HIHI Project Report 22252

Pilot of

Ecco Spray

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Health System Impacts

The impact of the pilot study of POCUS Spray from Ecco Spray was evaluated, in five key areas of health system impact (Table 1). Impacts were recorded in the study or through additional data gathering with staff.

Clinical Pathway	*value to the patients / users*
• **Patient comfort maintained:** patients reported no reduction in comfort levels when Ecco Spray replaced traditional gel sachets, supporting seamless adoption of the sustainable alternative. • **Enhanced post-scan experience:** the reduced gel residue associated with the fine-mist spray meant less wiping, less lingering discomfort, and a reduced cold sensation, improving overall patient satisfaction while also lowering reliance on disposable cleaning materials.	
Workflow	*value to the healthcare staff*
• **No change in clinical workflow:** the scan protocol remains identical, meaning a sustainable alternative can be adopted without retraining or disruption, removing a common barrier to implementing greener solutions. • **Improved staff efficiency:** refillable bottles eliminate the need to repeatedly open single-use sachets, which are often difficult to tear, saving time and reducing repetitive waste-handling tasks. • **Cleaner, more controlled application:** the fine-mist spray reduces excess gel use, limits contamination of gloves and equipment, and contributes to lower consumption of disposable materials. • **Reduced post-scan waste and clean-up:** less excess gel means fewer paper towels are required and less waste is generated per patient, supporting both environmental targets, streamlined workflow and providing cost savings. • **Improved clinical workflow:** the streamlined application and reduced clean-up requirement contributed to smoother session flow, allowing clinics to maintain pace more efficiently while generating less waste.	
Revenue	*value to budget holders*
• A standard bladder scan using single-use gel sachets costs €0.18 per sachet plus €0.10 in paper towels (4.7 towels at €0.02 each), totalling **€0.28 per scan**. With Ecco Spray, the per-scan material cost falls to **€0.038** (2.4 sprays at €0.016 each), delivering a saving of €0.24 per scan. Across 160 scans per month, this outpatient service saves **€461 annually**, with additional reductions in waste-disposal costs due to the elimination of paper towels. • While €461 reflects one department's activity, point-of-care ultrasound is used across emergency, medical, surgical, maternity, critical care and community settings. If the same consumable reductions were applied hospital-wide, the financial savings would scale to several thousand euro per year, with major cuts in single-use plastic and paper waste. • Based on HSE-reported figures, Ireland conducts approximately 2.5 million diagnostic imaging tests each year across all modalities. **If ultrasound accounts for a conservative 20% of total imaging activity, this equates to roughly 500,000 ultrasound scans annually nationwide** (*Insights into Imaging*, 2023). • Distributed across the year, this represents in the region of **10,000 ultrasound scans per week,** many of which are performed as point-of-care examinations in emergency departments, urology and surgical clinics, maternity services, medical and surgical wards, and community nursing teams. • This scale underscores the significant sustainability opportunity associated with replacing high-volume single-use gel sachets and consumables with validated alternatives such as Ecco Spray. Even small per-scan reductions in disposables translate into **large cumulative waste and cost savings** when applied across an estimated **half-million scans per year**.	
Interoperability	*integration into other systems*
N/A	

Sustainability	*impact on environment*
• **Approximately 95% reduction in gel volume per scan**, dramatically lowering material use and environmental impact. • **Complete elimination of plastic gel sachets**, removing single-use plastics entirely from the scans using Ecco Spray. • **Full removal of paper towel use** for gel management, cutting both costs and waste at source. • **Significant reduction in clinical waste and associated plastic packaging**, improving sustainability across the workflow. • **Directly advances HSE sustainability targets**, particularly the reduction of single-use items, waste generation and carbon intensity in clinical care.	

Table 1: Health System Impacts

Summary

One of the winners of the HIHI, HSE and ICGP GreenTech in Health Call 2024, Ecco Spray is a refillable fine mist ultrasound gel delivery system. The water-based coupling agent is designed for point-of-care ultrasound (POCUS) examination to replace traditional, messy gels and impact waste. Previously piloted by HIHI in Tallaght University Hospital, to assess clinical efficacy with traditional gel sachets, this Health Innovation Hub Ireland pilot project with University Hospital Galway, trialled the introduction of Ecco Spray, as a sustainable alternative to traditional 5 ml single-use gel sachets within a high-volume urology outpatient department. Overall, the Irish healthcare system produces over 120,000 tonnes of waste annually, with hospitals responsible for the majority. Bladder scanning is a routine diagnostic procedure and when repeated at scale it generates substantial single-use waste due to reliance on gel sachets and paper towels. With clinical waste disposal costing Irish hospitals up to €1,800 per tonne, replacing single-use consumables with refillable systems like Ecco Spray offers both environmental and economic benefit.

The pilot focused on real-world use, examining sustainability impacts, workflow efficiency and staff experience. Across more than 200 recorded scans, the pilot demonstrated strong evidence of sustainability benefits without negative impact on workflow or patient experience. Ecco Spray reduced product volume per scan by approximately 95%, eliminated paper towel use for gel clean-up and eliminated plastic gel sachet waste in the Ecco Spray arm. Importantly, average scan duration remained consistent with standard practice (approximately 2 minutes 43 seconds vs 2 minutes, 37 seconds minutes per scan), indicating no loss of efficiency. Staff feedback highlighted improved cleanliness, less mess, and reduced preparation and clean-up time. Users reported that the spray format offered more controlled application and less residue. No negative impacts on patient comfort or scan quality were reported. These results provide a strong foundation for considering Ecco Spray as a sustainable, operationally efficient and clinically acceptable alternative to traditional gel sachets in bladder scanning.

Overview of Pilot

The pilot was conducted in a urology outpatient department in Galway University Hospital, where bladder scans are part of routine care. Two methods of gel application were compared:

1. **Standard method**
    - 5 ml single-use ultrasound gel sachet per scan
    - Multiple disposable paper towels to manage excess gel
    - Conventional clean-up process after each scan

2. **Ecco Spray method**
    - Fine-mist spray delivering
    - Typically, 2–3 sprays per scan
    - No paper towels required for gel clean-up

Clinical staff alternated between the traditional sachet method and Ecco Spray, with each approach used for a full month. The total scan count recorded during the first month (sachet use) was established as the target number of scans for the second month when Ecco Spray was used.

A structured log (Excel-based) was developed by HIHI to capture:

- Number of scans
- Scan duration
- Number of sachets or sprays
- Number of paper towels
- Difficulty rating (Very Easy → Very Difficult)
- Free-text comments

The pilot was intentionally embedded within normal clinical workflow rather than a controlled research setting. This means the findings reflect real clinical practice, providing a realistic picture of how Ecco Spray may perform at scale.

Value of Pilot

The pilot was of value to both the company and the clinical setting. Ecco Spray and Urology Outpatient outlined the key benefits of the pilot to them.

Value to the Company

The pilot delivered significant value to the company by providing independent, real-world evidence from a busy clinical environment, demonstrating how Ecco Spray performs under genuine operational pressures. The findings confirmed that Ecco Spray can effectively replace traditional gel sachets without disrupting workflow or altering clinical pathways, strengthening confidence in the products practicality. Importantly, the pilot produced quantified sustainability outcomes, including reductions in gel volume, elimination of sachet waste and removal of paper towel use, which can now be communicated to potential adopters as credible, clinically generated results. In addition, the company gained practical insights from frontline nursing staff, offering meaningful feedback on usability, integration and implementation considerations that may inform future product refinement and support wider adoption.

Value to the Clinical Setting

For the clinical site, the pilot offered a valuable opportunity to trial a green innovation with minimal risk and no change to established clinical protocols. Staff were able to incorporate Ecco Spray immediately into routine bladder scanning without any disruption to workflow, demonstrating its practicality and ease of adoption. The benefits were noticeable from the outset, with immediate reductions in waste and consumable use, including fewer gel-related supplies and the complete removal of paper towels for gel clean-up.

The pilot also helped to enhance staff awareness of sustainability within everyday clinical practice, reinforcing how small operational changes can contribute meaningfully to environmental goals. Importantly, the data generated through the pilot now provides credible evidence to support local sustainability initiatives and discussions with hospital management, strengthening the department's capacity to advocate for environmentally responsible innovations. Overall, the pilot added value by improving efficiency, reducing waste and supporting broader organisational commitments to sustainable healthcare.

Status as of December 2025

The product is commercially available in Ireland through distributors such as Cardiogenics Ltd and can also be obtained by hospitals and healthcare providers. It is also distributed in the UK and EU through approved channels

Background

Healthcare Need

Bladder scanning is an essential diagnostic procedure widely performed across outpatient, inpatient, emergency and community healthcare settings. It is used routinely to support clinical decision-making in patients with urinary retention, post-void residual assessment, catheter management and a range of urological and non-urological conditions. Because bladder scanning is embedded in day-to-day clinical practice, the associated use of ultrasound gel is likewise constant and unavoidable.

Under the traditional approach, each scan requires a 5 ml single-use gel sachet and several disposable paper towels to manage gel application and clean-up. While these items are small at the individual patient level, their cumulative impact is substantial in high-volume services. Across hundreds or thousands of scans per year, this results in:

- Significant plastic waste from gel sachets and packaging
- Large quantities of paper waste from towels used to remove excess gel
- Gel waste, as sachets frequently dispense more gel than clinically required

This pattern of repeated single-use consumption sits in direct contrast to the ambitions of the HSE Climate Action Strategy, which prioritises the reduction of unnecessary plastic, the shift away from disposable materials and more efficient use of clinical resources. As healthcare continues to move toward low-carbon, circular models of care, addressing even small, repeated sources of waste, such as gel sachets, it can make a meaningful contribution to environmental performance across the system.

The need for a more sustainable, resource-efficient alternative is therefore clear: a solution that maintains clinical quality and workflow while substantially reducing plastic, paper and gel waste.

Innovative Product

Ecco Spray is an innovative, refillable fine-mist ultrasound gel delivery system specifically designed to support more sustainable clinical practice. Unlike traditional 5 ml single-use gel sachets, which dispense far more gel than is typically required, Ecco Spray enables clinicians to apply only the minimal amount of product necessary to achieve optimal imaging. This targeted approach directly reduces consumable use and gel wastage during every scan.

By replacing disposable gel sachets, Ecco Spray eliminates a consistent source of single-use plastic waste, while its controlled spray application significantly reduces or removes the need for paper towels previously required to manage excess gel. As a result, the system helps maintain a cleaner scanning environment, reducing residue on equipment, work surfaces and patients.

Each spray delivers approximately 0.1ml, providing predictable and precise application. During the pilot, clinicians typically used 2–3 sprays per scale, equating to an average of 0.24ml per procedure, compared with the full 5 ml dispensed from a standard sachet. This represents an immediate and substantial reduction in product volume used while maintaining clinical performance, making Ecco Spray a practical and sustainable alternative for routine bladder scanning.

Picture 1: Ecco Spray Bottle

Pre-pilot Standard of Care

Before the introduction of Ecco Spray, the standard method for conducting bladder scans relied entirely on single-use 5 ml ultrasound gel sachets, which were opened and used for every individual procedure. While familiar and widely available, this approach routinely resulted in over-application of gel, as sachets dispense a fixed volume that exceeds what is clinically necessary for most scans. Excess gel frequently accumulated on the patient's skin, the scanning probe, bedding and surrounding work surfaces, leading to additional clean-up and increased time between patients.

To manage this residue, staff habitually used multiple paper towels per scan, contributing further to single-use waste and adding another layer of disposable materials to routine clinical practice. Clinicians often noted frustration with sachets, particularly difficulty opening them while gloved, occasional tearing failures and the mess created during application. These small inefficiencies repeated many times across busy clinics compound to create avoidable workflow interruptions and unnecessary waste generation.

Overall, the pre-pilot standard of care was effective from a clinical perspective but material-intensive, producing consistent volumes of plastic, paper and gel waste. This made the area an ideal target for evaluating a more sustainable alternative like Ecco Spray capable of maintaining clinical quality while dramatically reducing reliance on disposable consumables.

Pilot Procedure

Study Team

HIHI collaborated with Advanced Nurse Practitioners (ANP) and Clinical Nurse Specialists (CNS) in the Urology Outpatients Department in University Hospital Galway and representatives of Ecco Spray on this pilot.

Picture 2: The study team pictured with HIHI Clinical Liaison

See

Table 2 for details of name and roles of project team.

Ecco Spray	Will Hogan, CEO
Urology Outpatients Department, University Hospital Galway	Marie McLoughlin: Clinical Nurse Manager 2 Gereldine Rooney: Advanced Nurse Practitioner Therese Kelly: Advanced Nurse Practitioner Marcella Fleming: Candidate Advanced Nurse Practitioner
Health Innovation Hub Ireland	Maria Kelly, Clinical Liaison & Project Manager Ruán Kane, Project Manager

Table 2: Names and Roles of the Project Team

Objectives

The objectives of the pilot were designed to capture both the environmental impact and clinical practicality of integrating Ecco Spray into routine bladder scanning, ensuring a comprehensive assessment suitable for informing future decision-making:

- to rigorously evaluate whether Ecco Spray can meaningfully reduce single-use consumables, specifically 5 ml gel sachets and paper towels, without altering the diagnostic quality or clinical workflow of bladder scanning.

- to compare key performance measures, including overall scan time, preparation and clean-up time and perceived difficulty of positioning the probe, in order to determine whether Ecco Spray performs equivalently to or better than traditional gel sachets in a real-world outpatient setting.
- to understand the broader operational impact on staff, including workflow efficiency, ease of use, ergonomic considerations, cleanliness of the scanning environment and staff satisfaction with the product during routine clinical activity.
- to explore the feasibility of wider implementation, assessing not only product usability but also compatibility with existing clinical pathways, potential environmental benefits at scale and the readiness of staff and departments to adopt a more sustainable alternative across similar care settings.

Research Ethics

Research Ethical Approval was not required for this pilot because the project constituted a service evaluation examining a change in consumables, rather than a change to clinical practice. The procedure performed bladder scanning, remained entirely standard and no patient-level interventions, data collection or modifications to care were introduced. As the pilot evaluated operational and sustainability outcomes only, it fell outside the scope of formal Research Ethics Committee review.

Enrolment

All nursing and clinical staff performing bladder scans in the urology outpatient department were invited to participate in data collection. No patient recruitment or consent was required beyond usual clinical practice, as patients received standard diagnostic care.

Pilot Protocol

The pilot followed a two-phase protocol designed to compare standard gel sachet use with the Ecco Spray system under routine clinical conditions.

In **Month 1**, nursing staff carried out bladder scans using the traditional 5 ml single-use gel sachets, applying as many sachets as required for each point-of-care ultrasound. For every scan, staff recorded: the number of sachets used, the duration of the scan, the number of paper towels required for gel management, the perceived difficulty of positioning the probe and any relevant comments relating to workflow or patient factors. The data was record on project data sheet (Appendix A). This dataset represented the baseline standard-of-care activity.

At the end of Month 1, the total number of scans completed using sachets was calculated and established as the target number of scans to be completed in Month 2 using Ecco Spray. This ensured that the volume of clinical activity would be broadly comparable between the two phases.

In **Month 2**, the same nursing team performed bladder scans using the Ecco Spray system, applying approximately 2–3 sprays per scan. Staff recorded the same metrics, Scan duration, number of sprays, towel use (if any), difficulty rating, and qualitative observations, using the identical data collection tool. The data was record on project data sheet (Appendix A). This consistency enabled a direct comparison of consumables, workflow and usability between the two methods, ensuring that the evaluation reflected real-world clinical practice.

Picture 3: A member of the study team prepares to use the Ecco Spray for a patient scan

Data Collection

Data for this pilot were collected using structured paper data collection forms, completed by nursing staff immediately after each bladder scan. This approach ensured real-time recording of details while the procedure and its context were still fresh in the clinician's mind, supporting the accuracy and reliability of the dataset. Each form contained predefined fields allowing the nurse to capture all relevant operational information in a consistent and standardised way.

For every scan performed, staff recorded:

- The method used (5 ml gel sachet or Ecco Spray)
- The number of scans conducted in that entry
- The number of consumables used, including sachets or sprays
- The number of paper towels required
- The duration of the scan, noted in minutes and seconds
- The perceived difficulty of probe positioning, rated on a five-point scale
- Any contextual comments, such as patient mobility, BMI, abdominal scarring, issues with gel handling or observations about ease or difficulty of use

Once completed, the paper forms were collected by HIHI staff, reviewed for completeness and then transcribed into a central Excel database specifically designed for this evaluation. This dual-step process (paper capture followed by digital consolidation) provided a clear audit trail and ensured that all data were stored in a format suitable for quantitative and qualitative analysis.

Across the two-month pilot period, over 300 individual scan records were collected and entered into the Excel dataset. The resulting database contained a balanced mix of both sachet and Ecco Spray scans, allowing for robust comparison across sustainability, workflow and usability metrics. An example of the paper data collection form is included in Appendix A for reference.

Analysis of Pilot

Quantitative Results

During the pilot, 165 bladder scans were completed in the control phase and 151 scans during the Ecco Spray phase. While the scan numbers were not matched exactly, the difference was small and reflects normal variation in clinical activity.

Key metrics after data cleaning and standardisation are set out below.

Gel Usage

Average gel use per scan (Figure 1)

- Sachet: **4.9 ml**
- Ecco Spray: **0.24 ml**
- → Approx. **84% reduction** in gel volume per scan.

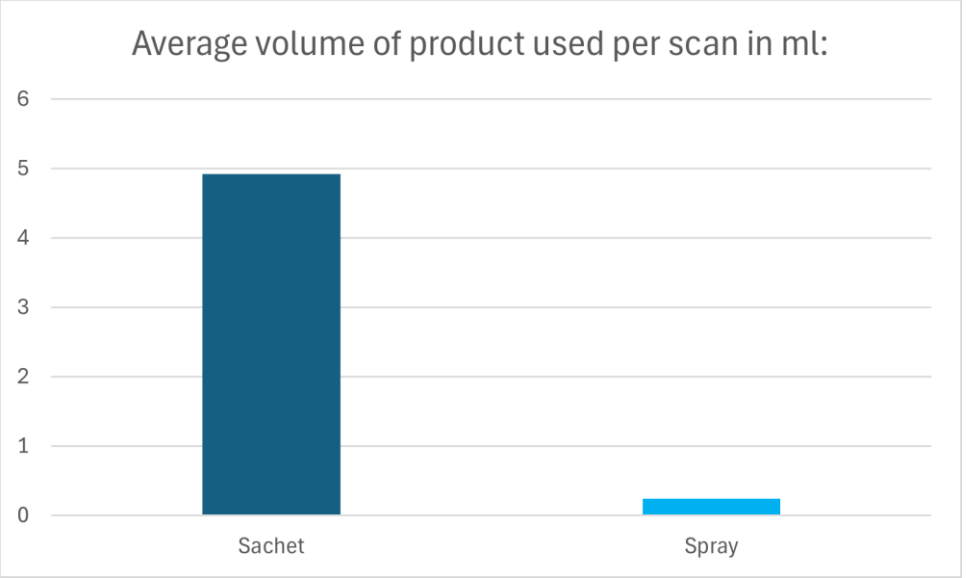

Figure 1: Gel Volume per Scan

Scan Time

Average scan time (Figure 2)

- Sachet: **2 minutes, 37 seconds**
- Ecco Spray: **2 minutes, 43 seconds**
- → Essentially **no difference in procedure duration**.

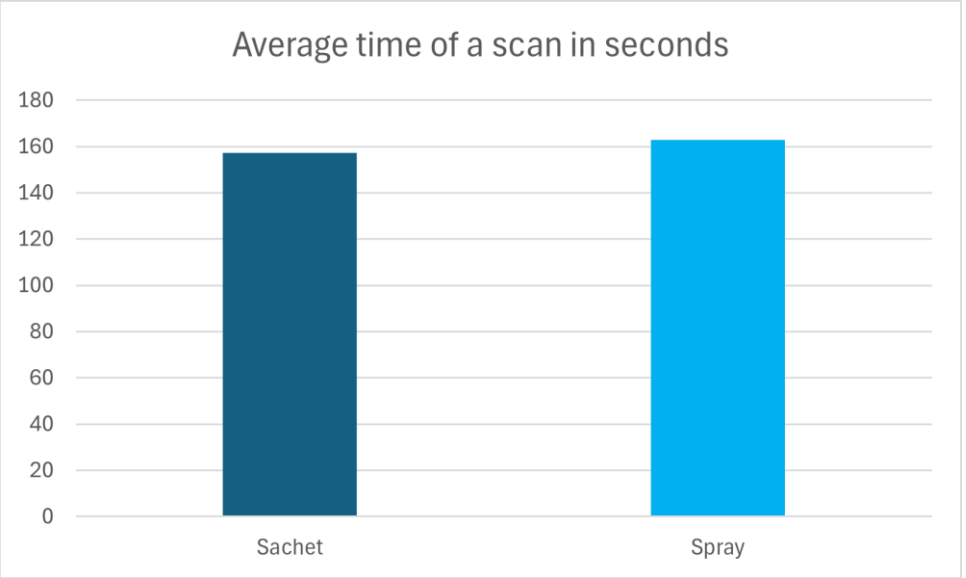

Figure 2: Average Scan Time

Paper Towel Usage

Average paper towel use per scan (Figure 3)

- Sachet: **4.7 towels**
- Ecco Spray: **0 towels**
- → **100% reduction in paper towel use** for gel control.

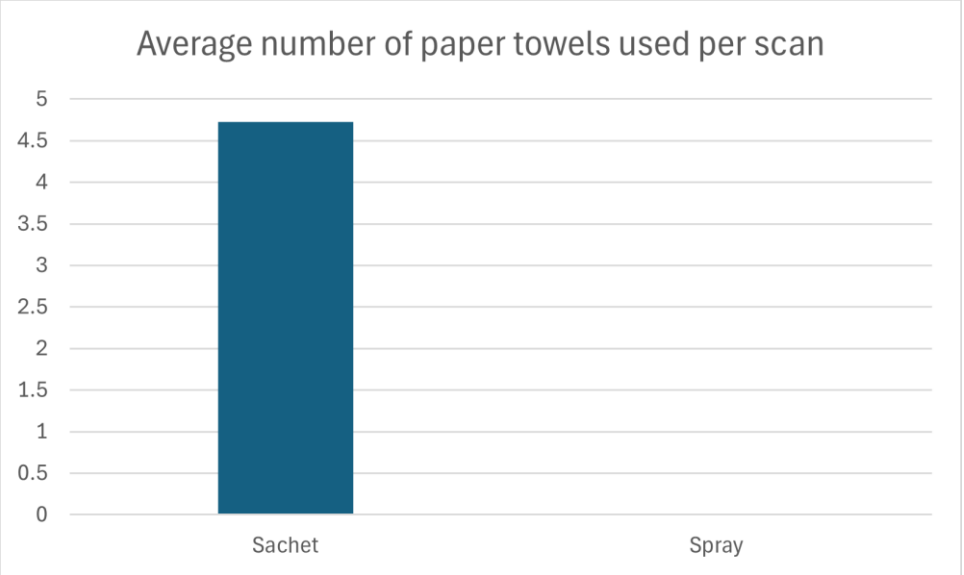

Figure 3: Paper Towel Use

Ease of Use

Difficulty of positioning the probe (Figure 4)

- Both methods were rated between **Easy** and **Neutral** on average.
- Occasional "Difficult" ratings were mainly related to patient factors (e.g. body habitus, surgical scars) rather than the gel method itself.

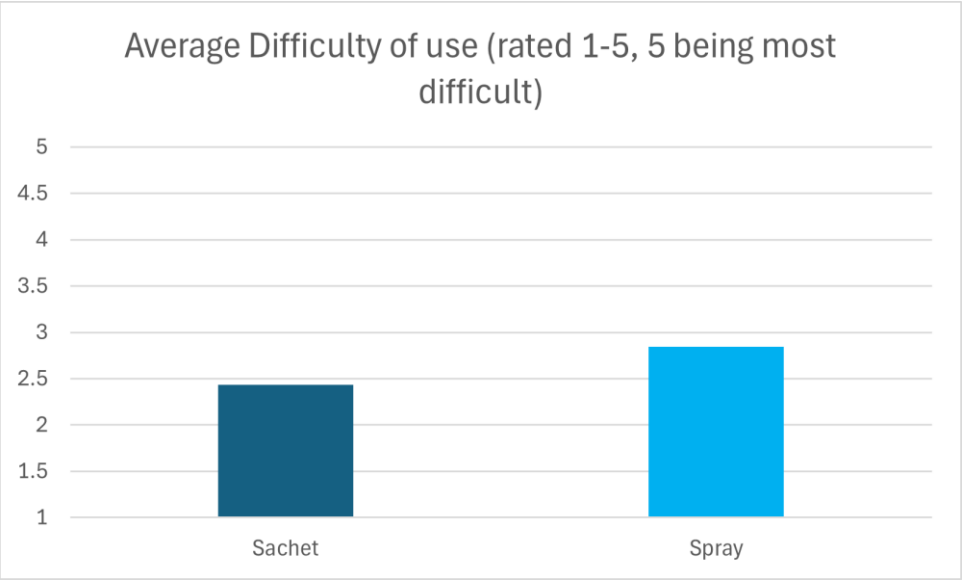

Figure 4: Difficulty-of-Use Rating

Qualitative Findings

Staff comments provided important context. Themes included:

- **Reduced mess**: less gel on equipment and surroundings
- **Reduced prep/cleanup**: fewer steps before and after the scan
- **Sachet-related frustration removed**: no more tearing sachets while gloved
- **Early learning curve**: some staff needed a few scans to judge the right number of sprays
- **Probe control**: some reported improved control once comfortable with the spray

Overall, qualitative data supported the quantitative findings and reinforced that Ecco Spray integrated well into day-to-day practice.

Impact of Ecco Spray on Patients / Users

- No change in diagnostic quality reported.
- No complaints or adverse experiences linked to the use of Ecco Spray.
- Patients benefitted from **less gel residue** and less need to be wiped down after the scan.
- The shorter clean-up also contributed to a smoother, less disruptive experience.

Impact of Ecco Spray on Health Economics

While a full health economic model was not built, the following implications are clear:

- **Reduced consumables**:
  - Fewer sachets purchased
  - No paper towels for gel clean-up in Ecco Spray scans
  - Less gel wasted
- **Reduced clinical waste**:
  - Lower volume of packaging and contaminated paper

These changes are likely to translate into:

- Lower recurrent costs for supplies
- Lower waste disposal costs
- Better value over time in high-throughput areas

Further detailed cost analysis could be pursued if Ecco Spray is implemented more widely.

Impact of Ecco Spray on Work Practices

- Staff reported that Ecco Spray simplified preparation: no more searching for sachets or handling packaging.
- Clean-up was faster, with less gel on couch, patient and surroundings.
- Work surfaces were easier to keep clean and dry.
- The procedure felt more controlled and predictable once staff were familiar with the spray technique.
- Importantly, no additional burden was introduced; if anything, there were small efficiency gains.

Dissemination

The findings of this pilot will be disseminated across multiple clinical, organisational and sustainability-focused channels to ensure that the insights and environmental benefits are shared widely. The results will be presented to the participating urology team and hospital management, providing a clear understanding of the operational and sustainability impact within their own service. In addition, the outcomes will be shared within HIHI networks, including innovation, quality improvement, and sustainability working groups, where the project can inform ongoing evaluations of environmentally conscious healthcare technologies.

As a winner of the HIHI, HSE ICGP GreenTech in Health Call 2025, this report is shared with call partners to assess for potential scale, supporting national efforts to reduce single-use materials within clinical practice. The learning from this pilot is very relevant to other hospital departments using point-of-care ultrasound (POCUS), such as emergency medicine, cardiology, and general medicine; therefore, the findings may be circulated more broadly across clinical specialties where ultrasound scanning is routinely performed.

A poster summarising the key sustainability outcomes, including reductions in gel, sachet waste and paper towel use, will be developed collaboratively with the Urology team. This will support local awareness-raising and provide a visual communication tool suitable for display within the department or presentation at QI, sustainability or clinical education forums.

As with all HIHI-supported pilots, the project may also be included as a case example in HIHI annual reporting, national innovation showcases, or sustainability communications, helping to highlight practical, real-world examples of low-disruption, high-impact environmental improvements within clinical care.

Conclusion

The findings of this HIHI-supported pilot provide clear and compelling evidence that Ecco Spray offers a practical, clinically sound and environmentally impactful alternative to traditional 5 ml ultrasound gel sachets in bladder scanning. Across more than 300 real-world scans, Ecco Spray demonstrated its ability to deliver equivalent diagnostic performance while significantly reducing consumable use and eliminating multiple sources of single-use waste. Importantly, the product integrated seamlessly into the workflow of a busy outpatient urology service, requiring no changes to clinical pathways, no additional training burden and no adjustment to patient care.

The Ecco Spray pilot demonstrates that sustainable clinical innovation can deliver measurable value without disrupting care. Patient comfort and scan quality were fully maintained, while post-scan

experience improved due to reduced gel residue and less wiping. For healthcare staff, the shift required no workflow changes, yet delivered meaningful efficiency gains through faster preparation, cleaner application, and reduced time spent managing waste. Material savings were substantial: per-scan costs fell by over 85%, eliminating both plastic sachets and paper towels while reducing clinical waste at source. Although the €461 annual saving reflects just one outpatient service, the scale of ultrasound activity across Ireland—estimated at up to 500,000 scans per year—highlights the transformative system-wide potential of replacing high-volume single-use consumables with validated alternatives. With a 95% reduction in product volume, complete removal of sachets, and full elimination of paper towels in participating scans, Ecco Spray delivers an immediately scalable pathway aligned with the HSE's climate, waste-reduction and circular-economy goals.

This pilot confirms that clinically acceptable, operationally seamless and environmentally impactful innovations can integrate smoothly into care pathways, delivering benefits for patients, staff, budgets and the planet.

Recommendations

Following completion of this pilot, HIHI recommends the following actions:

- **Scale within high-volume ultrasound environments:** Emergency departments, urology clinics, maternity services, surgical wards and community nursing teams conduct the majority of PoCUS scans. These settings should be prioritised for phased roll-out to maximise waste and cost reductions.
- **Integrate Ecco Spray into sustainability-led procurement:** Given the elimination of single-use plastics and paper towels, Ecco Spray should be identified as a preferred sustainable alternative within Green Procurement pathways.
- **Conduct hospital-wide cost and waste modelling:** Using the proven €0.24 saving per scan, hospitals can estimate potential annual savings based on their scan volumes. Even modest adoption across multiple departments could yield several thousand euro per year in consumable and waste-management savings.
- **Enable local implementation through Regional Health Authority (RHA) green leads**: Sharing this data within RHAs can accelerate uptake on significant, undisruptive, waste impact measure.
- **Continue monitoring patient and clinician experience:** Maintain short-cycle feedback loops during broader rollout to ensure patient comfort, MDT confidence and workflow efficiency remain consistently high.

Client testimonial:

"Much easier to use and more efficient than conventional gel." Marie O'Loughlin CNM2 UHG

"Simpler, cleaner and easier to manage in a busy clinic." Therese Kelly ANP UHG

Appendix A – Data Sheet

Sustainable Healthcare Innovation:

Staff Feedback on Bladder Scanning Solutions

Data analysis:

- ☐ **Bladder Scan Gel Sachets**
- ☐ **Bladder Scan Spray**

Date:

	5gm Gel Sachet	Ecco Spray
No. of scans		
Paper Towels Y/N		
No. of Towels		
Number of Sachets/Sprays		
Number on Labelled Bottle		
Scan time		

How would you rate positioning the bladder scan probe?

- ☐ **Very Difficult**
- ☐ **Difficult**
- ☐ **Neutral**
- ☐ **Easy**
- ☐ **Very easy**

Any Other Comment:

_____
_____
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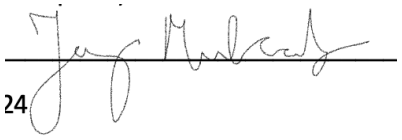
Signature Page

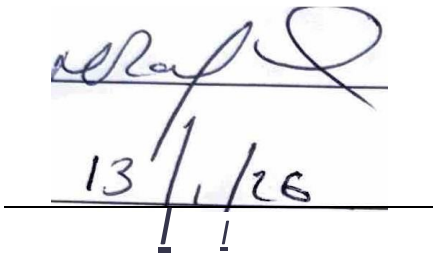
SIGNED for and on behalf of **HEALTH INNOVATION HUB IRELAND**

By: 

Date: ____14.01.26_____

Name: Dr Tanya Mulcahy
Title: Director, Health Innovation Hub Ireland

SIGNED for and on behalf of **University Hospital Galway**

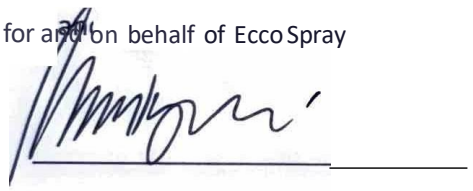
By: 

Date: 13-01-2026

Name: Marie O'Loughlin

Title:CNM

SIGNED for and on behalf of Ecco Spray

By: 

Date: 10-01-2026

Name: Will Hogan

Title: CEO