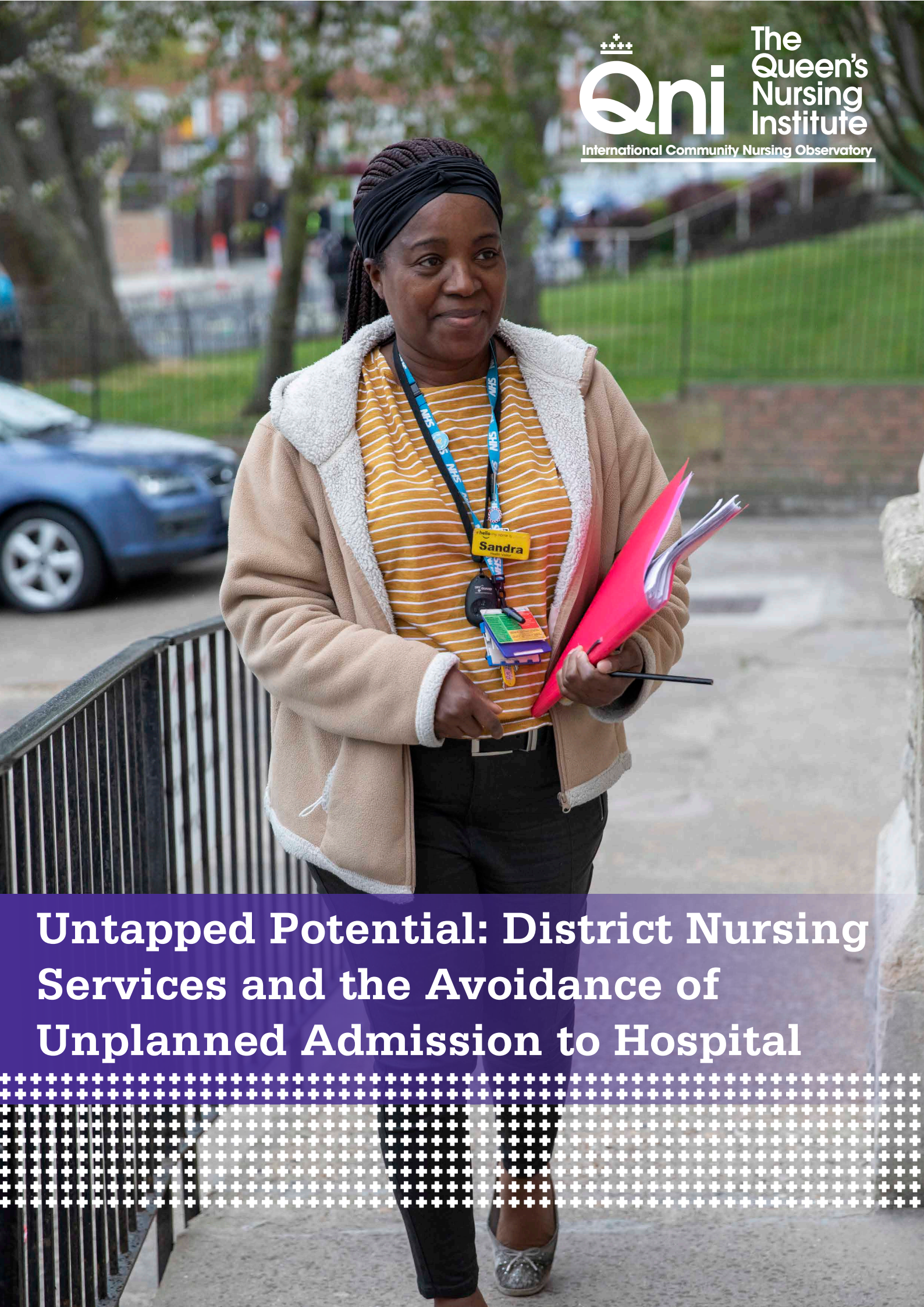

Untapped Potential: District Nursing Services and the Avoidance of Unplanned Admission to Hospital

The Queen's Nursing Institute's International Community Nursing Observatory

The QNI launched the International Community Nursing Observatory (ICNO) in November 2019.

The ICNO analyses data and trends in the community nursing workforce data in greater depth, to aid understanding of the challenges faced by services. It will collate and analyse data about community and primary care nursing services at a regional, national and international level.

Professor Alison Leary MBE, Chair of Healthcare and Workforce Modelling at London South Bank University (LSBU) and a Fellow of the QNI is Director of the ICNO.

The idea behind the foundation of the ICNO originated from an independent strategic review conducted in 2018 by executives at Barclays Bank plc, through the 'Unlocking Insights' programme, led and managed by the charity Pilotlight. The 'Pilotlighters' at Barclays highlighted that data relating to the community nursing services workforce is often incomplete and this leads to barriers which prevent the progression of policy development, service enhancement and improvements to the care of individuals, families, carers and communities.

The ICNO seeks commissions designed to support data gathering and analysis that will provide evidence to enhance service planning and delivery in health and social care settings.

Contents

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hello my name is...
Sarah
Specialist Nurse

‘The Covid-19 pandemic has demonstrated the importance of community health services, not least the care provided by community nurses who work in teams headed up by a District Nursing Team Leader.’

Foreword

For more than 10 years, The Queen’s Nursing Institute has been highlighting the workforce challenges associated with a reduction in district nursing posts. Since 2010 the number of district nurses has fallen by 48% in England. The tide is slowly turning, with increased numbers of district nurses entering educational programmes in both Wales and Northern Ireland and the early shoots of increased numbers in England (QNI, 2021). This is set against a backdrop of services which have never been under so much sustained pressure. During the pandemic the number of people dying at home increased by 39% (The King’s Fund, 2021) and more than 1 million people have debilitating illness as a result of Long Covid (Lintern, 2021).

In 2015 we undertook some research to examine the value of the District Nursing Specialist Practitioner Qualification (DN SPQ) (QNI, 2015). This report highlighted the value of advanced level assessment, clinical reasoning and decision making as well as the important care co-ordination role undertaken by District Nurse team leaders. Recognising the value that the district nursing Specialist Practice Qualification brings to the health system, the QNI were delighted when in 2021 the four UK Chief Nursing Officers affirmed their desire to see this recordable qualification continue.

While it is important to report on workforce challenges, the QNI is committed to identifying solutions and working with all partners to improve community healthcare. This report represents an opportunity to highlight what the workforce could achieve with greater investment.

Successive governments have recognised the system pressures which are caused, in part, by demographic changes and rising rates of long term conditions. All too often the solution is to invest in a new services such as intermediate care or rapid response without consideration of investment to strengthen the services already in place. Whilst these services are highly valued and can have a very welcome and positive impact on patients and their families, some of these services operate during the daytime and on Monday to Friday only and as a result their effectiveness on the overall rates of emergency admission may be limited (NICE, 2017).

This report outlines how there is untapped potential for admission avoidance work to be undertaken by existing district nursing teams. While capacity remains a significant issue, district nursing team leaders in particular have the capability to manage patients safely and effectively at home with a range of acute and long term conditions. Many district nursing services have 24 hour operations that enable the provision of care which is integrated into wider community health services. This report reaffirms the value that the District Nurse Specialist Practice Qualification brings to team leaders who are at the forefront of providing care to people in their homes and in our communities.This report also marks the second anniversary of the QNI International Community Nursing Observatory (ICNO). During the past two years the ICNO has carried out important workforce intelligence research exploring a range of specialist fields of nursing in the community including a focus on Care Home Nursing and General Practice Nursing during the pandemic. The ICNO’s work on District Nursing Workforce Standards is expected soon and we look forward to continuing to influence practice, education and policy now and into the future.

Dr Crystal Oldman CBE, FRCN
Chief Executive

Executive Summary

The Covid-19 pandemic has demonstrated the importance of community health services, not least the care provided by community nurses who work in teams headed up by a District Nursing Team Leader. Among the wider nursing team, the District Nursing Team leader has advanced skills to enable them to assess patients, including undertaking physical examinations, diagnosing and prescribing, and referring the patient to other practitioners and services.

Given that District Nursing Team Leaders have advanced skills in patient assessment and management, and they know many of the people who are living at home with long-term conditions, they are well placed to contribute to care outside of hospital when patients suffer an exacerbation of their health condition.

Even before of the pandemic, the NHS was under pressure from rising rates of emergency unplanned admissions to hospital. Rates have risen by 42% in the last decade. Many admissions involve individuals over 65 years of age and many have long-term conditions. For these patients, admission can lead to further deterioration in their physical functioning and increased frailty.

In 2018 around 4,000 of the 12,000 patients admitted to hospital, each month, in England as an emergency stayed less than one day (Steventon et al, 2018). A large proportion of these patients are admitted unnecessarily, with conditions suitable for management at home or within community services. These so-called Ambulatory Care Sensitive Conditions (ACSCs) include exacerbations of chronic illness, some acute conditions and vaccine-preventable health problems such as some cases of pneumonia.

Across the NHS, there have been widespread efforts to develop services to provide more care for ACSC at home. These services are often small in scale, sometimes disease-specific and usually only operate during normal weekday daytime hours. Consequently, their impact in preventing unnecessary admission to hospital is limited.

District Nursing Specialist Practitioner Qualification programmes (DNSPQ) include preparation around history taking, physical assessment, diagnostics and patient management, and many courses also have an integrated V300 Independent Prescribing qualification. As a result, across England, Wales and Northern Ireland, we have a number of practitioners who are prepared to manage many patients with ACSCs. Yet they are not used to their full potential, with many practitioners reporting little opportunity to consolidate and maintain their skills in patient assessment and management.

Findings from this study show that there is an expectation that District Nursing services will contribute to avoiding unnecessary admissions to hospital, with 42.7% (n = 67) of NHS Clinical Commissioners in England stating that this is included in the service specification and contract. 53% of NHS Clinical Commissioners have developed new services in the preceding 2 years, with 51 (37.5%) of these using existing community health services as the key approach to delivery.

Survey data from District Nursing Team Leaders reveals they feel competent and confident to prevent admission to hospital for patients experiencing an exacerbation of COPD and for those with cellulitis. Some updating of skills and competencies is necessary because of the infrequency with which such skills are practised. A number of respondents reported that myriad specialist teams had been created, effectively de-skilling the District Nursing Service. Further, the creation of specialist teams to deliver care related to single components of the patient's care needs is a worrying development, which creates confusion and adversely affects the continuity of care for patients.

With appropriate investment, the District Nursing Service in all three countries provides an ideal opportunity to provide admission avoidance services at scale, as well as a service that is integrated with primary care and other community health services.

Introduction

The Covid-19 pandemic has demonstrated the importance of community health services to the health and wellbeing of many of the most vulnerable members of society. Across the United Kingdom, community health services have managed the rapid discharge of patients from hospital during the first pandemic wave through to managing increasing numbers of people suffering the debilitating effects of 'Long Covid'. Across the country, thousands of community nurses have provided care every day to people living in their own homes. Each team of community nurses is headed up by a District Nurse Team Leader who co-ordinates and leads a team of staff, and provides assessment and care to people with a complex range of health conditions. The District Nurse Team Leader has advanced skills to enable them to assess patients, including undertaking physical examinations, diagnosing conditions and prescribing or referring the patient to other practitioners.

District Nursing Teams in many areas are attached to General Practices, while others work in geographical teams often covering several General Practices. Irrespective of the model, District Nursing Teams are integrated into a wider Primary Health Care Team, often working alongside social care services to provide care to people in the community.

Despite the important role District Nurses play in supporting patients at home and in communities, the number of staff employed in such services has been falling for several years. District Nursing in England has been in decline for more than eight years, with numbers falling by 48% since 2010 (Queen's Nursing Institute, 2019). Rates in Wales and Northern Ireland have also reduced over the same period. However, the decline in both Wales and Northern Ireland has been reversed with investment in district nursing education programmes.

The vast majority of District Nurse Team Leaders undergo additional education to prepare them for their role. The programmes approved by the Nursing and Midwifery Council (NMC) lead to a recordable qualification on the nursing register. These include, among other things, education in patient assessment, leadership, management, including the management of risk, prescribing, and assessing health needs in communities and populations.

Across the United Kingdom, the provision of District Nursing Services differs from area to area, largely because of issues of geography and population density. Many areas have services that operate 24 hours a day, while other areas have some degree of extended service into the evening. All services provide care every day of the year.

Given that District Nursing Team Leaders have advanced skills in patient assessment and management, and they know many of the people who are living at home with long-term conditions, they are well-placed to contribute to care outside of hospital when patients suffer an exacerbation of their health problem.

It is well documented that the NHS experiences pressures, even outside of a pandemic. Winter in particular can place unprecedented demands on hospital services and emergency departments. The number of emergency admissions has risen by over 42% since 2008 from 7,000 admissions a month to over 12,000 admissions per month (Health Foundation, 2018). The total cost of emergency admissions in England has increased by £5.5 billion during this period (Health Foundation, 2018). Many admissions involve individuals over 65 years of age with long-term conditions. It is not uncommon to see people with long-term conditions admitted several times a year (Steventon et al, 2018). A proportion of those admitted have problems amenable to management outside of hospital, referred to as Ambulatory Care Sensitive Conditions (ACSCs) (Sarmento, Muniz Rocha and Santana, 2020). Management outside of hospital is important to patients as well as to services, with hospital admission increasing frailty and mortality (Keeble et al, 2019).


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‘Despite the need for more care to be provided at home, services to prevent unplanned admission to hospital are not universal or are not provided at scale across health economies.’

Ambulatory Care Sensitive Conditions are health conditions for which timely and effective outpatient care can help to reduce the risks of hospitalisation by either preventing the onset of an illness or condition, controlling an acute episodic illness or condition, or managing a chronic disease (Sarmento et al, 2020). ACSCs can be divided into three broad categories: chronic conditions characterised by exacerbation, acute conditions and vaccine preventable conditions. ACSCs account for one in every six hospital admissions (The King’s Fund, 2012).

Despite the need for more care to be provided at home, services to prevent unplanned admission to hospital are not universal or are not provided at scale across health economies. Many services are small in scale and cover only specific diseases; given the size of the issue, they have little impact on overall numbers admitted to hospital (Monitor, 2015). Often NHS providers develop new services, which operate Monday to Friday 9am to 5pm and are therefore unable to prevent unnecessary admission outside that time frame.

Given the rising rates of admission and the need to support people at home, there has been a lack of investment and significant workforce issues for Community Health and Social Care Services (NHS Providers, 2018; Robertson et al, 2017). Yet policy promotes the notion of care closer to home and outside of hospital (NHSE, 2019). It remains unclear how much investment would be required to provide care, at scale, for more patients outside of hospital and what workforce development may be required. This report examines investment over the last two years and also reviews how ready the workforce is to take on a role in avoiding unplanned admission to hospital.

Methods

This service evaluation was conducted by the QNI’s International Community Nursing Observatory to provide workforce intelligence evidence with the aim of influencing future health policy. The work specifically sought to answer the following questions:

1. What is the current role of district nursing services in avoiding unnecessary admission to hospital for people suffering from ambulatory care sensitive conditions?
2. What investment has been made into community health services in the last two years and how has this led to the development of services to avoid unnecessary admission to hospital?
3. How confident and competent are District Nursing Team Leaders in managing patients suffering from common ambulatory care sensitive conditions?

The service evaluation utilized two approaches. First, requests were sent to NHS Commissioning Groups in England, Health Boards in Wales and Health and Social Care Trusts in Northern Ireland to ascertain current service requirements, investment and service developments. Requests were made under the Freedom of Information Act (2000) and asked respondents to answer the following questions:

NHS Clinical Commissioning Groups (CCGs) (England)

1. Does the CCG commission Community Health Services via a block contract?
2. Does the CCG’s Community Health Service contract specifically include the provision of care for ambulatory care sensitive conditions to prevent emergency admission to hospital?
3. Is the prevention of admission to hospital with one or more ambulatory care sensitive

condition a specific component of the current contract for district nursing services?
4. Other than an inflationary uplift, has the Community Health Services contract increased, decreased or remained the same during the 2019/20 and 2020/21 financial years?
5. Has the CCG commissioned services in the last two years (2019/20 and 2020/21) that are specifically designed to prevent admission to hospital for patients with ambulatory care sensitive conditions?
6. Were these services to develop:
    - New teams within the Community Health Services
    - Ambulatory care in the hospital setting
    - Existing Community Health Services and teams
    - Primary Care – General Practice Services or GP Federations
    - Other (briefly describe)

NHS Wales Health Boards (Wales)

1. Other than an inflationary uplift, has the Community Health Services contract or budget allocation increased, decreased or remained the same during the 2019/20 and 2020/21 financial years?
2. Does the Health Board's contract or agreement for Community Health Service specifically include the provision of care or services for ambulatory care sensitive conditions to prevent emergency admission to hospital?
3. Is the prevention of admission to hospital with one or more ambulatory care sensitive condition a specific component or target for the Board's district nursing services?
4. Has the Health Board developed services, in the last two financial years (2019/20 and 2020/21), which are designed to prevent admission to hospital for patients with ambulatory sensitive conditions?
5. Were these services to develop:
    - New teams within the Community Health Services
    - Ambulatory care in the hospital setting
    - Existing Community Health Services and teams
    - Primary Care – General Practice Services
    - Other (briefly describe)

NHS Health and Social Care Trusts (Northern Ireland)

1. Other than an inflationary uplift, has the Community Health Services contract or budget allocation increased, decreased or remained the same during the 2019/20 and 2020/21 financial years?
2. Does the Trust's contract or agreement for Community Health Service specifically include the provision of care or services for ambulatory sensitive conditions to prevent emergency admission to hospital?
3. Is the prevention of admission to hospital with one or more ambulatory sensitive condition a specific component or target for the Trust's district nursing services?
4. Has the Trust developed services, in the last two financial years (2019/20 and 2020/21), which are designed to prevent admission to hospital for patients with ambulatory sensitive conditions?
5. Were these services to develop:
    - New teams within the Community Health Services
    - Ambulatory care in the hospital setting
    - Existing Community Health Services and teams
    - Primary Care – General Practice Services
    - Other (briefly describe)

The second part of the service evaluation consisted of an online survey of District Nursing Team Leaders exploring the availability of equipment to conduct patient assessments and the practitioners' levels of confidence and competence to manage patients with two ambulatory care sensitive conditions. The online survey utilized Likert scales for the self-assessment of competence and confidence.

Confidence and competence are two components of professional capability. Capability has been described as 'the combination of skills, knowledge, values and self-esteem which enables individuals to manage change, be flexible and move beyond competency' (O'Connell et al, 2014; 2728). Competency alone has been deemed as only suitable where the practice setting is stable and when dealing with familiar problems (Phelps et al, 2005) as such assessing competence alone when faced with complex issues in a community setting would be inappropriate.

The two selected ambulatory care sensitive conditions were: a patient suffering an exacerbation of Chronic Obstructive Pulmonary Disease (COPD); and a patient suffering from cellulitis. These conditions were selected because they account for 21% of all emergency admissions and both have evidence-based guidelines for their treatment outside of hospital (The King's Fund, 2012).

Sample

The Freedom of Information requests were sent to 136 CCGs in England (in January 2021, prior to mergers in April), to six Health and Social Care Trusts in Northern Ireland and to seven Health Boards in Wales.

The survey was promoted via social media and QNI networks to District Nurse Team Leaders in England, Wales and Northern Ireland. The total potential population is around 4,000 Team Leaders but it was not practically possible to send the survey directly to all of these.

Results from Commissioners, Trusts and Health Boards

Responses to the Freedom of Information requests were received from:

129 NHS Clinical Commissioning Groups in England (94.8%)
6 NHS Wales Health Boards (85.7%)
4 Health and Social Care Trusts in Northern Ireland (66.6%)

In England the vast majority (n = 126, 97.6%) of NHS Commissioners commission Community Health Services (CHS) via a block contract as opposed to paying for specific activity. The system is different in Wales and Northern Ireland, as Health Boards and Health and Social Care Trusts are single organisations working to improve the health of the population as well as providing hospital and community services.

Across all organisations, the majority (60.4%) had specified that CHS should work to prevent unnecessary hospital admission, while 48.2% had specifically set out that District Nursing Teams should work to prevent hospital admission for ambulatory care sensitive conditions.

In relation to budgets for CHS, four organisations (0.02%) indicated that the block contract value had reduced in the preceding two years; 85 organisations (61.1%) indicated that the budget had stayed the same; and 40 organisations (28.7%) indicated that it had increased.

All organisations in Wales and Northern Ireland that responded had increased their expenditure on CHS above the standard inflationary uplift during the period.

Several NHS CCGs in England indicated that, due to the pandemic, NHS England Guidance issues had prevented any budget increase above the inflationary uplift. Several declined to provide answers to the question on this basis.

Finally, organisations were asked if they had developed or commissioned any new services designed to prevent unnecessary hospital admission for people with ambulatory sensitive conditions. 75 organisations (53.9%) reported that they had established a new service or funded existing CHS to provide admission avoidance services. Table 01 below details the types of services developed during this period (please note, several organisations developed more than one type of service).


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‘Confidence and competence are two components of professional capability. Capability is ‘the combination of skills, knowledge, values and self-esteem which enables individuals to manage change, be flexible and move beyond competency.’

Table 1: Establishing New Admission Avoidance Services

Team Type	Number
New specialist community team	32
Ambulatory care in the hospital	37
Investment in existing Community Health Service Teams	51
Primary Care	21
Other	4

Results from the Survey of District Nursing Team Leaders

The survey was open for a two-month period and promoted via QNI Networks and Social Media channels. 726 responses were received during the period, representing 18.1% of the total District Nursing Team Leaders in England, Wales and Northern Ireland.

Respondent Demographics

When asked ‘how would you describe your gender’ using an open text box, respondents reported:

Table 2: Respondent Demographics

	Number	Percent
Female	639	88%
Male	31	4.2%
Prefer not to say	57	7.8%

Figure 1 shows the age distribution of respondents. The distribution of ages reflects what is already known about the District Nursing workforce, in that it tends to be over 40 years of age and a number of practitioners are likely to reach retirement age in the next 5-10 years.

Figure 1: Age distribution of survey respondents

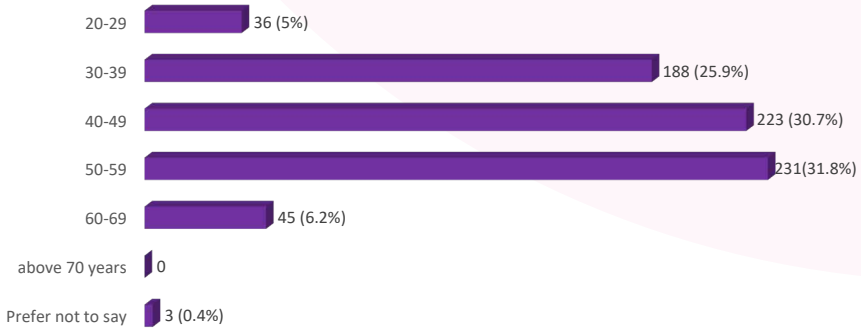
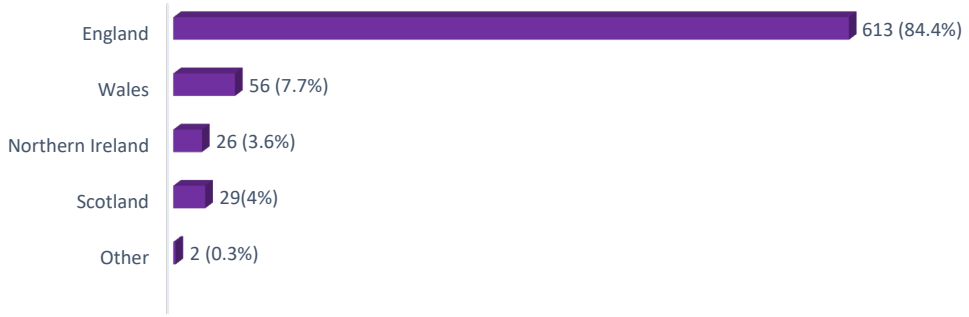


Figure 2 shows the distribution of responses by country. Please note, the survey was targeted to District Nurse Team Leaders in England, Wales and Northern Ireland but promotion via social media means that other responses were received.

Figure 2: Respondents by country of practice



Participants were asked to select the region that most accurately describes their area of primary employment. Table 2 shows the responses. The highest number of responses came from the North West, South East and Midlands regions of England.

Table 3: Regional, Trust and Health Board location of respondents

Region / Health Board or Trust	Number
East of England	64
London	65
Midlands	97
North East and Yorkshire	70
North West	146
South East	97
South West	68
Aneurin Bevan Health Board	9
Swansea Bay University Health Board	3
Cardiff & Vale University Health Board	13
Hywel Dda Health Board	1
Cwm Taf Morgannwg Health Board	7
Betsi Cadwaladr University Health Board	20
Powys Teaching Health Board	1
Belfast Health & Social Care Trust	10
Northern Health & Social Care Trust	4
South Eastern Health & Social Care Trust	10
Southern Health & Social Care Trust	5
Western Health & Social Care Trust	1
Other	35

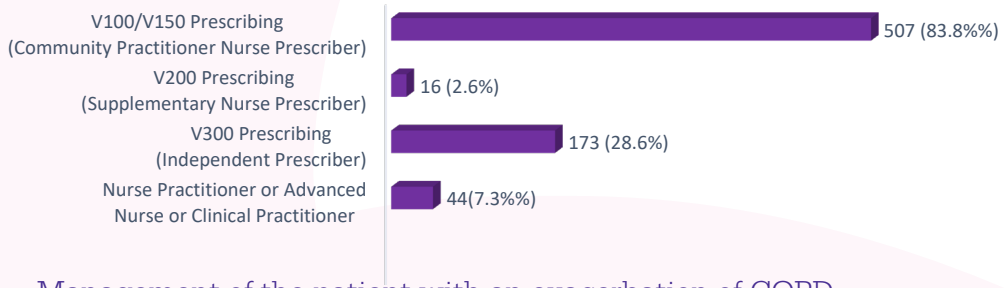
547 (75.3%) of respondents had a District Nursing Specialist Practitioner qualification. Of these, the decade in which the qualification was obtained is shown in table 03 below. The majority of respondents had undertaken an SPQ qualification in the last 20 years. This means they will have undertaken a programme that includes history taking, physical examination and prescribing practice (albeit in some cases just for V100 / V150 Community Practitioner Prescriber).

Table 4: The decade in which the respondents qualified as a Specialist Practitioner

Decade of SPQ	Number	Percent
1980s	14	2.5
1990s	37	6.7
2000s	102	18.6
2010s	289	52.8
2020s	105	19.1

Respondents were asked which additional relevant qualifications they had, from prescribing to Nurse Practitioner, Advanced Nurse or Clinical Practitioner qualifications. Figure 3 below shows the responses. Unsurprisingly, the majority had V100 / V150 Community Practitioner Prescriber but 28.6% of respondents had V300 Independent Prescribing.

Figure 3: Additional qualifications held by the respondents



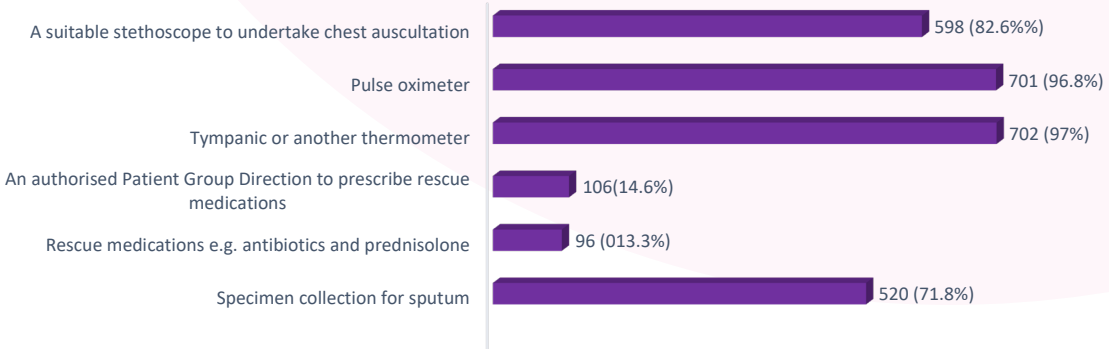
Management of the patient with an exacerbation of COPD

Respondents were asked to consider their ability to care for a patient experiencing an exacerbation of Chronic Obstructive Pulmonary Disease (COPD). They were first asked to indicate the availability of equipment, medicines and a care pathway to assist with patient assessment and management.

In response to the question 'do you have any of the following in your workplace?' the majority of respondents had access to pulse oximetry (96.8%) and a tympanic or other thermometer (97%). Slightly fewer had a suitable stethoscope to enable chest auscultation (82.6%).

The availability of an approved Patient Group Direction (14.6%) was very low (especially given the majority of respondents did not have an independent prescribing qualification), as was the availability of rescue medications like antibiotics and oral steroids (13.3%). This was despite the fact that 347 respondents (47.8%) reported that a care pathway for the home management of patients experiencing an exacerbation of COPD was available in their organisation or locality.

Figure 4: availability of equipment

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District Nurse

‘I seriously need to enrol for DN course. This will empower me to render excellent specialised care to my patients independently or with minimal support. The advance assessment training and V300 will empower me to critically assess patients.’

Respondents were asked about their own capability in terms of competence to perform a series of interventions. Respondents were asked to disregard the capacity within the team to provide the care, as we know from the ICNO report, District Nursing Today (2019), that teams are under huge pressure and frequently have to defer work and care because of the demands.

Table 4 shows the results for the question related to practitioner capability. While the majority (51%) were capable of taking a history from a patient, they were less able to conduct physical examination and chest auscultation without further supervision and support. Only 18% of respondents felt capable of differential diagnosis independently with others reporting capability with supervision and further training. Unsurprising, given the role of the respondents, 47.4% felt that they could assess and manage the risk associated with the patient independently.

Respondents could add free text comments at each stage of the survey. One practitioner who did not have a District Nursing Specialist Practitioner or prescribing qualifications commented,

‘I seriously need to enrol for DN course. This will empower me to render excellent specialised care to my patients independently or with minimal support. The advance assessment training and V300 will empower me to critically assess patients.’

Respondents reported that while they had developed these skills earlier in their career, often during the District Nursing SPQ, they had become deskilled as a result of not being asked to provide care for these patients.

‘I undertook the physical assessment and clinical reasoning module a number of years ago with my V300 but we are not called on to practice much.’

‘The skills I achieved during my training have not been used regularly enough to maintain confidence. Also not enough capacity in day to day visits to currently undertake full care of COPD patient, which is a shame as could reduce hospital admission.’

Several respondents highlighted the need for ongoing support to maintain skills and to develop confidence post-DN-SPQ qualification. One said,

‘I completed the holistic assessment module last year and the district nurses training me on this had forgotten many of the skills because they never use them. I feel DNs coming off the SPQ course are not confident at chest auscultation or differential history taking and therefore never use these skills. We need better supervision and opportunities to complete thorough assessments using these skills and gain confidence so we can then embed these skills into practice.’

Respondents were then asked to rate their levels of confidence about the same interventions using a Likert scale, from ‘very confident’ to ‘not at all confident’. The results are shown in Table 05. The confidence levels reflect a similar picture to self-reported competence. The majority of practitioners are confident to take a history (of which 36% reported they are very confident)

but are less confident to undertake physical examination (only 13.1% reporting they are very confident) and to complete a differential diagnosis (9.5% reporting they are very confident).

Some respondents reported the need for further training, particularly around diagnosis and assessment. One respondent said,

'At present, I have not had any diagnostic/assessment skills training. Would be willing to undertake extra training and it's vital for the DN service to move forward.'

The fact that multiple services to provide care (for specific conditions only) had been developed over several years resulted in District Nursing Team Leaders becoming deskilled.

'As a district nurse, we do not manage these patients. They are managed by another team of nurses specialised in this field.'

'We have community matrons that would support with these patients. At the moment, we do not have a service that could manage them at home but are looking at it.'

In addition, issues with demand on the service prevented staff from being able to develop their role in the way in which they had been prepared.

'Due to big caseload, do not get a chance to be a part of [these] assessments, even with training from my SPQ.'

Table 5: Respondents' self-reported capability to care for a person suffering from an exacerbation of COPD

How capable are you to:	Capable of independent practice without support	Capable of independent practice with further support & supervision	Capable of independent practice with further training & supervision	Not capable of independent practice without training
take a history from a patient?	370 (51%)	204 (28.1%)	97 (13.4%)	55 (7.6%)
undertake physical examination and chest auscultation?	184 (25.3%)	199 (27.4%)	89 (12.3%)	254 (35%)
make a differential diagnosis?	131 (18%)	226 (31.1%)	109 (15%)	260 (35.8%)
identify whether the patient is suitable for home management?	189 (26%)	204 (28.1%)	137 (18.9%)	196 (27%)
undertake vital observations including pulse oximetry?	610 (84%)	65 (9%)	30 (4.1%)	21 (2.9%)
assess the impact of co-morbidities on the presenting complaint?	297 (40.9%)	236 (32.5%)	121 (16.7%)	72 (9.9%)
assess and manage risk?	344 (47.4%)	212 (29.2%)	105 (14.5%)	65 (9%)

Table 6: Respondents' self-reported confidence to care for a person suffering from an exacerbation of COPD

How confident are you to	Very confident	Confident	Not very confident	Not at all confident
take a history from the patient?	261 (36%)	332 (45.7%)	103 (14.2%)	30 (4.1%)
undertake physical examination and chest auscultation?	95 (13.1%)	207 (28.5%)	237 (32.6%)	187 (25.8%)
make a differential diagnosis?	69 (9.5%)	205 (28.2%)	276 (38%)	176 (24.2%)
identify whether the patient is suitable for home management?	120 (16.5%)	251 (34.6%)	238 (32.8%)	117 (16.1%)
undertake vital observations including pulse oximetry?	507 (69.8%)	188 (25.9%)	22 (3%)	9 (1.2%)
assess the impact of co-morbidities on the presenting complaint?	190 (26.2%)	307 (42.3%)	174 (24%)	55 (7.6%)
assess and manage risk?	211 (29.1%)	323 (44.5%)	139 (19.1%)	53 (7.3%)

Management of the patient with cellulitis

Respondents were asked to consider their ability to care for a patient with cellulitis. Cellulitis is a common condition among adults and is a spreading bacterial infection of the dermis and sub-cutaneous tissues (CREST, 2005). Cellulitis is divided into classes depending on the clinical presentation and diagnostic parameters. Class 1 cellulitis is usually managed with oral antibiotic therapy, Class 2 requires intravenous antibiotics before switching to oral therapy. Class 3 and 4 require admission to hospital because of systemic illness and the risks of complication and sepsis. The questions relate to the management of Class 1 and 2 cases, which may be suitable for home management.

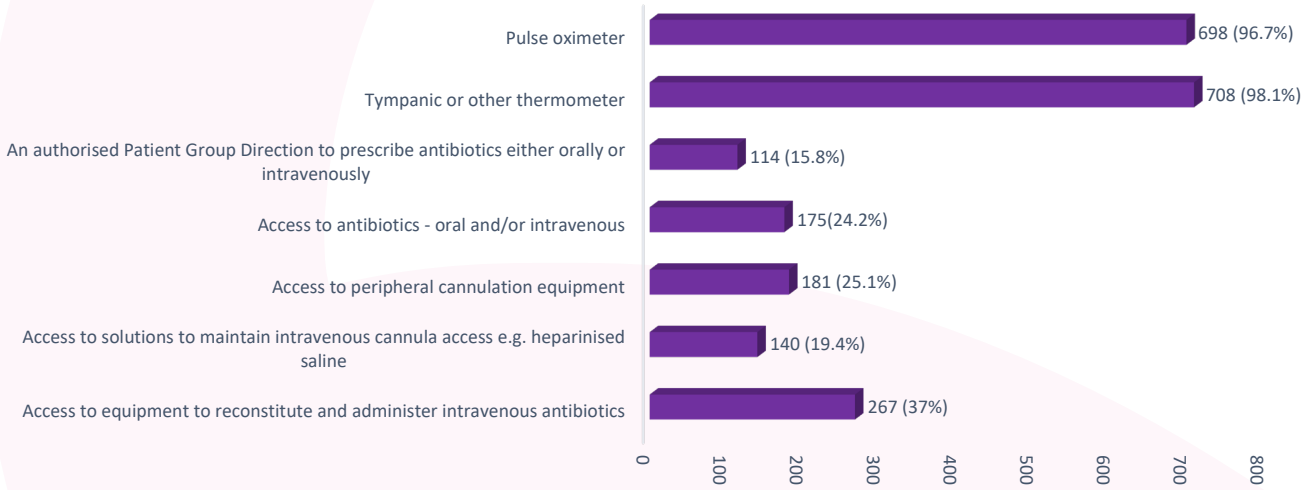
Respondents were first asked to indicate the availability of equipment, medicines and a care pathway to assist with patient assessment and management.

The majority of respondents reported that they had access to a pulse oximeter (96.7%) and tympanic or other thermometer (98.1%) to assist with patient assessment. The availability of an authorised Patient Group Direction (15.8%) and equipment for the cannulation of a patient and administration of intravenous antibiotics was less prevalent (see Figure 05 below).


Sarah

‘A pathway would be a great advancement in the treatment of cellulitis within the home environment, preventing hospitalisation. We would need more training but district nurses are capable of providing specialised care in the home setting.’

Figure 5: Availability of Equipment to assist with patient assessment and management



When asked whether there was a local pathway for the management of cellulitis, respondents were split roughly into thirds, with 35.1% stating yes, 35.7% stating no and 29.2% stating that they did not know whether a pathway existed.

Respondents were then asked about their own capability in terms of competence to perform a series of interventions. They were asked to disregard the capacity within the team to provide the care as we know from the ICNO report, District Nursing Today (2019), that teams are under huge pressure and that they frequently have to defer work and care because of the demands.

Table 6 shows the results for the question related to practitioner capability. Interestingly, a high number of practitioners reported competence in history taking (67.6%), physical examination (63.8%) and considering co-morbidities (52.2%). This is likely to be because of the active role played by District Nursing Team Leaders in the assessment of patients with skin problems and lower limb ulceration. Differential diagnosis has lower levels of competence (36%), as this also relates to determining the class of cellulitis. The latter is the key to deciding if care at home is appropriate and safe.

A reasonably high percentage reported competence with intravenous antibiotic administration (43.1%) but there was less competence with peripheral cannulation (14.6%) and knowing when to switch from intravenous to oral antibiotics (18.2%).

The free text comments provide greater insight into current practice, with several respondents reporting that they had learnt the skills of peripheral cannulation but the lack of opportunities to practice caused them to feel they need further training and supervision.

'I need to improve my knowledge around classifications of cellulitis and the conversions needed to switch from iv to oral and vice versa. I haven't cannulated for at least 10 years, so would need more training.'

'We used to follow a cellulitis pathway, but since the introduction of the hospital at home service we no longer cannulate or administer IV antibiotics. But I have done these tasks in the past and would be happy to again with some support.'

'Cannulation and antibiotic therapy has not been standard approach in my community settings, which is frustrating! Have acute experience including A&E prior to community so skills are there albeit rusty.'

The proliferation of community teams taking on roles that could easily be undertaken by an appropriately resourced District Nursing Team was concerning.

'IVs have been taken and put into a specialist team, and this has deskilled all the community nursing teams across the area. The team get frustrated because they know what to do but do not have the relevant skills and training to deliver it. Such a service would make it much easier and help keep people out of hospital.'

'Due to the development of a specialist team, our competencies have been reduced.'

'We have a home intravenous therapy team in our area.'

'We have a local cellulitis service, so when we see a patient with cellulitis they are referred to this service and they manage the cellulitis and treatment.'

Table 7: Respondents' self-reported capability to care for a person with cellulitis

How capable are you to:	Capable of independent practice without support	Capable of independent practice with further support & supervision	Capable of independent practice with further training & supervision	Not capable of independent practice without training
take a history from the patient?	491 (67.6%)	152 (20.9%)	58 (8%)	25 (3.4%)
undertake physical examination?	463 (63.8%)	172 (23.7%)	61 (8.4%)	30 (4.1%)
make a differential diagnosis to determine the class of cellulitis?	261 (36%)	268 (36.9%)	105 (14.5%)	92 (12.7%)
identify whether the patient is suitable for home management?	340 (46.8%)	233 (32.1%)	102 (14%)	51 (7%)
undertake vital observations including pulse oximetry?	619 (85.3%)	73 (10.1%)	25 (3.4%)	9 (1.2%)

assess the impact of co-morbidities on the presenting complaint?	379 (52.2%)	217 (29.9%)	95 (13.1%)	35 (4.8%)
assess and manage risk?	406 (55.9%)	206 (28.4%)	82 (11.3%)	32 (4.4%)
perform peripheral cannulation?	106 (14.6%)	130 (17.9%)	89 (12.3%)	401 (55.2%)
administer intravenous antibiotics?	313 (43.1%)	129 (17.8%)	74 (10.2%)	210 (28.9%)
know when to switch from intravenous to oral antibiotics?	132 (18.2%)	213 (29.3%)	146 (20.1%)	235 (32.4%)

The advent of multiple separate services is likely to reduce continuity of care. It is not difficult to imagine a patient with a leg ulcer who develops cellulitis then has one team to undertake the leg dressings and another team to administer antibiotics intravenously.

In addition, many respondents reported how their service was no longer commissioned to deliver intravenous antibiotics and care for peripheral lines such as Peripherally Inserted Central (PIC) lines. This was provided by hospital services, either requiring patients to travel or having outreach care teams, which further fragments care.

Respondents were asked to rate their levels of confidence about the same interventions using a Likert scale, from 'very confident' to 'not at all confident'. The results are shown in Table 07. The confidence levels reflect a similar picture to self-reported competence. History taking (56.3%), physical examination (49.2%), vital observations (76%) and assessing co-morbidities (38.4%) were the highest scoring items in terms of confidence. Peripheral cannulation (10.6%) and knowing when to switch to oral antibiotics (16.8%) were the lowers scoring items.

Respondents acknowledged the value of a pathway of care for these patients but identified the need for further training.

'A pathway would be a great advancement in the treatment of cellulitis within the home environment, preventing hospitalisation. We would need more training but district nurses are capable of providing specialised care in the home setting.'

Discussion

The rising rates of emergency and unplanned admission to hospital over the last 10 years requires new radical solutions. To date, the development of community-based services designed to prevent unnecessary admission to hospital has been piecemeal, small in scale and often focused on specific conditions. Many of these services operate Monday to Friday 9am-5pm and are therefore unable to have a significant impact on emergency admissions. Despite decades of policy espousing the need for care closer to home and improved community services, these services remain devoid of investment and many are in decline.

District Nursing in England has been in decline for more than eight years, with the number of District Nurses falling by 48% since 2010 (Queen's Nursing Institute, 2019). There is some welcome evidence that this is starting to be reversed with increasing numbers entering District Nursing Specialist Practitioner programmes (Queen's Nursing Institute, 2021). However, with a

Despite the emphasis on district nursing teams preventing unnecessary admission to hospital, many teams lack the basic tools to manage some of the most common ambulatory care sensitive conditions.

workforce made up of individuals reaching retirement age, it is unclear whether the increased numbers will facilitate growth or a steady state.

In Wales and Northern Ireland, the picture is very different. In Wales, an earlier decline in numbers has been reversed from 588.5 in 2018 to 641.1 in 2020 (Welsh Government, 2020). Despite this modest increase, the Royal College of Nursing has called for more investment in District Nursing SPQ courses (RCN, 2020) to develop the workforce to the previous level in 2009. In Northern Ireland, the Workforce Plan set to commission double the number of places on District Nursing SPQ programmes in the period up to 2025, although this would still result in a steady state, given projected retirements (Northern Ireland Audit Office, 2020).

Table 8: Respondents' self-reported confidence to care for a person with cellulitis

How capable are you to:	Very Confident	Confident	Not very confident	Not at all confident
take a history from the patient?	409 (56.3%)	260 (35.8%)	36 (5%)	21 (2.9%)
undertake physical examination?	357 (49.2%)	279 (38.4%)	64 (8.8%)	26 (3.6%)
make a differential diagnosis to determine the class of cellulitis?	207 (28.5%)	219 (30.2%)	218 (30%)	82 (11.3%)
identify whether the patient is suitable for home management?	243 (33.5%)	292 (40.2%)	143 (19.7%)	48 (6.6%)
undertake vital observations including pulse oximetry?	552 (76%)	160 (22%)	7 (1%)	7 (1%)
assess the impact of co-morbidities on the presenting complaint?	279 (38.4%)	296 (40.8%)	117 (16.1%)	34 (4.7%)
assess and manage risk?	304 (41.9%)	305 (42%)	85 (11.7%)	32 (4.4%)

perform peripheral cannulation?	77 (10.6%)	108 (14.9%)	155 (21.3%)	386 (53.2%)
administer intravenous antibiotics?	254 (35%)	165 (22.7%)	108 (14.9%)	199 (27.4%)
know when to switch from intravenous to oral antibiotics?	122 (16.8%)	162 (22.3%)	232 (32%)	210 (28.9%)

This study shows that 60.4% (n =78) of NHS Commissioners in England have set out in contracts the role of community health services in preventing unnecessary hospital admissions. More specifically, 48.2% (n = 67) have expectations that district nursing teams will work to manage ambulatory sensitive conditions at home to avoid unplanned admission.

Despite the emphasis on district nursing teams preventing unnecessary admission to hospital, many teams lack the basic tools to manage some of the most common ambulatory care sensitive conditions. Only 13.3% of teams had access to rescue medications such as antibiotics and steroids, and just 14.6% reported having a Patient Group Direction to facilitate the management of a patient experiencing an exacerbation of COPD. While a proportion of teams (28.6%, n = 173) have an Independent Prescriber qualification, a number of teams would need access to this and associated diagnostic equipment in order to safely and effectively manage an exacerbation.

District Nursing Team Leaders reported that the District Nursing Specialist Practitioner qualification prepared them to assess, examine, diagnose and care for such patients. However, many had minimal opportunity to consolidate and maintain their skills in practice following the course.

At a time when health policy is driving an integration agenda, in practice, services are becoming more fragmented. The qualitative comments from our survey detail a plethora of specialist teams providing care for single conditions. From a housebound patient's perspective, this means their chronic disease management is undertaken by a District Nurse, but if they have an exacerbation, a specialist team takes over the care for a short time.

Of greater concern is that the role of district nursing teams has been eroded, with specialist teams delivering intravenous antibiotics and caring for patients with central lines. Again, this results in fragmented care. A patient receiving care for their leg ulcer and associated cellulitis may be visited by a District Nurse for the wound care and by another team providing his or her intravenous antibiotics. The creation of such single task services may be simpler than training and developing a large number of practitioners but the impact on the continuity of patient care is significant.

The survey results suggest that it would be possible, with some investment, to develop the capacity of existing services to prevent unnecessary admission to hospital. This would enable a 365-day service and, in many areas, a service that works late into the evening if not 24 hours per day. It is a disappointing reflection of the National Health Service that we have failed to adequately use the workforce we have developed to its full potential. Our district nursing teams have expert knowledge and the ability to manage complex care at home for individuals who might otherwise need admission to hospital.

At the time of writing, the Nursing and Midwifery Council are consulting on their changes to Post-Registration Standards. While the existing Community Specialist Practitioner Qualification annotations are being retained, the NMC has removed any requirement to have field specific standards of proficiency for the preparation of District Nurses. The proposed high level framework will, in the opinion of the QNI, RCN and specialist groups in the field, lead to unwarranted variation in the skills, knowledge and competence of District Nursing Team Leaders as well as

those leading Community Children's Nursing, Community Mental Health Nursing, Community Learning Disability Nursing and General Practice Nursing. These changes raise significant patient safety concerns, given the drive by NHS Commissioners to use existing community services to avoid unnecessary admission, and come at a time when the NHS is starting to consider services at scale.

Limitations

Given the wide ranging nature of capability this study is limited because it assesses only confidence and perceived competence. The study recognises that without additional investment it is unlikely that the district nursing service would have the capacity to take on, at scale, admission avoidance activity.

This study used self-reports of confidence and competence from District Nursing Team Leaders. Previous studies examining prescribing practice amongst medical students has shown poor correlation between self-reported confidence and competence and performance when assessed (Brinkman et al, 2015). While the self-reported nature of this study may be a limiting factor it is important to remember that assessment would add an addition burden on practitioners which could affect performance.

Conclusion & Recommendations

This service evaluation has demonstrated that there is an increasing expectation that community health services and district nursing will contribute to avoiding unnecessary admission to hospital. The survey of District Nursing Team Leaders reveals that the DN Specialist Practitioner Qualification prepares staff to assess, diagnose and manage exacerbations of long-term conditions. However, the majority of practitioners have little opportunity to consolidate their skills and knowledge after completing the course, as opportunities to prevent hospital admission are often not afforded to this group of staff. Rather, District Nursing Team Leaders talk about the myriad single condition, and in some cases single task, services that have been developed by NHS providers. This complex tangle of services is confusing for patients and professionals alike, and can only serve to increasingly fragment care and the patient's experience.

In England, we are pinning our hopes on NHS England's Community Nursing Plan, currently in development, to ensure the continuation of an integrated service for District Nursing. In Wales, the Welsh Government's Community Nursing Strategy has made progress towards developing the District Nursing Service alongside other community specialisms. Future plans should focus on the added value the service can have on preventing unnecessary admission. Also, Northern Ireland have made considerable progress with implementing their plan for District Nursing, strengthening the patient experience, developing 24 hour care and promoting integration of services. https://www.health-ni.gov.uk/publications/district-nursing-framework-2018-2026

This study shows there is an opportunity to use an already prepared workforce to manage a range of ambulatory sensitive conditions. In order to use this untapped resource, commissioners need to be clear about the expectation to avoid unnecessary emergency admission to hospital and invest in developing a single service that can provide care 24 hours per day. NHS England's Ageing Well programme offers an opportunity for service transformation but there are concerns that despite recognition of the need for more care at home and in the community, the programme will yet again add another layer of complexity and could fragment the service even more. We would urge the Ageing Well NHSE/I team to consider integration of the programme with existing community health services to provide wraparound care 365 days of the year.

To ensure that we continue to develop practitioners with these skills, District Nursing and other Specialist Practitioner Qualifications must include specific specialist standards for each field of community nursing practice. Without a clear articulation of the knowledge and skills needed to care for individuals with acute and chronic illness, we will see the workforce depleted of these skills at a time when they are becoming increasingly necessary.

This study shows there is an opportunity to use an already prepared workforce to manage a range of ambulatory sensitive conditions.

Glossary

Ambulatory Care Sensitive Condition (ACSC): is a medical condition which is suitable for management outside of a full admission to hospital. Such conditions may include individuals with an exacerbation of a chronic illness, some acute conditions and vaccine preventable health problems such as pneumonia.

Block contract: is a payment made to a provider to deliver a specific, usually broadly defined, service. The contract is agreed for a specified period, usually annually, and payments are made in advance of care delivery. Contracts may be for the provision of a service and may take no account of the increased patient demand, increased costs and other unexpected pressures which can occur during the year.

Cellulitis: is a common condition among adults and is a spreading bacterial infection of the dermis and sub-cutaneous tissues

Chest auscultation: Chest auscultation involves using a stethoscope to listen to a patient's respiratory system and interpreting the lungs sounds heard.

Chronic Obstructive Pulmonary Disease (COPD): Chronic obstructive pulmonary disease, or COPD, refers to a group of diseases that cause airflow blockage and breathing-related problems. It includes emphysema and chronic bronchitis.

Co-morbidity: the simultaneous presence of two or more diseases or medical conditions in a patient.

Differential Diagnosis: the process of differentiating between two or more conditions which share similar signs or symptoms through history taking, physical examination, diagnostics and reasoning.

District Nurse Team Leader: is a district nurse in a senior clinical management / leadership position managing a team of community nursing staff. Many District Nurse Team Leaders hold a specialist practitioner qualification. Day-to-day they are responsible for case management, care co-ordination as well as providing team leadership and management.

Frailty: is theoretically defined as a clinically recognizable state of increased vulnerability resulting from aging-associated decline in reserve and function across multiple physiologic systems such that the ability to cope with every day or acute stressors is comprised (Xue, 2011).

Health and Social Care Trusts (Northern Ireland): Trusts which are responsible for integrated health and social care services across Northern Ireland.

Health Boards (NHS Wales): NHS Wales has been organised into administrative units known as Local Health Boards since 2003. Following a reorganisation in 2009, there are currently seven local health boards in Wales. Health Boards are responsible for the planning and delivery of health services for the population.

Health Economy: a term used to describe the providers and commissioners of healthcare from across a range of organisations including Local Authorities, NHS organisations and Primary Care Services. The wider health economy often leads joint planning and the transformation of services to prevent changes resulting in pressures and problems elsewhere in the geographical area.

Long-term condition: a condition or disease which requires management or treatment over a prolonged period. Conditions range of physical to mental health conditions and these often cannot be cured but can be managed to enable individuals to maximise their independence.

NHS Clinical Commissioning Groups: CCGs are groups of general practices (GPs) which come together in each area to commission the best services for their patients and population. CCG) commission most of the hospital and community NHS services in the local areas for which they are responsible.

Patient Group Directions (PGDs): provide a legal framework that allows some registered health professionals to supply and/or administer specified medicines to individuals who meet certain inclusion criteria and who do not have contra-indications or specific exclusion criteria.

Pulse Oximetry: Pulse oximetry is a non-invasive method for monitoring a person's oxygen saturation. Peripheral oxygen saturation readings are typically within 2% accuracy of arterial oxygen saturation from arterial blood gas analysis.

V100: Community practitioner nurse prescriber qualification is a prescribing qualification integrated into Community Specialist Practitioner qualifications (SPQ) or a Specialist Community Public Health Nursing (SCPHN) programme. Individuals can prescribe from the nurse prescribers formulary.

V150: Community practitioner nurse prescriber qualification is a prescribing qualification for community practitioners undertaken outside of a SPQ or SCPHN programme. Individuals can prescribe from the nurse prescribers formulary.

V200: Nurse independent prescriber qualification: this is a prescribing qualification previously offered to practitioners to undertake supplementary prescribing or prescribing from an extended formulary.

V300: Nurse independent / supplementary prescriber qualification: this is an independent prescribing qualification allow practitioners to prescribe from the full formulary within their scope of practice and competence.

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