Information for designated medical practitioners (DMP) considering mentoring a pharmacist to become an independent prescribing pharmacist

Introduction
The aim of this independent prescribing course is to allow pharmacists to practise and develop as prescribers and to meet the standards set by the Pharmaceutical Society of Northern Ireland/Royal Pharmaceutical Society of Great Britain.

Overall course learning outcomes
Following completion of the programme, pharmacist independent prescribers will be able to demonstrate all the following learning outcomes:

- understand the responsibility that the role of independent prescriber entails, be aware of their own limitations and work within the limits of their professional competence – knowing when and how to refer / consult / seek guidance from another member of the health care team
- develop an effective relationship and communication with patients, carers, other prescribers and members of the health care team
- describe the pathophysiology of the condition being treated and recognise the signs and symptoms of illness, take an accurate history and carry out a relevant clinical assessment where necessary
- use common diagnostic aids e.g. stethoscope, sphygmomanometer
- able to use diagnostic aids relevant to the condition(s) for which the pharmacist intends to prescribe, including monitoring response to therapy
- apply clinical assessment skills to:
  - inform a working diagnosis
  - formulate a treatment plan
  - the prescribing of one or more medicines if appropriate
  - carry out a checking process to ensure patient safety
  - monitor response to therapy, review the working/differential diagnosis and modify treatment or refer / consult / seek guidance as appropriate
- demonstrate a shared approach to decision making by assessing patients' needs for medicines, taking account of their wishes and values and those of their carers when making prescribing decisions
- identify and assess sources of information, advice and decision support and demonstrate how they will use them in patient care taking into account evidence based practice and national/local guidelines where they exist
- recognise, evaluate and respond to influences on prescribing practice at individual, local and national levels
- prescribe, safely, appropriately and cost effectively
- work within a prescribing partnership
- maintain accurate, effective and timely records and ensure that other prescribers and health care staff are appropriately informed
- demonstrate an understanding of the public health issues related to medicines use
- demonstrate an understanding of the legal, ethical and professional framework for accountability and responsibility in relation to prescribing
- work within clinical governance frameworks that include audit of prescribing practice and personal development
- participate regularly in CPD and maintain a record of their CPD activity

In practice learning
Pharmacists must complete a minimum period of 12 x 7.5 hour days with a designated medical practitioner. The purpose of the period of learning in practice is to enable the pharmacist to:

- identify the learning outcomes to be achieved through practical experience and how they will be achieved
- transfer their learning from the taught programme into practice
- acquire and practise skills that are more appropriately learned in practice, including communication with patients and carers and other prescribers, clinical knowledge and skills necessary for the diagnosis and treatment of the condition(s) for which they intend to prescribe
- prepare treatment plans and clinical management plans, monitor and assess patients' responses to treatment
- keep accurate and timely records of their prescribing practice
- demonstrate and document their professional development as a prescriber
- confirm that they have met the learning outcomes for the practice element of the education and training programme

Role of the designated medical practitioner
During the period of in practice training, students will be working with a designated medical practitioner whose role is to:

- help the pharmacist identify learning outcomes which are to be achieved in the period of learning in practice
- identify the roles of the designated medical practitioner, members of the healthcare team and the pharmacist in achieving the learning outcomes as part of a learning contract or similar agreement
- provide training and support to enable the pharmacist to achieve the learning outcomes, in particular clinical assessment of patients with the condition(s) for which the student intends to prescribe
- monitor progress of the pharmacist and confirm satisfactory completion of a minimum of 12 x 7.5 hour days supervised practice
- assess the achievement of the learning outcomes by the students, including confirmation of their ability to use common diagnostic aids for the physical examination of patients for the condition(s) for which the pharmacist intends to prescribe, including monitoring response to therapy
- ensure the pharmacist can identify any serious problems whose oversight would result in patient harm
- complete a professional declaration that confirms that in his/her opinion as the DMP, the skills demonstrated in practice confirm the pharmacist as being suitable for registration as an independent prescriber (see Appendix 3).

Assessment of the pharmacist by the designated medical practitioner
The designated medical practitioner will be responsible for assessing the pharmacist and confirming their clinical competence in the area(s) for which they intend to prescribe.

If you decide to act as a designated medical practitioner you will be given a checklist(s) of the clinical examinations and procedures, corresponding to the clinical area in which the pharmacist is working, against which to assess the pharmacist. For example, if your pharmacist is working in hypertension they would be expected to be able to perform a measurement of blood pressure and pulses (see Appendices 1 and 2 for examples relating

to blood pressure measurement). You would be responsible for assessing the pharmacist against the checklist(s) provided and returning the completed list to NICPLD.

If you would like to discuss your possible application please contact NICPLD (028 90972005).

Appendix 1

Queen's University Belfast

CLINICAL SKILLS EDUCATION CENTRE

Skill	**Blood pressure measurement**
Learning outcome	To be able to measure i) estimated systolic pressure ii) systolic and diastolic blood pressure
Background	Blood pressure can be defined as the pressure that blood exerts against the walls of the arteries as it flows through them. Blood pressure measurements consist of two numbers: the ***systolic pressure*** or "top" number represents the pressure when the heart actively pumps blood or contracts, and the ***diastolic pressure*** or "bottom pressure" represents the pressure when the heart relaxes or is filling up with blood. Blood pressure is measured using a ***sphygmomanometer***. Previously, this was generally measured using a mercury sphygmomanometer. Mercury sphygmomanometers are being phased out due to health and safety legislation concerns, but may still be found in many settings. Blood pressure is now routinely checked using *anaeroid sphygmomanometer*. However it has to be noted that their accuracy diminshes with time and they should be regularly calibrated. The principle behind blood pressure measurement is simple and related to blood flow. Arteries are elastic tubes. If blood flow from the heart to an artery is blocked by a constricting band which is slowly released, a pressure is eventually reached when the pressure of constriction is just equal to the maximal pressure of blood flow through the vessel. This equates to the maximal pressure produced by the heart (***systolic pressure***). As constriction is reduced, the blood flow becomes more turbulent and noisier but a stage will be reached when blood flow is unimpeded by the band and the turbulence is first reduced and then disappears. At this stage the sounds become muffled and then nothing is heard. The point at which the sound disappears reflects the minimal pressure produced by the heart (***diastolic pressure***). In some people, particularly young adults and pregnant women, the noise never quite disappears and the point at which the muffling of the sound occurs is taken as the diastolic reading. These sounds were first described by a Russian physiologist called Korotkoff and bear his name. The first sound is called the Korotkoff phase 1 and disappearance is phase 5.

Procedure		
Introduction & consent	The examiner should explain to the patient about the procedure. It is important to highlight that there may be some slight but temporary discomfort caused by inflation of the blood pressure cuff. Use this opportunity to place the patient at ease. Ideally the patient should be in a seated position 5-10 minutes prior to taking their blood pressure. You should also wash your hands (click here for link).	
Equipment:	Sphygmomanometer Stethoscope Alcohol swabs (*to clean the stethoscope diaphragm*)	
Patient position & preparation	Ideally have the patient seated and their arm at heart level. Make sure that they do not have any tight clothing which may constrict their arm.	

Locate the brachial pulse	Palpate in the antecubital fossa for the point of maximal pulsation of the brachial artery. *Click here for anatomy link to locate the brachial artery*	
Apply blood pressure cuff	Make sure you have a suitable sized blood pressure cuff. Ideally the bladder of the cuff should encircle 80% of the arm. You may find that in some patients you might need to use a larger or smaller cuff - depending on their arm circumference. Apply the cuff proximal to the location of the brachial pulse. The centre of the *cuff bladder* should be placed over the line of the brachial artery. It is recommended that the cuff tubing should not cover the antecubital fossa area. If you are using a mercury sphygmomanometer, make sure that the manometer is positioned at your eye level.	
Estimation of systolic pressure	The examiner should assess the *estimated systolic pressure*. To do this, palpate the patient's radial pulse. Now inflate the cuff until you feel the exact point when the pulse disappears. The point on the manometer at this moment represents the *estimated systolic pressure*.	

Assessment of systolic & diastolic pressure	**Place your stethoscope over the brachial artery area. Now inflated an extra 30mmHg worth of pressure above the** *estimate systolic pressure (e.g. if the estimate systolic pressure was 120mmHg – inflate the cuff to 150mmHg).*

	Now slowly release the pressure in the cuff by using the value.

	The pressure should be reduced at a rate of 2-3mmHg per second. The point were repetitive tapping noises *(i.e. Korotkoff phase 1)* occur you should read off the pressure on the manometer – *i.e. the* ***systolic pressure***. It is worth noting the 'silent interval' - this is when the sounds denoting systolic pressure disappear and then return before finally disappearing. When the repetitive sounds finally disappear *(i.e. Korotkoff phase 5)*, read off the measurement on the manometer This represents the ***diastolic pressure***.

Systolic pressure	**Phase 1** *Sharp 'thud'*
	Phase2 *A blowing or swishing sound*
	Phase3 *A softer thud than phase 1*
	Phase4 *A softer blowing noise that disappears*
Diastolic pressure	**Phase 5** *Sounds disappear*

Closure	Remove the cuff and thank the patient.

Documentation	Record your findings as follows: *(Readings to the nearest 2mmHg)*

2/2/10
Patient: Mr H Simpson *(DOB 1/1/65)*Right arm blood pressure *(Patient seated)*
122 / 74mmHg

Dr N Flanders (PRHO)

Appendix 2

Queen's University Belfast
CLINICAL SKILLS EDUCATION CENTRE

CHECK LIST: Blood pressure measurement

SKILL	DETAIL	CHECK – Patient no: 1	2	3
INTRODUCTION	Introduce yourself & identify the patient's details.			
CONSENT	Gain informed consent from the patient			
EQUIPMENT	Examination couch, stethoscope, sphygmomanometer, alcohol wipes			
INFECTION CONTROL	Wash your hands & cleanse stethoscope with alcohol wipe			
PROCEDURE	• **Have patient sit for 5 minutes at rest; make sure they have no constricting garments around their arm**			
	• **Have patient position their arm at the level of their heart**			
	• **Locate position of maximal brachial & radial pulses**			
	• **Place correctly sized cuff proximal to brachial artery *(in correct position)***			
	• **Inflate cuff. While palpating the radial pulse ascertain the point where you can not feel the pulse any *more (i.e. estimated systolic pressure)***			
	• **Now add an additional 30mmHg of pressure in the cuff**			
	• **Apply the diaphragm component of your stethoscope over the brachial pulse area**			
	• **Release the pressure in the cuff at approx 2-5 mmHg every 1 second**			
	• **Read systolic pressure at level of first repetitive sounds *(i.e. Korotkoff phase 1)***			
	• **Read diastolic when sounds first disappear *(i.e. Korotkoff phase 5)***			
	• **Remove cuff & thank patient**			
	• **Record findings**			
	• **In the opinion of the DMP did the pharmacist recommend appropriate action?**			

NI Centre for Pharmacy Learning & Development

Non-medical prescribing

OSCE ASSESSMENT

INSTRUCTIONS FOR ASSESSMENT

In order for the pharmacist to demonstrate competence in the area they intend to prescribe they must undertake an Observed Structured Clinical Examination (OSCE) covering the clinical examinations and procedures required for their area. In order to pass the course, the pharmacist must successfully complete a minimum of **THREE** patient consultations covering each clinical examination/procedure selected. To ensure consistency in assessment we would ask you to observe the pharmacist during the patient consultation(s) and tick each element as they complete it in the appropriate checklist(s). All elements of the appropriate checklist(s) must have been completed for a pass. **Below is the record sheet for <blood pressure measurement> for <pharmacist name>.**

<CLINICAL SKILL/ PROCEDURE e.g. Blood Pressure>	Consultation 1	Consultation 2	Consultation 3
(a) Date completed			
(b) Were all elements of checklist achieved?			
(c) Did the pharmacist fail to identify any major error(s) or provide an answer which could have resulted in patient harm?			

The presence of a single major error (defined as causing actual/potential patient harm) on the consultation would lead to a fail. If you have answered yes to (c) in any of the consultations above please provide further details below:

Appendix 3

NI Centre for Pharmacy Learning & Development

Non-medical prescribing

DMP FINAL DECLARATION

DECLARATION BY DESIGNATED MEDICAL PRACTITIONER

Pharmacist registration number:

Full name of pharmacist:

Full home address of pharmacist:

I,

(insert full name of medical practitioner)

being the Designated Medical Practitioner of the above name pharmacist, based at the following establishment

(insert full name and address of training establishment)

hereby declare that:
(i) the pharmacist has satisfactorily completed at least 12 x 7.5 h days supervised practice

between and

(*insert dates of training period)*

(ii) has demonstrated clinical competence in the area(s) in which they will be prescribing, as below and has passed an OSCE assessment

(insert area(s))

(iii) in my opinion as the DMP, the skills demonstrated in practice confirm the pharmacist as being suitable for registration as an Independent Prescriber.

Comments on pharmacist performance:

Medical Practitioner Signature:

Date: