

Nursing & Midwifery contribution to the HSE Spark Innovation Programme

Annual Report 2022



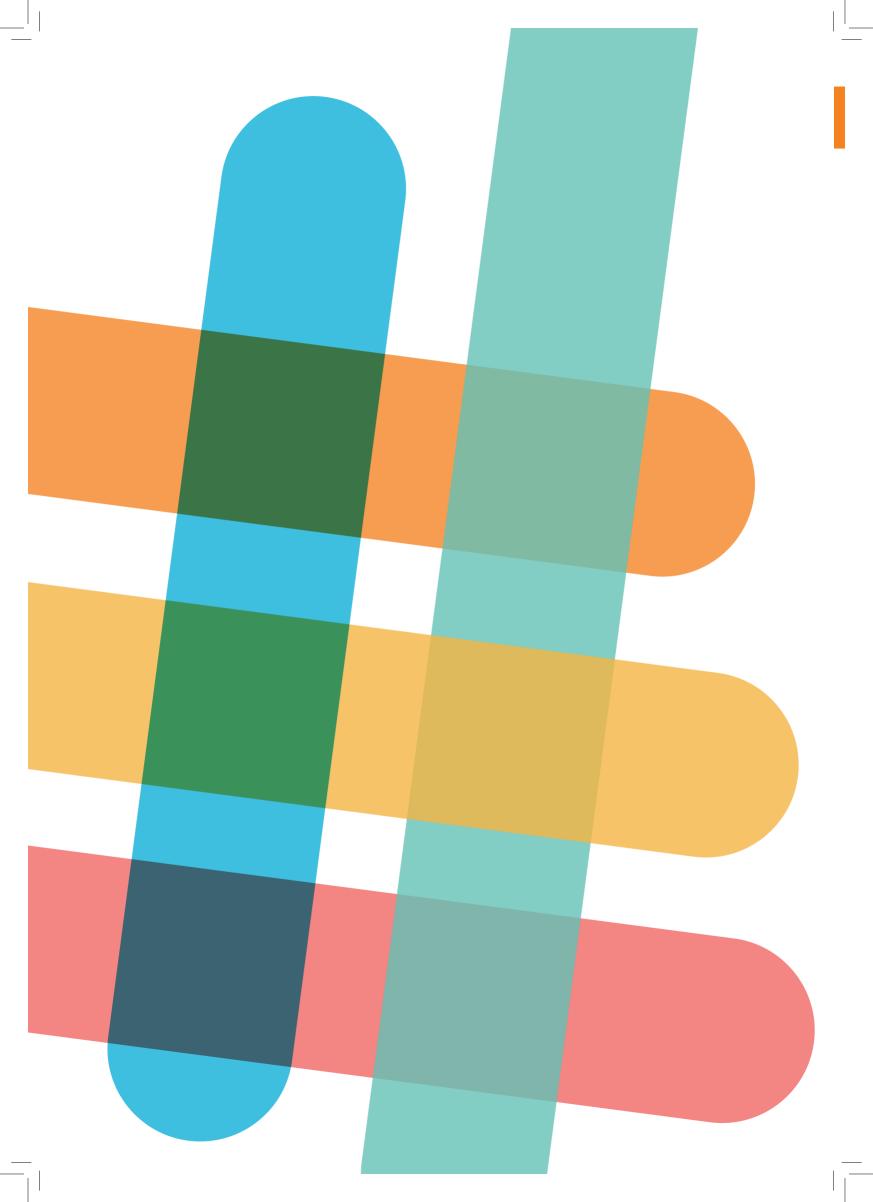


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MESSAGE FROM DR GERALDINE SHAW

I am pleased that we are continuing the Office of Nursing & Midwifery Service collaboration with the HSE Spark Innovation Programme. In this annual report we share information specifically on the nursing and midwifery contribution to service improvement through the Spark Innovation Programme in 2022.

It was a very exciting year that saw the establishment of the first ONMSD supported Nursing and Midwifery National Fellowship in Innovation. This one year developmental opportunity provides a clinical nurse or midwife with the opportunity to develop their innovation and leadership skills and shape the HSE Spark Programme.



Ms Amy Carroll, our first midwifery fellow, joined the HSE Spark team in April 2022. Her leadership from within the HSE Spark Programme team has resulted in a significant increase in engagement from nurses and midwives in the programme. A big thank you to Amy for leading the way. Amy's pioneering achievements and the evaluation of the first fellowship has resulted in our decision to continue to sponsor an annual fellowship.

HSE Spark continues to do remarkable work encouraging and supporting frontline innovation. With the end of COVID-19 restrictions the presence of HSE Spark at many of the in-person national nursing and midwifery conferences has meant more visibility, promotion and showcasing of both the HSE Spark Innovation Programme and nurses' and midwives' contribution to healthcare innovation. Through the HSE Spark Innovation Programme, nurses and midwives show the insights and empathy on which they develop and promote new ways of working to deliver safe, high-quality, personcentred care.

This year the HSE Spark Innovation Programme had a record number of applications from Nurse/ Midwife led projects from around the country, from all the various settings and representing all disciplines in nursing and midwifery. It is a credit to all those who took the time and effort to apply. In this report, we see some excellent examples of the creativity and achievements when this drive and commitment is dedicated by these leads to implement their project ideas. It is also worth noting that across all applications many of the multidisciplinary teams applying had a nurse or midwife as part of the team.

We continue to be excited about and committed to working collaboratively with HSE Spark. As you can see from this report our collaboration results in improvements in the totality of people's experiences (both patients and staff), better health outcomes and pioneering nursing and midwifery practices.

Congratulations and thank you to everyone involved.

Dr Geraldine Shaw

Nursing & Midwifery Services Director, Office of the Nursing & Midwifery Services Director (ONMSD), Clinical Programme Implementation & Professional Development, Office of the Chief Clinical Officer



The Slaintecare strategy has given us a clear mandate to reimagine healthcare delivery so that patients receive the right care from the right person at the right place and time, and the Design Principles for Government validates our investment in and strong emphasis on the value of design in healthcare innovation.

The fruits of that investment are clear to be seen in some the projects that are included in this report. Nursing and Midwifery has been at the forefront on innovation and leadership in healthcare, in education, quality improvement, clinical management and other countless facets of the sector. We are



delighted to be able to say that with the support and guidance of the first National Nursing and Midwifery Innovation Fellow 2022-23, Ms Amy Carroll, Nursing and Midwifery applications to our HSE Spark Initiatives have doubled.

We at HSE 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 better outcomes which ultimately leads to better experiences for patients.

As the synergies grow with our fellow actors in the ecosystem for healthcare innovation such as the St James's Design Lab, Mater Transformation, Tallaght Innovation Team, Cork University Maternity Hospital, University Hospital Limerick, National College of Art and Design, Munster Technological University and the list goes on - it's starting to feel like a rising tide that is lifting all boats.

That means it's getting easier for frontline workers to suggest, test and get support for innovative approaches to longstanding problems;

It's becoming the norm for multidisciplinary teams from across hospitals, hospital groups or healthcare regions to come together to bring collective insight and a systemic response to 'wicked' problems;

Our move to the new National Frontline Clinical Innovation and Simulation Office within the Office of the Chief Clinical Officer in the coming year will enable us bring even more energy to important developments that strengthen capacity for innovation and design in healthcare.

We are also working on how we can build a network of design and Innovation labs across the country that can bring design and innovation expertise closer to the frontline than ever before, ensuring everyone in healthcare, both in hospitals and in the community, has equal opportunity to make a difference to how things are done.

The HSE Spark Innovation Programme would like to thank Dr Maureen Flynn and the ONMSD colleagues in all their endeavours in championing the HSE Spark Innovation Programme within the ONMSD and National Quality and Patient Safety Directorate networks.

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

Jared Gormly

Head of HSE Spark Programme



HSE SPARK INNOVATION AIMS & OBJECTIVES

The aims and objectives of the HSE Spark Innovation Programme align closely with the HSE Corporate Plan 2021-2024, ensuring that activity receives strong support from the centre of the organisation.



AIMS

- 1. Promote the development of innovation culture to embed innovation as a foundation of the organisation at every level.
- 2. Advocate for innovation capacity building across the organisation to ensure that innovation activity is identified and supported as a strategic priority.
- 3. Seek to build capability through skills and mindset development to unleash the innovation potential of the frontline.

OBJECTIVES

ENGAGE & EMPOWER FRONTLINE STAFF

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

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

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 innovationfriendly 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

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)*

- Create an innovationfriendly 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

*HSE Corporate Plan 2021-24

2022 HSE SPARK TEAM



Jared Gormly Head of Programme



Dermot Burke National HSCP Innovation Fellow



Caitriona Heffernan HSE Spark Innovation Lead



Dr Cathal MacDháibhéid National NCHD Innovation Fellow



Dr Rachel McNamara National NCHD Innovation Fellow



Amy Carroll National Nursing/Midwifery Innovation Fellow

PILLARS OF THE HSE SPARK PROGRAMME

2022 has seen an expansion in the scale of activity undertaken by the HSE Spark Programme. Though previously the activity of the Programme fell broadly under the strands of 'Spark Seed', 'Spark Ignite' and 'Spark Design', this year has prompted a review of activity and a recognition of the growth of the HSE Spark Programme portfolio.

At HSE Spark, we are constantly re-evaluating and re-iterating our activities, and in empowering the frontline healthcare workers to be innovative and disruptive.

We are now operating through Seven Pillars:

INITIATIVES

Creating opportunities to develop skills, secure micro funding, access mentorship and embed innovation.

DESIGN

Implementing user informed change and innovation.

NETWORK

Gathering and connecting our internal and external partners.

RESEARCH

Contributing to the frontline innovation space both nationally and internationally.

ENGAGEMENT

Providing multimodal engagement opportunities for our innovation collective across the health service.

PIONEERING

Leading the way with new products, services and ways of working through pilots and validation studies.

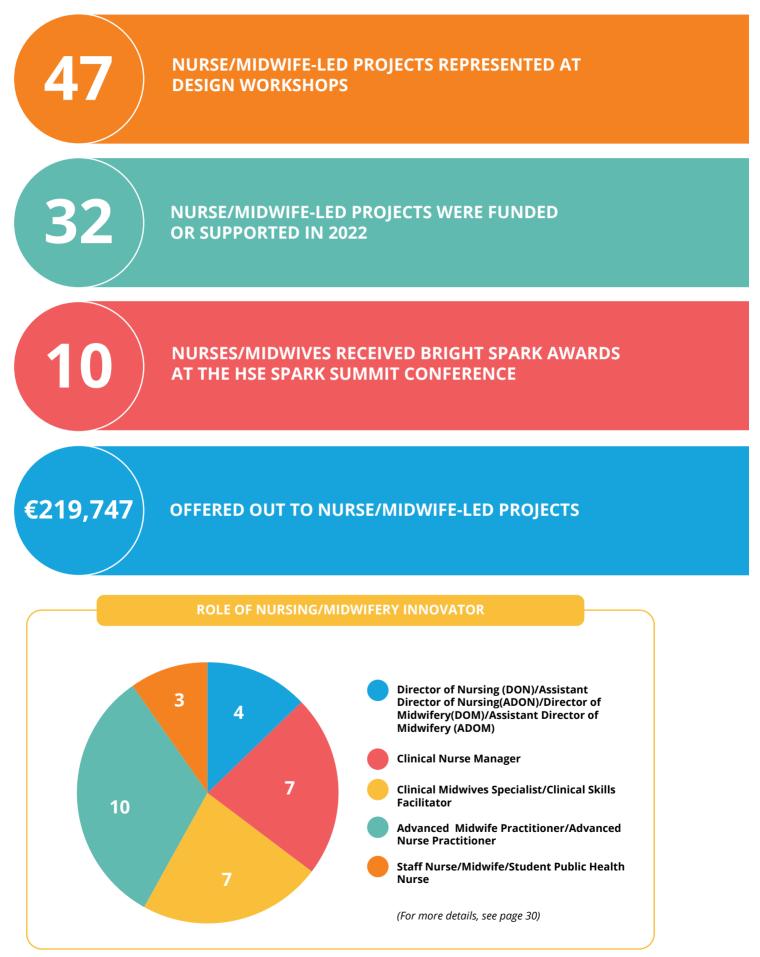
PROFESSIONAL DEVELOPMENT

Developing our staff for agency and impact

2022 AT A GLANCE



NURSING & MIDWIFERY 2022 AT A GLANCE



Nursing and Midwifery Contribution to the HSE Spark Innovation Programme | Annual Report 2022

2022 WAS THE THIRD YEAR OF THE ONMSD PARTNERSHIP WITH THE HSE SPARK INNOVATION PROGRAMME

The ONMSD and HSE Spark Programme Collaborative Group continued to meet regularly throughout the year to guide, oversee and promote collaboration with the HSE Spark Innovation Programme. This year the role of the group expanded to provide guidance and advice including encouragement and support to the National Nursing & Midwifery Fellow as well as evaluating the role and its contribution to the overall aims of the group.

It was a very exciting year with the appointment of the first ONMSD supported National Nursing & Midwifery National Fellowship in Innovation. The purpose of the National Nursing & Midwifery Innovation Fellowship is to give a registered nurse or midwife the opportunity to lead and shape the HSE Spark Programme.

The fellow plays a key part in supporting ideas, design, innovation, collaboration and initial implementation of initiatives led by frontline staff. The National Nursing & Midwifery Innovation Fellow joins medical and health and social care professional fellows so that all groups are represented in the decision-making processes, while also offering support to and implementation of projects. As a result making it a truly interdisciplinary effort. This reflects how interdisciplinary collaboration is at the heart of frontline healthcare. Innovation fellows are expected to lead the programme and shape it over the year in the role. The fellow is encouraged to engage in professional development pursuits as well as leading initiatives and supporting other projects within the programme.

Ms. Amy Carroll, the first National Nursing & Midwifery Innovation Fellow, joined the HSE Spark team in April 2022. Amy qualified as a midwife in 2004 and since then worked in the acute and community setting in the UK and in the south east of Ireland. At the time, Amy was a clinically practicing midwife and clinical placement coordinator. Amy had additional experience in developing innovative projects, guiding and promoting others involved in innovation. Her HSE Spark Seed project from 2021 'QR Maternity' earned her a Bright Spark Award.

Amy provided nursing and midwifery leadership from within the HSE Spark Programme team which resulted in significantly increased engagement from nurses and midwives in the programme as HSE Spark continues to do remarkable work encouraging and supporting frontline innovation. Amy represented HSE Spark at many of the in-person national nursing and midwifery conferences, which led to more visibility, promotion and showcasing of both nurses' and midwives' contribution to healthcare innovation and the HSE Spark Innovation Programme.

An evaluation of the impact of the role concluded that the nursing or midwifery Fellow is a critical componenet in shaping the HSE Spark Programme. Therefore, the Director of the ONMSD agreed to continue to fund the Nursing/ Midwifery fellowship for 2023/24.





The Nursing & Midwifery Innovation Fellowship is a developmental opportunity for those who are excited by change, innovation and personcentred design in the health system.

The role is undoubtedly a departure from day-today healthcare services life that most applicants might be coming from as it involves a lot of selfdirection, working independently and as part of groups/teams towards goals and deadlines. It allows the fellow to work closely for one year with innovative and creative people from industry and within the health service.



Amy Carroll & Dr. Geraldine Shaw

THE NURSING & MIDWIFERY INNOVATION FELLOW:

- Develops a vision for the one-year fellowship and promotes interdisciplinary team working
- Leads and continue to develop the HSE Spark Programme in collaboration with the NDTP, ONMSD leads, the National Lead NCHD, healthcare providers including NCHDs, Nursing and Midwifery colleagues, hospital community and ambulance services and other relevant stakeholders
- Acts as a resource for healthcare providers to help drive innovation, change and collaboration in the health services
- Develops and lead HSE Spark initiatives to support innovation and collaboration within the HSE
- Encourages engagement with the HSE Spark Programme via site visits to hospitals/services and attendance at training days and conferences
- Develops a series of Key Performance Indicators (KPIs) against which to measure the impact of the role, on projects, and nurses and midwives supported by HSE Spark
- Assists with scaling up and/or transferring successful initiatives and projects that have been undertaken in one clinical site to other sites
- Prepares reports, articles and or updates for a variety of purposes including the HSE Spark Programme Updates, ONMSD and other website blogs, Health Matters, Lead NCHD Newsletter, Annual Reports, HR updates, media press releases, social media, etc.
- Communicates with healthcare colleagues via various platforms e.g. social media, twitter, email, website etc.
- Joins numerous committees/working groups (these are discussed and agreed with the Fellow)

REFLECTION FROM THE FIRST NATIONAL NURSING & MIDWIFERY FELLOW - AMY CARROLL

WHAT, SO WHAT, NOW WHAT: REFLECTIONS OF THE FIRST NATIONAL NURSING AND MIDWIFERY INNOVATION FELLOW

What?

I was so delighted, but a little nervous, as to how I would give and get the most out of my year's fellowship. As the first nurse/midwife fellow (2022/23) there was no road map or SOP. My contribution was to bring the concept to life, testing and growing the HSE Spark Programme initiatives with unique nursing and midwifery insights.

My first undertaking was to describe my vision and my aims for the year. Following discussion with the HSE Spark lead, head of service and ONMSD HSE Spark Lead I set out aims within my vision...



MY VISION WAS THAT EVERY NURSE AND MIDWIFE IN THE COUNTRY WOULD KNOW WHAT THE HSE SPARK INNOVATION PROGRAMME IS.

My aims were to:

- Encourage those with a problem solving and innovative mind to engage with the programme
- Ensure that the reality and challenges specific to nursing and midwifery are kept at the forefront when planning HSE Spark initiatives
- Provide tailored support, practical guidance on implementation and measurement of success, and promotion of projects
- Nurture the successful collaboration between the ONMSD and the HSE Spark Innovation in all my endeavors

I decided to aim high and use my vision as a structure and metric on which to focus my work and evaluate it... producing a report at a glance every 100 days. It also helped me break down what actions would be needed to achieve it.

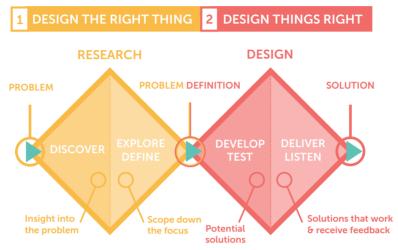
So what?

In my clinical role, as a midwife and clinical placement coordinator, I had gained experience in coaching, project implementation, presenting and promotion. I saw the fellowship development as an opportunity to bring this to the next level. Given my aims and my own personal experience of HSE Spark Seed (successful applicant in 2021) it was a natural fit that I take over as the fellow lead for the initiatives in 2022 and 2023. HSE Spark Seed has provided the perfect platform for me to work within my vision and bring my own personality, ways of working and clinical experience to the HSE Spark Team programme.

Due to my passion for project management and implementation, I made changes to the Seed initiative processes. These changes make seed more accessible and provide more personalised support at any stage of the process. After 200 days with the HSE Spark team, I reflected and noticed - as a midwife I work with women in partnership, and in a similar way, I believe I brought

that partnership approach to the HSE Spark Programme. This means that applicants feel supported from pre application to implementation. I soon recognised that funding was only one part of the HSE Spark offering and that frontline staff really appreciate this type of support to achieve higher project commencement and completion rates.

The fellowship has allowed me to develop a deeper understanding and love of human centered design. So much so that I have been honored to present at three national Nursing/ Midwifery conferences on the topic and I am now pursuing a human centered design clinical project in my own clinical unit at St Luke's General Hospital Maternity services.



Adapted from Double Diamond design process model, British Design

Sponsored by the HSE Spark Programme, I undertook and completed two postgraduate courses during the year in UCD Innovation Academy and Professional Academy. As well as the networks I made the courses brought me to new learning about innovation, creativity, project management and leadership beyond health care.

There have been so many highs over the years and working within the HSE Spark team was one of them. The camaraderie, passion for innovation, "can do" approach and mentorship have been wonderful. Always the extrovert I have loved meeting so many new people, my professional network has grown significantly encompassing those at strategic levels of the HSE and nurses and midwives from all roles throughout the country. I have learnt so much about myself, my strengths but also new skills to manage situations I am less comfortable with. I have a much deeper understanding of the HSE overall as an organisation and of the operational issues I wouldn't have experience in before... overall, my personal and professional development this year has evolved exponentially.

Over my time in HSE Spark I have been awestruck by the innovative nurses and midwives I meet at all levels of working. Their passion for their roles and improving the care for the people within their services. In addition, I have seen firsthand through conversations and visits to clinical spaces how innovation promotes psychological safety and staff morale in the healthcare setting.

Now what?

I am delighted to be bringing back my learning, experience and relationships I have forged over the last year back to my role in St Luke's General Hospital. I realised I love innovation and I love midwifery too! I am looking forward to the new opportunities in our maternity department. I especially have seen the power and difference innovative and compassionate nursing and midwifery leaders can make. My new vision when I return to Kilkenny is to endeavor to join their ranks!

A huge thank you to the HSE Spark team and the ONMSD collaboration group for your support throughout my time in the fellowship and to the ONMSD leadership team for continuing to support the fellowship.

SUMMARY OF HSE SPARK INNOVATION INITIATIVES



Spark Seed provides training, Micro funding and support to first step innovators to enable them to develop their project. HSE Spark Seed Funding is an initiative whereby frontline staff can apply for micro funding up to €3,000 that will improve our health Service.

How to get involved: All ideas are welcome by submitting a brief overview of your problem from your clinical area, all applicants are invited to attend a design thinking workshop where ideas are refined with support and mentorship from the HSE Spark Team. Every few of months the HSE Spark Seed Team will review project ideas, carry out Live Pitching events and determine which projects are ready to be brought to the next stage.

Workshops for all: All applicants are now offered a place on a design thinking workshop, an opportunity that was previously reserved only for those that were shortlisted. Applicants who don't fit into HSE Spark Seed's shortlisting criteria can now refine their problem and solution.



Spark Ignite is an annual call run to support Frontline Innovators who have an idea that could be commercialized and brought to market or an idea that has the scope to be scaled across the organisation for mass benefit.

This year, over 50 applicants benefited from three bespoke, expert delivered, healthcare focused innovation workshops to develop and hone their idea and build their skills in crafting the perfect pitch.





In 2022, the HSE Spark Innovation Programme, in collaboration with the Acute Hospitals Division, HSE Digital Transformation and HSE Services Change Matters, launched and ran the Hospital Innovation Fund (HIF).This initiative was designed to promote innovation in Irish Hospitals by funding senior-led hospital projects.

It offered support and funding from $\notin 20,000$ up to a maximum of $\notin 60,000$. Senior healthcare professionals applied for funding for novel initiatives that had the potential to significantly improve the way care is delivered in our public health service. All approved projects required sign off from the Hospital CEO, to ensure local buy-in and deliverability.



The Community Innovation Fund was developed to tap into the expertise and innovation potential of frontline workers in Community Services.

Projects focused on the following areas were of specific interest for the Community Innovation

Fund call:

- Care of Older Persons
- Scheduled Care
- Disability
- Mental Health
- Chronic Disease
- Integrated Care Pathways

HSE SPARK EDUCATION 2022

HSE SPARK DESIGN

In 2022 HSE Spark expanded, fully embedding human centered design into our offerings, through all our workshops/ boot camps/webinars. Our aim is to help frontline staff develop a design thinking mindset to ensure when facing clinical innovation challenges, they spend time in the problem space and prototype solutions so that the final results are more likely to succeed.

1) ONLINE WORKSHOPS

HSE Seed New to the Spark offering for 2022, all applicants were offered a place on a Design Thinking workshop as part of the application process. The full day online workshop were facilitated by expert Designers Trevor Vaugh and Martin Ryan, provided an introduction on how Human Centered Design can assist health professionals in their innovative endeavors.

- 3 full day online 'Design Thinking Introduction' workshops
- 183 project leads invited
- 128 project lead/teams attended

In addition to the bespoke HSE Spark Seed Design Thinking workshops this year, a number of additional short Webinars outlining Human Centred Design as a methodology and as a mindset for innovation were offered.

3) DESIGN WEEK

HSE Spark sponsored three design weeks in 2022. In St. James Hospital, Tallaght University Hospital and The Mater Misericordiae University Hospital. These Design weeks offer frontline staff opportunities to present their problem spaces and ask designers to explore solutions with them. It exposes student designers to the design opportunities in healthcare and it introduces frontline staff to human centered design techniques.

2) DESIGN BOOTCAMPS

ATTENDEES AT 3 DESIGN

THINKING WORKSHOPS.

ALL 3 WORKSHOPS WERE

WELL-ATTENDED BY NURSES

& MIDWIVES.

Quarters three and four of 2022 saw frontline staff across the country gather for two novel Design & Innovation Boot camps combining human centred and medical device design disciplines. The Boot camps were designed to engage participants in design innovation and creative problem solving, two methodologies which do not feature as part of the traditional training curriculum for clinicians.

The nurse's and midwives at the boot camp enjoyed a combination of lecture-based didactics and immersive, hands-on group activities.

The curriculum was carefully designed to encompass empathy building, idea generation, prototyping and testing, business canvas planning, and pitching. By incorporating these components, the boot camps empowered participants to think innovatively, collaborate effectively, and develop practical solutions to Healthcare challenges.



HSE SPARK SUMMIT 2022

This year's opening address was provided by the HSE's Chief Clinical Officer, Dr Colm Henry. Over 220 delegates were in attendance to enjoy keynote addresses from Trevor Vaugh, Assistant Professor of Design at Maynooth University and Siobhan Manning, Service Innovation and Design Lead at Mater Misericordiae University Hospital.

We were thrilled to award ten nurses and midwives HSE Spark Innovation Awards throughout the day for their innovation projects.

Our HSE Spark Ignite is an annual call run for front line innovators across healthcare who have an idea that could be commercialized and brought to market or an idea that has the scope to be scaled across the organization for mass benefit. The Final was held as part of the Summit day and we were delighted to award two nurses the final prize!



NURSES/MIDWIVES RECEIVED BRIGHT SPARK AWARDS AT THE HSE SPARK SUMMIT CONFERENCE



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HSE SPARK PRESENCE AT NURSING & MIDWIFERY CONFERENCES

Amy Carroll was delighted to present at three nursing and midwifery conferences over her year's fellowship. Her first presentation was in October at the Irish Association of Directors of Nursing and Midwifery Annual Conference (IADNM), Amy was joined on stage by Martin Ryan (Designer, Assistant lecturer in National College Art &Design (NCAD) and patient representative Elaine Chillingsworth to present how human centered design can change the way we develop services. The room was visually moved as Elaine shared her personal emotional story of how design and innovation has changed her life.

Following on the theme of promoting human centered design, Amy presented at the Midlands Midwifery Conference 2022 also at the Sligo Centre of Nursing and Midwifery Education conference in November. Amy introduced the audience to the steps involved and how Spark design workshops can assist all nurses and midwives develop a design thinking mindset when tackling challenges and problems in their clinical services.

Amy also provided information stands at the NMPDU Digital Conference, the National Women & Infants Heath Programme/ONMSD inaugural National Midwifery Conference and at the IADNAM conference.



Regional Centre of Nursing & Midwifery Education Conference, Sligo



IADNAM 2022



Visiting Midlands Regional Portlaoise CNM Meeting



Midland Midwifery Conference 2022



Rachel Kenna (Chief Nurse), Amy Carroll, Dr Ger Shaw at IADNAM 2022



Amy Carroll and Margaret Quigley at National Advanced Midwife Practice Conference 2022

SPARK INNOVATORS EXPERIENCE

FOCUS ON PROFESSIONAL DEVELOPMENT

Innovators: Sinead Gill, Shauna Vandendries, Shauna Delaney, Lisa Dunne, Bernie Garvin (Tallaght Hospital)

Project: New Graduate Nurse in Critical Care Support App

The Problem:

To support the transition of new graduate nurses into the critical care environment and ensure safe staffing levels, the team proposes to develop a support app specifically designed for new graduate critical care nurses. The app will serve as a quick reference guide and provide essential support throughout their learning journey. The app will be hosted on the existing Tallaght University Hospital App. It will feature five categories, including head-to-toe assessment, clinical presentations, skills videos/ simulation, research, and health and wellbeing. Each category will contain quick links to evidence-based practice guidelines and checklists, offering valuable resources and clarity for new graduate nurses.



Your experience with HSE Spark:

I had such an empowering experience with the HSE Spark Ignite Programme. It brought me on a journey of innovation and endless opportunities. It gave me the confidence and skill set to lead a team and to pitch an idea. It aided us as a team to develop this idea and share the vision of how this concept could have a positive impact on the staff and ultimately the patients in critical care.

The HSE Spark experience opened up a world of connections and support structures for me to utilise and apply to other projects. It has enhanced my professional development and I have maintained a keen interest in innovation and quality improvement ever since.

What happened after the pitch:

After the pitch we worked with another colleague who had developed a similar digital support tool. The project was implemented via the platform Padlet and after evaluation we felt it wasn't reaching its full potential.

Working on the front line you will always have to deal with time constraints but by working with the right team and availing of the supports available I believe we can bring this to fruition.

Where the project is at now:

The idea of a digital education support tool still exists. The roll out has been stalled while we collaborate with other departments to ensure smooth scaling to other areas outside of critical care.

What's coming next for the project and you?

For me, I am now making an exciting move into a new role as a Clinical Innovation Specialist at Innovate Health in Tallaght University Hospital. I am thrilled to be joining a strong team of likeminded individuals and envisage myself utilising the skills and knowledge gained during the HSE Spark Ignite Programme in supporting and guiding others with their ideations.

FOCUS ON NETWORKING AND PIONEERING

Innovators: Emily Naylor, Clinical Facilitator, Intensive Care Unit, St. James Hospital

Project: A platform to optimize learning in Critical Care

Problem:

ICU patients are critically ill requiring lifesaving interventions there is a high level of skill and competency required to look after these patients in order to maintain patient safety and nurse's professional registration by working within their scope of practice. New staff who enter into ICU often have less than 2 years critical care experience and are required to complete a set of competencies in order to pass probation and ensure they can practice safely in a very technical and demanding environment. Competency is currently tracked using whiteboards, excel sheets, and paper based 80 page competency record and other paper templates.

Solution:

We have identified a process that can be digitalized and add value to critical care in the immediate future and the need for a digital support system, to assist clinical facilitators to monitor, measure, allocate and review new nursing staff in ICU.

Features of the system would include features like:

Digitization of the 80-page paper based 'Competency Book' An All-Bed overview of Patients and Current Trainee Nurse Allocations (bird's eye view) – e.g. digital table or annotated map Daily rapid allocation of trainee staff to patient beds (by clinical facilitators) Trainee current competency score – progress bar Trainee (self) submission of ad-hoc tasks (unscheduled), signed off by buddy Trainee (self) upload of daily ICU bedside learning, validated by buddy

Expected benefits:

The benefits of this system would increase the efficiency of training intensive care nurses, ensuring nurses are allocated to the correct patient and exposed to the skills required to ensure competency. Oversight via a digital system will allow Clinical Facilitators to monitor staff nurses progress and performance in a timely manner.

Your experience of HSE Spark Seed:

My experience has been extremely positive. I entered the Seed competition with an idea of an electronic competency book, which when I look back now would be pretty simple to design. However after attending the Design Thinking workshop I pivoted to what the actual need was for the end user, this being that nurses were not being allocated effectively resulting in competencies not being achieved. The more exposure to a task such as Dialysis, allows the nurse to practice under supervision gaining confidence and increasing knowledge. The design thinking workshop really got me to think about the nurse's journey which then helped to shape the solution. The design thinking workshop also really helped with the presentation pitch, which I learnt is very different to a regular presentation.

What happened after the pitch?

After the pitch HSE Spark opened the door and helped connect our team with the Design and Innovation Lab at St James's Hospital, led by Dr Chris Soraghan. We met with the team and underwent a series of process mapping exercises, again something I was not familiar with but gradually it became obvious at how important this process was to really understand the pain points and the experiences of all of the stakeholders. To date we have created a highly detailed service design blueprint of the existing ICU education process, in order to identify features that would be needed in a new IT support system.

Chris's team have created a mock-up frontend wireframe interface to help discover a wider set of features needed and to create an interface that different groups could interact with. We have carried out 11 usability studies with this wireframe to elicit feedback and needs from nursing staff at ICU in SJH. This feedback has provided insights into what nurses think works well and what else could be added to provide value.

Where the project is at now:

The next step is to source funding which would allow us to develop the solution with an external contractor. We are in talks with the HSE as to whether there is potential for this to be funded.

What's coming next for the project and you?

We are continuing to work on the wireframe and explore funding opportunities to further develop the project. I am enjoying working on a project that will benefit colleagues and ultimately patient outcomes. I am really enjoying learning from the collaboration with the Design and Innovation Lab team. I recently attended the HSE Spark Summit conference and it was great to connect with the wider HSE Spark community and see how other projects have progressed through with the help of HSE Spark and are having a real impact on patient care and service.

NETWORK

Gathering and connecting our internal and external partners.

PIONEERING

Leading the way with new products, services and ways of working through pilots and validation studies.

SAMPLE OF PROJECTS





Innovators: Kate Johnson, CMM3 Community, Nora Vallejo, AMP Supported Care Pathway, in collaboration with the Community Midwifery Team

Project: The Coombe Community Midwifery Service: A well-kept secret

The problem:

Even though the Community Midwifery Service has been in existence since 2008 at the Coombe Hospital, there was very little public or organisational awareness of the team and the role they play across the organisation and out into the wider community.

The solution:

Our solution is to raise the overall awareness of the Community Midwives, their role in facilitating care for women and families across the maternity journey and the contribution of the team to the Coombe service. This includes raising the team's profile on the Coombe website, through social media and collaborating with the PR and marketing management team to develop resources that convey the team's philosophy.

The expected benefits:

Women and families are aware of the choices available to them in respect to maternity care that is close to home and delivered by a small team of midwives, bringing with it the identified health benefits.

Our organisation contributes to the principles of Slaintecare, enhancing care for women and families by taking it to them in the community: care in the right place, right time by the right people.

We showcase a service that attracts and retains midwives who wish to work in a way that utilizes all their skills in close relationship with women and families, enhancing midwifery expertise and job satisfaction.

Value:

By raising the awareness of the Community Midwifery Team within the Coombe, women are signposted to it through knowledge and familiarity by our multi-disciplinary team colleagues. Women are availing of the benefits of maternity care close to home. Feedback from families has also helped structure our service and make adaptations where necessary, such as our proposal to extend support to breastfeeding mothers beyond our conventional 5 day limit. Community Midwifery is the aspiration of a number of midwifery colleagues who are keen to join the team and develop their community skill-set.

Potential:

The committed and enthusiastic team of Community midwives have great potential to influence change and midwifery progression at the Coombe across the service. Their philosophy of care will be essential in our drive and determination to develop an Alongside Birthing Unit at the Coombe, which will further enhance the choice and options for women seeking maternity care with the Coombe.



Innovators: Clare Flanagan: Registered Advanced Nurse Practitioner, Jennifer Allen: Senior Social worker, Dr Leonard Douglas: Consultant Psychiatrist, St. Vincent's University Hospital, Maeve Toomey: Art Psychotherapist

Project: Mental Health for Older Persons, Creative Therapeutic, Group St Vincent's University Hospital.

The problem:

Over the years, services users attending the Department of Mental Health for Older Persons have spoken of the challenges associated with ageing and how these are significantly impacting on their mental health and recovery. These challenges include but are not limited to experiences of grief and loss; decline in health; change of roles; increased need for assistance from others; and an awareness of the impermanence of life.



Although efforts are made to acknowledge personal experiences of ageing, there were no creative

outlets available to help people reflect on their experiences. Also there is little acknowledgement of old age as a period in the lifespan that is usually closest to the end of a person's life.

The solution:

We wanted to provide a reflective and therapeutic space that acknowledged this important stage in the life span and the challenges that our service users experienced. There is also evidence that interventions led by creative arts therapists have significant physical and mental health outcomes.

The expected benefits:

The group provided a reflective space for service users to share experiences and support each other with similar experiences of ageing and loss. It also offered an opportunity to, as one participant stated 'get in touch with my creative side, and try things that I would not have had the confidence to do before'.

This creative group seemed to allow for and facilitate an alternative means for group members to access a deep level of processing of their emotions and life experiences. They expressed and externalized and to some extent processed feelings, thoughts and life experiences. These including loss, loneliness, trying to deal with changes in life situations and health.

Value:

Securing HSE Spark seed funding allowed us to work with an experienced Art Psychotherapist to design and deliver a programme that acknowledged experiences of old age in a creative, reflective and therapeutic way.

Nine service users consented to participate in this group over six weeks. A range of art materials and a narrative approach were used to help facilitate storytelling, reflection, and share experiences among group members.

One of the unexpected outcomes of the group was the friendships that developed among participants with some planning to meet up independently outside of the group for coffee etc. How positive that was in terms of ongoing support for each other.

Potential:

Whilst participants were attending the Creative Group there was a general decrease in need for individual involvement by other members of their treating team within the Mental Health Service for Older Persons including Community Mental Health Nursing, Social Work, Psychiatry, Psychology and Occupational Therapy.

Co-facilitating the group with an experienced Art Psychotherapist exposed us to unique skills and has the potential to enhance the skills of clinicians involved it this is to be scaled up.



Innovator: Joan McGrory, Galway University Hospital

Project: Hematology patient isolation booklet

The problem:

Patients not prepared for three weeks of hospital isolation and found the experience difficult. Anxiety and fear around the unknown.

The solution:

Practical guide on how to prepare for isolation, what to do during and what to expect on recovery. By using QR codes link patients to valuable HSE resources such as exercise videos, meditation and relaxation techniques, healthy eating and virtual ward tour to reduce anxiety.

The expected benefits:

Reduce anxiety and fear, provide patients and family members with useful information and guide to stay. Overall improve patient outcomes.

Value:

Reduced the amount of phone enquiries around hospital stay, reduced length of hospital stay by promoting exercise and wellbeing.

Potential:

It will change the patient experience by preparing them for the stay , providing tools and resources during stay and tips for recovery.



4

Innovator: Lisa Brady, Coordinator & TRiM practitioner, Cavan General Hospital

Project: Trauma Risk Management (TRiM)

The problem:

We had no structured, coordinated follow up support system for staff following exposure to a traumatic or potentially traumatic event in our unit. There was also perceived stigma

by staff around assessing support. **The solution:**

A coordinated approach to supporting maternity staff when they are exposed to a traumatic event.

This approach is a trauma-focused peer support system in the form of TRiM risk assessments undertaken by staff who have completed specialist training in TRiM. It signposts staff to available supports to help them navigate through this time

The expected benefits:

It will normalize psychological reactions commonly experienced by staff exposed to challenging or traumatic circumstances. It will establishing clear peer support structures to follow up staff and keep a 'watchful' eye on them. Through carrying out TRiM assessments in staff it may spot the signs of distress in staff that may have gone unnoticed.



Value:

It has provided visible leadership to addressing supporting staff and validated their responses to a traumatic or potentially traumatic event. Staff have welcomed and embraced it.

Potential:

It will play a role in supporting and promoting positive mental health within our workplace. It will save money as good mental health practices in an organisation can help to reduce sickness absence. It shows a legal duty of care to employees.

COMMUNITY INNOVATION FUND CASE STUDIES



Innovators: Mary Doyle - Advanced Nurse Practitioner, Peamount Healthcare

Project: Community Rehabilitation Inpatient Specialist Programme (CRISP)

Total Funding awarded: €6,773

Purpose of project:

To provide direct access to short-term in-patient rehabilitation for older adults who are experiencing functional decline or increasing frailty in the community. The project plans to enhance CRISP's diagnostic and treatment capacity with our new project Harnessing Technology to Augment Comprehensive Geriatric Assessment in CRISP Admissions.

Objectives and expected Results of this project:

Reduce wait times

Early diagnostics will give rise to early treatment options.

Inpatients /residents will no longer have to wait for appointments in Tallagh cardiology services and will no longer have to travel with staff escort to have monitors fitted. Collect data on amounts of sedentary time during inpatient rehabilitation stay. Use data received to highlight to patients the importance of activity and rehabilitation.

Project so far:

The ambulatory Blood pressure monitoring is now in use for appropriate patients - so far metrics show a decrease in night sedation and an increase of treatment modified following assessment as per best practice.

HOSPITAL INNOVATION FUND CASE STUDY





Innovator: Caroline Rooney, candidate ANP in National Children Cancer Services at Children's Health Ireland @ Crumlin Hospital

Project Title: An Ambulatory Home Hydration Programme for Children with Cancer

Total Funding awarded: €13,620

Purpose of project:

To pilot a home hydration infusion programme for a certain cohort of eligible patients diagnosed with a pediatric malignancy within the ambulatory department of the National Hematology, Oncology and Hematopoietic Stem Cell Transplant Centre based in Children's Health Ireland at Crumlin.

Objectives and expected Results of this project:

- Improve patient wellbeing
- Bring about cost and time savings at the National Children Cancer Services Unit
- Increase capacity for care delivery
- Empower patients and families
- Achieve normality and independence for patients during treatment
- Reduce impact on education and employment of patients and families



OVERALL NATIONAL IGNITE WINNING PROJECT

WEE CATCH IT! BERNADETTE HIGGINS, ANNE MURRAY

A MULTI-PURPOSE URINE COLLECTION DEVICE WITH INBUILT REAGENT STRIP

Bernie and Anne have developed three solutions to address the challenges of collecting urine samples for analysis. The solutions cater to pregnant women, the elderly, and babies/children, making the process easier and hygienic while reducing contamination.

For pregnant women, a barcoded sample stick collects urine, and the results are automatically transmitted to the GP or hospital system.



Bernadette Higgins & Anne Murray

For older individuals, people with physical impairments, and babies, a barcoded 'smart' sanitary pad with an inbuilt reagent strip is used. The third solution is a unisex urine collection device with a built-in reagent strip, capable of collecting the first 10 mls of urine for analysis.

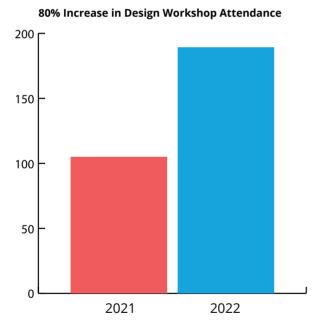
This solution component also has a barcode for result transmission. These solutions simplify urine collection and decrease waiting times at healthcare facilities. They offer environmental benefits and help manage urinary tract infections (UTIs) and antimicrobial resistance. Treating suspected UTIs costs approximately €343,000 annually in primary care alone.

A MedTech Innovation Solution	
We Cath of	
Providing a better experience for write collection for babies, children, and adults with incontinence.	
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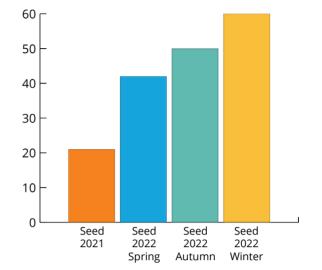
Extrapolating nationwide, the estimated annual cost reaches €19.2 million. By improving UTI diagnoses and reducing unnecessary antibiotic prescriptions, these solutions can alleviate the burden on hospitals and healthcare budgets.

EVALUATING IMPACT

This report has shown the significant investment of money and time into nurse and midwife led HSE Spark projects in 2022. A core belief at HSE Spark innovation Programme is the need to 'meet' the innovator where they are in their innovation journey. In 2022 HSE Spark expanded, fully embedding human centred design in our offerings. Through all our workshops/boot camps/webinars we aim to help frontline staff develop a design thinking mindset to ensure when facing clinical innovation challenge's they spend time in the problem space and prototypes solutions so that the final results are more likely to succeed.

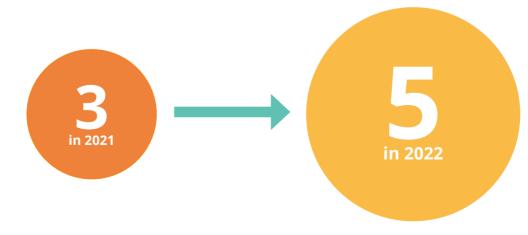


Number of Design Workshops Offered



Growth in Spark Seed Applications

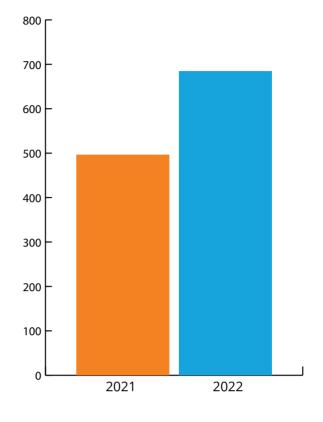
New to HSE Spark Seed offering for 2022, all applicants were offered a place on a design thinking workshop. The full day online workshop run by expert designer Martin Ryan and Trevor Vaugh provided an introduction on how human-centred design can assist health professional in their innovation endeavours. This gave an opportunity that was previously reserved only for those that were shortlisted. Applicants who don't fit into HSE Spark Seed's shortlisting criteria can now attend the workshop to refine their problem and solution. Developing a whole wave of frontline staff with a design thinking mindset will only serve to increase the wonderful solutions they provide in their workplace, thus creating a better healthcare system for patients, staff and services.



37% Increase in Participation in all Spark Initiatives

2022 was the first year that people were provided with bespoke feedback on their project ideas and were signposted to other sources of assistance where their projects didn't fit the HSE Spark criteria for innovation.

This year was also the first year successful projects had regular follow-up contact to see if the HSE Spark team could offer any assistance or even just a listening ear. Amy Carroll the Nursing and Midwifery fellow offered assistance wherever the innovator was in their journey. While some staff were well adapted to change projects, others were just starting out. This coaching was available to all applicants and has been instrumental to achieving higher than ever implementation rates from 2022 Seed projects, with 79% of Seed projects either implemented or in progress.



The HSE Spark Innovation Programme, acknowledges the time and effort taken by Frontline staff to attend all professional development events despite their busy clinical schedules. We acknowledge the commitment of their Directors of Nursing and Directors of Midwifery to facilitate their attendance when staffing challenges are a factor. We believe that by investing in innovation based professional development, collectively we are building key skills for now and for the future for the Nursing and Midwifery Profession.

LOOKING FORWARD TO 2023

WE WILL CONTINUE TO GROW THE HSE SPARK PROGRAMME OFFERINGS AND FURTHER STRENGTHEN OUR COLLABORATIVE WORK WITH THE ONMSD

We are inspired by the commitment and ingenuity of the Nursing and Midwifery frontline staff from across the country who have engaged with the HSE Spark Programme this year, and deliver change and innovation for patients, colleagues and services.

In 2023 we aim to:

- 1. Welcome our second National Nursing & Midwifery Innovation Fellow
- 2. Explore ways to encourage more nursing and midwifery applications and engagement from all levels of nursing and midwifery with a particular focus on promoting HSE Spark with nurses and midwives at the start of their careers
- 3. Be present at all HSE Nursing and Midwifery conferences
- 4. Promote access to all design workshops without the need of applying to a HSE Spark Initiative
- 5. Hold HSE Spark Summit 2023, an in-person conference focusing on Innovation in Action

Finally we look forward to another year of opportunities to meet new and existing innovators, to support them and enable them to be active agents of change and innovation in our healthcare service.



NNOVATOR AWARDS 2022



WAS OFFERED OUT TO NURSE/MIDWIFE SPECIFIC-LED PROJECTS.

(This does not include projects that had nurses/midwives as part of the overall team).

At HSE Spark Innovation, we offered more than financial support to projects.

Projects gained from:



	Name	Role	County	Inititive	Title of project	Support/number of euros given/ offered out	
1	Annette Fallon	Staff Nurse	Roscommon	Seed 2022	Fallons Fall Prevention Visual	Supported/advice - to prototype and progress	
2	ARCHANA NAIR	CNM2	Louth	Seed 2022	PERSON CENTERED	€2,000	
3	Audrey Dwyer	CNS	Dublin	Seed 2022	Burns Campaign	€3,000	
4	Caoimhe Fitzsimons	CNM3 Trauma	Dublin	Seed 2022	Projecting Forward: Digital Transformation in Major Trauma	€3,000	•••
5	Carmel Connolly	CMM2 Parent education	Galway	Seed 2022	New Mums Wellbeing Hub	€3,000	
6	Caroline O'Reilly	ADON	Cavan	Seed 2022	Package of care recruit	Linked in for advice with designer	•
7	Clare Flanagan	ANP	Dublin	Seed 2022	Expressions of ageing	€3,000	
8	Emily Naylor	CSF ICU	Dublin	Seed 2022	A platform to optimize learning in Critical Care	€3,000	
9	Joan McGrory	Haematology CNS	Galway	Seed 2022	Haematology Isolation support program	€3,000	
10	Kate Johnson	СММ	Dublin	Seed 2022	The Coombe Community Midwifery Service: A well- kept secret	€3,000	•••
11	Laura Foley	CSF	Limerick	Seed 2022	Why am I Waiting?	€3,000	
12	Lisa Brady	Midwife	Cavan	Seed 2022	Trauma Risk Management (TRiM)	€2,500 matched funding with unit	••
13	Marie O'Connor	CNM	Dublin	Seed 2022	Beating Boredom	€1,000	••
14	Mary-Louise O'Brien	CSF	Galway	Seed 2022	A virtual break from ICU	€3,000	••
15	Melissa Casey	CNS	Louth	Seed 2022	What Matters To You- CAMHS	€3,000	••

16	Nicolette Berbal	Student PHN Nurse	Мауо	Seed 2022	Shatterproof mirror for pressure ulcer	€500	••
17	Sinead Horgan	Nurse group lead	Cork	Seed 2022	Mother link	€3,000 + link with Caitriona	
18	Susan Sherwood	AMP	Kilkenny	Seed 2022	Obstetric Assessment Unit Development	Link with designer	
19	Maeabh Roche	CNM	Limerick	Seed 2022	I-Flow	Linked in for advice with designer	
20	Sheila Ryan	ANP	Mid West	CIF 2022	Integrated Care Programme for Older Persons Vestibular Assessment and Rehabilitation Service	€41,484	•••
21	Tara Curran	ANP	Dublin	CIF 2022	Share to Care - Optimising leg ulcer care	€35,872.48	
22	Adrienne Brady	СММЗ	Drogheda	HIF 2022	Heading in the Right Direction: Early detection of Breech presentation	€23,000	
23	Aine Bincy	ANP	Galway	HIF 2022	Plug 'n' Play Telepresence Training	€25,000	
24	Caroline Rooney	c. AMP	CHI at Crumlin	HIF 2022	An Ambulatory Home Hydration Programme for Children with Cancer	€13,620	
25	Mary Doyle	ANP	Peamount Healthcare	CIF 2022	Harnessing Technology to Augment Comprehensive Geriatric Assessment in CRISP Admissions	€6,773	•••
26	Sharon Maher/ Ronan O'Caoimh	Advanced Nurse Practitioner in Dementia Care	Cork	HIF 2022	DeliRium management in the ED and Acute Medicine unit (DREAM)	€20,000	•••
27	Tara Mannion	ANP	Dublin	CIF 2022	Improving Heart Failure management in the community with LUS	€8,498	
28	Mairead Bradley	ADON - Clinical Support and Recov- ery Unit	Limerick	HIF 2022	Digital Patient Status Tracking	€25,000	
29	Bernie Higgins/Anne Murray		Limerick	lgnite	Wee Catch It	€6,000	
30	Noreen Whitehead	ANP Tissue Via- bility	Tipperary	lgnite	My Healing Wounds	€3,000	••
31	Sinead Gill	CSF ICU	Dublin	Ignite	New Graduate Nurse in Critical Care Support App	€3,000	



STAY IN TOUCH



@spark_programme



HSE Spark Innovation Programme





spark@hse.ie

For more information on HSE Spark Innovation and ONMSD, scan below:







ONMSD







28th September 2023