An Evaluation of New Models of Prescribing (NMOP):

A Physiotherapist Prescribing Pilot

November 2021

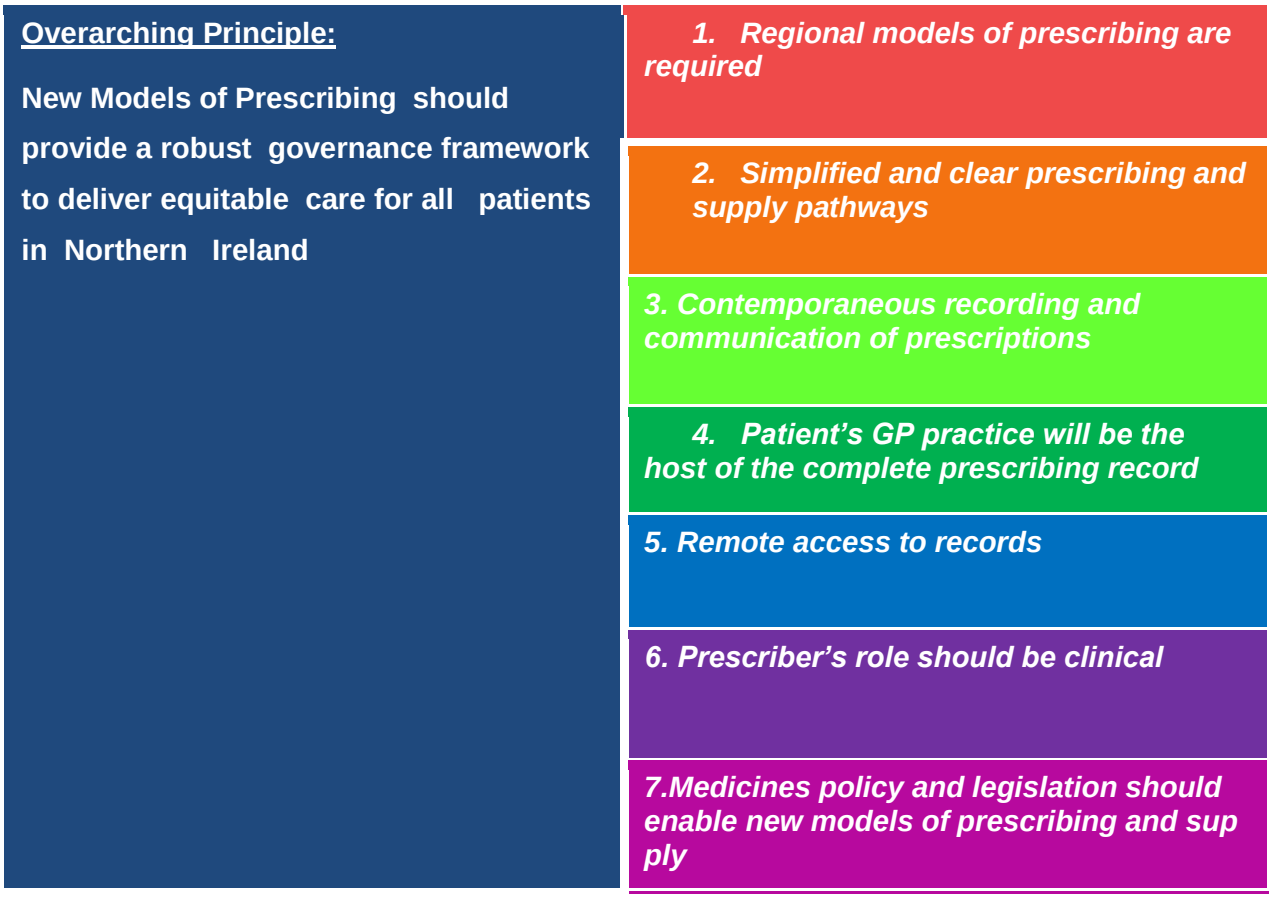
Contents

Overview of New Models of Prescribing project

Northern Ireland lacks mechanisms to allow some prescribers working at interfaces between primary and secondary care to prescribe treatments directly to their patients. This means that there may be duplication of work, with the original prescriber needing to work through the patient's General Practitioner (GP) to ensure that the required treatments are prescribed.

In order to address these issues, a transformation project, led by the Health & Social Care Board (HSCB) and involving extensive stakeholder engagement, was established to scope out the arrangements that need to be in place to enable prescribers working at the interface to work in a more effective and autonomous way. The stakeholder engagement established key principles to enable New Models of Prescribing (NMOP) (Figure 1).

Figure 1: Agreed NMOP Principles



A number of pilot projects were initiated to test the principles and explore the processes, governance and policy frameworks required for NMOP. The pilots included:

- Dietitian led direct ordering of oral nutritional supplements for care home patients
- Physiotherapist prescribing at the interface: community and outpatients
- Heart failure specialist nurse prescribing at the interface
- Mental Health Home Treatment Team: medical and non-medical prescribers

The Medicines Optimisation Innovation Centre (MOIC) is a regional centre in Northern Ireland dedicated to delivering medicines optimisation to the population. MOIC were tasked with assisting in the evaluation the NMOP pilot studies.

One of the pilot projects focussed on physiotherapist prescribing at the interface. This report will describe the evaluation of that pilot.

Context

The physiotherapy profession covers a broad and diverse range of specialties. In Northern Ireland there are currently approximately 75 qualified prescribing physiotherapists employed across all Trusts. At least 18 of those specialise in respiratory, 15 in musculoskeletal (MSK) and 5 in lymphoedema. With the exception of First Contact Physiotherapists working in GP Federation Multidisciplinary Teams, there is currently no mechanism for prescribers to issue a HS21 prescription directly to the patient. Recommendations made by these specialists have to be implemented by a GP, often causing duplication of effort and delays in treatment. Mechanisms to enable prescribing Physiotherapists to use their enhanced skills would empower the profession and improve patient care.

Aims and objectives of NMOP physiotherapy pilot evaluation

The overarching aim was to complete an evaluation of the NMOP physiotherapy pilot through joint working between MOIC, HSCB and NMOP Physiotherapy Task and Finish Group (Appendix 1).

The objectives were to:

- Evaluate the potential volume of prescribing activity that can be shifted to physiotherapist prescribers
- Evaluate the benefits in relation to access to prescribed items and reduced pressure on GPs
- Evaluate perspectives on the delivery of tailored physiotherapy interventions to patients and maximising professional skills at the point of care delivery
- Evaluate perspectives on the care pathways that can be delivered by a physiotherapist
- Evaluate perspectives on patients accessing prescribed items
- Evaluate perspectives on the impact on health care appointments and hospitalisations.
- Evaluate perspectives on patient / client concordance with taking prescribed items.
- Evaluate perspectives on communication processes to GPs regarding items prescribed.

Evaluation methodology

An analysis plan linking project objectives to the collected data was co-produced by MOIC, HSCB and clinicians participating in the NMOP pilot. Division of tasks under the plan was agreed between HCSB and MOIC (Appendix 2).

In line with the agreed analysis plan, the following outcome measurement and analysis was undertaken:

- **Stakeholder feedback sessions**: An agenda for a virtual feedback session was co-produced by HSCB and MOIC. Mentimeter software was used to capture quantitative agreement ratings and qualitative commentary from contributors. Qualitative feedback from participants was mapped to the project objectives using

a theming approach (a theme or discussion point was summarised and presented, supported by quote extracts form contributors). Average agreement ratings from the participants on how the pilot met the project objectives, were summarised.

- **Stakeholder survey**: A survey co-designed by HSCB and MOIC was launched via Citizen Space. Descriptive statistics were used to summarise responses. Qualitative feedback from participants was themed and tabulated.
- **NMOP audit activity**: Clinicians were invited to submit prescribing activity from 1 week of their practice around the start (16/11/2020) and end (30/06/2021) of the pilot. In addition, clinicians were invited to submit de-prescribing activity from 1 week during a 4 week period from 1st March 2021. Audit activity was collated using Excel. Data was quality checked and re-categorised as necessary. Descriptive statistics were used to summarise activity at the start and end of the pilot and results were tabulated.
- **Process maps**: Clinicians participating in the NMOP pilot summarised their clinical workflow at the start and end of the pilot. The main steps from the process at the start and at the end of the pilot were extracted from the text and collated in flowchart figure. Key findings were summarised.
- **Patient journeys**: Clinicians participating in the NMOP pilot summarised patient journeys, which emerged during the pilot. The full summaries and key findings were presented in text.
- **Patient Satisfaction Survey**: Patients receiving care as part of the NMOP pilot were invited to complete and submit a paper Patient Satisfaction Survey in person or via post. Descriptive statistics were used to summarise results. Direct quotes were extracted and presented.
- **Prescribing data**: Monthly prescribing data (number of prescribers, number of scripts, number of items, cost of items, average cost of item and average cost of item per prescriber) from the start to the end of the pilot was summarised using descriptive statistics.

Results

Stakeholder feedback session

During the stakeholder feedback session, agreement ratings on whether the pilot met the overall objectives of the project were collected using Mentimeter software. Data from 24 stakeholders, including physiotherapy prescribers were collected. Eight out of 21 physiotherapy prescribers involved in the pilot provided feedback.

The physiotherapy prescribers and other stakeholders were asked, “How strongly do you agree or disagree to the following statement” and asked to select a score from 1-5 (5 = strongly agree and 1 = strongly disagree). Overall, there was strong agreement that the pilot met the overall objectives of the project (Table 1).

Table 1 - Agreement ratings on whether the pilot met the overall objectives of the project

Question	Mean Score
Robust governance arrangements put in place to ensure safe and effective prescribing	4.5 / 5
This pilot project provided a greater opportunity to access the right medicines at the right time from the right person	4.8 / 5
The pilot project maximised the use of professional skills at the point of care.	4.3 / 5
The pilot project displaced prescribing activity from GP practices	4.1 / 5
This pilot project supported a reduction in the amount of unnecessary health care appointments and hospitalisations and promoted faster recovery	4.2 / 5

Key themes were identified from the Stakeholder feedback in relation to each objective, the benefits and challenges and requirements for regional roll-out. A summary of the themes linked to the objectives are presented in Table 2 and Figure 2 and further detail with supporting extracts in Appendix 3.1. Similar objectives were grouped together.

Table 2: Key themes identified from feedback provided at stakeholder workshop aligned with project objectives

Robust governance arrangements	**Benefits in accessing medication and reducing pressure on GPs**	**Establish communication processes to GPs regarding items prescribed**	**Enhance the delivery of tailored physiotherapy interventions maximising professional skills**	**Support care pathways that can be delivered by a physiotherapist**	**Reduce delays in patients accessing medication**	**Support a reduction in unnecessary appointments and hospitalisation; promote faster recovery and self-caring**	**Support improvements concordance**
Standardisation of processes	Reduction of errors	Additional administration time	Utilising skills and expertise	Highlighting physiotherapist skillset	Timely access to medications	Improved access to meds	Patient satisfaction
Duplication	Timely access to medications	GP Practice responsibility regarding the eTAN	Reduction in errors and delays	Reduction in errors and delays	Timely access to garments	Reduction in errors and delays	Patient confidence

IT systems	Patient satisfaction	Communication between primary and secondary care	Further opportunities and suggestions to prescribe	Limitations of what could be prescribed in the pilot	Timely access to medicines for Acute Care at Home patients	Communication	Improved medicines' adherence
Legislation and policy	Clinical responsibility	Assistance from Trust IT colleagues		Raising profile			Communication
Communication	Cost saving	Suggestions and amendments to digital platforms / communication					
Resource							

Figure 2: Key themes identified from Stakeholder Feedback

Common themes encompassing benefits, challenges, suggestions for future pilots and requirements for regional roll-out were extracted from the discussion feedback session and are tabulated in Appendix 3.2.

Stakeholder survey

An online survey was developed to obtain the views and experiences of a range of key stakeholders. It was circulated after the stakeholder feedback workshop, to Task and Finish group Members, GPs and GP Pharmacists working in the participating Trust localities via the GPNI website, and community pharmacists via Community Pharmacy NI and Pharmacy Forum. There were 46 responses in total. Most of the responses were from Physiotherapists, GPs, and Pharmacists (Table 3).

Table 3: Respondents to stakeholder survey

Stakeholder	**Number**	**Percentage**
GP	14	30%
Physiotherapist	16	35%
Community Pharmacist	3	7%
GP Pharmacist	6	13%
Trust Pharmacist	3	7%
Service Manager	1	2%
Other*	3	7%
Total	**46**	100%

*Other: n=1 HSCB Pharmacist; n=1 Community Respiratory team; n=1 Hospital Consultant

Most of the respondents (87%) worked either in the South Eastern or Southern Trust localities, where the pilot project was implemented.

Respondents were asked to respond to a number of questions.

Does physiotherapist prescribing on HS21 benefit patients?

The majority of respondents (80%) felt that physiotherapist prescribing on HS21 benefits the patient and half of the cohort provided further comment (Appendix 4.1). Benefits included: reducing delay in accessing urgent medicines; reducing risk of inappropriate medicines/appliances being prescribed and errors; reducing burden on GP practices; more convenient for patients; more streamlined process.

Some of the respondents had little first-hand experience of the service at the time of survey completion and were unable to elaborate.

Others were sceptical of the potential benefits, either because they had no experience to date, or were assuming that it was going to create more work, particularly for GPs.

Key Findings: Do you feel this pilot benefits the patient?
• Reduces prescription delay • Reduces risk of inappropriate prescription • Reduces burden on GP practices • Reduces burden on secondary care e.g. timely discharges • Streamlined patient service • Patient access to specialist clinician • Patient more informed about their medications

Did respondents feel comfortable using the electronic treatment advice note (eTAN)?

More than half of the respondents (59%) were comfortable with using the eTAN. Those who were unsure (39%) were more likely to be receiving the eTAN rather than generating the note. The main difficulty cited by those generating the eTAN was the time required by the prescriber to complete. There were issues cited with some practices' ability to receive and/ or action the advice in a timely manner and this appeared to be a reflection of differing systems across practices.

The eTAN offered advantages including: the provision of consistent, timely and clear information; patient safety and collaboration; GP kept informed of patient's management plan.

Again, a number of respondents, to date had not had any experience of the electronic communication. Further comments provided by respondents are listed in Appendix 4.2.

Key Findings: The electronic treatment advice note
• Clear, efficient and timely communication • ePrescribing is key to future use • Reduced paper load • GPs are more aware of role of NMP • Occasional issues with GPs receiving/accessing treatment advice notes • Compilation of GP advice notes can be time consuming • Lack of awareness among some GPs of electronic communication

Were respondents happy for physiotherapist prescribing to continue?

Most of the respondents (83%) indicated that they were happy for physiotherapist prescribing to continue. Further comment (39%) can be viewed in Appendix 4.3 and indicated that some respondents wanted the service to be commissioned and streamlined into business as usual and were disappointed that it had taken so long to pilot physiotherapist prescribing. GP respondents were keen to understand how this new approach to prescribing reduced their workload. Trust pharmacists wanted assurances that the prescribing would continue to be funded and monitored as per the processes established for the pilot project. Physiotherapists involved acknowledged that they had received good support across the multidisciplinary team in establishing this new pathway. However, MSK physiotherapists felt that the opportunity for them to prescribe was limited due to current controlled drug legislation for physiotherapists and the NMOP project criteria within which they could write a HS21 prescription.

Key Findings: Happy for pilot to continue?
• Dissemination and communication of evaluation is important • Confirmation that funding is in place, monitoring is in place is important • NMOP practice should be standard • NMOP practice benefits patients by providing access to specialist care • NMOP practice enables professional autonomy of physiotherapist • NMOP practice enables whole team approach to the patient's care • NMOP should be streamlined into business as usual • The need to demonstrate reduction in GP workload is key • Governance and funding required for educational supervisor roles • Ability to prescribe controlled drugs and de-prescribe via virtual consultations requires further exploration

What were the positives associated with physiotherapist prescribing of HS21s

Over three-quarters of respondents (76%) provided a response to this question with many listing multiple benefits. These can be viewed in Appendix 4.4. Benefits included: safer prescribing due to less need for transcription; faster access to medicines; supported GPs during COVID-19 pandemic; more efficient process; less confusion as to the intentions of the prescriber; optimising skills of NMP physiotherapists.

Some of the comments can be illustrated via the following quotes:

- “Lymphoedema prescriptions can often be quite complex, requiring inclusion of several codes. The absence of, or inclusion of incorrect information can lead to a delay in the correct garment being supplied to the patient. Physiotherapist prescribing should mean the patient receives the required garment sooner.”
- “Physiotherapist prescribing can minimise transcribing errors and avoid unnecessary expenditure. With so many similar garments available for

selection on practice clinical systems there have been occasions were the wrong garment has been selected."

- "Huge benefits to the patients. Quick and effective treatment in urgent circumstances. Very rewarding for the clinician, able to use their extended scope skills for the benefit of the patient. Putting all their training into action."

Key Findings: Positives of the pilot project
• Safer due to less transcription • Patients are accessing medicines at right time • Patients got advice at the time of assessment • Reduced burden on the clinician • Optimising the skills of non-medical prescribers leading to increased job satisfaction • Empowers clinicians to de-prescribe medications that patient may no longer require • Established electronic communication with GPs • Increased capacity of the team to see more patients • Supported GPs during COVID-19 pandemic • Promotion of the Physiotherapy profession • Inter-professional collaboration

What were the challenges/negatives associated with physiotherapist prescribing of HS21s

A similar proportion of respondents (76%) provided a response to this question, with many indicating that they had not come across any challenges/negatives. These can be viewed in Appendix 4.5. Challenges faced included; those related to additional administration time associated with data collection to support evaluation of the project; limitations to prescribing ability due to use of compliance aids, medicines legislation, delays in allocating cipher numbers to prescribers and establishing electronic

communication with GP practices. It was also difficult to secure community pharmacy representation for the Task and Finish Group.

One respondent highlighted that because this pathway was still "niche" and not widespread across the region it would be difficult to raise awareness among other stakeholders that this was now a possibility.

Key Findings: Challenges/Negatives of the pilot project
• Establishing electronic communication with GPs • Engaging community pharmacists • Increased administration time • Delays in accessing prescription pads • Limitations to using the prescription pads remotely • Restriction in the type of medication able to prescribe/de-prescribe • Lack of awareness of NMOP amongst GPs • Some teams with medical input have limited use for NMOP

What improvements/considerations should be made for full implementation?

The majority of respondents (61%) provided a response to this question. These can be viewed in Appendix 4.6. Responses included the need for a regionally commissioned service to ensure adequate resource, the importance of access to digital technology to enable remote access to appropriate records and decision support software and clear DH policy to support this model of care.

Key Findings: What improvements/considerations should be made for full implementation?
• Firm commitments and clarity around NMP (non-medical prescribing) budgets • Resource to ensure appropriate governance regionally • Shared learning and communication with other Trusts

- Raising awareness among GPs that NMPs are now issuing HS21 prescriptions
- Develop and implement electronic prescribing platform, operational within Primary Care
- Alignment with DH policy in relation to prescribing and supply of medicines at interfaces with primary care
- Support for prescribing physiotherapists to work independently from GP in surgeries
- Remote access to electronic systems to facilitate NMOP
- More training on use of HS21 and refresher training
- Dissemination and communication of results of the pilot to all stakeholders
- Improved team interaction
- Misuse of drugs legislative change to support MSK physiotherapist prescribing of some controlled drugs
- Extension to more specialties

Additional comments

Additional comments were provided by 20 of the 46 respondents (43%). These can be viewed in Appendix 4.7. Responses reflected the job satisfaction experienced by participating physiotherapists, the appreciation of an integrated and collaborative approach to the project and perceived benefits to patients. Others were more sceptical of the NMOP reducing GP workload, the numbers of patients benefitting and the fact that the pilot did not provide an opportunity for pharmacists to prescribe.

Key Findings: Additional Comments

- NMOP pilot is an example of collaborative leadership
- Ultimate goal is electronic prescribing
- Further pilots could better inform implementation
- Great feedback from patients, family members and team members

- Resources for physios as independent prescribers should be considered priority

NMOP audit activity

Between November 2020 and June 2021, 19 physiotherapy prescribers in the Southern Health and Social Care Trust and South Eastern Health and Social Care Trust were involved in a pilot of new models of prescribing in Physiotherapy. Clinicians were invited to submit activity from 1 week of their practice from before the start of the pilot (16/11/2020) and at the end of the pilot (30/06/2021). Data are summarised in Table 4.

There was little change in the prescribers' locality, years of prescribing experience, or proportion of time dedicated to clinical activities.

There was however, an increase in the ability of prescribers to facilitate face-to-face consultations at the end due to a relaxation in COVID-19 pandemic restrictions. There were also a greater proportion of prescribers working in respiratory compared with MSK, reflecting the opportunities to prescribe in an acute situation.

Table 4: Physiotherapy prescribers audit results

	Start	**End**
Number of prescribers recording data	16	15
Number of patient contacts	148	82
Prescriber Background		
N (%) Respiratory	52/148 (35%)	32/82 (48%)
N (%) ICATS	46/148 (31%)	3/82 (5%)
N (%) Lymphoedema	18/148 (12%)	27/82 (33%)
N (%) Musculoskeletal	18/148 (12%)	0/82 (0%)
N (%) ICT Physiotherapy	9/148 (6%)	6/82 (7%)
N (%) CST	3/148 (2%)	2/82 (2%)
N (%) Neurology	2/148 (1%)	5/82 (6%)
Mean WTE clinical time	0.7 *n=14/16	0.7 *n=11/15
Mean number of years qualified as prescriber	2.8 *n=8/16	2.7 *n=9/15
Trust		
N (%) SHSCT	90/148 (61%)	49/82 (60%)
N (%) SEHSCT	58/148 (39%)	33/82 (40%)
Patient		
Diagnosis N (%)		
Exacerbation of Chronic Respiratory Condition	29/148 (20%)	26/82 (32%)
Neck and back pain	25/148 (17%)	1/82 (1%)
Limb pain	18/148 (12%)	0/82 (0%)
Lymphoedema	18/148 (12%)	27/82 (33%)
Arthritis / tendonitis	17/148 (11%)	2/82 (2%)

Neurological Condition	12/148 (8%)	11/82 (13%)
Acute respiratory condition	10/148 (7%)	3/82 (4%)
Other	10/148 (7%)	4/82 (5%)
UTI	5/148 (3%)	5/82 (4%)
Other Respiratory Condition	3/148 (2%)	3/82 (4%)
Diabetes	1/148 (1%)	0/82 (0%)
Consultation		
N (%) Virtual	54/145 (37%)	16/82 (20%)
N (%) Face to face	76/145 (52%)	66/82 (80%)
N (%) not reported	15/145 (10%)	0/69 (0%)

ICATS: Integrated Clinical Assessment and Treatment Services

CST: Community Services Team

ICT: Integrated Community Team

UTI: Urinary Tract Infection

Overall, when comparing activity at the start and at the end of the audit, the proportion of patient consultations where a medication or garment was changed (started, stopped, or both); was greater at the end of the pilot (Table 5).

Some physiotherapists also reported other actions linked to the patient consultation; however, this activity was not routinely recorded (Table 5).

Table 5: Changes to medication or garment

	Baseline N=148 patient contacts N=15 prescribers	**Final** n=82 patient contacts n=15 prescribers	**Change from start to end of audit**
N (%) item started	50/148 (34%)	51/82 (62%)	↑
N (%) item stopped	6/148 (4%)	4/82 (5%)	↑
N (%) item started and stopped	6/148 (4%)	8/82 (10%)	↑
N (%) Not reported	1/148 (1%)	0/82 (0%)	↓
N (%) recording no change to item	85/148 (57%)	19/82 (23%)	↓
Other action	*24/148 reported other action	*7/82 reported other action	
N (%) Consultation with Dr	7/24 (29%)	2/7 (29%)	↔
N (%) Advice and/or counselling	12/24 (54%)	2/7 (29%)	↓

Relating to other actions, some physiotherapists also noted that they continued their existing prescribing activity. Indeed, there was an increase in some prescribing activity that linked to their existing skill set (i.e. not part of the NMOP). At the start of the pilot, 13/24 (54%) physiotherapists noted that they completed the Kardex or the Home Oxygen Order Form (HOOF); the proportion increased to 71% (5/7) at the end of the pilot.

Overall, at baseline there were 62/148 patients where medication or garment was changed. Overall, at the end of the audit there were 63/82 patients where medication or garment was changed (Table 6).

The n (%) of each mechanism of prescription in detailed in Table 6.

Table 6: Mechanism of prescription

	LOR	**TC/Email**	**LOR plus TC/Email**	**Other action**	**HS21**	**HS21 plus LOR**	**HS21 plus TC/Email**	**HS21 plus LOR plus TC/Email**	**Not reported**	**Total**
Baseline	31/62 (50%)	3/62 (5%)	13/62 (21%)	9/62 (15%)	-	-	-	-	6/62 (10%)	**62/62 (100%)**
Final	6/63 (10%)	0/63 (0%)	1/63 (2%)	6/63 (10%)	41/63 (65%)	2/63 (3%)	3/63 (5%)	4/63 (6%)	0/63 (0%)	**63/63 (100%)**
										

LOR: Letter of recommendation

TC/Email: Telephone contact or email contact with GP

Other action: Other action (complete of hospital paperwork (Kardex or HOOF)

- N/A as HS21 not in use

The physiotherapists also recorded their activity linked to any change in medication made. Table 6 above shows that at baseline 76% of changes to medication or garment were initiated by either LOR, TC or email or both, this had decreased to 12% at the time of the final audit. Each change using LOR or TC email would require GP resource to follow up and prescribe the medication/garment. At the end of the pilot, 79% (50/63) of items were prescribed using HS21 or a combination of HS21 plus another method removing the need for GP to action.

Ranges of items were prescribed across the different clinical areas. Table 7 summarises the prescription frequency of the various type of items, at both the start and the end of the pilot. Overall, there was an increase in the recording of respiratory medicines started and a reduction in analgesic items started. There was less engagement of physiotherapists working in the ICATS/MSK fields at end stage due to redeployment as a result of the pandemic and little potential to prescribe within the pilot criteria.

Table 7: Items (medication or garment) started

Service area / item type	**Start**	**End**
Respiratory	**(n=36 patient contacts where item started)**	**(n=24 patient contacts where item started)**
Oxygen	9/26 (35%)	4/24 (17%)
Inhaler medication and device	7/26 (27%)	12/24 (50%)
Carbocistene	1/26 (4%)	-
PPI	2/26 (8%)	-
Nebules	1/26 (4%)	2/24 (8%)
Nasal spray	2/26 (8%)	-
Analgesic	2/26 (8%)	-
Dressing	1/26 (4%)	1/24 (4%)
	1/26 (4%)	-
Saline	-	1/24 (4%)
Varenicline	-	2/24 (8%)
Antibiotic	-	1/24 (4%)

Spacer Oral steroid	-	1/24 (4%)
CST Neuropathic pain medication	**(n=0 patient contacts where item started)** **-**	**(n=1 patient contacts where item started)** 1/1 (100%)
ICATS Neuropathic pain medication Analgesic PPI NSAID	**(n=10 patient contacts where item started)** 4/10 (40%) 3/10 (30%) 2/10 (20%) 1/10 (10%)	**(n=0 patient contacts where item started)** **-** **-** **-** **-**
ICT physiotherapy Antispasmodic Analgesic	**(n=0 patient contacts where item started)** **-** **-**	**(n=2 patient contacts where item started)** 1/2 (50%) 1/2 (50%)
Lymphoedema Lymphoedema garment	**(n=18 patient contacts where item started)** 18/18 (100%)	**(n=27 patient contacts where item started)** 27/27 (100%)
Musculoskeletal	**(n=0 patient contacts where item started)**	**(n=0 patient contacts where item started)**
Neurology Antispasmodic Neuropathic pain medication	**(n=1 patient contacts where item started)** 1/1 (100%) -	**(n=4 patient contacts where item started)** 3/4 (75%) 1/4 (25%)

There was little change in the type of medicines discontinued at start and end of pilot (Table 8).

Table 8: Item (medication or garment) stopped

Service area / item type	Start	End
Respiratory Inhaler medication and device Nebules	**(n=9 patient contacts where item stopped)** 8/9 (89%) 1/9 (11%)	**(n=7 patient contacts where item stopped)** 7/7 (100%) -
CST	**(n=0 patient contacts where item stopped)**	**(n=0 patient contacts where item stopped)**
ICATS Neuropathic pain medication NSAID	**(n=1 patient contacts where item stopped)** 1/1 (100%) -	**(n=2 patient contacts where item stopped)** 1/2 (50%) 1/2 (50%)
ICT physiotherapy Analgesic	**(n=1 patient contacts where item stopped)** 1/1 (100%)	**(n=1 patient contacts where item stopped)** 1/1 (100%)
Lymphoedema Lymphoedema garment	**(n=0 patient contacts where item stopped)**	**(n=0 patient contacts where item stopped)**
Musculoskeletal	**(n=0 patient contacts where item stopped)**	**(n=0 patient contacts where item stopped)**

Neurology Antispasmodic	**(n=1 patient contacts where item stopped)** 1/1 (100%)	**(n=1 patient contacts where item stopped)** 1/1 (100%)

During the 4 week period from 1st March 2021, 5 clinicians (1/5 South Eastern Trust; 1/5 Southern Trust) submitted de-prescribing activity for 20 patient contacts. The medication type is summarised in Table 9. Inhalers were the item most frequently discontinued.

Table 9: Medication de-prescribed during a 4-week period from 1st March 2021

Medication type	**N (%)**
Inhaler medication and device	14 (70%)
NSAID	2 (10%)
Analgesic	1 (5%)
LTRA	1 (5%)
Carbocisteine	1 (5%)
Neuropathic pain medication	1 (5%)

Process Maps

Prescribers within each service area were asked to outline the current pathway for accessing medicines for patients within the service at the start of the pilot and again at the end, following introduction of HS21 prescriptions. Table 10 summarises the number of steps in each pathway at the start and end, showing a reduction in both the number of steps and the time taken in all service areas. On average, the number of steps required reduced by two. Completed process map templates and flowcharts for each area can be viewed in Appendix 5.1 – 5.5.

Table 10: Number of steps / time taken to access medicines

Speciality	Number of steps/times at start of NMOP pilot	Number of steps/time at end of NMOP pilot	Number of steps / time
Lymphoedema	9 steps Total timescale: (compression garments 3-6 weeks, medicines 4-7 days)	Supply via *DAC - 6 steps, Supply via Community Pharmacy - 8 steps Total timescale: (compression garments 7-10 days, medicines 1-4 days)	↓
Musculoskeletal	8 steps Total timescale: 4-7 days	7 steps Total timescale: 1-4 days	↓
Respiratory	10 steps Total timescale: 4-7 days	7 steps Total timescale: 1-3 days	↓
Respiratory – Acute Care at Home	7 steps Total timescale: 4-12 hours depending on staffing levels/ travel times	5 steps Total timescale: 1-7 hours depending on availability of family member and distance to community pharmacy	↓
Orthopaedic ICATS	8 steps Total timescale: 1-7days	7 steps Total timescale: 1-4 days	↓

Patient Journeys

Clinicians participating in the NMOP pilot summarised patient journeys that emerged during the pilot. Key findings are presented in Table 11 and full text can be viewed in Appendix 6.

Table 11: Key findings from patient journeys

Clinical Area	Key Findings
Respiratory	• NMOP reduced time between medication prescription and collection • NMOP intervention may possibly have avoided re-attendance during the Easter holiday period. • NMOP enabled more holistic management in the follow-up of post- COVID pneumonia patients • NMOP enabled timely prescription of medicines for a range of acute respiratory conditions • NMOP reinforced smoking cessation activity
Lymphoedema	• NMOP significantly reduced time between physiotherapist consultation and receipt of compression garment • NMOP enabled more direct and timely communication between supplier and physiotherapist • NMOP improved clinic efficiency: Reduced queries leading to time saving in clinic. Garment arriving quicker mean faster throughput. • NMOP improved prescription access for all patients including patients seen via remote consultation • NMOP had a positive impact on wider MDT: Garment arriving faster means less community nursing visits
ICATS	• NMOP does not increase prescribing and de-prescribing activity in physiotherapists working in MSK ICATS because: ➢ items required within 72 hours, ➢ limitations on prescribing at virtual consultations ➢ many of the medicines required are controlled drugs and cannot be prescribed due to Misuse of Drugs legislation • letters of recommendation to the GP are still key in this clinical area and NMOP has enabled improved

	communication via the development of eCommunications with GP practices • Current non-medical prescribing activity (letters of recommendation to the GP) is key to optimising other non-pharmacological interventions for patients

Patient Satisfaction Survey

A patient satisfaction questionnaire was developed to obtain the views and experiences of patients during the pilot period. Patients were provided with the satisfaction questionnaire at the end of their appointment and provided with a patient information leaflet to provide background information and further detail regarding the physiotherapist prescribing pilot. In addition, a freepost envelope to return the questionnaire was provided in order to maximise response. There were 64 respondents in total (Table 12).

Table 12: Respondents to patient satisfaction questionnaire by Trust and clinical setting

HSC Trust		**Speciality Area**		**Setting**	
Southern	34%	Respiratory	30%	Outpatient	53%
South Eastern	17%	Lymphoedema	33%	Community	9%
N/A	48%	N/A	38%	N/A	38%
Total	100%	Total	100%	Total	100%

A number of questions were asked in the survey to which the patient was asked to agree or disagree (Table 13).

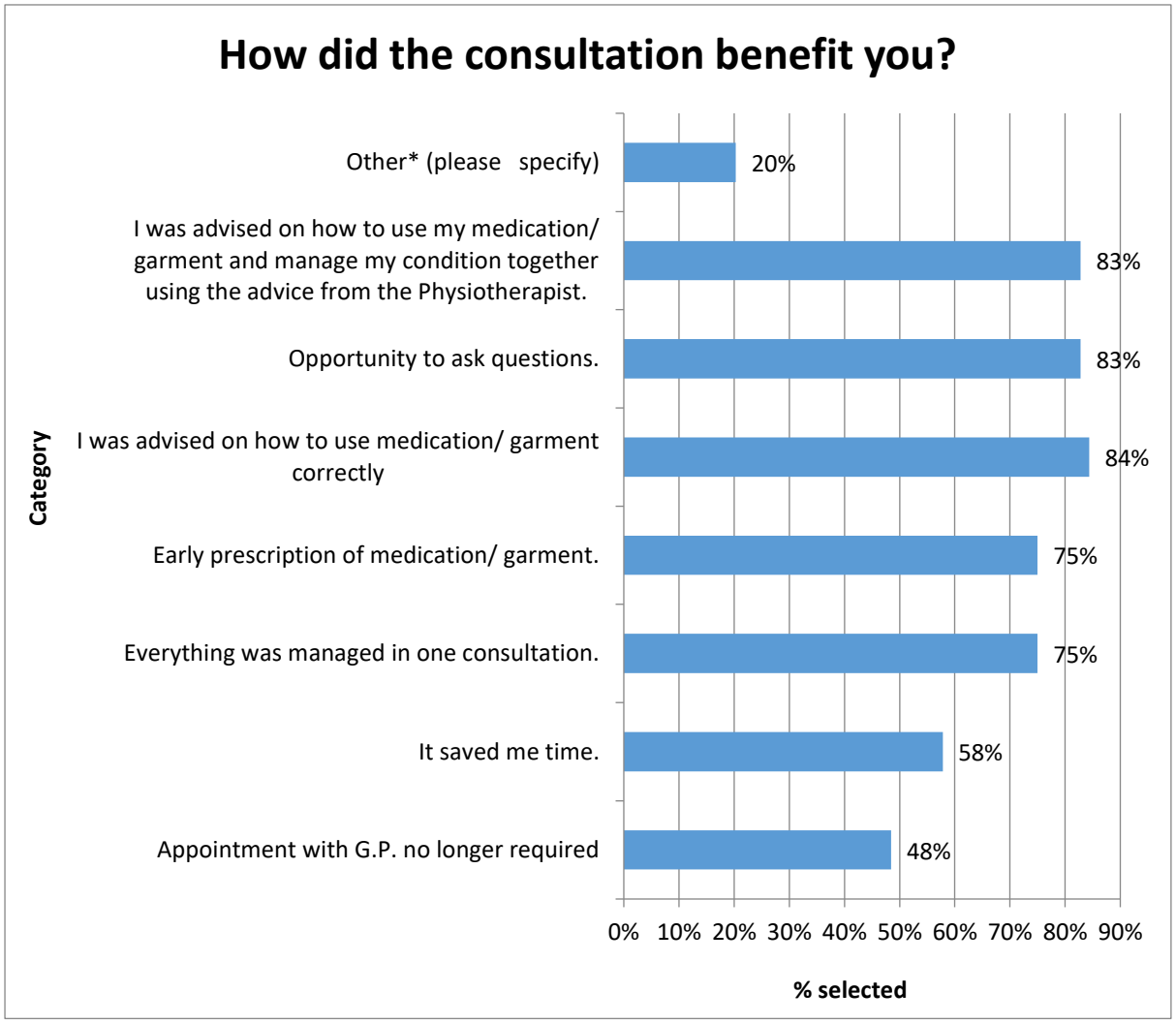
Table 13: Patient responses to patient survey questions

Question	Agree	Disagree	Not Answered
1. I was aware the medication/garment was being prescribed/ reviewed by a Physiotherapist Prescriber? (N=63)	95%	3%	2%
2. It was explained clearly why the medication/garment was prescribed? (N=63)	97%	3%	-
3. I was advised on how to take the medication and how long to take the medication for? (N=43)	100%	-	-
4. I was advised of possible risks or side effects and what to do should there be any reaction to the new medication prescribed? (N=43)	98%	2%	-
5. I was informed of arrangements to obtain repeat prescriptions. (N=43)	98%	-	2%
6. I was advised on how to correctly apply the garment and how long to wear? (N=20)	100%	-	-
7. I was advised of possible risks or side effects and what to do should there be any reaction to the new garments being issued? (N=20)	95%	5%	-
8. I was informed of arrangements to obtain repeat prescriptions?(N=20)	95%	5%	-

9. I was satisfied with the consultation and felt I received appropriate and sufficient information? (N=62)	97%	-	3%
11. If there were no medications/garments prescribed, but there were changes to my existing medications/garments, I was aware of future planned changes. (N=64)	27%	27%	47%

Each respondent was asked to identify how did the consultation benefitted them. Results are presented in Figure 3. Additional results are detailed in Appendix 7.

Figure 3: Patient responses to the benefits of the consultation



Patient survey: Key Findings
• Patients aware of the process and provided with high level of medication and garment information • Patients report high levels of satisfaction • A wide range of patient-perceived benefits were reported

Prescribing Data

Prescribing data relating to items prescribed by physiotherapists and dispensed by Community Pharmacies during November 2020 and June 2021 were provided by the Business Services Organisation and are presented in Table 14 and Figures 4 and 5. The number of prescribers and volume of prescribing and associated costs increased during the course of the pilot as more prescribers were released from redeployment duties associated with the pandemic and the pilot project was expanded to include additional clinical areas (Neurology, Women's Health, Intermediate Care) from April 2021 onwards. The average cost of a prescription item during the pilot was £21 and the average cost of items prescribed per prescriber per month was £280.

It is important to note that some prescriptions for lymphoedema compression garments were dispensed by Dispensing Appliance Contractors (DACs) based in England. These prescriptions were processed by Business Services Agency in England and therefore the data was not available for presentation in this report. However, in one of the Trusts the patient consultation platform was interrogated to produce a report on the number of items prescribed during the data collection period (January 2021 to June 2021) and one month post-data collection (July 2021). Costs were assigned to each of the items during April and July and data is presented in Table 15.

Table 14: Prescribing volume and costs*

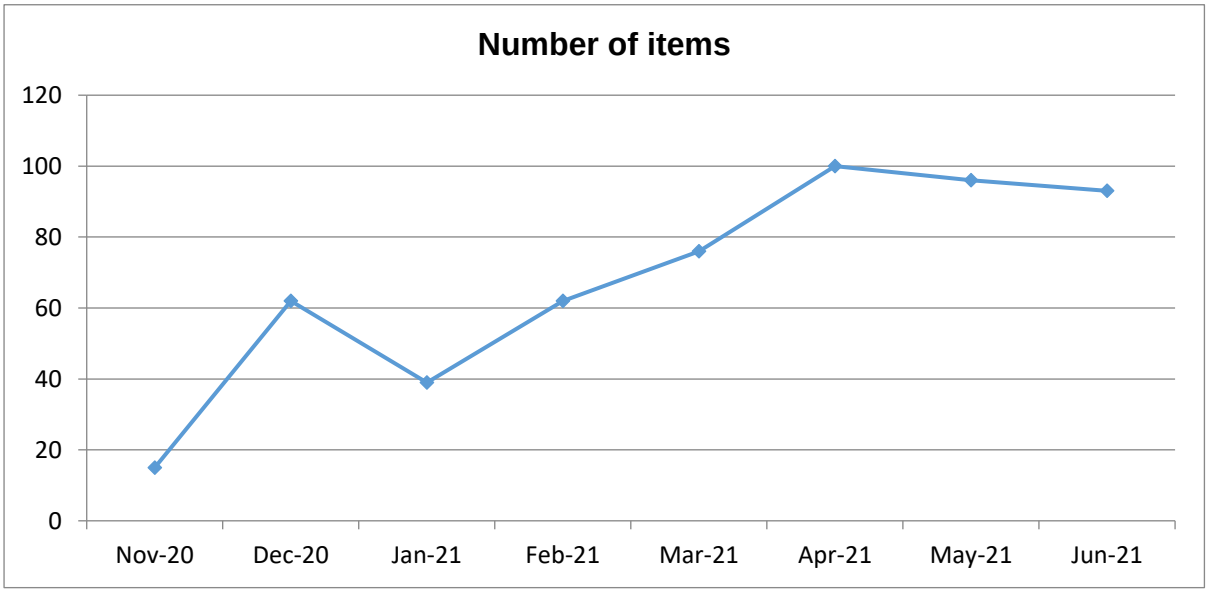
Month	No. of prescribers	No. of scripts	No. of items	Cost of items (£)	Average £ / tem	Average £ / prescriber
Nov-20	3	13	15	318.42	21.23	106.14
Dec-20	4	42	62	1268.05	20.45	317.01
Jan-21	4	29	39	877.63	22.50	219.41
Feb-21	4	41	62	1759.95	28.39	439.99
Mar-21	4	46	76	1222.19	16.08	305.55
Apr-21	5	52	100	1783	17.83	356.60
May-21	8	52	96	1662.74	17.32	207.84
Jun-21	9	52	93	2597.98	27.94	288.66
Average	**5**	**41**	**68**	**1436.25**	**21.47**	**280.15**
Total		**327**	**543**	**11489.96**		

**This data does not include Lymphoedema garments dispensed by DACs*

Table 15: Snapshot of costs associated with lymphoedema garments prescribed by SHSCT lymphoedema physiotherapists

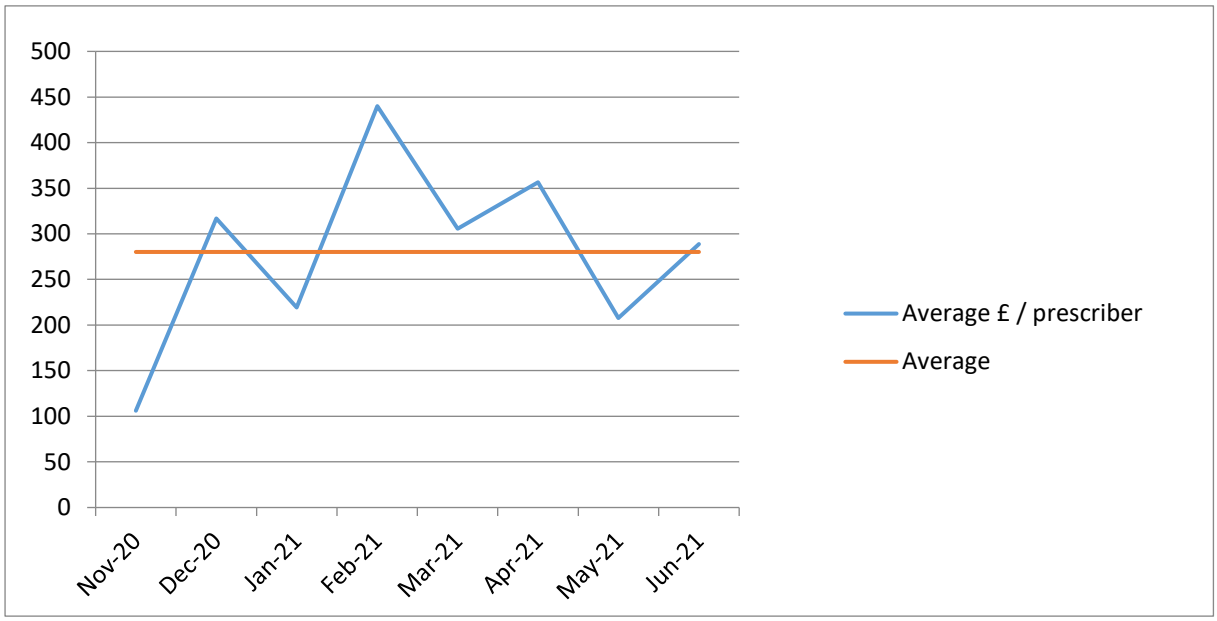
Month	April 2021	July 2021
Number of prescribers	2	3
Number of HS21 scripts issued	17	35
Total cost of scripts prescribed	£4033.77	£5770.20
Average cost of HS21 script	£237.27	£164.86
Range of cost of HS21 script	£15.34 to £607.46	£21.09 to £599.58

Figure 4 - Number of items prescribed by physiotherapists*



**This data does not include Lymphoedema garments dispensed by DACs*

Figure 5: Average cost of prescribing*



**This data does not include Lymphoedema garments dispensed by DACs*

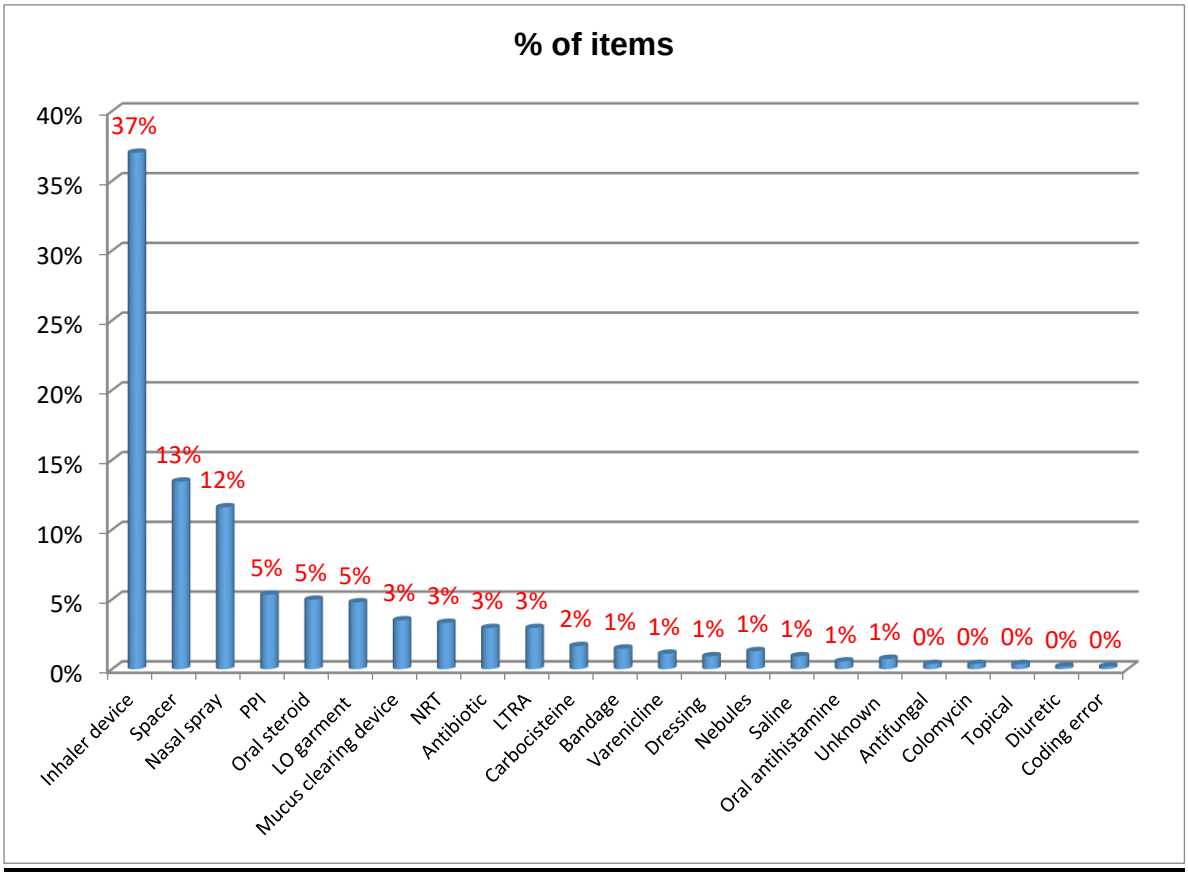
A total of 543 medicines were prescribed during the pilot period (Appendix 8). These were categorised into therapeutic groups and are presented in Table 16 and Figure 6. Respiratory medicines and devices were by far the most commonly prescribed item.

Table 16: Medicines prescribed by therapeutic group*

Therapeutic Group	Number of items
Inhaler device	201
Spacer	73
Nasal spray	63
PPI	29
Oral steroid	27
LO garment	26
Mucus clearing device	19
NRT	18
Antibiotic	16
LTRA	16
Carbocisteine	9
Bandage	8
Varenicline	6
Dressing	5
Nebules	7
Saline	5
Oral antihistamine	3
Unknown	4
Antifungal	2
Colomycin	2
Topical	2
Diuretic	1
Coding error	1
	543

**This data does not include Lymphoedema garments dispensed by DACs*

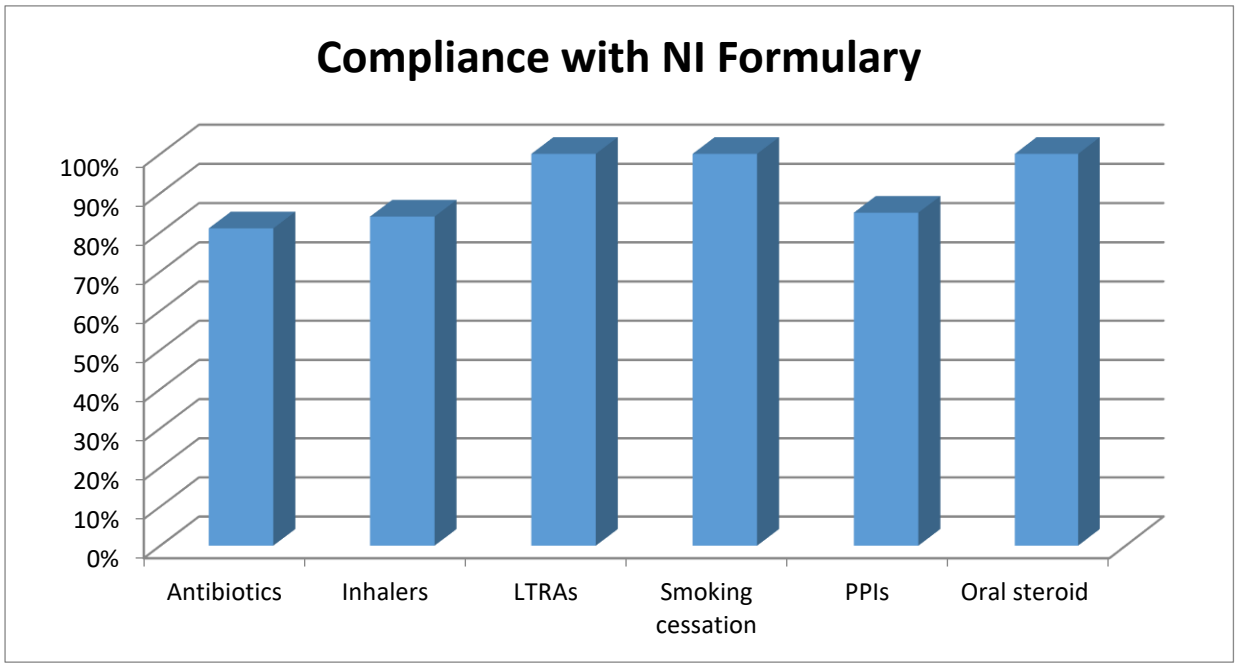
Figure 6: Percentage of items prescribed by therapeutic category



**This data does not include Lymphoedema garments dispensed by DACs*

Medicines prescribed by physiotherapists were reviewed to determine compliance with NI Formulary choices (for those therapeutic areas for which a formulary exists). Best practice guidance indicates that clinicians should aim for at least a 70% compliance rate with medicines' formularies. Figure 7 indicates the formulary compliance achieved.

Figure 7: Compliance with NI Formulary



Conclusion

In this evaluation, there was agreement amongst project stakeholders that the NMOP physiotherapy pilot met its objectives. The pilot successfully put in place robust governance arrangements, provided greater opportunity to access to the right medicines and/or garments at the right time for the right person, maximised professional skills at point of care, displaced prescribing activity from GP practices and reduced the amount of unnecessary health care appointments.

The audit activity clearly showed the delivery of prescriptions using HS21 forms and a reduction of the use of LOR, TC or email mechanisms for prescription, removing the need for a GP to action. The number of prescribers and volume of prescribing and associated costs increased during the course of the pilot. Following the introduction of HS21 prescriptions, there was a reduction in both the number of steps and the time taken in all service areas. Patients reported high levels of satisfaction and a wide range of benefits were reported.

The majority of physiotherapists involved in the pilot reported clear benefits to patients notably reducing prescription delays, reducing risk of inappropriate prescriptions and providing access to specialist clinicians. Physiotherapists also reported clear benefits for clinicians including more efficient processes and the optimisation of the NMP skills set. Furthermore, high levels of formulary compliance amongst clinicians were achieved.

Further work to streamline the technical solution and to maximise its ease of use for clinicians will bolster NMOP in Physiotherapy. Additional key considerations for full implementation of NMOP included shared learning, communication and dissemination of the results, refresher training and consideration of extending the work into more physiotherapy specialties.

The wider project group highlighted the success of the project work as an example of excellent collaboration and collective leadership across stakeholder groups.