Nurse independent prescribing: exploring the opportunities and challenges

Sonya MacVicar

Abstract
The Nursing and Midwifery Council states that nurses should be able to demonstrate competence in prescribing practice at the point of registration to be ‘prescribing ready’. The aim is to increase the number of nurse independent prescribers and improve access to pharmacological treatments for patients. However, while this policy presents opportunities for nurses to develop their prescribing knowledge and skills, there are also challenges involved in integrating prescribing theory into nurse education and ensuring there are enough suitable mentors available in practice. This article details how the policy of prescribing readiness is being addressed in preregistration nurse education and explores the supervision of nurse prescribing in clinical practice. The author also discusses how best to support the professional development of nurse independent prescribers beyond their initial training.

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Keywords
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To become a non-medical prescriber in the UK, an NMC-registered nurse or midwife must undertake an approved prescribing programme. For example, the prescribing programme for nurse independent prescribers (V300) involves 78 hours of taught study with 90 hours learning in practice. Prescribing students must achieve a 100% pass in a numeracy assessment and a minimum 80% pass in a pharmacology exam; they must also submit a master’s-level portfolio of evidence (NMC 2023a, 2023b).

While this fast-tracked time frame for commencing a prescribing qualification might provide more patients with access to pharmacological treatments, Halpin et al (2017) warned that robust clinical supervision was required to support newly registered nurses who may already be finding the demands of autonomous practice challenging.

The NMC (2024) rationalised shortening the time frame by stating that a nurse’s readiness to prescribe should be determined by their ability to demonstrate the necessary skills, knowledge and experience, rather than whether they had completed a preset amount of experience.

In an overview of nurse prescribing in the UK, Courtenay (2018) welcomed the NMC’s proposals to fast-track prescribing training. However, she warned that despite up to 50% of nurse prescribing trainees being educated to master’s level, as well as working as clinical specialists with a minimum three years’ post-qualification experience, many still found the prescribing programme in place at that time challenging. Courtenay (2018) emphasised that it would be important for any nurse undertaking an accelerated prescribing qualification to have the necessary experience to ensure safe and autonomous prescribing.

Another potential obstacle to fast-tracking prescribing training is the limited number of experienced nurse independent prescribers within the clinical setting who are available to support practice-based learning (Bowskill et al 2014). Similarly, fast-track prescribing training could result in increased numbers of applications from nurses with little experience of autonomous clinical practice. Stewart et al (2017) emphasised that a period of experience can enable nurses to develop their interpersonal skills by interacting with patients, while learning to develop therapeutic relationships can eventually result in more informed and appropriate prescribing. Therefore, fast-tracking prescribing training could result in increased numbers of applicants finding the prescribing programme too challenging and a ‘step too soon’, thereby negatively affecting their confidence, increasing non-completion rates and wasting finite teaching resources.

**History of non-medical prescribing**

The UK’s independent prescribing legislation for healthcare professionals is considered to be one of the more liberal in Europe (Maier 2019). Discussions on extending prescribing rights beyond medical and dental practitioners to ‘non-medical’ healthcare professionals were initially begun in 1978 with the proposal that community nurses could prescribe more efficiently if they had authority to independently prescribe wound care products. Subsequently, statutory legislation led to the introduction of a limited nurse formulary for community practitioners, which gradually became an extended nurse formulary for nurses and midwives beyond those only practising in the community (Gould and Bain 2022).

Since the initial inception of nurse prescribing, significant advances have been made, with current legislation extending prescribing rights to nurses, midwives and some allied health professionals, with only minimal restrictions on their prescribing authority in relation to some controlled substances (Graham-Clarke et al 2019). Current nurse independent prescribers have the authority to prescribe any medicines from the British National Formulary (BNF), including most controlled drugs, within their own level of professional competence. They also have autonomy for clinical decision-making for a whole patient care episode, including assessment and diagnosis (Joint Formulary Committee 2024). Nurse independent prescribers are responsible and legally accountable for their prescribing decisions and must act within their own scope of practice and within the relevant requirements of their professional bodies (NMC 2018).

Table 1 shows the independent and supplementary prescribing authority of the various non-medical prescribers.

Initially, some medical professionals and patient groups expressed reservations about the safety of nurse prescribing (Latter et al 2012); however, evidence has since demonstrated that non-medical prescribing has comparable clinical outcomes to medical prescribing without adversely affecting patient safety (Weeks et al 2016). Non-medical prescribing is also cost-effective (Noblet et al 2018), provides improved access and greater flexibility with appointments, thereby increasing continuity of care (Cope et al 2016), and means that the patient can receive a complete package of care from a single healthcare professional (Graham-Clarke et al 2019).

**Preregistration nurse education and prescribing**

The NMC (2018) requires nurse educators in higher education institutes, together with practice educators, to provide nursing students with field-specific pharmacology, medicines optimisation and health assessment content as part of the preregistration nurse education curriculum. This aligns with the NMC’s (2023a) prescribing standards, where applicants must evidence that they are capable of safe and effective practice in health assessment, diagnostics and care management, and planning and evaluating care.

**Health assessment**

To be deemed prescribing ready, nurses must have the competence to conduct a holistic health assessment and develop appropriate patient management plans at the point of registration. The NMC (2018) stipulates that nurses need to demonstrate an applied...
understanding of the physiology of whole-body systems including the respiratory, cardiovascular, circulatory, neurological, skin and musculoskeletal systems. They also require diagnostic skills such as chest auscultation and interpretation, as well as an understanding of social and behavioural sciences.

Holistic assessment is a prerequisite for any prescribing decision and a nurse independent prescriber assumes the responsibility for undertaking a consultation with patients, including diagnosis if necessary (Joint Formulary Committee 2024). While the nurse’s knowledge of physiology is essential for any health assessment, for it to be fully holistic they must engage in a process of shared decision-making with the patient. This involves establishing the patient’s treatment preferences and supporting their decisions by explaining the options in a language or form they understand (Elwyn et al 2017).

A prescribing consultation is a complex process, and determining the optimal treatment depends on the nurse accurately interpreting the patient’s medical and drug history, as well as ascertaining their expectations of management – for example, whether the aim is to achieve a cure, monitor a long-term condition or provide palliative care. A person-centred approach also enables the nurse to understand how the patient perceives their condition and how relevant potential management options may be, depending on how the illness is affecting their daily life (Davis et al 2013). In addition, exploring the patient’s cultural beliefs and how these influence their behaviour will guide the choice of treatment and increase the likelihood of concordance (Mitchell and Pearce 2021). Overall, a holistic assessment conducted with mutual respect and understanding is more likely to result in a shared prescribing decision.

Pharmacology education
The preregistration nurse education programme, which is field-specific (adult, children, learning disability or mental health), should prepare nursing students to apply their

knowledge of pharmacology in clinical practice. Pharmacology encompasses not only knowledge of individual medicines, but also an understanding of pharmacodynamics and pharmacokinetics. Pharmacodynamics explores how a drug exerts an effect through interaction with physiological functions to block, decrease or enhance existing bodily processes and regulation. Pharmacokinetics focuses on how the body processes drugs in relation to their absorption, distribution, metabolism and excretion. Understanding these processes can assist the nurse in determining the drug dosage, frequency and route of administration (Peate and Hill 2021).

In the preregistration nurse education curriculum, pharmacology content is taught within biosciences as a means of reducing medication errors. However, nursing students have reported that pharmacology concepts can be challenging to understand, and they can feel overwhelmed by both the content and depth of knowledge required (Khan and Hood 2018). Reynolds et al (2022) reported that nursing students often do not see a link between the bioscience taught in their courses and their clinical role, with this disconnect impeding student satisfaction and interest in the subject. This is supported by Afseth and Paterson (2017), who noted that prescribing students found pharmacology to be an area of weakness and required

| Table 1. Independent and supplementary prescribing authority of the various non-medical prescribers |

<table>
<thead>
<tr>
<th>Professional registration</th>
<th>Prescribing qualification</th>
<th>Prescribing authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registered nurse</td>
<td>Independent prescriber</td>
<td>Prescribe any medicine for any medical condition†</td>
</tr>
<tr>
<td>Registered midwife</td>
<td>and supplementary prescriber*</td>
<td>Prescribe unlicensed medicines‡</td>
</tr>
<tr>
<td>Pharmacist</td>
<td></td>
<td>Prescribe, administer and direct administration of Schedule 2, 3, 4 and 5 controlled drugs§</td>
</tr>
<tr>
<td>Physiotherapist</td>
<td>Independent prescriber</td>
<td>Prescribe any medicine for any medical condition†</td>
</tr>
<tr>
<td>Paramedic</td>
<td>and supplementary prescriber</td>
<td>Prescribe ‘off-label’ medicines</td>
</tr>
<tr>
<td>Podiatrist</td>
<td></td>
<td>Restricted list of controlled drugs</td>
</tr>
<tr>
<td>Optometrist</td>
<td>Independent prescriber</td>
<td>Prescribe any licenced medicine for ocular conditions affecting the eye or tissues surrounding the eye§</td>
</tr>
<tr>
<td>Dietician</td>
<td>Supplementary prescriber</td>
<td>Any medicine as part of a clinical management plan that details which medicines the supplementary prescriber can prescribe and under which circumstances</td>
</tr>
</tbody>
</table>

*Supplementary prescribing is a partnership between a medical prescriber and a supplementary prescriber to implement an agreed clinical management plan for an individual patient with that patient’s agreement. The supplementary prescriber can only prescribe medicines that are included in the clinical management plan and within the dosage and frequency limits set by the clinical management plan.
†Within recognised area of expertise and competence
‡With the exception of those controlled drugs used for treating addiction
§With the exception of controlled drugs or medicines for parenteral administration
(Adapted from Joint Formulary Committee 2024)

Key points

- The Nursing and Midwifery Council (NMC) expects nurses to be ‘prescribing ready’ at the point of registration, meaning they will already be equipped to progress to the completion of a prescribing qualification.
- To become a non-medical prescriber in the UK, an NMC-registered nurse or midwife with at least one years’ post-registration experience must complete an approved prescribing programme.
- Nurse independent prescribers have the authority to prescribe any medicines from the British National Formulary, including most controlled drugs, within their own level of professional competence.
- Nurses undertaking prescribing programmes need guidance and support from nurse independent prescribers to ensure they have the knowledge and skills required to demonstrate prescribing competence.

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support to contextualise generic pharmacological principles both in the workplace and in academic theoretical sessions. Similarly, McIntosh et al (2016) explored the views of qualified non-medical prescribers and found that inadequate pharmacology knowledge was an area that limited their confidence in prescribing and restricted their prescribing decisions to familiar medicines.

To counter these impediments to effective prescribing, Walls (2019) proposed embedding applied pharmacology into preregistration nurse education using technology-enhanced learning such as online modules with multimedia animation, case-study vignettes and automatic response quizzes. In addition to this online learning, Walls (2019) suggested that knowledge and understanding could be reinforced using face-to-face sessions, with group discussion promoting active learning. This approach would have the additional advantage of supporting nurses’ technological skills, which are increasingly required for remote consultations and prescribing. A systematic review of strategies for teaching pharmacology to nursing students by Gill et al (2019) supported this approach, finding that simulation using authentic scenarios and integrated approaches to education were most beneficial for knowledge retention and student satisfaction. The reviewers also found that traditional lectures, ‘flipped’ classroom approaches whereby pre-learning material was distributed and followed by group discussion, and problem-based activities were the least popular or effective strategies for student learning (Gill et al 2019).

Given the effectiveness of digital learning strategies, the rapid introduction of online and technology-enhanced learning strategies may be beneficial for preregistration nurse education in terms of supporting nursing students’ prescribing readiness.

Practice-learning environment
Nursing is a practice-based profession; therefore, the theory underpinning prescribing that is taught in higher education institutes must be consolidated through applied learning within the clinical environment. McLellan et al (2012) described the skill of prescribing as a ‘socially situated concept’, where learners experience uncertainty within the clinical environment and must adapt to various contextual factors, expectations and competing priorities. For example, patients may request inappropriate prescriptions such as unnecessary antibiotics, meaning that the nurse has to use their communication skills to decline them, while preserving the patient-prescriber relationship. Similarly, time pressures in a busy healthcare environment may result in rushed prescriber-patient consultations and the challenge of prescribing in such situations can develop the nurse’s experiential knowledge and future coping strategies.

Jack et al (2017) discussed the dual role of the nursing student as a ‘learner’ in the university setting and a ‘worker’ in the healthcare setting, which can cause challenges when attempting to assimilate theoretical and situated learning into one coherent experience. This emphasises the importance for nursing students of having experienced supervisors in education and practice settings to support learning. However, Gould and Bain (2022) observed that some nurse educators are now required to ensure nursing students achieve a level of competence in prescribing that many educators themselves do not possess. This demonstrates the challenge of having a limited number of nurse prescribers in higher education institutes and practice to support the development of nursing students and to offer authentic learning opportunities.

Role of the nurse independent prescriber
Workforce development initiatives such as the Scottish government’s transforming roles agenda has led to a growing number of nurse independent prescribers in specialist and advanced roles within primary care and acute services (Scottish Government 2017, MacVicar and Paterson 2023). Despite this, nurse independent prescribers are estimated to comprise only around 13% of the nursing workforce (Hyde et al 2020). Furthermore, while there is a defined concentration of nurse prescribers in certain specialties such as neonatology, which has a long-standing and well-developed advanced practitioner role, there are few in other clinical areas. Midwifery is particularly under-represented (Fontein-Kuipers et al 2019), while mental health prescribers are mainly located in community mental health teams or drug and alcohol treatment services (Fernandez 2023). This has implications in terms of ensuring that nursing students are prescribing ready across all fields of nursing and midwifery practice.

Acting as mentors
It is crucial that there are enough qualified nurse prescribers to act as role models and mentors to adequately prepare nursing students to be prescribing ready. A positive learning experience is crucial if nursing students are to successfully complete their university programmes. One approach to ensuring that nursing students are able to effectively integrate the knowledge, skills and attitudes required for practice is through spending time shadowing experienced nurse independent prescribers (Jack et al 2017). The Royal College of Nursing (2021) recommends that nursing students should be supported to achieve prescribing-ready status by practice supervisors who themselves are adequately experienced and have contemporaneous prescribing knowledge, so they can ensure that prescribing decisions are safe and clinically appropriate.

Increasing the critical mass of nurse prescribers in a timely manner will involve more than simply preparing nursing students to be prescribing ready. Therefore, as well as the fast-track prescriber training discussed previously, an initiative was introduced to enable existing experienced nurse independent prescribers to assume the role of a ‘designated prescribing practitioner’ (DPP) (Royal Pharmaceutical Society 2019). This initiative increased the number of mentors in clinical practice who could support and assess nurse independent prescriber...
trainees to complete their prescribing programme. The DPP role replaced the previous designated medical practitioner mentor, which was the preserve of medical professionals or dentists. The advent of the DPP role has enabled experienced non-medical independent prescribers to assume this mentoring responsibility.

Supporting prescribing competence

The NMC also adopted the Royal Pharmaceutical Society (2021) competency framework for prescribers. This generic framework sets out ‘the demonstrable knowledge, skills, characteristics, qualities and behaviours for a safe and effective prescribing role. Its implementation and maintenance are important in informing and improving practice, development, standard of care and safety (for both the prescriber and patient’) (Royal Pharmaceutical Society 2021). The framework also acts as a self-assessment tool for nurse independent prescribers to determine whether they have the competence and experience to supervise prescribing programme students in practice as either the DPP or practice supervisor. The framework can provide a ‘scaffold’ around nurse independent prescribing education to enable the nursing profession as a whole to evidence its suitability to supervise the next generation of nurse prescribers.

Figure 1 demonstrates the academic and practice journey of the nurse independent prescriber and their relationship with higher education institutes, practice learning environments and prescribing trainees.

In the author’s opinion, preparing nursing students to be confident and skilled in prescribing practice at the point of registration was a forward-thinking step by the NMC. Including pharmacology and health assessment in preregistration nurse education should increase the numbers of nurse prescribers available to deliver holistic care. Whether this leads to increased numbers of independent prescribers, however, remains to be seen. Similarly, reducing the length of experience required by newly registered nurses before they undertake a prescribing qualification, and enabling nurse independent prescribers to assume the DPP role, are both initiatives that will require further research to evaluate their effect on patient outcomes, service delivery and professional development.

Conclusion

For newly registered nurses, being prescribing ready entails more than a basic understanding of pharmacology and prescribing practice. Similarly, nurse independent prescribers have to be prepared to make challenging decisions, for example about appropriate medicine dosages and routes of administration, or whether to recommend alternative medicines. Therefore, it is crucial that higher education institutes and practice settings prepare nursing students to meet the NMC’s standards. Similarly, nurses undertaking post-registration prescribing programmes need support and guidance from experienced nurse independent prescribers who can ensure that they have the knowledge, skills and experience required to demonstrate prescribing competence.

Figure 1. Academic and practice journey of the nurse independent prescriber

References


