



# **Medicines Optimisation Innovation Centre (MOIC)**

## **Annual Report**

2021 – 2022



## **MEDICINES OPTIMISATION INNOVATION CENTRE (MOIC)**

### **Annual Report 2021 / 2022**

#### **Context**

The Regional Medicines Optimisation Innovation Centre (MOIC) aims to work towards better patient outcomes by initiating, developing and sharing best practice with regards to medicines use. This is achieved via the following primary activities:

1. Developing a systematic approach to finding and testing solutions for Health and Social Care (HSC).
2. Combining strengths in clinical pharmacy, pharmacy practice, research and service development with technology and business acumen.
3. (a) Developing a medicines optimisation network, linking with the HSC and other life science networks and innovation centres in NI and Europe.  
(b) Support knowledge sharing both with the HSC and wider networks and the development of collaborative working partnerships and joint working arrangements between participants.

#### **MOIC Workstreams**

In addition to work around Infrastructure, communications & marketing, MOIC activity is split across four workstreams, namely to:

- Focus on the needs of patients and the NI population.
- Accelerate the adoption of innovation into practice to improve clinical outcomes and efficiency.
- Build a culture of partnership and collaboration.
- Make a meaningful contribution to the NI economy.

This report will describe the key achievements in these areas during 2021/2022

#### **Staff, Infrastructure, Communications & Marketing**

A team of Programme Managers are key to the functioning of MOIC. During the year, one Programme Manager went on maternity leave and a recruitment exercise commenced in order to appoint temporary cover. In order to assist with building a cadre of skilled researchers within the pharmacy workforce, the MOIC Board approved a business case to part-fund a consultant pharmacist at the Western Health & Social Care Trust (WHSC). The individual was appointed as a respiratory consultant pharmacist in October 2020 for a 2 year period. The individual aims to spend 25% of their time working on research and service development activities with MOIC, however given their clinical expertise this has not always been possible as they focused on the care of patients with COVID-19.

In May 2021, the MOIC team moved to new offices situated within Pine house on the Antrim Area Hospital site at the Northern Health & Social Care Trust (NHSCT).



MOIC continues to benefit from the skills of a Communications Manager (0.4WTE). Work has continued on keeping the MOIC website updated and a monthly mail-chimp newsletter has been introduced. MOIC also has continued to engage with social media, including growing its audience on Twitter (now over 1200 followers) and utilising a LinkedIn profile. This assists in terms of communicating with a wide audience.

Where possible, the MOIC team have attended conferences and workshops across the UK to assist with the promotion of MOIC. In addition, results from specific projects have been disseminated through a variety of means including the publication of papers, undertaking video interviews, attendance and presentations at a range of conferences, website and Twitter. A list of publications, reports and presentations is included in Annex A.

### Focus on needs of patients and Northern Ireland population

Staff in MOIC have continued to work on a range of projects aimed at optimising medicines use and on maximising skill mix in order to ensure the best possible outcome from medicines use.

In Primary care, a range of new services have been established and MOIC staff continue to work with HSCB colleagues on the evaluation of these services. Work in this area has been disrupted as HSCB staff were redeployed to other areas in response to the COVID-19 pandemic. Details of the evaluations are:

- C-reactive protein (CRP) rises in the blood stream in response to inflammation. CRP point of care testing in primary care for patients with cough, cold and flu like symptoms may help to determine if antibiotics are required to treat symptoms. During this HSCB pilot, CRP testing was available in 17 pharmacies and 10 GP practices. Whilst the pilot was carried out during the winter of 2019/20 evaluation was paused due to COVID-19. Full evaluation was carried out by MOIC during the 2021/22 and a final report was sent to the HSCB. A paper will also be written for publication.
- A new service for the treatment of uncomplicated lower urinary tract infections (UTIs) in women aged 16 to 64 years was piloted during the year. Under this service, eligible patients can visit their community pharmacy, rather than their GP practice, for the treatment of UTI symptoms. If indicated, antibiotics were prescribed by an independent prescribing pharmacist or supplied under a patient group direction. MOIC are leading on the evaluation of the pilot and a final report is nearing completion.
- Within Northern Ireland, transformation funding has been awarded to the HSCB in order to scope and establish new models of prescribing by non-medical prescribers. By establishing these new models it is hoped that service users will be able to obtain their required medications in a more efficient and timely fashion. MOIC sits on the Steering Group for this initiative and are assisting in the evaluation of projects in the areas of physiotherapy, heart failure, dietetics and mental health. A final report on the physiotherapy project has been provided for HSCB. Reports in the other areas are in progress, however they have been delayed as HSCB staff have been redeployed to COVID-19 related duties.



- HSCB will be launching a new service for the provision of emergency hormonal contraception through community pharmacy. Initial meetings have been held with HSCB colleagues to agree the evaluation plans.

MOIC have been working with a number of colleagues across Northern Ireland in the area of cardiovascular disease. Funding has been obtained from AstraZeneca to pilot the establishment of a cardiometabolic pharmacy service and this has commenced in the WHSCT. Information governance arrangements relating to data collection and processing are being progressed.

In the Southern Health & Social Care Trust (SHSCT) work is being undertaken with the cardiology team and primary care colleagues to establish, deliver and evaluate virtual heart failure clinics. The virtual heart failure clinics will commence in April 2022 and an interim and full analysis at 6 and 12 months will be completed as part of the evaluation.

A series of workshops were carried out between December 2021 –March 2022 to explore how information provided by a clinical dashboard (Diabetes Care Dashboard - Apollo), developed by AstraZeneca could be used to identify patients who could be eligible to use digital tools to self-monitor and improve patient management in both primary and secondary care. Workshop participants came from the SHSCT, Belfast Health & Social Care Trust (BHSCT), the Connected Health Innovation Centre and Ulster University.

At the start of the pandemic, the demand for personal protective equipment (PPE) for HSC staff grew at an unprecedented rate. Linked with this, the number of offers of PPE from commercial companies to the HSC rose dramatically. There was an urgent need to maximise the availability of PPE whilst ensuring that all such products purchased by the HSC met the requisite quality and standards. MOIC worked closely with BSOPaLS and became the lead for technical assessment of offers of PPE regionally. Once MOIC had validated the essential documentation relating to products to ensure that the applicable standards had been met, BSOPaLS completed all of the procurement due diligence tasks to permit purchase of the products. During 2021/22 MOIC have continued to work in this area.

The COMET study is led by researchers in The Netherlands and is being run in the NHSCT with the support of both pharmacy and MOIC staff. The study uses pseudonymised data from patients hospitalised with COVID-19 to establish if certain medications affect clinical outcomes in those with COVID-19. As well as acting as a study site, the NHSCT was the coordinating site for the UK for COMET. During the year, sites at Norfolk and Norwich University Hospitals NHS Foundation Trust and Royal Brompton & Harefield NHS Foundation Trust were closed. At this stage a 1 year follow up of the initial patient cohort is being planned and it is hoped that data from the NHSCT will be included in this analysis during 2022/23.

Following on from MOIC and Queens University Belfast (QUB) research, the pharmacy team at NHSCT has established a post discharge telephone service. Under this initiative, patients discharged from hospital on multiple medications receive a telephone call from a clinical pharmacist following discharge. Research has shown that these patients have improved medicines optimisation and are less likely to be readmitted to hospital. MOIC continues to liaise closely with this service with regards to continued development and evaluation. Following a difficult 2020/21 year resulting



from pressures due to the COVID-19 pandemic, the service was re-established in 2021/22. This saw an average of 35 patients benefit from the service each month (range 22-66 per month), an average of 65 calls each month (range 39-115 per month) and average of 177 pharmacist interventions each month (total 2125 per year). In keeping with 2020/21 findings, the pharmacist makes an average of 5 interventions per patient. During the year a review was conducted and changes were made to the way patients are recruited including targeting those most likely to benefit from the service (ie those started on an anticoagulant and cardiology patients). Work is ongoing to improve the efficiency and impact of this novel service, including projects in the Emergency Department and Direct Access Unit.

The NHSCT pharmacy team obtained funding to pilot the role of an independent prescribing pharmacist within a Community Mental Health Team (CMHT). MOIC assisted with the evaluation of this service. During the 6-month pilot, the independent prescribing pharmacist developed a weekly clinic, primarily for patients with anxiety and depression, which focused on medicines optimisation. In addition, the pharmacist delivered education sessions to the CMHT and MOIC staff members. Satisfaction questionnaires completed by clients and staff indicated high levels of satisfaction with this service. A paper has been prepared for publication.

### **Accelerate the adoption of innovation into practice to improve clinical outcomes and efficiency**

During the year, work continued with Healthcare Analytics to develop the tagging and tracking of medical equipment. Discussions have been held with the Digital Transformation Lead for the Health Service Executive (HSE) in Ireland regarding this system. A Memorandum of Understanding (MoU) for collaborative working in this area was signed off with HSE Digital Transformation and Innovation unit at the National Digital Health Innovation Conference held in Tullamore, Ireland during March 2022.

Work continued between the team at MOIC and a QUB spin out company (Continga Limited) to trial a novel system for improving medicines adherence in those with respiratory diseases (e.g. asthma, TB). Using the system, clinicians can observe their patients as they use inhaled medication with a view to improving how such devices are used. A pilot for use of this technology is being run in the WHSCT.

### **Build a culture of partnership and collaboration**

MOIC continue to work with a range of collaborators from across the world. Activity includes:

- Collaborating in order to apply for large funding grants.
- Attending conferences and events in order to promote MOIC.
- Contributing to the organisation of conferences.
- Building international partnerships to aid knowledge translation and hosting.

In 2019 funding for the iSIMPATY project was awarded to a collaborative group from the Scottish Government, the HSE in Ireland and MOIC. A total of Euro 3.5million was awarded (Euro 915K for NHSCT) by the Interreg programme. (Interreg is a series of programmes designed to stimulate cooperation between regions in the European Union, funded by the

European Regional Development Fund). The project is trialling the use of pharmacy led medicine use reviews in all three jurisdictions. Four clinical pharmacists have been appointed to NHSCT to undertake the project. They are working closely with pharmacy and medical colleagues to identify and review the medicines of patients on polypharmacy. To date over 1000 reviews have been completed in the NHSCT. A training programme for wider health care professional use is currently being piloted and it is hoped that this will be accredited and rolled out later in 2022. The team in Northern Ireland is co-coordinating the next shared learning event. This will be delivered in June 2022.

MOIC is one of the 36 partners from across Europe in the SHAPES Project (Smart and Healthy Ageing). The project is funded by the EU under the smart and healthy living at home (Horizon 2020) workstream. This project is led by Professor MacLachlan, Director of the Assisted Living and Learning (ALL) Institute in Maynooth and was awarded a total of Euro 21million (Euro 572K was awarded to the NHSCT). In Northern Ireland, progress has been made on the Medicines Optimisation and Control pilot for which MOIC is the lead. At this stage mock up and user acceptability testing has been completed and ethical approval for the full pilot has been obtained. Some delay was experienced due to technical problems, however, technology testing by volunteers (phase 4) will commence in April 2022 with the full trial (phase 5) anticipated in June 2022.

Along with colleagues from the HSC and Ulster University, MOIC was successful in securing a wave one AIM development award from the NIHR. This was preparatory funding which allowed the development of a full grant application. The full grant application was submitted in October 2021 by a consortium from across Northern Ireland. It aimed to federate existing datasets so that appropriate exploration and data modelling could be undertaken to improve the health and well-being of those with multiple long term conditions. Unfortunately the application was unsuccessful, however the consortium are using the feedback to explore other funding options. Linked to this a funding bid in the area of pharmacogenomics is being drafted for submission to the Rosetree foundation.

During the year, further grant applications were made to:

- Horizon Europe: MOIC were part of the Medsafe consortium, led by the Scottish Government. A bid for Horizon Europe funding was submitted in September 2021 (call Horizon/HLTH/2021/Care/05/01). This was unsuccessful.
- Shared Island Fund: MOIC were partners in three Higher Education Authority (HEA) Shared Island funding applications with a range of partners from across Ireland. The applications were in the areas of respiratory care, health technology assessment and medicines safety. None of the bids were successful however the HTA bid is included on the reserve list.

The WHO global medicines safety challenge aims to reduce medicines related harm by 50% over a 5 year period. At a regional level, a representative from MOIC sits on the Safer Medicines Group and the newly established communications subgroup. The group is working to ensure that Northern Ireland meets the WHO global challenge and this includes supporting a range of research and service development projects. An ADEPT fellow joined the NHSCT in August



2021 and the focus of her work is on addressing the WHO challenge. Her Fellowship is jointly supervised by Medical Education and MOIC.

Also in this area, MOIC is continuing to link with colleagues in the Institute for Healthcare Improvement (IHI) to consider a learning collaborative approach to medicines safety.

Medicines safety & medicines optimisation can be impacted by medication adherence. EU COST Actions (Co-operation in Science and Technology) are interdisciplinary research networks which bring researchers and innovators together to explore a topic of interest. MOIC have recently joined the ENABLE COST Action (**E**uropean **N**etwork to **A**dvance **B**est practices & technology) on medication adherence. This action includes over 100 people from 39 countries and it aims to:

- raise awareness of adherence enhancing technological solutions,
- foster and extend multidisciplinary knowledge on medication adherence at patient, treatment and system levels,
- accelerate translation of this knowledge to useful clinical application
- work collaboratively towards economically viable implementation of adherence enhancing technology across European healthcare systems

In previous years knowledge translation has been supported and encouraged by MOIC via the hosting programme. Under this programme, visitors are usually welcomed to Northern Ireland for periods lasting between 1 day and 5 months. Whilst a number of requests for hosting visits have been received, these have been declined because of the current COVID-19 situation. However, a range of international partnerships and collaborations have continued to be developed including:

- Following the establishment of a Memorandum of Understanding (MoU) with the Polish Society of Clinical Pharmacy, a further MoU was agreed with the Estonian Society of Hospital Pharmacists. Both agreements aim to share learning and drive enhanced pharmacy services throughout Europe. The Ministry of Health in Poland have established a number of working groups to progress medicines optimisation in the country and MOIC have been invited to join a number of these. Staff from MOIC presented at a virtual conference in December 2021.
- MOIC is linking with the Commonwealth Pharmacists' Association to consider collaboration opportunities to share learning and support the introduction and evaluation of clinical pharmacy and antimicrobial stewardship activities in Commonwealth countries. This has led to exploratory meetings with Northumbria Healthcare Trust and Bright Charity.
- MOIC staff have been working with representatives of the Tanzanian Institute of Pharmaceutical Care. The Institute has been awarded funding to aid the introduction of medicines optimisation initiatives and MOIC are assisting with the design and monitoring of these projects.
- Sonja Guntschnig from Austria first visited the NHSCT under the hosting programme in 2019. Based on her learning she is now developing antimicrobial stewardship programmes as well as clinical pharmacy services within her hospital & region. Linked to this, she will be undertaking a PhD under the supervision and mentorship of UU and MOIC.

- A pharmacy masters student (Michael Tadros) from Misr University for Science and Technology (MUST) in Egypt has been working on a project evaluating the impact of the COVID-19 pandemic on antimicrobial prescribing and resistance patterns in secondary care.
- Professor Scott has been working with Anita Tuula, a PhD student based at the University of Tartu in Estonia. Her thesis is examining medicines use reviews with a focus on older people and polypharmacy in community pharmacy settings.
- With the University of Oslo, a new PhD protocol focussing on developing an intervention to optimise medicines at transitions in care has been developed. The PhD student has been recruited and it is anticipated that the new project will commence in August 2022.

### **Make a meaningful contribution to the Northern Ireland economy**

MOIC are the HSC lead in the Health & Social Care Industry Partnership (HSCIP). The partnership aims to deliver 'triple win' benefits to patients, the service and the economy through more rapid and consistent patient access to innovation, more effective use of HSC resources and increased cross-sector research collaboration. During the year a Governance Board for the partnership was established and work commenced addressing the first challenge to be addressed by the HSCIP namely - the eradication of Hepatitis C in Northern Ireland. The call for industry help was finalised and sent to potential industry partners in November 2021. Following evaluation, it was agreed that the HSC will work with MSD in this area. Meetings between the HSC and MSD representatives are scheduled for April 2022.

The Innovation for Active and Healthy Ageing (IN-4–AHA) builds upon the work undertaken by the European Innovation Partnership on Active and Healthy Ageing (EIP - AHA). MOIC is a member of this network and participates in activities and building partnership. Through this network links were made with the Cluster Saude de Galicia (CSG). The CSG is planning a Learning Expedition to Northern Ireland in May 2022. The aim is to find partners within NI that could lead to successful collaborations and business relationships between the members of CSG delegation and local companies. MOIC is liaising with InvestNI to assist in developing a programme to showcase innovation and facilitate introductions in the NI Health and Life Sciences Ecosystem.

MOIC also participated in two Department for International Trade (DIT) UK-Spain Bilateral Events with the regions of Andalusia and Madrid. Follow up meetings are continuing with companies, organisations and research centres to explore potential partnerships and collaborative projects.

Health Innovation Hub Ireland (HIHI) works across the health sector in Ireland with businesses to solve problems and improve patient care. A MoU has been established with the HIHI and a formal launch of this is anticipated in 2022. It is hoped that under the MoU we can work collaboratively with companies in the development of new healthcare technologies, products and services to benefit the health of the population.

Peace plus is a new funding programme which will support peace and prosperity across Northern Ireland and the border counties of Ireland. MOIC have been working with colleagues in both regions,



including those at policy level to help inform the development of this programme. It is hoped that medicines safety and medicines optimisation will form a significant component of the final work plan. As reported previously, high level draft proposals were prepared for DH in relation to this proposed programme. The proposals were under theme 4 (Healthy and Inclusive Communities) and theme 6 (Building and Embedding Partnership and Collaborations). It is hoped that calls for funding across these themes will be issued in 2022.

MOIC continue to work with Invest NI and are an Invest NI Knowledge Partner. Two companies have been awarded Invest NI Innovation vouchers to work with MOIC.

- MOIC worked with Nightingale analytics and the NHSCT Dementia team on phase 1 of a project on enhanced dementia diagnosis. This phase was covered by an innovation voucher and MOIC are currently preparing a report for Invest NI. UU will now be leading on project management for later phases of this project, however, MOIC have agreed to conduct feedback interviews with the NHSCT clinical staff in due course.
- The second voucher has been given to Hi-Viso to assist with the development of an all-in-one face covering to provide protection for the eyes, nose and mouth. This was a novel product within the PPE/ Medical device market and valuable information was gained as a result of the pilot trial which took place within HSCNI. MOIC PPE provided experience and expertise to assist Hi Viso in identifying the necessary requirements to bring a compliant product to the healthcare market. Following the pilot trial in HSCNI, Hi Viso took the decision to cease further design and development of the product. The Hi Viso collaboration was brought to a conclusion and a final report was sent to Invest NI.

Work is ongoing with 21 Omnicare (previously O'Neills) regarding a new gown product which arose following discussions with Invest NI. A trial of a reusable surgical gown with RFID tag was successfully carried out in Antrim Area Hospital to collect user feedback which will assist in further design and development of the product. 21 Omnicare continue to work with MOIC to ensure the product meets the appropriate standards and EU Regulatory requirements before placing on the healthcare market

### **Personal and Public Involvement (PPI)**

MOIC is endeavouring to increase PPI across the work programme.

The MOIC Board membership was reviewed during the year and it was agreed that a PPI representative would be sought for this group. The HSCIP Board invited representation from the Patient Client Council, unfortunately due to increased demands caused by the COVID-19 pandemic, they were unable to assist.

Major grant applications do have PPI and user representatives embedded within work programmes, for example the SHAPES consortium has 6 partner organisations representing the user perspective. In addition, there are three strands of activities aimed at promoting communication with older individuals, caregivers and care providers namely : a co-creation think tank, awareness campaigns and dialogue workshops. The Co-creation Think-tank for European Integrated Care



aims to foster an open and creative discussion forum to generate a common understanding of the SHAPES vision, concepts and work. MOIC is a member of the Think-tank and contributes via participation in workshops as a representative of the health and care industry. MOIC have contributed to the awareness campaigns by producing video footage to promote the project. The videos can be found at <https://youtu.be/2FENYqx6TUA> and <https://youtu.be/spPv6UfArSM>. MOIC have also participated in the dialogue workshops via presentations made by Prof Scott at the 2<sup>nd</sup> dialogue workshop “Integrated care models” and Dr Martin at the 5<sup>th</sup> dialogue workshop “Beyond the pilots: Upscaling and transfer of person-centred digital solutions in integrated care pathways in Europe”.

The iSIMPATY project is focused on the delivery of patient centred reviews. The iSIMPATY Board oversees the running of the project and Irene Oldfather from Health and Social Care Alliance Scotland is the PPI representative on this Board. As part of the project, shared learning events are held regularly and these always include session from patient representatives. The project website (<https://www.isimpathy.eu/>) has a full section devoted to patients and includes a range of resources including animations aimed at improving understanding of medicines use and medicines use review.

### **Financial report 2021/2022**

The Medicines Optimisation and Innovation Centre has reported an overall deficit of £19k and has £507k of deferred income from commercial funding carried forward into 2022/23. An income and expenditure report is included in Annex B.

## **Annex A: MOIC publications, presentations and reports 2021.22**

### **Papers & publications**

Tuula A, Volmer D, Jõhvik L, Rutkovska L, Trećciokien' e I , Merks P, Waszyk-Nowaczyk M, Drozd M, Tatarevi' c A, Radovanlija M, Pacadi C, Meštrovi' c A, Viola R, Soós G, Rais C , Táerel A, Kuzelova M , Zare M , Peymani P , Oona M & Scott M. Factors Facilitating and Hindering Development of a Medication Use Review Service in Eastern Europe and Iran-Cross-Sectional Exploratory Study. *Healthcare* 2021, 9, 1207. <https://doi.org/10.3390/healthcare9091207>

O'Neill K and Spargo M. How Northern Ireland's pharmacies vaccinated a nation. C+D. Published online <https://www.chemistanddruggist.co.uk/CD005294/How-Northern-Irelands-pharmacies-vaccinated-a-nation>

Guntschnig S, Burnett K, Courtenay A, Scott M. Initial observations on the implementation of a clinical pharmacy service in a rural hospital in Austria. *Hospital Pharmacy Europe*. Issue 99 2021. Issue 99 pp10-15

Gormley C, Spargo M, Fleming G, Moore B, Scott, M, Sharkey R & Friel A. Medicines Optimisation for Respiratory Patients—The Establishment of a New Consultant Respiratory Pharmacist Role in Northern Ireland. *Pharmacy* **2021**, 9, 177. <https://doi.org/10.3390/pharmacy9040177>

Burnett K, Martin S, Goudy C, Barron J, O'Hare L, Wilson P, Fleming G & Scott M. Ensuring the quality and quantity of personal protective equipment (PPE) by enhancing the procurement process in Northern Ireland during the coronavirus disease 2019 pandemic: challenges in the procurement process for PPE in NI. *Journal of Patient Safety and Risk Management* 2021, <https://doi.org/10.1177/25160435211057385>

### **Reports**

**An Evaluation of New Models of Prescribing (NMOP): A Physiotherapist Prescribing Pilot.** Presented to HSCB, November 2021

**An Evaluation of C-Reactive Protein Point of Care Testing in Community Pharmacies for Cough, Colds and Flu. A Health and Social Care Board Pilot.** Presented to HSCB, February 2022



## **EVENTS organised or jointly organised by MOIC**

**MOIC-Cluster Saude de Galicia (CSG) Webinar (28 June 2021).** The webinar introduced MOIC and CSG and highlighted opportunities in Northern Ireland and Galicia for potential collaboration and cooperation in innovative solutions that improve the health and well-being of our citizens.

## **Video interviews**

PharmacyUpdateOnline Interview: iSIMPATY & Polypharmacy: The NI journey Claire Scullin & Joanne Brown. 7 May 2022

## Conference presentations and posters

<b>Authors/Presenter</b>	<b>Title</b>	<b>Poster or Oral</b>	<b>Conference/Meeting</b>
O'Neill K, Parrott, Mcgrath H, Neely C, Bradley JM	A systematic review to assess the components of clinical decision support systems (CDSS) in chronic respiratory disease (CRD)	Poster presentation	European Respiratory Congress 5-8 September 2021
O'Neill K, Spargo M, Scott M, Fleming G	Learning from the Covid-19 vaccination programme in Northern Ireland: A qualitative report	Poster presentation	Clinical Pharmacy Congress, 24-25 September
Gormley G, Kelly M, Moore B, Sharkey R, Spargo M	Evaluation of a consultant respiratory pharmacist service for Respiratory Support Unit COVID-19 patients	Poster Presentation	Clinical Pharmacy Congress, 24-25 September
Spargo M, Goodfellow N, Fleming G, Scullin C, Guerra B, Manso M, Scott M	Optimising the multimedia design of a user-facing mHealth app for older individuals	Poster presentation	North American Conference on Integrated Care 4-8 October 2021
Hogg A	European Funding: The MOIC experience	Oral presentation	Horizon Europe Cluster 1, Health Event: Forthcoming opportunities Northern Ireland, 14 October 2021

Fleming G	MOIC research expertise	Oral presentation	Horizon Europe Cluster 1, Health Event: Forthcoming opportunities Northern Ireland, 14 October 2021
Scott M	Medicines optimisation Innovation Centre (MOIC)	Oral Presentation	PrescQIPP Annual Conference 18 October 2021
Hogg A	Medicines optimisation Innovation Centre (MOIC)	Oral presentation	Association of British Healthtech Industries, 11 November 2021
Gormley G, Spargo M, Friel A	The role of the consultant pharmacists in NI – with a focus on respiratory care	Oral presentation	PM National Forum for Northern Ireland, 24 November 2021
Hogg A	European Funding	Oral presentation	National Horizon Europe Tackling Diseases and AMR Event, 26 November 2021
Hogg A	European Funding: MOIC Hints and tips	Oral presentation	Horizon Europe Ireland Event, 09 December 2021
Hogg & Scott M	Medicine reconciliation and medicine review: Overview	Oral presentation	Clinical Pharmacy in Poland Conference 16 December 2021
Scott M	Integrated care: Focus on Northern Ireland	Oral presentation	UK Andalusia Bilateral Seminar on Innovation in Primary Care, 18 January 2022



Fleming, G	The medicines optimisation innovation Centre	Oral presentation	European regions research and innovation network (ERRIN) – health working group meeting, 17 March 2022
Guntschnig S; Aaron C; Abuelhana A; Scott M	Initial observations on the implementation of a clinical pharmacy service in a rural hospital in Austria	Poster Presentation	26th Congress of the European Association of Hospital Pharmacists, Vienna, 23-26 March 2022

Medicines Optimisation and Innovation Centre

Income and Expenditure position at 31st March 2022

	Deferred Income c/f	Income from other Sources 2021/22	Total Deferred Income 21/22	Transfer from Balance Sheet to MOIC	Deferred Income Carried Forward	DOH Funding	Other Income	Transfer from Balance Sheet to MOIC	Total Expenditure	Closing Balance
	£000's	£000's	£000's	£000's	£000's	£000's	£000's	£000's	£000's	£000's
Projects	- 562	- 245	- 807	300	- 507		- 5			- 5
Core						- 494		- 300	817	23
<b>Total</b>	<b>- 562</b>	<b>- 245</b>	<b>- 807</b>	<b>300</b>	<b>- 507</b>	<b>- 494</b>	<b>- 5</b>	<b>- 300</b>	<b>-</b>	<b>19</b>

Deferred Income c/f to 2022/23 -507

Deficit 19

## Annex B: Finance Report

### Medicines Optimisation and Innovation Centre Income & Expenditure as at 31st March 2022

	Project	As at 31st March 2022	Deferred Income
<b>Deferred Income as at 1st April 2021</b>			
			- 562,046
<b>2021/22</b>			
<b>HSCB</b>		- 405,108	
<b>PHA</b>	Research & Development Programme Manager	- 88,721	
<b>External Funding</b>			
	EU Shapes		- 95,402
	IKSUS		- 7,531
	Astracenecca		- 138,449
	Hi Viso		- 3,702
	Transfer to MOIC Isimpathy / Shapes	- 300,000	300,000
	Invest NI	- 4,576	-
<b>Total Income as at 31st March 2022</b>		<b>- 798,405</b>	<b>- 507,131</b>
<b>Expenditure as at 31st March 2022</b>			
<b>MOIC Costs</b>			
	Staffing Costs	806,989	
	Non pay Costs	10,219	
<b>Total Expenditure as at 31st March 2022</b>		<b>817,207</b>	<b>-</b>
<b>Deficit</b>		<b>18,802</b>	<b>- 507,131</b>

Deferred Income as at 31st March 2022 - 507,131

Net Deficit as at 31st March 2022 **18,802**

Notes	£
Overspend on MOIC	19,736
Underspend on PHA	- 933
	<b>18,802</b>

