies of the lecture material or reference books. On the other hand, annotations in the lecture handouts of some students indicated that some of them had managed to add further information to their lectures.

The MCQ test was followed by a case study that students had been given prior to the workshop. Groups of 5 or 6 students and were required to answer 49 questions. They tackled these through discussion and reference to their lecture notes and course text books. Further formative testing followed as the tutor moved amongst the groups, questioning and clarifying points under discussion as well posing occasional questions to test their learning. During discussions, students were referred to their pharmacology and chemistry lectures when discussing drug action and molecular structure.

Surprisingly, at the end of the session, the class as a whole were not given the correct answers. Nor were there any plans to be made available on the intranet. So, there is a potential risk that some students may not know that their answers were incomplete and/or incorrect. Students and the tutor explained that all students had opportunities to ask questions or seek clarification via intranet at anytime. That facility was accessible to the whole class and so further enhanced shared learning. Students confirmed that when using this media the responses by the tutor were quick and comprehensive. They used information gathered from these in their preparation for summative testing. Formative assessment was clearly being appreciated by the students in this session; however there was no summative test as it is planned for May 2015.

- Any additional relevant information
  1. Emphasis on self-learning appears to be designed to equip students with a lifelong skill. Notably two differing styles and beliefs in teaching between the tutors were observed. Probing for answers by the lead tutor taking the session on irritable bowel syndrome appeared to be rather limited. The emphasis was very much to leave the students to learn themselves.
  2. Both case studies had the benefit of input from Pharmacy Practice tutor who moved between the groups. During these interactions practical aspects of advising and managing patients were brought out. For example these included lifestyle issues and the hidden aspects of disease progression, interpretation of blood glucose levels, and significance of HbA1c etc. Students had not been given specific pharmacy practice learning objectives for these sessions. Instead the tutor had a plan number of issues that are commonly encountered in practice which demonstrated should be addressed. Consequently, an occasional spontaneous learning / clarification opportunity was missed.

#### **Activity 4: Skills for Practice - Pharmacy Practice Skills practical (Year 3) (interim visit)**

##### **Team member(s): Anne Watson**

Observed this session which was focusing on Pharmacy practice skills in relation to mainly community pharmacy practice and minor ailments met the aims and objectives and Standard 10 areas as stated in the documentation submitted by the University for the Interim event.

Eighteen 3<sup>rd</sup> year MPharm students were arranged into 4 working groups which were based on an OSCE type assessment with workstations as follows (25mins each workstation) based on the CNS system :

- Legal issues in relation to the prescription dispensing and checking process (5 x 5mins mini stations)
- Emergency supply of PM medicines \*
- Advice to a Dr in switching opioid analgesics for a patient \*
- A group exercise looking at a patient request to buy St.Johns Wort

I was able to observe several of the students interacting in role plays with the TPs.

- Students understood the activities required and seemed familiar with the format of this session. They were able to also relate this session to relate to different aspects of the course but some had not revised previous materials (although this had been indicated in the module guide re Emergency supply requirements). The student s I spoke to had however reviewed the content of the section in the BNF for CNS.
- Student engagement was excellent from the role plays witnessed and they appeared confident when interacting with the tutors.
- Feedback was provided to students later on the Blackboard
- Self-assessment was used for the Prescription checking scenario
- Copies of all the scenarios were taken away by the students for future reference and discussion
- Feedback on individual scenarios was encouraged within the groups to learn from each other
- Group feedback and overall review was arranged for a practical follow-up session in 1 week
- Good attendance at this formative session is normal as builds experience towards a summative assessment
- Assessments :
  - Observed OSCE type assessment for the scenarios marked \*
  - Advised of self and tutor feedback on Blackboard
- Some of the students commented that although the role play scenarios and feedback were useful they had limited experience in dealing with real patients by this stage.

**Activity 4: Skills for Practice - Pharmacy Practice Skills practical (Year 3) (interim visit)**

**Team member(s): Chris Langley**

From my observation, the session met the learning objectives. The relevant outcomes from Standard 10 were outlined on each of the students' worksheets, and all seemed relevant and applicable. From speaking to one of the students, they seemed to understand how the session related to other parts of the course. The level of student engagement was good and all knew how the session would operate. Individual one-on-one assessments were observed, although feedback was to be delivered at a later point in the course. Students seemed engaged with the session and worked well in their respective groups, which they remained within for the duration of the academic year to maintain consistency.

**Activity 4: Skills for Practice - Pharmacy Practice Skills practical (Year 3) (interim visit)**

**Team member(s): Helen Howe**

**The session met the objectives as listed in the Interim Submission document provided by DMU (p11-14).**

There were 4 workstations testing different skills. The 20 students were clear about the process of the session which was reasonably complex to implement efficiently. The School has used to approach for several years now and it was successful. All students did all 4 activities and some of these were broken down further into component parts.

There were two staff members supporting the practical. One acted the part of a pharmacist, one a doctor and the other supported the group work activity. On our visit he was also supporting our engagement and ensuring we observed the different parts of the session.

**The activity mapped to the outcomes in Standard 10.**

It was possible to observe that all planned mapping as detailed in the submission document did occur. In WS3, the group work, it was clear they would not complete the task in the group I observed. They are expected to complete this in their own time.

**Students' understanding of the activity in relation to other aspects of the programme**

The students may not have been able to map the activity to their learning modules as outlined in the submission document, but some at least were evidently drawing on a wide scope of learning.

**Level of student engagement**

Excellent. All fully engaged.

**Assessment**

DMU did provide us with marking criteria for the relevant WS i.e. 1: emergency supply- info retrieval; and 2: prescriber query- information provision; evidence based. These were completed after each engagement with the student by the two supervisors and would be given back to the student. It was possible to observe the assessment process.

A week later the whole session is reviewed and answers are available on Blackboard or in a discussion session. The session is formative.

It would be useful if the detail of the planned feedback process was included in the university submission.

**Activity 5: Skills for Practice - Responding to symptoms PBL and iSED (Year 3) (interim visit)****Team member(s): Katie Maddock**

- The session had clear aims and objectives and from what I observed the session was well designed to meet these
- The students were working independently and were very aware of what was required of them
- Students were engaged and demonstrated that they had done their directed study prior to the session. Different groups had done this differently; the group that had used the wiki provided by the university were the much better prepared of those that I spoke to
- Input from the facilitator was of a very high standard
- The iSED system is very impressive and appeared to be valued by the students using it.
- The activity related well to the outcomes in Standard 10 to which it was linked in the documentation

**Activity 5: Skills for Practice - Responding to symptoms PBL and iSED (Year 3) (interim visit)****Team member(s): Surinder Bassan**

A communications session by this facilitator was observed during the satellite visit in December. That had been well prepared and conducted with clear aims and objectives with the supporting material. Similarly so was this session concerning cases of haemorrhoids. It too comprehensive and of a high standard.

The facilitator's presentation was followed by students working independently in small groups of threes or fours. Students were enthusiastic. They had clearly come prepared having done pre-reading for the session and all were fully engaged in discussing which questions to ask and how to ask them. They were considering the common OTC products that are available and looking up details from SPCs, drawing from 'wiki' data, in agreeing various products and anticipating that different patients may prefer some formulations over the others.



It was obvious that the students were applying knowledge & skills acquired in the Communications session – probably similar to that observed during the satellite visit in December.

The class was divided into two for the video exercises. Some groups were to act as patients whilst the others were to be pharmacists. The student from each group who was to be videoed was given time to sit in a quiet room and prepare for it. Students explained that they all got a chance to act and then critique the sessions. They said these had helped them considerably in improving their self-confidence and communication skills. The actual video session was not observed but instead the limited available time was used to look at DMU's iSED (individual self evaluation and development) system.

In iSED DMU has a unique and really valuable asset. The facilitator explained it had taken her six years to develop iSED. The data base should be expanded to include other modules as students find the formative assessments most helpful which they can undertake at the time and place of their own choosing. Other schools should consider coming to some arrangements with DMU to enable their own students to benefit from this development.

Here was a clear illustration of spiral learning. I believe many of the outcomes of standard 10 were being met in this session.

#### **Activity 6: Skills for Practice - Responding to symptoms PBL and iSED (Year 3) (interim visit)**

##### **Team member(s): Anne Watson**

Observed this session which was focusing on RTS for Haemorrhoids which met the aims and objectives and Standard 10 areas as stated in the documentation submitted by the University for the Interim event.

During the initial part of the session where S Allen introduced the session the team members were shown the iSED system by K Pitchford and how it was used to self, peer and tutor feedback for recorded consultations for RTS sessions. The session was really useful to see how iSED works and it's potential for other areas in the course.

The team members then listened to the session where the lecturer S Allen went over the background lecture to Haemorrhoids with input and discussion with the students as a whole (students organised into four workshop groups of 4 -5) where the students used their preparation materials ( recorded on wikis or Drop box from pre-researched materials).

The team members then left the session as the students were going to prepare for recording their consultations on the ipads provided. The aim being that they would then load up the recordings and discuss between them on good and bad points as well as the provide feedback for themselves and each other using iSED. The students were then also encouraged to develop their own scenarios using a proforma to practice their consultations with these types of patients.

The students seemed to be very familiar with RTS activities and what was expected of them prior to the session and during the session hence the majority of students were all engaged in the discussion and seemed to have all been involved in preparing their prior research materials via wikis, dropbox and emails.

The students were going to be peer assessed through discussion in the session although we did not witness this activity. We were however shown and allowed to do a mock assessment using iSED with K Pitchford.

Suggested that the team may want to consider using the students ideas for cases in each of these sessions using the proformas in order to build up a bank of cases for each RTS topic (with appropriate adaption).

There was some `flags` to previous materials re pregnant women issues re constipation/piles for integration although there was perhaps another opportunity missed re the anticholinergic side-effects of tricyclic antidepressants (amitriptyline) that would probably have been covered in previous/future pharmacology that could have been flagged to improve integration.

**Activity 6: Skills for Practice - Responding to symptoms PBL and iSED (Year 3) (interim visit)**

**Team member(s): Chris Langley**

The observation started with an overview and demonstration of the iSED system. From the demonstration, this seems like a well-designed piece of software which should enhance the students' learning experience. Having spoken to one group of students within the session, I learnt that they appreciate the role the iSED system has in assisting them with their studies and also understood how they were to have prepared for the session being observed by undertaking group work on-line (via a wiki or other suitable electronic platform) in advance. The session was well facilitated and it was clear from the engagement of the students within the session that they had prepared in advance for the session. Overall, from the period of my observation, it appeared that the session was meeting its learning objectives.

**Activity 6: Skills for Practice - Responding to symptoms PBL and iSED (Year 3) (interim visit)**

**Team member(s): Helen Howe**

**The session met the objectives/learning outcomes as listed in the Interim Submission document provided by DMU (p15-16).**

This was the third and last PBL for Year 3. An initial discussion session to ensure the students were familiar with the clinical situation included many pointers to reading and learning they should revisit to refresh their understanding, outside the session. The university submission has mapped all the prior learning modules that are relevant. The culture in the university sets expectations in students that they will need to constantly reflect on prior learning. This was recognised by the students we spoke to in the student meeting. They suggested that it all came together in year 3. The spiral learning approach should make that a reality in year 2, too. For some students this is probably happening and I am sure the university is constantly prompting this recognition.

**The activity mapped to the outcomes in Standard 10.**

All are listed in the submission document and I would support the relevance offered of this PBL session.

**Students' understanding of the activity in relation to other aspects of the programme**

This is documented in the submission document and the student would need to know the material from the mapped modules to be able to complete the work.

**Level of student engagement**

All were engaged.

**Assessment**

Formative assessment using the DMU product iSED. This electronic tool was demonstrated and provided immediate feedback.

Summative assessment of the whole of PHAR3605 will be in 8 OSCEs at the end of the year. 2 of these will be linked to PBL and the learning across 3 years. My observation was that this approach was in line with the standards and Outcome 10 expectations.

**Activity 7: Hospital visit – Glenfield General Hospital (Year 3) (interim visit)**

**Team member(s): Katie Maddock**

- The session had clear aims and objectives and the students are provided with a workbook with structured tasks to work through during their time on the ward
- The students were working independently and said they were comfortable in doing so
- Students were engaged and demonstrated reflective and reflexive learning
- Supervision by the Teacher Practitioner was of a high standard
- Students were aware they had to link their work to prior learning, but this prior learning wasn't particularly evident (different types of inhaler devices). However, I didn't feel this was an abnormal response from an MPharm student when put on the spot!

**Activity 7: Hospital visit – Glenfield General Hospital (Year 3) (interim visit)**

**Team member(s): Helen Howe**

**The session met the objectives as listed in the Interim Submission document provided by DMU (p26 re week 2- taking a drug history).**

The students had clearly met the objectives on week 1 too which they were building on. They were well accepted and comfortable on the ward. There were three groups of 2 students on 3 separate wards and we visited each. They were all doing well and proceeding with recording a DH. We did not attend them at the bedside

but discussed how they were approaching the task, at the nurses station as we had met them there by chance as they had completed a first DH. They were able to discuss how well things were going with Anisha who was a great teacher and supporter. The students were completing their workbooks. They were reflecting between patients and seeking to improve their approach. They sought advice where appropriate- for instance when a previously planned patient for a DH was not available. They were encouraged to find others with the nurses assistance, seek patient consent etc. They were clear what the boundaries were for their involvement with care, and the patients had no difficulty accepting them as students and understood if the student did not immediately answer their questions but waited to take advice.

**The activity mapped to the outcomes in Standard 10.**

Yes it did. Some was in weeks we did not observe but the work we saw was entirely relevant.

**Students' understanding of the activity in relation to other aspects of the programme**

Yes for communication skills and record keeping.

This would be evidenced more in the workbooks reflective accounts and the case presentation.

**Level of student engagement**

Excellent. All fully engaged and evidently enjoying the experiences.

**Assessment**

The student completes a workbook which is reviewed; and they provide reflective accounts within that. They also do a case presentation when they are able to address the underpinning evidence based for the prescribing they saw.

**Activity 8: Hospital visit – Leicester Royal Infirmary (Year 4) (interim visit)**

**Team member(s): Anne Watson**

**Observed this session which was focusing on Evidence Based Medicine (EBM) within a hospital ward environment, where 4<sup>th</sup> year students were tasked for 4 weeks in developing up Pharmaceutical care plans for specific patient groups and use these also to debate EBM in relation to these patient groups.**

**The sessions should meet the aims and objectives and Standard 10 areas as stated in the documentation submitted by the University for the Interim event.**

We visited 3 wards set up within Leicester Royal Infirmary each with three 4<sup>th</sup> students placed on them with some support and guidance from a rotating Teacher Practitioner. The session was set up with minimal support to allow the students to take responsibility on the wards for identifying and consenting a suitable patient for interview. The following wards were visited :

Wd 37 – Diabetes

Wd 29 – Gastroenterology

Wd 26 – Stroke

The students had completed a similar 4 week programme of hospital visits (more TP supervision) during their 3<sup>rd</sup> year in a hospital environment.

The students were required to complete a workbook for each week (ward session) and had to develop a full Pharmaceutical care plan within this, Prepare a presentation to be feedback and assessed as a group in week 5 of the programme AND also provide a final report for assessment . At the stage we met the students in the afternoon they were only at the stage of interviewing the patient re their medical, drug and social history and then starting to review the patient case notes in some cases.

- Students understood the activities required and seemed familiar with the format of these sessions. They were able to also relate this session to relate to different aspects of the course especially when developing their EBM reports.
- Student engagement was excellent from most of the students who appeared confident apart from one group who were a bit anxious as they had not yet found a suitable patient to interview/ focus on although the TP was on the ward and was trying to offer support.
- Assessments :
  - Completed workbook
  - Group presentation in wk 5
  - Report including EBM
- One student commented that they would like more patient facing activities during the course.

#### **Activity 8: Hospital visit – Leicester Royal Infirmary (Year 4) (interim visit)**

##### **Team member(s): Surinder Bassan**

The aims and objectives of the ward based work were clearly conveyed to the students in the Clinical Visits Workbook for PHAR4501. This part of the Evidence Based Practice is comprised of weekly sessions at a hospital over 5 weeks. Students are expected to study nine different types of cases during these sessions and formulate a Pharmaceutical Care plan for each case studied.

The students workshop provided them with a structured guide to enable past disease history and the presenting symptoms, complaints and diagnosis was noted. By completing the sections for past drug history and current treatment as well as noting the standard physiological measurements, the students had good basis for discussions between themselves in considering various options and barriers in formulating a Pharmaceutical Care Plan.

My observations were of three groups, each of three 4th Year students on their 4th week. Each group working on a specific ward. These were:

Wd 37 – Diabetic patient

Wd 29 – Inflammatory Bowel Disease patient

## Wd 26 – Stroke patient

understanding of patient's condition

Observed this session which was focusing on Evidence Based Medicine (EBM) within a hospital ward environment, where 4th year students were tasked for 4 weeks in developing up Pharmaceutical care plans for specific patient groups and use these also to debate EBM in relation to these patient groups.

The sessions should meet the aims and objectives and Standard 10 areas as stated in the documentation submitted by the University for the Interim event.

All students appeared to respect the ward environment and etiquette. As these students had previously experienced ward based sessions, they were left largely to fend for themselves. The Teacher Practitioner let the students find a suitable case to obtain consent from and interview, without directing them to a specific patient. This way inter-professional skills were being developed as well as self-learning through group discussions and use of reference material.

There was one Teacher Practitioner who moved between the three groups and observed the students without interfering, however, if asked for clarification she offered brief guidance. Students work was frequently interrupted in this busy ward when either the nurses or doctors needed the patient's notes. However the students interacted well these other professionals. When any clarification was needed they confidently and politely sought it from the ward staff during occasion lull in activity.

The first group were reviewing a diabetic. The explained that it was quite challenging interviewing a confused diabetic patient whilst attempting to confirm patient's drug, social history and lifestyle matters.

The second group had planned to interview a patient with Inflammatory Bowel Disease. However when we met them they were debating what to do as the patient had visitors and was being rather un-cooperative. This had upset their plans and they appeared worried. This is when they sought advice from the Teacher Practitioner who appeared on the ward then. She suggested that they ought to find a different patient to review so they set upon doing so.

The third group of students had already gathered their patient's information and were discussing aspects of the patient's management and various strands in developing a pharmaceutical care plan. It was apparent that they were drawing bits of knowledge and information from a range of subjects that they had studied during their course so far.

When asked how they assured medication reconciliation, students in all three groups responded by referring to patient's case notes, drug chart, GP letter and patient's interview. It was disappointing that the examination of Patients' Own Medicines and contacting the GP/Community pharmacist had to be prompted out of them.

In all three groups all the students appeared to have prepared themselves by reading about the presenting patients' condition from their lecture material and references provided by their lecturers.

All students were fully engaged in the task at hand. This was most apparent in the stroke patient group. They explained that in the final week they were going to present the case to the whole class. That also formed part of summative assessment therefore everyone contributed their finest to ensure the best possible mark. Individual student's written submission of the case made up the rest of their final marks.

These observations indicate that most of the outcomes of standard 10 were being met.

**Activity 9: Inflammation, Cancer and infection – Debate (Year 3) (interim visit)**

**Team member(s): Chris Langley**

This session enabled students to discuss a particular topic (in this case the appropriateness of pharmacists as antibiotic guardians) in an interactive debate-style session facilitated by two members of staff; a microbiologist and a pharmacist. In the observed portion of the session, I observed that a good proportion of the students were keen to get involved in the discussion and were not afraid to challenge others' opinions. Many students had clearly prepared before the session and were willing and able to participate. However, there was a minority, albeit a significant one, who seemed reluctant to participate in the session, at least during the part I observed. Overall, from the period of my observation, it appeared that the session was meeting its learning objectives.

**Activity 9: Inflammation, Cancer and infection – Debate (Year 3) (interim visit)**

**Team member(s): Ian Marshall**

Observation of debate on antibiotic stewardship (Year 3):

- An interesting exercise and comments must be read with the knowledge that this was the first experience for both the School and the students of this type of learning
- Students were not as well-versed as might have been expected by Year 3 of an integrated programme
- Teachers did their best to keep the discussions alive
- Discussion was at a very basic level with (during the limited time observed) little reference to the scientific basis of the subject area; it was anticipated that this would be brought out later in the debate