

# Annual Report

2024

Melbourne  
Sexual  
Health  
Centre



**MSHC**

MELBOURNE SEXUAL HEALTH CENTRE  
Part of AlfredHealth

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# ABOUT MELBOURNE SEXUAL HEALTH CENTRE

Melbourne Sexual Health Centre (MSHC) is a service within Alfred Health. The vision of the MSHC is to be a leader in the management and prevention of Sexually Transmitted Infections (STIs) and its mission is to maximize sexual health through innovation and excellence in public health, education, clinical care and research.

It is the only centre that provides full-time, free sexual health services to the people of Victoria. The services provided by MSHC include general clinics for the management of STIs and HIV and a variety of specialist clinics. The service provided is predominantly walk in led by nurse triage service and an appointment-based clinic for people with HIV.

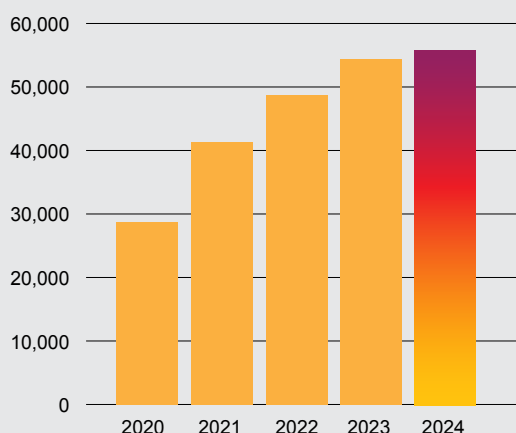
## ABOUT THIS REPORT

This annual report outlines the operational performance for MSHC from 1 January 2024 to 31 December 2024. We value transparency and accountability and aim to have all our reportable data available to the community in this publication.

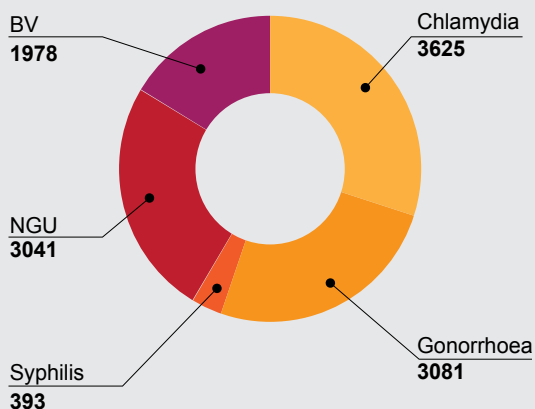
Melbourne Sexual Health Centre (MSHC), Alfred Health, is the only public sexual health service in Victoria. With a trusted brand, MSHC provides clinical services for the prevention, diagnosis and management of sexually transmitted infections (STIs) and HIV.

MSHC is recognised internationally for its STI research and innovation, along with digital transformation and infrastructure modernization. MSHC is a leader in digital health innovation where the centre has played a key role in developing AI-driven services.

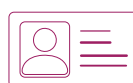
### Clinic visits 2024



### Positive Diagnoses 2024



### MSHC Fast Facts 2024



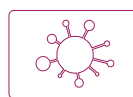
**120**  
Staff



**55,683**  
Sexual health consultations



**2,083**  
People living with HIV  
96% on HIV treatment



**257**  
Mpox diagnosis



**976**  
PEP consultations  
**933**  
PrEP clients



**104**  
Peer reviewed Publications



**548,912**  
Visits to MSHC web site



**117,813**  
SMS messages to sexual partners via Let them Know

### StaySTIFree

Victorian Sexual Health Network

Providing training and support to 10 GP partner clinics in our statewide Victorian Sexual Health Network VSHN



Partnership with Melbourne University and GP training programme providing education for nurses, medical students and GPs



# TRIBUTE TO Professor Christopher (Kit) Fairley AO Director 2001 – 2024



This year marks a significant transition for the Melbourne Sexual Health Centre (MSHC) as we bid farewell to Professor Christopher (Kit) Fairley, who has stepped down as Director after nearly 25 years of transformative leadership. As the new Director of this extraordinary institution, I feel privileged to build on the remarkable foundation that Kit has established.

Under Kit's stewardship, MSHC evolved from a relatively unknown clinic in to one of the world's foremost centres for sexual health research and innovation. When he took the helm in 2001, the clinic saw approximately 15,000 consultations annually; today, that number has quadrupled to

60,000, all achieved without corresponding increases in funding. His leadership has been defined by an unyielding commitment to efficiency, evidence-based care, and ensuring that every public dollar spent maximised health outcomes.

Kit pioneered numerous innovations that reshaped sexual health care delivery. MSHC became the first fully paperless STI clinic, integrating digital systems such as SMS reminders, automated clinical alerts, and self-collected testing. His work directly influenced policy and practice, from streamlining STI screening for sex workers to informing international HPV vaccination policies. His research established digital tools like *Let Them Know*, which allows people to anonymously notify partners about STI risks—an initiative now embedded in clinical and public health strategies.

One of Kit's most groundbreaking contributions was his research into gonorrhoea transmission via saliva. His work challenged long-held assumptions that gonorrhoea was transmitted solely through genital contact, demonstrating that oropharyngeal gonorrhoea could spread through practices such as deep kissing. This insight reshaped public health messaging, clinical screening recommendations, and prevention strategies, particularly for men who have sex with men. His advocacy for mouthwash as a potential intervention to reduce gonorrhoea transmission sparked global discussions on innovative, low-cost approaches to STI prevention.

Beyond his clinical and policy impact, Kit's dedication to research and mentorship has created a lasting legacy. When he arrived at MSHC, the research output was minimal; by the time he stepped down, the centre was producing over 100 publications annually, attracting millions in research funding, and housing six full professors. He personally supervised 40 PhD students, many of whom now lead major research programs in Australia and beyond, forming the backbone of MSHC's academic excellence.

Kit's influence extends far beyond our walls. His voice has shaped national and global discussions on STI prevention, control, and policy. His 2019 public lecture, *Whose Fault Was It That Bob Caught Syphilis?* challenged societal narratives around STI transmission, underscoring the need for structural and public health solutions rather than individual blame. He has continually advocated for better, more effective public health interventions—ensuring that sexual health remains a priority, not an afterthought, in broader healthcare discussions.

In his characteristically pragmatic style, Kit chose to step aside at 64, citing a desire to pass the baton to someone younger and more energetic. His departure is not just the end of an era but the continuation of a legacy—one that ensures MSHC remains at the forefront of sexual health research, education, and care for years to come.

On behalf of the staff, researchers, clients of MSHC, and the broader community, we thank Kit for his vision, ingenuity, and unwavering commitment to sexual health. We are all the better for his leadership, and we will carry forward his work with the same spirit of excellence and innovation that he exemplified.

Professor Doctor Jason Ong

Tribute to Ian Krigsman

**Developer and Programmer of CPMS 2000 - 2001**

**AN ENORMOUS THANK YOU TO**  
*Ian Krigsman*

Most of us just 'use' our electronic medical record system (CPMS) and take it a little for granted- something that is entirely reasonable....but we owe CPMS to one very nice, kind and intelligent man, Ian Krigsman. He is slowly stepping down from his role as the hands-on person- to a more supervisory role. I would like to thank him for his enormous contribution to CPMS. He has made a real difference to our lives and those of the Victorian community.

### **The beginning**

The Department of Health had commissioned Ian (circa 2000) to fix the old dbase 3, DOS based system. On a skeleton budget he created the first version which was essentially the spread sheet interface you see today with the storage of patient data and nursing and medical rosters. We still used paper-based histories kept in the old compactus in admin, paper-based laboratory testing that you took around to the blood room and put in a box in order. Version 1, went live in July 2001. It was a major improvement and allowed increases in our clinic efficiency.

### **Move to paperless medical record**

Looking back now, it seems amazing that Ian wrote the code and developed the paperless CPMS record that collects the computer assisted self-interview (CASI) data, the client's history, orders and receives laboratory tests, order injectables, visually displays longitudinal HIV data, tracks appointments, includes electronic alerts, automates client follow up (negative results automatically filed), stores documents and provides many vital reports. It is simply amazing. Many will remember the day we launched the paperless CPMS system on a Friday morning in March 2011....worked beautifully.

To give some context to the enormity of what Ian has done developing paperless CPMS, - these tasks are usually done by huge corporations like Cerner or Epic or Medical Director. For example, Cerner has a market capitalisation of 44 Billion dollars!

### **The difference this has made cannot be overstated**

I cannot overstate the contribution this software has made to the Victorian Public. No comparable system was available in 2000 and indeed even today, there is no system that can do what CPMS does. One key issue is how easy it is to get data out of CPMS and use it to influence public policy. Some examples include.

- Changing the sex worker legislation in 2012 to remove the onerous, expensive, and pointless monthly testing of all sex workers. CPMS provided the data to show sex workers had the lowest STI rate of any group in the Australian community. It now provides



monitoring data showing removing this testing requirement has not seen any rise in STI rates.

- Providing data on genital warts so countries changed from the bivalent to quadrivalent HPV vaccine (e.g. UK)
- Improved the clinic overall efficiency to allow many more clients to be seen. This may equate to about a quarter of a million extra clients seen since 2000.
- Provided the data for hundreds of important observations that have influenced clinical care (gonorrhoea transmission, self-collected samples, sexual transmission of BV etc)

Ian contribution to sexual health care for Victorians by enabling MSHC has been amazing.

### **And about Ian**

I have worked closely with Ian now for over a quarter of a century. He listens carefully, thinks deeply, responds thoughtfully, and communicates clearly and that combined with his clearly high levels of computer competence. He has been an incredible asset to MSHC. But personally, he is a very good person. He is kind, polite, thoughtful, unassuming, and humble.

Ian – Thank you. You're an amazing individual to whom Melbourne Sexual Health Centre owes an unquantifiable huge debt of gratitude. Five Faces, under Ian's watchful eye, will be taking over the routine maintenance of CPMS.

Professor Christopher Fairley

# DIRECTOR'S MESSAGE 2024



2024 has been a remarkable year of transition, reflection, and innovation at the Melbourne Sexual Health Centre (MSHC). It has been both a great honour and a humbling responsibility to take the reins as Director (from February 2025 onwards), succeeding Professor Christopher (Kit) Fairley AO, whose 24-year leadership transformed MSHC into one of the world's leading centres in sexual health research and care. I thank Kit for his visionary contributions and his continued support during this leadership transition.

MSHC is a vital public health service in Victoria, offering free sexual health care with a focus on those most at risk. In 2024, we provided over 55,000 consultations to nearly 27,000 individuals—a testament to our clinical, research, and administrative teams' dedication to delivering high-quality care despite increasing demand. Access to timely and quality sexual health services is essential for the effective control of sexually transmitted infections (STIs), and we remain steadfast in our commitment to reducing barriers and reaching those who need our care the most.

Client satisfaction increased significantly from 88% in 2023 to 96% in 2024, highlighting the effectiveness of our initiatives to enhance the client experience. A key initiative this year was the Nudge-a-thon, supported by an Alfred Health Innovations Grant, which allowed us to identify behavioural strategies aimed at alleviating overcrowding and reducing wait times.

In response, we have already implemented several enhancements, including improved website navigation for clients and the introduction of a 'Digital Front Door' to streamline the registration process. Additionally, we are progressing on another valuable suggestion from the Nudge-a-thon: implementing telephone triage. These practical, client-centered changes exemplify our commitment to ongoing improvement and delivering exceptional service.

Our research remains a cornerstone of MSHC. We contributed over 100 peer-reviewed publications in 2024 across diverse topics—ranging from syphilis screening in pregnancy, to AI-driven STI diagnosis tools, to cost-effectiveness modelling for HIV prevention. I am so proud of our Research team's achievements, including several national awards recognising excellence and emerging leadership in sexual health.

2024 also marked the retirement of Dr Ian Denham, whose wisdom and legacy have shaped sexual health medicine in Australia for over four decades. His contributions will continue to resonate across the generations of clinicians he has taught and inspired.

The expansion of the Victorian Sexual Health Network (VSHN) to include 10 affiliated general practice clinics reinforces our dedication to providing accessible sexual health care throughout the state. Our ongoing digital transformation initiatives are making significant strides, featuring advancements in our electronic medical records and the introduction of AI-based tools such as MySTIRisk, which predicts future STI risks, and ImageCapture, which aids in diagnosing skin lesions that could be caused by an STI. Furthermore, we are continuing to enhance our Test-IT platform, a virtual STI testing service designed for individuals without symptoms. These improvements reflect our commitment to innovative, patient-centred care.

As we look to 2025, our mission remains clear: to lead in the prevention and management of STIs through evidence-based care, innovation, and collaboration. I am proud to work alongside such an exceptional team and extend my deepest thanks to all staff, partners, and stakeholders who support our shared vision.

A handwritten signature in black ink, appearing to read 'Jason Ong', with a stylized flourish extending from the end.

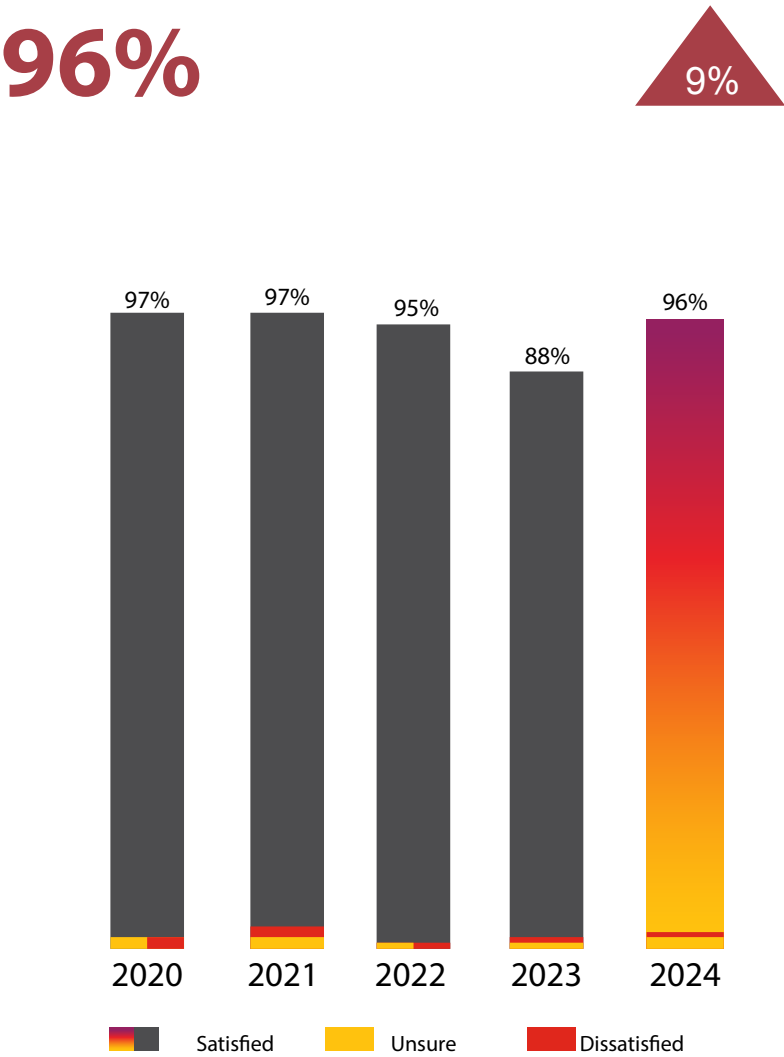
**Professor Doctor Jason Ong**  
Director, Melbourne Sexual Health Centre



# CLIENT SURVEY OVERALL SATISFACTION

Melbourne Sexual Health Centre scored an 96% overall satisfaction rating in 2024 (Figure 1). In 2023, we recorded an 88% satisfaction rate (lower than previous years) which we assume may be related to specific issues about the introduction of the computer system at the time of that survey and may not reflect the feeling of clients over the entire year. [Client Satisfaction Survey 2024.pdf](#)

Figure 1  
Client survey overall satisfaction



# VICTORIAN SEXUAL HEALTH NETWORK (VSHN) 2024 REPORT

In 2024, the Victorian Sexual Health Network (VSHN) saw significant growth and positive developments. Werribee Medical & Dental Centre joined the network, bringing the total number of affiliated VSHN clinics to 10. The continued support of the Victorian Department of Health has allowed us to maintain and expand our services. We anticipate continuing this strong trajectory into the 2025/26 financial year.

## Key Highlights

### 1. Clinic Growth & Partnerships

Werribee Medical & Dental Centre's inclusion in 2024 marked a milestone for the VSHN, increasing our affiliated clinics to 10, spanning across 11 sites (Andrew Place Clinic has 2 sites). The VSHN clinics offer critical sexual health services in areas with high need and demand. The VSHN clinics continue to be a destination for MSHC clients who are unable to be seen during the busier months. We sincerely thank Kardinia Health, Cranbourne West Medical Clinic, Anglesea Medical, and Werribee Medical & Dental Centre who ensured clients could access bulk billed telehealth consultations. The VSHN remains a vital point of referral for the community allowing people to access sexual health services closer to home.

### 2. New Staff & Expertise

2024 brought significant additions to the VSHN clinics. Cranbourne West Medical Centre welcomed Daniel Sankar, an experienced HIV S100 nurse practitioner, bringing valuable experience from previous positions at MSHC and Thorne Harbour Health. Kardinia Health also expanded its expertise with Dr. Darren Russell, formerly the Director of Cairns Sexual Health Centre, whose knowledge of STI/HIV and transgender health will be invaluable.

### 3. Professional Development & Scholarships

The VSHN provided four scholarships to the 2024 Australasian HIV & AIDS Conference and the 25th UISTI World Congress in Sydney in September. These opportunities allowed clinicians from the VSHN to gain a global perspective on sexual health, share insights, and contribute to discussions during Community of Practice (CoP) meetings with the network. The fortunate recipients included Dr. Jason Wu (KPMC), Dr. Joy Chin Hsien Liao (Mediclinic), Lindy Thunder (Y&DHS), and Rhiannon Porter (Modern Medical). We plan to offer further scholarships for the ASHM Conference in Adelaide in 2025, this will be done through a fair and transparent selection process.

### 4. Ongoing GP and Nursing Education

GP and nursing education in 2024 focused on current and emerging trends in sexual health, particularly the upsurge of Mpox. The VSHN team delivered face-to-face updates in collaboration with some of the Local Public Health Units (LPHU) to ensure VSHN clinics were equipped with the knowledge needed to address Mpox. Regular education sessions were provided throughout the year via Zoom and face-to-face, these covered STI / HIV transmission data, symptoms, testing protocols, and vaccination strategies. Feedback from clinicians was regularly evaluated to identify areas for improvement and ensure our VSHN clinics are prepared to handle any emerging cases of Mpox or STIs.

### 5. Surveillance & Monitoring

The VSHN continued to monitor STI testing and diagnosis through ACCESS surveillance, a national STI data collection tool used across all VSHN clinics. This data is essential in tracking key performance indicators (KPIs) to secure funding and support. Our VSHN clinics have shown exceptional dedication in maintaining high standards of care throughout 2024, and we look forward to awarding incentive payments in recognition of their efforts.

We would like to thank the ACCESS team at the Burnet Institute which enables this National surveillance.

## **6. Collaboration & Stakeholder Partnerships**

The VSHN continues to foster strong relationships with key stakeholders such as the Victorian NPEP service, RhED, Sexual Health Victoria, LPHUs, and Thorne Harbour Health. A key strategy in 2024 was strengthening connections with Local Public Health Units, which has proven to be a highly successful approach. We would like to highlight a collaboration with VSHN, NEPHU and Andrew Place Clinic which created a series of STI educational videos, these are currently being promoted across multiple social media platforms. The success of the Spicy Web marketing campaign has also elevated the VSHN's online presence. Here is a link to showcase some of the great work being done:

<https://www.youtube.com/watch?v=MEyqrF4uq4M>

## **Looking Ahead**

We are grateful for the ongoing support of our stakeholders, whose collaboration has driven positive change. As we look ahead to 2025, we remain committed to our partnerships with VSHN clinics and to continuing our impactful work and expanding the reach and effectiveness of the VSHN network. For more information, please visit the **Stay STI Free** website [www.staystifree.org.au](http://www.staystifree.org.au)



**Our mission is to maximise sexual health through innovation, education, research and care.**

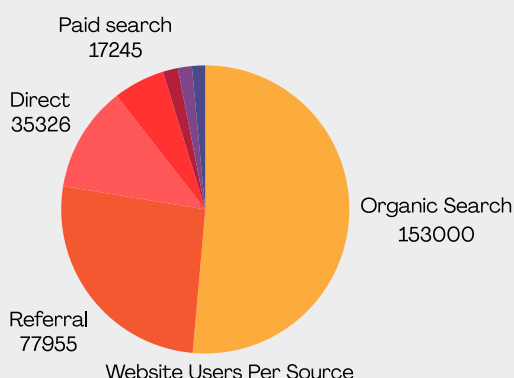
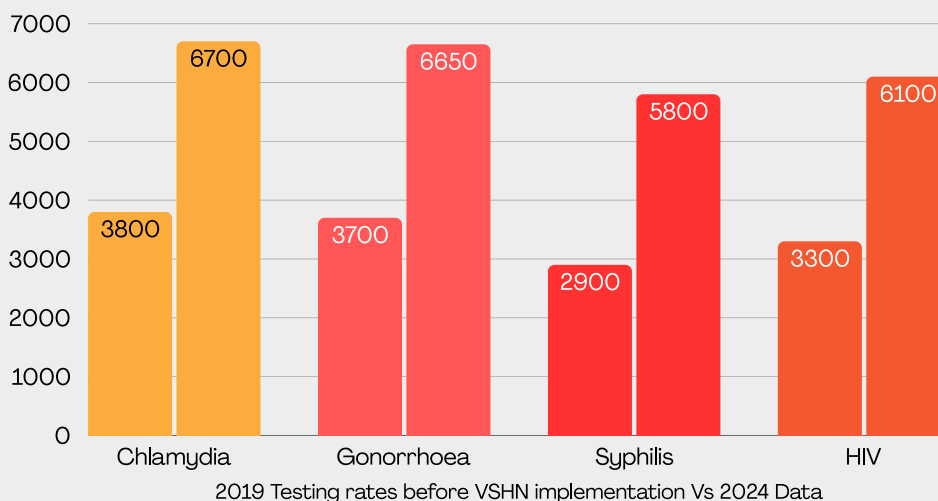


**StaySTIFree**  
Victorian Sexual Health Network

The Victorian Sexual Health Network (VSHN), is governed by MSHC, part of Alfred Health. It has established long-term partnerships with ten GP practices across selected regions and local government areas (LGAs), as designated by the Victorian Department of Health.

Each partner GP practice has received tailored sexual health education, training, and ongoing support to enable the delivery of comprehensive sexual health care including STI screening of target populations including culturally and linguistically diverse populations, men who have sex with men and sex workers, management of symptomatic STIs, mpox vaccination, injectable antibiotics for gonorrhoea and syphilis, telehealth and HIV prevention through PEP and PrEP.

## VSHN Comparative Testing Data



In 2025 alone, 280 patients have been triaged directly from MSHC to VSHN



## VSHN Fast Facts 2020-2024



4 VSHN Staff



10 GP Partners Recruited



124 GP's Trained  
59 Nurses Trained  
3 NP's Trained



12,841 Syphilis Tests  
118 Infectious Syphilis Diagnosis



14,834 Gonorrhoea Tests  
391 Positive Gonorrhoea Diagnosis



292,000 Visits to the StaySTIFree Website



95% patient Satisfaction

# DIGITAL TRANSFORMATION AND INFRASTRUCTURE MODERNISATION

The Centre has developed AI-driven tools like AI-ImageSTI and MySTIRisk, along with digital platforms such as Test-IT, Digital Front Door, and a modern EMR system, advancing STI care through technology and infrastructure modernisation.

## **Digital Transformation and Infrastructure Modernisation**

Since 2017–18, MSHC has been on a transformative journey to modernise its digital infrastructure. In partnership with Alfred Digital Health, the Centre transitioned to a virtual (VM) environment, significantly accelerating progress in mid-2019 under new leadership. More than 65 migration projects have been successfully completed, upgrading MSHC's infrastructure to the Alfred Data Centre and enhancing its digital systems.

## **Commitment to Digital Innovation**

MSHC continues to drive digital transformation, enhancing its infrastructure, systems, and applications to improve service safety, quality, connectedness, and efficiency. Recognised as a leader in digital health innovation, the Centre has played a key role in developing:

- **Test-IT** – A virtual testing platform
- **Digital Front Door** – A seamless digital patient engagement system
- **Modern EMR Solutions** Tailored to the STI healthcare landscape

With a strong foundation in innovation, experience, and data, MSHC's Digital Health Strategy ensures ongoing patient care and healthcare delivery advancements.

## **Strategic Vision and Future Roadmap**

Aligned with Alfred Health's Digital Health Design Principles and Strategic Pillars, MSHC has developed a comprehensive roadmap to provide world-class healthcare services to the community in Victoria.

By leveraging cutting-edge technology and fostering a culture of continuous innovation, MSHC remains at the forefront of digital transformation in sexual health care.

### Enhance Personalised Patient Experience through Digital Solutions

- Improve patient portal for appointments, results, and follow-ups.
- Introduce tele-triage for remote STI care.
- Launch a patient app for communication, reminders, and resources.

### Digital Workplace: We will support our staff to work collaboratively, in a digitally integrated

- Expand online training for all MSHC staff.
- Implement a staff-driven EMR system for seamless data access.
- Enhance data navigation for better insights and reporting.
- Improve staff and patient experience through digital transformation.

### Advance Data Interoperability and Integration

- Enhance data interoperability for seamless STI healthcare exchange.
- Upgrade systems for efficient data sharing and reduced redundancy.
- Develop a centralized HIE platform for streamlined collaboration.

### Strengthen Cybersecurity and Data Privacy

- Strengthen data security with encryption, audits, and MFA.
- Provide ongoing training on privacy and compliance.

### Optimize Operational Efficiency through Digital Tools

- Automate admin tasks for efficiency.
- Use digital tools to optimize patient flow.
- Develop a real-time KPI dashboard.

### Innovation in Sexual Health Research

- Create a cloud-based Research Data Hub.
- Use digital tech & AI for research and decision-making.
- Enhance clinical trials with digital monitoring.

## MSHC Digital Health Journey – Road map from 2002 to 2030

2002 - 2018

- CPMS (Delphi-Firebird based), CASI, Medical Director, In-house Infrastructure located Level 2 Data Center
- Autonomously MSHC IT services (no relation with Alfred ICT)

2019-2023

- Reformed MSHC Digital health
- Completed 65 Infrastructure Modernization (Migrate 22 Physical servers, 12 websites, High Speed Internet (Dark Fiber), New Cisco-based Telephony to Alfred Data Center)
- Digital Front Door (DFD) and remove old CASI System
- Published maximum research paper in STI Digital area

2023-2025

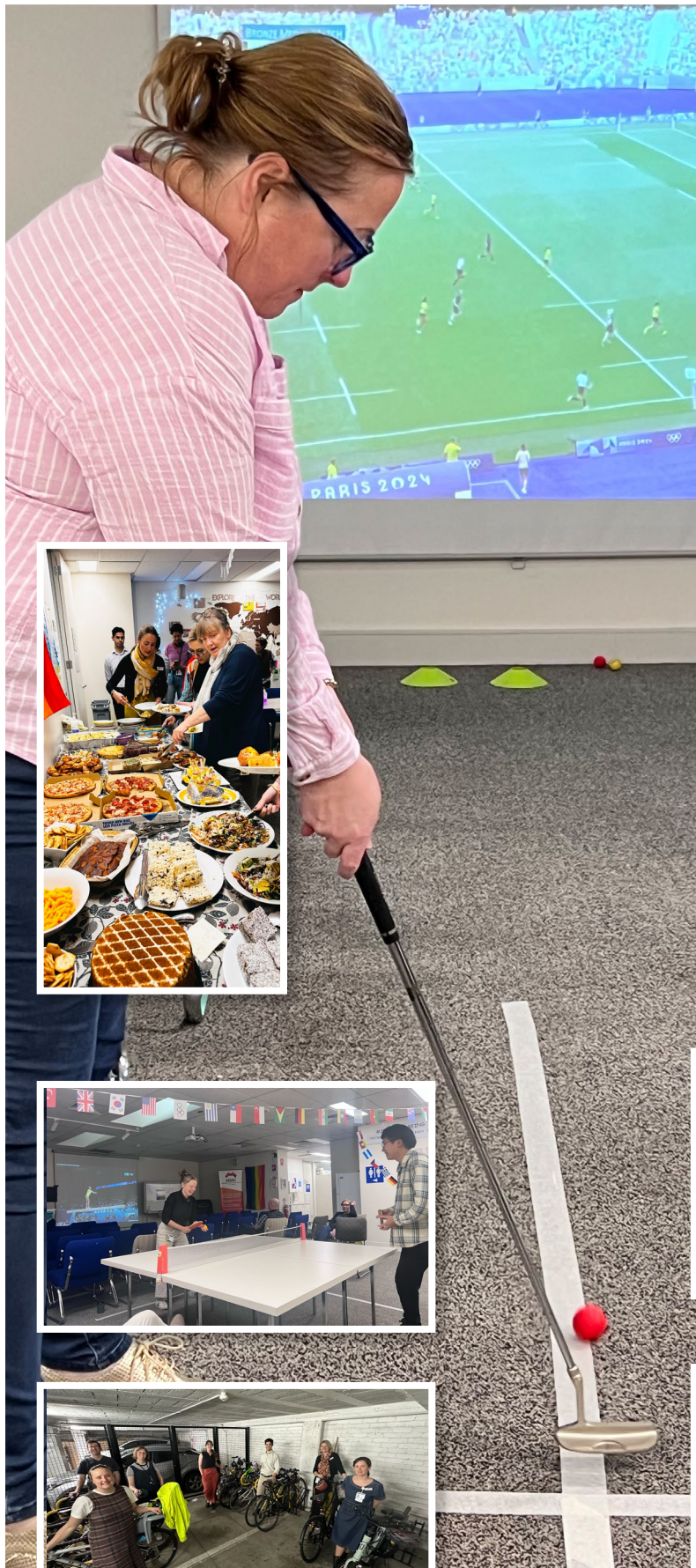
- Became a number one STI services in the World, where treated 60,000 patients per year
- Streamline MSHC Digital health with Alfred Digital Health Eco-system
- CPMS Pathology
- AI based initiatives (Alice Chat Bot, Image Collect, AI-STI)

2025-2030

- Test-IT, Online STI Services
- EMR (CPMS & Medical Director) Uplifting
- Continue with AI STI initiatives
- Independent Digital STI Services in Victoria



# WELLBEING



During 2024 the MSHC Wellbeing team has continued with collective efforts to help and support each other.

We have continued many lunch time information sessions and celebrations embracing the differences we have that bond including having 2 lunch celebrations where colleagues bring food from their country and culture to share and have begun a flourishing recycle scheme

The valuable contributions from Claire Randall, Linda Liu, Mark Thompson, Annie lang, Beth Costello, Kate Potapel, Megan Smith, Tina Schmidt, Shari Boyanton, Bec Wigan, Mark Chung, Monica Owlad, Lauren Bryar, Nikhil Arram, David Nguyen, Stacey Suddabey, Marcus Massiano, Isabel Fabian and Jason Kenna have enabled us to reflect and celebrate each other collectively including initiating communication boards so all colleagues and join together with small quiz or information sessions.

We have encouraged each other across the team to be physically active with the Alfred Health September and Ride to Work events and celebrations of international success during the Paris Olympics.



# RESEARCH

Research has continued to be one of the strengths of our service and has underpinned much of the strategic direction of our clinical services. We have active research NHMRC programs in virtually every area of STIs including:

- Bacterial vaginosis and Mycoplasma led by Professor Catriona Bradshaw. We have completed the first successful male partner treatment trial to improve BV cure for women. The trial was prematurely ceased by the Data Safety Monitoring Board for superiority. This trial represents a major paradigm shift in knowledge and clinical practice as it demonstrates that reinfection from sexual partners drives BV recurrence. Male partner treatment will become routine clinical practice in 2025. The team is preparing the necessary clinical documents for implementation. The trial was presented at the STI and HIV World Congress in September 2024.
- The HIV/STI Economics and Health Preference group led by Professor Jason Ong has made remarkable contributions to the field of HIV and STI research with 52 publications in 2024, spanning HIV and STI self-testing, digital health innovations, and multiple cost-effectiveness analyses. With numerous high-impact publications (including 1\*Lancet HIV, 3\*Lancet Regional Health Western Pacific, 2\*Lancet Global Health), our team has provided critical insights into improving diagnosis, treatment, and prevention strategies. Studies on economic evaluations, such as resistance-guided therapy for Mycoplasma genitalium and near-to-patient STI testing, have strengthened the evidence base for cost-effective interventions. Additionally, the team's research on social network-based approaches, machine learning applications, and behavioural insights has advanced the understanding of targeted interventions for key populations.
- Multiple projects led by Professor Marcus Chen focused on improving syphilis testing and control are continuing. The SToP syphilis programme is to improve syphilis control through novel approaches to testing and management in sexual health, antenatal and general practice settings. Syphilis transmission is increasing globally, with epidemics seen in many countries. Precisely how *Treponema pallidum* (Tp) is transmitted between sexual partners remains unclear and a better understanding of transmission will inform public health responses. There is emerging evidence for the role of asymptomatic transmission from the mouth and anus in men-who-have-sex-with-men (MSM), including publications of our original study of an MSM cohort with secondary syphilis (SOS and SOS2 projects). However, asymptomatic detection of Tp in women and men-who-have-sex-with-women (MSW) has largely not been explored. In Australia, the syphilis epidemic predominantly affects MSM. To enable adequate recruitment of women and MSW with syphilis and address this knowledge gap, we have expanded the SOS2 study to international recruitment sites – a study called SOS Global. Engagement with potential sites is well underway, with centres in the UK, South Africa, Peru and China (n=6) interested in collaborating. Site feasibility, ethics submissions and planning are at various stages of completion at each site.
- Increased syphilis PCR testing and detection in general practice through our collaborative implementation of multiplex syphilis and herpes PCR with Melbourne Pathology and Speedx. These findings have provided a strong enough business case that Melbourne Pathology have decided to continue multiplex testing for syphilis and herpes PCR as business as usual. These findings have also influenced pathology labs in Western Australia



and Tasmania to change their approach to syphilis PCR testing.

Increased syphilis screening in later pregnancy as a result of the implementation of universal syphilis screening with 28-week pathology across seven antenatal sites in Victoria

- Mathematical modelling and AI led by Professor Lei Zhang. Diagnosis of a sexually transmitted infection (STI) could soon be as simple as the click of a button. The app sees users upload a photo of an abnormal lesion area, with artificial intelligence (AI) then assisting with the detection of STIs and other common genital skin conditions. The framework for the app's development came from the collation of over 5000 images gathered with the assistance of MSHC clinicians and patient volunteers who consented to images of their lesions being used for research purposes, with initial testing of the app already seeing a promising accuracy of between 60 to 90 per cent. MSHC epidemiologist and development team leader Professor Lei Zhang expects this accuracy will only improve further as more data is collected.
- The Health Data Management and Biostatistics Unit led by Professor Eric Chow has published 38 studies in 2024 exploring a wide range of sexual health topics. The team examined the prevalence of antibiotic resistance in gonorrhoea, helping to inform how we treat this common infection as it becomes harder to manage with current medications. They also looked at HIV prevention, including how prescriptions for HIV post-exposure prophylaxis (PEP) changed following the introduction of pre-exposure prophylaxis (PrEP), and evaluated the role of telehealth in supporting people living with HIV. Their work also examined the risk factors for throat gonorrhoea in female sex workers and the link between saliva use during masturbation and urethral gonorrhoea in men who have sex with men. Furthermore, the team also explored broader sexual and reproductive health issues, such as changing trends in contraception use and the healthcare needs of people who have experienced sexual assault.

## Awards/Prizes

- 2024 Health Services & Policy Research Distinguished Investigator Award (Mid-Career Award), The Health Services Research Association of Australia & New Zealand: Eric Chow
- 2024 IUSTI Silver Medal, International Union Against Sexually Transmitted Infection: Eric Chow
- 2024 Gottschalk Medal, The Australian Academy of Science: Eric Chow
- 2024 Victorian Young Tall Poppy Award: Jason Ong
- 2024 AMR Hub Early-Mid Career Emerging Leader Award: Erica Plummer
- 2024 ASHM Early Career Award: Stephanie Bond for her presentation on the implementation of universal syphilis screening in later pregnancy
- 2024 Levinia Crooks Emerging Leader Award: Tiffany Phillips
- 2024 British Association for Sexual Health and HIV (BASHH) conference: Rebecca Wigan was awarded best presentation by a nurse for the presentation, "Risk-based syphilis screening in later pregnancy- is it happening?"
- 2024 Australian Society for Medical Research (ASMR) conference: Rebecca Wigan received the Burnett Flash talk award for presentation on "Multiplex testing for syphilis in general practice"
- Di Tibbits Award for Best Thesis in Sexual and Reproductive Health 2024: Ei Aung and Rosie Latimer. This award recognises high-quality PhD theses produced by Victorian PhD graduates in the Sexual Health field in the past 3 years

# SERVICES AND CONSULTATIONS

The numbers of consultations by type of service provided onsite are shown in Table 1. A further 80 outreach consultations were carried out offsite at Access Health services for marginalized people and test kits sent to clients if requested (TestMe and vending machines).

**Table 1**

Clinic Type	Total	Male	Female	Other gender
General Clinic	48,542	32,870	14,874	798
HIV Clinic	6,489	5,693	721	75
Counselling	652	418	227	7
Total	55,683	38,981	15,822	880
Individuals	27,127	17,429	9,179	519

## Diagnoses

The numbers of the most frequently made diagnoses in consultations are shown in Table 2. Gonococcal and chlamydial infections included are individuals with a newly diagnosed infection and may have more than one site of infection. Those returning with a new infection following successful treatment are included as a new diagnosis.

**Table 2**

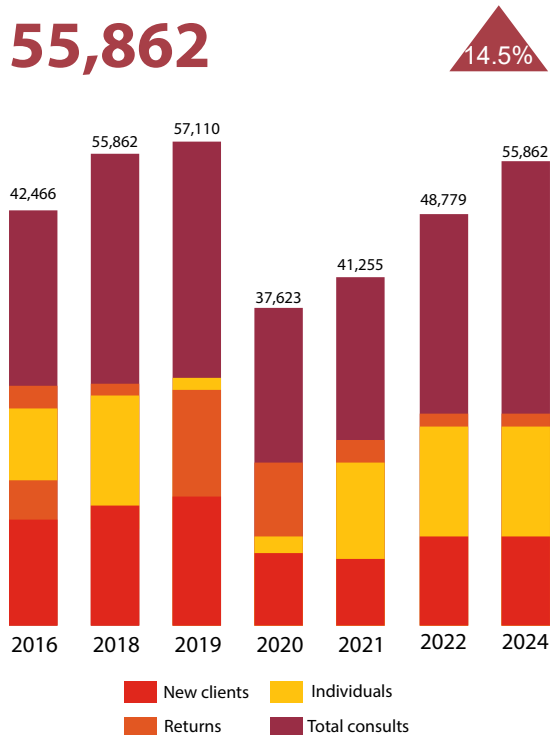
Diagnoses	Total
Chlamydia trachomatis	3,625
Neisseria gonorrhoeae	3,081
Non gonococcal urethritis (NGU)	3,041
Herpes	1,523
Infectious syphilis	393
Bacterial vaginosis	1,978
Warts	1,149
HIV new cases	74
PID	444
Monkeypox virus	257
Mycoplasma genitalium	733
Lymphogranuloma venereum*	48
HIV PEP	976
PCI	58
Gonorrhoea in women	262
Trichomoniasis in women	65
Infectious syphilis in women	38

The numbers of consultations continued to rise until covid lockdowns in 2020. Post covid lockdowns (Figure 2), the numbers of consultations have steadily increased and have almost reached the pre-covid levels

\* LGV is determined by confirmed laboratory diagnosis

**Figure 2      Number of consultations Jan 2006 – Dec 2024**

Number of consultations Jan 2016 -Dec 2024



Post covid lockdowns, the numbers of positive chlamydia and gonorrhoea tests are increasing (Figure 3 and 4) as well as the number of infectious syphilis cases (Figure 4).

**Figure 3      Number of positive chlamydia tests by year**

Number of chlamydia positives by year

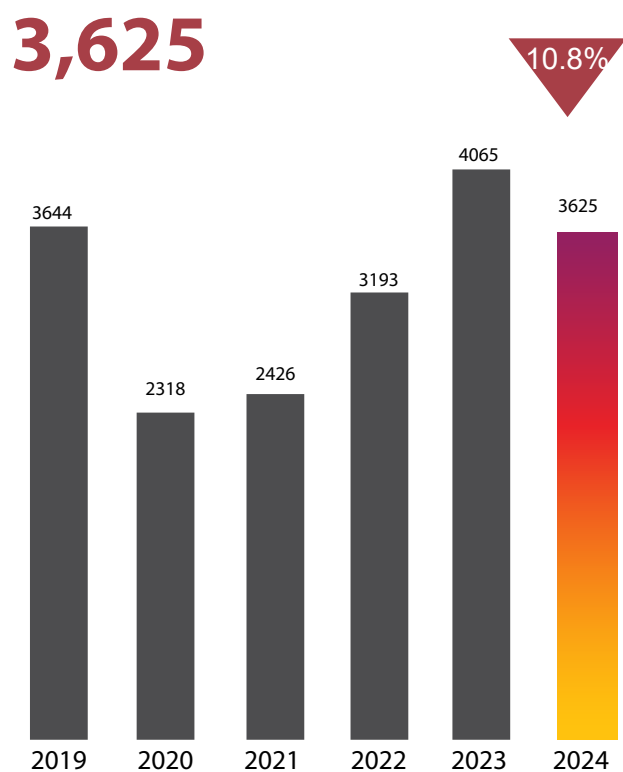




Figure 4      Number of positive gonorrhoea tests by year

Number of positive gonorrhoea tests by year

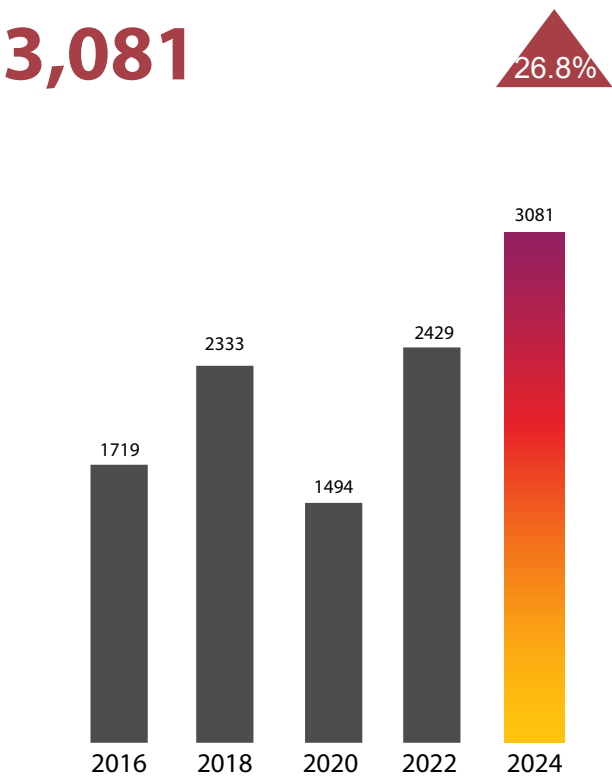
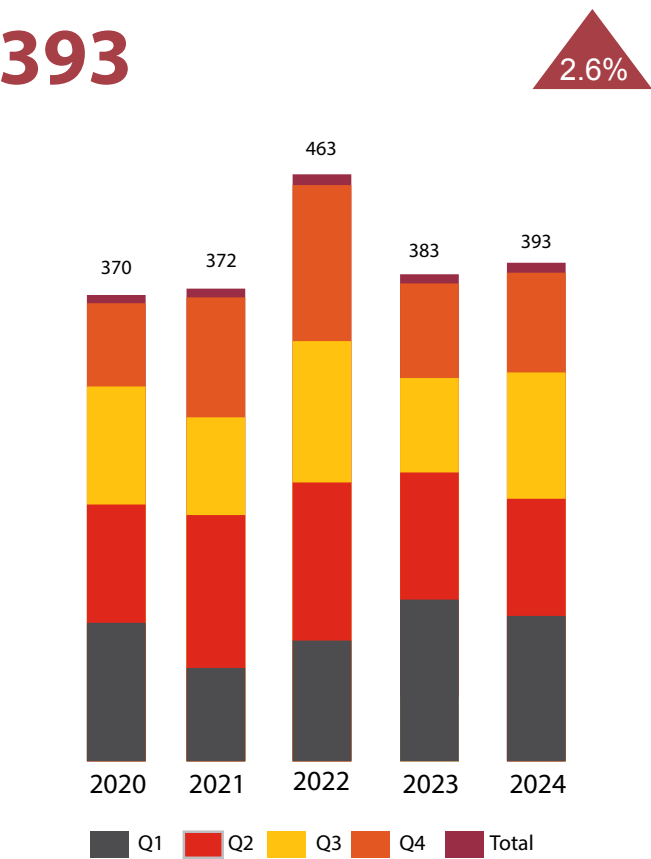
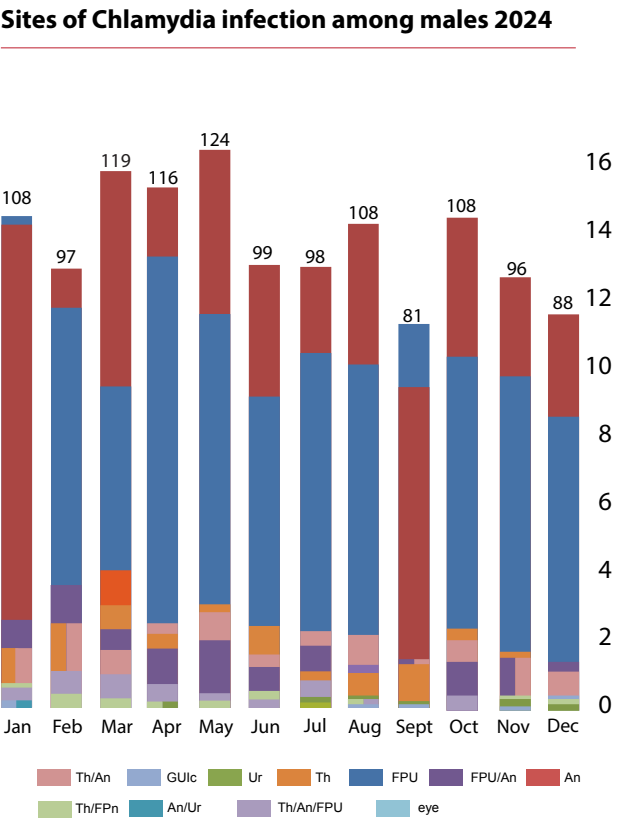


Figure 5      Number of infectious syphilis cases by quarter and year

Infectious syphilis quarter and year 2020-2024

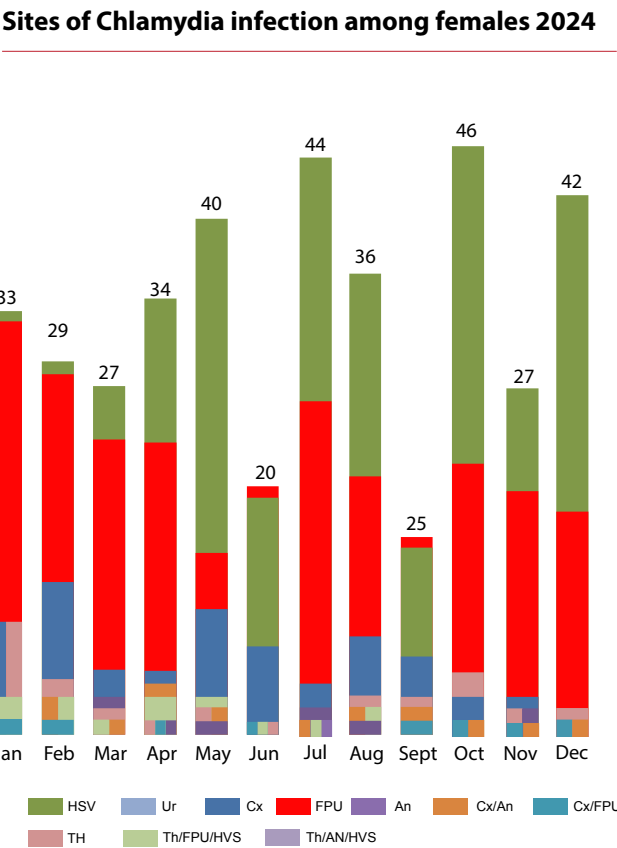


**Figure 6      Sites of chlamydia infections among 2,803 males in 2024**



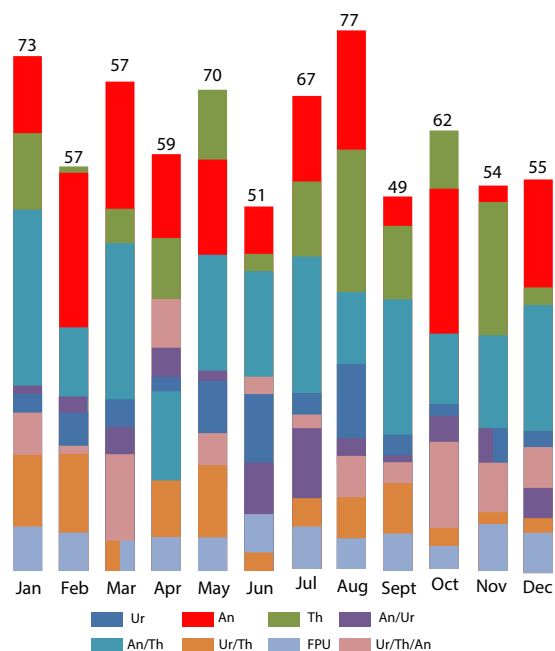
*Other gender 20*

**Figure 7      Sites of chlamydia infections among 802 females in 2024**



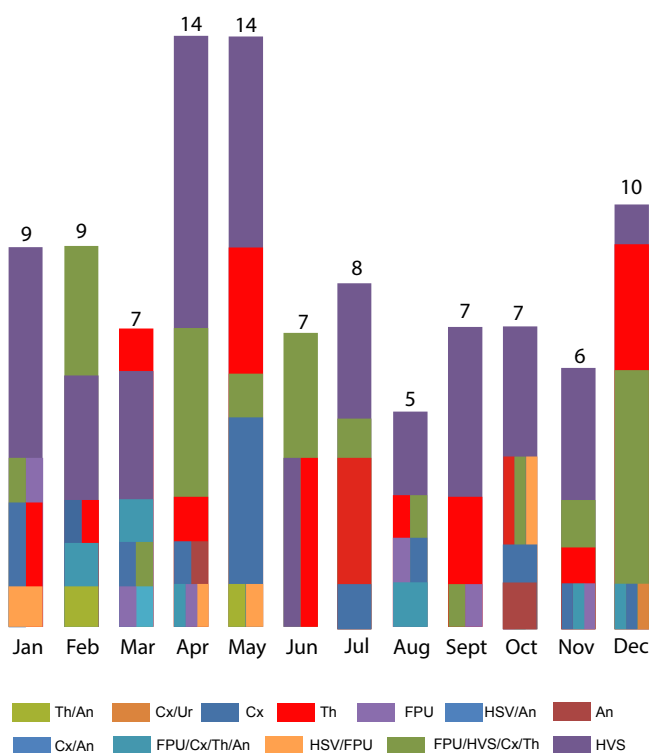
**Figure 8 Sites of gonococcal infections among 2,787 males in 2024**

**Sites of gonococcal infectious among males 2024**



**Figure 9 Sites of gonococcal infections among 262 females in 2024**

**Sites of gonococcal infectious among females 2024**



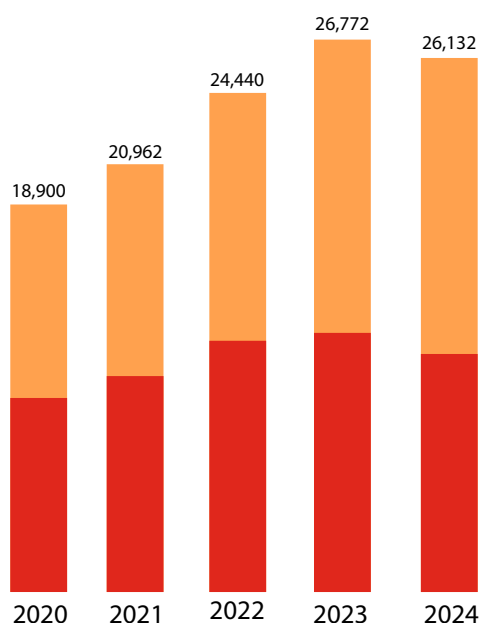
The numbers of HIV and syphilis tests over time has doubled since 2012 to 2019 and are slowly increasing to pre-covid 19 numbers (Table 3; Figures 10 and 11)

**Table 3      Number of HIV and Syphilis tests provided by year**

Year	HIV tests (Total)	HIV tests (in MSM)	Syphilis (Total)	Syphilis (in MSM)
2012	15168	6304	18129	8176
2013	17518	7544	20580	9489
2014	18666	8500	21881	10674
2015	20499	9931	23630	12199
2016	23307	12241	26443	14549
2017	25686	13753	29161	16332
2018	31315	15378	35245	18024
2019	31978	15008	36350	18043
2020	18900	9560	22650	12233
2021	20962	10559	24933	13382
2022	24440	12339	28610	15280
2023	26772	12603	31293	15773
2024	26132	11649	30875	14875

**Figure 10      Numbers of HIV tests taken over time**

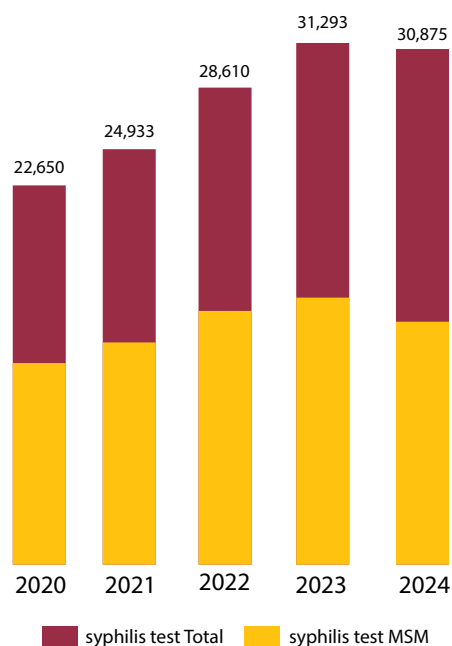
**Number of HIV test over time 2020 - 2024**



MSM= men who have sex with men

**Figure 11     Numbers of Syphilis tests taken over time**

**Number of syphilis test over time 2020 - 2024**

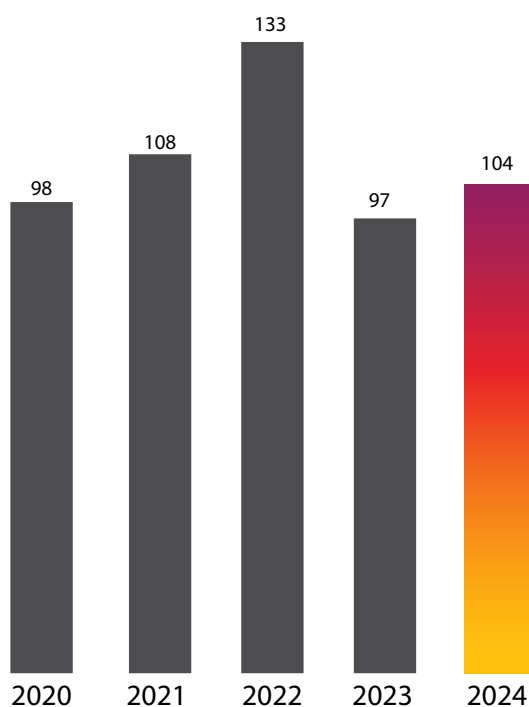


**Figure 12     Numbers of publications since 2020**

**Number of Publications**

104

7.2%



The number of publications in peer reviewed journals has grown particularly over the last 10 years reflecting the dynamic team of research and clinical staff at the Centre



# LIST OF PUBLICATIONS 2024

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