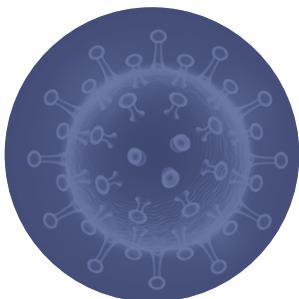




An tSeirbhís Náisiúnta Scagthástála
National Screening Service

Year End Report 2021

National Screening Service



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Message from the CEO, National Screening Service



Fiona Murphy
CEO, National Screening Service

Population screening programmes are a key part of any country's strategy for improving the health of its population. They bring a responsibility to ensure that there are demonstrable benefits from the programme, and that achieving those benefits is the right way to use the public money invested in it.

This means they must balance the benefits the programme delivers to the health of the population, against the potential individual harms that people taking up the offer of screening might experience.

Unfortunately, the COVID-19 pandemic added another important potential harm for us to consider – that of bringing healthy people into an environment where they could be at high risk of contracting or spreading a dangerous disease.

In 2021, as the third wave of COVID-19 took hold, we continued to uphold our duty to minimise this potential harm when screening healthy people. COVID-19 placed many restrictions on our operations, and these restrictions were added to with the cyber attack on the HSE in May. Despite this, each of our programmes maximised screening capacity in line with public health and government guidelines. We are grateful to all of our screening partners who enabled us to achieve this.

THE NSS IN 2021

We used our additional funding to increase sustainable capacity

We worked hard to restart as many of our participants as possible on their screening journeys

Over the course of the year our programmes worked hard to restart as many of our participants as possible on their individual screening journeys. And while we screened more people in 2021 than we anticipated, we have not lost focus of the fact that some of our programmes are up to a year behind in screening.

Our funding request for 2021 was generously supported by the Department of Health and the HSE, and during the year we used these funds to increase sustainable capacity. Despite global recruitment challenges in specific areas of healthcare, we also actively sought to recruit staff across the four screening programmes.

Over the past year we have been asked to define the effect of the pandemic on cancer diagnosis and prognosis, in the future. We know that screening accounts for 5% of all cancers detected in Ireland every year, so delays in screening will have a small but defined impact on detection rates. We have begun our own research in this area. In the case of BreastCheck, for example, we are hopeful that our work treating high-risk women with symptoms of breast cancer during the pandemic will counter any effect from the reduction in the number of well women we screened during that period.

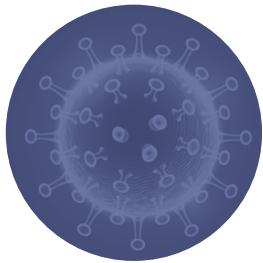
There was good news to tell about each of our programmes in 2021. In BreastCheck, three new mobile units were commissioned. In CervicalCheck, we saw a 25% increase on our estimated screening sample volumes in the first six months of the year. We ended the year 14% ahead of our target number of screening tests taken overall. CervicalCheck started 2021 up to date on screening invitations and caught up on sending all other reminder invitations. Diabetic RetinaScreen caught up on all invitations by the end of the year. Meanwhile, BowelScreen has opened a new unit in Waterford and is operating in each of its 14 endoscopy units.

Our communication campaigns in 2021 successfully increased awareness of screening. We also provided people with information on what they can do to reduce their personal risk of the disease being screened for, on symptom awareness, and how to aid early detection.

Our aim of ‘building a better screening service for all’ has informed our work in 2021. We enter a new year excited to continue our work with the public and our participants to inform our planning and delivery of services, strengthening our governance, improving our information resources, and enhancing our quality assurance processes.



COVID-19



All National Screening Service programmes were operational in 2021; however, like many areas of healthcare, their capacity was affected by COVID-19. Our priority was to deliver screening safely for both participants and staff. Communication with participants and stakeholders was central to managing the safe delivery of screening services. Information was provided through our programme websites, information line, and social and digital media platforms.

Each screening service agreed screening targets for 2021; however, these targets were revised by BreastCheck, BowelScreen and Diabetic RetinaScreen following the impact from the third wave of COVID-19 infections. The revised targets take account of the continued effect of this third wave and subsequent Government restrictions.

Continued response to COVID-19

The third wave of COVID-19 caused unprecedented levels of the virus within our community at the beginning of 2021. **BreastCheck** temporarily delayed new invitations for screening.

CervicalCheck worked closely with general practice and community clinics to ensure screening was delivered safely within available capacity.

BowelScreen worked with its colonoscopy providers, matching screening invitations to capacity. **Diabetic RetinaScreen** matched invites to capacity and worked with the treatment hospitals to ensure urgent patients were prioritised for follow-up treatment.

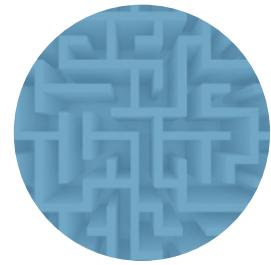
As we ended 2021, COVID-19 infection rates were again rising rapidly and general practice was engaged in rolling out the booster vaccination efforts. Nonetheless, all programmes maintained screening to year-end. Throughout the year we successfully achieved the maximum invitation rate compatible with a safe follow-up assessment, and our treatment capacity within the health service.

HSE ransomware attack



The HSE was the target of an ICT cyber-attack in May. While the NSS was not directly impacted, it caused a disruption to our interfaces with the wider HSE systems.

Our ICT department worked diligently to identify risk areas within the system and ensured ICT security. This enabled the NSS to reconnect to HSE services as they became available. The NSS programmes and ICT teams continued to manage connectivity issues associated with the attack until year-end.



Challenges

BreastCheck lost a year of screening time due to COVID-19 restrictions in 2020 and 2021. Unfortunately, this means appointments are delayed by up to a year. For a period of time, Ireland will be more in line with England, which screens women every three years. Women who are due their first screening appointment between the ages of 50 and 52 may not be invited until they are 53.

CervicalCheck saw an unprecedented rise in the number of people attending for screening in the first half of 2021. The challenge for the programme was managing the increase in capacity within primary care and laboratories while maintaining COVID-19 infection control measures. By October participation was closer to expected levels. The cyber-attack on the HSE caused some colposcopy clinics to operate with reduced capacity. In December, the Coombe Women and Infants University Hospital experienced an additional cyber-attack which impacted the processing of screening samples at that site. CervicalCheck actively managed the redirection of screening samples.

BowelScreen operated at reduced capacity due to COVID-19. The programme matched number of invites issued to available hospital capacity. This means it has taken longer to invite everyone who was due their screening appointment in 2020 and 2021. The programme has worked hard to restart their participants' screening journeys throughout the year; however, the programme is running a year behind due to the impact of ongoing capacity restrictions from COVID-19, and the cyber-attack on the HSE.

Diabetic RetinaScreen began 2021 with delays to screening related to the impact of COVID-19. The programme had to extend timelines for routine referrals and advised participants of the appointment delays or rescheduling.

Recruitment: recruiting clinical staff such as radiographers, medical scientists and consultant radiologists is challenging for screening. BreastCheck is actively recruiting new radiography and radiology staff. However, clinical staff retirements, coupled with a global shortage of radiographers and radiologists, has made recruitment more difficult.

HSE cyber-attack: a small number of external systems have been severely affected by the May cyber-attack. Our ICT team and external IT data system teams are continuing to seek to re-establish connectivity.

Communications: in a crowded health messaging space, we sought to ensure all our stakeholders are informed and aware of when people can expect their next screening test, symptom awareness, and how to minimise personal risks. We have used our stakeholder network, along with our websites, digital and social media presence, and media outreach to ensure the population stay informed about screening during COVID-19.



Operational plan

The NSS Operational Plan for 2021 set out our high-level aims for this year. It encompassed both strategic and operational objectives to achieve our interim goals of: Trust, Involvement and Governance.

Included within the plan were 79 initiatives across our four screening programmes and nine departments. Initiatives included short-term, medium-term and multi-year developments. By the end of 2021 we had completed 36 initiatives, with 37 continuing to deliver against expected timelines. A small number of projects which were not started due to various restrictions are prioritised to begin in quarter 1, 2022.

While our strong focus in 2021 was service provision during COVID-19, scoping work on an NSS Strategic Plan also began this year. The plan will inform the direction of the NSS for the next three to five years.

Highlights of progress made within some of our larger multi-year projects

National Cancer Screening Laboratory

The National Cancer Screening Laboratory (NCSL) is developing a new bespoke laboratory designed for use as a national ‘Centre of Excellence’ for cervical screening. This year saw significant progress being made on the construction of the laboratory. Building works began on the campus of the Coombe Women & Infants University Hospital in Dublin in January 2021. The new laboratory is due to be operational in quarter 3 2022.

The new laboratory is designed to become the principal provider of cervical screening laboratory services for the NSS. Workforce capacity is a key limiting factor for full establishment of the laboratory. It is anticipated that this will take a number of years to address.

BreastCheck CRIS

BreastCheck CRIS (Client & Radiology Information Management System) is a programme-wide IT solution capable of supporting screening participants through a range of clinical, operational and management processes. The system will replace BreastCheck’s original IT software, which is now over 20 years old. A winning tender has been identified and contracts were signed in December. It is expected that implementation of the new system will begin in 2022.

Interval cancer project

In October 2020, the HSE welcomed the publication of the [Expert Reference Groups \(ERG\) Interval Cancer Reports](#). These reports were commissioned as an outcome of the Scally Review into Cervical Screening Services in Ireland (2018). An Interval Cancer (IC) project was initiated following the publication of the reports, encompassing five working groups. The work of all groups is governed by an Interval Cancer Steering Group. A patient and public partnership engagement process is embedded throughout this project.

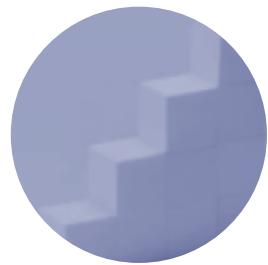
Progress to date is as follows:

- The CervicalCheck Working Group is progressing the design of patient-requested reviews and disclosure processes.
- The BowelScreen Group has developed a system for recording post-colonoscopy colorectal cancer (PCCRC), and agreed a working definition for a PCCRC in line with international evidence.

- The BreastCheck Group has focused on strengthening existing processes for patient-requested reviews. This progress will continue in tandem with the implementation of a review process framework.
- The Communications Group has conducted a three-stage research project to support future communications work to build the public's trust and confidence in the screening programmes. The research findings are informing our communications and programme-wide work.
- The Legal Framework Group continues to appraise the legal, screening, economic and patient perspectives on various elements of the ERG recommendations. Four research projects have been commissioned to provide an evidence base to inform the development of recommendations around the conduct of, and participation in, screening.

You can read the end of year one progress report in full [here](#).





Our achievements

BreastCheck

- Commissioned three additional mobile units, one of which became operational in October. Two more mobiles are due to be delivered in January and February 2022
- Embarked on a large-scale advertising campaign to maximise appointment uptake, in tandem with its new text message appointment system
- Focused communications on prevention and early detection, whilst informing women that appointments are delayed by up to a year due to COVID-19
- Maintained services following the cyber-attack
- Screening participation exceeded expected levels by 22.6% (based on revised targets)
- Increased capacity to 80% of pre-COVID capacity levels.

CervicalCheck

- Embarked on a large-scale, multi-platform information campaign
- Screening participation surpassed all expectations in the first six months of the year; meaning the programme was 14% ahead of target by year-end
- A quality improvement (QI) process has continued in many areas across the programme with 33 quality improvement and strategic initiatives being implemented over the next three years
- Launched the results of its LGBT+ Cervical Screening Study in September and began to implement its recommendations. You can read about the study [here](#).

BowelScreen

- Embarked on a media campaign as part of Bowel Cancer Awareness Month which resulted in 47,000 visits to the BowelScreen website during April. Screening participation exceeded expectations during April and May
- Participation in BowelScreen to date has exceeded expected levels by 4.6% (based on revised targets)
- Enhanced delivery of the full screening pathway by opening a new colonoscopy service in University Hospital Waterford
- Two colonoscopy units agreed increases in capacity, offering improved access for participants.

Diabetic RetinaScreen

- Issued invitation and reminder letters as individuals were due for screening
- The programme has achieved a reduction in the number of times participants with the lowest risk of progression of retinopathy will be screened, by extending the screening interval to two years
- Improved capacity for newly diagnosed patients and those who have early retinal changes
- Moved to trial a new pathway to refer routine digital screening patients to community-based digital surveillance screening.

Staff development

We value our staff and teams. We recognise that our staff are our biggest resource and value their dedication to delivering safe, quality care to our participants. We are committed to creating an environment where our staff feel valued.

NSS and Corporate induction programmes

- COVID-19 has changed the way many staff and teams function on a daily basis
- Most staff are working from home and on-going restrictions make the provision of an effective on-boarding process challenging
- To support the NSS interim operational goals of governance and involvement, the HR team rolled out a virtual e-induction programme for new starters in the NSS
- The NSS induction was introduced on a pilot basis in April and encompasses two sessions. The programme is now embedded as part of the NSS onboarding process for staff.

Academic Study Sponsorship Scheme

- Our HR department established the Academic Study Sponsorship scheme in 2018 to provide funding support for staff to undertake third level academic study to support their roles and career progression within the NSS
- The scheme is open to staff where their course of study enhances the level and depth of educational qualifications relevant to their role, and their career development
- During 2020-2021, 19 staff members have accessed the scheme, in areas of postgraduate study such as: Technology Enhanced Learning, HR Strategy & Practice, Leadership & Management, and Innovation.

NSS Recruitment Summary 2021

- Recruiting skilled staff remained challenging across many sectors within the NSS
- This year 93 permanent and five temporary posts were filled in the NSS
- This was the highest number of posts filled in any year since the establishment of the NSS in 2010
- Twenty-one posts were filled by NSS staff, creating further promotional opportunities nationwide to enhance professional development.



An equitable service



The NSS aims to address inequitable access to, or experience of, screening. We work with communities to enable greater access to screening programmes. In 2021 the NSS undertook 22 projects under the umbrella of equity; a sample of these are outlined here. All projects which fall under equity are aimed at increasing or supporting participant access to services and provision of improved information in different formats. You can find more detailed information on this on-going work [here](#).

LGBT+ cervical screening research

The NSS Public Health team completed a study in partnership with the LINC support group in Cork. The study examined the knowledge, attitudes, participation and experiences of lesbian and bisexual women, trans men, non-binary and intersex people with a cervix, in cervical screening in Ireland. Almost 450 LGBT+ people took part in the study which found a 14% difference in cervical screening participation between the LGBT+ community and the wider population. This study was published in September and implementation of its recommendations began and will continue in 2022.

CervicalCheck translated information

NSS Communications worked with Translate Ireland to produce multilingual video messages for migrants on cervical screening. These video messages are presented by a variety of healthcare professionals in Ireland who come from another country originally. We are continuing this work across our programmes in 2022.

NSS Patient and Public Partnership (PPP) Strategy

The aim of the NSS PPP Strategy is to:

- Empower patients and the public to play a meaningful and active role in the NSS
- Embed partnership working across the NSS
- Strengthen accountability, assurance and learning

Throughout 2021, work has progressed in coordinating the implementation of the PPP strategy and developing a robust PPP function within the NSS.



Our research development

The NSS Programme Evaluation Unit's (PEU) core work is data provision, analysis and interpretation for the four screening programmes, and for key internal and external stakeholders.

During 2021, PEU published nine peer-reviewed articles, and presented research at 12 international and national scientific conferences. Two of PEU's peer-reviewed articles published in 2021 are: 'Correlation of Faecal Immunochemical Testing levels with pathology results in a national colorectal cancer screening program'; and 'Factors associated with nonattendance in the Irish national diabetic retinopathy screening programme'.

Communications, inclusion and trust



The NSS communications team has focused on building trust this year. They have formed a new joint working group with Public Health. Together they have worked to embed the drivers of trust – intent, respect, inclusion, integrity, competence, openness and fairness – in NSS communications.

Information hub

The Communications and Public Health Departments are working together to enhance how communications content is developed for and communicated to NSS audiences. The Hub is using evidence-based, standardised approaches to develop patient-facing information. It is utilising stakeholder and subject matter expertise, user testing and behavioural insights in its processes. This work is assisting the NSS as it implements the recommendations in the 2020 Expert Reference Group reports on interval cancer. It is informing the ongoing response to [Dr Gabriel Scally's Scoping Inquiry into the CervicalCheck Screening Programme](#) and the NSS Public Patient Participation strategy.

Stakeholder strategy

The communications team have continued to build a resilient trust relationship between the NSS and our stakeholders, through regular stakeholder updates and briefings on important issues. The team have been proactive in communicating issues as they arise, acting swiftly to provide detailed information as required by our stakeholders.

Campaigns

We have run large-scale communication campaigns, informing the public about our services, and about screening in a COVID-19 environment. The public response to the CervicalCheck campaign was a major driver in bringing cervical screening uptake figures back on track this year, despite the impact of the pandemic.

National survey

The NSS has sought to identify and explore peoples' perceptions of screening services in Ireland, and find out what drives and inhibits them to attend screening. Through a national survey of 2,000 people we found that overall, screening is seen as an important service in which people intend to participate. The survey has guided us towards the key areas where there is more work to be done in communicating about screening. Implementing our research recommendations will be our focus in 2022.



What our participants told us



CervicalCheck

"As always I've recently received my CervicalCheck reminder letter. I just wanted to say thank you. I also recently found out that I'll be having a full hysterectomy to stop the cancer found... I wanted to thank you for all your work in the screening programme. Someone said to me once she didn't know why I went for cervical screening as I was single but look, it turns out I have [cervical] cancer despite being single. But all of your team save so many of us. Thank you, particularly this year when your work lives have been as unimaginable as our home lives now look. You are appreciated more than you know."

Diabetic RetinaScreen

"[My screener] had a natural balance between genuine friendliness and professionalism. She listened carefully to everything I said and explained every aspect of retinopathy to me, which allayed any fear I had about background diabetic retinopathy. In consideration to an adverse effect I experienced from the eye drops in 2018 she tried and succeeded to record the images without the need for drops. I felt completely at ease and confident knowing that I was receiving the best possible treatment."

BowelScreen

"I would like to extend my sincere thank you to everyone I met on my two visits to Roscommon Hospital Endoscopy Unit. From the referral pathway to day admission I was so taken at the kindness and professionalism that I encountered on my journey. It was reassuring in this strange COVID world to meet staff who were so pleasant and who took pride in their work and delivered exceptional patient-centred care. From the phone calls for pre-assessment to check in ... the check-in nurse was very friendly which helped alleviate my anxiety. The staff in the scope room were friendly and professional and treated me with dignity at all times."

BreastCheck

"Thank you so much for all your care and attention when I attended my mammogram and biopsy last week. It was a very worrying time for me and each and every one of you handled my case with such care and empathy. You must know that it makes such a difference. Your kindness is truly appreciated. I must make special mention of the radiographer who looked after me when I was having my biopsy. She held my hand and offered such comfort at a moment when I was quite frightened. You have no idea how supporting and caring this is at a time when I needed it."



Information technology

This has been a challenging year for IT within the health service. Our Information Communication Technology (ICT) team achieved much in supporting all programmes to deliver population screening services.

ICT maintained all data and ICT systems above 99% availability despite the challenges of COVID-19 and the cyber-attack. They provided a large-scale equipment roll-out, supported the screening programmes to enhance their data systems to facilitate improvements to screening delivery. They updated the data server which stabilised IT systems. The team also supported the NSS's ICT needs as we adhered to the Government directive to work from home where possible.

Governance



Ensuring robust governance continues to be a key focus of the NSS and is one of our three interim operational goals for 2021. Many departments have successfully implemented initiatives to help strengthen our governance structures.

- Our Quality, Safety and Risk (QSR) department is in the final stage of a project to integrate a quality management information system which has multiple modules, including staff training modules. They have provided guidance and support in the management and reporting of incidents and risks. They are working on streamlining processes for information governance, including the management of data breaches. A project to improve awareness across the NSS of core areas of HSE internal controls is under way.

- Our Public Health department with our QSR department developed a Quality Assurance Framework for implementation.
- An Information Governance steering committee and a working group were established this year with the aim of achieving full compliance with HIQA's 'Information management standards for national health and social care data collections' and relevant legalisation across the organisation.
- Patient representatives were involved in priority projects, such as the Interval Cancer Expert Review, and Quality and Risk Committee, as well as supporting the HIQA international review of ethics frameworks for screening.
- Our Client Services Department's records management project to review data held by all four screening programmes and all departments within the NSS was completed. The output from this project was the development of the 'Policy and Procedure for Records Retention and Disposal Management' which was approved by our Information Governance Steering Group in November 2021.

The year ahead



The HSE National Service Plan 2022 summarises the priority areas for the National Screening Service in the year ahead. At NSS level, these priorities include continuing the implementation of the recommendations from the interval cancer audits and building on the progress made during 2021; implementing strengthened organisational and governance arrangements including the implementation of the PPP plan; and enhancing client services to ensure patients and families have access to records for all screening programmes by developing a dedicated client management system.



At programme level some of the priority areas for action include:

CervicalCheck

- The ongoing development of the National Cervical Screening Laboratory and continuing support for colposcopy services
- Continued work on the quality improvement process with particular emphasis on improving programme data and metrics; continued development of education and training materials; defining and implementing specific communication campaigns
- Ongoing engagement with participants and the public regarding the benefits and limitations of cervical cancer screening.

BreastCheck

- Open two additional mobile BreastCheck units to increase capacity and access
- Recruitment of clinical staff to enable the increase in capacity and access to screening
- Continue to implement a new client and radiology information management system.

BowelScreen

- Maximise uptake through targeted communication and promotion amongst eligible men and women aged 60-69 years
- Continue to review and increase capacity within BowelScreen units which provide colonoscopies
- Increase the number of BowelScreen units which provide colonoscopies.

Diabetic RetinaScreen

- Support the treatment clinics to reduce delays further which have been exacerbated by the pandemic and the cyber-attack
- Continue with the pilot programme to extend the scope of the digital surveillance screening programme and increase the cohort suitable for this pathway
- Further develop the new tender for screening service provision in early 2022 with the aim to award the tender in quarter 3 2022
- Maximise uptake through targeted communication and promotion amongst the eligible population aged 12 years and over.

Cervical cancer elimination

CervicalCheck marked global Cervical Cancer Elimination Day of action on 17 November 2021. The NSS in partnership with key stakeholders highlighted a joint project which will bring Ireland closer to realising the aim of eliminating cervical cancer.

From January 2022, the NSS, National Immunisation Office (NIO); National Cancer Control Programme (NCCP); and National Cancer Registry of Ireland (NCRI) will begin working with academics in Australia to develop a model to work towards cervical cancer elimination in Ireland.

This model will give the HSE pointers on how to work towards cervical cancer elimination including; improving uptake of cervical screening and HPV vaccination. With the implementation of the schools HPV vaccination programme in 2010, and the HPV primary screening programme in 2020, Ireland is in a great position to aim for elimination.

Patient & Public Partnership (PPP) strategy

The NSS will publish a mid-way progress report on the implementation of the PPP strategy in 2022, and work will continue to embed the PPP within NSS. Patient experience surveys will be central to the PPP project.

Information governance

An information governance manager will be appointed to support staff, management and services to implement the quality improvement plan throughout 2022.

Your Service Your Say

Roll out of the HSE policy for managing service user feedback across the NSS.

Information system redevelopment

To facilitate capturing all service user feedback with a view to identifying organisational improvement opportunities.





Conclusion

It will take some years to fully assess the ongoing impact of COVID-19 on our health services. However, in 2021 our screening programmes worked hard to increase sustainable capacity, with two programmes now returned to pre-pandemic screening levels.

We are grateful to the Department of Health and the wider HSE for supporting our funding request for 2021, which enabled us to restart a greater number of our participants on their personal screening journeys. We are grateful also to our screening partners and our participants for continuing to prioritise screening at this time.

Moving forward, we will continue to build on the progress made throughout COVID-19, with a focus on further increasing sustainable capacity in 2022.

We aim to meet the challenges of information governance, ensuring implementation of our improvement plan and embedding and supporting new information governance structures.

We look forward to the outcome of the National Screening Advisory Committee's public consultation process on changes to existing/new screening programmes.

And we are excited to begin the development of our NSS Strategic Plan, while continuing to focus on transparent communication, incorporating stakeholder feedback, and embedding true partnership in the continued delivery of screening services.





An tSeirbhís Náisiúnta Scagthástála
National Screening Service

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