

External Evaluation and Benchmarking report for Uppsala University Masters Programme in Clinical Pharmacy

Participants

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Background and Introduction

The course team produced a comprehensive description of the Masters programme along with suitable supporting documents. The team also responded to a number of questions asking for clarification before the two day visit to Glasgow. The two day benchmarking visit consisted of two days in Glasgow where the Uppsala team spent time in discussion with the Strathclyde reviewers, observed teaching on the Strathclyde MSc in Advanced Pharmacy practice and visited leading edge practitioners in the NHS. The Strathclyde reviewers were able to talk to the staff and graduates from Uppsala in separate sessions. External review of documentation and interviews with staff and students from the programme confirms the self-evaluation to be an accurate report covering the aspects listed in the university guidance. Aligned to these 11 aspects, our observations and recommendations are listed below.

In comparison to the current University of Strathclyde Postgraduate Masters course, there is a significant gap in the baseline entry requirements in terms of previous experiential learning and practice experience. This reflects advances in clinical pharmacy practice in the UK which has driven developments in the initial education and training of pharmacists to provide competence based training in clinical pharmacy in undergraduate and pre-registration education and training. Candidates for the Strathclyde MSc in Advanced Clinical Pharmacy Practice are expected to have achieved these competences before undertaking the postgraduate MSc, designed to meet current practice requirements in Scotland. The gap in entrance requirements may reflect the differences in undergraduate and foundation level education and training in clinical pharmacy. The Uppsala Masters course meets current requirements in Sweden.

REF UK TOP 20 RESEARCH-INTENSIVE UNIVERSITY

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Reflections aligned to the aspects of education and training

1. Achievement of the objectives set out in the Higher Education Act and Higher Education Ordinance and Programme Specific objectives

This is the area on which we spent the majority of time. Overall the Masters in Clinical Pharmacy does meet the objectives set by Government but we make the following observations

- The course prepares the graduates well for developing practice and becoming role models for Clinical Pharmacy in Sweden.
- The course builds on the undergraduate education and training in Sweden taking the graduates from a focus on dispensing to a more patient focused role.
- Ethics and confidentiality are very well covered in the course.
- Research ethics and practice are fundamental to the course.
- While continued professional development (CPD) is not mandatory for continued registration as a pharmacist in Sweden the graduates of the course understand the need for CPD and life-long learning.
- The periods of experiential learning in hospitals throughout the country pose some logistical problems for supervision and equity of experience but this is mitigated by the periods in the University where students share their learning through peer-review sessions. In the experiential learning students reported that they had good opportunities to work with other health care professionals.
- We questioned the lack of an award for participation in the course other than the Masters. Not all students completed the full course and therefore did not receive any award for their studies. We were informed that this is normal in Sweden but we would **RECOMMEND** that awards of Certificate and Diploma to recognise periods of study are considered as exit awards.
- The graduates of the course were excellent and enthusiastic ambassadors for the course and we **RECOMMEND** that the course leaders consider using past graduates as ambassadors for the course and as student mentors.

2. Link to research – science & proven experience as a basis for content and form of teaching

The link to research was well demonstrated in both the application of research to the management of patients and undertaking research in the project.

- We **COMMEND** the peer-review sessions in the design and execution of the project. The graduates in particular described the usefulness of peer review in the design of the project and the support given by staff.
- We **COMMEND** the preparation for international dissemination of output through the requirement to produce the project abstract in English
- We **RECOMMEND** that competence and confidence in supervisors to promote a more evaluative approach to practice and generate meaningful research projects relevant to practice development is developed.

3. Student centred learning

The Masters course is based on sound student centred principles with the students learning from each other, facilitated by staff rather than being taught by the staff.

- We **COMMEND**
 - the level of student centred peer based learning,
 - student centred interactive learning with student cohorts ahead and behind

- the training of students and supervisors in use of reflection, peer review and feedback
- We **RECOMMEND** that graduates of the programme are used as mentors during experiential learning and that the potential added value from a clinical expert during experiential learning and peer discussion be investigated.

4. Methods of testing achievement of objectives – appropriateness, legal certainty and progression

Our impression is that this Masters course is over assessed. While the assessment does ensure that the learning outcomes are met this could be undertaken more efficiently.

- We **COMMEND** the strength of the tools used to assess students and provide feedback in the practice environment and in the use of OSCE methods to assess competence.
- Both staff and students in separate conversations commented on the number of assessments in the course. Excessive assessment, particularly written assessments, may inhibit the quality of feedback and may result in students focussing on the assessment rather than their learning. Our impression is that there are too many assessments each assessing a small component of the course and that these could be amalgamated into a smaller number of more substantial assessments. Some written examinations require memorisation of factual knowledge which may not be necessary in testing the application of this knowledge but is an added burden for students. We **RECOMMEND** that the assessment strategy for the Masters in Clinical Pharmacy should be reviewed. This should include considering the value of making some written examinations 'open book' to mirror practice and alternative assessment methods in pharmacotherapy linked to the discussion seminars.
- There are two members of staff on this course and the burden of assessment setting and marking falls on them. This model has little resilience and if a student asks for a piece of work to be remarked then it becomes difficult to find an alternate examiner. We **RECOMMEND** that the staffing associated with the Masters in Clinical Pharmacy should be reviewed to ensure that there is resilience in the system.
- For each assessment there is the possibility of six attempts. In the UK system this is capped at four with the last two being at the discretion of the Board of Examiners. We **RECOMMEND** that the number of attempts at each assessment is reviewed.

5. Staff subject expertise, teaching skills and capacity

The staff involved in the course are enthusiastic and keen to develop the course and are to be **COMMENDED** for their innovation in developing this course as the first of its kind in Sweden.

- We **COMMEND** the staff for the development, implementation and publication of teaching and learning methods
- With only two full time equivalent staff teaching on the course this has little resilience if one were to leave for any reason. In particular, the capacity and capability for research project supervision is limited. We **RECOMMEND** that Uppsala University reviews the staffing compliment for a course that should be seen as a leader in the country and engage clinical expertise where appropriate to support student peer learning.
- We **RECOMMEND** that a broader group of stakeholders is engaged in course management and infrastructure to support experiential learning
- Staff from Uppsala reported that their administrative support model differs from other Masters programmes and while this has not had a detrimental effect on the programme it does mean that this Masters is not as visible in the university as other programmes. We **RECOMMEND** that the administrative support for this programme is brought in line with other Masters programmes and that the programme is more visible at Faculty level.

6. Internationalisation, international perspectives and sustainability practice

The course meets this criterion in terms of its learning and teaching although its sustainability in teaching provision relies on two staff. As above we **RECOMMEND** that the staffing associated with the Masters in Clinical Pharmacy should be reviewed to ensure that there is resilience in the system.

7. Equality perspective

The course meets this criterion. We were interested to see that like our courses there is a predominance of women but this reflects the profession as a whole.

- Students on the course spend time in both Uppsala and in their experiential learning site. These can often be at opposite ends of the country. This may have some implications for students' ability to participate in the course.

8. Professional relevance – individuals' and society's needs for learning and professional knowledge and career preparation

This course meets the needs of a developing profession in Sweden and we **COMMEND** Maria and Elisabet on being pioneers of this course which is developing leading edge practitioners. Both teachers know the clinical pharmacy community which facilitates the students teaching and learning.

9. Student influence

There is clear evidence that student feedback is acted on and that the students think very highly of the course and the staff involved. The graduates we met with are excellent ambassadors for the course. It is clear that action is taken to address views of students and alumni which are continuously sought

10. Study environment

Through our discussions, we identified that there is excellent student support throughout the course and this criterion is met. The students identified that there is limited study space and the need for additional work/study space should be considered if student numbers and guest lecturers increase.

11. Continuous follow up and improvement

The programme undergoes regular evaluation and update. Participation in this benchmarking process also shows a commitment to development of the course. The course also offers opportunities for supervisors to refresh application of scientific skills

Benchmarking observations

In addition to the comments under each of the standards we make the following benchmarking observations and recommendations some of which are beyond the scope of the current evaluation but are considered relevant.

Recommendation – Formally engage stakeholders in the strategic planning and delivery of the Masters programme

Capacity for experiential learning limits recruitment to the Uppsala Masters programme. Currently, agreement to host students is organised through personal contacts, often with previous graduates from the course. This process is vulnerable and may not be sustainable.

Employers seem to value graduates from the course. Embracing appropriate representatives from employing organisations in the planning and delivery of a course to meet their workforce requirements may enhance stakeholder engagement and influence agreement and development of infrastructure to support experiential learning. Formation of such a 'club' may stimulate curiosity from others and enhance the number of sites willing to host students. In future, this may also enable

development of experiential learning at undergraduate level. Engagement of employers may also support contribution from clinical experts in the teaching and facilitation of student discussions within the university. There may be potential for future joint appointments between the university and practice employers.

The University of Strathclyde has an NHS-University Board which through a signed Memorandum of Agreement works in partnership to strategically agree and deliver experiential learning and practitioner teaching. Engagement is secured at a senior level with Directors of Pharmacy as Board members. A network group of representatives from each of the participating health boards operationally supports organisation and delivery of teaching and experiential learning for undergraduate and postgraduate students. Through this structure practice staff have the opportunity to apply for unpaid university honorary academic appointments. This engagement with the university is perceived to be mutually beneficial.

Recommendation – consider leadership role in professional development

In recent years, the European Association of Hospital Pharmacy has published standards for hospital pharmacy which includes clinical pharmacy. Although the Masters in Clinical Pharmacy prepares graduates to practice to these standards, there is a need to ensure these standards are followed throughout the country and in a consistent manner. We did not observe any professional organisation taking a lead in the development of national standards for practice. Is there a role for the university, perhaps through a partnership group to influence leadership in clinical pharmacy practice? This may enhance the quality of clinical teaching, experiential learning and practice based research elements of the Masters programme in addition to increasing demand for the course. A consistent approach to service development is valuable to planning and delivery of necessary education.

Clinical Pharmacy practice in NHS Scotland is driven by government policy

<http://www.gov.scot/Publications/2002/02/10633/File-1>

<http://www.gov.scot/resource/0043/00434053.pdf>

<http://www.gov.scot/Publications/2017/08/4589>

All stakeholders are engaged in the development of policy which influences changes in practice and the necessary education. It is also the strategic driver for service development and its evaluation which generates the need for research and development of clinical pharmacy practice. These policies and stakeholder engagement led to the review of Strathclyde MSc in Clinical Pharmacy and development of the MSc in Advanced Clinical Pharmacy Practice, teaching on which was observed by staff and students from Uppsala on 4th Oct 2017.

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