



The Pilot Online STI Testing Service in Ireland, 2021: Evaluation Report

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List of abbreviations

CTNG	<i>Chlamydia trachomatis</i> (CT) and <i>Neisseria gonorrhoeae</i> (NG)
EIA	enzyme immunoassay
EIS	early infectious syphilis
gbMSM	gay, bisexual, and other men who have sex with men
GMS	General Medical Services
GP	General practitioner
The GUIDE Clinic	Genitourinary Medicine and Infectious Diseases Clinic, St James's Hospital, Dublin
HIV	human immunodeficiency virus
HPSC	Health Protection Surveillance Centre
HSCN	Health and Social Care Network
HSE	Health Service Executive
MMUH	Mater Misericordiae University Hospital, Dublin
MSW	men who have sex with women
MSWM	men who have sex with women and men
N/A	not applicable
NAAT test	nucleic acid amplification testing
NR	notification rate
PEP	post-exposure prophylaxis
PrEP	pre-exposure prophylaxis
REC	Research Ethics Committee
RPR	Rapid plasma reagin
SH:24	Sexual Health 24
SHCPP	Sexual Health and Crisis Pregnancy Programme
SIVUH	South Infirmar Victoria University Hospital, Cork
STI(s)	sexually transmitted infection(s)
SVUH	St. Vincent's University Hospital, Dublin
UPSI	unprotected sexual intercourse (condomless sex)
WSM	women who have sex with men
WSW	women who have sex with women
WSWM	women who have sex with women and men

Glossary

Online STI testing service	A service which enables users to undergo an assessment on a website and order a test kit for sexually transmitted infections which will be delivered to them by post. Users return their test kits to the laboratory by post, and then receive their results by text or phone call.
Public STI clinic	A specialist sexual health service which receives direct public funding and provides services free at the point of access.
Reactive test result	A test result where the first (usually highly sensitive) test within a testing algorithm is positive, but requires confirmation through completion of the testing algorithm.
Return rate	The proportion of STI tests which are returned out of those that have been ordered. The return rate will continue to rise over time. While most tests are returned within 3 months, it can take up to 1 year for some users to return a test kit.
Sequelae	A secondary consequence or outcome from a primary infection.
Sexual health services	A broader category of sexual health services, predominantly focused on testing and treatment, but expanded beyond the main provision of public STI clinics to include services which may be provided by non-governmental organisations (NGOs), the private sector, general practitioners (GPs), and pharmacies. These can also include talking therapies and behavioural change interventions, and may be co-delivered with contraception services.
<i>Treponema pallidum</i>	The organism that causes syphilis

Foreword

The Health Service Executive (HSE) Sexual Health and Crisis Pregnancy Programme (SHCPP) is a national policy priority programme situated within Health and Wellbeing, responsible for implementing the National Sexual Health Strategy 2015–2020. The aims of the strategy are to improve sexual health and wellbeing and to reduce negative sexual health outcomes. In order to achieve these aims, the strategy focuses on the importance of accessible services and data-informed planning

The pilot home-testing service was rolled-out based on evidence from other countries that it would increase accessibility to STI testing and add value to current service provision. This report documents the process put in place by the SHCPP team and the service provider SH:24, to pilot an online home STI testing service in Ireland, as well as provide an assessment of service-delivery from the perspective of service users and clinical service providers in the Irish context.

We are really pleased that, on the basis of the pilot service funded by the Sláintecare Integration fund in 2019, the SHCPP successfully secured funding in Budget 2022, to establish a free national home testing service on an ongoing basis.

We would like to acknowledge the hard work and dedication of our Medical Director, Professor Fiona Lyons; our Clinical Project Manager, Caroline Hurley and our Clinical Project Officer, Rachael Metrustry, who led on piloting and establishing this service in Ireland. We would like to thank the service providers SH:24, who have worked closely with the SHCPP team to make the service workable in the Irish context. We would like to thank all involved for preparing this evaluation report.

Helen Deely,

AND Health & Wellbeing,
Strategy & Research, HSE

Maeve O'Brien,

Interim Programme Lead, SHCPP,
Strategy & Research, HSE

Introduction

I am delighted to introduce this evaluation report for the 2021 pilot online sexually transmitted infection (STI) testing service. This pilot was undertaken to assess the acceptability and feasibility of online STI testing in Ireland and was commissioned by the Health Service Executive (HSE) Sexual Health and Crisis Pregnancy Programme (SHCPP), with funding from the Government of Ireland's Sláintecare Integration Fund 2019.

The SHCPP is responsible for implementing the National Sexual Health Strategy (2015–2020). A key goal of the strategy is to deliver equitable, accessible, and high quality sexual health services that are targeted and tailored to individual needs, and are available to everyone.

Previous work carried out by the SHCPP identified inequity in the population's access to public STI services, with public STI services struggling to meet service demand. Reported clinic challenges include lack of staff resources and insufficient opening hours for clinics, resulting in waiting lists and having to turn people away. Harnessing technological advances to deliver sexual health services online has been shown to improve efficiency, activity, and access, thus empowering individuals to self-manage their care and enabling them to overcome the stigma and embarrassment that often serve as barriers to engaging with sexual health services.

This pilot coincided with the world-changing COVID-19 pandemic, an event which presented Ireland in general and healthcare services in particular with unprecedented circumstances and rapidly deployed restrictions to how we live our lives and how we access and deliver healthcare. As the pandemic continued, we realised that the time was ripe to proceed with this pilot: individuals had experienced severe restrictions in accessing sexual health services, and we urgently needed to assess whether this model of service delivery for STI testing would work in Ireland.

This report clearly demonstrates that the pilot online STI testing service successfully engaged individuals potentially at risk of STIs, many of whom had never previously accessed sexual health services in a way that was acceptable to both service users and service providers alike. The pilot strongly suggests that a free online STI service in Ireland will make a significant contribution in our quest for "equitable, accessible and high quality sexual health services".

I would like to extend my sincere thanks to everyone involved in bringing this piece of work together, from the planning and delivery of the pilot, which coincided with the most challenging of times in healthcare delivery, to the completion of this evaluation report: the Pilot Steering Group and Evaluation Subgroup; the team at SH:24, in particular Justin Harbottle and Dr Paula Baraitser; my colleagues in the SHCPP, in particular Caroline Hurley, Dr Nicola O'Connell, Rachael Metrustry, and Maeve O'Brien; HSE Procurement; the Pilot Clinic sites; and those who engaged with this new way of delivering free STI testing services in Ireland. These contributions have been integral to the success of the pilot and to gathering the evidence for this evaluation report.

I am delighted that in Budget 2022 funding has been allocated to the establishment of a free, integrated, national online STI testing service in Ireland. I truly believe that this service will improve access to and capacity for STI testing. Exciting times ahead!

Professor Fiona Lyons

Medical Director/Clinical Lead, Sexual Health, HSE SHCPP

About the HSE Sexual Health and Crisis Pregnancy Programme

The Sexual Health and Crisis Pregnancy Programme is a Policy Priority Programme in HSE Health and Wellbeing, Strategy and Research, Healthcare Strategy and is responsible for implementing the National Sexual Health Strategy (2015–2020). The aims of the Strategy are to improve sexual health and well-being and to reduce negative sexual health outcomes among the Irish population. The Strategy’s vision is for “everyone in Ireland to experience positive sexual health and well-being and have access to high quality sexual health information, education, and services throughout life”.

To read the Strategy, click [here](#).



About SH:24

Sexual Health 24 (SH:24) is a not-for-profit community interest company (CIC) based in the United Kingdom (UK). The organisation provides free and confidential online sexually transmitted infection (STI) testing kits, emergency and oral contraception, and information and advice on sexual, genital, and reproductive health, fully integrated with public STI services. SH:24 follows all relevant guidelines from the International Union against Sexually Transmitted Infections, the British Association for Sexual Health and HIV, the Faculty of Sexual and Reproductive Healthcare, and the National Institute for Health and Care Excellence policies and standards.

SH:24 provides clinically led, user-centred, and evidence-based practice, and it works in over 40 regions within the UK (including Northern Ireland) and internationally in Germany, Ghana, Kenya, Nigeria and Romania. SH:24 is an accredited service in receipt of accreditation for all clinical laboratory pathways. The service is registered to provide triage, medical advice, and treatment remotely in each region that it operates in, including the Care and Quality Commission (CQC) in England (rated Outstanding) and the Regulation and Quality Improvement Authority in Northern Ireland.

SH:24 has received a number of awards from the British Medical Journal, The Guardian newspaper, and the Queen's Award for Enterprise Fund.

About the authors

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Justin has worked in sexual health for 15 years and is a Business Development Manager for Sexual Health 24 (SH:24). After completing his Master's, Justin worked in human immunodeficiency virus (HIV) prevention in the third sector, delivering frontline services and digital campaigns. At SH:24, Justin is responsible for managing STI and contraception services across 15 regions in the UK (including Northern Ireland), and he led the implementation of the Ireland online STI pilot.

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A Torm Shaw previously worked as Research Associate for SH:24 and holds a Master of Public Health from Imperial College London. They have worked in the field of public health for the past several years in research, publishing articles with a focus on HIV and sexual health in gender and sexual minorities.

Professor Fiona Lyons

Fiona is the Medical Director/Clinical Lead at the HSE Sexual Health and Crisis Pregnancy Programme, Consultant in Genitourinary Medicine at the Genitourinary Medicine and Infectious Diseases (GUIDE) Clinic, St James's Hospital, Dublin, and Clinical Professor in Genitourinary Medicine at the School of Medicine, Trinity College Dublin.

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Caroline Hurley

Caroline has a nursing background and a Master's in Public Health from the London School of Hygiene & Tropical Medicine, and has worked in the area of sexual health and HIV both at home and internationally for the past 20 years. Caroline has worked as a Project Manager in the HSE Sexual Health and Crisis Pregnancy Programme for over 6 years, predominantly working on the clinical actions of the National Sexual Health Strategy (2015-2020).

Rachael Metrustry

Rachael holds a BSc in Biomedical Science and an MSc in Public Health from the London School of Hygiene & Tropical Medicine. During her Master's degree, she specialised in sexual and reproductive health and completed a dissertation with MSI Reproductive Choices. She has worked at the HSE Sexual Health and Crisis Pregnancy Programme for 2 years.

Acknowledgements from the authors

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The authors would like to acknowledge and thank the expert guidance of the Pilot Steering Group members (listed in Appendix 1), the Evaluation Subgroup, the SHCPP, the Departments of Public Health, and all the staff from the participating public sexually transmitted infection (STI) clinics who provided invaluable support throughout the duration of the project, including:

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- Stephen O'Hare, HIV Ireland, Dublin
- Suzanne Cremin, South Infirmar Victoria University Hospital, Cork
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- Phil Downes, Department of Public Health, HSE East
- Aline Brennan, Department of Public Health, HSE South

Use of gender identity terms and how users were asked to describe sexual practices and sexual orientation

Users of the pilot online service were asked to select one of the following options to describe their gender identity:

- Female (including trans female)
- Male (including trans male)
- Non-binary
- In another way
- Prefer not to say.

Thus, data that describe the online service user population as male or female includes people who are trans male and trans female.

Users of the pilot online service were asked questions about their anatomy (penis/vagina) and the gender of their sexual partners. These responses were used to determine what tests the user was offered. Based on responses, users were then categorised as: gay, bisexual, and other men who have sex with men (gbMSM), men who have sex with women and men (MSWM), men who have sex with women (MSW), women who have sex with men (WSM), women who have sex with women (WSW), and women who have sex with women and men (WSWM). These categories were used in presenting the outcomes of the pilot.

Users were also asked to select their sexual orientation as heterosexual, bisexual, gay male, lesbian, or prefer not to say. There was also an option to select 'other', which gave users the opportunity to self-describe their sexual orientation.

In this report, we will use data from service users' answers to both questions to describe their sexual orientation, with the terms indicating which question data is referenced.

For more information, please see Chapter 6.2 and Appendix 4.

Executive summary

Introduction

A 2018 survey of sexually transmitted infections (STIs) and contraception services in Ireland showed that there is inequity in the population's access to public STI services (Sexual Health and Crisis Pregnancy Programme, 2018). Notifications of STIs have been increasing in Ireland over the past 10 years (Health Protection Surveillance Centre, 2021). Early diagnosis and treatment improves health outcomes for service users and results in fewer infected STI days in the population, reducing onward STI transmission.

Advances in technology make it possible to provide an increasing number of health services online, thus improving patient care and outcomes. Online STI testing services offer the potential to overcome barriers to users engaging with sexual health services, such as embarrassment, concerns about confidentiality, difficulty travelling to or obtaining an appointment at public STI clinics, and anxiety while waiting or test results. Online STI testing services potentially offer easy access to testing, enabling face-to-face clinics to focus their capacity on those with more complex needs.

In 2019, the Government of Ireland launched the Sláintecare Integration Fund, seeking to fund programmes focused on prevention, community care, and integration of care across all health and social care settings. The Sexual Health and Crisis Pregnancy Programme (SHCPP) successfully applied for this funding and commissioned a pilot online STI testing service for Ireland. The contract was awarded to Sexual Health 24 (SH:24), a UK-based community interest company (CIC), and commenced on 1 September 2020.

The pilot sought to establish an online STI testing platform that facilitated online ordering of STI tests by the general public; establish partnership and integration processes between the online platform and pilot public STI clinics; implement the pilot testing service in agreed project sites; and conduct an evaluation of the pilot service.

The aim of this pilot project evaluation was to assess the feasibility, impact, and acceptability of the online STI service that is integrated with public STI clinics in Ireland.

Pilot service development and delivery

The existing SH:24 service was adapted to meet the needs of the Irish pilot project, in close collaboration with the SHCPP and a Pilot Steering Group.

Dublin, Cork, and Kerry were chosen as the three counties in which the pilot would operate due to persistently high reported STI rates within the Dublin (HSE East) area, as well as a desire to assess the pilot in both urban and rural areas, and in areas with different levels of existing access to public STI clinics. Within these counties, the pilot was delivered at four sites: the Genitourinary Medicine and Infectious Diseases (GUIDE) Clinic at St James's Hospital, Dublin; Mater Misericordiae University Hospital (MMUH), Dublin; St. Vincent's University Hospital (SVUH), Dublin; and the South Infirmity Victoria University Hospital (SIVUH), Cork. Due to temporary closure of the Kerry public STI clinic in 2021, SIVUH Cork provided clinical support for results from kits ordered in Kerry.

An Irish SH:24 website was established, and the pilot service was commissioned to deliver 8,000 tests in each county. This was increased to 14,000 tests during the service delivery period, due to demand. Test kits for the public were available to order from January to May 2021.

All users were offered a human immunodeficiency virus (HIV), syphilis, chlamydia, and gonorrhoea single-site test, and gay and bisexual men who have sex with men (gbMSM) were offered HIV, syphilis, and a triple-site (first-void urine, rectal, and pharyngeal swabs) test for chlamydia and gonorrhoea, as standard,

with hepatitis B testing (if the user has not been vaccinated) and/or hepatitis C testing (if the user has not been tested for hepatitis C in the last year, or has had a recent risk for hepatitis C transmission).

SH:24 agreed on individual service user referral pathways with each of the pilot clinics. These set out how reactive STI results would be handled, and agreed service user pathways. There was one participating clinic site for users who ordered kits from Cork and Kerry. For Dublin, users were signposted to a Dublin referral webpage (<https://SH:24.ie/dublin-clinics>), which was updated regularly and gave users up-to-date information on clinic capacity to support users' access to the clinics as the COVID-19 pandemic progressed.

SH:24 staff ran pilot clinic staff training sessions via Microsoft Teams to ensure that relevant pilot clinic staff were able to use the SH:24 Administration Clinical Record System to look up patient results and risk assessments, check users' prior communication logs with SH:24 clinicians, record attendance in clinic, and record clinical outcomes.

SH:24 worked closely with the SHCPP to create a communications partner pack containing an overview of the proposed service as well as agreed promotional messages and images, to be shared with relevant Health Service Executive (HSE) and community stakeholders to inform and generate interest in the proposed service.

The evaluation of the pilot service began in June 2021 and was completed by the end of August 2021.

Methodology

The aim of the evaluation was to assess accessibility and cost to service users of accessing sexual health check-ups in Ireland, and to determine if a pilot online STI testing service, integrated with public STI clinics, is feasible; has an impact; and is acceptable to service users and clinicians, with a view to informing the roll-out of a national service.

The evaluation used a variety of methodological approaches to address the evaluation questions, including quantitative and qualitative analyses.

SH:24 conducted new analyses on routinely collected data from SH:24 service outputs on kits ordered, kits dispatched, laboratory turnaround times in the pilot areas, pilot online service user profiles, pilot online service user feedback, laboratory *Chlamydia trachomatis* and *Neisseria gonorrhoeae* (CTNG) testing in the pilot areas, and previous data collected by the SHCPP on CTNG testing in Ireland. SH:24 also conducted and completed an analysis using data from an anonymous online questionnaire promoted on social media to understand the accessibility and experience of STI testing in Ireland, as well as data from an anonymous online questionnaire targeting pilot clinic staff on their experience of the pilot service.

Findings: accessibility

An anonymous online questionnaire was completed by 398 individuals who identified themselves as being from the Republic of Ireland. The survey reached both new and regular users of STI testing services.

Of the 304 people who responded to a question as to whether they lived in a rural or urban area, 69% (209) of respondents came from urban areas and 31% (95) from rural areas.

Of the 396 people who scored how easy it was to access STI testing (1 = worst access; 5 = best access), the average score for urban areas was 3 compared to 2 in rural areas.

Of the 304 people who responded to a question about the cost of accessing STI testing, 39% said that it would cost them more than €100, 38.5% reported that it would cost them between €50 and €100, and 22.4% reported that it would cost them less than €50.

Sixty-four per cent of respondents reported that the cost of accessing STI testing was “unaffordable” or “very unaffordable”. Many of the respondents lived far from any sexual health service, with 27.3% travelling more than 30 km, and 52.6% reported that getting an STI test would take more than 2 hours.

Of the 305 people who responded to a question about where they would be most likely to access STI testing (and only being allowed to choose one option), responses suggested that users would prefer a range of testing options, and access to an online STI testing service would be a valuable additional testing option.

Of the 363 people who responded to a question about where they would most likely go for an STI test, 97% of respondents said they would use a free online service for sexual health testing if it was available to them.

A small number of individuals (29, or 7.3%) had previously used the pilot service and expressed a desire to see the service continued and expanded.

Findings: feasibility

Overall, 13,749 of 14,000 available test kits were ordered and dispatched between 5 January and 23 May 2021. There was an unprecedented demand for kit orders in the first 24 hours, with 4,911 test kits ordered (Phase 1). Following a temporary pause on new orders, the service was reopened on 29 March until the end of the pilot phase (Phase 2, 29 March to 23 May 2021). A total of 8,838 test kits were ordered and dispatched in Phase 2.

The majority of service users were aged 20–24 years (representing 43.1% of the total sample), followed by those aged 25–29 years (28.9%), and 8,933 (65%) service users were female.

The pilot sought to ensure that 100% of the tests were dispatched by the next working day. Due to an extremely high demand during the pilot’s first 24 hours, dispatch of test kits was staggered over 2 weeks, to protect clinic capacity during COVID-19 restrictions. In Phase 2, however, 100% of kits were dispatched by the next working day.

The pilot had a target test kit return rate of higher than 75%. On completion, the return rate was 67% (9,181 test kits returned by the end of August).

Clinician-confirmed user attendance at clinic upon receipt of a reactive result was high regardless of which STI reactive result a service user received, varying from 89% for service users with a hepatitis B reactive result up to 93% for service users with a chlamydia reactive result. Attendance may be underestimated, as there may have been cases where clinicians did not confirm attendance on the clinical record system.

A total of 8,064 users returned test kits by the end of May 2021, and 637 (8%) had a reactive result. This is consistent with other SH:24 services which are provided across a mixture of urban and rural settings.

Findings: impact

An estimated 42,181 CTNG tests were carried out in the first 5 months of 2019 in public STI clinics and general practices in Dublin, Cork, and Kerry, while during the 5 month pilot in 2021, 13,749 tests were dispatched from the online pilot service. Assuming that the same level of testing would have occurred in face-to-face services in 2021 had it not been for the impact of the COVID-19 pandemic, the online STI testing service added an estimated 33% to testing capacity in the pilot areas.

In Ireland, STI rates are highest amongst those younger than 30 years and in gbMSM:

- 76% of the 13,749 pilot users were aged between 17 and 29 years; and
- 17.2% of the 13,749 pilot users were gbMSM.

Of the pilot users younger than 30 years who returned an STI kit, 484 (7.8%) had a reactive result. Of the pilot users who were gbMSM and who returned an STI kit, 244 (16.2%) had a reactive result.

All users were asked about their previous history of accessing sexual health clinics as part of the STI test kit order assessment. Of all users (n=13,749) of the online service:

- 57% (7,863) had never used a sexual health clinic before; and
- 11% (1,580) had been to a sexual health clinic in the last year.

For those users of the online service who returned their test kit and responded that they had never visited a sexual health service before (4,525), an overall reactive rate of 7% was reported.

SH:24 calculated the average cost to the health service of one individual using the online STI testing service from the pilot to be €55.61, which is predicted to decrease as the service matures.

Detailed cost analyses of the pilot were not possible. Roll-out of a national online STI testing must include work to understand potential cost savings and cost-effectiveness of the intervention.

Findings: acceptability

All 13,749 users of the pilot were sent a text message asking them to complete the user feedback form. Users were able to rate the service out of five stars and provide free text comments about the service. Of the 2,528 (18.4%) who responded, 94.7% (2,395 users) gave the service five stars out of five, 4.6% (117 users) gave it 4 stars, and 0.7% (16 users) gave it three stars or less. When asked about their experiences of using the service, respondents mentioned its ease and convenience, speed and efficiency, the support and logistics provided, as well as the privacy and discretion it afforded. SH:24 contacted 15 of the 16 respondents who rated the service three stars or less, and the only significant concern cited was difficulty using the blood test.

SH:24 developed an anonymous online questionnaire to assess clinicians' (i.e. doctors' and nurses') experiences of and views on the online pilot. Seventeen people completed the questionnaire. The majority (16 of the 17 respondents) agreed that the pilot had improved their patients' care. All agreed or strongly agreed with the statement, "SH:24 has increased my patients' access to STI testing." Fifteen of the 17 respondents agreed or strongly agreed with the statement, "Patients with a positive result from SH:24 transition easily to clinics." All respondents agreed or strongly agreed with the statements, "Online testing increases patient autonomy," and "Online testing increases overall capacity for STI testing." Fifteen out of 17 respondents agreed that "Online testing frees clinic staff time for more complex care."

Conclusions

Evaluation of the pilot found it to be feasible, impactful, and acceptable to service users and providers. It served to increase STI testing capacity within the pilot counties, engaging new users and identifying STIs in groups known to be at risk of STIs. In Ireland, the introduction of an online STI testing service for asymptomatic individuals, integrated with public STI services, is likely to be part of the solution to the issues surrounding access and capacity that have been identified in public STI clinics. In addition, it is likely to engage new users to avail of STI testing, by addressing the established concerns of embarrassment, stigma, and confidentiality that can serve as barriers to STI testing within face-to-face settings.

Chapter
1

Introduction

In 2015, Ireland launched its first National Sexual Health Strategy (2015–2020), a nationally coordinated approach to reducing negative sexual health outcomes and improving the sexual health and well-being of the Irish population (Department of Health, 2015). A key focus of the strategy is that equitable, accessible, and high quality sexual health services, which are targeted and tailored to individual needs, will be available to everyone (Department of Health, 2015).

A survey of sexually transmitted infections (STIs) and contraception services in Ireland carried out in 2015/2016 showed that there is inequity in the population's access to these services (Sexual Health and Crisis Pregnancy Programme, 2018). Public STI services struggling to meet increasing demand. The roll-out of a national human immunodeficiency virus (HIV) pre-exposure prophylaxis (PrEP) programme in November 2019 further increased the demand on public STI services.

Over the past 10 years, notifications of STIs in Ireland have been increasing (Health Protection Surveillance Centre, 2021). Early diagnosis and treatment of STIs improves health outcomes for the service user and results in fewer infected STI days in the population, thereby reducing onward STI transmission.

Advances in technology make it possible to provide an increasing number of health services online, thus creating opportunities to improve patient care and outcomes. While these changes are relevant for the entire healthcare sector, for sexual health services in particular, digital technology offers solutions to some long-standing challenges.

Online STI testing services offer the potential to overcome barriers to users engaging with sexual health services, such as embarrassment, concerns about confidentiality, difficulty travelling to or obtaining an appointment at public STI clinics (which are often open during working hours only), and anxiety while waiting for test results. Against a backdrop of increased demand for STI testing and resource constraints, online STI testing services potentially offer easy access to testing, which enables clinics to focus capacity on those with more complex needs (Turner *et al.*, 2018).

In 2019, the Government of Ireland launched the Sláintecare Integration Fund, which sought submissions for projects with a focus on prevention, community care, and integration of care across all health and social care settings. Sláintecare specifically sought projects that would demonstrate partnership working, promote engagement and empowerment of citizens in caring for their own health, and encourage innovations in the shift of care to the community or provide hospital avoidance measures.

Having seen the potential gains of online STI testing services highlighted in other countries (Baraitser *et al.*, 2015; Wilson *et al.*, 2017; Turner *et al.*, 2019), and recognising the issues around capacity and accessibility identified in Ireland (Sexual Health and Crisis Pregnancy Programme, 2018), the Sexual Health and Crisis Pregnancy Programme (SHCPP) successfully applied for Sláintecare funding to pilot an online STI testing service for Ireland.

In 2019, the SHCPP commissioned a pilot online STI testing service and evaluation in Ireland, which was funded by the SHCPP and the Government of Ireland Sláintecare Integration Fund 2019. The pilot project had the following specific deliverables:

- establish an online STI testing platform that facilitates online ordering of STI tests and provides clinical governance, results management, and remote clinical support to service users
- establish partnership and integration processes between the online STI testing platform and pilot public STI clinics, including referral pathways as needed for directing those with reactive and/or positive test results into clinical services for further management
- implement the pilot online STI testing service in collaboration with the agreed pilot project sites, and
- conduct a project evaluation that provides the Health Service Executive (HSE) with robust data on the feasibility, impact, acceptability, and cost of an online STI testing service that is integrated with public STI clinics in Ireland.

Following delays in the tender procurement process in 2020, the contract was awarded to the community interest company Sexual Health 24 (SH:24), and the pilot project commenced on 1 September 2020. Development and implementation of the service took place over a 3-month mobilisation phase, which was immediately followed by the launch in January 2021.

SH:24 is a not-for-profit community interest company (CIC), based in the United Kingdom (UK) that provides free and confidential online STI testing kits, emergency and oral contraception, and information and advice on sexual, genital, and reproductive health. The service operates in an integrated way with public STI services, providing clinically led, user-centred, and evidence-based practice in over 40 regions within the UK (including Northern Ireland) and internationally in Germany, Ghana, Kenya, Nigeria and Romania.

The objectives of the pilot project were to:

- improve user access to STI testing and treatment in the pilot project areas
- increase STI testing capacity in the pilot project areas
- shift those with less complex sexual health needs out of clinics to an online service, thus reducing waiting times and more appropriately using available public STI clinic staff resources; and
- promote self-management of service users by providing online access to comprehensive sexual health information, signposting to services, and remote clinical support.

The pilot service was available to individuals aged 17 years¹ and older, with a postal address in Dublin, Cork, and Kerry. It ran between January and May 2021.

The aim of this pilot project evaluation was to assess the feasibility, impact, and acceptability of the online STI service that is integrated with public STI clinics in Ireland.

This report describes the processes of the pilot service development and delivery, and presents the evaluation of the pilot service as it relates to the overall project aims. This information will be used to inform future sexual health service planning.

1. The legal age of consent for sexual intercourse in Ireland: <https://www.sexualwellbeing.ie/sexual-health/sexual-consent/legal-age-of-consent/>.

Chapter
2

Context

This chapter sets out the current epidemiology of STIs and STI service delivery in Ireland, highlighting the inequity of access to services that exists among the population and the fact that these services face significant challenges in meeting demand. It also describes how online STI services work and the benefits that can arise from them. Finally, this chapter acknowledges that both the pilot and the evaluation took place in the midst of the global COVID-19 pandemic, when all aspects of life and healthcare in Ireland went through unprecedented changes.

2.1 Epidemiology of STIs in Ireland

Over the past 10 years, STI notifications in Ireland have been increasing (Health Protection Surveillance Centre, 2021). Between 2015 and 2019, diagnoses of chlamydia, gonorrhoea, and early infectious syphilis (EIS) increased by 35%, 116%, and 194% respectively (see Table 2.1).

Untreated STIs may cause significant individual morbidity, including:

- death or significant morbidity associated with untreated HIV
- cardiovascular and neurological complications from untreated syphilis
- stillbirth and congenital infection associated with unrecognised or poorly treated syphilis during pregnancy
- pelvic inflammatory disease, ectopic pregnancy, and subfertility associated with chlamydia and gonorrhoea; and
- liver damage associated with hepatitis B and C.

In addition, untreated asymptomatic infections can be transmitted to others within the population.

Table 2.1. STI notifications and notification rates (NR)/100,000 population in Ireland, (HPSC, 2015 - 2019)²

STI	2015 (NR)	2016 (NR)	2017 (NR)	2018 (NR)	2019 (NR)	% increase 2015-2019
Chlamydia	6,797 (148.1)	6,893 (144.7)	7,408 (155.4)	7,932 (166.6)	9,173 (192.4)	+35
Gonorrhoea	1,302 (28.4)	1,957 (41.1)	2,249 (47.2)	2,405 (50.5)	2,812 (59.1)	+116
EIS	268 (5.8)	305 (6.4)	398 (8.4)	484 (10.2)	787 (16.5)	+194

Regular testing and treatment are important strategies for reducing the number of infections, their potential sequelae, and onward transmission.

2. We have used data from the years directly prior to the COVID-19 pandemic, as these are more representative of testing when clinics and STI surveillance were functioning at pre-pandemic capacity.

National data from the Health Protection Surveillance Centre (HPSC) report that the highest number of STIs are seen in those younger than 30 years. In 2019, 51% of chlamydia notifications and 31% of gonorrhoea notifications were in 15–24-year-olds (Health Protection Surveillance Centre, 2021).

The other population group disproportionately affected by STIs are gay, bisexual, and other men who have sex with men (gbMSM). Where the mode of transmission was known, in Ireland in 2018,³ gbMSM accounted for:

- 86% of diagnoses of EIS; and
- 65% of diagnoses of gonorrhoea.

2.2 STI service delivery in Ireland

STI services in Ireland are provided by a mix of public, private, and non-governmental organisations (NGOs). These include general practice, family planning clinics, student health services, and dedicated public and private STI clinics.

Public STI clinics, which receive direct public funding, provide their services completely free of charge to service users. There is no cost for consultation, testing, vaccination, or treatment. Service users can self-refer to public STI clinics. While services are provided at no charge to users, a survey of 23 public STI clinics in 2017 identified significant barriers to access, including lack of services available on weekends; long waiting times for appointments at clinics; and long distances between public STI clinics (Sexual Health and Crisis Pregnancy Programme, 2018). Additional challenges reported include lack of staff resources and limited clinic opening hours, resulting in increased waiting lists and staff having to turn people away. Just over half of public STI clinics communicate all STI test results to service users, while 40% communicate results only if they are positive. This report found that across the country there is inequity of available capacity within public STI clinics according to where in the country the clinic is located.

Within general practice a survey of STI and contraception service provision published in 2018 found that the main barriers to providing STI services in general practice relate to financial issues, specifically ‘not covered by General Medical Services (GMS) contract’ and ‘patient finance constraints’ (Irish College of General Practitioners (2018). While medical card and GP visit card holders do not have to pay consultation fees they may have to pay for STI testing.

Student health services often provide services at a subsidised cost to students. Private services are provided at a cost to attendees.

Information on where STIs were diagnosed, which serves as a proxy for where users visited for their STI testing, is available in the 2018 HPSC STI reports (Health Protection Surveillance Centre, 2019a, b, c, d). The primary sites for STI diagnoses are public STI clinics and general practice, with variation by infection type (see Table 2.2).

3. The data for 2019 on mode of transmission are not yet available.

Table 2.2. Proportion of STI diagnoses by service type in 2018

Service type	Gonorrhoea n (%)	Chlamydia n (%)	EIS n (%)	Genital herpes n (%)
General Practice	821 (34.2)	2,116 (26.7)	67 (13.8)	825 (51.9)
Public STI clinics	1,443 (60)	1,268 (16)	356 (73.6)	445 (28)
Emergency Department or other hospital setting	17 (0.7)	58 (0.7)	35 (7.2)	39 (2.4)
Other/unknown setting	124 (5.1)	4,490 (56.6)	26 (5.4)	282 (17.7)
Total	2,405 (100)	7,932 (100)	484 (100)	1,591 (100)

2.3 Legal framework for STIs and STI care in Ireland

In Ireland, many STIs are included on the list of notifiable diseases.⁴ This means that all medical practitioners, including clinical directors of diagnostic laboratories, are required to notify the Medical Officer of Health (MOH)/Director of Public Health (DPH) of certain diseases. This information is used to investigate cases and prevent spread of infection and further cases. Laboratory notifications are made electronically through the Computerised Infectious Disease Reporting System (CIDR). CIDR is an information system developed to manage the surveillance and control of infectious diseases in Ireland.⁵

Furthermore, under the Infectious Diseases legislation, diagnosis and treatment of notifiable infectious diseases should be provided at no charge to the individual receiving the diagnosis and treatment.⁶

2.4. How online STI testing services work

Online STI testing services can vary significantly, but usually share the following characteristics:

- Service users complete an assessment online, via a secure website, to assess their testing needs and determine the appropriate test kit.
- Test kit is delivered via post to an address specified by the user, with full instructions and support.
- Service users complete sample collection at home and send them to the laboratory in a prepaid envelope.
- Service users receive their test results in a few days, either by SMS, email, or phone, and are signposted to services for management, treatment, and confirmation testing as required.

Testing for chlamydia and gonorrhoea via an online service does not require confirmatory testing in the event of a reactive result. However, blood testing for syphilis, HIV, hepatitis B and hepatitis C undertaken using self-sampling methods requires additional testing of reactive samples to confirm the presence/absence of infection. For reactive HIV results obtained through an online STI testing service, the reactivity level can be used to determine the likelihood that a subsequent test will produce a confirmed positive HIV result. Depending on the likelihood of a positive test, the online service can then take a more nuanced approach to counselling those with a reactive HIV result, potentially reducing their anxiety prior to confirmatory testing (Taylor, O'Brien, Fagg, Holdsworth, *et al.*, 2022).

Online STI testing services are most appropriate for individuals who do not have symptoms of an STI but who would benefit from testing. In general, individuals who have symptoms need a clinical consultation to accurately direct investigation, management, and treatment.

4. <https://www.hpsc.ie/notifiablediseases/listofnotifiablediseases/List%20of%20Notifiable%20Diseases%20February%202020.pdf>
 5. <https://www.hpsc.ie/cidr/>
 6. <https://www.irishstatutebook.ie/eli/1981/si/390/made/en/print?q=infectious+diseases&years=1981>

2.5 Potential benefits of online STI testing services

Online testing can increase access to testing by offering a more convenient and private service through increased opportunities for self-care (Baraitser *et al.*, 2011; Baraitser *et al.*, 2015). By offering more opportunities for self-care to those with low-complexity needs, the cost of service delivery can potentially be reduced (Turner, *et al.*, 2019), and specialist clinical teams have more time to deliver more complex, clinical sexual health care (Turner, *et al.*, 2018).

Online testing can address some of the barriers to service access as described in Chapter 1, through the provision of free testing, available 24 hours a day, and for many without the need to attend a face-to-face service.

A randomised controlled trial conducted in South London tested an intervention which offered postal self-sampling test kits for chlamydia, gonorrhoea, HIV, and syphilis, with results delivered via text message or telephone. It also provided web-based safer sex information. Participants were aged 16–30 years, resident in one of two South London boroughs, had at least one sexual partner in the last 12 months, stated their willingness to take an STI test, and had access to the Internet. Participants were randomly allocated to receive either one text message with a weblink to an online STI testing and results service, or to receive one text message with a weblink to a bespoke website listing locations, contact details, and websites of seven local sexual health clinics. Uptake of STI testing was twice as high among people who received information about their local online STI testing service in comparison with those who received information about their local sexual health clinics (50% versus 27%) (Wilson, *et al.*, 2017). These effects were similar across population groups within the area studied (Wilson, *et al.*, 2019).

In the same area, the introduction of online services changed attendance patterns at public STI clinics, with a shift in complexity mix. The proportion of ‘simple’ attendances reduced, while the proportion of ‘complex’ attendances increased: 17% to 12% ($p < 0.001$) and 69% to 75% ($p < 0.001$) respectively (Turner, *et al.*, 2018).

Online STI testing has the potential to reduce the cost of testing and to be a cost-effective intervention. There are many factors that determine this, including: whether the population is offered and accepts online STI testing; overall availability of testing within a given population; return rates; and the number of STIs diagnosed in the online versus the clinic setting. Online services for STI testing are not ‘standalone’ and should not be assessed in isolation. The likely effect of the introduction of online services is an increase in total testing activity, movement of activity between online and clinical services, and a decrease in cost per diagnosis (Turner, *et al.*, 2019).

2.6 COVID-19

Since March 2020, the COVID-19 pandemic has had a significant impact on all aspects of healthcare delivery in Ireland and has included significant curtailment in the availability of public STI testing and treatment services and STI surveillance. During the various waves of COVID-19, many public STI services had to restrict services to emergency appointments only. Many STI services, in particular smaller satellite clinics, have been closed for significant periods of time. The pilot was launched during the highest level of COVID-19-related restrictions in Ireland,⁷ which included the closure of all non-essential retail, no visitors allowed to private homes unless for essential purposes, and people working from home unless their job was deemed an essential service. Face-to-face service activity was reduced due to redeployment of clinic staff to acute care and the need to maintain social distancing.

The pandemic had a significant effect on the evaluation process, resulting in significant delays in the ability to apply for and obtain Research Ethics Committee (REC) approval for a planned multisite study to evaluate the pilot. This, coupled with the ongoing challenges facing clinical services, resulted in the adoption of a practical approach to determine how the pilot could best be evaluated in a timely manner. A decision was made to proceed with answering as many evaluation questions as possible from

7. <https://www.gov.ie/en/publication/2dc71-level-5/>

data routinely gathered, taking a service evaluation approach. The original evaluation objectives and evaluation questions were modified to accommodate the limits the absence of REC approval would place on data collection and interrogation.

While this was not the intended approach to the evaluation, utilising routinely collected data has its strengths, as it allows evaluation of the day-to-day running of the pilot and this method of data collection can be applied in the future. In addition, it was agreed to conduct two anonymous questionnaires: one open to the general public and one open to clinicians working in the participating clinics. These were opt-in, anonymous questionnaires, with the general public questionnaire distributed over social media and the clinician questionnaire via staff networks, and were utilised for the purposes of evaluating the pilot. The pilot evaluation methodology is described in detail in Chapter 4.

2.7 Context: Summary

- STI notifications have been increasing in Ireland over the past 10 years, and the groups disproportionately affected by STIs are people younger than 30 years and gbMSM.
- STI services in Ireland are provided by a mix of public, private, and non-governmental organisations.
- There are significant access barriers to these services, including a lack of weekend opening hours, long waiting times for appointments, long distances between public STI clinics and the cost to service users.
- Online STI testing services offer the potential to overcome these barriers by providing a free convenient and discreet service, and providing service users opportunities for self-care, thus enabling public STI clinics to focus on the provision of more complex care.
- Online STI testing has the potential to reduce cost and be cost-effective.
- This pilot and the evaluation took place during the COVID-19 pandemic, a time when there were significant curtailments to STI service delivery in Ireland.

Chapter
3

Pilot service development, delivery and targets

This chapter summarises the steps taken to establish the online STI testing service in the pilot counties. It describes the processes involved in adapting the SH:24 service to the Irish setting, engagement and training of the participating pilot sites, and communication to the public about the service. It also sets out the key targets for the pilot.

3.1 Pilot planning and oversight

When applying for Sláintecare funding, the SHCPP engaged with public STI clinics in Dublin, Cork, and Kerry to determine levels of interest in participating in the pilot. The SHCPP’s decision to pilot the service in these counties was driven by a number of factors, including: persistently high reported rates of STIs within the Dublin (HSE East) area; a desire to assess the pilot in different geographical areas, including an urban–rural mix; and a desire to assess the pilot in areas with different levels of access to public STI clinics.

Across the participating counties, the SHCPP identified six clinic sites that agreed to participate in the pilot. However, due to clinic closures arising from COVID-19-related service restrictions, the pilot was delivered at four sites:

- The GUIDE Clinic at St James’s Hospital, Dublin
- Mater Misericordiae University Hospital (MMUH), Dublin
- St. Vincent’s University Hospital (SVUH), Dublin
- South Infirmary Victoria University Hospital (SIVUH), Cork

Due to the temporary closure of the Kerry public STI clinic in 2021, SIVUH Cork provided clinical support as needed for results from kits ordered in Kerry.

The pilot service was originally commissioned to deliver 8,000 test kits in three counties: Dublin, Cork, and Kerry. For residents aged 17 years and older in these counties, test kits were to be available to order from January 2021, with evaluation of the pilot service beginning in June 2021 and completed by the end of August 2021 (see Figure 3.1).

2020				2021								
Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	
Service Development				Launch	Pilot service delivery				Evaluation			

Figure 3.1. Planned timescale for pilot

In Q3 2020, a Pilot Steering Group was convened by the SHCPP to work with the online provider SH:24 to ensure successful delivery of the pilot project (see Appendix 1 for a list of all members). Representation was sought from the pilot clinic sites and NGO partners located in the participating counties. The Group's Terms of Reference are listed in Appendix 1.

The Pilot Steering Group met three times during the course of the pilot to provide oversight of the pilot service delivery and evaluation process.

Throughout the pilot there was regular contact between SH:24, the SHCPP, and the pilot sites. This was a dynamic process as Ireland moved through different phases of the pandemic, which saw associated staff redeployment, staff shortages, and service restrictions.

3.2 Adapting the SH:24 online STI testing service for the pilot

The existing SH:24 service was adapted to meet the needs of the pilot project, in close collaboration with the SHCPP and the Pilot Steering Group. This required the development of a new website and a new user journey.

3.2.1 Developing a new website for the pilot

The pilot required an Irish SH:24 website (www.SH24.ie) that provided information for users and was specific to the Irish context. This included:

1. the registration and creation of a new SH24.ie domain and website
2. development of content for the new website, including information for potential service users about the aims and objectives of the pilot; and
3. integrating links between SH24.ie and the well-established sexualwellbeing.ie website (created and maintained by the SHCPP), for wider information on STIs, contraception, unplanned pregnancy, and PrEP.

3.2.2 Adapting the SH:24 service and user journey for the pilot

The existing SH:24 service was modified for the Irish context, including:

- integration of SH24.ie with Irish SMS mobile numbers
- establishment of an SH:24 Irish mobile number to enable the SH:24 clinical team, based in the UK, to contact pilot users from an Irish number
- integration of SH24.ie with an Eircode-finder service which would allow users to find their Eircode from their address (if not known).

SH:24 uses the information provided from a self-completed user online assessment to assign the correct test kit, flag any safeguarding concerns, and signpost users to additional information regarding emergency contraception, post exposure prophylaxis and vaccinations and/or PrEP for gbMSM.

Existing SH:24 service user assessment questions were updated, and agreed test kit offers were developed in consultation with the Pilot Steering Group, meaning:

- All users were offered a HIV, syphilis, chlamydia, and gonorrhoea single-site test as standard; and
- gbMSM were offered a HIV, syphilis, and triple-site (first-void urine, rectal, and pharyngeal swabs) test for chlamydia and gonorrhoea as standard, with hepatitis B testing (if the user has not been vaccinated), and/or hepatitis C in line with national HCV screening guidelines (Department of Health, 2017).

Table 3.1. STI test type

STI	Test type
HIV	4th generation HIV combination antigen-antibody assay
Syphilis	No history of previously treated syphilis infection: <i>Treponema pallidum</i> EIA test
	History of previously treated syphilis infection: qualitative RPR test
Hepatitis B	Hepatitis B core antibody, with reflex testing for hepatitis B surface antigen if core antibody is positive
Hepatitis C	Hepatitis C antibody
Chlamydia	Combined nucleic acid amplification testing (NAAT) test
Gonorrhoea	

The pilot user journey from visiting SH24.ie to receiving results, are as follows:

1. Users visited the online testing service platform SH24.ie to complete demographic and triage questions, and to agree to terms and conditions of service use.
2. Users recommended an STI test kit based on their responses.
3. Users were required to provide contact details and delivery address, and to verify their phone number via two-factor authentication.
4. Users were required to answer safeguarding questions. Any test kit orders that were flagged for potential safeguarding issues during the ordering process were reviewed by a clinician before the test kit was dispatched, and users were called if necessary.
5. Distributors packed the STI test kits and posted them to the users' addresses.
6. Users completed sample collection at home, following instructions provided in the STI test kit. Video instructions were made available, and clinical support was also available by SMS or phone call.
7. Once self-sampling was complete, users posted their test kits to the diagnostic laboratory using a pre-paid envelope.
8. Results were sent to the user by SMS or phone call from a clinician.

To support users in completing the blood sampling process, SH:24 has created a 'top tips' video that is sent to everyone who orders a blood test: <https://www.youtube.com/watch?v=8gM1DT5PZi8>.

For the pilot, processes for safeguarding potentially vulnerable service users were agreed and implemented. Once a user had registered their personal details as part of the order process described above, SH:24 asked background questions about their situation and reason for using the service.

All users were asked if they had ever experienced sexual assault. All users who reported having had an experience of sexual assault were sent a follow-up message offering support from SH:24's clinical support team and were provided with details of the national Sexual Assault Treatment Units.

Users aged 17 years (the minimum age for using the pilot online service in Ireland and the age of sexual consent in Ireland) were asked a further five safeguarding questions before their order was completed, based on UK national guidance. In cases where an individual with a date of birth showing that they are younger than 17 years tries to access the service, they are immediately signposted to clinics and no record is generated for them.

When a user aged 17 years responds positively to any of the safeguarding questions:

1. A 'safeguarding' flag is automatically created on their electronic record.
2. A notification of a possible safeguarding concern that warrants follow-up is automatically sent to the site administrator.
3. SH:24 delays distribution of the testing kit until the clinical support team have discussed the safeguarding issue with the user.
4. A clinician makes contact with the user by telephone and conducts a full safeguarding assessment.
5. The clinician classifies the case according to agreed safeguarding criteria, ranging from low to high risk:
 - Low A – no or low risk identified
 - Low B – historical risk or fully integrated with services
 - Medium A – required signposting to services or confirmation of current linkages to services; low risk identified, no further follow-up required
 - Medium B – required signposting to services or confirmation of current linkages to services; medium risk identified, required follow-up to check that support was accessed
 - High – safeguarding risk identified; referral to external agencies required, follow-up to check attendance.

Referral to appropriate services is an important part of this process for those at medium to high risk. This included:

- referral to sexual health services
- support to access this care; and
- follow-up to ensure that contact has been made.

Where potential safeguarding issues are identified and a clinician has been unable to make contact with the individual SH:24 will send information to the individual by two different media, usually SMS and email signposting to services. In these circumstances test kits are not dispatched.

Other key adaptations SH:24 made to their service, specifically for the pilot, included:

- bespoke instruction leaflets for all test kits, co-branded with the HSE
- clinical integration between SH:24 and the Ireland-based pathology provider, MedLab Pathology⁸
- in the first week of delivery, an issue was identified that affected transgender users. In order to be more inclusive of trans and non-binary service users, SH:24 had recently made a change in the way gender was classified across their service. Service users were asked: 1) their gender identity; 2) if their gender identity was the same as the sex they were assigned at birth; and 3) if they needed a urine sample or vaginal swab (with specific advice provided for trans users). While the new gender classification correctly assigned gender to trans service users, there was a knock-on effect on the type of kit they were sent, such that they only received a vaginal swab or urine sample, and were not sent the additional anal and oral swabs which all trans service users should receive as standard. Within 24 hours of being made aware of the issue, SH:24 contacted the small number of service users affected and sent them the additional swabs with an apology. SH:24 then met with the SHCPP and a representative from the trans community to discuss the risk assessment and ordering process. SH:24 confirmed that all transgender users would be offered triple-site (anal, pharyngeal, and urine/vaginal) chlamydia and gonorrhoea testing, alongside optional testing for hepatitis B and C.

8. In 2021, Eurofins Group bought MedLab Pathology diagnostics and medical testing business.

3.2.3 Pilot clinic integration, training, and mandatory reporting

SH:24 agreed individual service user referral pathways with each of the pilot clinics. These set out how reactive and/or positive STI results would be handled, and agreed service user pathways.

Individuals with a positive chlamydia or gonorrhoea test did not require confirmatory testing prior to treatment. Individuals with reactive blood results were referred to participating clinics for laboratory-based testing.

For users needing additional care, the process was simple for orders placed from Cork and Kerry, where there was one participating clinic site. For Dublin, users were signposted to a Dublin referral webpage: <https://SH24.ie/dublin-clinics>. This website was updated regularly, following consultation with clinic sites, to provide up-to-date information on capacity of participating Dublin clinics to support users' access to the services as the COVID-19 pandemic evolved.

SH:24 created accounts for assigned participating clinic staff from each pilot site on the SH:24 Administration Clinical Record System. This is a secure clinical record system, accessible by a web portal.

Pilot clinic staff training sessions were delivered by SH:24 staff via Microsoft Teams to ensure that relevant pilot clinic staff would be able to use the SH:24 Administration Clinical Record System to:

- look up patient results and risk assessment records
- check a user's prior communication logs with SH:24 clinicians
- record attendance in clinic; and
- record clinical outcomes.

Clinic staff were also provided with an *Administration Handbook*, adapted for Ireland, which detailed the roles and responsibilities of users, the functions of the SH:24 Administration Clinical Record System, and how to use it.

Due to COVID-19-related challenges to pathology capacity in Ireland, SH:24 used a courier link from MedLab Pathologies to one of its partner laboratories in the UK to provide additional laboratory capacity. This laboratory is not integrated with CIDR. In order to meet mandatory reporting requirements, a manual arrangement was agreed with HSE Public Health for reporting positive chlamydia and gonorrhoea results. SH:24 provided relevant Public Health staff with appropriate training and access to the SH:24 Administration Clinical Record System and the positive chlamydia and gonorrhoea results. Public Health staff then entered these into CIDR. Of note, this methodology was not required for reactive blood tests, as these all required additional testing in STI clinics to establish an individual's infection status.

3.2.4 Information governance and data security

SH:24 has modelled its data security and information governance practices on standards set by statutory healthcare providers, including the National Health Service (NHS) in the UK and the HSE in Ireland, for the purposes of cybersecurity. SH:24 is fully General Data Protection Regulation (GDPR) compliant, is registered with the Information Commissioner's Office in the UK, and uses industry-leading hosting provider, Amazon Web Services. SH:24 has 'Cyber Essentials' accreditation and undertakes external 'Penetration Testing' from certified providers to rigorously test their security measures.

SH:24 employs measures that protect its users' data security by design, with key examples including:

- No personal identifiable data (PID) are included on samples returned to the laboratory, with only QR data matrix codes used on completed samples.
- PID are stored separately from the rest of the patient data in a secure hosting environment within the secure Health and Social Care Network (HSCN) network.
- Two-factor authentication is used by clinical staff, including a password, memorable word, and SMS verification code, to provide secure access to SH:24's web-based results platform.

For the purposes of the pilot, SH:24 undertook specific Data Processing Impact Assessments for Ireland. Brexit created an additional level of complexity with regard to data protection, as the transition period of the UK formally leaving the European Union was ending, after which GDPR would no longer apply in the UK. To provide the appropriate safeguards to allow the sharing of personal data between HSE pilot sites and SH:24, EU Standard Contractual Clauses agreements were signed with each of the pilot sites and data-sharing protocols established. Subsequently, the EU Commissioner granted the UK a decision of adequacy to last until 2025, which effectively considers the UK equivalent to an EU member state from a data protection perspective.

3.3 Communication with stakeholders

SH:24 worked closely with the SHCPP to create a communications partner pack containing an overview of the proposed service and agreed promotional messages and images, which would be shared with relevant clinical and community stakeholders to inform and generate interest in the proposed service. Stakeholders could then use the information and resources from the partner pack to promote⁹ the service with prospective users, catchment populations, and the general public.

Relevant community stakeholders included public STI/HIV clinics, student health services, third-level institutions, and community organisations (in particular those who work with specific populations, such as young people, the lesbian, gay, bisexual, transgender, and intersex (LGBTI+) community, gbMSM, sex workers, migrants, etc.).

The partner pack included:

- a slide deck explaining the aims and objectives of the pilot service, how online STI testing works, where the service was available, and how it could be accessed
- agreed social media graphics and promotional messaging suggestions for use by partner organisations; and
- ordering information for promotional posters and small referral cards.

Examples of the social media images, posters and referral cards are available in Appendix 8.

3.4 Pilot service launch

3.4.1 Phase 1

A 'soft launch' of the new service was planned for January 2021, with no paid-for marketing or direct promotion, to assess organic interest in the service.

SH:24 scheduled the service switch-on, without any announcement, for the evening of Tuesday, 5 January 2021. The plan was to follow this with a launch announcement and distribution of the partner pack to stakeholders on the morning of Wednesday, 6 January.

With the 'soft launch' approach, SH:24 anticipated fewer than 30 orders over the first 12 hours. This was based on their launch in Northern Ireland, which has a similar population to the three pilot counties in Ireland (1.8 million). The Northern Irish service dispatched an average of 21 orders a day, with 650 orders in total over the first month.

The service was switched on the evening of Tuesday, 5 January. In an unprecedented scenario for SH:24, a small number of users found the service and promoted it widely on social media (notably on Twitter and within shared WhatsApp groups). Posts were shared hundreds of times, and the service was promoted extensively by individuals over the course of the evening.

By 12.00pm on Wednesday, 6 January, users had ordered 4,911 test kits via the online platform. The intended total for the pilot was 8,000 test kits to be dispatched over 6 months.

9. In practice, due to the viral organic promotion of the service by users on launch, the stakeholder resource packs were not used to promote the service until later on in 'Phase 2'; see 3.4.2.

The rapidly escalating COVID-19 pandemic situation in January 2021 meant that clinic capacity was severely reduced at the time.

So, in collaboration with the SHCPP and the Pilot Steering Group, a decision was made on Wednesday, 6 January to suspend accepting new orders and hold any promotion of the service. A staggered dispatch of test kits was organised to ensure that participating clinics had sufficient capacity to see users in a timely manner for confirmation testing and/or treatment. Users and stakeholders were notified of the staggered dispatch and the reason for the temporary suspension of the service.

This 24-hour period became 'Phase 1' of the service, with new orders switched off until 29 March 2021.

SH:24 closely monitored Phase 1 returns with clinical sites over January and February, providing additional day-by-day triage to respond rapidly to changes in clinic capacity arising from COVID-19 pandemic staff redeployment.

During this period, SH:24 worked in partnership with the SHCPP and the Pilot Steering Group to plan a reopening of the ordering process, which would form 'Phase 2' of the project and was scheduled to begin on 29 March 2021. The partner pack was circulated to all relevant services and community stakeholders in advance of the service being reopened for Phase 2. The revised pilot schedule is shown in Figure 3.2.

In addition, in Q1 2021, following the overwhelming demand for the service, the SHCPP was able to support the pilot by expanding overall testing capacity from 8,000 to 14,000 test kits.

2020				2021							
Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Service Development				Phase 1 service delivery	Preparation for Phase 2 and launch		Phase 2 service delivery		Evaluation		

Figure 3.2. Revised pilot schedule

3.4.2 Phase 2

Phase 2 launched on 29 March 2021. Daily quotas (limits) on orders were put in place to enable SH:24 to manage service delivery around available clinic capacity, allowing clinicians to see those in need of confirmation testing and/or treatment. Daily quotas were 500, 400, and 300 orders for the first 3 days, then 200 per day for combined orders across all counties for the remainder of Phase 2. These quotas were discussed and agreed with the Pilot Steering Group and clinic sites.

Phase 2 saw a lower uptake per capita in Cork and Kerry, compared with Dublin, and, in consultation with the Pilot Steering Group, additional targeted promotion was used to promote the service in the former counties:

- via sexualwellbeing.ie and SHCPP social media channels
- via community stakeholders (third-level institutions, NGO partners who work with populations known to be at risk of STIs) to engage specific groups; and
- through local stakeholders in Cork and Kerry.

Phase 2 ran from 29 March to 23 May 2021. Orders in Dublin closed a week earlier than in Cork and Kerry. Due to the lower uptake per capita in Cork and Kerry, orders remained open for a further week to increase the proportional uptake.

3.5 Pilot targets

The following targets were set for the pilot:

- 14,000 (originally 8,000) test kits to be delivered in a 6-month period;
- 100% of test kits ordered to be dispatched by the next working day;
- return rate of 75% for dispatched kits; and
- more than 95% of users to receive their test results within 72 hours.

3.6 Pilot development, delivery and targets: summary

- The pilot service was originally commissioned to deliver 8,000 test kits in Dublin, Cork, and Kerry. Following a strong demand for the service, this number was increased to 14,000.
- A Pilot Steering Group was convened to work with SH:24 to ensure successful delivery of the pilot.
- The existing UK SH:24 service was adapted to meet the needs of the Irish pilot project.
- The service was intended to start slowly and was launched without announcement or promotion. Following rapid organic promotion of the service on social media, 4,911 test kits were ordered within the first 24 hours (Phase 1). New orders were suspended, and the dispatch of test kits was staggered to ensure that participating clinics had sufficient capacity to see users who required confirmation testing and treatment.
- The service reopened on 29 March 2021, with capacity for 9,000 test kits to be dispatched over 2 months (defined as 'Phase 2'). Daily quotas were put in place during Phase 2 to manage demand. Phase 2 ran until 23 May 2021.
- Pilot targets were agreed.

Chapter

4

Pilot evaluation methodology

This chapter sets out the methods used to determine if the pilot met its key aims and evaluation questions.

4.1 The evaluation process

From within the Pilot Steering Group, a smaller Evaluation Subgroup was convened to determine and agree the approach to evaluating the pilot online STI testing service.

The evaluation began in June 2021. To understand the potential changes associated with the introduction of the pilot service, data for 2019, the most recent complete year of normal service delivery prior to the onset of the pandemic, were used as a control comparator. The Subgroup recognised the limitations that this posed on data interpretation and conclusions.

As outlined in Section 2.6, the approach taken to the pilot evaluation was adapted in response to the impact of the COVID-19 pandemic.

4.2 Evaluation aims and questions

The aim of the evaluation is to assess:

- accessibility and cost to service users of accessing sexual health check-ups in Ireland; and
- whether a pilot online STI testing service, integrated with public STI clinics, is feasible, has an impact, and is acceptable to service users and clinicians.

The evaluation was designed to answer the questions set out in Table 4.1, with a view to informing the roll-out of a national service.

The original evaluation objectives, prior to adaptations being made, are presented in Appendix 2. Every effort was made to align what was possible with what had originally been intended. Unfortunately, the planned cost assessment of the pilot service was not possible.

Table 4.1. *Evaluation aims and questions*

Evaluation aims	Evaluation questions
Accessibility and cost of sexual health checks in Ireland	How accessible are sexual health services in Ireland?
	Is accessibility different in urban and rural areas?
	What is the cost to an individual of accessing sexual health services in Ireland?
	How would individuals like to access sexual health services?
	Would an online service be acceptable to individuals?
Feasibility	Did the online STI testing service work in pilot areas?
	Did people use the pilot service?
	Who used the pilot service?
	Did the processes work?
	Did the pilot service identify STIs?
Impact	Did the pilot lead to benefits or changes for individuals, populations, and the health service during or after participation?
	Did the pilot lead to increased STI testing capacity in the pilot areas?
	Did groups known to be at risk of STIs engage?
	Were STIs diagnosed in groups known to be at risk of STIs?
	Did the pilot engage new users?
	Were STIs diagnosed in these new users?
	What was the cost of testing to the health service?
Acceptability	Was the pilot service acceptable?
	Was the pilot service acceptable to service users?
	Was the pilot service acceptable to service providers?

4.3 Evaluation design and data sources

The evaluation used a variety of methodological approaches to address the above questions, including quantitative and qualitative analyses.

In using the data from the pilot for the purpose of the evaluation, 14 May 2021 and 23 May 2021 were the cut-off points for data analysis in Dublin and Cork/Kerry respectively. Due to the lower uptake per capita in Cork and Kerry, orders in those counties remained open for an additional week. An exception was made for the number of kits returned, where the cut-off date was extended to the end of August 2021 for all three counties, allowing users who had ordered kits to return them to the laboratory for processing.

SH:24 conducted new analyses on routinely collected data from:

- service outputs on kits ordered, kits dispatched, laboratory turnaround times in the pilot areas, and descriptive statistics on pilot service users;
- feedback from users of the pilot online service; and
- laboratory *Chlamydia trachomatis*, *Neisseria gonorrhoeae* (CTNG)¹⁰ testing data in the pilot areas, as well as previous data collected by the SHCPP on CTNG testing in Ireland.

SH:24 also conducted and completed an analysis of:

- an anonymous online questionnaire promoted on social media to understand the accessibility and user experience of STI testing in Ireland. The survey provided a space for respondents to give insight on aspects such as the travel, cost, anonymity, and availability of STI testing in Ireland, within both rural and urban settings. The survey also looked into acceptability of online testing, particularly for those who had not accessed the pilot service. The questionnaire was distributed by social media nationally, whereas the pilot service was only available in three counties, so we anticipated a proportion of survey respondents would not have used SH:24.
- an anonymous online questionnaire with pilot clinic staff on their experience of the pilot service. Key topics in this survey centred on clinicians' views as to whether the pilot had improved patients' access to STI testing, the quality of patient care, impact on capacity within clinics, and efficacy of referral pathways between the pilot and STI clinics.

4.3.1 SH:24 routinely collected data

SH:24 completed a descriptive analysis of routinely collected, anonymised data from the pilot service users. This included data on:

- gender;
- age;
- ethnicity;
- sexual orientation;
- gender of sexual partners;
- county of residence;
- date of service use
- use of sexual health clinics (including in the previous 12 months);
- tests taken;
- test results; and
- unprotected sexual intercourse (UPI) in the last 5 days.

GbMSM and trans people were also asked about:

- hepatitis B immunisation
- use of PrEP, and
- risk factors for hepatitis C transmission.

10. CTNG testing was used as a proxy of STI testing activity.

4.3.2 Feedback from users of the pilot online service

The pilot evaluation utilised routinely collected feedback from SH:24 service users. All users are invited to rate and comment on the service they received. SH:24 used both the quantitative data (response rates and rating on a 1–5 scale) and the qualitative data (comments) to understand user experience of those who used the pilot service.

4.3.3 Laboratory CTNG testing in the pilot areas

Data on CTNG testing in public laboratories in the pilot counties was used as a proxy for STI testing activity.

The SHCPP had previously collected this data, available on a county-by-county basis, from all public laboratories for 2014 and 2015.

As part of the pilot evaluation data on CTNG, testing completed within public STI clinics and general practice in 2019 and 2020 was collected from laboratories serving the pilot counties to describe CTNG testing completed in the two years before the pilot was introduced.

The evaluation team was cognisant of the impact the COVID-19 pandemic had on STI testing availability. There was an estimated 23% increase in CTNG testing between 2015 and 2019 across the three pilot counties.¹¹ This activity dropped by 28% between 2019 and 2020, likely in large part due to service restrictions during the COVID-19 pandemic. For this reason, 2019 CTNG testing data were used as comparator data to reflect pre-pandemic CTNG testing, as this was seen as most representative of normal service activity prior to the addition of the online STI testing service in the pilot areas.

4.3.4 Online questionnaires

SH:24 developed two anonymous online questionnaires:

1. Public questionnaire: to understand the accessibility and user experience of STI testing, including for those living in rural areas. A link to the questionnaire was posted on the SH24.ie website and was promoted via SH:24 social media (see Appendix 6), and was open to the general public. The online questionnaire was created on the Typeform platform and could be completed anonymously. People were asked a range of questions about where they lived in Ireland, whether they had used STI testing services previously, and what their experiences were of accessing these services, focusing on accessibility and cost. The survey was open to everyone aged 17 years and older.
2. Staff questionnaire: to capture the experience of sexual health service staff in participating clinics. This questionnaire was distributed through internal communication systems within participating clinics (see Appendix 7).

11. Combined laboratory CTNG testing data from the pilot counties (Dublin, Cork, and Kerry) show that 164,438 CTNG tests were performed in these areas in 2014 and 2015. This equates to 82,219 per year, assuming that there were equal numbers of tests each year. In 2019, 101,234 CTNG tests were performed in Dublin, Cork, and Kerry.

4.4 Data used to answer evaluation questions

Table 4.2. Evaluation aims, questions, and methods applied to address each question

Evaluation aims	Evaluation questions	Evaluation method/dataset
Accessibility and cost to individuals of sexual health checks in Ireland	How accessible are sexual health services in Ireland?	An anonymous public online questionnaire (see Appendix 6)
	Is accessibility different in urban and rural areas?	
	What is the cost to an individual of accessing sexual health services in Ireland?	
	How would individuals like to access sexual health services?	
Feasibility	Did the online STI testing service work in pilot areas?	<ul style="list-style-type: none"> • Test kit orders, returns, clinic attendance • Demographics of pilot service users (age, gender, sexuality, risk factors for STIs) • Kit dispatch time, laboratory turnaround time • STI results • Safeguarding outcomes
	Did people use the pilot service?	
	Who used the pilot service?	
	Did the processes work?	
Impact	Did the pilot lead to benefits or changes for individuals, populations, and the health service during or after participation?	<ul style="list-style-type: none"> • CTNG testing information from laboratories • Demographics of pilot service users (age, gender, sexuality, risk factors for STIs) • Previous use of clinic services among pilot service users • Estimated cost of providing the service to an individual
	Did the pilot lead to increased STI testing capacity in the pilot areas?	
	Did groups known to be at risk of STIs engage?	
	Were STIs diagnosed in groups known to be at risk of STIs?	
	Did the pilot engage new users?	
	Were STIs diagnosed in these new users?	
	What was the cost of testing to the health service?	
Acceptability	Was the pilot service acceptable to service users and providers?	<ul style="list-style-type: none"> • Routinely collected user satisfaction feedback from online service • Online questionnaire for clinicians participating in pilot
	Was the pilot service acceptable to service users?	
	Was the pilot service acceptable to service providers?	

4.5 Pilot evaluation methodology: summary

- The aim of the evaluation is to assess accessibility and cost to service users of accessing sexual health check-ups in Ireland and whether a pilot online STI testing service, integrated with public STI clinics, is feasible, has an impact, and is acceptable to service users and clinicians. The evaluation was designed to answer a range of questions to address the evaluation aims using a mixed-methods approach, analysing a range of routinely collected data from SH:24 and data collected from laboratories on CTNG testing.
- In addition to routinely collected data, two anonymous online questionnaires were developed, one assessing the accessibility and experience of STI testing in Ireland for the general public, and the second circulated to pilot clinic staff and focused on their experience of the pilot service.
- The evaluation outputs will inform roll out of a national service.

Chapter
5

Accessibility and cost of sexual health checks in Ireland

The original evaluation methodology had planned for qualitative user interviews, in order to get a better understanding of people’s experience around accessing sexual health services in Ireland. However, as outlined in Section 2.6 due to the impact of the COVID-19 pandemic and delays in obtaining REC approval, it was not possible to conduct the interviews. Instead, SH:24 created an anonymous online questionnaire that was issued to the public to gain an understanding of how accessible sexual health services are in Ireland and their cost to users. This chapter presents the findings of this questionnaire.

5.1 Who answered the questionnaire?

The questionnaire was viewed 1,269 times, 830 people started to complete it, and 409 responses were received, giving a completion rate of 49.3%. Questions were not mandatory, so not all users answered all questions. As this is not a representative sample of the population of Ireland, caution is recommended in interpreting the results.

Ninety-nine per cent of respondents (398 people, out of 404 who answered the question) lived in the Republic of Ireland (ROI), and six people lived in the UK. The analysis was limited to the 398 living in the ROI. Fifty-eight per cent (230) lived in Dublin, Kerry, or Cork, with smaller numbers of respondents from all other counties in Ireland except for Leitrim and Monaghan. A total of 304 people responded to a question as to whether they lived in a rural or urban area, with 69% (209) of respondents coming from urban areas and 31% (95) from rural areas.

5.2 Respondents’ use of STI testing services

Of the 331 people who answered the question about when they had last had a sexual health check-up, 29% (96 people) responded “within the last year”, 37% (124 people) “more than a year ago”, and 34% (111 people) that they had “never had a sexual health check-up”. This suggests that the survey reached both new and regular users of STI testing services.

Thirty-four people responded to the question of whether they had used SH:24 before, with 29 (7.3%) stating they had previously used the service, and none reported using any other online service. As such, the questionnaire reached people from the wider community and was not limited to collecting the views of people who had used SH:24.

5.3 Respondents’ access to STI testing

When asked “How easy is it to access STI testing in your area?” 396 people answered this question to give an average score for STI testing access of 2.5 out of 5. Access scores were higher among those living in urban areas than those in rural areas (see Table 5.1).

Table 5.1. Responses to the question “How easy is it to access STI testing in your area?”

Respondent type	1 star, ‘Worst access’ n (%)	2 stars n (%)	3 stars n (%)	4 stars n (%)	5 stars, ‘Best access’ n (%)	Average score	Total n
All respondents	117 (30)	91 (23)	96 (24)	44 (11)	48 (12)	2.5	396
Respondents living in rural areas	44 (47)	24 (26)	16 (17)	3 (3)	7 (7.5)	2	94
Respondents living in urban areas	46 (22)	43 (21)	62 (30)	28 (13)	30 (14)	3	209

When asked where they would be most likely to access STI testing (with only one option allowed), 305 people responded to this question. Of these, 90 people (29.5%) would access STI testing from a public STI clinic, 75 people (24.6%) would access testing from a GP, 61 people (20%) would access it from an online service provider, 28 (9.2%) from a private provider, 23 (7.5%) from a student health service, 23 (7.5%) from a pharmacy, and 5 (1.6%) from another service or location. This suggests that among those who responded to the question a range of testing options is preferred, and access to an online STI testing service would be a valuable additional testing option.

5.4 Cost of obtaining an STI test

As part of the online questionnaire, individuals were asked to estimate how much it would cost them to attend a service for STI testing. Respondents were given three options: less than €50; €50–€100, or more than €100. Of the 304 people who responded to this question, 39% said that it would cost them more than €100, 38.5% that it would cost them between €50 and €100, and 22.4% that it would cost less than €50. When asked how affordable STI testing was for them, 64.3% of respondents said that it was unaffordable or very unaffordable.

Many of the respondents lived far from a sexual health service, with 27.3% living more than 30 km from a service, and 52.6% said that getting an STI test would take more than 2 hours.

Available data suggest that the cost to an individual in accessing STI testing is a significant barrier and unaffordable for many.

5.5 Attitudes towards online sexual health services

The questionnaire asked, “Where would you most likely go for an STI test?” Of the 363 people who responded to this question (91% of the 398 respondents from Ireland), 353 (97%) said they would use a free online sexual health service if it was available, with 6 respondents (1.7%) unsure and four respondents (1.1%) reporting that they would not use this type of service.

The 29 respondents who had used SH:24 before were also given the option to tell us about their experience using the service in a freetext comments box. A recurring theme in their comments was a wish to extend the pilot online STI testing service both in terms of duration and geographical coverage. The quotes below were typical of these comments:

“Super quick and easy to understand. Really took the awkwardness of seeking a test in person away! Would love love love to see this as a permanent option going forward. First STI check I’ve ever done and it was purely because of this amazing service.”

“Excellent service, my college friends wished it was available in their county.”

“Very quick and easy to do at home, the packaging is discreet and the turnaround was incredible! I would love to see this become a regular service.”

“I thought it was really easy to use and am really supportive of it as a service. Thrilled that it could be something that is widely available.”

5.6 Accessibility and cost of sexual health checks in Ireland: summary

- Accessibility of existing STI testing services is poor, particularly for those living in rural areas.
- Sixty-four per cent of respondents reported that the cost of accessing STI testing was ‘unaffordable’ or ‘very unaffordable’.
- Many of the respondents lived far from a sexual health service, with 27.3% travelling more than 30 km, and 52.6% reported that getting an STI test would take more than 2 hours
- Ninety-seven per cent of respondents to the online questionnaire would use a free online service for sexual health testing if it was available to them.
- The small number of respondents who had used the pilot service previously expressed a desire to see the service continued and expanded.

Chapter
6

Feasibility of online STI testing in the pilot areas

This chapter sets out the findings of the feasibility evaluation questions developed to determine if the online STI testing model worked in the pilot areas.

6.1 Feasibility: Did people use the pilot service?

6.1.1 Did people place orders?

Overall, 13,749 of 14,000 available test kits were ordered and dispatched between 5 January and 23 May 2021. As outlined in Chapter 3, there was an unprecedented demand on kit orders in the first 24 hours (Phase 1), with 4,911 test kits ordered. Following a temporary pause on accepting new orders, the service was reopened on 29 March (Phase 2). Phase 2 closed for Dublin on 14 May 2021, and for Cork and Kerry on 23 May 2021. Due to a lower uptake per capita in Cork and Kerry, orders remained open for an additional week in those counties to increase the proportional uptake. In total, 8,838 test kits were ordered and dispatched in Phase 2. The Phase 2 daily orders across the pilot counties are shown in Figure 6.1.

During Phase 2, a daily quota on test kits was put in place to manage demand. The quota was higher for the first 3 days to meet anticipated demand, with a standard daily quota of 200 test kits put in place for the remainder of Phase 2. The daily quota was split between Dublin, Cork, and Kerry, proportional to the county populations based on the 2016 Census (Central Statistics Office, 2016): 132 in Dublin, 52 in Cork, and 14 in Kerry.

The average number of daily test kit orders was 160. The daily quota was met in Dublin on over 95% of the days of Phase 2, while Cork only reached the quota on 29% of the days, and Kerry 35% of the days.

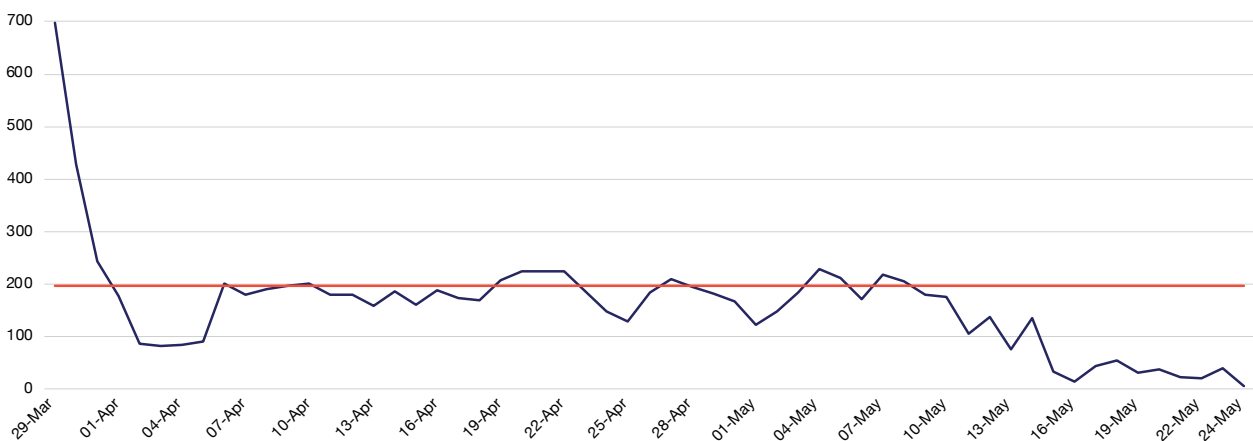


Figure 6.1. Phase 2 orders across all pilot counties (29 March to 23 May 2021)

The red line on the graph indicates the daily quota.

Dublin

In Dublin, users ordered 9,781 test kits across both phases (71% of total orders).

For Phase 2, the service launched with a higher daily quota during the first 3 days (330, 260, and 200 test kits) to facilitate anticipated demand. A lower daily quota (66 test kits) was put in place over the Easter Bank Holiday Weekend (2–6 April 2021), largely to prevent a backlog of orders building up over Easter. A standard daily quota of 132 test kits was put in place for the remainder of Phase 2.

In Dublin, the number of orders reached the daily quota on over 95% of days (see Figure 6.2), suggesting that demand may have exceeded available capacity.

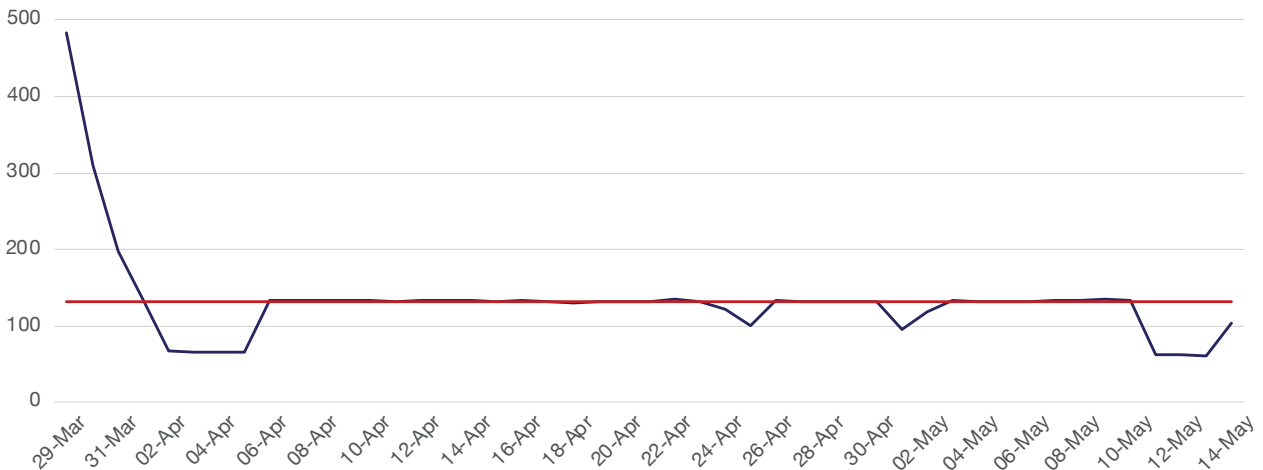


Figure 6.2. Phase 2 orders in Dublin, with a daily quota of 132 (29 March to 14 May 2021).

The red line on the graph indicates the daily quota.

Cork and Kerry

Across both phases, Cork users ordered 3,259 test kits (24% of total orders) and Kerry users ordered 709 test kits (5% of total orders).

For Phase 2, the service launched with a higher daily quota during the first 3 days to facilitate anticipated demand. A standard daily quota (52 test kits for Cork and 14 test kits for Kerry) was then put in place for the remainder of Phase 2. However, in practice, order numbers only reached daily quotas on some days, so the daily quotas were raised for both counties. This allowed for higher peak days to offset the days when fewer orders were placed: see Figure 6.3 (Cork) and Figure 6.4 (Kerry).

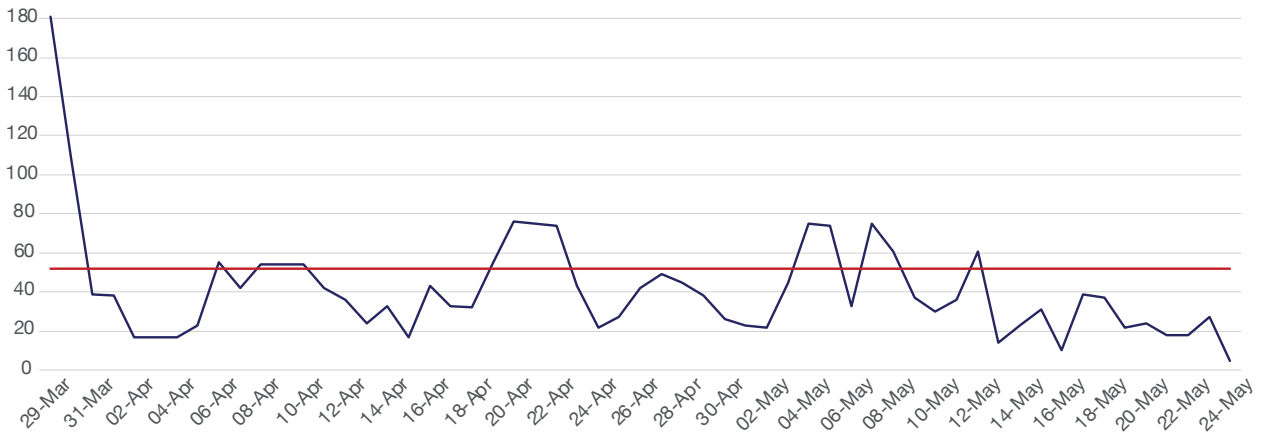


Figure 6.3. Phase 2 orders in Cork, with a daily quota of 52 (29 March to 23 May 2021)

The red line on the graph indicates the daily quota.

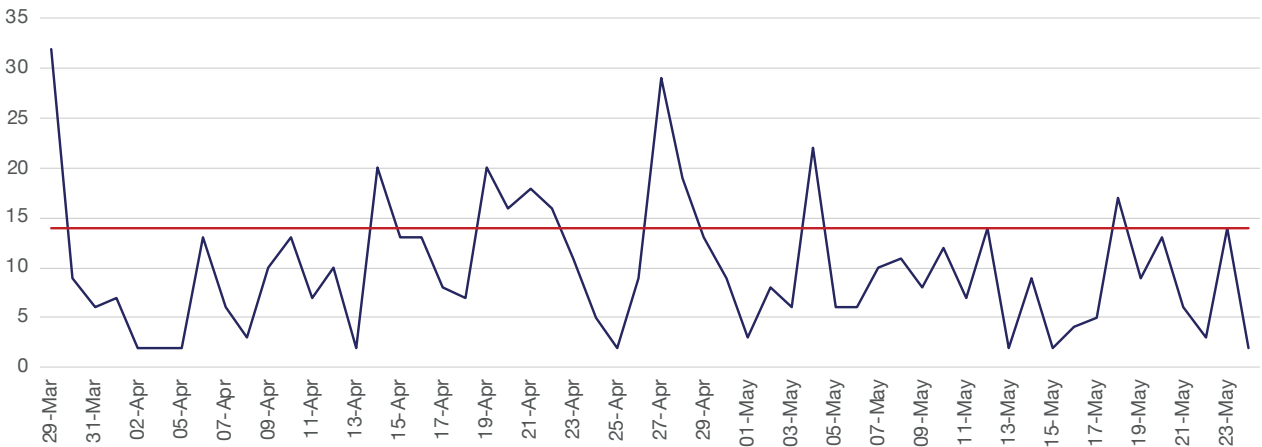


Figure 6.4. Phase 2 orders in Kerry, with a daily quota of 14 (29 March to 23 May 2021)

The red line on the graph indicates the daily quota.

While allocated testing capacity was proportionally split between the three counties (based on population), demand for the service in Dublin may have exceeded this allocation, while Cork and Kerry did not fully utilise their available capacity.

Overall, 268 users (2%) placed repeat orders for test kits during the pilot. It should be noted that the nature of the pilot (being available in two condensed phases for a relatively short duration) likely meant that users would have limited opportunity for repeat use; the service has a baseline restriction on repeat orders of tests within a 6-week period after the first order.

SH:24’s established UK services tend to see around 15% of users order more than one test kit over the course of a year, with a higher proportion of repeat users younger than 25 years, gbMSM, and from black and minority ethnic communities.

6.1.2 Did people return STI test kits?

Pilot target: Return rate higher than 75%

Pilot outcome: Return rate 67% (9,181 test kits returned by the end of August)

By 31 May 2021, the end of the pilot phase, users had returned a total of 8,064 test kits from both Phase 1 and Phase 2, making an overall return rate of 59%. SH:24's experience elsewhere is that the majority of users return their kits within the first 2 months, but a smaller and diminishing number will continue to return kits beyond that time. Due to the uneven, phased distribution of test kits, updated return rates from beyond the May cut-off date have been included. The overall number of returned kits had risen to 9,181 by 31 August 2021, making a return rate of 67% (see Table 6.1).

Table 6.1. Return rates of STI test kits by 31 May 2021 and 31 August 2021, from both ordering phases of the pilot.

Phase	Return rate by 31 May	Return rate by 31 August
Phase 1	64%	65%
Phase 2	55%	67%
Total	59%	67%

For orders made in Phase 1 (i.e. orders made 5–6 January 2021):

- 32% of orders were returned within the first month.
- 57% of orders were returned by the end of the second month.
- Returns dropped to a much lower rate in the third month, but the total number of returns continued to rise slowly each month (see Table 6.2).
- 64% of orders were returned by the end of May.

Table 6.2. Returns from kits dispatched from Phase 1 (4,911).

Number of returns	Jan. n (%)	Feb. n (%)	Mar. n (%)	Apr. n (%)	May n (%)
Monthly returns from orders (total n=4,911)	1,594 (32)	1,239 (25)	202 (4)	90 (2)	35 (1)
Cumulative returns from orders (total n=4,911)	1,594 (32)	2,833 (57)	3,035 (61)	3,125 (63)	3,160 (64)

For orders made in Phase 2 (i.e. orders made between 29 March and 23 May 2021):

- 23% of orders were returned within the first month.
- 55% of orders were returned by the end of the second month.
- 67% of orders were returned by the end of August, surpassing the Phase 1 return rate (see Table 6.3).

A small number of users may take up to a year to return their test kit, and therefore it is likely that return rates will continue to rise over time.

Table 6.3. Returns from kits dispatched from Phase 2 (8,838).

Number of returns	Mar. n (%)	Apr. n (%)	May n (%)	Jun. n (%)	Jul. n (%)	Aug. n (%)
Monthly returns from orders (total n=8,838)	7 (<1)	2,054 (23)	2,843 (32)	684 (8)	245 (3)	127 (1)
Cumulative returns from orders (total n=8,838)	7 (<1)	2,061 (23)	4,904 (55)	5,588 (63)	5,833 (66)	5,960 (67)

One explanation for the fact that Phase 2 return rates were starting to overtake Phase 1 by the end of August (despite users having less time in total to return their tests) is the fact that Phase 1 orders were largely driven by the viral promotion of the service on social media, whereas Phase 2 orders came from more typical referral pathways (e.g. from sexualwellbeing.ie and stakeholders). As such, Phase 2 users may have been more invested in seeking STI testing and receiving their results, better reflecting how the service might be used beyond the pilot phase.

Return rates for STI test kits in Ireland were found to be consistent with those of new online STI testing services in other areas. In other settings, SH:24 has also observed that return rates improve over time as the service matures, with higher return rates occurring in consecutive years of service delivery. For example, the current SH:24 Northern Ireland service reached a 75% return rate in 2021, compared to 65% when the Northern Ireland service launched in the autumn of 2019. SH:24 typically reports higher than 80% return rates in its mature UK services.

The return rate in the pilot may have been influenced by the following additional factors:

1. In the Ireland pilot, all users were sent a blood testing kit. In other SH:24 services, users can opt out of ordering blood tests, and approximately 35% of users will take this option. Where users can opt out of blood tests, SH:24 tends to see a 5% higher return rate. Overall, SH:24 user feedback has consistently shown that users find the blood test to be the hardest part of the test to complete.
2. Across all the online services provided by SH:24, return rates during the pandemic have been lower than pre-pandemic levels. This is despite an increase in the number of orders placed. This may, in part, be due to the impact the pandemic has had on sexual behaviour and partner change.

It is expected that returns rates for test kits would increase to approximately 80% as a community becomes more familiar with the process of online testing.

6.1.3 Did people attend services when advised?

Clinician-confirmed attendance on the SH:24 Administration Clinical Record System or service user self-reported attendance was used to measure service user attendance for treatment or confirmation testing, and is outlined in Table 6.4.

These figures may underestimate the true treatment rate, as clinicians may not have confirmed attendance on the SH:24 Administration Clinical Record System and service users may have chosen not to report that they attended a service, or they may have provided inaccurate information. The pilot was developed to allow SH:24 to refer users with reactive results to participating public STI clinics, although some users did report that they visited their GP or private services for treatment or confirmation testing.

It is acknowledged that in standard clinical practice some people will choose not to attend services despite intensive follow-up by clinicians.

Table 6.4. Confirmed attendances in clinic for reactive results.

STI	Number of reactive or positive results	Confirmed attendances n (%)
Chlamydia	450	419 (93)
Gonorrhoea	69	62 (90)
Syphilis enzyme immunoassay (EIA)	58	54 (93)
Syphilis rapid plasma reagin (RPR)	24	20 (83)
Syphilis total	82	74 (90)
HIV	17	16 (94)
Hepatitis B	19	17 (89)
Hepatitis C	0	Not applicable (N/A)

Attendance rates were similar across all three counties in the pilot.

6.2 Feasibility: Who used the pilot service?

6.2.1 Age profile of service users

Of the 13,749 users over the course of the pilot 43% were aged 20–24 years and 29% were 25–29 years. See Figure 6.5 for a breakdown of the pilot service users’ age profile. Appendix 3 presents additional information on age profile across the two phases.

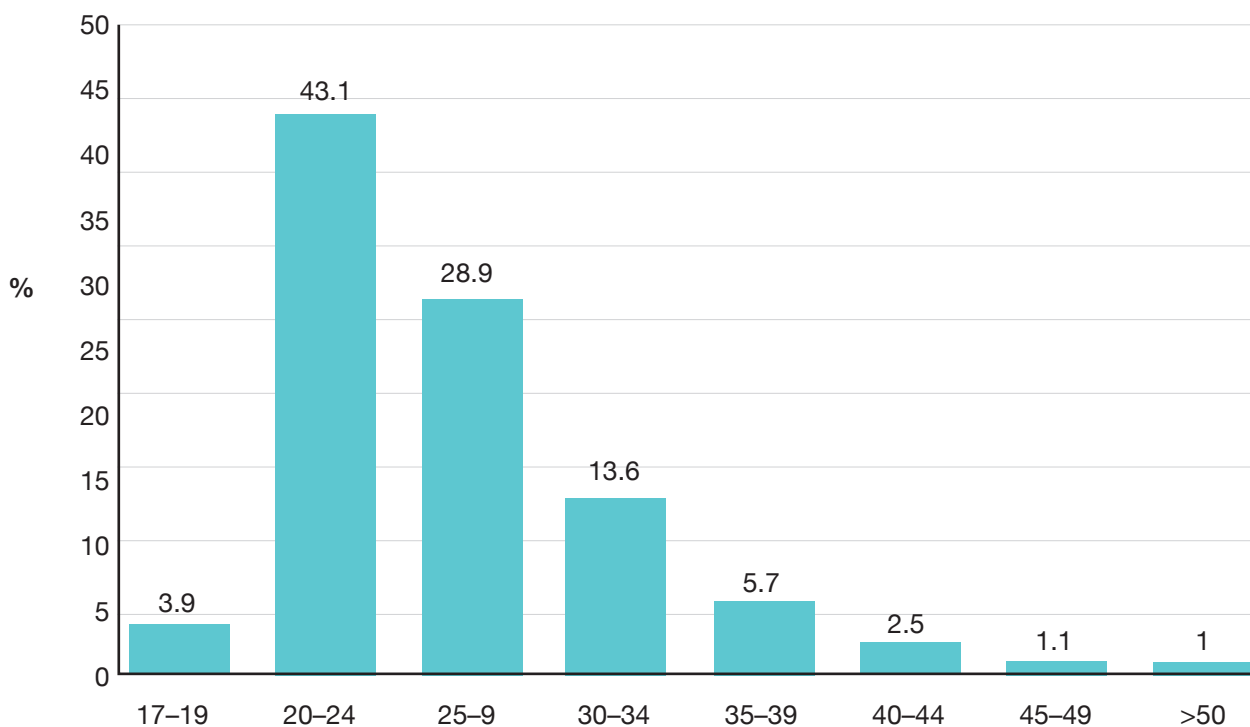


Figure 6.5. Age profile of pilot service users in Phases 1 and 2.

6.2.2 Gender of service users

Of those using the pilot online service, 8,933 (65%) were female. Figure 6.6 shows the breakdown of service users according to gender. Appendix 4 gives a breakdown of gender according to age categories across the two pilot phases.

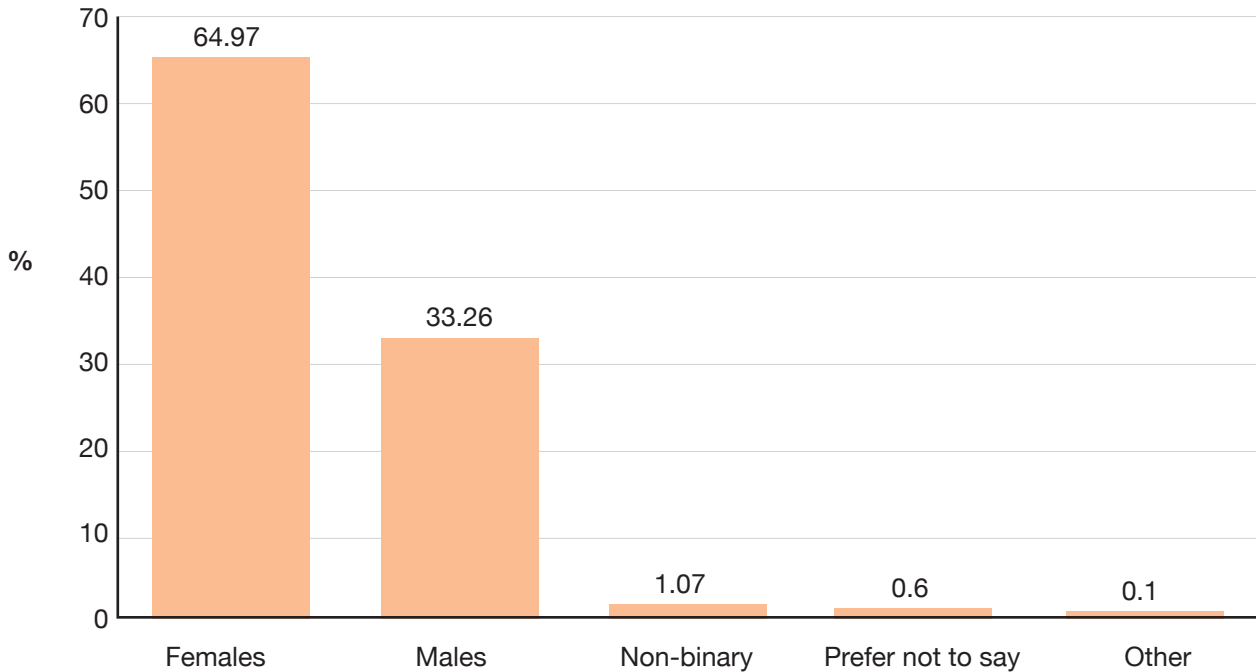


Figure 6.6. Gender profile of service users.

6.2.3 Sexual orientation and sexual practice of service users

Users were asked to describe their sexual orientation on the user assessment (see Appendix 3), with the majority describing themselves as heterosexual (70.9%), 13.8% as gay men, 11.3% as bisexual, and 1.7% as lesbian, while 1.5% preferred not to say and 0.7% chose ‘other’ and used a freetext field to describe their sexuality (e.g. some users described themselves as pansexual, queer, and asexual).

In addition, users are asked about their anatomy and the gender of their sexual partners to determine the correct test kits and health promotion information to send them.

The majority of service users in the pilot were ‘women who have sex with men’ (WSM) (58.1%), followed by ‘gay and bisexual men who have sex with men’ (gbMSM) (17.2%), ‘men who have sex with women’ (MSW) (16.6%), ‘women who have sex with women and men’ (WSWM) (5.8%), and ‘women who have sex with women’ (WSW) (2.3%).

Of note, 82 male users who described themselves as heterosexual also reported that the gender of their sexual partners was either ‘male’ or ‘male and female’. Asking users questions in this way ensures that they are sent the appropriate test kit (with an extra anal and oral swab for chlamydia and gonorrhoea, and optional testing for hepatitis B and C).

6.2.4 Demographic differences between Phase 1 and 2

Users who placed orders in Phase 1 (n=4,911) were different from those who placed orders in Phase 2 (n=8,838) and were more likely to be aged 20–24 years (50% in Phase 1, 39% in Phase 2), female (70.4% in Phase 1, 62% in Phase 2), and WSM (63.7% in Phase 1, 55.1% in Phase 2%) (see Appendix 3). Users who placed orders in Phase 2 were more typical of SH:24 users in other jurisdictions, with a higher proportion of men, over 25s, and gbMSM than seen in Phase 1.

One explanation for the demographic difference between Phase 1 and 2 was the viral promotion of the service on social media during Phase 1, which is likely to have influenced user uptake of the service.

6.3 Feasibility: Did the processes work?

6.3.1 Proportion of kits dispatched by next working day

Pilot target: 100% of tests dispatched by next working day

Pilot outcome: 100% of tests dispatched by next working day during Phase 2

Phase 1 dispatch

Due to the extremely high demand during the first 24 hours, dispatch of test kits was staggered over 2 weeks, to protect clinic capacity in Ireland during COVID-19 pandemic restrictions. Users were informed that dispatch of kits would be staggered over the following 2 weeks and they would be sent a message, as standard, once their test kit had been posted by SH:24.

Phase 2 dispatch

During Phase 2, 100% of test kits were dispatched by the next working day (from the time when the order was placed).

6.3.2 Time to users receiving results

Pilot target: More than 95% of patients receive their test results within 72 hours of samples being received at the laboratory.

Pilot outcome: 97.3% of users received their results within 72 hours.

Strong turnaround times for laboratory results were achieved and are outlined in Table 6.5.

Table 6.5. Time to users receiving results.

Result turnaround time from receipt at laboratory	Total results issued n (%)
24 hours	5,584 (69.2)
48 hours	1,989 (24.7)
72 hours	277 (3.4)
Subtotal	7,850 (97.3)
72+ hours	214 (2.7)
Total	8,064 (100)

For the small number of users who did not receive their results within 72 hours, the average time for the turnaround of results was 120 hours. All users with delayed results were notified of the delay at 72 hours after laboratory receipt of their samples, along with an apology from the service, and they were informed that the delay was not related to their specific test results, nor was it a cause for concern.

6.3.3 Safeguarding issues and actions

The safeguarding process for the pilot is outlined in Chapter 3.

185 people (1.3% of all users) who ordered STI tests reported having experienced sexual assault.

The average age of users who had reported a sexual assault was 24, and 90% were female and 10% were male.

All users who reported sexual assault were offered information on self-referral into support services as well as the option of talking to an SH:24 clinician. Further outcomes are not recorded.

During the pilot, 537 people aged 17 years (4% of all users) ordered test kits. Of these, five (0.9%) raised safeguarding flags during their order process:

- Two users did not respond to three text messages and an email, and in line with agreed processes (see Section 3.2.2) their order was not dispatched.
- Three users were contacted; of these, two required referral to additional services, and one required no action.

One clinician sent feedback directly to the SH:24 safeguarding team, highlighting the important nature of an effective safeguarding process embedded within the online system:

“I just wanted to feedback that there was an excellent pickup by the team to refer a 17-year-old to our service at the end of last week. Incredibly challenging circumstances for him and he commented that he found the SH:24 service very supportive.”

6.4 Feasibility: Did the pilot service identify STIs?

A total of 637 reactive results were reported on test kits returned and processed during the pilot service delivery period (5 January–31 May 2021), giving an overall reactive rate of 8% (637/8,064). See Table 6.6 for a breakdown according to different STIs.

Table 6.6. Reactivity rate by STI.

STI	STI reactivities n (% of returned tests ¹²)
Chlamydia	450 (5.6)
Gonorrhoea	69 (0.9)
Syphilis	82 (1.0)
HIV	17 (0.2)
Hepatitis B	19 (0.2)
Hepatitis C	0 (0)
Total	637 (8)

An overall reactive rate of 8% is consistent with other SH:24 services, which are provided across a mixture of urban and rural settings.

Blood test outcomes

Of the returned test kits, 11.5% (931/8,064) had blood samples that were either haemolysed or insufficient, and 3.6% (294/8,064) were missing the blood component. All users with missing, haemolysed, or insufficient blood samples were offered a replacement blood sample test kit automatically via SMS. The haemolysed/insufficient/missing rate is consistent with those of the SH:24 UK service.

12. The denominator is the total number of tests returned between 5 January and 31 May 2021 (n=8,064). Some test kits were returned with the blood samples missing, haemolysed, or insufficient. As such, these results may slightly underestimate the positivity for syphilis, HIV, hepatitis B and C, but this gives a more accurate portrayal of real-world positivity for clinic referrals, relative to the number of orders and returns from an online STI testing service.

Syphilis

During the online pilot, there was a total of 82 (1% of blood tests returned) reactive syphilis results:

- 58 reactive *Treponema pallidum* EIA results; and
- 24 reactive RPR results.

HIV

During the online pilot there were 17 (0.2% of blood tests returned) reactive HIV tests.

Of these:

- Three were confirmed new infections.
- Two were previously known HIV positives.
- Eleven were confirmed as negative; and
- One was lost to follow-up, despite repeated attempts to contact the user.

The number of reactive HIV results subsequently confirmed as negative is consistent with experience across SH:24's UK-based services.

SH:24's clinical team has access to a numerical reactivity value alongside each reactive HIV result. Typically, low reactive values will subsequently be confirmed negative on laboratory testing, whereas samples with higher reactive values will be confirmed positive (Taylor et al., 2022). SH:24's clinical team uses this information to tailor the language they use when informing the user of their reactive result in order to reduce anxiety while making it clear that all reactive tests require confirmatory testing.

Hepatitis B and C

There were 19 reactive results (0.2% of tests returned) for hepatitis B. There were no reactive results for hepatitis C.

6.5 Feasibility: summary

- People engaged with the pilot service such that 13,749 of 14,000 available test kits were ordered and dispatched between 5 January and 23 May 2021.
- The service largely engaged people between 20 and 29 years of age (72%); females (65%) and people who identified as heterosexual (71%).
- During Phase 2, 100% of test kits were dispatched by the next working day (from the time when the order was placed) meeting the pilot target.
- The overall return rate of test kits to the laboratory by the cut-off date of 31 August 2021 was 67% which is lower than the target of 75%.
- 97.3% of users received their results within 72 hours.
- A total of 637 reactive results were reported during the pilot service delivery period (5 January–31 May 2021), giving an overall reactive rate of 8%, which is consistent with other SH:24 services.

Chapter
7

Impact

This chapter sets out the findings of the impact evaluation questions, which were developed to determine whether the pilot led to benefits or changes for individuals or populations during or after participation in the pilot.

7.1 Impact: Did the pilot lead to increased STI testing capacity in the pilot areas?

Data on total public laboratory CTNG testing activity from GP and public STI clinic sources were gathered in pilot counties for 2019 from which an estimate of activity for 5 months was determined¹³, and were considered in relation to the online pilot CTNG testing activity in the first 5 months of 2021 (see Table 7.1).

2019 data from public laboratories on testing activity in GP and public STI clinics were used to show the number of tests that took place within face-to-face care, as it was felt that this was more reflective of normal testing activity prior to the effects of COVID-19 restrictions on clinical and laboratory services seen in 2020–21.

An estimated 42,181 CTNG tests were carried out in the first 5 months of 2019 in public STI clinics and general practices in Dublin, Cork, and Kerry, while, during the 5 month pilot in 2021, 13,749 tests were dispatched from the online pilot service. Assuming that the same level of testing would have occurred in face-to-face services in 2021 as 2019, had it not been for the impact of the pandemic, the online STI testing service added an estimated 33% to testing capacity in the pilot areas.

A limitation of this analysis is that some of those who had previously used face-to-face services may have shifted to the online service when it became available, resulting in an overestimation of the increased capacity.

Table 7.1. *Estimated CTNG testing in general practice and STI clinics over 5 months in 2019 and testing provided by the online service during the first 5 months of 2021.*

Location	Number of tests over 5-month period
Dublin general practice + STI clinics 2019	31,231
Cork and Kerry general practice + STI clinics 2019	10,950
Total general practice + STI clinics 2019	42,181
Pilot Dublin 2021	9,781
Pilot Cork 2021	3,259
Pilot Kerry 2021	709
Total SH:24 2021	13,749

13. In 2019, 101,234 CTNG tests were performed in Dublin, Cork, and Kerry. Assuming stable testing over a 12 month time frame an estimated 42,181 CTNG tests were done in a 5 month timeframe.

7.2 Impact: Did groups known to be at risk of STIs engage?

In Ireland, STI rates are highest among those younger than 30 years and in gbMSM.

- 76% of the 13,749 pilot users were aged 17–29 years.
 - 3.9% of pilot service users were aged 17–19 years.
 - 43.1% of pilot service users were aged 20–24 years.
 - 28.9% of pilot service users were aged 25–29 years.
- 17.2% of the 13,749 pilot users were gbMSM.
 - 12.0% of pilot users in Phase 1 were gbMSM.
 - This increased to 20.1% in Phase 2.

Having unprotected sex in the previous 5 days may reflect a user being at high risk for an STI.

- 19.4% of the 13,749 pilot users reported having unprotected sex in the previous 5 days:
 - 65.6% of these were younger than 30 years.
 - 16.6% of these reported their sexuality as gbMSM.

(For a more detailed analysis of users who reported having unprotected sex in the previous 5 days, see Appendix 5).

7.3 Impact: Were STIs diagnosed in groups known to be at risk of STIs?

Of the pilot users younger than 30 years who returned an STI kit (6,244, 77% of all users),¹⁴ results showed an overall reactive rate of 7.8%, with the following number of reactive or positive STI results given:

- 382 chlamydia (6.1%)
- 49 gonorrhoea (0.8%)
- 41 syphilis (0.6%)
- 12 HIV (0.2%)

Of the pilot users who were gbMSM and who returned an STI kit (1,505, 19% of all users), results showed an overall reactive rate of 16.2%, with the following number of reactive or positive STI results given:

- 91 chlamydia (6%)
- 64 gonorrhoea (4.2%)
- 63 syphilis (4.2%)
- 19 hepatitis B (1.3%)
- 7 HIV (0.5%)

Of the pilot users who reported unprotected sexual intercourse (UPI) in the last 5 days and who returned an STI kit (1,459, 18% of all service users), results showed an overall reactive rate of 9.4%, with the following number of reactive or positive STI results given:

- 100 chlamydia (6.7%)
- 17 gonorrhoea (1.2%)
- 15 syphilis (1%)
- Case numbers of those with HIV and hepatitis B were below five and have been suppressed for privacy.

14. The denominator is the total number of tests returned between 5 January and 31 May 2021 for these specific demographic groups. Some blood tests are returned with missing, haemolysed, or insufficient samples. As such, this may slightly underestimate rates of positivity for syphilis, HIV, and hepatitis B and C, but this gives a more accurate portrayal of real-world positivity rates for clinic referrals, relative to the number of orders and returns from an online STI testing service.

7.4 Impact: Did the pilot engage new users?

The ability to engage new service users who have not tested in other settings before is a potential advantage to the online STI testing model. All users were asked about their previous history of accessing sexual health clinics as part of the STI test kit order assessment. Of all users (n=13,749) of the online service:

- 57% (7,863) had never used a sexual health clinic before;¹⁵ and
- 11% (1,580) of all users had been to a sexual health clinic in the last year.

Groups known to be at risk of STIs were well represented amongst users who had never used a sexual health clinic before:

- 62% (6,524) of 17–29-year-olds (10,447) reported that they had never used a sexual health clinic.
- 31% (754) of gbMSM (2,367) reported that they had never used a sexual health clinic.

Having unprotected sex in the previous 5 days may reflect the user being at high risk for an STI.

- 56% (1,482) of the pilot users who reported having unprotected sex in the previous 5 days (2,664) had never attended a sexual health service.

7.5 Impact: Were STIs diagnosed in these new users?

For users of the online service who returned an STI kit and responded that they had never visited a sexual health service before (4,525), an overall reactive rate of 7% was reported.

Among those users who returned their STI test kit and had never visited a clinic before, many were also from groups known to be at risk of STIs and the following reactive rates were reported:

- 7% (269) of users younger than 30 years who had never visited a clinic (3,814)
- 12% (57) of gbMSM who had never visited a clinic (490); and
- 7% (58) of users who had UPSI in the last 5 days (798).

7.6 Impact: What was the cost of testing to the health service?

SH:24 calculated the average cost of one individual using the online STI testing service from the pilot to be €55.61.

This cost is built from the total cost of the service including all overheads, the test kit, packing and distribution, postage, laboratory processing, clinical support, clinical governance, safeguarding, and ongoing software development support, which includes service localisation, contract management, and reporting.

The average SH:24 test cost was also determined by:

- The total cost of all dispatched orders and returns, divided by the number of returns; and
- The proportional split of test kit type (e.g. some users will need triple-site CTNG testing while others will need single-site CTNG testing. Some test kit conformations are more expensive than others).

It is predicted that the average cost for someone testing online will decrease, dropping below €55.61 as the service matures and there is less wastage associated with unreturned test kits (see Section 6.1.2 for more detail).

15. It is possible some of these service users were not sexually active prior to 2021. However, this is likely to affect a small proportion of users.

For the pilot evaluation, the intention was to undertake more detailed cost analyses, including costing of STIs diagnosed in the least complex patient journey in one of the participating pilot clinics, compared to costing of STIs diagnosed in the pilot service. Unfortunately, due to the impact of the COVID-19 pandemic on availability of staff to undertake this work, it was not possible to complete this service cost evaluation. In other healthcare settings, the cost per STI diagnosis is reduced with online STI testing of asymptomatic individuals (Turner *et al.*, 2019). With regard to the planned roll-out of the online STI testing service in 2022, it is important that this work is completed in order to ensure that the service offers value for money. Furthermore, it is worth exploring the potential cost savings associated with managing suitable individuals with asymptomatic chlamydia infections within the online service. Finally, there are currently few data on cost-effectiveness of online sexual health services, and further work is needed in this area (Sumray *et al.*, 2022).

7.7 Impact: summary

- The online STI testing service increased testing capacity by an estimated 33%, highlighting the significant contribution a service like this can make to service capacity.
- STI rates are highest among those younger than 30 years, as well as in the gbMSM group. The pilot engaged these groups known to be at risk of STIs, with 76% of users aged between 17 and 29 and 16.9% reporting their sexual orientation as gbMSM.
- The pilot engaged new service users, with 57% reporting never having previously used a sexual health clinic and only 11% reporting having been to a sexual health clinic in the last year.
- The average cost to the health service for an individual to avail of the pilot was €55.61, which is predicted to decrease as the service matures.
- Detailed cost analyses of the pilot were not possible.
- Roll-out of a national online STI testing must include work to understand potential cost savings and cost-effectiveness of the intervention.

Chapter 8

Acceptability

This chapter sets out the findings of the questions developed to evaluate whether the online STI service was acceptable to the service users and providers who participated in the pilot. Additionally, it presents the findings of an anonymous questionnaire completed by the general public, some of whom had used the pilot service.

8.1 Acceptability: Was the pilot online STI testing service acceptable to service users?

SH:24 routinely asks users to provide feedback using a five-star rating system, and it gives them the option to provide more detailed feedback by entering their specific experience into a freetext field. All 13,749 users of the pilot were sent an SMS asking them to complete the user feedback form.

Of the 2,528 (18.4%) who responded:

- 94.7% (2,395 users) gave the service five stars.
- 4.6% (117 users) gave it four stars.
- 0.7% (16 users) gave it three stars or less.

2,528 users provided optional freetext comments about the service. SH:24 analysed the frequency of words used with software (DataBasic.io) that counts how often commonly occurring words appear in the freetext feedback fields, to better understand these star ratings. Responses were grouped into four themes, which are described below with examples of user responses to illustrate them.

8.1.1 Ease and convenience

Forty-two per cent of users mentioned words such as “easy to use” (617), “simple” (56), “clear” (109), “straightforward” (62), or “convenient” (61). Thirty-nine per cent used positive terms such as “amazing” (58), “great” (244), “impressed” (30), “recommend” (30), or “excellent” (79).

“Honestly I thought this was amazing and I hope you keep it up – I usually try go to [name of clinic] about twice a year and this was so much less hassle, it was much quicker and really user friendly and easy to follow.”

“An outstanding experience. The overall service is fantastic. The website is excellent. The kit-ordering process was simple.”

8.1.2 Speed and efficiency

Thirty-seven per cent of users mentioned words like “quick”, “fast”, or “efficient”.

“I found the whole process really easy to follow thanks to the text messages received. The results were returned to me really fast. I feel like a service like this is really invaluable to people my age as it is a free and anonymous service, it will encourage more people to get tested. I would definitely use the service again and recommend to friends.”

“I loved how quick and efficient this all was. I like to get checked when I finish with a partner but with work times it can be difficult. This made it so much easier and stopped me from putting it off. Thank you!”

8.1.3 Support and logistics

Nineteen per cent of users mentioned the quality of the user experience, including instructions, text message responses, or videos.

“All steps were clearly explained, and I was kept informed of all stages of the process. A valuable service.”

“Very trans and queer inclusive and so easy to use, would defo use this service again.”

“The communication was great. Documentation/instructions were great. Everything was very swift too. Hugely impressed.”

8.1.4 Privacy and discretion

Ten per cent of users commented on the privacy, discretion, or anonymity of the service:

“Exceptional, much-needed vital service. Delighted to be able to participate in this trial. The opportunity to be able to do at-home discreet testing without the embarrassment and shame of being in front of a doctor is what inspired me to finally get tested as part of a general sexual health check. This programme should be rolled out nationwide and broadly advertised specifically for teens/young adults to end the stigma.”

“Brilliant service, I really hope it stays for public sexual health as part of the HSE. I don’t know how many of my female friends in particular who were embarrassed to get checked even after unprotected sex... a lot of people do judge so I think it would help stop the spread of STIs.”

8.1.5 Response to low ratings

SH:24 reached out to 15 of the 16 service users who gave three stars or less in order to better understand their concerns (the one other user had opted out of any contact from SH:24 specifically). The only significant area of concern users identified was difficulty completing the blood test. Six people reported difficulty completing the blood test, two reported a false positive result, one was concerned that treatment was not available in their area, three had either made this rating in error or gave no reason, one was unhappy that their result was positive, one misread the results message, one had difficulty posting the sample, and one had experienced a delay in receiving their results.

8.2 Acceptability: Was the pilot online STI testing service acceptable to service providers?

SH:24 developed an anonymous online questionnaire (see Appendix 7) for clinicians (doctors and nurses) working in the participating public STI clinics in the pilot areas.

Seventeen people completed the questionnaire:

- 12 nurses
- 4 doctors
- 1 clinical administrator; and
- of whom, 16 had experience of signposting patients to the online service.

The denominator for the number of doctors and nurses who could respond to the questionnaire is not known. However, it is likely that 17 responses is a low response rate. As such, these results may not be representative and should be interpreted with caution. Almost all respondents¹⁶ valued the contribution of online services to sexual health service provision, and they were positive about the quality of the pilot online service and the interface with face-to-face care.

8.2.1 Improving patient care

When asked, ‘Do you agree with the statement: “Signposting to SH:24 improved my patients’ care”?', 16 out of 17 people agreed or strongly agreed. Their reasons centred around the possibility of rapid access to convenient testing that acknowledges the value of face-to-face care.

One respondent who disagreed with the statement observed: “Not enough appointments available for treatment”. This highlights a known issue during the pilot. The Pilot Steering Group was aware that clinical capacity was already strained by the impact of the COVID-19 pandemic, and that the pilot service increased the number of people who required treatment, particularly when the number of orders were very high in Phase 1. The Pilot Steering Group had taken steps to stagger the number of users attending clinics for treatment, consulting with clinics to ensure the pilot online STI testing service could maintain a high standard of care.

“Easy and quick access to testing is the most appropriate way to deal with public health issues like STIs. It gives the patient control over their own health and encourages personal responsibility.”

“The availability to screen without coming to the clinic appeals to many and encourages more frequent testing.”

“Minimises patients’ need to attend the hospital for an asymptomatic screen. Reduces footfall within the department assisting with COVID social distancing measures.”

8.2.2 Improving patient access to STI testing

All 17 respondents had seen a patient who had taken or attempted to take an STI test with the online service. All agreed or strongly agreed with the statement “SH:24 has increased my patients’ access to STI testing”.

The reasons given were:

- limited capacity within face-to-face services that had been further decreased during the COVID-19 pandemic

16. One provider responded negatively about the availability of appointments in clinic for treatment, but they were otherwise positive about the impact of the online service. Another provider stated “strongly disagree” in response to the question on whether the service improved capacity in clinic for more complex care. However, they gave positive responses to all other questions, so it was not clear if this low score was intentional or provided in error.

- improving access for people who otherwise would have to travel to a clinic or who were not sure how to test during the COVID-19 pandemic; and
- engaging a wider population in STI testing.

“Clinics are always busy and always full to capacity. It’s not always possible to fit a patient into the clinic in a timely fashion, so online access is a necessity. This is particularly important when someone is a recent contact of an infection and needs to check where they stand, allowing earlier intervention.”

“SH:24 played an essential role for access to sexual health testing during COVID-19.”

“There is still a taboo relating to sexual health and although awareness has increased in recent times, SH:24 caters for the population that are still apprehensive to attend sexual health services in person and value the discretion of screening themselves at home – an advantage to national health promotion with regard to early identification of infection, treatment and prevention.”

8.2.3 Transition to clinics

Fifteen of 17 respondents agreed or strongly agreed with the statement “Patients with a positive result from SH:24 transition easily to clinics.”

“We control the triage for all SH:24 positive diagnoses so access to treatment appointments is completely within our control. There is never a delay in arranging treatment.”

“The fact that patients are given prompt information via text messaging makes it user friendly and easier for them to contact our service.”

“... there was ease of access due to availability of slots for SH:24 patients. I find that patients are quite anxious immediately post diagnosis and that easy and accessible communication pathways with rapid response facilitates improved patient experience/outcomes.”

The two respondents who did not agree cited both the high demand for services causing delays and the difficulty they experienced in contacting patients.

8.2.4 Increasing user autonomy, capacity for STI testing, and appropriate use of specialist care

All respondents agreed or strongly agreed with the statements “Online testing increases patient autonomy” and “Online testing increases overall capacity for STI testing”.

Fifteen out of 17 respondents agreed that “Online testing frees clinic staff time for more complex care”. One provider did not respond to this question, and one provider strongly disagreed.¹⁷

17. The user did not elaborate on why they strongly disagreed, but the rest of their responses indicated a positive view of STI testing and an agreement with improving capacity, so the negative response may have been provided in error.

8.2.5 Open feedback from clinicians

SH:24 invited all respondents to make general comments about the service.

Respondents highlighted several benefits of the service, including the value of:

- online testing to rural areas
- online information if linked to the possibility of contacting clinic staff; and
- integration between online services and face-to-face clinical.

Two respondents mentioned concerns around service users receiving a reactive blood test (HIV or syphilis) result at home, where they may not have support available or understand that these results are 'provisional'. SH:24 recognises these concerns; all reactive HIV tests are given over the phone by an experienced clinician who can explain what this means and support the user with the next steps (confirmatory testing).

“The discreet manner of [online testing] and its easy accessibility is a game changer for those living in rural areas, or those who would not be able to access STI clinics for various reasons. The information on the site is clear and easy to understand so anyone with anxiety around a certain issue or sexual contact can gain more control and answers to questions... allaying fears. It will allow people of all ages and sexual preferences to get tested without worrying about attending a clinic, but still [knowing] they [can] contact staff should there be a positive result”

“An integrated model of care which incorporates an appropriate level of face-to-face education/ testing and home testing will greatly support ease of access to care and allow better care for a larger number of patients.”

8.3 Acceptability: summary

- The pilot demonstrated a high degree of acceptability for both users and clinicians.
- Users found the service easy to use, fast, and efficient, with excellent support provided and high levels of privacy and discretion.
- Clinicians reported that the online service contributed to better care, with improved access to testing for users and integrated pathways of care that connected online and face-to-face services as required.

Chapter 9

Conclusions

9.1 Summary

This evaluation set out to assess the feasibility, impact, and acceptability of operating a pilot online STI service in three counties in Ireland. Despite there being no official announcement or advertising, there was unprecedented demand for the service due to the sharing of information about the service on social media and through WhatsApp groups. Indeed, demand for the service was so high that a decision was made to temporarily suspend the dispatch of new orders.

Over the course of the pilot, 13,749 of 14,000 available test kits were ordered and dispatched. A total of 637 reactive results was reported during the pilot service delivery period (5 January–31 May 2021), giving an overall reactive rate of 8% (637/8,064).

Service processes ran smoothly through the course of the pilot. In total, 100% of kits were dispatched to service users by the next working day, and 67% of service users returned their kits to the laboratory for testing. While this might be lower than expected, the rate of kit return will likely increase as the service matures. Laboratory testing was efficient, with 97.3% of users receiving their results within 72 hours. Five service users aged 17 years raised safeguarding flags during their order process, 3 of whom were contacted and followed up with. Two users did not respond to three text messages and an email, and in line with agreed processes, their order was not dispatched.

The online STI testing service increased testing capacity by an estimated 33% in the pilot areas in which it operated. In Ireland, STI rates are highest among those younger than 30 years and in gbMSM. This pilot reached these groups, with 75.9% of service users aged between 17 and 29 years and 17.2% being gbMSM. Having had unprotected sex in the previous 5 days may reflect a user being at high risk for an STI, and 19.4% of pilot users reported having had unprotected sex in the previous 5 days, of whom 65.6% were younger than 30 years.

In total, 18.4% of service users completed feedback on their experience of the questionnaire. The majority (94.7%) rated the service five stars out of five. Freetext responses were analysed, and respondents cited ease and convenience, speed and efficiency, support and logistics, and privacy and discretion as positive aspects of the service. Similarly, the service was rated highly by a small group of clinicians involved in the service.

The average cost to the health service for an individual to avail of the pilot testing service was €55.61, which is predicted to decrease as the service matures. Detailed cost analyses of the pilot were not possible. Roll-out of a national online STI testing must include work to understand potential cost savings and cost-effectiveness of the intervention.

9.2 Evaluation strengths

This evaluation has a number of strengths. It began directly after completion of the pilot, so respondents would have little retrospective bias. It used routinely collected data, and therefore it will accurately reflect the pilot processes, challenges, and achievements. The mixed-methodological approach allows for a rounded and comprehensive understanding of the feasibility, impact, and acceptability of the service. By including data from 2019 services, the evaluation allows for comparative conclusions to be drawn. While 2019 is reflective of a pre-COVID-19 pandemic era, and, as such, behavioural patterns and clinical capacity might be slightly different from how they are currently, analysing data from that year does allow for a description of 'service as normal'. Comparison using 2020 data was not possible, as these data had not been released at the time of analysis.

9.3 Evaluation limitations

This pilot took place during the COVID-19 pandemic, which presented challenges to the implementation of the pilot and completion of the evaluation report due to severe pressure on clinical services and staff time. The data may somewhat underestimate the effectiveness of the online service due to potential decreases in STI circulation as a result of governmental restrictions such as social distancing and travel restrictions.

Similarly, due to COVID-19 pandemic restrictions, it was not possible to use the original methodological approach planned for this evaluation. The adapted approach, however, allowed for the collection and analysis of robust, routinely collected data. Had this pilot collected additional data for the purposes of the evaluation only, tracking future progress might not have been as straightforward. For operational reasons, this evaluation was led by SH:24, so it is possible there is some observational bias. However, the project was overseen by a Steering Group and a smaller subcommittee which formed the Evaluation Group, as well as by members of the SHCPP, and all efforts have been made to reduce the possibility of any such bias.

Finally, a full cost-effectiveness analysis was not possible in the scope of this evaluation, although all efforts have been made to outline the cost of testing within the pilot study. The evaluation was unable to adequately investigate the cost for the healthcare system or the user of the pilot integrated service. This needs to be addressed and monitored as a national service is rolled out, and should include a determination of the cost-effectiveness of this intervention in the Irish healthcare setting.

9.4 Conclusions

Evaluation of the pilot found it to be feasible, impactful, and acceptable to service users and providers. The pilot served to increase STI testing capacity within the pilot counties, engaging new users and identifying STIs in groups known to be at risk of STIs. In Ireland, the introduction of an online STI testing service, integrated with public STI services, for asymptomatic individuals is likely to be part of the solution to the access and capacity issues that have been identified with public STI clinics. In addition, it is likely to engage new users to STI testing, addressing the established concerns of embarrassment, stigma, and confidentiality that can serve as barriers to seeking STI testing within face-to-face settings.

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Appendices

Appendix 1: Steering Group membership and Terms of Reference

SH:24 CIC members

- Dr Paula Baraitser, Clinical Director, SH:24 and Consultant in Sexual Health, King's College Hospital
- Justin Harbottle, Business Development Manager
- A Torm Shaw, Research Associate

HSE Sexual Health and Crisis Pregnancy Programme

- Fiona Lyons, Clinical Lead/Medical Director
- Caroline Hurley, Project Manager
- Rachael Metrustry, Project Officer
- Owen Brennan, Research Assistant

The GUIDE Clinic, St James's Hospital, Dublin

- Grainne Courtney, Consultant in Genitourinary/HIV Medicine
- Sile Dooley, Clinical Nurse Manager 2/Sexual Health Advisor
- Fi Herraghty, Clinical Nurse Manager 2/Sexual Health Advisor
- Grainne Kelly, Sexual Health Advanced Nurse Practitioner
- Fiona Lyons, Consultant in Genitourinary/HIV Medicine

Mater Misericordiae University Hospital, Dublin

- Jack Lambert, Consultant in Infectious Diseases
- Paul Duggan, Candidate Advanced Nurse Practitioner
- David Field, Clinical Nurse Specialist

St. Vincent's University Hospital, Dublin

- Cathal O'Broin, Consultant in Infectious Diseases and General Internal Medicine
- Laura Martin, Clinical Nurse Manager 2
- Siobhan O'Dea, Clinical Nurse Manager 2
- Clarence Soliman, Clinical Nurse Manager 2

Gay Men's Health Service

- Susie Clarke, Consultant in Infectious Diseases

HIV Ireland

- Stephen O'Hare, Executive Director

South Infirmar Victoria University Hospital, Cork

- Suzanne Cremin, Area Medical Officer
- Danny Quealey, Clinical Nurse Manager 2

Sexual Health Centre Cork

- Martin Davoren, Executive Director

University Hospital Kerry

- Martina O’Sullivan Darcy, Clinical Midwife Manager

Steering Group Terms of Reference:

- Support and oversee the establishment, progression, and successful completion of the pilot project;
- Input into and agree online STI testing platform requirements (e.g. access, geographical boundaries, risk assessment, etc.);
- Input into and agree monthly monitoring metrics and evaluation requirements;
- Lead on integration requirements and project delivery at respective clinic sites;
- Attend quarterly steering group meetings; and
- Review the draft evaluation report.

Appendix 2: Original pilot evaluation objectives

1. Document the impact of the introduction of online STI testing on volume of testing, place of testing, and case mix within two geographical areas in Ireland
2. Understand user experience of online and clinic-based services in rural and urban contexts.
3. Understand clinicians' experiences of the changes in workload (quantity and complexity of caseload) within the clinic-based services as a result of the introduction of online care.
4. Document the opportunity cost to users who use online and clinic-based services.
5. Document the changes to the cost per public health outcome (STI diagnosed and treated) to the health service, as a result of the introduction of the online service.

Appendix 3: Age and sexual orientation of online STI testing service users

Table A3. Age and sexual orientation of users during Phase 1 and Phase 2 of the pilot service

User's age	Phase 1		Phase 2		Pilot total	
	n	%	n	%	n	%
17–19 years	142	2.9%	395	4.5%	537	3.9%
20–24 years	2,482	50.5%	3,448	39.0%	5,930	43.1%
25–29 years	1,513	30.8%	2,467	27.9%	3,980	28.9%
30–34 years	512	10.4%	1,364	15.4%	1,876	13.6%
35–39 years	187	3.8%	602	6.8%	789	5.7%
40–44 years	49	1.0%	294	3.3%	343	2.5%
45–49 years	14	0.3%	144	1.6%	158	1.1%
>50 years	12	0.2%	124	1.4%	136	1%
Age total	4,911	100.0%	8,838	100.0%	13,749	100
User category as defined by gender and gender of partners	Phase 1		Phase 2		Pilot total	
	n	%	n	%	n	%
gbMSM	589	12.0%	1,778	20.1%	2,367	17.2%
MSW	787	16.0%	1,494	16.9%	2,281	16.6%
WSM	3,126	63.7%	4,868	55.1%	7,994	58.1%
WSWM	286	5.8%	509	5.8%	795	5.8%
WSW	123	2.5%	189	2.1%	312	2.3%
Total	4,911	100.0%	8,838	100.0%	13,749	100.0%
User's sexual orientation	Phase 1		Phase 2		Pilot total	
	n	%	n	%	n	%
Heterosexual	3,668	74.7%	6,084	68.8%	9,752	70.9%
Bisexual	578	11.7%	980	11.1%	1,558	11.3%
Gay male	468	9.5%	1,433	16.2%	1,901	13.8%
Lesbian	98	2.0%	142	1.6%	240	1.7%
Other	33	0.7%	64	0.7%	97	0.7%
Prefer not to say	66	1.3%	135	1.5%	201	1.5%
Total	4,911	100.0%	8,838	100.0%	13,749	100.0%

Appendix 4: Gender and age of those who ordered an online test

Table A.4. Gender and age of those who ordered an online test from the service from January to May 2021.

	16–19 ^a		20–24		25–29		30–34		35–39		40–44		45–49		>50		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Males (incl. trans male)	136	3.0	1,503	32.9	1,417	30.1	789	17.3	361	7.9	178	3.9	88	1.9	101	2.2	4,573	100
Females (incl. trans women)	395	4.4	4,324	48.4	2,506	28.1	1,057	11.8	401	4.5	158	1.8	62	0.7	30	0.3	8,933	100
Non-binary	5	3.4	70	47.6	39	26.5	15	10.2	13	8.8	*	*	*	*	*	*	147	100
Other	*	*	6	40.0	*	*	*	*	*	*	*	*	*	*	*	*	15	100
Prefer not to say	*	*	27	33.3	14	17.3	13	16.0	12	14.8	*	*	*	*	*	*	81	100
SH:24 Total tests ordered	537	3.9	5,930	43.1	3,980	28.9	1,876	13.6	789	5.7	343	2.5	158	1.1	136	1.0	13,749	100

^a SH:24 was commissioned for users aged 17 years and older only.

* Cells with values of less than 5 have been suppressed.

18. Of those males, 34 said their gender identity was not the same as what they were assigned at birth.

19. Of those females, 31 said their gender identity was not the same as they were assigned at birth.

Appendix 5: UPSI in the 5 days before ordering an STI test among users of the online service

Table A.5. Age, gender, and sexual orientation of users who self-reported having UPSI in the 5 days before ordering an STI test.

	Self-reported UPSI in previous 5 days	
	n	%
Age		
17–19 years (total n=537)	146	27.2
20–24 years (total n=5,930)	1,193	20.1
25–29 years (total n=3,980)	738	18.5
30–34 years (total n=1,876)	339	18.1
35–39 years (total n=789)	129	16.3
40–44 years (total n=343)	60	17.5
45–49 years (total n=158)	38	24.1
>50 (n=136)	21	3.3
Total age (n=13,749)	2,664	19.4
Gender		
Women (including trans women) (total n=8,933)	1,666	18.6
Men (including trans men) (total n=4,573)	949	20.8
Non-binary (total n=147)	30	20.4
Prefer not to say (total n=81)	16	19.8
Other (total n=15)	3	20
Total gender (n=13,749)	2,664	19.4
Sexual orientation		
gbMSM (n=2,367)	392	16.6
MSW (n=2,281)	575	25.2
WSM (n=7,994)	1,480	18.5
WSWM (n=795)	160	20.1
WSW (total n=312)	57	18.3
Total sexual orientation (total n=13,749)	2,664	19.4

Appendix 6: 'Sexual Health in Ireland' questionnaire

Beginning of questionnaire.

Do you live in the Republic of Ireland? If so, we would love to hear about your experiences accessing online and in-person testing for sexually transmitted infections (STI) in your area.

This feedback is anonymous, and it is not necessary to provide your name. We intend to use this information to improve testing for STIs in Ireland.

Questions begin.

Q1. Do you live in the United Kingdom or the Republic of Ireland?

Response options:

Republic of Ireland
United Kingdom

Selecting 'UK' leads to the end of the questionnaire to screen users out. Selecting 'Republic of Ireland' leads to Q2.

Q2. Please select which county you live in below.

Response options:

Carlow
Cavan
Clare
Cork
Donegal
Dublin
Galway
Kerry
Kildare
Kilkenny
Laois
Leitrim
Limerick
Longford
Louth
Mayo
Meath
Monaghan
Offaly
Roscommon
Sligo
Tipperary
Waterford
Westmeath
Wexford
Wicklow

Q3. Do you live in an urban area (city/town) or a rural area (not city or town)?

Response options:

Urban
Rural

Q4. When was your last sexual health check-up?

Response options:

In the last year
Longer than 12 months ago
I have never had one before

Q5. How easy is it to access STI testing in your area? Please consider all aspects of getting an STI test, e.g. appointment availability, waiting times, privacy, childcare, time off work, etc.

1 star is difficult, 5 stars is easy.

Q6. Where would you most likely go for an STI test?

Response options:

Public STI clinic
Private provider
General practitioner (GP)
Student health service
Pharmacy (purchase a home test)
Online service provider
Other

Q7. Can you estimate the total cost of getting an STI test?

Response options:

Less than €50
€50–€100
More than €100

Q8. Overall, how affordable is it for you to get an STI test? Please consider all costs associated with a visit such as travel, GP costs, time off work, childcare, etc.

1 star is very expensive, 2 quite expensive, 3 affordable, 4 very affordable, and 5 is free.

Q9. What would a return journey to travel to get an STI test involve, in terms of distance?

Response options:

Under 10 km
10–30 km
30–60 km
60–100 km
Over 100 km

Q10. How long would it take for you to get your STI test check-up? Please consider all elements of the journey from the time you leave your house to the time you arrive at the clinic, e.g. public transport routes, accessibility of transport, waiting times, length of appointment, etc.

Response options:

Under 2 hours
2–5 hours
Over 5 hours

Q11. Would you use a free online sexual health service if you were offered the opportunity?

Response options:

Yes
No
Unsure

Respondents who select 'No' or 'Unsure' are directed to Q.12. Respondents who select 'Yes' are directed to Q.13.

Q12. Please expand on why you would be reluctant to use an online sexual health service below.

Q13. Have you used SH:24 (online sexual health service) previously?

Response options:

Yes
No

Respondents who select 'Yes' are directed to Q.14. Respondents who select 'No' are directed to Q.15.

Q14. Could you tell us about your experiences of using SH:24?

Q15. Have you used any other online sexual health services previously?

An online sexual health service is when a sexual health test is ordered and sent to your home.

Thank you for taking the time to complete this questionnaire. Your experiences are important to us and will help to shape services around your needs.

If you would be interested in talking to us further about your experiences of using sexual health services, please leave your contact details below.

End of questionnaire.

Appendix 7: SH:24 Ireland clinicians questionnaire

Thank you for completing this short questionnaire about your experience of working with the online sexual health service SH:24.

As someone working in clinic-based sexual health services, we are interested in your experience of working with SH:24.

Completing this questionnaire will help us understand and improve the way that online and clinic-based services work together to improve sexual health in Ireland.

The questionnaire is anonymous, and we will not ask for your name.

Q1. What is your job type within the sexual health service where you work? If you do not work in a sexual health service, then please do not continue with this questionnaire.

Response options:

Doctor
Nurse
Other

Q2. Please describe your role.

Q3. In your clinical practice, have you signposted one or more patients to SH:24?

Response options:

Yes
No

Q4. Do you agree with the statement ‘Signposting to SH:24 improved my patients’ care’?

Response options:59

Strongly agree
Agree
Disagree
Strongly disagree

Q5. Please explain your answer to Question 4.

Q6. In your clinical practice, have you seen a patient who had taken an STI test or attempted to take an STI test with SH:24?

Response options:

Yes
No

Q7. Do you agree with the statement ‘SH:24 increased my patient’s access to STI testing’?

Response options:

Strongly agree
Agree
Disagree
Strongly disagree

Q8. Please explain your answer to Question 7.

Q9. In your clinical practice, have you seen a patient who was referred to you for treatment after taking a test with SH:24?

Response options:

Yes
No

Q10. Do you agree with the statement ‘Patients with a positive result from SH:24 transition easily to clinics for treatment’?

Response options:

Strongly agree
Agree
Disagree
Strongly disagree

Q11. Please explain your answer to Question 10.

Q12. Do you agree with the statement ‘Online testing increases patient autonomy’?

Response options:

Strongly agree
Agree
Disagree
Strongly disagree

Q13. Do you agree with the statement ‘Online testing frees clinic staff time for more complex care’?

Response options:

Strongly agree
Agree
Disagree
Strongly disagree

Q14. Do you agree with the statement ‘Online testing is a discreet and convenient way of testing for STIs’?

Response options:

Strongly agree
Agree
Disagree
Strongly disagree

Q15. Do you agree with the statement ‘Online testing increases overall capacity for STI testing’?

Response options:

Strongly agree
Agree
Disagree
Strongly disagree

Q16. Please add any additional comments that you would like to make about the role of publicly funded online STI testing in Ireland.

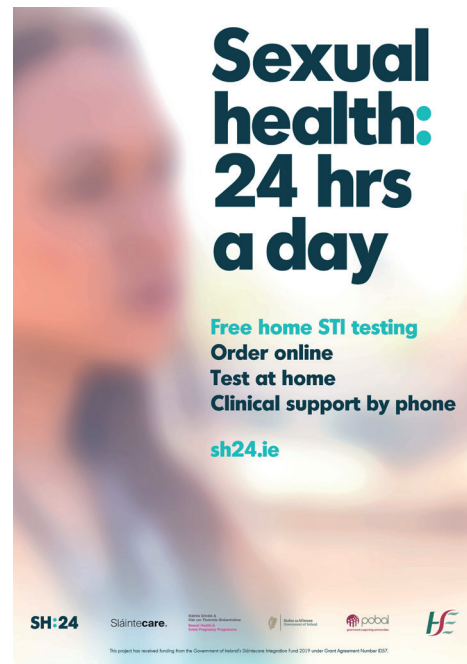
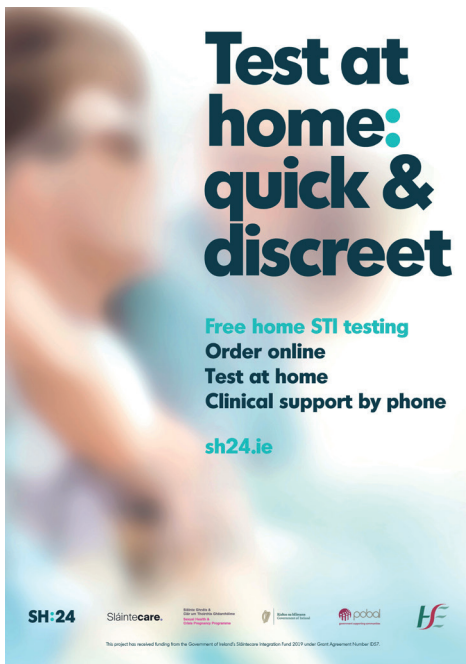
End of questionnaire.

Appendix 8: Social media imagery, posters, and referral cards

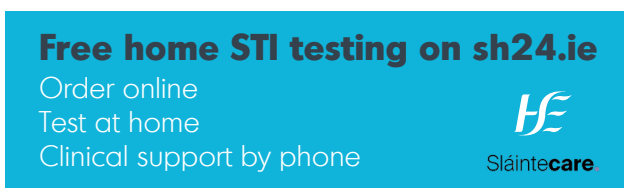
Social media imagery



Posters



Referral cards



Visit sexualwellbeing.ie for sexual health and wellbeing information.



Appendix 9: User feedback questionnaire examples

“Very trans and queer inclusive and so easy to use, would defo use this service again.”

“An outstanding experience. The overall service is fantastic. The website is excellent. The kit-ordering process was simple. The communication was great. Documentation/instructions were great. Everything was very swift too. Hugely impressed.”

“Brilliant service, I really hope it stays for public sexual health as part of the HSE. I don’t know how many of my female friends in particular who were embarrassed to get checked even after unprotected sex. I never felt shame or embarrassed but pride... however, a lot of people do judge so I think it would help stop the spread of STIs.”

“I’ve been trying to build up the courage to get a check for so long, this test made it so much easier to bite the bullet and do it in the safety of my own home. I know there are some free clinics in town but another huge deterrent for me for the past few years has been the price of STI checks in college/ GPs. This was so so helpful, thank you!”

“Exceptional, much-needed vital service. Delighted to be able to participate in this trial. The opportunity to be able to do at-home, discreet testing without the embarrassment & shame of being in front of a doctor is what inspired me to finally get tested as part of a general sexual health check. This program should be rolled out nationwide and broadly advertised, specifically for teens/young adults to end the stigma.”



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