THE IMPACT OF INNOVATION IN ADVANCED PRACTICE

The Transformative Power of Advanced Nurse and Midwife Practitioner Led Innovation in Ireland

Anna Marie Kiernan
National Nursing and Midwifery Innovation Fellow
HSE Spark Innovation Programme
&
Registered Advanced Nurse Practitioner
in Pain Medicine
HSE Mid West

May 2026

Oifig an Stiúrthóra Seirbhísí Altranais & Cnáimhseachais | Office of the Nursing & Midwifery Services Director

Spark

Executive Summary

Ireland's health and social care system is in the midst of a once in a generation reform. Sláintecare 2025+ sets a mandate for universal, accessible and integrated care, enabled through digital transformation and workforce redesign. Advanced Nurse and Midwife Practitioners (ANPs/AMPs) are uniquely positioned to deliver this reform as system innovators who measurably improve access, safety, quality, integration, value and patient experience. This potential is already evident in the scale and momentum of the advanced practice workforce, with over 1,240 Registered Advanced Nurse Practitioners nationally in 2025, alongside sustained growth in Advanced Midwife Practitioners, reflecting a 24% increase in ANPs and an 8% increase in AMPs in the most recent NMBI data.

Across more than two decades of national role development, ANPs and AMPs have consistently demonstrated that innovation embedded in advanced clinical expertise can deliver transformative outcomes. New models of care are now essential components of Ireland's service redesign. These models have reduced waiting times, diverted thousands of patients from acute hospitals and enabled earlier safer intervention closer to home.

Innovation in Advanced Practice has strengthened patient safety and quality through leading evidence-based protocols and advanced assessment and prescribing initiatives. They also coordinate integrated care planning. These contributions improve diagnostic accuracy and enhance continuity of care. Their preventative and self-management work supports people with chronic and complex conditions through education, coaching, behavioural interventions and technology-enabled tools.

Crucially, innovation in Advanced Practice delivers measurable value and sustainability. By shifting care from hospital to the community, reducing duplication, preventing clinical deterioration and enabling interdisciplinary integration ANP/AMP-led services have demonstrated high return on investment. They support Sláintecare goals by enabling right-care-right-place-right-time, reducing pressure on overstretched acute services and future-proofing the workforce through advanced clinical leadership.

Collectively, the innovations described in this document illustrate that Advanced Nurse and Midwife Practitioners are not only advanced clinicians, they are strategic assets in system redesign. Their expertise, autonomy and innovation capability place them at the forefront of Ireland's transformation toward high-quality, person-centred, digitally enabled and sustainable care. This report synthesises the national impact of innovation in Advanced Practice across five domains - Access, Safety & Quality, Prevention & Self-Management, Digital Transformation and Value & Sustainability. This is in alignment with the direction of the Expert Review Body, whose recommendation for system level evaluation of advanced practice impact is now progressing through a nationally commissioned, independent assessment.

2 Introduction

Ireland's health system is evolving rapidly as it responds to rising demand, increasing clinical complexity and the accelerating shift toward digital and integrated models of care. These pressures and the opportunities they create are reflected across the Sláintecare reform programme. There is a clear national direction set for delivering high-quality care "in the right place, at the right time". Within this context, Advanced Nurse and Midwife Practitioners (ANPs and AMPs) have become a critical strategic asset for the professions and the wider health service. Advanced clinical expertise combined with their leadership in redesigning care delivery at the frontline positions them as key contributors to Sláintecare's implementation plan.

Sláintecare's ambition to expand community-based pathways, to reduce waiting times, to build system capacity and to embed integrated care aligns directly with the Advanced Practice mandate. National progress reports continue to highlight improvements in primary and community capacity. Modernised care pathways and new clinical models aimed at improving access and reducing waiting lists continue to evolve as a result of Advanced Practice. ANPs and AMPs are central to these developments and their work continually improves patient flow, strengthens continuity of care, reduces avoidable admissions and enables earlier intervention.

This rings particularly true for people with chronic, complex or time-sensitive needs. The roles support system priorities while reinforcing nursing and midwifery leadership at the direct point of care and are already delivering measurable impacts across Ireland. Their innovation capability is a national resource that strengthens service reform and contributes to a modern, sustainable, person-centred health system.

However, the development and spread of Advanced Practice innovation remains uneven across the system. Many improvements rely on local initiative short-term project structures or site-specific arrangements. This often leads to variation in access to innovation opportunities, limited cross-site learning opportunities and constrains the ability to scale successful models nationally. As Sláintecare 2025+ places greater emphasis on workforce reform, digital enablement and community-centred care, a more coherent regional and national approach to supporting and embedding ANP/AMP-led innovation is increasingly important.

A streamlined national framework for cultivating and supporting ANP/AMP-led innovation would enable more cohesive implementation of Sláintecare priorities. It would reinforce the contribution of Advanced Practice to best quality healthcare while ensuring that successful models are not confined to isolated sites. By embedding Advanced Practice innovation as a core component of system transformation, within the HSE Regions, Ireland can leverage the full capability of this highly skilled workforce and accelerate progress toward a more integrated, efficient and responsive health service. Enabling and strengthening the advanced practice cohort represents a key strategic opportunity to not only implement transformative change but to lead change across the disciplines through leading by example.

Aim:
To highlight the strategic value of ANP/AMP-led innovation and demonstrate how Advanced Practice contributes to national health system reform, improved access, better patient outcomes and strengthened nursing and midwifery leadership across all care settings.

Opportunity:
ANPs and AMPs are already delivering high-impact service improvements across the country and regions. However, these innovations often emerge through local initiatives or short-term project arrangements, resulting in variation in spread and scale. A more cohesive regional and national approach would help translate successful local models into consistent, system-wide improvements.

3 Advanced Practice: A Catalyst for System-Wide Innovation

3.1 Why ANPs/AMPs are uniquely positioned

- Clinical credibility and prescriptive authority where relevant.
- Whole journey visibility across acute, primary and community care.
- Design mind-set, which is grounded in real patient and population needs and operational constraints.
- Crossdisciplinary leadership.

3.2 Potential value delivered (the triple impact)

- **Clinical:** Reduced variation, safer care, improved outcomes and experience of care.
- **Operational:** Shorter waits, fewer avoidable admissions, streamlined pathways, better flow.
- **Economic:** Cost avoidance, better use of workforce, scalable digital solutions, service redesign.

3.3 ANPs and AMPs Are a Ready Made Innovation Engine

Advanced Practice sits right at the pressure points where Sláintecare needs real change. In the areas of integrated care, chronic disease management, community based models, prevention, digital adoption and a modern, flexible workforce. ANPs/AMPs are already addressing these areas. ANPs and AMPs are improving access, safety and patient experience day to day. The cohort are often achieving these gains without the structured innovation supports that other clinical groups can draw on. That alone speaks volumes about the depth of expertise and initiative within the professions.

Recent national experience has shown that when frontline clinicians are given the space to innovate, services improve quickly and in ways that last. The work done through the Consultant Innovation Fund is a good example. When clinical insight and system challenges come together, the best solutions follow. The same momentum is clearly visible in Advanced Practice where ANPs and AMPs operate at the junction between clinical care, patient flow and community need.

In practice, innovation in Advanced Practice is already:

- reshaping care pathways to reduce delays and improve continuity
- testing and spreading models that tackle variation and make services easier to navigate
- driving digital transformation because they understand both the technology and the clinical reality
- creating genuine feedback loops between service users, local services and national priorities
- helping Sláintecare move from planning to implementation

ANPs and AMPs form a workforce that is both highly skilled and deeply connected to the day to day needs of patients and services. Their proximity to the frontline means they spot problems early and can respond quickly. Their advanced clinical training means the solutions are safe, practical and grounded in evidence as well as experience. Recognising and supporting innovation in Advanced Practice is not about adding something new, it's about making the most of what is already happening across the country. When the system listens to, learns from and enables this work, the result is better access, smoother pathways, more consistent care and a health service that is more responsive to the people who rely on it. Innovation in Advanced Practice is not an aspiration. It is a daily reality with the capacity to shape a more person centred, responsive and sustainable health service.

4

Unlocking Potential: The Case for Continued Investment in Nursing and Midwifery Innovation

Since the Office of the Nursing and Midwifery Service Director (ONMSD) supported Nursing and Midwifery Innovation Fellowship began with the HSE Spark Innovation Programme in 2020, something far deeper than project delivery has taken root. When nurses and midwives feel their insight is genuinely valued, something shifts. They lean in, they share more and they start looking at longstanding challenges through a different lens. Over the past few years, the HSE Spark Innovation Programme has become a place where clinicians do not just bring ideas, they rediscover their confidence. Many arrive unsure of the value of their perspective and leave recognising they had been innovating all along. The programme invests in the project, yes, but more importantly, it invests in the person behind it. In building capability, but also pride, ownership and a renewed sense of purpose is created.

The results speak for themselves. Since 2023, 116 nursing and midwifery projects have been supported with €1,288,038 in funding and each project reflects a piece of frontline wisdom given the room to grow. These initiatives have improved care quality. They have strengthened communication and reshaped patient experience across a range of services. Equally important is what they reveal about the professions themselves. There is a workforce rich with curiosity, practical intelligence and an instinctive drive to improve the systems they work within.

This growing movement shows that innovation in nursing and midwifery is not a departure from practice. It is a natural extension of it. When nurses and midwives are given space, trust and encouragement, they don't just solve problems. They redefine what better can look like. The HSE Spark Innovation Programme has created an environment where that potential is recognised and nurtured and where clinicians see, often for the first time, that their ideas are not only valid but also essential to building a more responsive, compassionate and modern health service.

5 National Context & Policy Alignment

Advanced Practice is inherently aligned with national health reform. It reflects national healthcare focus on integrated, community based, preventative and digitally enabled care. It already delivers the system behaviours and outcomes that current policy aims to scale across other disciplines.

5.1 Sláintecare: Delivering the Right Care, in the Right Place

Context:
Sláintecare sets a national direction for universal, high quality and accessible care. There is consistent emphasis on integrated pathways, strengthened community capacity and timely access to services. Its overriding ambition is to ensure patients receive “the right care, in the right place, at the right time” and to shift more care into primary and community settings through redesigned models and enhanced multidisciplinary working. Ongoing Sláintecare progress reports highlight improvements in waiting times with the expansion of community care, creation of new clinical pathways and resulting reduced trolley numbers.

Applicability:
ANP and AMP led innovation directly advances these aims by redesigning care pathways, strengthening community-based management of both chronic and acute conditions and reducing avoidable hospital attendances. Through a deep understanding of system pressures, ANPs and AMPs are able to rapidly test, refine and embed new models of care that are directly impactful. These approaches support earlier intervention, improve patient flow and enhance the integration of services across settings. A coordinated national approach to supporting and scaling this innovation would further accelerate the delivery of Sláintecare priorities.

5.2 Expert Review Body: Strengthening Advanced Practice Through Evidence, Governance and Scale context

Context:
The Report of the Expert Review Body (ERB) on Nursing and Midwifery provides a comprehensive, system level examination of the nursing and midwifery professions within the context of Sláintecare reform. The ERB recognises that Advanced Nurse and Midwife Practitioners (ANPs/AMPs) have progressed from discrete service innovations to essential components of the health system's clinical, leadership and reform capability. It highlights the need for governance, workforce planning, education and digital enablement to mature alongside the expansion of advanced practice ensuring consistency, sustainability and alignment with national reform priorities. A central component of the ERB's work is the emphasis on robust evidence to inform the next phase of policy and implementation, including the importance of evaluating the system level impact of advanced practice roles.

Applicability:
The innovations outlined in this report are directly congruent with the ERB's findings, which identify advanced practice as a key enabler of integrated care, service redesign and workforce optimisation across acute, community and primary care settings. Recommendation 28 of the ERB explicitly recognises the importance of a national evaluation of advanced nursing and midwifery practice to inform continued strategic development. The commissioning of an independent, system wide evaluation now underway represents a pivotal moment in the evolution of advanced practice in Ireland. Leveraging this evidence to guide policy, commissioning, governance structures and scale up decisions will support the transition of ANP and AMP roles from variable local implementation to a coherent, nationally embedded model of care. A coordinated response to this evidence base will strengthen advanced practice as a transparent, accountable and high value contributor to the delivery of Sláintecare, ensuring that innovation at the frontline is systematically translated into sustainable national impact.

5.3 HSE Corporate Plan & Digital for Care: Workforce Innovation, Access, Safety & Value

Context:
The HSE Corporate Plan and Digital for Care programme prioritises system modernisation through digital enablement, service quality improvement, better access and value based care. These frameworks emphasise the need for a capable and innovative workforce who are equipped to adopt and embed new technologies safely and effectively. They also highlight the shift towards data driven decision making, integrated digital systems which are focused on the development of improved patient experience through redesigned processes.

Applicability:
ANPs and AMPs are natural enablers of organisational innovation through the combination of clinical leadership with operational insight. They identify inefficiencies in service and assess opportunities for digital or workflow improvements. This results in leading on safe, evidence-based implementation of innovation and change at the point of care. Their position within clinical teams allows them to bridge strategy and frontline delivery while ensuring that redesign efforts translate into practical improvements in access, safety and quality. A more coherent national approach to supporting and spreading this work would strengthen Advanced Practice contributions to transformation and system-wide value.

5.4 Digital Health: Clinically Led Adoption of Digital Enabled Care, Telehealth, Remote Monitoring & Decision Support

Context:
Ireland's digital health strategy, which includes commitments under Sláintecare 2025+, prioritises expansion of current digital tools, expansion of remote monitoring, use of integrated decision support systems and the development of new technology enabled pathways. National reforms place strong emphasis on ensuring digital adoption is clinically informed and that it can be scalable, safe and aligned with patient needs.

Applicability:
ANPs and AMPs are well positioned to lead frontline digital innovation across regions. The cohort bring together advanced clinical judgement and practical insight into real-world care delivery. They integrate digital tools into everyday practice and readily evaluate usability and safety and adapt technology to fit their clinical workflows. Their leadership ensures that remote monitoring models, telehealth pathways and decision-support systems are grounded in genuine clinical need and operational reality with available resources. A more coordinated regional and national approach to supporting and scaling this work would help ensure that digital solutions are implemented safely and consistently while in ways that strengthen access, quality and integrated care across the system.

5.5 Workforce Strategy & Advanced Practice: Modernising Services, Expanding Roles & Retaining Talent

Context:
Ireland's national workforce strategies recognise the need to expand advanced roles to modernise services, a direction reinforced through recent system level reviews of nursing and midwifery. This approach has been evidenced by the extension of advanced level practice across other disciplines, supporting more responsive service models in the face of demographic pressure and increasing system complexity. Workforce reform under Sláintecare includes the deliberate expansion of advanced practice to enable new community based models of care, increase workforce flexibility and strengthen clinical leadership pipelines, supported by an increased emphasis on evidence informed planning and evaluation of impact.

Applicability:
ANP-led and AMP-led innovation strengthens both the attractiveness and the impact of advanced roles. It enables practitioners to lead meaningful change, improve access and enhance the quality of care. The Advanced Nursing and Midwifery roles are used as a blueprint for new emerging disciplines in the field. ANPs and AMPs build capability, deepen clinical leadership and contribute meaningfully to workforce retention by creating roles that are dynamic, progressive and aligned with system priorities. Ensuring a coherent regional and national approach to developing and spreading ANP/AMP-led models help to embed Advanced Practice as a core driver of service modernisation.

5.6 ANP/AMP Led Innovation as a Delivery Mechanism for Reform

ANP and AMP led innovation acts as a direct delivery mechanism for Ireland's reform ambitions. The roles translate policy goals into practical, patient-centred improvements in care. Their work strengthens access while supporting and enabling integration, digital adoption and workforce sustainability while ensuring that national priorities are realised at the point of care. By enabling the consistent development and spread of these models, Ireland can position Advanced Practice as a cornerstone of system transformation which is fully aligned with Sláintecare, the Expert Review Body on Nursing and Midwifery Report, the HSE Corporate Plan, digital health priorities and long-term workforce strategy.

6 The Impact of Innovation in Advanced Practice: Five National Impact Domains

This section highlights the major domains of system level impact that ANP/AMP innovation is delivering across Ireland, supported by case study evidence.

6.1 Impact Domain 1: Improved Access and Reduced Waiting Times

Sláintecare's commitment to waiting time reduction and improved access has been repeatedly emphasised in national progress reports and ministerial statements. ANP led innovation directly operationalises this mandate.

Case Study 1: Cardio Vascular Disease Screening & Prevention in Intellectual Disability Community Group Homes

Lead ANP / Specialty / Location:
Irene Drury - Advanced Nurse Practitioner (Chronic Disease Management) - Intellectual Disability Residential Service (IDRS), Springfield Centre, St Loman's Campus, Mullingar, Co. Westmeath

The Problem:
Adults with intellectual disability experience earlier, higher burden cardiovascular disease (CVD), yet access to primary care and timely diagnostics is lower. Undetected Atrial Fibrillation, hypertension and dyslipidaemia drive avoidable events and emergency care.

The Innovation:
The delivery of ANP led annual health checks and targeted CVD screening in group homes, enabled by portable diagnostics and advanced assessment which brings detection, treatment initiation and monitoring to the point of living.

Impact

- **Clinical:** Earlier detection of AF/HTN/hyperlipidaemia; timely initiation/optimisation of therapy; improved tolerance and outcomes by avoiding stressful clinical environments.
- **Operational:** Fewer acute hospital and GP appointments; flexible, person centred delivery in homes; smoother coordination with primary care.
- **Economic:** Clear cost avoidance through reduced ED/OPD visits and transport needs; equipment funded via NMPDU Midlands Innovation & the HSE Spark Innovation Programme, minimising setup costs (quantification via ongoing audit).

Scalability National Potential:
There is clear opportunity to replicate this low complexity, high yield model across HSE regions and nationally, aligning with Sláintecare's shift to community based chronic disease care.

Enablers (funding, codesign, digital, MDT):
NMPDU & HSE Spark Innovation Programme funding; ANP leadership; codesign with residents/families; liaison with GPs/pharmacy; standardised screening protocols.

Case Study 2: Integrated Community Pathway for Older Adults with MCI, Dementia, Delirium & NCSD

Lead ANP / Specialty / Location:
Ms Edel Carey - ANP, Nurse Prescriber, Behaviour Specialist (PhD Candidate) Cherry Orchard Hospital and Community Healthcare Networks in Dublin South, Kildare & West Wicklow, Partner MDT: People living with dementia and their families, Expert advisory group members, Candidate advanced nurse practitioner, Therapeutic health care assistants, and Care integration network across acute, community and voluntary services.

The Problem:
MCI/dementia/delirium drive functional decline, admissions and costs. Services are fragmented and inequitable with no consistent national pathway for early, community based intervention and post diagnostic support.

The Innovation:
An ANP led, cross service community pathway has been created with early capture at diagnosis, telehealth support, bespoke OT/physio programmes, Memory Lounge groups, care partner supports and a standardised SOP on an encrypted IT platform.

Impact

- **Clinical:** Earlier intervention improves recovery and stabilisation; reduced ED attendance and hospitalisations; safe early supported discharge post delirium.
- **Operational:** Shorter waits; single point ANP coordination; integrated community-acute-voluntary collaboration; digital documentation streamlines handovers. 250 patients seen annually with over 100 attendances each month Patient-specific measures, increases in confidence 91%, mood 53%, Quality of life 51% and anxiety down 44%.
- **Economic:** € 863,704 saving during pilot phase (hospital avoidance + early discharge)

Scalability & National Potential:
There is opportunity for lift and shift of this pathway across regions with minimal adaptation directly aligning with Sláintecare's integrated care and Healthy Communities ambitions.

Enablers (funding, codesign, digital, MDT):
ANP leadership; Multidisciplinary integration; voluntary sector partners; SOPs; carersupport links.

6.2 Impact Domain 2: Safety, Quality and Clinical Excellence ANPs bring advanced assessment, diagnostic decision-making and prescriptive autonomy (where relevant) to their innovation work.

Case Study 3: Trauma Informed Forensic Photography in SATU

Lead ANP / Specialty / Location:
Catherine Marsh - ANP, Sexual Assault, Rotunda Hospital, Dublin.
Partner MDT: Prof Maeve Eogan (National Clinical Lead SATU), Dr Nicola Maher (Clinical Director, SATU Rotunda) and SATU team - Rotunda Hospital, Dublin

The Problem:
SATU previously captured no onsite injury photos, relying on Garda Scenes of Crime. This increased patient exposure during a traumatic event missed time sensitive injuries and created courtroom continuity challenges.

The Innovation:
Cortexflo forensic photography was integrated into the clinical pathway with trauma informed consent, encrypted storage/transfer, chain of custody procedures and Human Centred designed patient information to reduce anxiety.

Impact

- **Clinical:** More accurate, consistent injury Photo documentation; encrypted storage protects evidentiary integrity; images deemed court admissible; only approximately 9 minutes added to exam time.
- **Operational:** Fewer external personnel; streamlined workflow; significant reduction in missed injury documentation (comparative baseline: 103 missed photo cases among non pilot staff).
- **Economic:** Cost avoidance via reduced external callouts, repeat assessments and legal delays; improved efficiency within existing staffing.

Scalability & National Potential:
This model is being scaled across SATUs nationally with standard protocols strengthening patient dignity and evidentiary quality system wide.

Enablers (funding, codesign, digital, MDT):
Equipment procurement; ANP led training and peer review; collaboration with Garda National Technical Bureau and hospital IT; encrypted media handling; patient centred communications.

6.3 Impact Domain 3: Empowered Self-Management and Prevention

Chronic disease accounts for the majority of long-term demand, cost and morbidity. Innovations that increase self-efficacy and early intervention have exponential system value.

Case Study 4. Fluid Heart Tracker - Digital Early Warning for Heart Failure Deterioration

Lead ANP / Specialty / Location:
Norma Caples - Advanced Nurse Practitioner (Heart Failure) - University Hospital Waterford. Partner MDT: National Heart Programme, Ireland

The Problem:
Heart failure affects approximately 90,000 people with 160,000 at risk; early fluid retention often goes unrecognised and mild cognitive impairment limits numeracy for weight tracking, delaying intervention and driving admissions.

The Innovation:
A simple mobile app was co-designed which autodetects ≥2 kg gain over 7 days and prompts immediate contact with HF services/GPs thus removing patient calculation burdens and enabling earlier care.

Impact

- **Clinical:** A multicentre Irish study (n=136) demonstrated improved adherence to daily weighing, earlier recognition of deterioration and significantly faster help seeking. Timely contact following deterioration increased from 43% to 74%, and the longest delay to clinical review reduced from 14 days to 2 days.
- **Operational:** The app supports patients with cognitive and numeracy challenges, standardises self management behaviour and enables timely patient-team contact without reliance on hospital IT integration.
- **Economic:** Significant reductions in hospitalisations and admissions were observed (total admissions reduced from 39 to 16). Estimated savings are €15,000 per patient per year; scaled to 5,800 HF admissions, this equates to potential annual HSE savings of €87 million through avoided or shorter hospital stays.

Scalability & National Potential:
The Irish Heart Foundation hosts the app; it can be deploy nationally with minimal training and rapid uptake across HF clinics and primary care.

Enablers (funding, codesign, digital, MDT):
Patient codesign; ANP clinical leadership; IHF partnership; straightforward user interface; primary care collaboration.

6.4 Impact Domain 4: Digital Transformation Through Clinically Led Innovation

Digital transformation in Ireland requires clinician innovators. Digital for Care emphasises that digital adoption must be safe, clinically appropriate and aligned to real patient needs. ANPs have emerged as some of the most agile digital adopters in the country.

Case Study 5: Relief Reimagined - Augmented Reality/Virtual Reality Supported Chronic Pain Management in the acute and home setting

Lead ANP / Specialty / Location:
Anna Marie Kiernan - Advanced Nurse Practitioner in Pain Medicine, Pain Excellence Centre, Croom Orthopaedic Hospital, Limerick.
Partner MDT: Multidisciplinary Pain Team, HSE Mid West Region Pain Excellence Centre

The Problem:
Despite significant wait time improvements, patients undergoing Qutenza treatment for neuropathic pain experienced heightened procedural pain, anxiety and catastrophising with ongoing reliance on analgesics which was resulting in associated side effects.

The Innovation:
Augmented Reality (HoloLens 2 + HoloMoves) was implemented during Qutenza treatment process for procedural distraction and supported self-regulation and as a follow on project scaled to home based Virtual Reality (ShineVR) was implemented for ongoing self management in an affordable, accessible and GDPR compliant means.

Impact

- **Clinical:** 48.22% reduction in procedural pain with AR; 78% of Shine VR users improved across measures (N=54) - 19% improvement in reported pain intensity and 33% improvement in reported pain interference; reduced anxiety and better tolerance of treatment without need for additional analgesia.
- **Operational:** Smoother procedures with fewer interruptions; improved patient readiness; home access to the platform supports continuity without extra clinic time.
- **Economic:** Low unit costs & 6 month license software €43 per patient; Spark funding €20,000 to reach 400 patients; potential reduction in repeat visits and medication burden.

Scalability & National Potential:
We can standardise AR in procedural pain clinics and deploy VR nationally for chronic pain self management - rapid to train, low cost and highly acceptable.

Enablers (funding, codesign, digital, MDT):
Spark funding; ANP led design and evaluation; MDT buy in; patient education; digital literacy appropriate content.

Why this matters:
Digital health succeeds only when technology is adapted to workflow, safety, literacy and acceptability. This is precisely the domains where ANPs excel.

6.5 Impact Domain 5: Value, Productivity, and System Sustainability

Ireland's system pressures - waiting times, workforce shortages, ED congestion, rising chronic disease prevalence - require innovations that deliver value not just increased activity. ANP led innovations repeatedly demonstrate high return on modest investment, mirroring patterns seen in the Consultant Innovation Fund, which saw participation increase by 66% year on year with funding growing from €4.7M to €6.18M and a rise in pooled collaborative projects.

Examples of value delivered through innovation in Advanced Practice:

- **€554K in pilot savings and €2.2M projected from integrated older adult pathways**
- **Reduced hospital utilisation via HF digital early warning**
- **Avoided GP and acute attendances via community based diagnostics**
- **Reduced forensic pathway burden and improved workflow efficiency in SATU**
- **Reduced opioid use and improved patient experience through the use of virtual reality**

Innovation in advanced practice is therefore not a cost, it is a multiplier!

7

Cross Case Insights:
What innovation in Advanced Practice show us

Clear patterns emerge about the true impact of innovation in Advanced Practice:

- **Innovation flourishes closest to patient need**

ANPs/AMPs identify unmet needs before they escalate into crises which guides prevention, early intervention and system responsiveness.

- **Innovation led by Advanced Practice reduces variation and increases equity**

ANPs/AMPs innovations bring high quality, standardised care into communities and populations that are historically underserved.

- **Digital health must be clinically led and ANPs/AMPs are leading it**

The Digital for Care framework depends on safe adoption, usability and patient centred design. ANP/AMPs are demonstrating how to bring this into real practice.

- **Modest investment produces substantial system impact**

These innovations are high yield, low cost and often self-sustaining. Their return on investment is immediate.

- **Innovation strengthens the workforce, retention and morale**

ANPs/AMPs engaged in innovation report stronger professional identity, leadership growth and multidisciplinary credibility.

8 Conclusion

The evidence throughout this report highlights a strong consistent message. Innovation within Advanced Nursing and Midwifery Practice is already shaping a safer more responsive and more person-centred health service. Across acute, community and specialist settings, ANPs and AMPs are demonstrating how advanced clinical expertise combined with frontline insight can translate directly into easier access, smoother pathways, earlier intervention and improved patient experience.

What makes this progress particularly compelling is that it has been driven from within. By clinicians who understand the realities and complexities of service delivery and the needs of the people they care for. Their ability to identify challenges, design solutions and embed new models of practice has shown that innovation is not an added extra in Advanced Practice, it is a natural extension of the role.

ANPs and AMPs work at the key intersections of care. Between clinical decision-making and digital transformation, between hospital and community, between operational flow and patient-centred design. This unique vantage point allows them to create improvements that are practical and grounded in everyday clinical reality. The outcomes already achieved illustrate the difference that empowered frontline innovation can make. It reduces variation, strengthens continuity of care and enhances the quality and safety of specialist care. As Ireland continues to evolve its health system, the contribution of Advanced Practice stands out as one of its greatest strengths. By recognising and nurturing the innovation already embedded within nursing and midwifery, the system can continue to grow in ways that are modern and resilient. The achievements to date show what is possible with supported progression. The ongoing commitment of this workforce ensures that progress will not only continue but accelerate.

Appendices

Appendix A: Case Studies 1–5 (full detail)

Project Name:
Monitoring and prevention of Cardiovascular Disease in Community Group homes of those whom have a learning disability.

Team members:
Irene Drury Advanced Nurse Practitioner in Chronic Disease Management

Location:
Intellectual Disability Residential Service (IDRS)
Springfield Centre, St Loman's Campus, Mullingar, Co. Westmeath

The Problem:
Individuals with intellectual disabilities have higher morbidity and earlier mortality than that of the general population. Access to primary health care is lower, despite a higher prevalence of many long-term conditions. The prevalence of Cardiovascular Disease (CVD) in this population group may be greater and apparent earlier in life than that found in the general population.

What does your project aim to achieve?
This screening program will play a crucial role in identifying those whom are at high-risk for developing CVD. These CVD conditions can include atrial fibrillation (AF), hypertension and raised cholesterol, which are shown to significantly increase the risk of CVD events such as heart attack, stroke and dementia. Optimal treatment of AF, high blood pressure and raised cholesterol is highly effective in the prevention of CVD events. However, a large proportion of those living with these conditions remain undiagnosed, and of those with a diagnosis, a large number are not receiving optimal treatment.

Aims:
Slainte Care the 'Integrated Care' model for Chronic Disease (CD) is to focus and provide healthcare at the lowest appropriate level of complexity, with responsive services built around the needs of the population supporting and empower them to optimise their health, actively address and minimise their risk factors for CD and to live well in their CGH. The aim of the initiative is to provide regular screening/annual health checks to manage and monitor those with risk factors for CVD such as stage 1 HTN, high cholesterol, identified and unidentified with cardiovascular disease.

Objectives:
By providing regular screening to this population group, one can detect disease at its earliest and most treatable stage thus avoiding further health complications developing.

The solution:
Successful funding received from both Midwifery Planning & Development Unit Midlands Innovation Funding & Spark Innovation Funding for the project which has provided much needed diagnostic equipment to fully support advanced clinical assessment and diagnostic testing in the CGH for this population group.

The Benefits:
This initiative has reduced appointments to the acute hospital services/GP clinics by having the facilities locally to undertake screening. There is flexibility to where the service can be delivered as per resident's preference. Many individuals with learning disability or autism find clinical areas stressful which can negatively impact on outcomes therefore the provision of this service in CGH has shown successful outcomes and benefits to the residents.

The purpose of the initiative is to align with national policy such as to bring care closer to residents' home as per Sláintecare Implementation Strategy. While there are many models of care in the community this is unique to the IDRS and would greatly benefit not only the local service but geographically services connected under the umbrella of the CHO 8 learning disability services.

How is your project going to share learning- expected benefits?
Learning and outcomes are extended at the national sub group meetings of ANP's in Chronic Disease Management in Learning Disability and is filtered throughout services. The local regional hospital have provided a platform to engage with ANP in CDM on the service provided and its benefits to the acute hospital service in terms of reducing hospital visits and responding to the Model of care for the Integrated Prevention and Management of Chronic Disease particularly making a positive difference at levels 0-3.

Project Name:
Relief Reimagined - Enhancing Pain Management Through Augmented and Virtual Reality in the HSE Mid West Region Pain Excellence Centre

Team Members:
Anna Marie Kiernan, Advanced Nurse Practitioner in Pain Medicine, Multidisciplinary Pain Team, HSE Mid West Region Pain Excellence Centre

Location:
HSE Mid West Region Pain Excellence Centre

The Problem:
Chronic pain affects 20 - 40% of people in Ireland and contributes significant emotional,psychological and financial strain. It accounts for an estimated €5.34 billion annually and leads to reduced functional capacity, increased disability and high healthcare utilisation. Despite transformational improvements in service efficiency in the Mid West Region resulting in the reduction of wait times from 49 months (2021) to 22 weeks (2025), patients continued to struggle with procedural and post procedural pain, particularly during Qutenza therapy for localised neuropathic pain. For those who are psychologically sensitive, the procedure often triggers anxiety, catastrophising and reduced pain tolerance. In addition, those with chronic pain were often left reliant on analgesia with significantly high side effect profiles, which resulted in reduced independence and loss of identity.

What Did the Project Aim to Achieve?
Aims:
- To improve the patient experience of procedural and post procedural pain during Qutenza treatment.
- To introduce innovative non pharmacological interventions that reduce pain, improve emotional wellbeing and enhance patient empowerment.
- To explore scalable digital health solutions that support longterm symptom management which is both accessible and affordable.

Objectives:
- Implement Augmented Reality (AR) during ANP led Qutenza treatments to reduce procedural pain intensity.
- Evaluate the impact of AR on pain scores, anxiety, relaxation and overall patient satisfaction.
- Expand into Virtual Reality (VR) to address barriers for patients who have limited mobility or difficulty engaging with AR.
- Generate evidence to support a future business case for ongoing provision of extended reality to patients.

Solution
The project introduced Augmented Reality using the HoloLens 2 and HoloMoves platform during Qutenza patch application. Patients interacted with gamified holographic tasks designed to distract attention, reduce pain perception, and increase emotional regulation during the procedure. AR was introduced at the midway point of treatment when heat and pain response to treatment was established and maintained until treatment was completed.

An audit of 100 consecutive Qutenza treatments showed:

- 48.22% reduction in reported pain intensity scores for those using AR.
- Improved reported pain interference and quality of life scores at 2 week follow up.
- Marked improvements in relaxation, mood and treatment tolerance.

Despite the significant benefits, the use of AR was identified as inaccessible in the home setting, short term in relief and difficult to use for those with poor manual dexterity or reduced digital literacy.

The project has developed further to address these limitations. ShineVR offers immersive guided imagery, mindfulness and therapeutic environments that support both physical and psychological aspects of chronic pain. Through Spark Impact funding of €20,000 a means of addressing the limitations was designed and piloted. Through co-creation sessions, prototyping and iterative testing, a mobile phone based VR platform was developed. When the new platform was used in conjunction with a mobile phone mountable headset, users could access the same menu and content in 360 degree VR using gaze technology. Beta testing was performed with patients to ensure the new approach met the needs and abilities of all patients. This new system maintained immersive therapeutic quality while enabling patients to use it in clinics, at home or in community settings, which represented a major leap in accessibility and impact for users. The platform created, is deemed GDPR compliant following internal and external DPO and consultancy assessment as log in is a one-time entry of a 16-digit code. Following successful IT risk assessment and DPA completion, the platform is now on the national procurement framework.

The innovative approach is now available to all patients attending the department including those who struggled with the interaction required for augmented reality. At a cost of €43 per patient for a 6-month license to the ShineVR platform and a mobile phone mountable headset, patients can access a 360-degree VR experience in the comfort of their own home regardless of digital literacy. Mobile phone based virtual reality is now being introduced for use before procedures and for extended self-management to 400 patients at home with a long term goal of reducing reliance on analgesia for incidental pain.

The Benefits:

Clinical Benefits:

- Improvement across all measurement tools for 78% of users of the mobile phone based platform ShineVR to date (N=54)
- 19% improvement in Pain Intensity Scores
- 33% improvement in Pain Interference Scores
- Reduced anxiety and emotional burden associated with the chronic pain.
- Improved patient tolerance, enabling more comfortable and effective treatment delivery.

Patient Experience Benefits:

- Improved confidence and sense of control over symptoms.
- Increased engagement in self-management strategies.
- Accessible, enjoyable and easy-to-use therapeutic tool.

Service & System Benefits:

- Low-cost intervention (€7.80 per headset) with strong scalability.
- Potential reduction in repeat clinic visits due to improved self-management.
- Supports the national agenda for digital innovation in healthcare.

The approach is significantly lower in cost than common analgesia used for treatment of chronic pain, with the total patient package equivocal to a 5-week prescription of an adjuvant analgesic for neuropathic pain.

Next steps:

The next phase of the project will focus on examining how the VR model can be transferred into wider acute and chronic care pathways. Case studies are already underway in intensive care, paediatrics, oncology and labour and delivery which are showing encouraging results. Each speciality is reporting reductions in patient distress, stronger levels of engagement and higher overall satisfaction. Building on this momentum, the project will next explore applications in gynaecology, particularly for conditions such as endometriosis, where non pharmacological support may offer meaningful benefit. Insights from these settings will guide the development of a scalable framework for integrating immersive technologies across diverse clinical environments.

Project Name:
Fluid Heart Tracker – A Digital Solution to Support Early Detection of Heart Failure Deterioration

Team Members:
Norma Caples, Advanced Nurse Practitioner in Heart Failure
Open Source Volunteers (OSV-X)

Location:
University Hospital Waterford, National Heart Programme Ireland

The Problem:
Heart failure (HF) is a chronic, progressive condition affecting approximately 90,000 people in Ireland, with a further 160,000 at risk. It is associated with high morbidity, mortality, frequent hospitalisations and significant healthcare costs. Fluid retention is a key indicator of worsening HF and is often reflected in weight gain of ≥2 kg within a 7-day period. While daily weight monitoring is recommended in clinical guidelines, patients frequently struggle to interpret changes and act on them promptly. Additionally, up to 66% of patients with HF may have mild cognitive impairment, making numeracy and interpretation of weight trends challenging. As a result, deterioration is often recognised late, leading to delayed intervention and potentially avoidable hospital admissions. This highlights a critical gap between symptom monitoring and timely clinical response within current models of HF self-care.

What Does Your Project Aim to Achieve?
Aims:
To support patients with HF in recognising early signs of deterioration and responding appropriately.

Objectives:
- To develop a simple, user-friendly mobile app that detects clinically significant weight gain.
- To remove the need for patients to calculate or interpret weight trends.
- To prompt timely help-seeking behaviour in response to deterioration.
- To support patient self-care and autonomy within routine clinical practice.

The Solution
The Fluid Heart Tracker is a mobile app designed to support daily weight monitoring in HF. Patients enter their weight once daily and the app automatically tracks changes over a 7-day rolling period. When a clinically significant increase is detected, an on-screen alert prompts the patient to contact their HF team or GP. The app was co-designed with patients and developed as a low-complexity, patient-held digital tool that requires no integration with hospital IT systems. Data remains on the patient's device, supporting ease of implementation and scalability across services. This innovation shifts weight monitoring from passive recording to active behavioural support, bridging the gap between symptom detection and timely clinical response. It represents a nurse-led, low-complexity digital innovation that supports early intervention in HF by bridging that gap between symptom monitoring and timely clinical response.

The Benefits: (A multicentre Irish study involving 136 patients with heart failure)

Clinical Benefits compared to traditional methods:

- Improves adherence to daily weight monitoring
  (Median 346.5 vs 315 days; +31.5 days; $p < .001$)
- Enhances timely help-seeking behaviour following deterioration
  (Increased from 43.4% to 73.5% of episodes; +30 percentage points; $p = .031$)
- Reduces delays in seeking clinical review
  (Longest delay reduced from 14 days to 2 days; $p < .001$)

Patient Experience Benefits:

- Supports patients with cognitive or numeracy challenges.
- Simplifies daily self monitoring.
- Enhances confidence and engagement in self-care.

Service & System Benefits:

- Associated with reductions in hospitalisations and admissions (Participants hospitalised 24 vs 10; total admissions: 39 vs 16; $p = .0066$ and $p = .0035$, respectively)
- Cost of one hospital admission is approx. €10,474 per admission (Morgan et al.,2017)
- Potential to reduce healthcare costs through earlier intervention and reduced hospital utilisation

Project Name:
Féileacán Bán Nursing Service: An Innovative Co-Designed Nursing-Led Approach toDementia Care in the Community

Team members:
- Ms Edel Carey, Advanced Nurse Practitioner, Nurse Prescriber, Behaviour
- Specialist, PhD Candidate
- People living with dementia and their families
- Expert advisory group members
- Candidate advanced nurse practitioner
- Therapeutic health care assistants
- Care integration network across acute, community and voluntary services

Location:
Féileacán Bán, Cherry Orchard Hospital and Community Healthcare, Integrated Healthcare Area, Dublin and Midlands Region, HSE (former CHO7, DSKWW)

The Problem:
Globally, populations are ageing rapidly, leading to a significant rise in the number of older adults living with dementia. In Ireland, over 64,000 people are living with dementia, of whom 63% reside at home supported by family members. The cost of care in Irish communities is estimated at €58,550 per person and is expected to increase alongside greater longevity. Irish health policy emphasises supporting older adults to live independently at home for as long as possible with a strong focus on enhancing community care and enabling ageing-in-place. However, the growing prevalence of dementia, combined with increasing demand for community-based care, has exposed significant gaps in the coordination, accessibility, and continuity of existing services, resulting in fragmented care, increased burden on families, and inequitable access to timely supports.

These gaps have informed the development of a robust nursing service model, Féileacán Bán, designed to enhance continuity of care through coordinated pathways, early intervention, comprehensive post-diagnostic support, and equitable access to community-based therapeutic programmes

What does your project aim to achieve?
- To establish a robust, advanced practice nursing service model of care and support pathways for older adults living with dementia, delirium and NCSD that is inclusive of family.
- To demonstrate delivery of early, person centred and rights-based care, specialist intervention that reduces hospital admissions and provides safe care at home.
- To enhance the quality of life, independence, and overall wellbeing of patients and their families.

The Solution:
The project introduces a nursing service model for older adults living at home with dementia, delirium and NCSD. The solution to the dementia care challenge lies in the creation of Féileacán Bán, a nurse-led, community-based service offering a comprehensive, person-centred dementia care pathway. This model incorporates community clinics, home visits, crisis intervention, support networks, and virtual consultations, creating a seamless experience for patients and families throughout their journey. The initiative began with a scoping review to identify shortcomings in traditional care models, particularly the lack of community-based services and emotional support for caregivers.

Through ongoing engagement with patients, families, and healthcare professionals, key gaps in service delivery were identified, including fragmented care, inadequate caregiver support, and delayed access to services. Co-designed with input from patients, families, and healthcare teams, the model focuses on emotional well-being alongside nursing intervention, ensuring services align with real-life needs. By emphasising early intervention and hospital avoidance, the service facilitates timely access to necessary care. The approach also involved building robust partnerships with local healthcare and community providers, establishing carer support networks, and training staff to deliver compassionate, person-centred and rights-based care. This collaborative, advanced practice model ensures smooth service delivery and enhances the well-being of individuals living with dementia and their families in the community setting.

Key components include:

- Holistic ANP-led assessment
  (physical, cognitive, emotional, functional, behavioural).
- Crisis response incorporating virtual consultation.
- ANP comprehensive assessment and staged intervention
  (pathway specific)
- Psychotherapeutic programme followed by:
  - Bespoke Brain Gym Home Programme (delivered by the therapeutic HCA)
  - Bespoke exercise programme (delivered by the therapeutic HCA)
  - Monthly Memory Lounge sessions offering brain health activities, exercise, and peer support.
- Post intervention review and personalised wellbeing plan.
- Coordinated support for family and care partners, family meetings, and carer support networks and connecting them to community services.
- A standardised operational procedure guiding referral processes and service level agreement between services.
- Transitioning all documentation from paper to an encrypted IT platform, enabling consistent data collection and streamlined collaboration.
- The advanced practice nursing model project is the first of its kind in Ireland to provide careand support throughout the dementia journey, which is inclusive of family.

The Benefits:
Clinical Benefits:

- Earlier therapeutic intervention reduces deterioration and optimises functional recovery.
- Supports cognitive baseline restoration following delirium.
- Reduced waiting times, improved coordination of care, and reduced ED attendance.
- Hospital avoidance and early supportive discharge improve clinical outcomes.

Patient Experience Benefits:

- Patients receive timely, holistic, person centred care at home.
- 250 patients seen annually with over 100 attendances each month
- Patient-specific measures, increases in confidence 91%, mood 53%, Quality of life 51% and anxiety down 44%.
- Improved confidence, well-being, and independence.
- Enhanced continuity and consistency through a single point of ANP support.
- Access to memory lounge groups facilitates social connection and reduces isolation.
- Care partners receive structured support, reducing stress and improving their ability to care confidently.

Service & System Benefits:

- Cost savings:
  - **€863,704** during pilot phase (hospital avoidance + early discharge)
- Reduced long-term care admissions due to early and proactive community support.
- Strong interdisciplinary collaboration across acute, primary and community care.
- Aligned with Sláintecare, HSE Corporate Plan and national dementia strategies.
- Scalable and transferable across CHOs with minimal barriers once funded.
- Care partners measure, carer burden down 54%, quality of life increased by 57%
- Overall service satisfaction 94%

Project Name:
A Trauma Informed Approach to Forensic Photography in SATU

Team members:
- Catherine Marsh – ANP Sexual Assault
- Prof Maeve Eogan – National Clinical Lead for SATU
- Dr Nicola Maher – Clinical Director, SATU Rotunda
- Deirdra Richardson – CMS SATU Rotunda
- Christine Pucillo – CNS SATU Rotunda

Location:
Sexual Assault Treatment Unit (SATU), Rotunda Hospital, Dublin

The Problem:
Prior to this project, SATU did not capture any injury photographs onsite. When photographic documentation was required, the unit relied on An Garda Síochána's Scenes of Crime team. This added extra personnel, increased patient exposure during an already traumatic experience, and created challenges in court when clinicians were shown photos they had never seen or taken themselves.

This gap contributed to:
- Increased patient distress due to additional interactions.
- Missed opportunities to document time sensitive injuries.
- Reduced continuity and clarity of forensic evidence.

What does your project aim to achieve?
The project aimed to introduce trauma informed, clinically led forensic photography within SATU to reduce patient trauma, enhance evidence quality, and streamline the examination pathway.

Aims:
- Preserve patient dignity by reducing unnecessary personnel involvement.
- Improve accuracy, clarity, and consistency of forensic documentation through onsite photography.
- To ensure that images captured within SATU are of a standard suitable for reliable use in court.
- Build staff confidence and competency in traumainformed photographic documentation.

Objectives:
- Evaluate the feasibility and impact of implementing forensic photography within SATU.
- Reduce patient trauma by limiting additional personnel such as Garda Scenes of Crime teams.
- Develop and test standardised protocols, consent processes, storage pathways, and chain of custody procedures.
- Establish training and peerreview processes to support national scale up.

The Solution:
The project piloted the integration of Cortexflo forensic photography equipment into the SATU clinical examination pathway.
Key elements included:

- Training two core forensic nurse examiners to capture encrypted, high-resolution images onsite.
- Trauma informed consent and communication processes.
- Chain of custody procedures using encrypted USB devices provided by Gardaí.
- Collaboration with Garda National Technical Bureau to confirm evidentiary acceptability.

Human centred design (HCD) informed additional supports:
A human-centred design (HCD) methodology underpinned the development and implementation of this initiative, ensuring that both patient experience and clinician workflow were central to all decision-making. This approach moved beyond solution implementation to actively explore the lived experience of patients undergoing forensic examination, recognising the cumulative impact of trauma, environment, and process complexity.

The Benefits:
The pilot demonstrated that forensic photography is both feasible and impactful within SATU, improving clinical, operational, and emotional outcomes for patients and staff.

Clinical Benefits:

- More accurate & consistent documentation of injuries, improving evidentiary quality.
- Secure, encrypted photo storage ensured integrity and continuity of evidence.
- Only 9 minutes added to exam time on average, supporting workflow integration.
- Early legal feedback confirmed that SATU captured images were admissible in court.

Patient Experience Benefits:

- Significantly reduced patient exposure and psychological burden by eliminating the need for external forensic personnel
- Reinforced a healthcare-led, trauma-informed environment, improving patient comfort and trust
- Strengthened informed consent and patient understanding through structured communication supports
- Actively protected patient dignity, autonomy, and choice throughout the forensic examination process

Service & System Benefits:

- Improved documentation reduced missed opportunities for evidence capture (103 missed injury photo cases among nonpilot staff).
- Built examiner confidence and skill in forensic photography, supporting service sustainability.
- Created a scalable, standardisable model for national rollout.
- Strengthened collaboration with Gardaí, IT, and forensic experts, improving overall system integration.

THE IMPACT OF INNOVATION IN ADVANCED PRACTICE

The Transformative Power of Advanced Nurse and Midwife Practitioner Led Innovation in Ireland

Anna Marie Kiernan
National Nursing and Midwifery Innovation Fellow HSE Spark Innovation Programme
& Registered Advanced Nurse Practitioner in Pain Medicine HSE Mid West

May 2026

Oifig an Stiúrthóra Seirbhísí Altranais & Cnáimhseachais
Office of the Nursing & Midwifery Services Director

Spark