Dated 15 June 2018

(1) The Medicines Optimisation Innovation Centre, Northern Health & Social Care Trust

(2) European Association of Hospital Pharmacists

MEMORANDUM OF UNDERSTANDING

PARTIES

(1) The Medicines Optimisation Innovation Centre, Northern Health & Social Care Trust, whose address for these purposes is at Bretten Hall, Antrim Area Hospital, Bush Road, Antrim, BT41 2RL. ("**the MOIC**")

(2) The European Association of Hospital Pharmacists (EAHP), whose address for these purposes is at Boulevard Brand Whitlock 87, Box 11, 1200 Brussels, Belgium

BACKGROUND

The parties have agreed to work together to pursue joint work in relation to the development and implementation of all aspects of the EAHP statements of practice (see appendix 1) in line with the objectives of "MOIC" (appendix 2)

OPERATIVE PROVISIONS:

1. DEFINITIONS AND INTERPRETATION

1.1. In this MoU the following definitions have the following meanings:-

MoU: This memorandum of understanding.

Parties: The parties to this MoU, and Party shall be construed accordingly.

2. BASIS OF THIS MOU

2.1. This Memorandum of Understanding:

i. is not intended to create a legally binding contract;

ii. is not intended to set out an exhaustive list of matters to be acted upon or incorporated into any subsequent legally binding contract to be prepared between the Parties;

iii. is not intended to override or affect any existing legal agreements with which the Parties are already involved.

2.2. Both Parties agree to use reasonable endeavours to carry out their obligations under this MoU.

3. PURPOSE

3.1. The MOIC and EAHP wish to develop joint work in relation to the area of hospital pharmacy and medicines optimisation. This MOU is an agreement to work together in these areas; make joint funding applications where it is appropriate to do so and to facilitate all aspects of work as identified in the EAHP statement of practice and MOIC key objectives as stated in appendices 1 and 2.

4. OBJECTIVES

4.1. Set up channels of communication to discuss and take forward any opportunities in the field of Hospital Pharmacy Practice as identified both in the EAHP statements and in the MOIC objectives e.g. funding calls, knowledge transfer / exchange, training and development

4.2. To set up such mechanisms as appropriate for joint dissemination action including conferences and workshops and also to key stakeholders in Europe to promote the objectives of both organisations

4.3. To facilitate staff from both parties and with other potential parties in identifying actions working together solely for the purpose of pursuing the objectives as set out herein at paragraph 4.1 and 4.2

5. OBLIGATIONS ON THE MOIC

5.1. To initiate discussion with EAHP if opportunities for work in the areas of interest become available.

5.2. To facilitate staff from both parties working together in pursuance of the above objectives

6. OBLIGATIONS ON EAHP

6.1. To initiate discussion with the MOIC if opportunities for work in the areas of interest become available.

6.2. Staff from both parties working together in pursuance of the above objectives

7. EXPENSES

7.1. Both Parties to pay their own costs in relation to performing their obligations under this MoU

8. ANNOUNCEMENTS

8.1. Neither Party shall make or permit any person to make, any public announcement concerning this MoU without the prior written consent of the other Party (such consent not to be unreasonably withheld or delayed), except as required by law, any governmental or regulatory authority (including, without limitation, any relevant securities exchange), any court or other authority of competent jurisdiction.

8.2. Each Party agrees that the other party may use its logo on its website in connection with a general advertisement concerning third party collaborators, or in connection with a specific article in relation to this MoU.

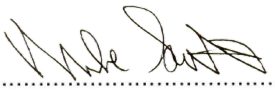
9. MISCELLANEOUS PROVISIONS

9.1. Either Party may terminate this MoU on giving notice to the other Party in writing.

9.2. Nothing in this MoU is intended to, or shall be deemed to, establish any partnership or joint venture between the Parties, constitute any Party the agent of the party, nor authorise either Party to make or enter into any commitments for or on behalf of the other Party.

9.3. This MoU is made for the benefit of the Parties to it and their successors and permitted assigns and is not intended to benefit, or be enforceable by, anyone else.

This MoU has been entered into on the date stated at the beginning of this memorandum.

Signed by:	Prof Mike Scott (Print Name)	 (Signature)	
for and on behalf of	**The Medicines Optimisation Innovation Centre**	on 13 day of August	2018
Signed by:	PETR HORÁK (Print Name)	 (Signature)	
for and on behalf of	**The European Association of Hospital Pharmacists**	on 15 day of JUNE	2018

APPENDIX 1

EAHP

The European Statements of Hospital Pharmacy

The European Statements of Hospital Pharmacy of the European Association of Hospital Pharmacists (EAHP) are provided in the following pages. The statements express commonly agreed objectives which every European health system should aim for in the delivery of hospital pharmacy services.

The statements were formulated following an 18-month review process, which included two rounds of online Delphi consultation with EAHP's 34 member country associations and 34 patient and healthcare professional organisations.

Final agreement on the statements' wording and scope was reached at the European Summit on Hospital Pharmacy in Brussels, May 2014. The statements were subject to weighted voting by EAHP member country associations (50%), European patient organisations (25%) and associations representing doctors and nurses at the European level (25%). A high level of 85% agreement or above was required for each statement to be confirmed.

Throughout the statements, where the term medicines is used, medical devices are also included for countries in which hospital pharmacists have responsibility for this area. All the statements were agreed with the intention of improving the safety of patients.

EAHP and its national member associations now look forward to working with national health systems to bring about full implementation of the European Statements of Hospital Pharmacy in all European countries.

Section 1: Introductory Statements and Governance

1.1 The overarching goal of the hospital pharmacy service is to optimise patient outcomes through working collaboratively within multidisciplinary teams in order to achieve the responsible use of medicines across all settings.

1.2 At a European level, 'Good Hospital Pharmacy Practice' guidelines based on the best available evidence should be developed and implemented. These guidelines will include corresponding human resources and training requirements and assist national efforts to define recognised standards across the scope and levels of hospital pharmacy services.

1.3 Health systems have limited resources and these should be used responsibly to optimise outcomes for patients. Hospital pharmacists should develop, in collaboration with other stakeholders, criteria and measurements to enable the prioritisation of hospital pharmacy activities.

1.4 All hospitals should have access to a hospital pharmacist who has overall responsibility for the safe, effective and optimal use of medicines. Health authorities should ensure that each hospital pharmacy is supervised by a pharmacist with appropriate working experience in the hospital setting, and explicit demonstration of competence in hospital pharmacy.

1.5 Hospital pharmacists should work with all relevant stakeholders to develop hospital pharmacy human resource plans covering the breadth of hospital pharmacy practice. These should be aligned to engage hospital pharmacists as supervisors in all steps of all medicine use processes to meet health needs and priorities across public and private sectors that optimise medicines use and patient outcomes.

1.6 Hospital pharmacists should take the lead in coordinating the activities of multi-disciplinary, organisation-wide Drug & Therapeutics Committees or equivalent. They should have appropriate representation as full members of these Committees which should oversee and improve all medicines management policies.

1.7 Hospital pharmacists must be involved in the design, specification of parameters and evaluation of ICT within the medicines processes. This will ensure that pharmacy services are integrated within the general Information and Communication Technology (ICT) framework of the hospital including electronic health (eHealth) and mobile health (mHealth) procedures.

Section 2: Selection, Procurement and Distribution

2.1 Hospital pharmacists should be involved in the complex process of procurement of medicines. They should ensure transparent procurement processes are in place in line with best practice and national legislation, and based on the principles of safety, quality and efficacy of medicines.

2.2 Hospital pharmacists should take the lead in developing, monitoring, reviewing and improving medicine use processes and the use of medicine related technologies. Responsibility for using these processes may rest with other health care professionals and may vary according to the medicine, the medicine related technology, the health care setting and the multidisciplinary team delivering care.

2.3 Hospital pharmacists should coordinate the development, maintenance and use of a medicines formulary system, which may be local, regional and/or national. The medicine formulary system should be linked to guidelines, protocols and treatment pathways based on the best available evidence including patient outcomes and pharmacoeconomic evaluations where these are available.

2.4 Procurement should be according to the medicine formulary and informed by the formulary selection process. A robust process should also be in place to appropriately procure medicines not included in the formulary where their use is indicated for the safe and effective care of individual patients.

2.5 Each hospital pharmacy should have contingency plans for shortages of medicines that it procures.

2.6 Hospital pharmacies should have responsibility for all medicines logistics in hospitals. This includes proper storage, preparation, dispensing, distribution and disposal conditions for all medicines, including investigational medicines.

2.7 Hospital pharmacists should be involved in the development of policies regarding the use of medicines brought into the hospital by patients.

Section 3: Production and Compounding

3.1 Before pharmacy manufacture or preparation of a medicine, the hospital pharmacist should ascertain whether there is a suitable commercially available pharmaceutical equivalent, and if necessary, discuss the rationale for this decision with the relevant stakeholders.

3.2 Medicines that require manufacture or compounding must be produced by a hospital pharmacy, or outsourced under the responsibility of the hospital pharmacist.

3.3 Before making a pharmacy preparation, the hospital pharmacist must undertake a risk assessment to determine the best practice quality requirements. These must consider premises, equipment, pharmaceutical knowledge and labelling.

3.4 Hospital pharmacists must ensure that an appropriate system for quality control, quality assurance and traceability is in place for pharmacy prepared and compounded medicines.

3.5 Hazardous medicines should be prepared under appropriate conditions to minimise the risk of contaminating the product and exposing hospital personnel, patients and the environment to harm.

3.6 When the reconstitution or mixing of medicines takes place in a patient care area, a hospital pharmacist should approve written procedures that ensure staff involved in these procedures are appropriately trained.

Section 4: Clinical Pharmacy Services

4.1 Hospital pharmacists should be involved in all patient care settings to prospectively influence collaborative, multidisciplinary therapeutic decision-making; they should play a full part in decision making including advising, implementing and monitoring medication changes in full partnership with patients, carers and other health care professionals.

4.2 All prescriptions should be reviewed and validated as soon as possible by a hospital pharmacist. Whenever the clinical situation allows, this review should take place prior to the supply and administration of medicines.

4.3 Hospital pharmacists should have access to the patients' health record. Their clinical interventions should be documented in the patients' health record and analysed to inform quality improvement interventions.

4.4 All the medicines used by patients should be entered on the patient's medical record and reconciled by the hospital pharmacist on admission. Hospital pharmacists

should assess the appropriateness of all patients' medicines, including herbal and dietary supplements.

4.5 Hospital pharmacists should promote seamless care by contributing to transfer of information about medicines whenever patients move between and within healthcare settings.

4.6 Hospital pharmacists, as an integral part of all patient care teams, should ensure that patients and carers are offered information about their clinical management options, and especially about the use of their medicines, in terms they can understand.

4.7 Hospital pharmacists should inform, educate and advise patients, carers and other health care professionals when medicines are used outside of their marketing authorisation.

4.8 Clinical pharmacy services should continuously evolve to optimise patients' outcomes.

Section 5: Patient Safety and Quality Assurance

5.1 The "seven rights" (the right patient, right medicine, right dose, right route, right time, right information and right documentation) should be fulfilled in all medicines-related activities in the hospital.

5.2 Hospital pharmacists should ensure the development of appropriate quality assurance strategies for medicines use processes to detect errors and identify priorities for improvement.

5.3 Hospital pharmacists should ensure their hospitals seek review of their medicines use processes by an external quality assessment accreditation programme, and act on reports to improve the quality and safety of these processes.

5.4 Hospital pharmacists should ensure the reporting of adverse drug reactions and medication errors to regional or national pharmacovigilance programmes or patient safety programmes.

5.5 Hospital pharmacists should help to decrease the risk of medication errors by disseminating evidence-based approaches to error reduction including computerised decision support.

5.6 Hospital pharmacists should identify high-risk medicines and ensure appropriate procedures are implemented in procurement, prescribing, preparing, dispensing, administration and monitoring processes to minimise risk.

5.7 Hospital pharmacists should ensure that the medicines administration process is designed such that transcription steps between the original prescription and the medicines administration record are eliminated.

5.8 Hospital pharmacists should ensure accurate recording of all allergy and other relevant medicine-related information in the patient's health record. This information

should be accessible and evaluated prior to prescription and administration of medicines.

5.9 Hospital pharmacists should ensure that the information needed for safe medicines use, including both preparation and administration, is accessible at the point of care.

5.10 Hospital pharmacists should ensure that medicines stored throughout the hospital are packaged and labelled so to assure identification, maintain integrity until immediately prior to use and permit correct administration.

5.11 Hospital pharmacists should support and implement systems that allow traceability of all medicines dispensed by the pharmacy.

Section 6: Education and Research

6.1 Undergraduate pharmacy curricula should include experience of hospital pharmacy practice. The role of all hospital healthcare practitioners, including hospital pharmacists, should be integrated into the curricula of other health professionals.

6.2 All those involved in medicines use processes must be able to demonstrate their competency in their roles. Hospital pharmacists should participate in the development of European-wide competency frameworks to ensure standards of best practice are met.

6.3 A European-wide framework for initial post graduate education and training in hospital pharmacy with an assessment of individual competence is essential. In addition, hospital pharmacists should engage in relevant educational opportunities at all stages of their career.

6.4 Hospital pharmacists should actively engage in and publish research, particularly on hospital pharmacy practice. Research methods should be part of undergraduate and postgraduate training programmes for hospital pharmacists.

6.5 Hospital pharmacists should be actively involved in clinical trials of medicines.

APPENDIX 2

MOIC

MOIC THEMES

Focus on the needs of the Northern Ireland population

Accelerate the adoption of innovation into practice to improve clinical outcomes and patient experience

Build a culture of partnership and collaboration

Make a meaningful contribution to the Northern Ireland economy

MECHANISMS

- Research and Development
- Quality Improvement
- Innovation
- Knowledge Transfer