



Innovation Programme

NURSING AND MIDWIFERY
CONTRIBUTION TO THE
SPARK INNOVATION PROGRAMME

**A N N U A L
R E P O R T
2 0 2 1**

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01. Foreword

**Dr Geraldine Shaw, Nursing and Midwifery Services Director
ONMSD, Health Services Executive**

I am delighted that the ONMSD has continued to collaborate with the Spark Programme during 2021. In the face of the Covid 19 pandemic, **Nurses and Midwives have not only demonstrated outstanding resilience, dedication and care, but also proven their innovative ability to adapt their services** in order to continue to give the best care to patients.

We in the ONMSD recognise that Nurses and Midwives are natural problem solvers with a unique relationship to patients. We also recognise how important it is that Nurses & Midwives receive due recognition for this vital and ever-adapting contribution. Thus we continue to be excited and motivated to work with Spark to expand opportunities for Nurses and Midwives to bring their passion, expertise, creativity and insight to healthcare innovation, resulting in better patient experiences, health outcomes and Nursing and midwifery practices.



Spark itself has adapted too, moving their offerings to online formats, innovating their own programme with the **Design on the Frontline Covid Call**, and piloting an exciting interim role for Nurses and Midwives creating a **one-year National Nursing and Midwifery Innovation Fellowship** – with the test of concept commencing in April 2022.

This is an exciting time to be involved in healthcare innovation. I believe **the future is bright for the collaboration between Spark and ONMSD as we continue to work together to empower frontline teams to identify problems, improve processes, and implement solutions.**

02. Foreword

*Jared Gormly,
Head of Spark Innovation Programme*

The Spark Innovation Programme appeals to those who are excited by change, innovation and development in our health system.

Since well before the time of Florence Nightingale, nursing and midwifery has been at the forefront of innovation and leadership in healthcare, whether in clinical management, education, quality improvement or countless other facets of the sector. We are delighted to be able to support a greater number of nurses to reach excellence and demonstrate their pioneering spirit in the field of healthcare innovation.

Innovation and design principles are undoubtedly a departure from the day-to-day clinical roles that most in the HSE might be used to. **The Spark programme seeks out innovative and creative people from within the health service, then encourages, supports and empowers them**



to explore their vision of how their corner of the healthcare system can better serve both patients and healthcare workers.

We at Spark recognise that the insight and creativity of healthcare staff, and their experience of working in the healthcare system, are of central importance in generating better systems, leading to better outcomes and better experiences for patients.

By equipping them with modest resources, mentorship, innovation skills, **we enable them to progress their ideas, run tests, evaluate impact, and establish how best to create change** for the better.

Spark is currently run by a small team, but it is growing, and it represents the tip of an iceberg of collaboration, support and mutual progress that we believe is quietly transforming our healthcare system.

By continuing to grow through continuously reaching out to new partners, we are amplifying our collective ability to move closer to the healthcare system we know we are capable of producing in Ireland.

The Spark Innovation Programme would like to thank Dr Maureen Flynn and ONMSD colleagues in all their endeavours in championing the Spark Innovation Programme within the ONMSD and QPSD networks.

We are grateful for the continuing support of Dr Geraldine Shaw as she continues to include Spark in the ONMSD priorities.

03.

About Spark Innovation Programme

The Spark Innovation Programme is a frontline staff-led initiative that seeks to support, promote and recognise innovation amongst healthcare staff.

Spark Innovation Programme was initially established as a national programme to empower and engage Doctors at the beginning of their careers. The opportunity to develop one's ideas is central to keeping staff engaged and inspired, and makes it easier to recruit and retain the high quality graduates of our world class medical education system.

However, Spark is not solely about successful ideas but also about the potential shared learning for the system – **creating a great place to work where healthcare professionals are empowered and encouraged to bring all of their creativity, imagination, problem solving skills, love of design, and passion for the wellbeing of patients.**

The power of this vision has seen Spark expand to include all healthcare professionals, and every employee of the HSE, thanks to partnership with an ongoing support from Office of Nursing and Midwives Director (ONMSD), National Doctors Training and Planning (NDTP), and National Health & Social Care Professions Office (NHSCPO).



The programme continues to exemplify bottom up innovation support. The role of the **Innovation Fellows** is, therefore, critical in leading and shaping the Spark Programme, playing a key part in supporting ideas, design, innovation, collaboration, and initial implementation of initiatives led by frontline staff.

This ongoing monitoring, and a willingness to pilot new schemes, critically appraise them, and keep what works best, is key to the continued success of the Programme.

04. The ONMSD and Spark Programme Collaborative Group

2021 was the second year of the ONMSD partnership with the Spark Innovation Programme.

This collaboration was led by a small group, which reported back to the ONMSD leadership team, and included Jared Gormly, Neilan Govender, Dr Alan Hopkins, Dr Rachel McNamara, Loretto Grogan, Claire MacGabhann, Margaret Williams, Margaret Casey and Dr Maureen Flynn.

The group met on five occasions throughout the year to guide the development of the Spark programme and to explore how our shared interests could be met.

A key initiative has been the identification of a clear need for a Nursing and Midwifery Innovation Fellow role within the Spark Innovation team. From these discussions an evident requirement for the role was identified and a job description developed.



This first ever National Nursing and Midwifery Fellow Role, as well as the first HSCP Fellow, were advertised in November 2021.

The role of the Nursing or Midwifery Fellow is critical in leading and shaping the Spark Programme. The Fellow will play a key part in supporting ideas, design, innovation, collaboration and initial implementation of initiatives led by frontline staff.

The Nursing & Midwifery Innovation Fellow joins Medical and Health and Social Care Professions Fellows so that all groups are represented in the decision-making processes and the support and implementation of projects - making it a truly interdisciplinary effort.

We believe interdisciplinary collaboration is at the heart of frontline healthcare.

05. The Innovation Fellows



Dr Alan Hopkins

remained in the NCHD fellowship until June 2021, where he continued to encourage the Nursing and Midwifery contribution to Spark Initiatives.

NCHD Fellow 2020–21



Spark Innovation Programme NCHD Fellow 2021

Although last year was one of the most challenging in the history of our health service, I am proud to see the enormous capacity for innovation in our hospitals and the resilience of our healthcare workers. Through my Fellowship I aimed to harness the ingenuity and spirit of the healthcare workers to create a health service of which we can be truly proud.

Dr Rachel McNamara, NCHD, Public Health



Spark Innovation Programme NCHD Fellow 2021

My main priority has been to progress and facilitate innovation for not only doctors within the Irish health service but also my Nursing and Midwifery, and Health & Social Care Professions colleagues.

Dr Ivan Yu, NCHD, Paediatrics



06. A Summary Of Spark Initiatives 2021



Healthcare staff applied in record numbers to our COVID Call and their message was clear:

We are continuing to innovate!

We have responded by expanding our offerings as much as our capacity has allowed.

Whether organising events (User-Centred Design webinars, Design Week, Spark Summit), creating and disseminating digital content through our website and social media channels, and most importantly supporting innovators through training, funding and other supports, the Spark programme is continually evolving.

2020/21 saw us pivot to online Design Thinking workshops and applicants pitching for funding and support via digital sessions.

Seed Funding & HSE HIHI Spark Ignite

COVID Call

Design On The Frontline

Hospital Innovation Fund

Design Weeks

Designer in Residence

07. Spark Activity 2021

Spark continues to initiate collaborations, support projects based at clinical sites and advocate at all levels of the health service for innovation, innovators and innovation-friendly workplaces.

SEED Funding and HSE HIHI Spark Ignite

These initiatives continue to anchor our programme, offering Design Thinking Workshops, mentorship, support, and the resources to prototype, test, pilot, and evaluate innovative ideas.

SEED provides training, micro funding and support to first step innovators to enable them to develop their project.

IGNITE is aimed at projects that have the potential to scale, to make systemic improvements, or to have commercial impact.

This report contains details on those projects and a selection of Projects

Design

Our **Design Weeks and Challenges** continue to inspire healthcare workers to think about the problems they face on a daily basis, to establish the causes and impacts of those problems, and to begin to think constructively about how to solve those problems.

Design Thinking Workshops, which migrated online during 2021, offer the skills and peer support to help innovators break their challenges down and think through the innovation process.

With projects still spinning out of the **Covid Call** and **Design on the Frontline** initiatives of 2020, we were also delighted to support the appointment of Máire Kane as the first **Designer in Residence** at St James's Hospital, and confirm our support for a similar post in Mater Hospital in 2022.

Hospital Innovation Fund

Following the success of the Consultant Innovation Fund in 2020 it was recognised that Senior Nurses, Midwives and HSCPs were equally well positioned to lead high impact innovation projects.

Therefore, in December 2021 Spark, in collaboration with the Acute Hospitals Division, was delighted to launch the Hospital Innovation Fund to promote innovation in Irish Hospitals by supporting senior-led hospital projects.

This initiative offered Senior Healthcare Professionals funding from €20,000 to a maximum of €60,000 for novel initiatives that have the potential to improve the way care is delivered in our public health service.

These projects:

- Add value to the hospital through increased delivery of best practice care, cost savings or increased capacity.
- Demonstrate new ways of working.
- Encourage collaboration within the hospital and between organisations.
- Can be scaled up and transferred to other services or other hospitals.
- Show commitment to innovation from hospital or hospital group.

In particular, we seek projects that show:

- An emphasis on sustainability and a commitment to reducing the carbon footprint of healthcare.
- Evidence of innovative or design thinking.
- Engagement with emerging technologies.

08. Testimonials

“I am delighted to have been a recipient of Spark funding as part of the Covid Call initiative. I attended the workshop online and it has encouraged me as a frontline worker to have a problem-solving mind and has increased my desire to learn about Design Thinking and Innovation.

Nothing is more rewarding than the knowledge that you have improved the quality-of-care delivery to older adults attending the service and enhanced their healthcare experience. Support from the Spark team and the funding received have enabled me to improve the service by problem-solving in an innovative way.”

**Mary Doyle,
Advanced Nurse Practitioner,
Peamount Healthcare**

“Insightful. Amazing process. It pushed us to do something about the problem.”

**Siobhan Treacy,
Clinical Nurse Manager 2,
Department of Public Health,
HSE Mid West**

“The Spark Seed programme gave me the help, support and tools I needed to bring my project from an idea to a reality. Their knowledge and guidance is outstanding.”

**Emer O'Rourke,
Clinical Practice Support Nurse in Urology and Kidney Transplant,
Beaumont Hospital**

“The Spark Innovation Programme has been instrumental in promoting innovative Nursing and Midwifery practice in the Ireland East Hospital Group (IEHG). Many project teams engaged in a variety of initiatives in 2021.

Spark provides excellent innovation and networking opportunities and as an external HSE avenue of support for frontline staff, it supports their ability to avail of innovation support, expertise and funding. I have seen how Spark empowers Nurses and Midwives to take the next steps in their innovation journeys. The added value that they bring to their respective organisations and the IEHG favourably impacts on our patients.”

**Paul Gallagher,
Chief Director of Nursing & Midwifery,
Ireland East Hospital Group**

09. Spark Aims and Objectives

01. Engage & Empower Frontline Staff

We seek to empower staff to deliver change, identify barriers and implement improvements for patients and service-users.*

- Promote and celebrate initiative, creativity and collaboration
- Create funding streams for staff-generated solutions to identified problems and opportunities
- Enable access to and training in design and innovation methodologies
- Provide mentoring
- Share success stories

02. Create a Supportive Ecosystem for Health Innovators

With a shared vision of improving patient and service-user experience, we will work together more effectively and overcome barriers that have made change more difficult in the past.*

- Create an innovation-friendly workplace
- Promote collaborative work practices
- Normalise innovation practices
- Promote the role of human-centred thinking in the health system
- Promote early engagement with emerging technology

03. Develop Systematic Capability

To create this environment...an increased focus on teamwork and collaboration... education and training programmes... and developing necessary structures (e.g. locally based change and improvement networks, communities of practice etc)*

- Leverage existing resources and form strategic partnerships
- Source expertise
- Create pathways for innovation, innovators, and innovation processes
- Build an evidence base to illustrate value

10. Three Key Programme Strands

SPARK SEED

Provides training, micro funding and support to first step innovators to enable them to develop their project

SPARK IGNITE

Aimed at projects that have the potential to scale, to make systemic improvements, or to have commercial impact

SPARK DESIGN

Help changemakers to make space in their process to consider whether their solutions are human-centred and of the highest quality

While these areas cover a lot of what we do, we are always open to collaborate with others to promote frontline innovation and work on new initiatives that can improve the innovation ecosystem in healthcare.

Spark Seed

Resourcing
frontline
innovation



Spark Ignite

Growing
innovation
talent

Spark Design

Collaboration,
human-centred
solutions, quality
improvement



Spark Seed

11. Spark Seed Funding

The frontline staff in our health service are best placed to identify key problems and implement meaningful solutions. Spark Seed is about enabling them to sow the seed of innovation and cultivate the solution to grow and bear fruits of improvements.

The Spark Innovation Programme recognises **that frontline staff are best placed** to identify key problems faced by service users and care providers alike, and implement solutions to those problems. Offering **funding in combination with mentorship and training** equips staff with the skills required to effect meaningful change.

Spark Seed Funding is an initiative whereby frontline staff can apply for micro funding and other supports for innovative projects that will improve our health service. The initiative focuses **on small, rapidly implementable projects which take a bottom up approach to change.**

While small in scale, these projects have great potential to make meaningful improvements to patient care, increase service capacity and generate cost savings.

Applicants submit a brief project overview, with the best solutions shortlisted to attend a **Design Thinking workshop** where ideas are refined with support and mentorship from the Spark team. The workshops were **facilitated by Trevor Vaughn, Assistant Professor of Human Centred Innovation in Maynooth University and inventor on RTÉ's "The Big Life Fix"**. The workshops were held online.

These Seed Funding Calls were open to all Nurses & Midwives, Doctors and HSCPs. The initial call of the year was the first call since the commencement of the ONMSD partnership and the enthusiasm from Nurses and Midwives was incredible with large volumes of high quality initiatives put forward.

Spark Seed Funding

- COVID Call
- Targeted at NCHDs, Nurses, Midwives & HSCPs with emphasis on MDT collaboration
- Multiple calls per year for small scale projects
- Micro funding up to €3,000 for individual and €5,000 for groups
- Best ideas invited to attend CPD CEU accredited Design Thinking workshops
- Mentorship and support also provided

Data on Nursing and Midwifery Applications

Spark Seed

Two Rounds: April + August 2021



Total number of Applications

211



Number of Nursing/Midwifery applications + attendees to workshop:

34



Number of Nursing/Midwifery funded projects

9

COVID Call



Number of Nursing/Midwifery attendees to workshops

10



Number of Nursing/Midwifery funded projects

5

“The Spark Seed experience was brilliant! I loved the Design Thinking workshop – the whole process gave me more incentive to get the project done.”

**Amy Carroll,
Clinical Placement Coordinator Midwifery
St Luke’s General Hospital Kilkenny**

A Selection of Seed Funding Projects

Bernie Waterhouse (CNM2) & Tony Galvin (CNMI)

St James's Hospital

A website providing a comprehensive set of resources aimed at patients and professionals addressing all aspects of Upper Gastrointestinal care.

Funding Awarded: €2,432

Fiona Montgomery (CNM2)

An Solasan, Priorland Road, Dundalk, Co Louth, Louth/Meath Mental Health Service

An active panel or smart board enhancing the experience for residents.

Funding Awarded: €3,000

Sarah Lodge (Staff Nurse)

Theatre Department, Midland Regional Hospital, Portlaoise

Online platform whereby hospitals/departments could share items that are soon to expire. Hospitals that are most likely to use the item can request the item.

Funding Awarded: €2,650

Anthony Corbett (Senior Staff Nurse, Inpatient CAMHS)

Hazel Unit, Linn Dara Inpatient CAMHS, Cherry Orchard Campus, Ballyfermot Rd, Ballyfermot

The development of a therapeutic workbook, centred on wellness recovery, discharge planning and relapse prevention.

Funding Awarded: €3,000

Emer O'Rourke (Clinical Practice Support Nurse In Urology and Kidney Transplant)

Beaumont Hospital, Transplant and Urology

Creation of a catheter care passport.

Funding Awarded: €500

Siobhan Treacy (Health Protection CNM2)

HSE Mid West Department of Public Health

Complete process improvement project with a communication solution.

Funding Awarded: €3,000

Vimal John (Staff Nurse- Dementia Lead)

Nenagh Hospital

A Carer Passport - a card or a badge that is easily recognised by hospital staff, identifies the passport holder as a carer and includes the name of the patient. This ensures hospital staff are aware of their role as a carer and will involve and consult them in the care and treatment of their family member.

Funding Awarded: €1,500

12. Spark Ignite



HSE-HIHI

Spark Ignite

The Spark Ignite Competition is run in association with the Health Innovation Hub Ireland (HIHI), the Health Service Executive (HSE), the Office of the Nursing and Midwifery Services Director (ONMSD), the National Health and Social Care Professions Office (HSCP), and National Doctors Training and Planning (NDTP).

The goal of this competition is to help staff in the health service develop solutions to the challenges faced by care providers and patients. Entrants are asked to plan, refine and then pitch their ideas at the event. The winners of the competition are given funding to further develop their ideas and receive on-going support and mentorship.

This unique bottom up approach, **supported by the commercial and industrial experience** of the HIHI team, allows staff to articulate their ideas in a structured, needs led manner and builds the knowledge and confidence of individuals to promote their ideas for solutions based on their frontline experience within the healthcare system.

The Spark Ignite initiative provides an engaged cohort of the HSE with the skills and means to assess innovative ideas, understand the process and requirements to bring them towards reality, and apply these skills to their current work practices.

Developing a culture of innovation from the ground level, by empowering staff to develop their ideas that will ultimately deliver benefits to patients, improve efficiencies, reduce costs, and deliver new products, processes, technologies and services, makes Spark Ignite an approach that is scalable to other departments within the public sector.

Spark Ignite

- Open to all HSE staff
- Bottom up approach
- Learn about innovation and Design Thinking methodologies
- Validate unmet clinical needs and determine if a market exists for their proposed solution
- Identify the stakeholders and develop a coherent value proposition
- Understand the product development pathway
- Reviewed by a panel of experts from various sectors
- Funding awarded for further development of winning ideas

HSE-HIHI Spark Ignite at a Glance



Social media impressions

109.8K



HSE staff engaged via email
and in-person contact

+1K



Total applications

180



Nursing/Midwifery
Applications

33



Projects awarded funding
totalling €33,000

15

Nurses/Midwives Shortlisted to Attend Workshops and Invited to Pitch

**Deirdre Hall (CNS), Joanne
Lowe (CNS), Claire Dingle
(CNS), Roisin Kavanagh
(Administrator)**

HSE Primary Care Unit, Bray, Co Wicklow

**Insulin Administration
Delegation Programme**

**Valerie Ball (CNS),
Aideen O Connor
(Plaster Nurse Specialist)**

CHI Connolly and Connolly Hospital

**Vacufit - Conformable
Humeral Brace**

Suzanne Marie Egan (CNS)

Tallaght University Hospital

**A mobile phone App to improve
management of patients with
Chronic Pancreatitis**

**Theresa Tierney-Bugler
(CNM3)**

Eist Linn Child and Adolescent Mental Health
Inpatient Unit, Cork

**i-CHAT App - Integrated
Comprehensive Health
Assessment for Teens App**

**Catriona O'Leary (CNS),
Dr Maeve Crowley (Consultant
Haematologist), Dr Pat Barry
(Consultant Acute Medicine)**

Cork University Hospital, Cork

**Development of a rapid access DVT
assessment clinic and ambulatory
DVT pathway using a collaborative
approach between Acute Medicine
and Haematology Services**

**Kathryn Hallahan (ANP),
Amanda Keating (Clinical
Nurse specialist), Sonia
Magaharan (Clinical Nurse
Specialist)
& Team**

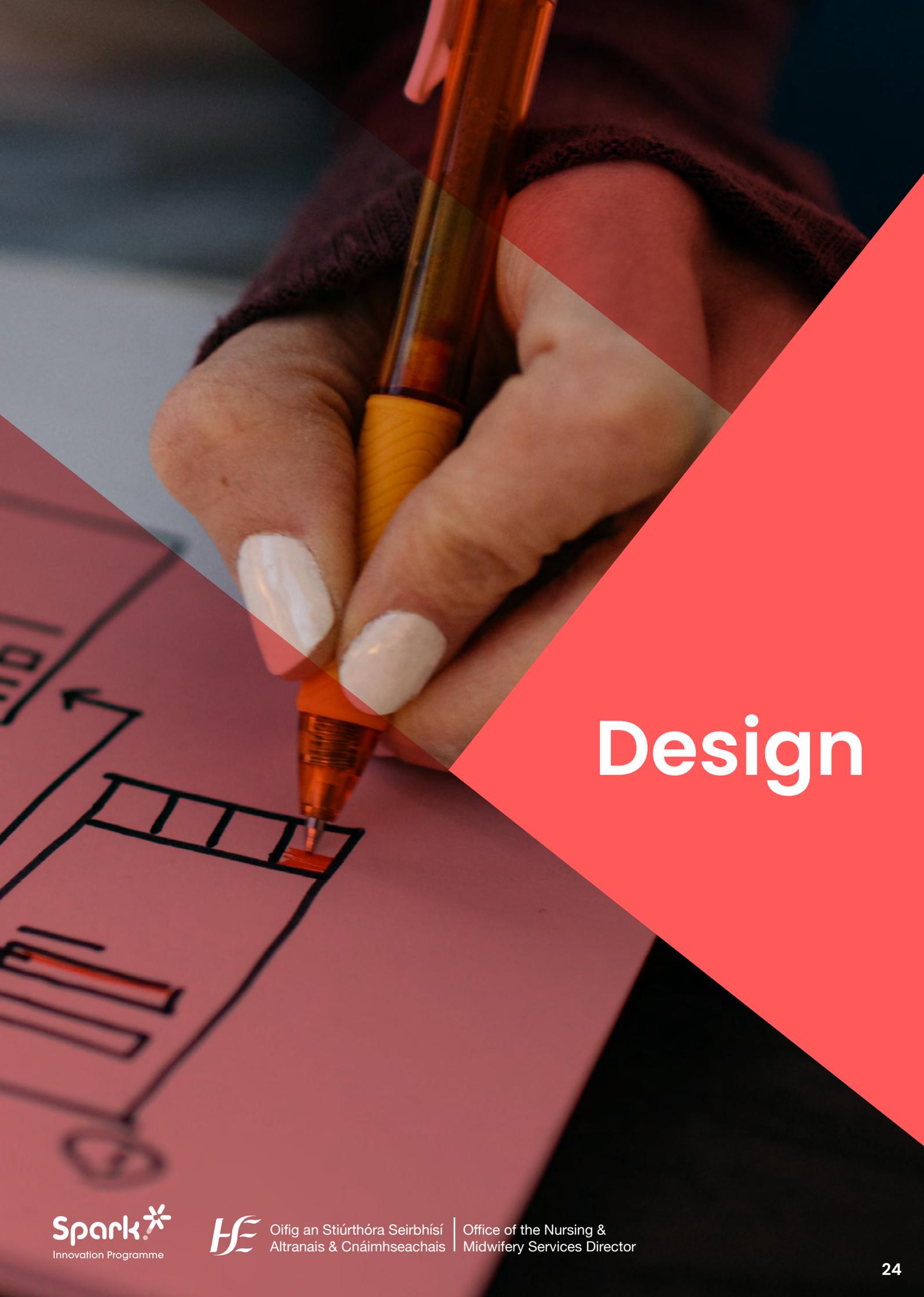
CAMHS, Cork

**Digitally Adapted ADHD Post
Diagnostic Care Pathway for ADHD**

**“The
programme
was engaging
from the outset.**

**The workshop days
were highly effective
in gathering groups of
like-minded HSE staff
together to highlight
common problems
throughout the health
service. There was
great shared learning
& a great opportunity
to network.”**

**Vikki Sheeran,
Nurse Practice Development Unit,
Sligo University Hospital**



Design

13. Spark Design

Healthcare delivery is complex and problems within healthcare, as a result, are complex, requiring intelligent solutions. At Spark we fully believe in human-centred design and our goal is to spread design principles to healthcare professionals. Great Design is inclusive, pragmatic and questions the status quo.

Innovation is a **complex process that involves myriad competencies.**

It can be a long journey from identifying and generating insights into a problem; researching, devising, prototyping, and testing solutions.

Design Thinking and Design Practices are **invaluable resources that help potential innovators structure the innovation process, collaborate, and set key milestones for each stage of a project.**

We at Spark are passionate about the use of design principles in healthcare and strive to integrate with the design community and encourage design thinking and user-centred design in all of our initiatives.

- **Promoting design practices in the workplace**
- **All Seed / Ignite funding applicants attend Design Thinking and Innovation workshops**
- **Matching designers with Seed and Ignite projects to maximise impact**
- **Designer in Residence**
- **Design Challenges / Design Weeks**
- **Linking with the Design community such as in our COVID Design on the Frontline initiative**

Spark Design Outputs at a Glance



Design Thinking Workshops
hosted in 2021

3



Total number participated
in workshops

105



Total number of applications

211



Total number of
projects funded

58



Nursing/Midwifery
Applications

34



Total Nursing/Midwifery
applicants participated in
Workshops

14



Total Nursing/Midwifery
funded projects

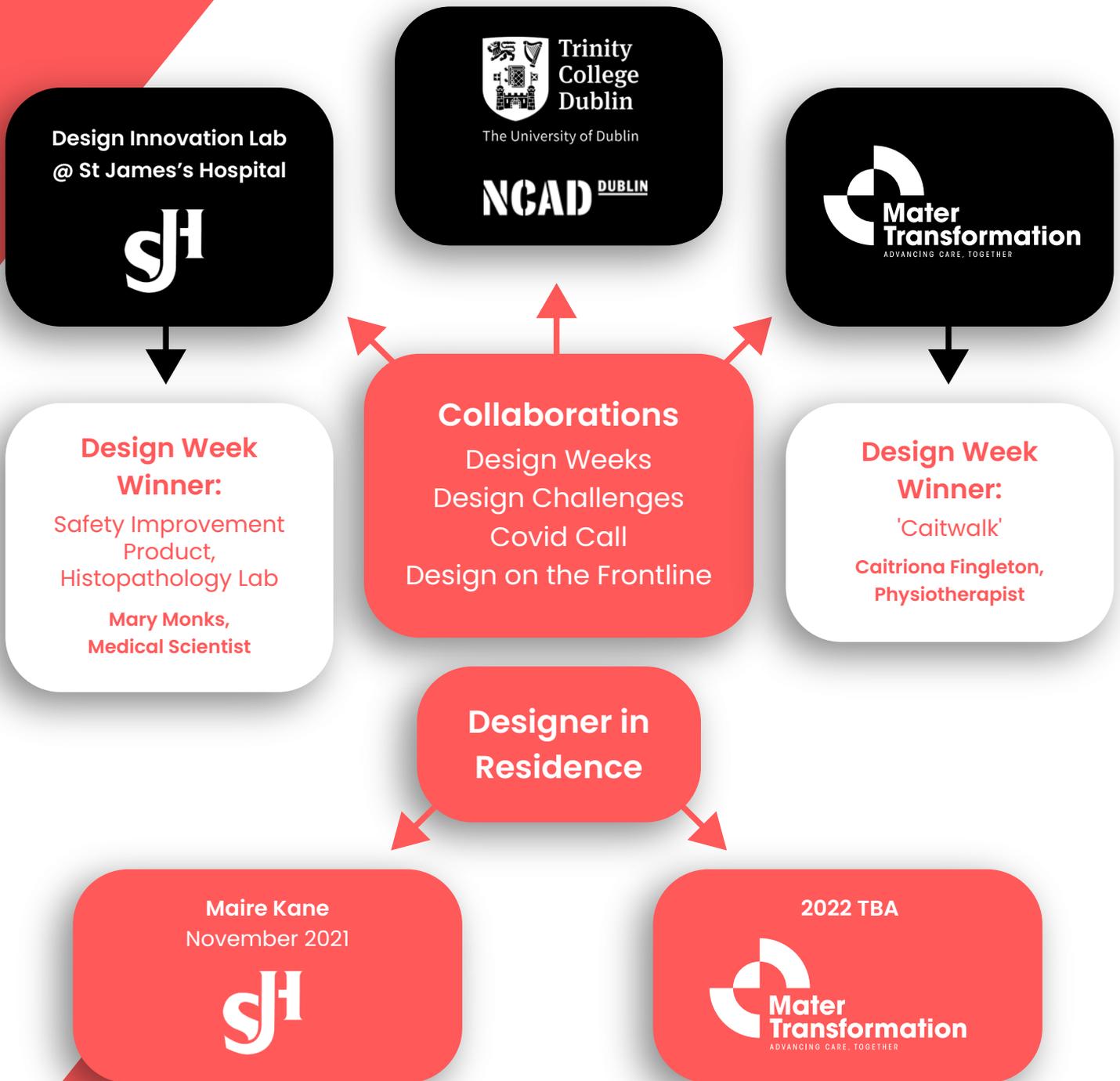
9



2 Week-Long Hospital
Design Challenges Supported

2

Design Collaborations Seed & Ignite



"I think design can bring a lot to improve health care. I think as designers we tend to think and look at challenges in a different way with a different perspective. And I think in an environment that has kind of been the same for a number of years, that's really important "

Maire Kane, Medical Device Designer, St James's Hospital

Design Weeks

Both the Mater and St James's Hospitals run challenge-focused design weeks where student design teams from National College of Art and Design (NCAD) and Trinity College Dublin (TCD) work intensively with staff members on briefs collected from the hospital workforce through an open call.

The Mater champion for this project, Physiotherapist Caitriona Fingleton, will now have access to the €3000 Seed fund from Spark to help bring the concept to the next stage.

At St James's Hospital, seven projects were shortlisted in 2021 and pitched to a judging panel to determine a winning design. **This year's winner Chief Medical Scientist Mary Monks received €3000 development funding for a Safety Improvement Product Design for Histopathology Lab Staff at the Hospital.**

Designer in Residence & Programme Planning

Spark recognises the significant potential that design offers to driving frontline innovation within healthcare – particularly when supported by a multidisciplinary team who can:

Cultivate and identify optimal opportunities where design can generate impact

Connect designers with frontline workers and provide access to the wider hospital

Mentor frontline workers through the change process helping them to overcome obstacles and drive projects through to completion.

Recognising this, Spark has co-funded a one year full time Designer in Residence post and two six month Internships from NCAD undergraduate design programmes at both the Design Innovation Laboratory @ St James's Hospital and the Mater Transformation Unit @ Mater Hospital.

COVID Call

In 2020, in the context of the COVID-19 pandemic, we put two simple questions to our frontline staff:

‘What current challenges are preventing you from doing your job well today?’

‘What is currently causing your patients distress or leading to negative experiences?’

The response was overwhelming. The ideas that we received from healthcare workers and have subsequently supported are innovative, implementable, and most importantly, they are human-centred. Some examples of projects that were awarded support are listed opposite.

Brief 1

How might we tackle some of the interaction, efficiency & comfort challenges arising as a result of PPE usage?

Brief 2

How might we identify, prevent, reduce or manage the onset of frailty in older adults while socially isolating / cocooning?

Brief 3

How might we mitigate some of the negative impacts of social isolation, poor communication and boredom to enable more meaningful connections between people with amplified needs?

In March 2021, Spark held a workshop for the remaining 2020 Spark COVID Call shortlisted applicants. *See Projects – Chapter 13.*

Design on the Frontline

As a follow-up to the Covid Call, Spark created Design on the Frontline which was a collaboration with the design community. We released the call to designers, design agencies and design teams, as well as students and colleges, **to develop solutions to the briefs arising from the Covid Call.**

In one case, we were able to link Jincy Jerry, Assistant Director of Nursing in Infection Prevention and Control at Mater Misericordiae University Hospital, with designer Niamh Lynch, Head of Fashion at Dublin Design Institute. *You can read about their collaboration on page 38.*

Design on the frontline presents the merits of bringing the design community and health services together, building the case for human-centred design to be a key component in healthcare.



Play, Purpose

Spark Summit

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“The team behind Spark are incredibly active, care deeply about innovation and improvement in the system and are strong advocates of Human-Centred design. It’s important to point out that Spark doesn’t offer workshops just for the sake of workshops, they are linked to funding and action. Staff on the programme all have ideas to improve the system around them, and this training helps them understand the problem in a different way and provides them tools, techniques and hopefully creative confidence to take action.”

“This is all part of a bigger drive to bring design and healthcare closer together. We have been introducing human-centred design approaches to hundreds of healthcare professionals which, when you think about it is quite exciting. Not because they will all start designing, but because this will encourage design mindsets like empathy, problem framing, communication, and creativity can really complement what health professionals do, and I really believe can make them better practitioners.”

Trevor Vaughn

**Maynooth University Innovation Lab,
The Big Fix, RTE,
Actionable Innovation,
Public Service Innovation Advisory Board**

“The Design Thinking workshop was amazing, unbelievable! Spark is the appropriate word. It sparked creativity to what could be.”

**Siobhain Treacy,
Health Protection Clinical Nurse Manager 2,
HSE Mid West Department of Public Health**



14. Projects



QR Maternity

Amy Carroll

CPCM, Maternity, St Luke's General Hospital Kilkenny

Funding Awarded: €3000



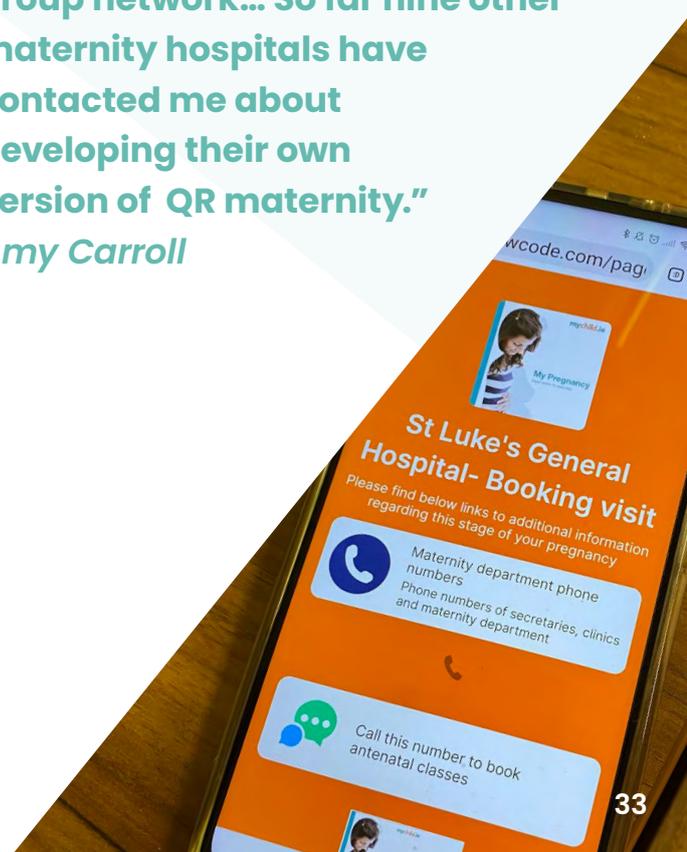
With one scan, one scroll of a page and one click, women can access relevant quality national and local maternity resources, including contacting specialists, booking antenatal classes or contacting the Maternity Unit.

Quality Resources Maternity (QR Maternity) uses QR codes to link to carefully chosen information that is professional, up to date, specific, easy to understand and saves time, money and the environment.

This provides a trusted source of information instead of the current 'doctor google' or the overload of paper leaflets that are sometimes irrelevant, out of date, poorly printed or hard for staff to locate.

“The skills I learnt pitching meant I was able to pitch to our governance meeting who then suggested I pitch to my hospital group network... So far nine other maternity hospitals have contacted me about developing their own version of QR maternity.”

Amy Carroll





Red Leg RATED Tool

Gillian O'Brien

Registered Advanced Nurse Practitioner,
Naas General Hospital ,
Department of Dermatology
& Tissue Viability

Funding Awarded: €2000

Gillian and team's project supports accurate diagnosis and management of 'red legs' in acute and primary care settings.

They believe that increased awareness and use of their evidence-based Red Leg RATED tool will result in more appropriate prescribing of antibiotic treatment, reduced re-presentations, increased patient satisfaction, improved patient outcomes and improved utilisation of resources.

The piloted Red Legs RATED tool resulted in 72% admission avoidance rates and recent audit results reported continued admission avoidance rates of 66%.

Implementation is ongoing and Spark will support Gillian through a national roll-out process.



The Exchange: Old Space with a Familiar Face

Paul Phelan

Clinical Nurse Specialist,
Department of Psychiatry,
University Hospital Waterford

Funding Awarded: €3,000

The pandemic posed many challenges. Face to Face contact with friends, family, carers and advocates was severely restricted. Patients experienced many barriers to satisfying their communication needs such as lack of space and privacy, limited technological equipment and reduced access to telephones while inpatients.

Following community meetings, focus groups, and bedside discussion and questionnaires, it was agreed that a private and confidential space was required which Service Users could use to make video calls with family.

A fun and quirky old-style telephone box was fabricated to suit the limited space available, designed to be wheelchair accessible and user friendly.

“The Exchange” Communication Hub continues to provide a useful and private space to Service Users which preserves confidentiality and dignity.



Improved Digital Accessibility for Children & Families

Josephine O'Reilly

Community Mental Health Nurse, Child and Adolescent Mental Health Services (CAMHS) Cavan

Funding Awarded: €2,000

The CAMHS team saw an increase in referrals for young people since the onset of the COVID-19 pandemic. These included moderate to severe mental health disorders and, in particular, eating disorders in adolescents.

To support this cohort Josephine and her team have developed a library of texts for parents and families as well as a selection of workbooks and clinical resources for clinicians to use in their therapeutic work.

“Young people with ED (eating disorders) in particular...have the highest mortality rate of all the young people we see, and are often likely to avail of costly and lengthy inpatient treatment - therefore increased therapeutic resources for this client group is indicated.”



Childhood Asthma Education Programme

**Catherine Carrig
and Mary Devitt**

Paediatric Respiratory Clinical Nurse Specialists,
Childhood Asthma Education Program

Funding Awarded: €3,000

A childhood asthma education programme can better support children and their families to manage their asthma effectively following referral.

Catherine and Mary have developed a special 'wallet' for child patients containing:

- leaflets and booklets
- a personalized management plan
- the patients' medical letters and appointments
- QR codes allowing digital access to asthma action plans, videos on inhaler technique and emergency treatment for acute asthma attacks.

The pack can be updated at further follow up healthcare appointments, and can be brought along to consultations with other clinical teams.





GN95 Personal Protective Gown

Jincy Jerry

Assistant Director of Nursing in Infection Prevention and Control, Mater Misericordiae University Hospital

Niamh Lynch

Head of Fashion at Dublin Design Institute

The GN95 Personal Protective Gown makes radical improvements to the interaction, efficiency & comfort challenges arising as a result of increased PPE gown usage.

It incorporates key user insights related to comfort, fit, safety, temperature and difficulty donning and doffing when using traditional gowns. The GN95 comes in a one-size-fits-all version that enables the wearer to edit the body and cuff fit as desired.

The textile provides breathability and is fabricated using sealed seams with a centre back vent allowing heat to escape, therefore stabilising body temperature, and also affords resistance to penetration by contaminated liquids, contagious aerosols and infective agents.

The Gown is currently at feasibility testing stage.

Helping children learn through play at an early age to manage and control their asthma and allergies



Ally Russel

Paediatric Respiratory CNS

Dr Muhammad Tariq

Maura Rice

Midlands Regional Hospital, Portlaoise

Funding Awarded: €1,000

This project seeks to educate and promote patient self-management by learning through play, thus preventing illnesses and fatalities in patients with asthma and allergies.

Potential Impacts:

- Reduction in GP and ED visits, reducing hospitalizations.
- Reduced cost of medication and investigations.
- Reduction in days missed from school and work.

“Taking part in the Design Thinking workshop was very beneficial for us as a team. It provided an opportunity for us to think differently and be exposed to other professionals and teams and hear how others are working.”

**Clare Flanagan
Registered Advanced Nurse Practitioner,
Old Age Psychiatry,
St Vincent’s University Hospital**



Impact

15. Evaluating Impact

What you can't put a number on

Through pursuing our three strategic objectives we are empowering frontline staff, creating a supportive ecosystem for innovation, and making the healthcare system more capable of implementing innovative staff projects and processes. Together with frontline staff, we are helping to create a better health system that is attentive to the needs of service users and responsive to the impulses of care providers to improve services through innovation practices.

Empowering Frontline Staff

- The power of being told your idea is really good
- Feeling your insight, experience and creativity can make a difference
- Being given the tools to advance your solution

A Better Healthcare System

- Improved services
- Better use of resources
- Patient satisfaction

A culture of innovation

- Problems are resolved quickly at little cost
- Collaborative working becomes the norm, and promotes mutual inter-professional trust, respect, and collaboration

16. Looking Forward

We will continue to grow the Spark Programme offerings and further strengthen our collaborative work with the ONMSD. In 2022 we aim to:

01

Continue to roll out and evolve all Spark Initiatives for nursing, medical and HSCP staff. By adjusting each iteration of our initiatives to further meet the needs of the frontline HSE staff and our sponsors we hope to engage with a wider range of frontline innovators.

02

Complete the Hospital Innovation Fund and support implementation of these projects.

03

Welcome our first National Innovation Fellow in Nursing and Midwifery, and recruit our first HSCP Fellow. With an expanded team we aim to provide a more visible presence at HSE events and meetings.

04

Continue to grow our social media presence and promotion of initiatives.

05

Evolve the Spark Ignite Competition by broadening the scope and reach of this initiative.

06

Develop speciality specific 'Design Thinking Boot Camps'.

07

Expand our Innovation Network, connecting existing and establishing Innovation Teams nationwide.

08

Hold Spark Summit 2022, an in person conference and awards ceremony.

09

Develop an innovation series of online webinars briefly introducing bite-size design-thinking principles to HSE staff

HSE



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Innovation Programme

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