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Title: Establishing priorities on the range of conditions managed by UK community practitioner nurse prescribers: A modified Delphi consensus study

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CONFLICT OF INTEREST

None declared.

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ABSTRACT

Aim: To provide national consensus on the range of conditions community practitioner nurse prescribers manage, and for which it is considered important that they can prescribe.

Background: Around 35,000 community practitioner nurse prescribers in the UK are able to prescribe from a limited formulary. Although prescribing is a key role for these nurses, there has been a decline in the numbers of community practitioner nurse prescribers who prescribe. It is evident that changing patterns of client and service delivery, changes the role of community nurses and the conditions they manage, however, little is known about the conditions community practitioner nurse prescribers manage.

Design and methods: A modified Delphi approach comprising three on-line surveys delivered to a national Expert Panel of eighty-nine qualified community practitioner prescribers. Data collection took place between January and March 2017.

Results: Panelists reached a consensus, with consistent high levels of agreement reached, on nineteen conditions for which it is believed community practitioner nurse prescribers should be able to prescribe. Conditions identified by school nurses (n=12) and health visitors (n=7) were mainly acutely focused, whereas those identified by district nurses (n=9) and community staff nurses (n=6) included both long-term and acute conditions.

Conclusion: Given the high degree of consensus, this list of conditions should influence any decisions about the items community and public health nurses should be able to prescribe. The findings should also influence the education and training of these nurses.

SUMMARY STATEMENT

Why is this research needed?

- Prescribing is a key role for community nurses, however, there has been a decline in the numbers of these nurses who prescribe from the limited range of items available to them in the Nurse Prescribers Formulary for Community Practitioner Nurse Prescribers
- Although it is evident that the changing pattern of client and service delivery has changed the role of the community nurse, little evidence is available about the conditions community practitioners nurse prescribers manage

What are the key findings?

- Overall, the modified Delphi method used in this study enabled panelists to reach a consensus, with consistent high levels of agreement reached, on nineteen conditions for which it is believed community nurse practitioner prescribers should be able to prescribe
- Consensus was achieved by district nurses and community staff nurses on a number of chronic conditions, whereas agreement was reached on a number of more acutely focused conditions across all community practitioner prescriber groups

How should the findings be used to influence policy/practice/research/education?

- The conditions identified in this research provide national guidance on the items community practitioner nurse prescribers need to prescribe, and also international guidance for countries in which prescribing by community and public health nurses is established, and for those countries wishing to establish prescribing by these nurses.

- Our findings can also be used to direct national and international education and training for the preparation of community and public health nurses.

KEYWORDS: Nurse prescribers, nurse prescribing, modified Delphi, school nurses, district nurses, health visitors, community staff nurses, condition management, community and public health nurses

INTRODUCTION

Extending nurses' scope of practice to include prescribing has been supported in a number of countries, including the United Kingdom (UK), the United States, New Zealand, Netherlands, Ireland, Australia, Canada, and Sweden (Weeks et al 2016, Kroezen et al 2011, Ball et al 2009). Drivers for this role include the need to address doctor shortages, improve patient access to medicines, make better use of nurses' skills, and to develop advanced practitioner roles (Weeks et al 2016, Kroezen et al 2011).

In the UK, changes in legislation in 1992, enabled District Nurses (DNs), and Health Visitors (HVs), to access prescribing training to prescribe from a limited range of items, included in the Nurse Prescribers' Formulary (NPF) for Community Practitioners (Nursing and Midwifery Council (NMC) 2006). **Items include laxatives, anti-fungal preparations, emollients, some analgesics (e.g. aspirin, paracetamol, ibuprofen), nicotine replacement products, anthelmintic and insecticides, wound dressings, catheter management preparations, stoma appliances, and wound management products (British Medical Association and the Royal Pharmaceutical Society 2016).** Training (typically of 4 days duration), is now integrated into the qualifying programme for Specialist Community Practitioners i.e. DNs, Public Health nurses (previously known as HVs) and School Nurses (SNs). Community staff nurses (CSNs) without a specialist qualification in community nursing but with 2 years qualified experience, are also able to prescribe from the NPF once they have undertaken a stand-alone course of 10 days duration (NMC 2009).

In 2001, independent prescribing rights were extended to include other groups of registered nurses, with three years qualified experience (Department of Health (DoH) 2001). These nurses are able to prescribe any medicine within their area of competence independently or, via supplementary prescribing (DoH 2005). Supplementary prescribing involves a written agreement, between the patient, doctor and supplementary prescriber, on a list of medicines from which the supplementary prescriber is able to prescribe. In contrast, independent

prescribers are responsible for the assessment, diagnosis, and decisions about the clinical management required in patients with diagnosed or undiagnosed conditions. Training for nurse independent supplementary prescribing is typically 6 months in length (NMC 2006). This is in contrast to countries such as the United States, Canada and Australia, where training to independently prescribe is at master's level for registered nurses and a component of 2 year advanced nurse practitioner programmes (Ball et al 2009).

Although there is evidence available that has explored the prescribing practices of nurse independent supplementary prescribers, there is very little recent evidence available that has explored the prescribing practices of community practitioner nurse prescribers (CPNPs). The evidence that is available has reported that whilst these nurses view prescribing as an important element of their role (Downer & Shepherd 2010, Young 2009), decreasing numbers are actively prescribing (Drennan 2014) with reports that items included in the NPF do not meet the needs of the patients these nurses manage (Hall et al 2006, Brooks et al 2004, Lewis-Evans & Jester 2004, While & Biggs 2004). This is concerning given that prescribing has been identified as a key role for community nurses (Health Education England 2016, Health Education England 2015, NHS England 2014).

BACKGROUND

Nurse independent and supplementary prescribers, of whom there are 36,000 in the UK (Courtenay 2017), prescribe for a broad range of conditions (Courtenay et al 2017, Latter et al 2010). They are safe and prescribe clinically appropriate medicines (Latter et al 2010, Latter et al 2005). Stakeholders are satisfied (Courtenay et al 2011, Latter et al 2011), and outcomes of care are comparable to medical prescribing (Weeks et al 2016, Gielen et al 2014). Between 10-20% of CPNPs have been reported to go on to become nurse independent supplementary prescribers (Courtenay et al 2017a, Courtenay et al 2012, Latter et al 2010).

The majority of studies that have explored prescribing by CPNPs were undertaken over a decade ago. A review of the literature in 2004 (Latter & Courtenay 2004), designed to identify the impact and effectiveness of community practitioner nurse prescribing, reported that although prescribing by these nurses had generally been evaluated positively, there was wide variation in the number of items prescribed, with DNs prescribing more than HVs. A consistent theme within the 18 studies included in the review, was that the NPF was restrictive, with both nurses and patients calling for expansion to the range of medicines that nurses were able to prescribe. Following on from this review, low levels of prescribing amongst CPNPs have been reported (Drennan et al 2014, Courtenay et al 2012, Hall et al 2006). Hall et al (2006), in interviews with 23 CPNPs and 5 prescribing leads in primary care trusts within three Strategic Health Authorities, identified 16% of these nurses prescribed infrequently (i.e. less than once a week) with double the proportion of health visitors compared with district nurses classed as infrequent prescribers. Furthermore, the inability by these nurses to prescribe medicines for patients they managed was reported to be a barrier to prescribing. Findings from a survey of nurse, pharmacist and allied health professional prescribers in one Strategic Health Authority reported as many as a third of CPNPs did not prescribe (Courtenay et al 2012). This finding was supported in a later study by Drennan et al (2014) investigating nurses prescribing activities, over time, in English primary care settings. These researchers identified a decrease in the number of CPNPs who used the limited formulary, and a decrease in CPNPs who actively prescribed.

There is huge diversity in community and public health nursing roles globally (World Health Organisation (WHO) 2017). However, typical activities of these nurses include health promotion, disease prevention and disease management (WHO 2017). Community and public health nurses have the potential to make significant contributions to the health care needs of various population groups in a variety of community settings and changing population profiles have led to international interest in the work of these nurses (WHO 2017). Evidence available (Nissanholtz-Gannot et al 2017, Rodden 2016, Maijala et al 2016, Kelehera & Parker 2013, Kemp

et al 2005), has identified a shift in focus of the care provided by these nurses. In Australia, for example, researchers have reported community nurses to be increasingly working in roles that have moved away from longer term support and care to provision of a more 'acutely' focussed episodic care (Kemp et al 2005) with increasing involvement in health promotion activities (Rodden et al 2016, Kelehera & Parker 2013). Similarly, in Finland and Israel, researchers have reported nurse's involvement in the implementation of a variety of health educational activities within the primary health care context (Maijala et al 2016) and a shift in nursing tasks from hospitals to the community setting, a key area of involvement including health promotion (Nissanholtz-Gannot et al 2017).

Given the increased investment in the UK in the skills of community nurses, including prescribing (Health Education England 2016, NHS England 2014), it is important that these nurses are able to prescribe medicines for the conditions they manage. The items listed in the NPF have remained unchanged since its inception in 1998, and it is likely, given the changing population profiles and changing patterns of client and service delivery, that these items no longer reflect the prescribing needs of these nurses. To our knowledge, there is no evidence available that has explored the conditions these nurses manage.

THE STUDY

Aim

The aim of this research was to provide national consensus on the range of conditions CPNPs manage, and for which it is considered important that they can prescribe.

Design

Where there is an absence of research evidence or the desire to gather opinion, structured or formal methods are commonly used to reach consensus. The Delphi technique is a commonly used formal consensus method which uses an iterative series (or rounds) of questionnaires to gather data and achieve group consensus (Keeney et al 2001). A benefit of the Delphi technique is the potential to include large numbers of participants who are geographically dispersed and are from diverse areas of expertise (Keeney et al 2001). The technique, unlike traditional group meetings, avoids the risk of meetings being dominated by one individual or influenced by coalitions between group members (Keeney et al 2001). A classic Delphi survey begins with a questionnaire containing open ended questions from which subsequent questionnaires are developed (Day & Boveva 2005, Hasson et al 2000). As a list of conditions for which CPNPs are reported to manage had already been developed from the literature, the current study used a modified Delphi survey, i.e. the traditional round 1 open ended questionnaire was replaced with this predefined list of conditions. This is an acceptable modification of the Delphi process (Keeney et al 2011).

Participants

The Delphi technique employs 'experts' as panel members as opposed to a random sample representative of the target population. However, there is a lack of consensus within the literature as to the definition of an expert (Baker et al 2006), and no consensus as to the optimum number of participants to be included in Delphi surveys (Keeney et al 2011). It is suggested that the selection of expert panel members should be dependent upon what is being investigated, the complexity of the problem, the homogeneity or heterogeneity of the sample and availability of resources (Keeney et al 2011). Although there is no consensus within the literature as to what is defined as large or small, larger panels are recommended for heterogeneous groups and smaller panels for homogeneous groups (Skulmonski et al 2007). Larger samples are reported to increase the complexity and difficulty of collecting data, reaching

consensus, conducting analysis, and verifying results (Skulmonski et al 2007), and it is recommended that researchers be explicit about criteria used to include participants in a study (Trevelyan & Robinson 2015). Given the topic being investigated, and resource constraints, the decision was made to include a relatively homogenous sample (i.e. recruiting only CPNPs) and 'Expert' for the current Delphi study was defined as Specialist Community Practitioners with a prescribing qualification and CSNs (without a specialist qualification) qualified to prescribe.

Participants of the expert panel were recruited through a purposive sampling method to create a database reflecting the range of community nurses able to prescribe medicines from the NPF for community practitioners. In order to ensure that the full range of these nurses was included on the panel, and that they were representative of CPNPs across the UK, contact was made by MC with Chief Executive Officers, Directors, Chairs, and Professional Leads of national bodies representing UK community practitioner groups. These organisations included the Community Practitioner and Health Visitors' Association, the Royal College of Nursing (RCN), the Institute of Health Visitors', the Queens Nurse Institute, and the Association for Prescribers. These individuals were informed about the project and provided with details about the research. They were also invited to share these details with their members. Specialist Community Practitioners with a prescribing qualification and CSN prescribers (without a specialist qualification) were invited to contact the researchers, if they were keen to become an expert member of the Delphi panel. The current survey aimed to include all professionals who expressed an interest to take part and who fulfilled our definition of 'expert'.

One hundred and fifty community nurses contacted the researchers and expressed an interest to participate. Each was sent a participant information sheet by email and provided with the opportunity to address any queries they may have had with a researcher. The participant information sheet highlighted that questionnaire data would be anonymous, that all information collected during the course of the study would be kept strictly confidential, and that completion

of questionnaires provided implied consent to participate. Of the 150 community nurses who expressed an interest to take part, 89 community nurses agreed to participate.

Data collection and analysis

The survey was conducted across three rounds. Bristol Online Survey—a tool for creating web surveys—was used to develop each round of the on-line questionnaire survey. A link to each survey was distributed via email to all participants who had confirmed their participation, followed by two follow-up reminder emails, at one week intervals per survey round. Data collection took place between January and March 2017.

Round 1 Elicitation of the conditions managed by community practitioner prescribers

A list of 15 conditions for which CPNPs are reported to manage, was developed from the literature (See Table 1).

Delphi panel members were asked to identify from this list, the conditions they manage, prescribe for, treat, or provide advice. Space was also provided for panel members to list any additional conditions not included on the list. Demographic details collected included role, if they were a qualified Nurse Independent Supplementary Prescriber, job band, employer, years qualified as a prescriber, age range, setting in which participant worked, service provided, whether participants prescribed, and the number of items prescribed per month, was also collected.

Refining factors and actions

Questionnaire data were analysed within SPSS version 17 and descriptive statistics calculated for each question. A list of conditions representing those that expert panel member reported that they managed, prescribe for, treat, or provide advice for, was then developed.

Round 2 – Building consensus on priorities

An email was sent to members of the expert panel inviting them to participate in round 2 of the Delphi process. In this round, participants were asked to use a 5 point Likert scale (1=strongly agree to 5 =strongly disagree) to rate each condition identified in round 1, with regards to the extent to which they felt it was important that they could prescribe for it. Median scores and interquartile ranges (IQRs) were calculated for responses to each condition, for each community nurse group (i.e. DNs, HVs, SNs, and CSNs), in order to characterise the answer category above and below which 50% of the answers fell. IQRs which form the distance between the 25th and 75th percentiles were used to represent the spread of the data and to assess the level of consensus per question. Although there is no agreement on the best method used to determine consensus, median score and IQR is a frequently used method (Skulmoski et al 2007) and is considered robust (Stark et al 2015). Responses where the median was less than or equal to 2 (i.e. a high level of agreement that participants viewed it as important to their role that they can prescribe for this condition) with a small IQR (less than or equal to 1.5), were considered important conditions that have reached consensus across each community practitioner group and taken forward to the 3rd round.

Round 3 – Reaching consensus on priorities

In the final round, participants were asked to rank each condition with regards to how much of a priority it was that they were able to prescribe for it. Responses were inversely scored and collated. Priorities were defined as the conditions receiving the highest total scores for each group.

Ethical consideration

Ethical approval for the study was provided by the School of Healthcare Sciences Research Governance and Ethics Committee, Cardiff University (427c).

RESULTS

A total of 89 CPNPs agreed to become members of the expert panel, of whom 80 (90%) completed round 1 questionnaire, 70/80 (88%) completed round 2, and 65/70 (92%) responded to round 3. Table 2 provides a description of the different types of CPNP who responded to each round (See Figure 1 for a summary of the Delphi process).

Round 1

Eighty (90%) participants responded to the initial survey. Most of these participants were HVs. Only small numbers were SNs (see Table 2). **Forty-one (51.3%) participants** had more than 5 years' experience as a qualified prescriber and 67 (83.8%) **participants** reported that they prescribed. The demographic characteristics of these participants are described in Table 3.

A list of 30 conditions were identified by respondents as those for which they managed, prescribe for, treat, or provide advice (see Table 4).

Round 2

Seventy (88%) participants responded to the second round. See Table 5 for a description of the median scores and IQRs for each of the 30 conditions per CPNP group

Responses from DNs identified 9 conditions, for which there was a high level of agreement, that it was important to their role that they could prescribe medicines. HVs showed a high level of agreement across 7 conditions. SNs agreed on 12 conditions, and CSNs 6 conditions. These conditions were taken forward into round 3.

Round 3

Sixty five (92%) participants responded to the third round. Conditions, ranked in priority order (for each group), are presented in Table 6.

DISCUSSION

The aim of this study was to provide national consensus on the range of conditions CPNPs manage, and for which it is considered important that they can prescribe. Starting with a predetermined list of conditions developed from the literature, the traditional round 1 of the Delphi survey i.e. item generation was unnecessary. Overall, the modified Delphi method used in this study enabled panelists to reach a consensus, with consistent high levels of agreement reached, on nineteen conditions. This included 5 additional conditions (skin infections, lymphedema, post immunization fever, infant colic, and nocturnal enuresis) contributing to round 2. Confidence in reaching consensus means that we now have a comprehensive list of conditions for which each group of CPNPs believe it is important for them to be able to prescribe.

In line with previous research (Herklotts et al 2015, Daughtry and Hayter, 2010; Downer and Shepherd, 2010, Young 2009, While & Biggs 2004) CPNPs in our study valued prescribing as an important element of their role. Consensus was achieved by DNs and CSNs on a number of chronic conditions, whereas agreement was reached on a number of more acutely focused conditions across all CPNP groups.

Conditions identified by HVs (such as infestation, fungal infections, dry skin) supports the results of previous research (Ellefson 2001) that HVs have a significant role in health promotion and early intervention and aligns with the role HVs play in supporting parents and carers to recognise and act upon childhood illnesses (NHS England 2014). Contraception and sexual health and

smoking cessation, rated as priority areas by SNs, concurs with themes identified in research by UK researchers Hoekstra et al (2016). This also corresponds to national guidance in which a key role of these nurses is to reduce under 18 conceptions, reduce smoking prevalence, and chlamydia diagnosis (Public Health England 2014). Although DNs and CSNs primarily identified chronic conditions as those for which they believed they needed to prescribe, a number of acute conditions were also identified. This aligns with the complex care needs of the patients these nurses have been reported to manage in the UK (Queens Nurse Institute 2014). Our findings also align with the international research that has explored community and public health nursing roles in countries including Australia (Rodden 2016, Kelehera & Parker 2013, Kemp et al 2005), Finland (Maijala et al 2016), the US (Shaeffer et al 2016), and Israel (Nissanholtz-Gannot et al 2017), the findings of which report the increasing involvement of these nurses in acute episodic care and health promotion activities.

Although participants in our study believed it was important that they were able to prescribe, they typically only prescribed a small number of items a month which supports earlier evidence (Hall et al 2006, While & Biggs 2004). This may suggest that prescribing knowledge is applied in other ways than physically writing a prescription which aligns with previous research (Courtenay et al 2017a, Herklotts et al 2015, Courtenay et al 2012), nurses reporting that they use their prescribing knowledge to undertake a range of other activities such as making recommendations to another healthcare professional to prescribe a medicine or, making recommendations to a patient to buy a medication over the counter, and medicines reviews.

Given the increased investment in the skills of community and public health nurses globally, our findings should be of international interest. Strategies are required to address health service demands in low-, middle- and high-income countries, extending nurses scope of practice to include prescribing is one such strategy. Strengthening nurses' capacity in this way improves their ability to reach more people with quality health services (Weeks et al 2016). Although it is recognised that the findings of this work originate from a UK perspective, and so leaves open

the need for adaptation to other healthcare systems and consideration of other national and regional concerns, our findings provide some guidance for those countries in which prescribing by community and public health nurses is established, and for those countries wishing to establish prescribing by these nurses, with regards to the conditions these nurses manage and so the medicines they will need to prescribe. Our findings can also be used to direct national education and training for the preparation of community and public health nurses. If proposals (NMC 2017), enabling community nurses to access training to prescribe immediately upon qualifying as a 1st level registered nurse are accepted, it will also be important to include some of this preparation in undergraduate nurse education programmes.

Findings from this study could be used to inform further survey work, involving a larger sample of CPNPs, or, patients and other members of the community healthcare team. This would help to validate study findings, and so may have a greater influence on policy. Another important next step would be to investigate how prescribers decide whether to expand their prescribing competencies to new areas of practice, perhaps moving on to undertake nurse independent and supplementary prescribing training. Less than 10% of the CPNPs in our study were qualified as nurse independent and supplementary prescribers and this is fewer than the figures of between 10-20% reported previously (Courtenay et al 2017a, Courtenay et al 2012, Latter et al 2010). If training interventions, designed to help these prescribers feel confident to identify areas of practice in which they would like to expand their prescribing competencies, could be identified, this has the potential to lead to improved patient experience and cost savings for the NHS.

LIMITATIONS

The main strength of our work is that it is based on responses from a national panel of defined experts, had a good response rate, and provides information on the range of conditions that CPNPs manage, and for which it is considered important that they can prescribe. However, some limitations also need to be recognised. First, although expert panel members who responded to each Delphi round, included each of the different groups of CPNPs, only small numbers were

SNs. Therefore, our findings may not present an accurate picture of this population rather, they may represent the views of DNs, HV and CSN prescribers. Second, we could have included other groups on the expert panel e.g. doctors and patients. We acknowledge that for care to be patient centred, patients need to participate in the research that informs healthcare decisions, however, given resource constraints and the problems associated with large heterogeneous samples (i.e. difficulties surrounding data collection/analysis, reaching consensus, and verifying results) (Skulmowski 2007), the decision was made to include only CPNP on the expert panel. As such, our findings may not be representative of the wider population.

Third, only those conditions that met consensus in round 2, were taken forward to round 3. Therefore, although participants were aware of the conditions upon which consensus had been reached, they were not provided with the opportunity to reflect on their initial judgement. Fourth, it is important to recognise that the results of Delphi studies are 'group consensus' and not necessarily 'best', 'expert' or 'correct' results (Trevelyan & Robinson 2015).)

CONCLUSION

Given the high degree of consensus, this list of conditions should influence any decisions about the items community and public health nurses should be able to prescribe. The findings should also influence the education and training of these nurses.

Contributions

MC, PF, MG, TH, J Mac, JM, FPB, and KR, made substantial contributions to the conception and design of the work. MC was involved in the acquisition and analysis of the data. All authors were involved in critical revisions of drafts of the manuscript and approved the final draft.

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Table 1 – A list of conditions for which community nurse practitioner nurse prescribers are reported to manage

Asthma
Catheter management
Conjunctivitis
Constipation
Contraception and sexual health
Dry skin
Fungal infections (skin and oral)
Infestations (threadworm, lice, scabies)
Mastitis
Nappy rash
Pain
Smoking cessation
Stoma management
Varicose veins, varicose eczema, and leg ulcers
Wounds

Table 2 – Community practitioners nurse prescribers' who responded to each round

Community Practitioner Nurse Prescriber	Round 1 n=80		Round 2 n=70		Round 3 n=65	
	n	%	n	%	n	%
Health Visitor	38	47.5	30	42.8	30	46.1
District Nurse	21	26.25	21	30.0	18	27.7
School Nurse	7	8.75	7	10.0	5	7.7
Community staff nurse	14	17.5	12	17.1	12	18.4

Table 3 – Demographic details of those responding to round 1

Demographic Information	Round 1(n=80 or 90%)	
	n	%
Role		
Health Visitor	38	47.5
District Nurse	21	26.25
School Nurse	7	8.75
Community staff nurses	14	17.5
Job band (i.e. Registered Nurses in the UK are put into a Band. Band 5 = lower Band. Band 8 or 9 = higher Band. A higher Band reflects salary/managerial responsibility/clinical expertise)		
5	4	5.0
6	37	46.3
7	30	37.6
8A	7	8.8
8C	1	1.3
Prescribing qualification		
Nurse Independent Supplementary Prescriber	7	8.8
Employer		
National Health Service Trust	55	68.8
Community Trust	7	8.8
Independent Sector providing services on behalf of the NHS	13	16.3
Other	4	5.0
Age range		
25 or under	2	2.5
26-35	6	7.5
36-45	23	28.8
46-55 years	38	47.5
56 or over	10	12.5
Years qualified as a prescriber		
Less than 1 year	4	5.0
1-3 years	23	28.8
4-5 years	10	12.5

More than 5 years	41	51.3
Setting		
Primary care	28	35.0
Community	56	70.0
Service provided		
National Health Service Trust Hospital out-patient	1	1.3
National Health Service Trust Community clinic	29	36.3
General practice service	6	7.5
Her Majesty's Prison Services	1	1.3
Community/intermediate care	60	75.0
Out of hours	2	2.5
Armed forces	1	1.3
Other	5	6.3
Do you prescribe		
Yes	67	83.8
No	8	10.0
Number of items prescribed in a typical month		
1-5	33	41.3
6-10	15	18.8
11-20	7	8.8
21-30	4	5.0
31-40	3	3.8
41-50	0	0
Over 50	9	11.3

Due to missing data from participants who chose not to disclose demographic information, the percentages do not always equal 100%. Some respondents worked across both primary and secondary care settings, and provided more than one service, therefore, these percentages do not equal 100%

Table 4 - List of Conditions identified in round 1 Delphi

Conditions identified from the original list that panel members manage, prescribe for, treat, or provide advice.

Asthma
Catheter management
Conjunctivitis
Constipation
Contraception and sexual health
Dry skin
Fungal infections (skin and oral)
Infestations (threadworm, lice, scabies)
Mastitis
Nappy rash
Pain
Smoking cessation
Stoma management
Varicose veins, varicose eczema, and leg ulcers
Wounds

Additional conditions not included on the list

Burns
Chest infections
Chronic Oedema
Chronic obstructive pulmonary disease
Depression
Earwax
Heart failure
Infant colic
Lymphedema
Nocturnal enuresis
Osteoporosis
Post immunisation fever
Psoriasis
Skin infections
Urinary tract infections

Table 5 - Median scores and interquartile ranges for each of the 30 conditions per community practitioner nurse prescriber group

Condition	District Nurses		Health Visitors		School Nurses		Community staff nurses	
	Median	IQR	Median	IQR	Median	IQR	Median	IQR
Asthma	4.0	2.0	4.0	2.0	1.0	4.0	3.0	3.25
Catheter management	1.0	0.0	5.0	0.0	4.0	2.0	3.0	4.0
Conjunctivitis	3.0	3.0	2.0	3.0	1.5	1.0	1.0	3.0
Constipation	1.0	0.0	2.0	1.75	1.0	1.0	1.0	0.0
Contraception and sexual health	5.0	2.0	2.5	3.0	1.0	0.0	5.0	0.5
Dry skin	1.0	0.0	1.0	0.0	1.0	0.0	1.0	0.0
Fungal infections (skin and oral)	1.5	1.0	1.0	0.0	1.0	1.0	1.0	1.0
Infestations (threadworm, lice, scabies)	3.0	3.0	1.0	1.0	1.0	1.0	2.0	2.0
Mastitis	5.0	2.0	1.0	1.5	2.5	1.5	4.0	4.0
Nappy rash	3.0	2.75	1.0	0.0	2.0	2.0	1.0	4.0
Pain	2.5	0.75	2.0	2.25	1.5	1.0	1.0	1.0
Smoking cessation	2.0	3.0	2.0	2.5	1.0	1.0	5.0	0.5
Stoma management	1.0	1.0	5.0	0.0	4.0	2.0	3.0	4.0
Varicose veins, varicose eczema, and leg ulcer	1.0	0.0	5.0	4.0	3.0	3.0	1.0	1.75
Wounds	1.0	0.0	5.0	1.25	3.5	1.25	1.0	0.0
Burns	2.0	1.75	5.0	1.25	4.0	2.0	1.5	2.0

Chest infections	3.0	1.0	5.0	1.5	4.0	2.0	2.0	1.75
Chronic oedema	2.0	2.0	5.0	0.0	4.0	2.0	1.5	4.0
Chronic obstructive pulmonary disease	4.0	2.0	5.0	1.0	4.0	2.0	5.0	0.5
Depression	4.0	1.0	4.0	2.0	3.5	3.25	5.0	2.25
Earwax	1.0	1.75	4.0	2.0	2.5	3.25	3.0	4.0
Heart failure	4.0	1.75	5.0	0.0	4.0	2.0	5.0	0.5
Infant colic	5.0	2.0	1.0	1.0	1.5	1.0	2.5	4.0
Lymphedema	1.0	1.0	5.0	0.0	4.0	2.0	1.5	1.75
Nocturnal enuresis	3.0	2.0	4.0	2.0	1.0	1.0	4.5	2.25
Osteoporosis	4.0	2.0	5.0	1.0	4.0	2.0	4.5	1.25
Post immunisation fever	5.0	3.0	1.0	1.0	1.5	1.0	2.0	2.5
Psoriasis	2.0	2.0	5.0	1.5	3.0	2.0	4.0	4.0
Skin infections (such as infected eczema or impetigo)	1.5	1.0	2.0	2.0	2.0	1.0	1.0	1.0
Urinary tract infections	2.0	1.75	5.0	2.0	3.0	4.0	2.0	2.5

*Shaded areas signify the conditions for which there was high level of agreement amongst the different CPNP groups, that it was important to their role that they could prescribe medicines

Table 6 – Conditions ranked in order of priority per community practitioner nurse prescriber group

Rank	District Nurses	Health Visitors	School Nurses	Community staff nurses
1	Wounds	Fungal infections (skin and oral)	Contraception and sexual health	Wounds
2	Varicose veins, varicose eczema, and leg ulcers	Dry skin	Smoking cessation	Skin infections
3	Catheter care	Nappy rash	Dry skin	Constipation
4	Constipation	Mastitis	Infestations (threadworm, lice, scabies)	Pain
5	Dry skin	Infant colic	Constipation	Fungal infections (skin and oral)
6	Skin infections	Infestations (threadworm, lice, scabies)	Nocturnal enuresis	Dry skin
7	Fungal infections (skin and oral)	Post immunisation fever	Skin infections	
8	Stoma care		Fungal infections (skin and oral)	1
9	Lymphedema		Pain	
10			Post immunisation fever	
11			Conjunctivitis	

Figure 1 – Summary of the Delphi process

