Journal of Prescribing Practice

Paramedic independent prescribing in primary care – seven steps to success.

--Manuscript Draft--

Manuscript Number:	jprp.2020.0027
Full Title:	Paramedic independent prescribing in primary care – seven steps to success.
Short Title:	Paramedic independent prescribing in primary care – seven steps to success.
Article Type:	Professional
Keywords:	Paramedic practice; independent prescribing; primary care; implementation; organisational readiness; barriers
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Additional Information:	
Question	Response
Please enter the word count of your manuscript excluding references and tables	3253

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Paramedic independent prescribing in primary care – seven steps to success.

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Conflict of interest statement

Judith Edwards is a postgraduate research student undertaking a PhD funded by the University of Surrey Doctoral College Studentship award 2018-2021. The authors declare there are no other conflicts of interest.

Abstract

Paramedic practice is evolving and the number of advanced paramedics in primary care roles in the UK has risen dramatically. A significant milestone for the paramedic profession, recent legislation granting paramedics independent prescribing rights means UK paramedics are the first worldwide to receive this extension in scope of practice. Paramedic prescribing capability is expected to increase autonomy for independent case management and enhance capacity for service development. Local and national success is however likely to depend on skilful implementation and the avoidance of historical barriers. This article aims to raise awareness of potential barriers to early adoption of paramedic independent prescribing in primary care. It identifies common pitfalls prior to training and provides seven practical steps for paramedics considering pursuing non-medical prescribing training.

Background

Internationally, paramedic practice is becoming increasingly diverse (Morton et al, 2015; Caffrey et al, 2017). The changing nature of clinical work and developments in education, training and career pathways have seen a rapid growth in the number of novel paramedic roles contributing to care pathways outside traditional ambulance settings (Bigham et al, 2013; Brooks et al, 2016; Batt et al, 2019). In the UK following recommendations made by the Primary Care Workforce Commission in 2015 (Health Education England, 2015, HEE, 2015), there has been a rapid rise in the number of paramedic practitioners (PPs) working in general practice. An estimated 694 PPs are now based in general practice (NHS Digital, 2019), delivering care within single or combined home visit, clinic and telephone consultation services (Brown, 2017; Booker and Voss, 2019; Proctor, 2019). Recent introduction of independent prescribing (IP) rights to the paramedic profession is anticipated to increase autonomy and capacity for independent case management, optimise skill mix and help facilitate novel service redesign (NHS England 2015a, NHSE 2015a).

Whilst outside the UK a number of countries have introduced nurse, pharmacist and optometrist non-medical prescribing (NMP) to address physician shortages and meet remote population medicines needs (Nissen and Kyle, 2010; Kroezen et al, 2011; Maier et al, 2016), Australia and Canada are the only countries to extend medicines legislation to permit AHP (podiatrist) prescribing (Couch et al, 2018; Health Professions Regulatory Advisory Committee 2008). Representing a significant extension in scope of practice, progressive legislation means UK paramedics are first worldwide to receive prescribing authority. In the early stages of implementation, and as yet without national evaluation, exactly how and where paramedic IP (PIP) will be employed for maximum service benefit is unclear. Uptake within primary care has however commenced (Dixon, 2019a; Hilton et al, 2019) and is expected to be high (Mahtani et al, 2018; Booker and Voss, 2019). Whilst an important professional milestone and exciting opportunity for paramedics to enhance their roles within

unscheduled care, as an innovation, national success of PIP will depend on skilful implementation (Khadjesari et al, 2017).

As with other professions, PIP implementation requires change at practitioner, service and wider organisational levels (Noblett et al, 2016). Although governance arrangements for NMP already exist in many primary care organisations (Smith et al, 2014), paramedics are the first group of healthcare professionals to be awarded joint IP/SP rights without a preliminary SP lead-in period (AHP Medicines Project Team, 2015). It remains to be seen if this change in strategy results in unique, profession specific barriers. Nevertheless a small qualitative study exploring the experiences of an early cohort of qualified PIPs points to transitional problems (Stenner et al, 2019), suggesting organisational readiness that builds capacity for implementation is important (Shea et al, 2014). The full cost of training an individual NMP is around £10,000 (Latter et al, 2010) and if implementation fails or is partially successful there is risk of loss of investment to practitioners, patients and the wider NHS (Bowskill et al, 2014; Courtenay et al, 2018). There are already 301 paramedics annotated as IPs (Health and Care Professions Council, 2020, HCPC, 2020) and uptake is gathering pace. It is timely therefore to review current evidence of barriers that can limit its uptake in practice.

The aim of this article is to raise awareness of the barriers and the 'seven steps to success'; a practical guide designed to support paramedics who are considering undertaking NMP training.

Seven steps to prescribing success

Step 1. Identify a clinical need

Establishing a clinical need for NMP is a seemingly obvious requisite. Despite this, lack of planning and clarity in the preliminary phase of adoption regarding how and where NMP will be used has been reported (Ross and Kettles, 2012; Hopia et al, 2017; Oldknow et al, 2019).

This in turn can lead to lack of prioritisation of NMP within teams, poor multi-disciplinary understanding, inappropriate pressure for prescribing or conversely a failure to employ prescribing roles to full scope (Maddox et al, 2016; Lim et al, 2017; Lennon and Fallon, 2018). Understanding the NMP evidence base and reflecting on how various patient, service and professional benefits might apply to primary care paramedic service models may help contextualise the role of NMP locally (Courtenay et al, 2018).

Higher Education Institutes (HEIs) offering courses usually request a statement of intended application of NMP within a trainee's area of practice, prompting consideration of how prescribing capability will address unmet service/patient needs. A useful exercise is to undertake a clinical audit to demonstrate need, focusing on, for example, the limitations of current patient group directions, the number of patients referred to other IPs for medicines, time spent in completing referrals and/or the added time patients wait for medicines (Carey et al, 2017). Some managers/doctors can be sceptical of the value of NMP and the need to change existing prescribing arrangements, and desire evidence of service benefit before committing to implementation (Kroezen et al, 2014; Lennan, 2014; McHugh et al, 2020). It may be pertinent therefore to focus on how NMP could influence patient reported and/or service outcomes such as satisfaction, number of return visits, waiting times and/or other service use in order to gather evidence for support (Laurant et al, 2018). Aligning need for NMP with local and/or national strategy, such as the Quality and Outcomes Framework (NHSE 2019b), is a facilitator for implementation in the literature and recommended to help develop a case for implementation (Courtenay et al, 2011; Dobel-Ober and Brimblecombe 2016). Guidance on writing NMP specific business cases is also available (Medicines Use & Safety Team, 2019).

Step 2. Obtain managerial support

It is imperative that managers sanction and confirm their commitment to implement PIP during the adoption phase; lack of managerial support is one of the most frequently cited barriers limiting uptake in primary care (Kelly et al, 2010; Scrafton et al, 2012) and other

settings (Taylor and Bailey, 2017; Fisher et al, 2018; Casey et al, 2020). Managerial lack of knowledge and understanding of NMP, limited organisational prioritisation of NMP and over restrictive policies for expanding NMP numbers are widely reported barriers (Courtenay et al, 2011; Dobel-Ober and Brimblecombe, 2016; Connor and McHugh, 2019). Seeking the support of an NMP lead is highly recommended (Courtenay et al, 2011; Tonna et al, 2018). As strategic and operational advocates (Lim et al, 2013), NMP leads are experienced in supporting prospective NMPs and offer a range of measures to mitigate potential barriers (Courtenay et al, 2011; Lim et al, 2013). Whilst most secondary care organisations employ NMP leads (Smith et al, 2014), the legacy of primary care reconfiguration means they may not be present in all clinical commissioning groups (CCGs) (Carey et al, 2014). In their absence, locating regional/local specialist NMP groups and/or discussing the practicalities with experienced nurse or AHP IPs in similar services may be beneficial. The Association for Prescribers (AFP) provides updated information on NMP, discussion forums, an on-line learning resource library as well as a “Frequently Asked Questions” section (AFP, 2020).

Managerial agreement for study leave/protected time is an essential requirement for undertaking training (Department of Health, 2006, DH, 2006). Securing study leave to attend taught classroom sessions and/or participate in on-line learning, as well as protected time for the 12 days supervised period of learning in practice (PLP) is essential pre-training (Boreham et al, 2013). Studies indicate the latter can be the “pinch-point” for some GPs/practice managers, rather than the financial outlay for training (Kelly et al, 2010; Unwin et al, 2016). Deficiencies in protected time provision are widely reported and can markedly affect the overall learning experience for trainees (Latter et al, 2010; Carey et al, 2017; Fisher et al, 2018). Although HEIs seek assurance that trainees will be released for the designated 27 taught and 12 supervised learning in practice days, from managers within the application process, competing clinical workload pressures mean, in practice, this is not always the case (McCormick and Downer 2012; Bourne et al, 2013; Smith et al, 2014).

Step 3. Check Eligibility for training

Assuming a clinical need has been identified, paramedics should subsequently check that they are eligible for training. Applicants must hold HCPC registration, with inherent requirement to evidence a portfolio of continued professional development (HCPC, 2018). The College of Paramedics (CoP) has recommended that paramedics should have 3 years' experience in the clinical area where prescribing will take place (CoP, 2018a), and be working at a level equivalent to the HEE definition of advanced practice (HEE, 2018). They should have, or be working towards a masters level/ post-graduate qualification (CoP, 2018a). However, these recommendations are not mandatory, and evidence suggests that there is variation in HEI admission criteria. For example, some HEIs are requesting applicants have at least 5 years post qualification experience (University of Plymouth, 2020) and/or are taking a broader interpretation of advanced practice (Booker and Voss, 2019). However, most HEIs are offering and mandating paramedics apply for NMP courses at Masters level (Rovardi, 2019), and prospective paramedic prescribers must be able to evidence competence in assessment, physical examination, diagnosis and critical reasoning skills.

Evidence shows that pre-existing knowledge and skill levels highly influence how nurses use their prescribing qualifications; more clinically experienced nurses who have undertaken accredited study days and specialist modules prescribe more frequently and demonstrate greater involvement in medicines optimisation (Courtenay et al, 2007; 2012; Carey et al, 2013). It is therefore highly recommended that paramedics undertake advanced and/or specialist skills training prior to embarking on NMP programmes. Although acquisition of these skills is unlikely to be a problem for paramedics who have pursued the advanced clinical practitioner route (Dixon 2019a; Hilton et al, 2019), there has been confusion regarding the interpretation of different role titles in relation to advanced practice (HEE, 2013; Booker and Voss, 2019). The recent capability framework for specialist PPs in primary

care which is linked to the HEE advanced practice framework should help clarify the level that is expected (Skills for Health, 2019).

Numeracy proficiency is also required for entry into NMP training, and has been a difficulty for some trainees, with many HEIs reporting substantial input to help nurses achieve the requisite pass rates (Latter et al, 2010). Deficiencies in calculation skills have been noted amongst healthcare professionals over the years (Oldridge et al, 2004; Taylor and Byrne-Davis, 2017) and in experienced paramedics in international studies (Eastwood et al, 2009; Boyle, 2018). Some organisations and HEIs undertake pre-course numeracy assessments as part of the application process (Latter et al, 2010; Courtenay et al, 2011; Dobel-Ober and Brimblecombe, 2016), and it is recommended that paramedics carry out preliminary self-testing before applying for training. On-line resources such as 'SN@P Assessment & Education' are readily available (sn@p, 2020).

Step 4. Practical considerations

Practical considerations before registering for training include confirmation of secured funding and an identified prescribing budget. Both, when lacking, have inhibited uptake of NMP in primary care (Scrafton et al, 2012; Brodie et al, 2014; Courtenay et al, 2017). Where the release of paramedics for training is likely to impact short term service sustainability, it may also be necessary to secure substantive post backfill. Failure to do so has been a rate limiting factor to initial adoption of NMP (Carey et al, 2010; Latter et al, 2010; Fisher et al, 2018) and a barrier in planning further expansion of NMP numbers (Courtenay et al, 2018). Funding sources to support NMP training vary inter-organisationally, with some CCGs commissioning a specific number of training places and others providing funding through specific workforce transformation streams (Hindi et al, 2019). A small percentage of practitioners self-fund, paying between £1,600 and £3,500 (AFP, 2019). This may be a significant deterrent, particularly if adopting the prescribing role is not perceived as financially and/or professionally remunerated (Kelly et al, 2010; Ross, 2015).

Step 5. Identify a Practice Educator

Until recently the role of the practice educator could only be undertaken by a medical doctor or dentist, known as 'designated medical practitioner' (DMP) (National Prescribing Centre, 2005). However, recent regulatory changes (HCPC, 2019; Nursing and Midwifery Council 2019) designed to overcome limited availability of DMPs in some areas of practice (Smith et al, 2014; Carey et al, 2017), mean that other suitably qualified NMPs can now undertake the role, providing support and assessment of trainee non-medical prescribers in practice.

Current transitional arrangements mean that some HEIs have already introduced this change, while others are still awaiting HCPC approval of revised programmes that incorporate this change for introduction later this year (HCPC, 2019). Caveats for this important role however, remain unchanged; this individual must have relevant experience in the trainee's area of practice and be actively prescribing. As an area of potential confusion, it is highly recommended that paramedics discuss the requirements/regulations with their local HEI NMP programme lead. Endorsed by the College of Paramedics the Royal Pharmaceutical Society (RPS) Competency Framework for Designated Prescribing Practitioners (DPP) underpins the new regulations and sets out a common set of competencies that all prescribers undertaking the practice educator role are expected to hold (RPS, 2019). Bringing clarity to HEIs, NMP leads and trainees of what is necessary for safe and effective prescribing supervision, the framework should promote consistency in the quality of training provided for the period of supervision.

The practice educator is highly influential in moulding the overall learning experiences of trainees NMPs (McCormick and Downer, 2012; Unwin et al, 2016). Stressing the importance of careful selection, pre-existing good relationships, the amount of direct supervision time given and clarity in the role and responsibilities of practice educators have been pivotal influencing factors (Avery et al, 2004; Ahuja, 2009; Latter et al, 2010). The DPP framework stipulates clearly the practice educator's responsibilities whilst also indicating the hosting

organisation's role in meeting the supervisory needs of trainees. This transparency should fulfil the dual function of helping practice educators determine their own suitability, as well as helping the trainee identify an appropriate individual. Most HEIs provide written guidance for practice educators and maintaining a close liaison with them, offer a range of supports such as inductions and practice visits for individuals new to the practice educator role (Latter et al, 2010).

6. Choosing an accredited NMP programme

There are a number of things to consider when deciding where best to access NMP training. IP/SP prescriber courses are delivered as stand-alone programmes, although some HEIs offer them as optional modules within larger awards. Some require attendance at university for 26 days, whilst others have fewer direct taught sessions and greater distance learning components. A typical example of a Masters level IP/SP course with 400 allocated hours, includes 180 scheduled learning and teaching hours, 130 independent study hours and 90 hours in supervised practice. One academic credit equating to 10 hours of student input, a total of 40 academic credits would be assigned. Although the taught aspect of most IP/SP courses is between 3-6 months duration, students should be prepared that overall, with academic assessment and subsequent HCPC annotation, the whole process from start to the point of prescribing in clinical practice can take 9 months to a year. A considerable commitment, it is important therefore to identify before submitting an application, how the required attendance, practice time and private study within the course duration will be completed. Whilst location, accessibility and travel costs are important aspects, distance learning and part-time options may influence course choice. Researching different HEI providers in relation to pedagogical preferences and seeking the experiences of recently qualified paramedic IPs is recommended. NMP leads usually liaise with HEI programme leads concerning employee learning needs (Courtenay et al, 2011) and are familiar with local programme structures (Latter et al, 2010).

There are currently 43 HEIs offering accredited NMP programmes for paramedics (HCPC, 2020). As the Department of Health (DH) takes a generic approach to NMP training (DH 2006; Bowskill 2014) these are multi-professional. Although trainee PIPs have reported they value the opportunity to share and exchange knowledge through inter-professional learning (Dixon, 2019b; Hilton et al, 2020), the generalist nature of NMP programmes has also been criticised (Ross and Kettles, 2012; Hindi et al, 2019; Latham and Nyatanga, 2018). It is important to note however that NMP programmes teach competent, safe prescribing practice. Inherent in the requirement to be working at an advanced level of practice, specialist knowledge should be acquired prior to NMP training (Courtenay et al, 2012; Carey et al, 2012, 2013).

7. Building personal readiness

As with organisational readiness, building personal readiness and clear expectations for NMP and training is recommended (Courtenay et al, 2011). The literature indicates a number of misconceptions about course complexity and pass rates have inhibited some practitioners from undertaking NMP training (McHugh et al, 2020). It is recognised and reassuring that NMP programmes are rigorous given the added responsibility for patient safety that prescribing imbues, and trainees must be prepared to manage the competing demands of training whilst continuing to work (Bowskill et al, 2014). Nevertheless, evidence indicates some students lack understanding of NMP (Ross and Kettles, 2012; Ross, 2015), and whilst training clarifies expectations (Carey et al, 2017), having a clear understanding of the commitment level necessary relative to overall work-life balance in advance is highly advisable. Early reports suggest strategies to deal with course demands (Dixon, 2019b) and promote common understanding of paramedic prescribing role capabilities (Stenner et al, 2019) may be beneficial. For example, the “Preparing to Prescribe” toolkit (Carey and Stenner, 2020), a relatively new and freely available resource, has been designed

specifically to help ensure consistency in the information provided and facilitate preparation for the prescribing role (AFP, 2019).

The DH recommends peer mentoring, also known as a ‘prescribing buddy’, for NMP students (DH, 2006), providing moral support and contextualisation of prescribing in practice (Bowskill et al, 2014). Given the paramedic NMP pool is thus far limited, securing a “buddy” from a different profession and/or specialty may be appropriate and is as equally effective as same profession/specialty mentoring (Bowskill et al, 2014). PP social media forums are currently available for primary care and NMP and may be useful (Facebook, 2020a, 2020b).

Conclusion

Paramedics in the UK are the first in the world to be granted prescriptive authority representing a significant opportunity to make a difference to professional practice and patient care. Key to maximising advanced practice skills, as primary care undergoes reconfiguration, PIP is likely to become increasingly important for service innovation. To help overcome historical barriers to early adoption of NMP experienced in nursing and pharmacy, it is recommended that paramedics planning to undertake IP training review the common pitfalls. By working with their organisation and making appropriate plans, paramedics will be better placed to ensure effective implementation of the prescribing role in practice.

Keywords: Paramedic practice | independent prescribing | primary care | implementation | organisational readiness | barriers

Key points:

- Enhancing scope of practice to include independent prescribing is key to developing the capacity and capability of advanced paramedics to deliver innovative models of service in primary care

- Optimising organisational readiness for paramedic independent prescribing by identifying barriers is essential for successful implementation
- Development of mitigating strategies, capitalising on recognised facilitators is necessary to prevent historic repetition of barriers and enhance adoption of paramedic independent prescribing in primary care networks

Reflective questions

- What was the key challenge that you encountered when undertaking prescribing training and how did you overcome it?
- What are the key challenges paramedic practitioners in primary care may experience prior to undertaking non-medical prescribing training?
- How might you use your own experience to support other paramedic practitioners who plan to undertake the course in the future?

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Figure 1. Seven steps to successful paramedic independent prescribing

(AP – advanced practice, DPP – Designated Prescribing Practitioner, HEI – higher education institute, NMP – non-medical prescribing, RPS – Royal Pharmaceutical Society)