

Health Education North West

i5 Health

# Non-Medical Prescribing (NMP) An Economic Evaluation

December 2015





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# **1. Executive Summary**

Prescribing of medicines has traditionally been a doctor dominated activity within the English National Health Service (NHS) [1]. However, since 1994, UK government policy has focused on expanding the prescribing remit to include nurses, pharmacists, podiatrists, radiographers (supplementary), optometrists and physiotherapists [2]. The prescribing right might soon also be given to radiographers (independent), paramedics and dieticians. Such practice is known as Non-Medical Prescribing or NMP in England [1], [3]. There is considerable evidence that NMP not only has a very strong safety record but provides significant advantages to patients and the NHS as a whole. [4]

Despite the evidence for the above and the fact that the legal boundaries are being regularly extended, the adoption of NMP within the NHS is still at a relatively slow pace. One of the reasons put forward is that little evidence exists on the actual economic impact of NMP. NHS Health Education North West asked i5 Health to undertake data research and analysis to evaluate that impact. The North West of England has a longstanding history in the use of nurses, pharmacists and other professionals who are not doctors or dentists to prescribe and manage medicines for the benefit of patients and organisations [5]. The qualitative and quantitative impacts on patient outcomes are tested through the use of an annual audit in the North West of NMP practitioners (Clinicians Audit). Based on the latest Clinicians Audit, i5 Health has calculated that each of the 1,566 participants contributed an average added value of nearly £1,500 during the month of the audit i.e. together a total of £2.7m for that month and, in all probability, over £32.8m during 12 months. Applying the results to England as a whole, i5 Health's Big Data analytical capabilities show a value of circa £777m in a twelve month period [6], [7].

i5 Health also applied its algorithms to quantifying the economic impact of Primary Care NMP on Secondary Care for 16 Long Term Conditions (LTC). An initial finding was that hospital attendances are significantly lower for such conditions where patients are registered with GP practices that use NMP practitioners than for those with no NMP practitioners present. i5 Health was then able to establish the level of hospital attendances and admissions linked to GP practices by LTC. The conclusion is that a minimal presence of NMP in the top quartile of GP practices without NMP would reduce attendances and admissions representing annual values of over £270m across England.

Finally, i5 Health, using its Commissioning Opportunity (COP) algorithms, established that in introducing NMP as an initiative into environments like Care Homes, OOH practice and Palliative Care, the prospective value for CCGs can range up to £1m – depending on the size and location in England.

(NB The references that appear in the text of this report are, in most cases, active citations; to access them on your computer, hover your cursor over the relevant citation number and click. A full description and list of the references appear in the Reference section before the appendices)



# 2. Purpose and Outline of Report

Non-Medical Prescribing (NMP) is the practice in the United Kingdom whereby nurses, pharmacists, optometrists, physiotherapists, podiatrists, radiographers (supplementary) and community nurse practitioners are legally permitted to prescribe medication [8]. There are now proposals that would enable four additional groups of registered allied health professions (AHPs) – radiographers (independent), paramedics, dieticians and orthoptists – to prescribe or supply and administer medicines, giving patients even more responsive access to treatment in one location [30].

Studies show NMP to have many benefits [9], some of which are listed below:

- NMP is safe and clinically appropriate.
- NMP has been found to **deliver similar level of care** as provided by GPs and generate a **higher satisfaction** rating from patients.
- Patient acceptability of NMP is high.
- NMP is viewed positively by other health care professionals.
- NMP is becoming a well-integrated and established means of managing conditions and providing access to medicines.

There appear to be relatively few documented disadvantages of NMP [9], [12]. Amongst these are concerns relating to safety and to cost – both of which appear to be unsubstantiated.

Given the combination of the financial pressures on the NHS and the number of documented advantages of NMP, it should have followed logically that decision makers in the NHS would be firm supporters of widespread NMP adoption. Facts however do not support this [11], [13]. On a geographic basis alone, NMP penetration in England shows large variances. As can be seen from the heat map in (Appendix 1), parts of the South East of England and some eastern counties have a limited use for NMP compared to the North West of the country.

Despite a number of case studies on NMP that strongly support its positive claims [13],[14],[15],[16], there has been a growing view amongst observers that one of the factors holding back its development has been a lack of hard data to place in front of decision formers and makers. An article in the Nurse Prescriber [16] concludes that available literature on NMP is too scarce and unreliable to make an impact within health services. Therefore more quantitative and qualitative research is needed to provide a greater evidence base [13],[14],[15],[16]. NHS Health Education North West asked i5 Health to undertake such data research and analysis – particularly in respect of the Clinicians Audit. The resulting study has ascertained that the supporting data as evidence is there, is accessible and, addressed with the appropriate algorithms, is most fruitful.



## The report below is set out as follows:

- Describes the relevance of the report to different stakeholders
- Outlines the overall methodology used

## **Numbers of NMP Practitioners**

- Investigates the numbers of professionals that have qualified at all English institutions
- Identifies the data sources for NMP numbers of those currently practising
- Provides the results of questioning NHS trusts about their NMP practitioner numbers
- Sets out the numbers for NMP Nurses, Pharmacists and Allied Health Professionals

## The Voices of NMP Practitioners and Practice Management

- Quotes from interviews and questionnaire responses

## Analysis

- Analysis of NW England NMP Clinicians Audit
- Economic effect from Clinicians Audit
- Economic effect of NMP on Long Term Conditions
- Economic effect of NMP assessed by i5 Health COP algorithms

# 3. Messages for Stakeholders

## **3.1.** For Policy Makers

We believe that the findings of this report, combined with those that have been carried out over the past twenty years of NMP practice and evidenced in the Clinicians Audit, should confirm that NMP makes a significant contribution to the NHS under the broad headings of improved patient care and return on investment.

## **Patient Care**

High quality healthcare associated with strong clinical governance is one of the top priorities of successive British governments and is the very reason for the existence of the Department of Health and NHS England. Where a practice such as NMP is so clearly a benefit in support of that priority, it more than merits serious consideration in the development of Healthcare policy. It is encouraging that the NMP qualification is being considered for a wider range of health professionals – a factor that might help take the growth rate of NMP beyond the current level of 7% pa [31].

#### **Return on Investment**

The financial challenges faced by the NHS are mounting continuously. Over £22 billion savings need to be made during the next five years as demand unceasingly advances upwards. Policy makers at government, Department of Health and NHS England levels should be particularly interested in the economies NMP practitioners can contribute to both the Primary and Secondary Care sectors. Those economies, nationally, can reach millions of



pounds in value for relatively modest investments in NMP training, continuous education and clinical governance.

## **3.2.** For Clinical Commissioning Groups

Clinical Commissioning Groups (CCGs) are the now the budget holders of the NHS and should be carrying out their decision making locally bearing in mind the same patient care imperatives and 'return on investment' that should drive policy makers. Actions they take or encourage involving NMP can have extensive effects in both Primary and Secondary Care settings and, with the greater combination of the Health budgets and Social Care budgets, penetrate more deeply into the community. It is hoped that the information contained in this report might be taken into consideration in prioritising NMP at a higher level and used for strategic direction. This report has used the i5 Health commissioning opportunity tool that identify gaps in care provision that NMP practitioners can fill.

## **3.3.** For Healthcare Providers

Providers in both the Primary, Secondary and Community Care sectors are particularly challenged by the continuing tightening of financial support at a time of greater demand. "Having to do more with less" has never been, in the history of NHS hospitals and general practices, a more appropriate description of the situation today. The evidence shows that strategic use of NMP practitioners in LTC management in both sectors can be an important response to that requirement. This study illustrates what can be achieved by the involvement of NMP practitioners in both Primary and Secondary Care. In the former, for example, GPs can allocate better valuable time, ensure speedier treatment for their patients and offer a number of additional slots. The Primary Care involvement also means that A&E attendances, non-elective admissions and readmissions can be reduced and, even once patients are admitted, they can benefit from faster and, arguably, safer care and discharge than might otherwise be the case.

## 3.4. For Healthcare Practitioners

We believe elements of this study will further encourage nurses, pharmacists and allied health professionals to seek the NMP qualification. One of the questions such professionals might ask themselves is "What difference does it really make?". They might take comfort from, amongst other things, the prospect of improved care they could provide and the enhanced career opportunities that could be presented.



# 4. Methodology

We have used a three-route approach to this study.



## 4.1. Route 1: The work of others

A structured survey of existing literature was undertaken to extract facts and meaningful knowledge pertaining to NMP in the UK. Keywords such as 'non-medical prescribing', 'non-medical\*' and 'supplementary prescribing' and variations were used to search for articles. In addition to providing valuable insight on historical and current NMP impacts, the review laid the foundations for a deeper analysis of the Clinicians Audit in North West England [17], [18].

There have been excellent studies done by, amongst others, the University of Southampton [32]. The journal Nurse Prescribing not only contains instructive material on a variety of pathways that NMP practitioners will encounter but also assessments of the effect of NMP intervention and what still holds back its wider acceptance in England [33].

Very useful work has already been undertaken to capture the experiences of NMP practitioners in a number of different fields. A notable example of this is 'Prescribing for Success – Expansion or Evolution' – the product of a project team comprising Sam Sherrington, Paula Smith, Craig Noonan, Robert Hallworth and Dianne Hogg [20].



# 4.2. Route 2: Personal and group interviews

Qualitative research was performed by interviewing a range of NMP practitioners and health managers (including practice managers) in various health settings and NMP focus groups [7]. We also asked a range of NMP practitioners to respond to a structured questionnaire. For all these purposes, we used questions from an extensive list appropriate to the interviewees (Appendix 2A). The findings from this process of discussions and questioning were used to guide the data analytics. This 'on the ground' part of the study has owed much to assistance from NMP leaders in different parts of the country (see Acknowledgements).

We have contacted 160 hospital trusts – an exercise that elicited information on the number of NMP practitioners there are in Secondary Care.

## 4.3. Route 3: Data analysis

Informed by the findings from routes 1 and 2, and drawing on i5 Health's Big Data databases, we quantitatively investigated the effects of NMP in Primary and Secondary Care settings. Three specific and unique processes were used in those investigations:

- 1. The assessment of findings from the NW England Clinicians Audit held in 2014.
- 2. The identification of efficiencies in 16 Long Term Conditions pathways through introducing one or more NMP practitioners into GP practices.
- 3. The application of the i5 Commissioning Opportunity (COP) algorithms to data for health care economies and identifying the benefits possible from specific initiatives including NMP.

# 5. Numbers of NMP Practitioners

Prior to the analysis, i5 Health looked into multiple sets of data to derive useable conclusions on the numbers and whereabouts of NMP qualified professionals actually practising. In this section, we set out a list of data sources and then conclusions drawn from those specific data sources that help identify national numbers, namely:

- Qualifications issued by English educational establishments
- Nursing & Midwifery Council (NMC)
- NHS Prescription Service (eNurse)
- NHS Business Services Authority (NHSBSA)
- NHS Trusts
- General Pharmaceutical Council
- Health and Care Professionals Council (HCPC)

Establishing a definitive figure is not an exact science. There is probably a need for a consistent method, agreed between the various organisations and agencies, of calculating the numbers of active NMP practitioners. We report the different conclusions - with the purpose of establishing a conservative set of numbers for the analysis.



# 5.1. NMP Practitioners Data Sources

The principal data sources for NMP practitioners and their specific uses are set out in the chart below.

Source	Document	Figures obtained	Geographic range	Primary/ Secondary	Numbers	Last update	Contains duplicates	Used for
Health and Social Care Information Centre (HSCIC)	Records all nurse types currently in the workforce	Number of all nurse types in the workforce ie qualified nursing, midwifery & health visiting staff	England	Both	358,089 (out of a total of 645,249 professionally qualified clinical staff)	April 2015	No	Calculating the change of the NHS workforce numbers
Health and Social Care Information Centre (HSCIC)	Hospital Episode Statistics(HES Data)	NMP impact analysis and COP potential opportunity	England	Secondary	Vary per analysis	April 2014 – March 2015	N/A	NMP impact analysis and COP potential opportunity calculation
Nursing & Midwifery Council (NMC)	NMP qualifications issued by universities	Number of qualifications issued to nurses and midwives	England	N/A	58,497	Feb 2015	N/A	Calculating the number of NMP qualified nurses and midwives
Nursing & Midwifery Council (NMC)	Register of nurses and midwives	Number of those registered as NMP	England	Both	53,572	March 2015	Yes – some may have multiple qualifications	Establishing the number of NMP nurses and midwives
NHS Prescription Services	eNurse	Numbers, places of work and identifying codes of Nurse Prescribers	England	Primary	41,745 gross entries (30,928 de- duplicated)	March 2015	Yes – some may be registered within multiple sites	Establishing increase or decrease of Nurse Prescribers
NHS Business Services Authority (NHSBSA)	Responses to FOI requests	Number of NMP nurses in Primary Care	England	Primary	51,034 (including those not attached to a cost centre)	Dec 2014	No	Collecting the latest figures on NMP practitioners
NHS Trusts	FOI responses on NMP numbers from 116 trusts	Number of NMP practitioners In acute settings	England	Both	9,674 (estimate)	Feb 2015	N/A	Calculating NMP practitioner numbers
General Pharmaceutical Council	Register of pharmacists	Number of NMP qualified pharmacists	England,	Both	3,845	2015	N/A	Calculating pharmacist prescriber numbers
Health and Care Professions Council (HCPC)	Register of allied professionals that are regulated	Numbers of professionals with NMP qualifications	UK	Both	587	2014	N/A	Calculating NMP practitioner numbers
NHS NW Clinicians Audit	Report	Number of participants and their input	NW England	Both	1,566	2014	N/A	Establishing effects of NMP locally and nationally
Office of National Statistics (ONS)	Population estimates	General population statistics	England	N/A	53.01m	June 2014	N/A	Extrapolating figures from local to national

1



# 5.2. Education and Qualifications

In the twenty years or more since some limited rights of prescribing were first given to nurses, a growing number of universities have established courses in Non-Medical Prescribing and 69,983 NMP qualifications have been awarded to nurses in the UK as of January 2015. Of these, nearly 58,497 have been by English universities (*Source: Nursing & Midwifery Council – February 2015*). The figures do not necessarily take account of credits for NMP modules that are included in other courses at the universities.

The key point one might draw is that, particularly because some individuals represented in the numbers have either retired, ceased to use their NMP qualification in any meaningful way (e.g. medicines management) or have died, the chances that the number 58,497 is truly reflective of the current headcount of practitioners is remote. In addition, there is the likelihood that, in some instances, a student could obtain more than one qualification such as the V150 and V200. Finally, the ranks of NMP practitioners in England will have been reinforced by professionals trained in other parts of the UK.

At the very least, as a starting point, one would not realistically expect the number of practitioners, inclusive of those who are not nurses, to be higher than 60,000.

## 5.3. Nursing & Midwifery Council (NMC) NMP Practitioners

The number of registered nurse and midwife CPNPs, NIPs and NI/S practitioners in England provided by the Nursing & Midwifery Council (NMC) is 53,572 as of 30th March 2015. However, due principally to the registration process, this number cannot be interpreted as reflecting the number of individuals currently practising as NMP professionals.

## 5.4. eNurse and Estimates of NMP Practitioners

eNurse is a database managed by NHS Prescriptions Service (a department of NHS Business Service Authority - NHSBSA). It contains the name and address information and identifying codes for Nurse Prescribers working in Primary Care only. The identifying codes provided in the file are the Nurse's PIN numbers allocated by the Royal College of Nursing when a Nurse qualifies to prescribe.

The NHS Prescription Service collates the Nurse Prescribing data for their own internal use in tracking the prescribing activity of nurses. Information on the nurses and their place of work is provided to the NHS Prescription Service by contacts within the Employer Organisations. This updating is carried out to the NHS Prescription Service's systems on an ongoing basis, with the NHS Prescription Service supplying updated files to ODS for publication once a quarter [34].

An individual nurse can be registered in more than one setting (e.g. two to three GP surgeries). We have therefore de-duplicated the eNurse list (currently showing 41,745 registrations) to arrive at a figure of 30,928 individual NMP practitioners connected with cost centres in Primary Care.



# 5.5. NMP Practitioners According to NHSBSA

Another source of information on the numbers of nurse practitioners within the Primary Care sector of the NHS in England is the NHS Business Services Authority (NHSBSA) itself which collects data from NMC and NHSBSA's own NHS Prescription Services. Based on these sources, the NHSBSA has put forward the figure of 51,000 NMP practitioners across England.

After discussion with the BSA, they have accepted our calculations that de-duplicate the eNurse numbers (see above Section 5.4) and suggest that the difference between their gross NMP number and eNurse, approximately 21,000, "...is the number of NMPs who have been registered to prescribe in Primary Care but are currently not attached to a practice/cost centre".

The gross figures should also be considered in the light of their being skewed by having elements of accumulation. Those elements of accumulation arise because it has not been mandatory to report that an individual has actually left service (and names have to be left on the register for 5 years). In other words, there are likely to be individuals represented in the numbers that have retired, ceased to use their NMP qualification in any meaningful way (e.g. medicines management) or have died.

## 5.6. NMP Practitioners registered with NHS Trusts

An additional route through to the NMP practitioner numbers has been by way of questioning a selection of individual trusts through Freedom of Information requests (FOI). We asked 160 hospital trusts in England how many NMP practitioners they employed. Of these, 116 trusts responded - i.e. 72.5% of those questioned (see trust responses chart on page 16). The total of NMP practitioners, of all categories, and including those in the community as well as in the acute setting, was reported by these trusts as 9,484. The quality of the responses was varied. Some trusts will have included primary care numbers in their counts – without identifying them as such. We have therefore made estimated adjustments accordingly and extrapolated a workable estimate for all acute settings in England (i.e. exclusive of Community practitioners employed by the trusts) of 9,674.

# in teat

## **Responses from NHS Trusts**



**Chapter:** Numbers of NMP Practitioners

4



# 5.7. Pharmacists

Pharmacist prescribers are becoming significant contributors to non-medical prescribing services. The number of registered has increased year on year over the last 5 years. At the beginning of 2015, according to the General Pharmaceutical Council, there were 3,845 NMP pharmacists in England [25].

# 5.8. Allied Health Care Professionals

It is now possible for health professionals other than nurses and pharmacists to qualify as NMP prescribers. These are: podiatrists, physiotherapists and radiographers that are regulated by the Health and Care Professionals Council (HCPC). As of October 2014, there were 203 podiatrists, 322 physiotherapists and 46 radiographers (HCPC). According to the General Optical Council, as of April 2012 there were 118 Optometrist Independent Prescribers [36].

There are currently proposals to enable other groups of registered allied health professions to prescribe - namely paramedics and dieticians - and to extend the rights of radiographers.

## 5.9. NMP Practitioners Total

Should one accept the maximum figures noted in each of the sections above, one arrives at a total of circa 58,000 NMP practitioners throughout England. That is, in our view, an overstated number. As already noted, there is uncertainty attached to the figures ascribed to practitioners in both the Primary and Secondary sectors – mostly relating to nurses and issues of accumulation and of double counting. We have, therefore, erred on the side of caution in choosing a figure that represents a conservative but credible total to work with. This figure, covering all NMP practitioner types in all settings, is 44,629.

Setting	NMP Practitioners	Distribution
Acute	9,674	21.7%
GP Practice	7,184	16.1%
Community	25,394	56.9%
Mental Health	1,347	3.0%
Social Care	449	1.0%
Hospice Care	380	0.9%
Voluntary Sector	201	0.5%
Total	44,629	100%

# 6. Voices of the Practitioners

## 6.1. Introduction

This report focusses primarily on the collection and analysis of data extracted from a number of sources. It has been informed, however, by conversations with NMP practitioners - those who, on a daily basis, bring their wide range of knowledge and skills to bear on improving patient care as well as a questionnaire to NW England NMP practitioners. We want to acknowledge those people behind the statistics by relaying their opinions in their own words and through their questionnaire responses. We have also added to these views those of a number of GP practice managers interviewed.

## 6.2. Conversations

# Advanced Nurse Practitioner / A&E Acute Oncology

His involvement across the cancer range prevents unsafe delays in prescribing. Such delays can amount to hours - even a day in some cases - and have a big impact on Length of Stay (LOS).

Ambulatory care is sometimes essential and, without it, the bigger the dangers of ailments like DVT. The situation can be exacerbated over weekends - resulting in unnecessary three day LOS. A prime example of the difference an acute oncology NMP can make is in respect of Cellulitis. The NMP can support same day discharge. There are probably 2 cases per day that could have become inpatient, with 4-7 LOS days, without NMP intervention.

## **Advanced Nurse Practitioner**

"I can now alleviate a patient's acute or palliative pain, prescribe intravenous fluids for a dehydrated patient; intervene swiftly with antibiotic therapy for a patient with sepsis, improve the glycaemia control of a patient with diabetes by adjusting their insulin..... The list goes on".

## **A&E Consultant Nurse**

A key advantage of NMP in the A&E setting is the better management of risk. The NMP is able to ensure a complete patient episode. Without an NMP, there would be frequent interruption by non-prescribers of doctors; in fact A&E is one massive interruption area because of the presence of so many juniors / F1s.

In a typical 8 hour shift, there might be 15 prescriptions required. Without an NMP presence, getting a doctor to prescribe might take 10 minutes for each prescription (resulting in frequent queues). The time lost is 150 minutes for a nurse seeking the prescription and equally 150 minutes of more doctors' time.

An added problem with having to turn to a doctor is that the doctor will not necessarily have seen the patient - thus increasing the quality risk. Patient satisfaction is high because the patient does not want to be treated by a group but by an individual.



# Nurse Consultant at an FT Mental Health Unit

"Patients are in the unit for shorter periods of time and the use of inappropriate medication has been significantly reduced. 1 use my prescribing to reduce inappropriate medication, introduce or evaluate the effectiveness of antipsychotic medication manage delirium and and minor ailments".

In her view, NMP facilitated:

- Increased carer, patient satisfaction
- Speedy response from referrals
- Greater wellbeing for patients
- Shorter in-patient stay
- Reduced falls
- Timely prescriptions
- Reduction in the use of antipsychotics in dementia care
- Alternatives to medication and good behaviour management
- Person centred care

#### **Lead Pharmacist**

"The Traumatic Stress Service deals with PTSD. Where the role of the prescriber is to review current medication and adjust or initiate treatment. The role has proved extremely successful and is appreciated by the patients as well as by the therapists".

#### **Depot Medication- OP Clinic**

NMP has freed up a doctor for 3 days a week to spend time on more critical medical challenges. Added to this were better outcomes in relationships with patients and compliance with medication. It was clear, in the context of the Lithium treatment (for Secondary Care patients), that patients risked falling through the gaps. Lithium was not dealt with well at the GP level.

She calculated that there were 80 patients being treated once every three months at the Lithium Clinic. At the Depot, there were 120 patients receiving treatment between 2 weeks and 6 months intervals; they were suffering from bipolar disorder and/or depression.

# Nurse Clinician for Breast Medical Oncology

"The most significant benefits can be seen in the chemotherapy clinics. For patients on adjuvant chemotherapy, I prescribe all chemotherapy and supportive medication throughout the course, modifying patients' medication as required, thus enhancing symptom management".

# Senior Sister - Continuing Care -Dementia

The usual 10 minute GP consultation wasn't enough for MH patients. They benefited from 45 minutes with an NMP and the consequence, from a cost perspective, was large given the savings on ambulance and A&E - due to the immediate access to medication.

#### **Anaemia Co-Ordinator**

"The role of the Non - Medical Prescriber has saved hours of time and benefited hundreds of patients receiving erythropoietin therapy and intravenous iron through our nurse led clinics. This has helped provide the patients with a seamless service".



#### **Palliative Care Nurse**

The key advantage from the service he gave was constant monitoring ("A GP tended to prescribe and then not follow up"). In fact, GPs were not keen on dealing with Palliative patients and were more reactive than proactive. Each only saw 6 patients per annum and was just not skilled in prescribing for their specific needs. For him, the savings were in respect of less GP visits and appointment times and avoidance of admissions.

There were 3 NMPs in a care team of 6. Of 360 patients, 20-30 were very poorly and the key recipients of NMP service.

#### **Diabetes Specialist Nurse**

"When you consider that the Diabetes Specialist nurse may see up to 10 patients each session in which 6 may need a prescription change, 5 minutes waiting for the doctor adds up to 30 minutes each day, 2.5 hours per week, 10 hours per month and 120 hours each year!".

#### Matron – Rehab Centre

There was a significant problem of capacity - which put pressure on the nurses. An optimum service would be one that was NMP led and a case study of the pathway should be pursued. However, commissioners were not putting in enough investment - for services, access and beds. Properly staffed, there could be a far greater turnover thus relieving pressure on hospitals.

#### **District Nurse, Matron - LTC**

District Nurses are heavily reliant on their NMP skill sets - particularly in the following areas:

Palliative

- Urinary Tract Infection (UTI)
- Chest Infection
- LTC (notably in deprived areas)

Their mantra is 'Assess, Diagnose and Treat'.

#### **Consultant Cardiology Nurse**

"Prescribing has enhanced the comprehensive care I am able to offer to patients who attend our clinics. More time is spent with patients discussing their disease process and giving them advice about all aspects of their treatment, of which medication plays a substantial part concordance, is improved. Being able to complete episodes of care independently enables doctors on our team to devote more time to critical patients".

# FT Director and Mental Health NMP specialist

In her experience, NMP has become an essential ingredient in the proper care of MH patients in particular. Its importance is reinforced by the fact that there was a risk of premature death for MH patients because of high levels of medication. In fact, MH patients die 25 years earlier than the average person. The situation in the field of MH is made even more precarious because a demographic time bomb existed: Dementia. Add the lengthening of life and Dementia to Downs Syndrome sufferers and the consequences for care are greatly increased.

She believes that the Step Up capability provided by the local Rehab centre could be better than the acute could provide – with patients likely to be more independent more quickly. One of the key issues faced by the Rehab centre, though, is that there is far greater pressure on



them now to provide Respite / Recovery care. The centre finds it difficult to refuse the patients concerned.

A data study is underway on avoidance of Metabolic Syndrome (a constellation of abnormalities) in the Rehab context (lesser effect in acute). NMP is integral to this area - as part of bringing a multidisciplinary approach to Health and Wellbeing. This was particularly significant for the treatment of sectioned patients as their entering hospital, with all the security involved, could cost up to £4,000 a time. On a more general point, she believes resistance to antibiotics is growing. It is often the NMP who could best carry out differential diagnosis to ensure the right medication (or no medication) is applied. They are important in the viral v bacterial decision.

She believes that NMP trained professionals like her have somewhat replaced the doctors in some Primary Care settings and are better able to bring about a holistic approach.

## 6.3. NMP North West Questionnaire

One of the ways i5 Health has elicited information is through the use of a questionnaire (<u>Appendix 2B</u>) which was completed by 87 NMP practitioners in NW England. The questionnaire was designed to give a picture of the experiences of NMP nurses, from training to implementation and on to future expectations.

One major theme to come out of the responses was the importance of support for NMPs within departments and via NMP leads. Due to the delivery method of the questionnaire there may be a bias towards areas that have good support in place and this may impact the responses received.

#### Training

The majority of prescribing nurses felt that training was generally sufficient. A need for training within specific specialities (generally whichever area they were working in) was raised by many NMPs although this is often dependent on the background of the nurse - for example how long they have been working in their specialty. The need for effective mentoring was also raised; there was a mix between nurses that had found the mentoring they received to be helpful in starting to prescribe and those that felt that they would have felt more confident if there had been more mentoring available. Connected with the need for mentoring is the need for additional training in the specialty of the prescriber. This is often linked to the time the prescriber has spent working within their specialty before training to prescribe.

"I feel that the training was sufficient to prescribe safely, however I feel that confidence comes with experience and cannot be developed through education alone." Community Children's Nurse



## **On-going training and career development**

When asked about on-going training and support the response was generally positive, with over half of prescribers reporting that training and support was sufficient (43 of 84). However, there was a significant minority that mentioned a need for more support or that had experienced difficulty in accessing training and support.

"Support is given if needed and I know where to access this but regular training sessions would be beneficial." Nurse Prescriber working in minor ailments/eczema

## Support for NMP prescribing

Prescribers were asked about the levels of support they received from colleagues. The number of prescribers that had experienced unsupportive colleagues was low (n=4). However the number reporting that colleagues had a lack of understanding of the range and limitations of NMP was far higher (n=20). There is potentially a need to educate those working with NMPs to ensure that the most effective use of NMP is achieved.



## Are colleagues supportive

## Perceived Impact of NMP on care

The perceived impact of NMP generally related to improved timeliness of care and better patient experiences. The ability to complete care episodes without spending time obtaining sign off from doctors allows better time management for both patients and staff. Prescribing is also allowing nurses to prevent further appointments and hospital admissions - which impacts not only on patient experience but also on the achievement of departmental targets.

As shown in the diagrams below, the top three areas of impact of NMP on patients are faster access to medication, better patient care and not having to access doctors and the top three areas of impact of service provision are faster medication, better patient experiences and improved services.

# **Perceived Impact of NMP on Patients**



# Perceived Impact of NMP on Service Provision





"Being able to prescribe had a major impact on my role as a nurse practitioner. It made our system safer and saved time for patients and clinicians." GP Nurse Practitioner

#### What prevents effective use of NMP

Almost three quarters of prescribers felt that there were issues impacting on their ability to prescribe. The most common constraints on prescribing were local guidelines/formularies, organisational issues and colleagues; conversely, some practitioners found the constraints of the Formulary actually empowering. The need to ensure that local guidelines are updated regularly to reflect the work being carried out by NMPs was raised. Another issue raised in many responses was the need to ensure that the infrastructure is in place for NMPs to work effectively - for example, the ability to access prescription pads or use local computer systems. For newly qualified prescribers, confidence was also a significant factor in the ability to prescribe effectively.

#### "Our local Primary Care IT system – no easy way to input nurse prescriptions." District Nurse

In response to separate questions, prescribers reported on the effect of local protocols on prescribing. The responses to local protocols were largely positive, with most prescribers that gave a specific response on protocols feeling that they provided a framework within which to work allowing consistency and improving confidence.

"Protocols provide a supportive framework." Community Children's Nurse



## The Effects of Local Protocols

## **Benefits of NMP for Nurses**

NMPs were asked to report the impact of training on both their job satisfaction and career. Where NMP was being used effectively, the effect on job satisfaction was almost universally positive. The effect on career was slightly less positive although in some cases this was because the nurse was in a role where NMP qualifications were expected.



"I feel that completion of NMP has improved my career prospects and I would encourage anyone to complete the training." Nurse Prescriber working in leg ulcer and general wound/skin clinic



#### Potential to increase use of NMP

Prescribers were asked whether they felt there was potential to expand the use of NMP in their area. Just over half of those that responded (yes=41, no=38) felt that services could be expanded. It can be seen that a significant number (38) of those that responded felt that there was little or no potential for the expansion of NMP.

*"Walk in centres are making good use of NMPs as they are central to the service"* Minor injuries nurse

## 6.4. Practice Managers

The financial calculations in this section are based on the National PbR tariff.

## **Rural Practice**

There are 2 Nurse Independent Prescribers out of 5 nurses in a practice of 10 partner and 2 salaried doctors. The nurse practitioners are a hugely effective part of the clinical staff. They lead on three areas – Warfarin, Sexual Health and Minor Illnesses - and are important in a fourth, Chronic Disease treatment.

#### Anti-coagulant clinic

Approx. 200 patients on the drug, each seen once every three weeks – 3,500 appointments pa that would otherwise be GP slots - at 12 min and £35 per slot, a saving of 690 GP hours, £121k cost pa. Without NMP, all patients would go the Secondary Care route.

#### **Sexual Health**

NMP nurse provide leadership in contraception prescribing - that would otherwise require a GP slot.

#### **Minor Illnesses**

The NMP nurses address 50 slots a week approximately 2,600 pa - a saving of 520 GP hours / £91k pa - 12 min and £35 per



slot. They also reduced A&E attendances and non-elective admissions.

#### **Chronic Disease**

The NMP nurses play a key role in treatment of Diabetes, Asthma and COPD – by prescribing themselves rather than having to rely on GP availability (more details in section 10 below).

#### QOF

NMP practitioners help the practice achieve the higher targets for most chronic disease targets, especially sexual health, Diabetes, Asthma, and COPD. It is estimated that around 20% of the practice's QOF points are achieved by the NMP practitioner, which for an average practice equates to £50,000.

#### **Patient Satisfaction**

That satisfaction comes from easier access, frequent medications reviews, better drug adherence, and more slots for GPs to deal with more complex patients. From a practice view it offers better multidisciplinary working, better motivated staff, and more choice for patients and nurses offering patients more time.

#### **Rural Practice**

There are 2 Nurse Independent Prescribers out of 5 nurses in an 8 partner practice.

#### **GP Slots**

Both NMP nurses concentrate on Chronic Disease management. Each NMP works 30 hours per week (30h pw = 1,560 pa), 49 patient slots per week (41% patient time, 15 min per slot) of which 32 pw result in avoidance of GP slots (333 hours, £55k GP time and cost saved).

#### Secondary Care Avoidance

As to A&E and NEL admissions, they are very low indeed. Probably 25% of the weekly patients would otherwise end up in hospital.

#### **Additional Advantages**

The NMPs are central to expert patient programmes and to the internal education / cross feeding sessions.

## **Semi-Rural Practice**

The practice is a two hander. They have had an NMP for two years. She has just left and been replaced by a non-prescribing nurse.

#### **GP Slots**

The NMP focussed her skills in two roles:

Minor Illness surgery every Tuesday morning. She would be dealing with, on average, 14 patients. Reasonable to say that this saved an equivalent number of GP slots (14 times 12mins therefore 2.8 hrs per week - 145 hrs, £25k per year).

Diabetes session on Thursday morning. On average, 13 patients with 135 hrs pa of GP

time, £24k saved. If clinic is run by nonprescriber a need to get prescription signed by GP reduces impact.

#### **Prescribing Budget**

She was not aware of any difference in prescribing budget since NMP nurse also take patients off medication or reduces dosage.

#### Cost

The NMP nurse costs the practice £5-£6 per hour more than a non-prescriber.

#### **Urban Practice**

The practice has 2 full time GPs and 1 Nurse Independent Prescriber - but is over three sites. The nurse prescriber has been in place for eight months.

#### **GP Slots**

The Nurse Independent Prescriber fundamentally ensures clinical cover is given each day throughout the practice. She currently carries out two half day Minor Illness sessions per week covering, on average, 30 patients. Without her, those thirty patients would have to:

1. Be seen by an already heavily stretched GP or

2. Go to A&E or Urgent Care Centre Example of a day's list for the NMP nurse:

- Eye problem alternative is UC
- Viral illness walk-in at A&E
- Stomach A&E/UCC
- Cough/cold GP
- Urine GP

#### **Cost Advantage**

Both GP and NMP nurse slots are of 12 min length. However hourly rate of a GP is twice as high as the NMP rate (£44 per hour vs £22 per hour) [20]. The cost per hour difference in using an NMP compared with a non-prescriber is £10. Overall she saves 312 GP hours with a £55k cost.

Another key advantage of the NMP nurse is that she can ensure there is no call on expensive locums (£69 per hour) if a GP is away from the practice.

#### **Prescribing Budget**

It is difficult to calculate the effect on the prescribing budget because the practice is growing so fast that, each year the past 5 years (currently 3,917 patients), the practice has gone over budget.

#### QOF

There must be some effect on QOF because the NMP nurse supports certain targets like Respiratory and Diabetes.

#### **Patient Satisfaction**

Patient satisfaction is good. The elderly feel assured once they learn an NMP nurse can prescribe; younger patients raise no concerns.

Overall, He considered the NMP nurse as essential - particularly as there were not enough GPs coming through to meet the demand. Many doctors were attracted by the role of locum - which pays a lot more.

## **Semi Urban Practice**

**The practice has 2 Nurse Independent Prescribers and 4 GPs.** She spoke in praise of the benefits of using Nurse Practitioners - particularly in the context of saving GP slots.

#### **Rural Practice**

The interviewee is a Nurse Independent Prescriber - the only one in a 2 GP practice.

#### **GP Slots**

She sees about 60 patients a week, on average. Absent her presence, almost all of the 60 would need to see a GP. She believes that 8 of the 60, on average, are prevented from going to Secondary Care. Impact is 624 GP hours at a £109k cost.

#### QOF

She is at the heart of achieving high QOF scores.

#### **Patient Satisfaction**

As to qualitative aspects: the patients have ease of access and the advantages of a one-stop-shop.

## **Semi Urban Practice**

The practice employs 2 Nurse Independent Prescribers (with a third seeking qualification), 7 GPs and 2 registrars.

#### **GP Slots**

The NMP nurses deal with about 150 patients per week. Without their involvement, all those patients would have to see the GPs. A significant proportion would, given the impossibility of getting early treatment, go to A&E

(particularly those from the minor illnesses category). Impact is 1,560 GP hours saved pa at a £273k cost.

#### QOF

They are intimately involved in QOF targets as they cover the range of major diseases (Diabetes, COPD, Asthma....).

**Chapter:** Voices of the Practitioners

#### **Urban Practice**

The practice employs 2 Nurse Independent Prescribers in a 4 GP practice.

#### **GP Slots**

Both NMP nurses deal with around 36 patients per day, five days a week. Their focus is entirely Minor Illnesses. The GPs would have to pick up the slots in the absence of the NMP nurses. Conditions

such as Diabetes etc. are dealt with by the non-prescribing Practice Nurse.

#### **Secondary Care**

It was felt that A&E and MIU activity was reduced by NMP.

#### **Urban Practice**

The practice employs 11 Nurse Independent Practitioners (including 1 Mental Health nurse) in a practice of 19 GPs (12 salaried and 7 partners - though some part time).

The nurse prescribers see about 80 patients per day. In the absence of those nurses, most of the burden would fall on the GPs. Without them, a significant number of patients would head to A&E. The impact of the nurse prescribers is the saving of 4,680 GP hours at a cost of £409k per year.

He believes the nurse prescribers account for about 10% of QOF points which was £428k in 2013/14 - accounting for £43k contribution to practice income. [23]

# 7. Analysis of 2014 NW Clinicians Audit

The annual North West Non-medical Prescribing Clinicians' Audit, which takes place over one month, aims to demonstrate how NMP impacts on the delivery of patient care i.e.

- Improved outcomes
- Effective use of a highly skilled workforce
- Waste reduction
- Improvement in quality of patient care
- Cost efficiencies





# 7.1. Overview of audit records

The 2014 Clinicians Audit analysis showed 21,964 records relating to appointments entered by 1,566 unique prescribers. However, the count of unique prescribers by setting is 1,830 due to the fact that 264 participants practice in more than one setting thus causing double counting. Out of 21,964 audit records, 465 (2%) did not indicate the profession of the NMP prescriber.

The greatest number of appointments for one prescriber was 238, whilst 279 prescribers had only one appointment recorded. The average number of appointments was 14; the median number of appointments was 6. Compared to the last audits in 2012, an increase of +2,606 appointments was recorded whilst there was a slight drop in the number of prescribers (-77).

## 7.2. Clinicians Audit Participants

A sense check has been performed that compared the number of participants against the expected number of NMP Practitioners working in the region and estimated the NMP workloads. It provided evidence that the 1,566 prescribers are representative.



# 7.3. Number of Participants by Organisation

The audit was performed by 42 organisations - which is a drop of 12 from 54 organisations that participated in the 2012 audit. The reason may be due in large part to the organisational changes that took place in the NHS between the audits.



The diagram below shows the number of participants by organisation which ranges from 230 for Bridgewater to one from Wirral CCG.



## 7.4. Care Setting of Appointments

In the 2014 Clinicians Audit, care settings were captured and categorised as shown in the table below. It can be seen that the majority of appointments are in Secondary, community and Primary Care and that the top three settings account for 97% of appointments.

The number of prescriptions issued in each setting varies between 2.3 appointments per prescription in the community, which is less prescribing compared to 1.75 appointments per prescriptions in mental health. Overall, 1.97 appointments per prescription are recorded in the audit which can mean that one prescription is issued in every second appointment. The one caveat to note is that respondents might not always include appointments that do not involve medication.

Appointments	Prescriptions
8,830	4,857 (1.82)
6,740	2,925 (2.30)
5,799	3,101 (1.87)
281	130 (2.16)
140	80 (1.75)
134	60 (2.23)
15	4
10	6
5	0
8	2
2	1
21,964	11,166 (1.97)
	Appointments   8,830   6,740   6,740   2,81   2,81   140   134   15   10   5,799   134   15   16   17   18   19   10   10   10   10   10   10   10   10   10   10   11   11   11   11   11   11   11   11   11   11   11   11   11   12   13   14   15   15   16   17   18   19   11   11   12

## Table: Care Settings from the 2014 Clinicians Audit



For reference, a 2010 survey of settings for Nurse Independent Prescribers (NIP) and Pharmacist Independent Prescribers (PIP) found 35% of NIPs and 55% of PIPs in Primary Care, 24% and 36% in acute trusts, 10% and 3% in home visits and 4% and 1% in Walk-in centres [16].

# 7.5. Prescribing Type

The NMP practitioners that participated in the Clinicians Audit were predominately independent prescribers. Comparison between the two latest audits shows a slight increase in Independent/Supplementary prescribing and a reduction in Community Practitioner Nurse Prescriber (CPNP) prescribing. This is in line with the workforce statistics [26]. [24] The table below shows the numbers of respondents by prescriber type.

Prescriber Type	2012	2	2014		
	Prescribers	%	Prescribers	%	
Independent/Supplementary	1,199	73%	1,161	74%	
Community Practitioner Nurse Prescriber	378	23%	342	22%	
Supplementary	66	4%	63	4%	
Total	1,643	100%	1,566	100%	

## **Prescriber Type by Prescriptions**

As shown in the table below, of the 21,964 appointments that were recorded in the 2014 audit, approximately every second appointments resulted in a prescription – giving a total of 11,166 prescriptions. By analysing the prescriber type, activity levels of prescribing can be obtained. The highest number is for independent prescribers which in 2014 have performed 88% of all prescriptions issued by NMP practitioners who responded.

Prescriber Type	2012		2014		
	Prescriptions	%	Prescriptions	%	
Independent	9,096	86%	9,869	88%	
Community Practitioner Nurse Prescriber	1,134	11%	953	9%	
Supplementary	298	3%	344	3%	
Total	10,528	100%	11,166	100%	

# 7.6. Discipline by Care Setting

The table below shows the number of NMP practitioners in the audit seeing patients in each care setting by discipline. Due to NMP professionals practising in multiple settings, the row totals do not match. It can be noted that the nursing discipline is the strongest in all settings, health visitors are predominantly in the community setting and pharmacists in Secondary Care.

Discipline	All (unique)	GP	Secondary	Community
Nursing	1,259	262	497	628
Health Visitor / School Nurse	173	10	6	166
Pharmacy	53	17	21	15
Podiatry	27	0	19	21
Physiotherapy	24	3	18	13
Radiography/Therapy	3	0	3	0
Midwifery	6	1	5	1
Unknown	21			
Total	1,566	293	569	844

# 7.7. Areas of Care by Care Setting

The tables below compare 2012 and 2014 audit numbers of prescribers by area of practice (LTC, Acute Care, etc.). The audits allow participants to select more than one care setting - hence the number of practitioners (2,597 in 2014) exceeds the number of unique prescribers in the audit (1,566).

# Care Areas of NMPs by setting – 2012

	All*	Home/GP	Secondary	Community
Long Term Conditions	827	315	204	308
Acute Care	736	63	433	240
Planned Care	295	114	64	117
Children's Services	250	73	38	139
Staying Healthy	227	56	20	151
End of Life	238	146	51	41
Mental Health	131	25	28	78
Maternity and new-borns	75	16	28	31
Total	2,779	808	866	1,105

\*NMP Practitioners may be registered and work in more than one setting

# Care Areas of NMPs by setting – 2014

	All*	Home/GP	Secondary	Community
Long Term Conditions	792	228	227	454
Acute Care	639	148	354	203
Planned Care	264	87	57	144
Children's Services	260	48	36	197
Staying Healthy	251	153	24	104
End of Life	213	23	58	161
Mental Health	118	46	13	43
Maternity and new-borns	60	15	14	39
Total	2,597	748	783	1,345

\*NMP Practitioners may be registered and work in more than one setting

Year on year comparison shows a 46% increase in prescribers supporting LTC in the Community, from 308 to 454. Also, prescribers supporting patients at Home/GP for acute care have more than doubled from 63 to 148. A reduction in the number of responding prescribers working in secondary care (-10%) and at Home/GP (-8%) was offset by an increase in those respondees working in the Community (+21%) - giving an overall increase of 2.9%.

## 7.8. Consultation Purpose by Care Setting

Prescribers that participated in the Clinicians Audit were able to state the purpose of the consultation using multiple reasons. Those reasons include Review/follow up, Specialist assessment, Consultation, Non-medical prescribing (prescription required), Medication review and No Reason given.

The graph overleaf shows each reason as a percentage of all responses for each setting (GP, Secondary or Community Care). It can be noted that in the majority of all appointments a medicines review/follow up was performed (29%). Prescribers in a GP setting were predominantly performing consultations (33%); in Secondary Care, prescribers were predominantly performing specialist assessments (28%) whereas prescribers in a community setting were predominantly performing medicines review and follow up (35%).



**Consultation Purpose by Clinical Setting** 

# 7.9. Year of Qualification

The year of qualification for NMP that participants entered into the Clinicians Audit is shown below by setting (GP, Secondary and community). It can be seen that for all settings the number of clinicians qualifying shows an upward trend with the exception of GP. The increase is likely to be due to changes in regulations and training becoming more accessible. The drop for 2013 may be caused by the low contribution to the audit from CCGs - perhaps due to the change from PCTs to CCGs which caused many NMPs to re - register in the community.





# 7.10. Source of Referrals

During the Clinicians Audit participants were asked who referred the patient and providing 5 options to choose from (Existing Patient, Self-referral, Doctor, Other NHS Organisation, and Other Non NHS). The charts below compare the sources of referral distribution for the two audits. It can be noted that in 2014 appointments with patients that were known to the prescriber has increased significantly by 54%.



The graph below shows the sources of referrals for NMP consultations by setting in the 2014 audit.



While Existing Patient was by far the greatest source of referrals across settings, it can be seen that Doctor Referrals are significantly more common in the Secondary setting than in the other settings.

#### 7.11. Faster Access to Care and Medicine

Within the Clinicians Audit, NMPs were asked to select whether the appointment was an emergency appointment. Below is a comparison between the two audits that shows an increase in unscheduled care without issuing a prescription.

	2012			2014			Comparison 2012/14		
	Appointments	Prescription required	Prescription given	Appointments	Prescription required	Prescription given	Appointments	Prescription required	Prescription given
Scheduled	77%	49%	94%	68%	48%	94%	9%	1%	0%
Unscheduled	23%	71%	98%	32%	66%	96%	-9%	5%	2%

The reason why a higher percentage of unscheduled appointments is present in 2012 compared to the 2014 audit might be that emergency appointments were separated from unscheduled appointments.

#### 7.12. **Completing Care Episodes**

Where NMPs can complete care episodes, they can prevent additional appointments for other clinicians, allowing patients to receive care closer to home and improve patient experience.

NMP professionals in the 2014 audit reported that using independent prescribing skills allowed patients to receive a complete care episode in 95% of appointments.

#### 7.13. **Prevention of appointments**

Clinicians participating in the audit were asked what they believe the savings implications were of the appointment. They were given 15 options in 2012 and 14 in 2014 as shown in the table below. It can be noted that Prevention of GP surgery appointment has increased significantly from 26% in 2012 to 34% in 2014. Also Prevention of follow up by consultant has increased from 15% to 18%.

# **Results of Consultations**

of the appointment. They were given 15 options in 2012 and 14 in 2014 as shown in the tablethe below. It can be noted that Prevention of GP surgery appointment has increased significantlyfrom 26% in 2012 to 34% in 2014. Also Prevention of follow up by consultant has increasedfrom 15% to 18%.Results of ConsultationsThe surgery appointment has increased							
	2012	%	2014	%			
Prevention of GP surgery appointment	4,938	26%	7,390	34%			
Prevention of follow up by consultant (or team)	2,828	15%	4,002	18% 者			
Prevention of care by another healthcare professional	2,148	11%					
Prevention of follow up to another healthcare professional	2,078	11%	2,491	11% 🛓			
Prevention of GP home visit	1,402	7%	1,984	9%			
Prevention of increased dependency in healthcare system	1,063	5%		0			



Prevention on new referral to another healthcare professional	1,007	5%	1,226	6%
Prevention of increased bed days- reducing length of stay	912	5%	1,267	6%
Prevention of new referral to consultant	788	4%	760	3%
Prevention of increased steps on care pathway	676	3%		
Prevention of A&E attendance	518	3%	769	4%
Prevention of Admission (Hospital or Hospice)	429	2%	1,031	5%
Prevention of re-admission	363	2%	616	3%
Prevention of walk-in-centre visit	145	1%	257	1%
Prevention of absence at work/school	63	0%		
Prevention of visit to Minor Injuries Centre			57	0%
Prevention of visit to Urgent Care Centre			73	0%
Prevention of visit to Primary Emergency Centre			39	0%

## 7.14. Medication Reviews

Medication reviews play a major part in the work load of NMPs that took part in the Clinicians Audit. They can reduce drug wastage by improving drug adherence by patients and by reducing the amount of drugs prescribed.

The latest Clinicians Audit recorded that medication reviews were carried out at 75% of appointments. This was a slight drop from the figure of 79% for the 2012 audit. The table below shows how often medication reviews were performed during the 2014 audit. It can be noted that most medication reviews were performed in Secondary Care.

	All	GP	Secondary	Community
Review	75%	67%	85%	68%
No review	25%	33%	15%	32%

Information on the medications being taken by the patient was available at 98% of medication reviews, which was the same in the 2012 audit. The table below shows the impact the medication review had. The majority related to appropriate regimen identification.

	2012	2014
Appropriate medicines regimen identified	61%	69%
Sub therapeutic dose of a drug identified	9%	13%
Inappropriate regimen identified	9%	7%
Patient was not taking some or all of their prescribed medicines	N/A	5%
Excess dose of a drug identified	2%	3%
Identified delayed access to medicine	2%	1%
Decreased risk of drug interaction	1%	1%
Inappropriate repeat prescriptions	2%	1%
Patient was not taking any medicines	14%	5%


Findings during medication reviews were also collected during the audit and are shown below. It can be seen that, while the majority of medicine reviews found that medications were correct, a significant number of medicine reviews found issues with the medicine regimen (10%).

#### 7.15. Drug Adherence

It has been estimated that between 30% to 50% of patients do not take or use their prescribed medicines as recommended by their prescriber [22]. Research has shown that 3%-4% of UK hospital admissions are a result of avoidable medicine-related illness [19]. Between 11% and 30% of these admissions result from patients not using their medicines as recommended by the prescriber.

Costs associated with non-adherence include the direct cost of medication wastage along with other costs such as additional GP or hospital attendances due to patients not receiving the correct therapeutic dose of their medication. Medication reviews allow non-adherence to be identified and, where possible, the level of adherence to be improved.

Information on adherence levels found during medication reviews were captured in the Clinicians Audit and are shown in the table below.

#### Levels of non-adherence found during medication reviews by setting

	2012	2014
Patient adhering to medication regimen	94%	91%
Non adherence	6%	9%

The levels of non-adherence identified rows since the 2012 audit.

The Clinicians Audit identifies reasons for non-adherence but does not show whether the medication review resulted in better adherence.



## 7.16. Reasons for Non-adherence

Looking at the reasons for non-adherence in the table below, it can be seen that the Primary reason for non-adherence was that the patient was taking medication inappropriately. Multiple reasons were frequently given for non-adherence so percentages will total to more than 100%.

	2012	2014
Patient taking medication inappropriately	37%	
Non-Medical Prescriber identified patient misunderstanding of the purpose of the prescribed medication	32%	34%
Patient made an informed choice not to take the medication	29%	29%
Patient concerned regarding potential side effects of medication	22%	23%
Potential adverse effects/side effects were not explained effectively by the original prescriber and patient has not taken medication	7%	15%
Patient felt medication impacted on lifestyle and work	12%	11%
Mental incapacity	10%	7%
Prescription charges influenced patient's concordance	2%	2%

Longer consultation times for NMP professionals may allow improved understanding of the reasons for non-adherence. Where non-adherence is due to a lack of concordance, they can provide additional explanations of medications in terms both of potential side effects and the way in which they should be taken. Where patients have chosen not to take medication, NMP professionals can review medications to improve concordance.

# 7.17. Pharmacists in the Clinicians Audit

A total of 53 pharmacists contributed to the Clinicians Audit with 686 consultations. They were predominantly working in Acute Care and Long Term Conditions. All pharmacists in the Audit reported their prescribing type as Independent/Supplementary.

The graph below shows how pharmacists responded when asked about their care setting - with 40% in GP practice, 33% in hospitals and 15% in mental health outpatient settings.



#### **Reported Care Setting**



Other details reported by NMP pharmacists include the facts that 75% of appointments were scheduled and prescriptions were required in 69% of all appointments. Pharmacists in the audit reported that prescribing allowed the care episode to be completed in 92% of appointments.

It was also reported that medication reviews were conducted at 89% of appointments and that patients were taking other medications in 83% of medication reviews. Information on the patient's medications was available in 99% of reviews and appropriate medication regimens were identified in 50% of appointments, as shown in the chart below.

#### **Outcomes of medication reviews**



The Results of Consultations table below shows what pharmacists believe the saving of their appointments were. The majority of the appointments saved were GP appointment (31.6%) - followed by the prevention of a follow up appointment by a consultant (30.5%). Those savings are used in the following sections to calculate the economic impact of NMP on the local and national health economy.

Results of Consultations	Total	%
Prevention of GP surgery appointment	217	31.6%
Prevention of follow up by consultant (or team)	209	30.5%
Prevention of follow up to another to another healthcare professional	141	20.6%
Prevention of increased bed days- reducing length of stay	57	8.3%
Prevention of new referral to another healthcare professional	33	4.8%
Prevention of new referral to consultant	12	1.7%
Prevention of A&E attendance	8	1.2%
Prevention of re-admission	5	0.7%
Prevention of GP home visit	2	0.3%
Prevention of Admission (Hospital or Hospice)	1	0.1%
Prevention of walk-in-centre visit	1	0.1%
Prevention of visit to Minor injuries Centre	0	0.0%
Prevention of visit to Urgent Care Centre	0	0.0%
Prevention of visit to Primary Emergency Centre	0	0.0%
Total	686	100%



# 8. Calculating the Economic Effect of NMP

We have applied three separate methods to establish the potential economic value of NMP to the NHS. As illustrated below, they are:

- Evaluating the information provided by the latest NW Clinicians Audit and applying the results at the national level
- Calculating the effects on Long Term Conditions cohorts through the addition, in Primary Care, of NMP resources
- The calculation, using COP algorithms, of the effect of introducing NMP into a series of health circumstances





# 9. The Economic Impact of NMP based on the Clinicians Audit

Figures generated from the NW Clinicians Audit have been used to calculate potential figures for England. The methodology used to create the national figures is outlined below, along with the assumptions that were used.



#### 9.1. Evaluate Local Impact

To produce national figures requires addressing the reporting habits contained in the 2014 Clinicians Audit. This can be performed by adjusting the actual appointment levels of NMP activity from the levels that were reported in the Audit. Factors affecting reporting levels include internet access, computer literacy, time available between patients for reporting, engagement in process, computer specification.

#### 9.1.1. Prescribing Ratio

An additional factor is sample bias e.g. are NMPs responding to the audit representative of the region or do they have higher levels of engagement in NMP?

The figures in the audit showed that on average 150 prescribers see 723 patients during which 384 prescriptions are issued in a 7 day working week. With this, a prescriber sees 5 patients per day issuing 2 prescriptions utilising NMP skills and resulting in an improved patient outcome.

This can be compared with a survey conducted as part of research by University of Southampton [27] which reported the following levels of prescribing:

Patients prescribed for per week	% of responding NIPs
<=5	19%
6-10	14%
11-20	17%
21-30	17%
31-40	8%
41-50	9%
51+	16%

The table above would indicate an average of 21 prescribing appointments per week, which equates to approximately 3 prescribing appointments per day in a 7 day working week.

It can be seen that taking activity levels from the Clinicians Audit provides are comparable to the findings in the University of Southampton report **(though it should be noted that this report did not include coverage of CPNP activities).** 

#### 9.1.2. Workforce Ratio

Activity levels and the types of saving they produce are dependent on care setting. The figures from section 5 in this report show that 32% work in GP practices, 29% in trusts and 30% in the community. The workforce that participated in the audit are in favour of trusts by +11% with less representation by GP practices by -6% and less for others -5%.

etting Number of appointments		Clinicians Audit	National Workforce
GP Practice	5,799	26%	32%
Secondary/Tertiary/Quaternary Care	8,830	40%	29%
Community Setting	6,740	30%	30%
Other	590	4%	9%
Total	21,959	100%	100%



#### 9.1.3. Cost of Writing a Prescription

When calculating the savings that NMP practitioners contribute towards, two fundamental elements are required, the cost of the time of the prescription and the cost of the event that was prevented. We will not include the cost of the prescribed item since it is expected that the item would be prescribed by a medical professional anyhow.

The cost of writing a prescription is the investment made by NMP practitioners on a daily basis that lead to savings elsewhere. Operationally, this cost, excluding the training and mentoring cost, is the additional costs for senior practitioners that work independently and have the skills and motivation to issue prescriptions.

The cost of prescribing varies depending on the discipline of the NMP practitioner and the care setting of the prevented event. The practitioner disciplines in the audit were:

- Pharmacists
- Nurses
- Health Visitors/School Nurses
- Physiotherapists
- Podiatrists
- Midwives
- Radiographers

The cost of prescribing was estimated to be 5min and calculated based on the average appointment time and unit cost of health and social care [28] published by The Personal Social Services Research Unit (PSSRU).

<b>NMP Туре</b>	Average Appointment Session	Cost of writing Prescription (5 Min)
Pharmacists	10.6 Minutes per patient	£ 10.50
Nursing	15 Minutes per patient	£ 6.55
Midwifery	20 Minutes per patient	£ 5.90
Radiography/Therapy	20 Minutes per patient	£ 5.50
Podiatry	20 Minutes per patient	£ 5.33
Health Visitor/ School Nurse	30 Minutes per patient	£ 3.58
Physiotherapy	45 Minutes per patient	£ 3.00

Over the seven disciplines of NMP practitioners listed above, Pharmacists (£10.50) and Physiotherapists (£3.00) are at the two extremes of cost when it comes to writing a prescription that takes up five minutes of appointment time. The average cost of an NMP Nurse writing a prescription is £5.77. We also established the average cost of the range of activities that would have been incurred without NMP intervention (e.g. GP appointment cost of £35 and admission cost of £720) (Appendix 3).

The prevented activities identified during the audit were:

- Accident & Emergency (A&E)
- First Attendance (FA)
- Follow Up (FU)
- Admissions (Adm)
- Length of Stay (LOS)
- GP Appointments (GP Appt)
- GP Home Visits (GP Home)
- Minor Injuries Unit (MIU)/Urgent Care Centre (UCC)

#### 9.1.4. Impact of NMP at Local Level (Appendix 4)

The Prevented Events – Patient Counts table below shows events that were prevented by a NMP nurse based on various settings. For example, 506 NMP nurses practising in Secondary Care prevented 7,770 events to which most relate to prevention of OP Follow up (FU) appointments 3,442. The Cost Prevention table below shows that the 3,442 FU appointments would have costed £338,849. The biggest saving for NMP nurses in Secondary Care are admissions where 1,067 admissions prevented saved over £716k.

<b>Activity Preventi</b>	on - Audit	Staff	Preve	nted Event	ts - Patien	t Counts -	One Month	n				
NMP Qualification	Setting	Count	A&E	FA	FU	Adm	LOS	GP Ap	pt GP I	lome N	11U/UCC	Total
Nursing	Secondary	506	162	927	3,44	2) (1	,067	1,174	841	92	65	7,770
	GP Practice	265	268	284	41	6	26	- (	4,085	111	190	5,380
	Community	659	277	464	1,31	8	480	23	1,414	1,692	125	5,793
	Mental Health	43	7	39	22	0	7	1	13	3	-	290
	Social Care	10	-	-		1	2	1	1	9	-	14
	Hospice Care	6	-	-		2	2	1	1	1	-	7
	Voluntary Sector	2	-	-		2	-	-	-	-	-	2
	Total	1,491	714	1,714	5,40	1 (1	,584	1,200	6,355	1,908	380	19,256
<b>Cost Prevention</b>	- Audit	Staff	Prev	ented Eve	ents - Cos	Preventi	on - One M	lonth (£ Sterl	ing)			
NMP Qualification	Setting	Count	A&6	FA		FU	Adm	LOS	GP Appt	GP Home	MIU/UCC	Total
Nursing	Secondary	50	6	8,334	163,565	338,849	716,43	272,891	23,923	6,113	1,849	1,531,956
	GP Practice	26	5 1	3,787	50,111	40,953	17,45	8 -	116,200	7,375	5,405	251,288
	Community	65	9 1	4,250	81,871	129,751	322,29	4 5,346	40,222	112,426	3,556	709,715
	Mental Health	4	3	360	6,881	21,658	4,70	0 232	370	199	- (	34,401
	Social Care	1	0	-	-	98	1,34	3 232	2 28	598	-	2,300
	Hospice Care		6	-	-	197	1,34	3 232	2 28	66	- 1	1,867
	Voluntary Sector		2	-	-	197	-	-	-	-	-	197
	Total	1.49	1 3	6.732	302,427	531,704	1.063.57	278,935	180,771	126,778	10.809	2.531.725

\*Complete tables covering the entire Clinicians Audit can be found in Appendix 4.

The 265 NMP nurses in a GP practice setting have prevented 4,085 GP appointments costing over £116k. Certain correlations of impact can be observed that are expected e.g. NMP in Secondary Care mainly impacts OP, LOS and Admissions whereby a NMP in a GP practice prevents GP appointments.

The biggest financial impact NMP nurses have is in the avoidance of admissions which was over £1m during the Clinicians Audit conducted in September 2014 over a period of 1 month only.



#### Primary and Secondary Example using one month Clinicians Audit:

The following diagrams depict the use of the tables above in a more graphical way. This example below is based on the NMP Nurse Type located in Secondary Care.



In the above, note that, for nurses in Secondary Care, the greatest single number of activities prevented is of Follow Up. In Primary Care, not surprisingly, it is of GP appointments. Financially, these translate into, £338k for Follow Up prevention and £116k for GP appointments over the Audit month. More impressive is the effect on Admissions of NMP intervention. Overall 1,584 admissions were avoided – representing a saving of £1,063,570.

The total savings of prevented activity by NMP nurses within the one month audit is over  $\pm 2.5$ m. By multiplying the prevented activity and their cost by 12, an annual figure of  $\pm 32,795,044$  can be estimated, as shown in the table below:

NMP Туре	Count	Month's Value	Average
Pharmacists	58	£ 63,713	£ 1,099
Nursing	1,491	£ 2,531,725	£ 1,698
Health Visitor/ School Nurse	196	£ 40,072	£ 204
Physiotherapy	34	£ 35,964	£ 1,058
Podiatry	41	£ 34,899	£ 851
Midwifery	7	£ 8,289	£ 1,184
Radiography	3	£ 18,258	£ 6,086
1 Month Cost Prevention	1,830	£ 2,732,920	£ 1,493
12 Month Cost Prevention	1,830	£ 32,795,044	£ 17,921

The accumulation of savings by prevention of activity for each category of NMP practitioners in different settings for the audit month is over £2.7m and over the calendar year is £32.8m.

#### 9.2. Extrapolation from Clinicians Audit to National

Using the results of the Clinicians Audit performed by 1,566 NMP practitioners over a one month period of over £2.7m, a savings estimation of prevented activity for all of England over a one year period can be performed. For this, national NMP numbers for each discipline can be used to extend the count of participants to the nationally registered practitioners. A simple estimate would come from pro-rating the £32.795m that can be achieved per year with 1,830 NMPs (inclusive of practitioners with more than one role) to the estimated number of 44,629 NMPs in England. Doing this would give a figure of £799.786m per year. This basic estimate does not take into consideration the care settings impacted but provides a ballpark figure.

To arrive at a more accurate set of figures for economic effect, the levels of prescribing per NMP were calculated by CCG. These were calculated using, principally, NMP nurse numbers and prescribing data from eNurse. Levels in the CCGs covered by the Clinicians Audit were then compared with those for the country as a whole to give a normalisation factor.

#### 9.2.1. Impact of NMP at National Level

Similarly to the exercise relating to the NMP staffing counts of the Clinicians Audit, the same presentation for the national NMP staffing counts is used in the tables below. The Prevented Events – Patient Counts table below shows events that were prevented by a NMP practitioner based on various settings but with national Staff Counts. For example, in one month 9,674 NMP practitioners within the Secondary Care settings prevented 148,551 events most of which relate to prevention of OP Follow up (FU) appointments (65,806) The Cost Prevention table below shows that the 65,806 FU appointments would have cost over £6.478m.

103,281

118,251

19,788

64,768,331

<b>Activity Prevent</b>	tion - England	Staff	Prevented Events - Patient Counts - One Month								
NMP Qualification	Setting	Count	A&E	FA F	U Adı	m L	OS GP /	Appt GP	Home MI	u/ucc	Total
All Categories	Secondary	9,674	3,097	17,723	65,806	20,400	22,445	16,079	1,759	1,243	148,551
	GP Practice	7,184	7,265	7,699	11,278	705	-	110,742	3,009	5,151	145,849
	Community	25,394	10,674	17,880	50,788	18,496	886	54,487	65,200	4,817	223,228
	Mental Health	1,347	219	1,222	6,892	219	31	407	94	-	9,084
	Social Care	449	-	-	45	90	45	45	404	-	629
	Hospice Care	380	- 1	-	127	127	63	63	63	-	443
	Voluntary Sector	201	-	-	201	-	-	-	-	-	201
	Total	44,629	21,256	44,524	135,136	40,037	23,471	181,824	70,529	11,210	527,986
Cost Prevention	- England	Staff	Prevented	Events - Cost	Prevention -	One Month	(f Sterling)				
NMP Qualification	Setting	Count	A&F	FA	FU	Adm	105	GP Appt	GP Home	MIU/UCO	Total
All Categories	Secondary	9 674	159 337	7 3 127 128	6 478 31	3 13 697	165 5 217 28	A57 366	116 871	35 349	29 288 818
An eacebones	GP Practice	7 184	373 768	1 358 467	1 110 22	1 473	265 -	3 150 104	199 944	146 516	6 812 286
	Community	25 394	549 126	3 154 816	4 999 84	5 12 419	315 206.01	3 1 549 914	4 332 226	137 015	27 348 272
	Mental Health	1.347	11.281	215.563	678.44	9 12,413, 9 147.	.234 7.28	1 11.584	6.244		1.077.637

As illustrated below, the annual savings amount based on setting and prevented activity for all of England over a 12 month period is **12** \* **£64,768,331** = **£777,219,972** gross of costs.

7,855,975

4.420

12,470

19,788

13,303,507

60.296

85,050

26,882,325

10.437

14,722

5,455,739

1.277

1,802

5,172,046

26.851

4,208

318,883

4,686,345

Social Care

Total

Hospice Care

Voluntary Sector

449 380

201

44,629

1,093,512

NMP Туре	Count	Month's Value	Average
Acute	9,674	£ 29,288,818	£ 656
GP Practice	7,184	£ 6,812,286	£ 153
Community	25,394	£ 27,348,272	£ 613
Mental Health	1,347	£ 1,077,637	£ 24
Social Care	449	£ 103,280	£ 2
Hospice Care	380	£ 118,251	£3
Voluntary Sector	201	£ 19,787	0
1 Month Cost Prevention	44,629	£ 64,768,331	£ 1,451
12 Month Cost Prevention	44,629	£ 777,219,972	£ 17,415

This final figure for the potential impact of NMP over 12 months has been estimated based on the assumption that all areas can achieve levels of NMP activity in line with the areas in the top quartile of current utilisation as demonstrated during the Clinicians Audit.

In all cases, assumptions and methodologies have been selected to provide a conservative calculation of England figures. This means that final figures calculated should be underestimations and that, in all probability, the true potential is greater than the estimated results.



# 9.3. Potential Staff Level Breakdown Example

The following diagrams depict the use of the tables above in a more graphical way. This example below is based on the NMP Nurse Type located in Secondary Care.



#### 9.4. Conclusion

Those that have developed and fostered the Clinicians Audit over the years merit thanks. It has produced data that is sufficiently robust to allow viable conclusions to be drawn not only locally but also at the national level. Indeed, it is the view of the authors of this report that other parts of the country should be encouraged to carry out similar audits in order to add to the fund of valuable data. In all probability, the deeper analysis that enriched data can allow is likely to show that there is a current value to NMP in England of beyond the circa £777m this report has identified.



# 10. Economic Impact of Primary Care NMP on Secondary Care

#### 10.1. Methodology

This section evaluates the economic impact of Primary Care on Secondary Care by assuming that GP practices that do not have any NMP practitioner would employ one and perform like the upper quartile of GP practices that have one NMP practitioner. The performance measurements used are based on A&E Admissions, Non-Elective Admissions (NEL) and Readmissions per 1,000 registered practice populations in respect of 16 Long Term Conditions as defined in the QoF LTC registers.

The data used for this evaluation was drawn from 2014/15 HES spell activity (125 million activity records per annum) grouped and costed at PbR National Tariff, a register of all Primary Care NMP nurses provided by HSCIC (eNurse), QoF for practice list sizes and LTC registers. The i5 Health Big Data approach facilitated the correlation between the different data sources and, in consequence, we were able to calculate relevant hospital attendance and admission rates for A&E, NEL and Readmissions. Our findings were that those attendance and admission rates are lower for practices with one or more NMP practitioner than for those for practices with no NMP presence.

That measurable information allowed us to calculate the likely effect of introducing NMP into the least performing or most challenged practices without NMPs i.e. those with the highest levels of attendances and admissions by LTC. NB – The calculations in this section are not net of the cost of prescribing time (unlike in the Clinicians Audit and national level calculations in section 9 above); they highlight potential added value without the cost of an NMP practitioner being incorporated.

It is not the purpose of this exercise to display the names of the general practices that have been researched – other than to list those CCGs within the areas of which are those most challenged general practices. These are as follows:

NHS ASHFORD CCG NHS BARNSLEY CCG NHS BRACKNELL AND ASCOT CCG NHS BRENT CCG NHS CAMBRIDGESHIRE AND PETERBOROUGH CCG NHS CAMDEN CCG NHS CANTERBURY AND COASTAL CCG NHS CASTLE POINT AND ROCHFORD CCG NHS CHILTERN CCG NHS COASTAL WEST SUSSEX CCG NHS CROYDON CCG NHS DARTFORD, GRAVESHAM AND SWANLEY CCG NHS EAST AND NORTH HERTFORDSHIRE CCG NHS EAST STAFFORDSHIRE CCG NHS EASTBOURNE, HAILSHAM AND SEAFORD CCG NHS FAREHAM AND GOSPORT CCG NHS HAMMERSMITH AND FULHAM CCG NHS HERTS VALLEYS CCG NHS HULL CCG NHS KERNOW CCG

NHS KNOWSLEY CCG NHS LEEDS SOUTH AND EAST CCG NHS NORTH LINCOLNSHIRE CCG NHS NORTH MANCHESTER CCG NHS NORTH WEST SURREY CCG NHS NORTH, EAST, WEST DEVON CCG NHS OXFORDSHIRE CCG NHS REDBRIDGE CCG NHS SLOUGH CCG NHS SOUTH LINCOLNSHIRE CCG NHS SOUTH SEFTON CCG NHS SOUTHAMPTON CCG NHS SUNDERLAND CCG NHS THANET CCG NHS TOWER HAMLETS CCG NHS TRAFFORD CCG NHS VALE ROYAL CCG NHS WALTHAM FOREST CCG NHS WANDSWORTH CCG NHS WEST HAMPSHIRE CCG NHS WEST SUFFOLK CCG

#### **10.2.** NMP Impact on Coronary Heart Disease

Here, by way of example, is the approach as applied to one of the 16 LTC covered in this report, Coronary Heart Disease (CHD):

We analysed the difference between CHD hospital attendance rate for the general practices with 0 NMP, 1 NMP, 2-4 NMPs and 5 or more NMPs for A&E, NEL and Readmissions as shown in the three graphs below. There were 1,026 practices with NMP practitioners that performed the best (upper quartile) with a total list size of 8,792,650 patients. Assuming that, with the introduction of NMP into the worst performing practices currently without an NMP presence, those practices could perform as well as the practices in the upper quartile, the impact on A&E, NEL and Readmissions of employing one NMP at each of those practices was calculated.



Corornary Heart Disease NEL Admissions per 1k Registered Patients by N° of NMP





Corornary Heart Disease 30 day Readmissions per 1k Registered Patients by N° of NMP



The attendance rate difference between 0 NMP and 1 NMP practices for A&E attendances is 2.85 (7.88 - 5.03), NEL is 1.14 (4.65 - 3.51) and Readmissions are 0.61 (1.98-1.37) per 1,000 patients. In the case of A&E, we applied the 2.85 per 1,000 to the total population figure represented by the upper quartile (8,814,209) to obtain the prospective number, per annum, of 21,190 A&E attendances that could be avoided by the introduction of one NMP into to those GP practices.

This saved attendances figure of 25,120 was then multiplied with the average cost of the A&E attendance of £119 per activity to obtain the overall impact in cost of £2,988,553. Following the same approach for NEL admissions, the cost reduction £14,752,637 is much greater because of the higher cost per activity - £2,483 for CHD patients.

A similar approach was taken to establishing the value of avoiding Readmissions - which amounted to £7,605,387. The total of all three areas is £25,346,577.

#### Achievable Efficiencies for Coronary Heart Disease LTC

	A&E	NEL	Readmission
Activity avoidance per 1,000 patients (7.88 - 5.03), (4.65 - 3.51), (1.98-1.37)	2.85	1.14	0.61
Patients in Upper quartile (25% of 0 NMP 1026 practices)	8,814,209	5,211,413	5,211,413
Annualised number of patients activities avoided	25,120	5,941	3,179
Average cost of activity	£118.97	£2,483.19	£2,392.41
Annualised reduction in Cost	£2,988,553	£14,752,637	£7,605,387

The worst performing practices with 0 NMP have higher A&E, NEL and readmission rates related to CHD than practices with NMPs.

If practices in the upper guartile (25%) with no NMP could achieve activity rates of well performing practices with 1 NMP, efficiencies of almost £25m could be achieved.

An example of the service NMP practitioners can provide in Primary Care, through GP practices, is within the Redcar and Cleveland area – under the auspices of South Tees Hospitals FT [29].

A team consisting of four specialist nurses, two full-time and two part-time have been facilitating coronary heart disease clinics since 2000. They provide risk assessments and give individually tailored advice to patients to address risk factors. This includes prescribing preventative medications.

These clinics are carried out by heart manual facilitators in GP surgeries and in the patient's home for those that are housebound.



The service is for patients who have ischaemic heart disease including new diagnosis following exercise testing, post myocardial infarction and revascularisation procedures such as angioplasty or coronary artery bypass surgery.

The service is provided in 16 GP surgeries in the Redcar and Cleveland area. Clinics are provided from 9am to 5pm. Patients are maintained on a CHD register and offered an annual appointment; follow up after this appointment is based on patient need.

Patients can be referred by members of the multidisciplinary team. Patients can also self-refer if they require further information or advice. Heart manual referrals also come from The James Cook University Hospital via our nhs.net e-mail accounts allowing timely intervention to implement cardiac rehabilitation.

The Redcar and Cleveland NMP experience in the context of Coronary issues is not an isolated one as illustrated by comments from practitioners elsewhere:

#### Heart Failure Specialist Nurse in nurse led clinic:

"Benefits to my patients have been tremendous ..... I am able to issue a prescription on the day and arrange for renal function to be checked, prior to the patient's return to clinic two weeks later for assessment."

#### **Heart Failure Specialist Nurse:**

"I can prescribe independently, changing medication to improve symptoms immediately. This makes the patient journey through the health system less problematic".

In every case in the section that follows, we have decided to stick with the conservative addition of just one practitioner. Likewise, we have restricted ourselves to applying that formula to just 1,026 of the most challenged GP practices for any LTC - not to all of them.

The reason for such is we wanted these propositions to be as much grounded in reality as possible and operational within a sensible period of time. For example, with present NMP growth being at around 7% per annum, a magic number of new NMPs cannot suddenly be produced out of the hat - There is going to be a significant lead time.

As shown in section 10.19 below, the annual value contributed by the addition of one NMP practitioner, in respect of all the LTCs, is **£271,558,436**.

# 10.3. NMP Impact on Asthma LTC







# Achievable Efficiencies for Asthma LTC

	A&E	NEL	Readmission
Activity avoidance per 1,000 patients (9.93 - 5.73), (4.34 - 2.80), (1.55 - 1.13)	4.2	1.54	0.42
Patients in Upper quartile (25% of 0 NMP 1,026 practices)	10,409,846	7,063,071	7,063,071
Annualised number of patients activities avoided	43,721	10,877	2,966
Average cost of activity	£108.93	£1,125.04	£1,362.93
Annualised reduction in Cost	£4,762,567	£12,237,207	£4,043,122

Chapter: Economic Impact of Primary Care NMP on Secondary Care

# 10.4. NMP Impact on Cancer LTC







# Achievable Efficiencies for Cancer LTC

	A&E	NEL	Readmission
Activity avoidance per 1,000 patients (8.66 - 6.24), (3.44 - 2.55), (1.38 - 1.01)	2.42	0.89	0.37
Patients in Upper quartile (25% of 0 NMP 1,026 practices)	10,456,370	8,075,146	8,059,985
Annualised number of patients activities avoided	25,304	7,187	2,982
Average cost of activity	£118.32	£2,990.61	£1,730.81
Annualised reduction in Cost	£2,993,974	£21,493,133	£5,161,619

# 10.5. NMP Impact on Diabetes LTC

Diabetes A&E Attendances per 1,000 Registered Patients by N° of NMP 8 7 Attendance/ List Size \* 1,000 6 5 4 3 Т 2 1 0 0 NMP 1 NMP 2 to 4 NMP 5 or more NMP Attendance Rate 6.15 4.46 3.42 2.22 Diabetes NEL Admissions per 1k Registered Patients by Nº of NMP





# Achievable Efficiencies for Diabetes LTC

	A&E	NEL	Readmission
, Activity avoidance per 1,000 patients (6.15 - 4.46) (3.08 - 2.07), (1.85 - 1.45)	1.69	1.01	0.40
Patients in Upper quartile (25% of 0 NMP 1,026 practices)	8,655,375	5,284,389	5,284,389
Annualised number of patients activities avoided	14,628	5,337	2,114
Average cost of activity	£118.23	£1,710.26	£2,060.72
Annualised reduction in Cost	£1,729,395	£9,128,038	£4,355,865

# 10.6. NMP Impact on Epilepsy LTC

Epilepsy A&E Attendances per 1,000 Registered Patients by N° of NMP 4.0 3.5 Attendance/ List Size \* 1,000 3.0 2.5 2.0 1.5 1.0 0.5 0.0 0 NMP 1 NMP 2 to 4 NMP 5 or more NMP 3.43 1.89 Attendance Rate 1.43 1.00 Epilepsy NEL Admissions per 1k Registered Patients by N° of NMP





# Achievable Efficiencies for Epilepsy LTC

	A&E	NEL	Readmission
Activity avoidance per 1,000 patients (3.43 - 1.89), (1.65 - 0.83), (0.69 - 0.42)	1.54	0.82	0.27
Patients in Upper quartile (25% of 0 NMP 1,026 practices)	8,130,566	5,492,475	5,492,475
Annualised number of patients activities avoided	12,521	4,504	1,483
Average cost of activity	£117.25	£1,379.73	£1,646.14
Annualised reduction in Cost	£1,468,083	£6,214,055	£2,441,180

**Chapter:** Economic Impact of Primary Care NMP on Secondary Care

# 10.7. NMP Impact on Atrial Fibrillation LTC

Atrial Fibrillation A&E Attendances per 1k Registered Patients by N° of NMP









#### **Achievable Efficiencies for Atrial Fibrillation LTC**

	A&E	NEL	Readmissions
Activity avoidance per 1,000 patients (7.37 - 4.92),	2.45	1.59	0.60
(5.58 - 3.99),(1.81 - 1.21)			
Patients in Upper quartile (25% of 0 NMP 1,026	9,199,483	7,238,832	7,238,832
practices)			
Annualised number of patients activities avoided	22,539	11,510	4,343
Average cost of activity	£122.49	£1,710.95	£2,172.48
Annualised reduction in Cost	£2,760,723	£19,692,569	£9,435,724

Admissions/ List Size \* 1,000

# 10.8. NMP Impact on Chronic Kidney Disease LTC





Chronic Kidney Disease 30 day Readmissions per 1k Registered Patients by N° of NMP



#### Achievable Efficiencies for Chronic Kidney Disease LTC

	A&E	NEL	Readmissions
Activity avoidance per 1,000 patients (4.11 - 2.06), (2.41 - 1.58), (1.14 - 0.69)	2.05	0.83	0.45
Patients in Upper quartile (25% of 0 NMP 1,026 practices)	9,435,667	6,670,766	6,670,766
Annualised number of patients activities avoided	19,343	5,537	3,002
Average cost of activity	£122.36	£2,479.57	£1,589.66
Annualised reduction in Cost	£2,366,762	£13,728,745	£4,771,906

#### 10.9. NMP Impact on Back Pain LTC







# Achievable Efficiencies for Back Pain LTC

	A&E	NEL	Readmissions
Activity avoidance per 1,000 patients (3.21 - 1.89),	1.32	0.90	0.35
(1.49 - 0.59),(0.56 - 0.21)			
Patients in Upper quartile (25% of 0 NMP 1,026	9,508,640	7,518,464	7,518,464
practices)			
Annualised number of patients activities avoided	12,551	6,767	2,631
Average cost of activity	£115.83	£1,089.63	£1,854.73
Annualised reduction in Cost	£1,453,877	£7,373,126	£4,880,646

O 9 Chapter: Economic Impact of Primary Care NMP on Secondary Care

## **10.10.** NMP Impact on COPD LTC

COPD A&E Attendances per 1,000 Registered Patients by N° of NMP 3.5 3.0 Attendance/ List Size \* 1,000 2.5 2.0 1.5 Ι 1.0 0.5 0.0 0 NMP 1 NMP 2 to 4 NMP 5 or more NMP Attendance Rate 2.81 1.64 1.12 0.99







# Achievable Efficiencies for COPD LTC

	A&E	NEL	Readmissions
Activity avoidance per 1,000 patients (2.81 - 1.64),	1.17	0.35	0.19
(1.15 - 0.80), (0.40 - 0.21)			
Patients in Upper quartile (25% of 0 NMP 1,026	10,692,794	5,477,572	5,477,572
practices)			
Annualised number of patients activities avoided	12,511	1,917	1,041
Average cost of activity	£123.59	£2,437.10	£2,256.68
Annualised reduction in Cost	£1,546,221	£4,672,278	£2,348,616

#### 10.11. NMP Impact on Dementia LTC

Dementia A&E Attendances per 1,000 Registered Patients by N° of NMP









#### Achievable Efficiencies for Dementia LTC

	A&E	NEL	Readmissions
Activity avoidance per 1,000 patients (2.15 - 1.13), (0.92 - 0.48), (0.51 - 0.32)	1.02	0.44	0.19
Patients in Upper quartile (25% of 0 NMP 1,026 practices)	7,606,147	5,881,914	5,881,914
Annualised number of patients activities avoided	7,758	2,588	1,118
Average cost of activity	£126.19	£2,963.02	£2,832.27
Annualised reduction in Cost	£979,028	£7,668,429	£3,165,244

#### 10.12. **NMP Impact on Heart Failure LTC**

Heart Failure A&E Attendances per 1,000 Registered Patients by Nº of NMP







#### **Achievable Efficiencies for Heart Failure LTC**

	A&E	NEL	Readmissions
Activity avoidance per 1,000 patients (3.96 - 2.84), (1 54 - 1 08) (0 66 - 0 38)	1.12	0.46	0.28
Patients in Upper quartile (25% of 0 NMP 1,026	8,819,520	5,418,607	5,418,607
Annualised number of patients activities avoided	9,878	2,493	1,517
Average cost of activity	£126.34	£2,968.47	£2,801.71
Annualised reduction in Cost	£1,248,018	£7,399,085	£4,250,785

# 10.13. NMP Impact on Hypertension LTC

Hypertension A&E Attendances per 1,000 Registered Patients by N° of NMP







#### **Achievable Efficiencies for Hypertension LTC**

	A&E	NEL	Readmissions
Activity avoidance per 1,000 patients (8.09 - 4.65),	3.44	1.39	0.40
(4.59 - 3.20), (1.41 - 1.01)			
Patients in Upper quartile (25% of 0 NMP 1,026	10,144,232	6,902,729	6,902,729
practices)			
Annualised number of patients activities avoided	34,896	9 <i>,</i> 595	2,761
Average cost of activity	£116.81	£1,474.90	£1,981.30
Annualised reduction in Cost	£4,076,113	£14,151,351	£5,470,538

# 10.14. NMP Impact on Osteoarthritis LTC

Osteoarthritis A&E Attendances per 1k Registered Patients by N° of NMP







#### Achievable Efficiencies for Osteoarthritis LTC

	A&E	NEL	Readmissions
Activity avoidance per 1,000 patients (1.11 - 0.66), (0.62 - 0.37), (0.31 - 0.17)	0.45	0.25	0.14
Patients in Upper quartile (25% of 0 NMP 1,026 practices)	8,597,541	6,294,288	6,294,288
Annualised number of patients activities avoided	3,869	1,574	881
Average cost of activity	£109.99	£2,394.36	£2,386.72
Annualised reduction in Cost	£425,557	£3,767,697	£2,103,178

# 10.15. NMP Impact on Parkinson LTC

Parkinson A&E Attendances per 1k Registered Patients by N° of NMP







#### **Achievable Efficiencies for Parkinson LTC**

	A&E	NEL	Readmissions
Activity avoidance per 1,000 patients (1.81 - 1.17), (0.98 - 0.31), (0.35 - 0.20)	0.64	0.67	0.15
Patients in Upper quartile (25% of 0 NMP 1,026 practices)	6,172,214	5,860,532	5,860,532
Annualised number of patients activities avoided	3,950	3,927	879
Average cost of activity	£122.28	£2,710.78	£2,785.15
Annualised reduction in Cost	£483,029	£10,644,046	£2,448,371

# 10.16. NMP Impact on Rheumatoid Arthritis LTC

Rheumatois Arthritis A&E Attendances per 1k Registered Patients by N° of NMP







#### Achievable Efficiencies for Rheumatoid Arthritis LTC

	A&E	NEL	Readmissions
Activity avoidance per 1,000 patients (1.93 - 1.01), (0.9948), (0.32 - 0.21)	0.92	0.51	0.11
Patients in Upper quartile (25% of 0 NMP 1,026 practices)	9,145,646	7,090,175	7,090,175
Annualised number of patients activities avoided	8,414	3,616	780
Average cost of activity	£110.72	£1,665.57	£1,707.34
Annualised reduction in Cost	£931,633	£6,022,665	£1,331,591

# 10.17. NMP Impact on Stroke LTC

Stroke A&E Attendances per 1k Registered Patients by N° of NMP 6.0 5.0 Attendance/ List Size \* 1,000 4.0 3.0 2.0 1.0 0.0 0 NMP 1 NMP 2 to 4 NMP 5 or more NMP Attendance Rate 5.12 3.09 2.00 1.05





# Achievable Efficiencies for Stroke LTC

	A&E	NEL	Readmissions
Activity avoidance per 1,000 patients (5.12 - 3.09), (2.04 - 1.57), (0.84 - 0.69)	2.03	0.47	0.15
Patients in Upper quartile (25% of 0 NMP 1,026 practices)	10,006,751	7,205,384	7,205,384
Annualised number of patients activities avoided	20,314	3,387	1,081
Average cost of activity	£139.74	£3,529.54	£3,510.91
Annualised reduction in Cost	£2,838,558	£11,952,897	£3,794,615

Chapter: Economic Impact of Primary Care NMP on Secondary Care





**G O** Chapter: Economic Impact of Primary Care NMP on Secondary Care

#### 10.19. NMP Impact on Long Term Conditions - Table

LTC	AE Potential Saving	NEL Potential Saving	Readmission Potential Saving	Total Potential Saving
Atrial Fibrillation	£2,760,723	£19,692,569	£9,435,724	£31,889,016
Cancer	£2,993,974	£21,493,133	£5,161,619	£29,648,726
Coronary Heart Disease	£2,988,553	£14,752,637	£7,605,387	£25,346,577
Hypertension	£4,076,113	£14,151,351	£5,470,538	£23,698,002
Asthma	£4,762,567	£12,237,207	£4,043,122	£21,042,896
Chronic Kidney Disease	£2,366,762	£13,728,745	£4,771,906	£20,867,413
Stroke	£2,838,558	£11,952,897	£3,794,615	£18,586,070
Diabetes	£1,729,395	£9,128,038	£4,355,865	£15,213,298
Back Pain	£1,453,877	£7,373,126	£4,880,646	£13,707,649
Parkinson	£483,029	£10,644,046	£2,448,371	£13,575,446
Heart Failure	£1,248,018	£7,399,085	£4,250,785	£12,897,888
Dementia	£979,028	£7,668,429	£3,165,244	£11,812,701
Epilepsy	£1,468,083	£6,214,055	£2,441,180	£10,123,318
COPD	£1,546,221	£4,672,278	£2,348,616	£8,567,115
Rheumatoid Arthritis	£931,633	£6,022,665	£1,331,591	£8,285,889
Osteoarthritis	£425,557	£3,767,697	£2,103,178	£6,296,432
Total	£33,052,091	£170,897,958	£67,608,387	£271,558,436

#### 10.20.Conclusion

The introduction of just one NMP practitioner into the Primary Care setting (particularly within a GP practice) can have effects well beyond the saving of doctors' time. Those effects reach across the LTC spectrum and right into the Secondary Care sector; they evidently include the improvement of patient care whilst reducing costs incurred in attending and being admitted or readmitted into hospitals. The value of those avoided Secondary Care activities can amount to over £270m annually.



# **11.** Commissioning Opportunities

#### 11.1. Introduction

The NMP initiative has been introduced into the i5 Commissioning Opportunity module (otherwise known as COP) in order for those involved in commissioning decisions (CCGs and Trusts) to consider the financial contribution the practice might make. COP facilitates transformational change by evaluating hundreds of successfully implemented healthcare initiatives by the NHS at patient level to identify patient cohorts that would benefit from an initiative. COP supports QIPP, BCF, CIP, Co-Commissioning etc. planning activities for both two year operational and five year strategic plans and can also be used for constant monitoring of initiatives.

Commissioning Opportunity For: CCG - Unplanned Care						in	Health			
Commissioning	Tolelastico	Outcomer	2013/14	Deference	Current	Cound	A	0		Aug.
Opportunity	Initiative	Outcomes	Assumption	Reference	Activity	Cost	Cost	Reduction	Saving	Saving
Community Care	NMP Physiotherapist services(Activity = No. of Bed days)	Reducing Length of stay and better patient outcome	Physiotherapist Service in place to improve capacity and reduce LOS. Improving access to physiotherapy services including extending the normal working day and providing routine physiotherapy over seven days for patients	http://tinyurl.com/q2d2n3y http://tinyurl.com/p228dmu	1,253	£538,391	£430	191	£66,518	£348
	NMP Podiatry Service (Activity = No. of Bed days)	Reducing Length of stay and better patient outcome	The vascular triage service is delivered in the community rather than patient accessing hospital based services. The heel protection service allows patients to be discharged to structured care in the community therefore reducing length of stay in hospital with patient care closer to home	http://tinyurl.com/qhrb35y http://tinyurl.com/p228dmu	3,314	£1,136,642	£343	90	£17,782	£198
End of life care	NMP Pallitiave Care at home	More rapid response to the patient's pain and symptom control by a team of specialist nurses at home and reduce NEL admissions	NMP expedites symptom control for palliative care, saving GP/hospital consultant time at no extra cost from nursing time. NMP is used to ease or resolve symptoms and side effects from chemotherapy for patients at hom	http://tinyurl.com/p228dmu	362	£801,788	£2,215	141	£234,124	£1,660
Primary Care Capacity	NMP Nurses in Out- of-Hour practices	Having 1 NMP will avoid 3 to 4 A&E attendance per day. Strengthening GP out-of-hours services.	Redirecting Non-Emergency patients with low acuity patients to OOH. Ability to book patient GP appointment.	http://tinyurl.com/o4tn525	21,905	£2,051,494	£94	2,570	£236,840	£92
	Management of patients with respiratory disease by NMP Pharmacist in non-acute settings	Better patient outcomes and NEL Admissions reduction.	NMP Pharmacist working together with GP practice to help patient with Respiratory disease (Asthma,COPD) with prescribing and followup.	http://tinyurl.com/17zf9xw http://tinyurl.com/phx2krb	702	£955,214	£1,361	131	£117,057	£894
	Use of NMP in Carehomes	1 MNP Nurse can avoid 3 to 4 A&E attendance per day. Support to care homes to avoid emergency referrals.	NMP visiting carehomes reduces A&E Attendance of patients with Low Acuity rate. Non-Emergency patients without GP followup	http://tinyurl.com/43xu49o http://tinyurl.com/kyf5cy6	1,189	£157,821	£133	137	£16,509	£121
Run by i5 Health on 08/03/2015 © 2015. i5 Health, All Rights Reserved Page 1 of 1										

To create examples, COP analysed the effect of introducing NMP into six environments and then applied the findings to all CCGs throughout the country to obtain the likely financial benefits. The environments are:

- Care Homes
- Non-Acute (Pharmacists)
- Out-of-Hours
- Palliative Care
- Physiotherapist Services
- Podiatry

For each of these areas, heat maps were created – using different colours, from yellow through to ever deeper shades of green, to represent increasingly growing value from lowering A&E attendance by the introduction of NMP. A list of the 30 CCGs, in each case, that could most

benefit from the involvement of NMP is also shown – together with the specific values of the benefits. NB – The results are not net of costs of writing prescriptions.

#### **11.2.** NMP in Care Homes

This initiative addresses the health and social care of persons in homes with multiple long term conditions who are at risk of deteriorating, multiple hospital admissions or longer lengths of inpatient episodes. An NMP nurse visiting care homes can contribute to the unscheduled care agenda through lowering the frequency of self-referred A&E attendance and providing a better level of care for the elderly.

#### Table:CCG Ranking

Clinical Commissioning Group	<b>Potential Reduction</b>	Potential Saving	
NHS Somerset CCG	1,848	£127,494	
NHS Nene CCG	1,016	£102,464	
NHS Birmingham Cross City CCG	934	£94,134	
NHS Barnsley CCG	909	£85,185	S
NHS Milton Keynes CCG	699	£80,042	nitie
NHS Leicester City CCG	751	£77,969	rtur
NHS Cambridgeshire and Peterborough CCG	676	£76,715	lod
NHS Wolverhampton CCG	633	£74,592	ğ
NHS Hartlepool and Stockton-On-Tees CCG	836	£68,784	guing
NHS Southern Derbyshire CCG	655	£64,208	sior
NHS Wirral CCG	596	£61,929	mis
NHS Dudley CCG	561	£59,512	ы
NHS Walsall CCG	528	£57,057	0 ::
NHS Brent CCG	620	£52,839	pte
NHS Wiltshire CCG	680	£50,282	Cha

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NHS Coastal West Sussex CCG NHS Greater Preston CCG NHS Ipswich and East Suffolk CCG NHS East Leicestershire and Rutland CCG NHS South Kent Coast CCG NHS Chorley and South Ribble CCG NHS Doncaster CCG NHS Greater Huddersfield CCG NHS Greater Huddersfield CCG NHS West Hampshire CCG NHS West Hampshire CCG NHS South Gloucestershire CCG NHS Durham Dales, Easington and Sedgefield CCG NHS Ealing CCG NHS Calderdale CCG NHS South Warwickshire CCG

539	£47,583
443	£45,427
430	£45,274
435	£44,805
463	£44,345
433	£43,619
426	£43,002
443	£42,506
497	£41,960
430	£41,877
451	£41,829
431	£41,821
551	£41,735
423	£41,677
437	£41,655

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### **11.3.** NMP Pharmacist in non-acute settings

The initiative addresses the needs of those suffering forms of respiratory disease (e.g. children with Asthma, elderly with COPD....) who might otherwise visit hospital regularly and even get admitted. An NMP pharmacist, operating within a local pharmacy or other non-acute setting, can often prescribe straightforward medication that fulfils the clinical needs, alleviates concern and takes pressure off A&E.





#### Table:CCG Ranking

Clinical Commissioning Group	<b>Potential Reduction</b>	Potential Saving
NHS Birmingham Cross City CCG	757	£557,417
NHS East Lancashire CCG	460	£386,793
NHS South Tees CCG	442	£364,051
NHS Dorset CCG	422	£346,609
NHS Herts Valleys CCG	374	£346,449
NHS Cambridgeshire and Peterborough CCG	410	£339,712
NHS North, East, West Devon CCG	416	£338,226
NHS Oxfordshire CCG	341	£302,058
NHS Wiltshire CCG	243	£298,954
NHS Hull CCG	408	£298,140
NHS Heywood, Middleton & Rochdale CCG	336	£296,545
NHS Wigan Borough CCG	349	£296,084
NHS Northumberland CCG	367	£295,158
NHS Cumbria CCG	365	£291,903
NHS Sandwell and West Birmingham CCG	396	£290,778
NHS Gloucestershire CCG	335	£288,518
NHS Bury CCG	295	£276,540
NHS Somerset CCG	356	£275,208
NHS North East Essex CCG	280	£249,835
NHS Nottingham City CCG	296	£242,719
NHS Wakefield CCG	298	£242,269
NHS Hartlepool and Stockton-On-Tees CCG	289	£240,720
NHS Coastal West Sussex CCG	288	£234,512
NHS Canterbury and Coastal CCG	299	£233,416
NHS Nene CCG	281	£228,200
NHS West Hampshire CCG	270	£226,398
NHS Liverpool CCG	288	£223,625
NHS Barnsley CCG	259	£215,119
NHS North Derbyshire CCG	249	£213,583
NHS East and North Hertfordshire CCG	235	£213,260

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#### **11.4.** NMP Nurses in Out-of-Hours practices

The initiative of having an NMP practitioner within an OOH practice is aimed at reducing the unnecessary attendance at A&E of patients with Low Acuity diagnosis. It can also lead to hospitals redirecting non-emergency patients to OOH practices.



#### Table:CCG Ranking

Clinical Commissioning Group	Potential Reduction	Potential Saving
NHS Somerset CCG	17,714	£1,052,742
NHS Sunderland CCG	14,477	£868,503
NHS Kernow CCG	14,833	£860,104
NHS Croydon CCG	13,024	£800,671
NHS Gloucestershire CCG	13,308	£770,701
NHS East Lancashire CCG	12,432	£746,221
NHS South East Staffs and Seisdon Peninsular CCG	13,108	£743,113
NHS Leicester City CCG	12,266	£577,324
NHS Gateshead CCG	9,489	£569,319
NHS Ealing CCG	8,060	£563,388
NHS West Hampshire CCG	8,784	£537,976
NHS Heywood, Middleton & Rochdale CCG	8,489	£517,751
NHS Cumbria CCG	8,613	£516,324
NHS Oxfordshire CCG	7,353	£434,987
NHS Hartlepool and Stockton-On-Tees CCG	7,175	£423,466
NHS Enfield CCG	5,687	£395,281
NHS Hounslow CCG	5,762	£393,658
NHS Haringey CCG	5,562	£388,269
NHS East Riding of Yorkshire CCG	7,491	£385,706
NHS Southampton CCG	6,119	£384,547
NHS Hillingdon CCG	5,114	£353,341



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NHS Hammersmith and Fulham CCG	4,500	£321,966
NHS South Devon and Torbay CCG	5,492	£320,809
NHS Fareham and Gosport CCG	4,937	£309,999
NHS Wiltshire CCG	5,860	£301,494
NHS North, East, West Devon CCG	5,074	£297,169
NHS Greenwich CCG	4,901	£284,994
NHS Bracknell and Ascot CCG	4,036	£273,652
NHS Brent CCG	3,875	£269,285
NHS Northumberland CCG	4,312	£258,499

#### 11.5. **NMP** Palliative Care at home

The initiative involves the use of NMP for palliative care at a person's home - often to ease pain symptoms and side effects from chemotherapy. It reduces visits to Saving GP surgery or a trip to hospital, where patients may come into £0 to £25,000 contact with infection. £25,000 to £50,000 001 £50000 to £100,000

#### **Table:CCG Ranking**

Clinical Commissioning Group	Potential Reduction	Potential Saving
NHS Southwark CCG	392	£226,300
NHS Bromley CCG	230	£175,230
NHS Lambeth CCG	322	£174,646
NHS WEST LONDON (K&C & QPP) CCG	188	£146,960
NHS Ealing CCG	205	£123,468
NHS Nene CCG	293	£122,032
NHS Hammersmith and Fulham CCG	163	£93,999

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NHS West Kent CCG	252	£79,078
NHS Lewisham CCG	161	£77,064
NHS Greenwich CCG	128	£68,308
NHS Brent CCG	105	£64,468
NHS Central London (Westminster) CCG	100	£60,438
NHS Hillingdon CCG	112	£58,817
NHS Croydon CCG	87	£53,041
NHS Hounslow CCG	99	£52,955
NHS Corby CCG	124	£51,281
NHS Southern Derbyshire CCG	98	£50,920
NHS Dartford, Gravesham and Swanley CCG	55	£40,713
NHS Herts Valleys CCG	72	£39,689
NHS Richmond CCG	62	£36,028
NHS Wandsworth CCG	138	£35,957
NHS Coventry and Rugby CCG	66	£35,705
NHS Harrow CCG	60	£32,257
NHS West Hampshire CCG	44	£32,147
NHS West Norfolk CCG	41	£31,226
NHS Medway CCG	68	£29,944
NHS West Essex CCG	14	£28,069
NHS Cambridgeshire and Peterborough CCG	55	£27,722
NHS North West Surrey CCG	48	£26,572
NHS Bexley CCG	72	£23,832



#### 11.6. NMP Physiotherapist services – Unplanned & Planned Setting

The initiative involves using an NMP practitioner in a Physiotherapist Service at a community care centre. This would allow patients to have access to physiotherapy assessment and treatment up to seven days a week, therefore improving continuity and consistency in the delivery of rehabilitation programmes, reduce length of acute stay and limit readmissions. It is particularly appropriate for the frail elderly.

**Unplanned Care** 

#### **Planned Care**



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**Chapter:** Commissioning Opportunities



### Table:CCG Ranking Planned Care

Clinical Commissioning Group	<b>Potential Reduction</b>	Potential Saving
NHS Birmingham Cross City CCG	1,484	£526,261
NHS Herts Valleys CCG	1,019	£432,574
NHS West Hampshire CCG	826	£319,111
NHS Cumbria CCG	850	£302,919
NHS North, East, West Devon CCG	772	£261,475
NHS Cambridgeshire and Peterborough CCG	575	£246,253
NHS Nene CCG	586	£235,650
NHS Oxfordshire CCG	509	£223,291
NHS Kernow CCG	534	£223,037
NHS Solihull CCG	605	£220,792
NHS Ealing CCG	514	£214,822
NHS Hillingdon CCG	524	£211,821
NHS Southampton CCG	535	£211,041
NHS Vale of York CCG	631	£210,386
NHS South Kent Coast CCG	697	£205,236
NHS Dorset CCG	565	£201,950
NHS Shropshire CCG	501	£197,486
NHS Barnet CCG	428	£195,817
NHS Harrow CCG	497	£192,592
NHS East and North Hertfordshire CCG	460	£185,894
NHS Mansfield & Ashfield CCG	547	£183,801
NHS Birmingham South and Central CCG	490	£181,430
NHS Sandwell and West Birmingham CCG	515	£178,986
NHS Wiltshire CCG	467	£173,296
NHS North Derbyshire CCG	550	£169,995
NHS Sheffield CCG	420	£169,555
NHS Southern Derbyshire CCG	730	£159,948
NHS Gloucestershire CCG	437	£156,035
NHS Hull CCG	399	£151,738
NHS North West Surrey CCG	423	£150,961

6 2 Chapter: Commissioning Opportunities



#### Table:CCG Ranking Unplanned Care

Clinical Commissioning Group	Potential Reduction	Potential Saving
NHS West Hampshire CCG	937	£272,140
NHS Waltham Forest CCG	883	£238,497
NHS Birmingham Cross City CCG	1,215	£203,926
NHS Cambridgeshire and Peterborough CCG	751	£198,682
NHS Coastal West Sussex CCG	752	£198,528
NHS Sheffield CCG	674	£167,598
NHS North West Surrey CCG	618	£157,237
NHS Coventry and Rugby CCG	684	£155,946
NHS Northumberland CCG	669	£154,685
NHS Barnet CCG	574	£154,585
NHS Dorset CCG	561	£151,944
NHS Herts Valleys CCG	480	£150,372
NHS Nene CCG	708	£149,774
NHS Somerset CCG	700	£149,128
NHS Wirral CCG	650	£145,263
NHS Havering CCG	483	£141,107
NHS Southern Derbyshire CCG	694	£138,589
NHS Tameside and Glossop CCG	557	£137,310
NHS North, East, West Devon CCG	739	£133,233
NHS Bristol CCG	705	£132,628
NHS South Gloucestershire CCG	550	£127,575
NHS Oxfordshire CCG	360	£121,681
NHS Shropshire CCG	492	£120,420
NHS Blackpool CCG	561	£120,030
NHS WEST LONDON (K&C & QPP) CCG	338	£117,875
NHS East and North Hertfordshire CCG	467	£117,809
NHS Wiltshire CCG	675	£117,040
NHS Sandwell and West Birmingham CCG	597	£117,009
NHS Cumbria CCG	381	£117,006
NHS Salford CCG	364	£115,937

Chapter: Commissioning Opportunities

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#### **11.7.** NMP Podiatry services – Unplanned & Planned Setting

The initiative uses an NMP practitioner for the vascular triage service in the community rather than patient accessing hospital based services. The heel protection service allows patients to be discharged to structured care in the community therefore reducing admissions, readmissions and length of stay in hospital whilst, in many cases, ensuring the patient gets care closer to home.

**Unplanned Care** 

#### **Planned Care**





#### Table:CCG Ranking Planned Care

Clinical Commissioning Group	<b>Potential Reduction</b>	Potential Saving
NHS Dorset CCG	835	£175,758
NHS Southwark CCG	213	£58,445
NHS Cumbria CCG	210	£53,566
NHS Herts Valleys CCG	108	£45,609
NHS West Hampshire CCG	129	£38,999
NHS North Staffordshire CCG	206	£37,791
NHS Wigan Borough CCG	136	£37,565
NHS Coventry and Rugby CCG	119	£35,867
NHS Oxfordshire CCG	139	£35,177
NHS East Surrey CCG	193	£34,563
NHS North, East, West Devon CCG	111	£33,382
NHS Hambleton, Richmondshire and Whitby CCG	179	£33,340
NHS Warwickshire North CCG	124	£31,415
NHS North West Surrey CCG	119	£29,443
NHS Stockport CCG	112	£29,235
NHS Stoke on Trent CCG	134	£28,953
NHS Bristol CCG	75	£26,257
NHS Bolton CCG	85	£26,127
NHS South Manchester CCG	105	£24,725
NHS East Riding of Yorkshire CCG	103	£24,568
NHS Eastbourne, Hailsham and Seaford CCG	53	£24,451
NHS Kernow CCG	109	£22,703
NHS Leeds North CCG	93	£21,778
NHS Hillingdon CCG	51	£20,660
NHS Wandsworth CCG	72	£20,611
NHS Birmingham CrossCity CCG	77	£20,521
NHS Nene CCG	90	£20,442
NHS Surrey Downs CCG	44	£17,918
NHS Shropshire CCG	61	£17,867
NHS Guildford and Waverley CCG	62	£17,303

Chapter: Commissioning Opportunities



#### Table:CCG Ranking Unplanned Care

Clinical Commissioning Group	<b>Potential Reduction</b>	Potential Saving
NHS Dorset CCG	2,647	£414,379
NHS North, East, West Devon CCG	2,396	£378,125
NHS West Hampshire CCG	1,936	£329,085
NHS Cumbria CCG	1,603	£293,680
NHS Somerset CCG	1,547	£248,550
NHS Nene CCG	1,480	£247,866
NHS Kernow CCG	1,464	£236,092
NHS Northumberland CCG	1,190	£211,983
NHS Sheffield CCG	1,203	£205,576
NHS Coastal West Sussex CCG	1,144	£203,034
NHS Sandwell and West Birmingham CCG	1,136	£193,711
NHS Cambridgeshire and Peterborough CCG	1,101	£183,918
NHS Bristol CCG	1,370	£167,628
NHS East Leicestershire and Rutland CCG	864	£163,506
NHS Basildon and Brentwood CCG	966	£156,615
NHS Wiltshire CCG	961	£155,450
NHS Guildford and Waverley CCG	770	£153,611
NHS Southern Derbyshire CCG	973	£150,200
NHS Liverpool CCG	1,094	£145,548
NHS Vale of York CCG	1,236	£143,782
NHS Bedfordshire CCG	967	£142,891
NHS Birmingham CrossCity CCG	1,371	£142,529
NHS West Kent CCG	842	£140,583
NHS Waltham Forest CCG	678	£140,449
NHS Oxfordshire CCG	773	£139,772
NHS Gloucestershire CCG	994	£135,327
NHS Herts Valleys CCG	965	£133,460
NHS North Somerset CCG	751	£125,310
NHS Coventry and Rugby CCG	673	£121,540
NHS Brent CCG	564	£120,589

#### 11.8. Conclusion

The above exercise underlines the importance of commissioners in particular introducing, as a matter of course, the consideration of the NMP initiative into their planning and decision making processes. In many parts of the country, as demonstrated by the heat map exercises, it is given relatively little consideration.



#### **12. Economic Evaluation Conclusion**

It has long been advocated that the Non-Medical prescribing model in England enhances patient experience without endangering patients, improves overall performance and brings about significant economies. However, the discipline has not been widely adopted in either the Primary or Secondary Care environments. The provision of more sound, data-based evidence is needed to convince policy makers, clinicians and health care managers that NMP should have greater prominence in health planning and practice.

This report seeks to demonstrate that not only the data can be collated, connected and analysed but that the results of such exercises can provide strong support for the wider adoption of NMP. On the basis of economic value alone, investment in NMP can give a significant return during this period of ever growing demands on the NHS and restricted funding. It is already doing so across England to the value of close to £800m annually, as demonstrated by using the data derived from the Clinicians Audit. The addition of just one NMP practitioner into certain GP surgeries indicate value contributions of circa £270m can be obtained annually. Finally, a more focussed use, encouraged by commissioners, of the NMP initiative in a variety of health circumstances can have significant positive effects on both patient care and finances; in respect of the latter, values of up to £1m are obtainable.

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# in Hereit



#### **Appendix 1 – NMP Practitioners within CCGs**

Source – eNurse - 2015



### **Appendix 2A – Questionnaire for Stakeholders**

Question	Stakeholder Group
What is the cost of NMP	B,C,D,E,F,F,K
How many GP visits did NMP prevent	A,C,D,E,F,G,H,J,K,
How many hospital bed days did NMP save	A,C,D,E,F,G,H,J,K,
How many consultant visits did NMP save	A,C,D,E,F,G,H,J,K,
Does NMP show faster access to care	М
Does NMP show faster access to medicine	М
Do NMPs complete care episodes	М
Do care episodes with NMPs show a reduction in the number of health professionals involved	М
Do NMP localities show increased patient satisfaction	A,C,D,E,F,,G,H,J,K,L
Do NMPs result in reduced number of appointments in care episode (Primary Care)	A,C,D,E,F
NMPs help improve access to care (Primary)	A,C,D,E,F
Do NMPs reduce (re)admissions	A,C,D,E,F,G,H,J,K
Do NMPs reduce hospital LOS	A,C,D,E,F,G,H,J,K
Do NMPs reduce emergency admissions	A,C,D,E,F,G,H,J,K
Do NMPs reduce OP appointments	A,C,D,E,F,G,H,J,K
What level of NMPs are prescribing after qualification	А,В
Do NMP medication reviews improve medication regimens	A,C,D,E,F,G,H,J,K
Do NMP medication reviews improve concordance/adherence	A,C,D,E,F,G,H,J,K
Do NMP medication reviews identify side effects	A,C,D,E,F,G,H,J,K
Do NMPs follow recommended prescribing patterns	A,C,D,E,F,G,H,J,K
Do NMPs follow recommended consultation procedures	A,C,D,E,F,G,H,J,K



Question	Stakeholder Group
Does the use of NMPs show an overall effect on prescribing	A,C,D,E,F,G,H,J,K
Do NMPs show increased job satisfaction	A,B,C,D,E,F,G,H,J,L
Are NMPs accessing CMD options effectively	A,B,C,D,E,F,G,H,J,L
Do NMPs have better career prospects	A,B,C,D,E,F,G,H,J,L
Do NMPs help achieve 18 week referral targets	A,C,D,E,F,G,H,J,K,L
Where opportunities exist to extend NMP what would the savings be	A,C,D,E,F,G,H,J,L
For supplementary prescribing what improvements to the system could be made and what results would that achieve (cost, time, satisfaction)	М
Where NMP is in use could it be extended, e.g. increasing referrals, and what results would that achieve (cost, time, satisfaction)	М
How many NMPs currently active and localities	B,C,G
Level of NMP activity for NMPs	A,B,C,D,E,F,G,H,J,L
Do GPs report an improvement in their practice from use of NMPs	A,C,D,E,F
Do NMPs improve access to care for groups that have trouble/are not accessing healthcare	A,C,D,E,F,L
Does access to NMP training improve skill levels of health professionals	A,B,C,D,E,F,G,H,J,L
NMPs reduce the number of GP home visits required	A,C,D,E,F,K
Can efficiency of NMP be increased	A,C,D,E,F,G,H,J,K,L

A – NMP Practitioner

- B Registration Body
- C CCG Clinical Leadership
- D Practice Manager
- E General Practitioner
- F Consultant

- G Trust/Hospital Administrator
- H Doctor
- J Hospital Consultant
- K Patient Organisation
- L University
- M All

## in Heat

### Appendix 2B – North West Questionnaire

#### **Questions for NMP Practitioners**

- 1. Summary of your NMP role
- 2. What is the biggest impact of NMP on your working practices? How has the ability to prescribe and the NMP training impacted on your working practices?
- 3. What is the biggest impact of NMP on working practices in your department? For example, improvements in care pathways or achieving targets.
- 4. What has the biggest impact on your ability to prescribe effectively? For example, restrictions on prescribing or attitudes of colleagues. What would increase you prescribing levels, if relevant?
- 5. What has the biggest impact on efficient use of NMP in your department? How do local protocols impact on prescribing?
- 6. Was your training sufficient to enable you to prescribe confidently? Are there areas where additional training would have helped as you started prescribing? What could be done to assist others as they start prescribing?
- 7. Are you satisfied with the level of support and on-going training available to you? Do you know how to access support if required? Do other NMPs that you work with know how to access support?
- 8. Are your colleagues supportive of NMP? All other health professionals that you are working with. Do colleagues have a good understanding of potential and limitations of NMP? Do they support you in your NMP role?
- 9. Is there potential for increased use of NMP in your care pathway? Is NMP capability being accessed effectively? For example, could referrals to NMPs be increased by increasing awareness of availability?
- 10. Do you feel NMP has improved job satisfaction and future career development?

## in Head

#### **Appendix 3 – Cost of 5 Minute Prescribing - Table**

Description	Cost	Nursi ng	Pharm acy	Health Visitor / School Nurse	Physioth erapy	Podiat ry	Midwife ry	Radiogr aphy/T herapy
Prevention of A&E	58	£6.6	£10.5	£3.58	£3.00	£5.33	£5.90	£5.5
Prevention of Admission (Hospital or Hospice)	678	£6.6	£10.5	£3.58	£3.00	£5.33	£5.90	£5.5
Prevention of re- admission	720	£6.6	£10.5	£3.58	£3.00	£5.33	£5.90	£5.5
Prevention of new referral to another healthcare professional	183	£6.6	£10.5	£3.58	£3.00	£5.33	£5.90	£5.5
Prevention of new referral to consultant	183	£6.6	£10.5	£3.58	£3.00	£5.33	£5.90	£5.5
Prevention of follow up by consultant (or team)	105	£6.6	£10.5	£3.58	£3.00	£5.33	£5.90	£5.5
Prevention of follow up to another to another healthcare professional	tion of follow 105 £6.6 £10.9 nother to r healthcare ional		£10.5	£3.58	£3.00	£5.33	£5.90	£5.5
Prevention of GP surgery appointment	35	£6.6	£10.5	£3.58	£3.00	£5.33	£5.90	£5.5
Prevention of GP home visit	73	£6.6	£10.5	£3.58	£3.00	£5.33	£5.90	£5.5
Prevention of increased bed days- reducing length of stay	239	£6.6	£10.5	£3.58	£3.00	£5.33	£5.90	£5.5
Prevention of visit to Minor injuries Centre	35	£6.6	£10.5	£3.58	£3.00	£5.33	£5.90	£5.5
Prevention of visit to Primary Emergency Centre	35	£6.6	£10.5	£3.58	£3.00	£5.33	£5.90	£5.5
Prevention of visit to Urgent Care Centre	35	£6.6	£10.5	£3.58	£3.00	£5.33	£5.90	£5.5
Prevention of walk- in-centre visit	35	£6.6	£10.5	£3.58	£3.00	£5.33	£5.90	£5.5

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#### **Appendix 4 – Clinicians Audit and National Tables**

#### **Clinicians Audit Tables**

#### Nursing

Staff Prevented Events - Patient Counts - One Month											
FA	FU	Adm	LOS	GP Appt	GP Home	MIU/UCC	Total				
927	3,442	1,067	1,174	841	92	65	7,770				
284	416	26	-	4,085	111	190	5,380				
464	1,318	480	23	1,414	1,692	125	5,793				
39	220	7	1	13	3	-	290				
-	1	2	1	1	9	-	14				
-	2	2	1	1	1	-	7				
-	2	-	-	-	-	-	2				
1,714	5,401	1,584	1,200	6,355	1,908	380	19,256				
	FA 927 284 464 39 - - - - -	FA         FU           927         3,442           284         416           464         1,318           39         2200           -         1           -         2           -         2           -         2           -         2           -         5,401	FA         FU         Adm           927         3,442         1,067           284         416         26           464         1,318         480           39         220         7           -         1         22           -         2         2           -         2         2           -         5,401         1,584	FA         FU         Adm         LOS           927         3,442         1,067         1,174           284         416         26         -           464         1,318         480         23           39         220         7         1           -         1         2         1           -         2         2         1           -         2         2         1           -         2         2         1           -         2         2         1	FA         FU         Adm         LOS         GP Appt           927         3,442         1,067         1,174         841           284         416         266         -         4,085           464         1,318         480         23         1,414           39         220         7         1         13           -         1         2         1         1           -         2         2         1         1           -         2         2         1         1           -         2         -         -         -           1         5,401         1,584         1,200         6,3555	FA         FU         Adm         LOS         GP Appt         GP Home           927         3,442         1,067         1,174         841         92           284         416         26         -         4,085         111           464         1,318         480         23         1,414         1,692           39         220         7         1         13         3           -         1         2         1         1         9           -         2         2         1         1         1           -         2         2         1         1         1           -         1         2         1         1         1           -         2         2         1         1         1           -         -         -         -         -         -	FA         FU         Adm         LOS         GP Appt         GP Home         MIU/UCC           927         3,442         1,067         1,174         841         92         65           284         416         26         -         4,085         111         190           464         1,318         480         23         1,414         1,692         125           39         220         7         1         13         3         -           -         1         22         1         1         9         -           -         1         2         1         1         9         -           -         2         2         1         1         1         -           -         2         2         1         1         1         -           -         2         2         1         1         1         -         -           -         2         -         -         -         -         -         -           -         1         5,401         1,584         1,200         6,355         1,908         380				

<b>Cost Prevention</b>	ost Prevention - Audit Staff				ff Prevented Events - Cost Prevention - One Month (£ Sterling)											
NMP Qualification	Setting	Count	A&E	FA	FU	Adm	LOS	GP Appt	GP Home	MIU/UCC	Total					
Nursing	Secondary	506	8,334	163,565	338,849	716,432	272,891	23,923	6,113	1,849	1,531,956					
	GP Practice	265	13,787	50,111	40,953	17,458	-	116,200	7,375	5,405	251,288					
	Community	659	14,250	81,871	129,751	322,294	5,346	40,222	112,426	3,556	709,715					
	Mental Health	43	360	6,881	21,658	4,700	232	370	199	-	34,401					
	Social Care	10	-	-	98	1,343	232	28	598	-	2,300					
	Hospice Care	6	-	-	197	1,343	232	28	66	-	1,867					
	Voluntary Sector	2	-	-	197	-	-	-	-	-	197					
	Total	1,491	36,732	302,427	531,704	1,063,570	278,935	180,771	126,778	10,809	2,531,725					

#### Health Visitor/School Nurse

<b>Activity Preventio</b>	ctivity Prevention - Audit Staff		taff Prevented Events - Patient Counts - One Month											
NMP Qualification	Setting	Count	A&E	FA	FU	Adm	LOS	GP Appt	GP Home	e MIU/UC	C Total			
Health Visitor / School	Secondary	6	-		1	3	1	2	2	7	-	16		
Nurse	GP Practice	10	-		1	3	-	-	12	-	1	17		
	Community	179	1	5	54	54	3	-	503	32	30	691		
	Mental Health	-	-	-	-		-	-	-	-	-	-		
	Social Care	1	-	-	-		-	-	1	-	-	1		
	Hospice Care	-	-	-	-		-	-	-	-	-	-		
	Voluntary Sector	-	-	-	-		-	-	-	-	-	-		
	Total	196	1	5	56	60	4	2	518	39	31	725		

<b>Cost Prevention -</b>	Audit	Staff Prevented Events - Cost Prevention - One Month (£ Sterling)											
NMP Qualification	Setting	Count	A&E	FA	F	U J	Adm	LOS	GP Appt	GP Home	MIU/UCC	Total	
Health Visitor / School	Secondary	6		-	179	304	674	471	63	486	-	2,178	
Nurse	GP Practice	10		-	179	304	-	-	377	-	31	892	
	Community	179		816	9,689	5,477	2,023	-	15,803	2,221	943	36,971	
	Mental Health	-		-	-	-	-	-	-	-	-	-	
	Social Care	1		-	-	-	-	-	31	-	-	31	
	Hospice Care	-		-	-	-	-	-	-	-	-	-	
	Voluntary Sector	-		-	-	-	-	-	-	-	-	-	
	Total	196		816	10.047	6.085	2.698	471	16.274	2.707	974	40.072	

#### Pharmacy

<b>Activity Prevent</b>	ion - Audit	Staff	Prevente	ed Events -	Patient Co	unts - One M	lonth				
NMP Qualification	Setting	Count	A&E	FA	FU	Adm	LOS	GP Appt	GP Home	MIU/UCC	Total
Pharmacy	Secondary	21	3	22	132	4	55	13	-	-	229
	GP Practice	17	2	. 7	68	2	-	192	2	- 2	273
	Community	6	-	5	44	-	-	11	-	:	1 61
	Mental Health	14	3	11	. 106	-	2	1	-	-	123
	Social Care	-	-	-	-	-	-	-	-	-	-
	Hospice Care	-	-	-	-	-	-	-	-	-	-
	Voluntary Sector	-	-	-	-	-	-	-	-	-	-
	Total	58	8	45	350	6	57	217	2	2 :	1 686



Cost Prevention	- Audit	Staff	Preven	ted Event	ts - Cost Pre	evention - Or	e Month (£	Sterling)				
NMP Qualification	Setting	Count	A&E	FA	F	U .	Adm	LOS	GP Appt	GP Home	MIU/UCC	Total
Pharmacy	Secondary	21		143	3,795	12,474	2,67	12,568	319	-	-	31,968
	GP Practice	17		95	1,208	6,426	1,33	5 -	4,704	125	-	13,893
(	Community	6		-	863	4,158	-	-	270	-	25	5,315
	Mental Health	14		143	1,898	10,017	-	457	25	-	-	12,539
	Social Care	-		-	-	-	-	-	-	-	-	-
	Hospice Care	-		-	-	-	-	-	-	-	-	-
	Voluntary Sector	-		-	-	-	-	-	-	-	-	-
	Total	58		380	7,763	33,075	4,00	5 13,025	5,317	125	25	63,713

#### Physiotherapy

<b>Activity Prevention</b>	on - Audit	Staff	Prever	nted Ever	nts - Patier	t Counts - Or	e Month					
NMP Qualification	Setting	Count	A&E	FA	FU	Adm	LOS	GP Appt	GP Home	e MIU/UC	C Total	
Physiotherapy	Secondary	18		4	36	28	2	1	41	2	4	118
	GP Practice	3	-		3	2	19	-	47	1	-	72
	Community	13		5	11	27	2	-	45	2	5	97
	Mental Health	-	-		-	-	-	-	-	-	-	-
	Social Care	-	-		-	-	-	-	-	-	-	-
	Hospice Care	-	-		-	-	-	-	-	-	-	-
	Voluntary Sector	-	-		-	-	-	-	-	-	-	-
	Total	34		9	50	57	23	1	133	5	9	287

Cost Prevention	- Audit	Staff	Preven	ted Event	s - Cost Pre	evention - O	ne Month (£S	Sterling)				
NMP Qualification	Setting	Count	A&E	FA	F	U	Adm	LOS	GP Appt	GP Home	MIU/UCC	Total
Physiotherapy	Secondary	18		220	6,480	2,856	1,350	236	1,312	140	128	12,722
	GP Practice	3		-	540	204	12,825	-	1,504	70	-	15,143
	Community	13		275	1,980	2,754	1,350	-	1,440	140	160	8,099
	Mental Health	-		-	-	-	-	-	-	-	-	-
	Social Care	-		-	-	-	-	-	-	-	-	-
	Hospice Care	-		-	-	-	-	-	-	-	-	-
	Voluntary Sector	-		-	-	-	-	-	-	-	-	-
	Total	34		495	9,000	5,814	15,525	236	4,256	350	288	35,964

#### Podiatry

Activity Prevent	on - Audit	Staff	Preve	nted Eve	nts - Patie	nt Counts - Or	e Month					
NMP Qualification	Setting	Count	A&E	FA	FU	Adm	LOS	GP Appt	GP Home	e MIU/UCC	Total	
Podiatry	Secondary	19		4	9	41	9	1	25	3	-	92
	GP Practice	-		-	-	-	-	-	-	-	-	-
	Community	22		1	34	108	4	1	24	18	2	192
	Mental Health	-		-	-	-	-	-	-	-	-	-
	Social Care	-		-	-	-	-	-	-	-	-	-
	Hospice Care	-		-	-	-	-	-	-	-	-	-
	Voluntary Sector	-		-	-	-	-	-	-	-	-	-
	Total	41		5	43	149	13	2	49	21	2	284

<b>Cost Prevention</b>	- Audit	Staff	Preve	nted Ever	nts - Cost Pre	evention - One	Month (£ Sterlin	ig)				
NMP Qualification	Setting	Count	A&E	FA	F	U Ad	dm LOS	G	P Appt	GP Home	MIU/UCC	Total
Podiatry	Secondary	19		211	1,599	4,086	6,054	234	742	203	-	13,128
	GP Practice	-		-	-	-	-	-	-	-	-	-
	Community	22		53	6,041	10,764	2,691	234	712	1,218	59	21,771
	Mental Health	-		-	-	-	-	-	-	-	-	-
	Social Care	-		-	-	-	-	-	-	-	-	-
	Hospice Care	-		-	-	-	-	-	-	-	-	-
	Voluntary Sector	-		-	-	-	-	-	-	-	-	-
	Total	41		263	7.640	14.850	8.745	467	1.454	1.421	59	34.899

#### Midwifery

<b>Activity Prevent</b>	ion - Audit	Staff	Prevent	ted Events	s - Patient C	ounts - One	Month					
NMP Qualification	Setting	Count	A&E	FA	FU	Adm	LOS	GP Appt	GP Hon	ne MIU/U	CC Total	
Midwifery	Secondary	5		1	4 5	52	2	1	2	-	-	62
	GP Practice	1	-		1	5 -		-	-	-	-	6
	Community	1	-	-	-	-		-	-	1	-	1
	Mental Health	-	-	-	-	-		-	-	-	-	-
	Social Care	-	-	-	-	-		-	-	-	-	-
	Hospice Care	-	-	-	-	-		-	-	-	-	-
	Voluntary Sector	-	-	-	-	-		-	-	-	-	-
	Total	7		1	5 5	7	2	1	2	1	_	60

4



<b>Cost Prevention</b>	- Audit	Staff	Preve	nted Events	- Cost Preve	ention - One M	onth (£ Sterlin	g)				
NMP Qualification	Setting	Count	A&E	FA	FU	Adm	LOS	G	P Appt	GP Home	MIU/UCC Tot	al
Midwifery	Secondary	5		52	708	5,153	1,344	233	58	-	-	7,549
	GP Practice	1		-	177	496	-	-	-	-	-	673
	Community	1		-	-	-	-	-	-	67	-	67
	Mental Health	-		-	-	-	-	-	-	-	-	-
	Social Care	-		-	-	-	-	-	-	-	-	-
	Hospice Care	-		-	-	-	-	-	-	-	-	-
	Voluntary Sector	-		-	-	-	-	-	-	-	-	-
	Total	7		52	886	5.649	1.344	233	58	67	_	8,289

#### Radiography/Therapy

Activity Prevention		Staff Prevented Events - Patient Counts - One Month										
NMP Qualification	Setting	Count	A&E	FA	FU	Adm	LOS	GP Appt	GP Hom	e MIU/UC	C Total	
Radiography/Therapy	Secondary	3	:	1	12	128	2	3	37	3	-	186
	GP Practice	-	-	-		-	-	-	-	-	-	-
	Community	-	-	-		-	-	-	-	-	-	-
	Mental Health	-	-	-		-	-	-	-	-	-	-
	Social Care	-	-	-		-	-	-	-	-	-	-
	Hospice Care	-	-	-		-	-	-	-	-	-	-
	Voluntary Sector	-	-	-		-	-	-	-	-	-	-
	Total	3	:	1	12	128	2	3	37	3	-	186

Cost Prevention - Audit		Staff	Staff Prevented Events - Cost Prevention - One Month (£ Sterling)										
NMP Qualification	Setting	Count	A&E	FA	FU	Adm	LOS	(	GP Appt	GP Home	MIU/UCC	Total	
Radiography/Therapy	Secondary	3		53	2,130	12,736	1,345	701	1,092	203	-	18,258	
	GP Practice	-		-	-	-	-	-	-	-	-	-	
	Community	-		-	-	-	-	-	-	-	-	-	
	Mental Health	-		-	-	-	-	-	-	-	-	-	
	Social Care	-		-	-	-	-	-	-	-	-	-	
	Hospice Care	-		-	-	-	-	-	-	-	-	-	
	Voluntary Sector	-		-	-	-	-	-	-	-	-	-	
	Total	3		53	2,130	12,736	1,345	701	1,092	203	-	18,258	

#### **National Tables – One Month**

Activity Prevention - England Staff			Prevented Events - Patient Counts - One Month											
NMP Qualification	Setting	Count	A&E	FA	FU	Adm	LOS	GP Appt	GP Home	MIU/UCC	Total			
All Categories	Secondary	9,674	3,097	17,723	65,806	20,400	22,445	16,079	1,759	1,243	148,551			
	GP Practice	7,184	7,265	7,699	11,278	705	-	110,742	3,009	5,151	145,849			
	Community	25,394	10,674	17,880	50,788	18,496	886	54,487	65,200	4,817	223,228			
	Mental Health	1,347	219	1,222	6,892	219	31	407	94	-	9,084			
	Social Care	449	-	-	45	90	45	45	404	-	629			
	Hospice Care	380	-	-	127	127	63	63	63	-	443			
	Voluntary Sector	201	-	-	201	-	-	-	-	-	201			
	Total	44,629	21,256	44,524	135,136	40,037	23,471	181,824	70,529	11,210	527,986			

Cost Prevention - England s			Staff Prevented Events - Cost Prevention - One Month (£ Sterling)										
NMP Qualification	Setting	Count	A&E	FA	FU	Adm	LOS	GP Appt	GP Home	MIU/UCC	Total		
All Categories	Secondary	9,674	159,337	3,127,128	6,478,313	13,697,165	5,217,286	457,366	116,871	35,349	29,288,818		
	GP Practice	7,184	373,768	1,358,467	1,110,221	473,265	-	3,150,104	199,944	146,516	6,812,286		
	Community	25,394	549,126	3,154,816	4,999,846	12,419,315	206,013	1,549,914	4,332,226	137,015	27,348,272		
	Mental Health	1,347	11,281	215,563	678,449	147,234	7,281	11,584	6,244	-	1,077,637		
	Social Care	449	-	-	4,420	60,296	10,437	1,277	26,851	-	103,281		
	Hospice Care	380	-	-	12,470	85,050	14,722	1,802	4,208	-	118,251		
	Voluntary Sector	201	-	-	19,788	-	-	-	-	-	19,788		
	Total	44,629	1,093,512	7,855,975	13,303,507	26,882,325	5,455,739	5,172,046	4,686,345	318,881	64,768,331		



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