Victorian Agency for Health Information (VAHI) **Divisional guide**







Department of Health

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Delivering trusted information to inform better decisions to improve the health and wellbeing of Victorians.

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Who we are

The Victorian Agency for Health Information (VAHI) is Victoria's end-to-end health data agency, delivering trusted information to inform better decisions to improve the health and wellbeing of Victorians.

As a division of the Department of Health (the department), we ensure that data and information on the quality, safety and performance of Victoria's healthcare system are readily available to health services, government departments and agencies, researchers and the Victorian community.

Our role covers data acquisition, analysis, reporting, and the ongoing transformation to digital insights. VAHI supports better decisions and meaningful improvements to safety, quality, oversight, and transparency in Victoria's health services.

OUR VALUES

VAHI's objectives are aligned to the reform agenda and priorities of the department, and our work is driven by our shared values:

- Responsiveness
- Integrity
- Impartiality
- Accountability
- Respect
- Leadership
- Human Rights

KEY ACHIEVEMENTS

The last five years have seen enormous changes in Victoria's health landscape, culminating in the most devastating pandemic seen in the last century.

Despite these challenges, VAHI has expanded beyond its initial mission as an agency. Through fostering innovation, investing in our staff's skills and expertise, and collaboration with clinicians, the sector and Safer Care Victoria, VAHI has achieved a number of stretch goals, including:

- implementing a comprehensive health data information portal – delivering health services, clinicians and the Victorian community insights into performance, quality, safety and population health
- delivering the most advanced health data linkage service in any jurisdiction, via the Centre for Victorian Data linkage. Victoria is the first jurisdiction to access Commonwealth data (PBS and MBS) for linkage

- developing Australia's first cloud-based secure portal to provide access to linked, de-identified data for researchers, health services and government. Providing access to these data within a secure environment has been an important step in building community and stakeholder confidence
- commencing Australia's most extensive long COVID community survey, to help us identify the health and wellbeing impact of long COVID on the population, to assist in ensuring Victoria can meet those needs
- providing holistic support to Victoria's COVID-19 management and recovery, including daily COVID linkage, vaccine safety and outcomes, and population health reporting
- providing a world class population health monitoring and surveillance program via the Victorian Population Health Survey (VPHS).Measuring the health of the Victorian population helps build the evidence base showing how the work of health services, the department and the health system as whole impacts the lives of Victorians

- conducting a complete review and redesign of Victoria's patient experience reporting program, using digital first approaches to enhance consumers' voices in the delivery of patient-centred care across acute, community and mental health services
- leading the delivery of a Commonwealth funded project to link primary care and acute data and develop predictive analytics to help identify patients at risk of hosptialisation for cardiovascular disease, which will report new insights to general practitioners across the care continuum
- launching the VAHI Data Request Hub (the Hub), a 'one-stop shop' for health data requests. Since launch, the Hub has delivered significant improvements in how requests from government, the health sector, researchers and the community are managed, giving greater access to data than ever before

- delivering one of the leading health data integrity programs in Australia, supporting the transparency and accountability of health services and coding for clinical truth. This helps stimulate improvements in patient safety, quality and outcomes in collaboration with Safer Care Victoria, the Victorian Clinical Council, clinical leaders and researchers
- providing one of the most comprehensive mental health reporting programs in Australia, to support the Mental Health Royal Commission and the Victorian Government's response, including close collaboration with the mental health and wellbeing division of the department
- reporting on the quality and safety of Victoria's private hospitals – the first report of its type in Australia. The report provides comparative quality and safety data to all Victorian private hospitals, better enabling them to learn from each other and highlighting areas of success and potential improvement

- creating the new, interactive *Best Care report*, designed to allow for comparison between peer health services around potential instances of care with a low evidence base. This includes non-urgent surgery procedures identified as having little or no benefit to patients based on current clinical evidence
- producing the *Delivering better cardiac* outcomes in Victoria report, developed by VAHI as part of an initiative under the National Data Linkage Demonstration Project. This is the first time in Australia that patients' hospital data was linked with the Pharmaceutical Benefits Scheme
- developing Victoria's first dedicated quality and safety reports for health service Boards, providing tailored data and information to support their governance and oversight roles
- providing comprehensive and risk adjusted Hospital Acquired Complications (HACs) reporting. This helps health services identify and understand variation in the level of complications their patients experience, and supports the design and evaluation of improvement activities

- designing Victoria's first *Emergency Department interactive report*, developed to assist government and health services to monitor performance and inform ongoing system-wide improvements to emergency care
- creating the *Maternity and Newborn Safety report*, which helps maternity services better understand their performance across key quality and safety measures, providing greater visibility of potential issues that might be emerging
- developing a new system to capture safety and surveillance data, and the statewide rollout of a new minimum data set to underpin future reporting

- reviewing and redesigning the Victorian Healthcare Experience Survey (VHES) program, ushering in a new era of patient experience reporting in Victoria
- supporting the COVID-19 response with near real time data provision via the VAHI portal, covering health service capacity and resourcing as well as critical data linking work to assist infection tracking and the population health reporting program.

In 2021-22, we:

- **reformed** Victoria's patient experience program
- developed and deployed the VHIMS Central Solution for incident reporting
- continued to lead Victorian health data acquisition, classification and coding, and linkage
- **progressed** the Cardiac Outcomes project, enabling use of linked data across patient journey including GPs
- *launched* the long COVID project, aiming to better understand and guide best practice.

What we do

In February 2021, VAHI became a division of the new Victorian Department of Health, in order to play a larger role in supporting the department's ambitious health reform agenda.

The Centre for Victorian Data Linkage and the Health Services Data business area were also brought into VAHI, integrating health data, analytics and reporting into a single division to streamline the flow of information from collection to insight, so that we can better support decisions that can improve care for Victorian consumers.

VAHI contributes to the department's reform agenda in many ways, including:

- analysing and sharing information across the Victorian health system to ensure services have an accurate picture of their quality and safety
- monitoring and reporting on public and private services that impact on health, wellbeing, quality and safety, in order to stimulate and inform improvements, increase transparency and accountability, and inform the community
- collecting and analysing information about the health status of Victorians to inform policy development and planning, and to give a complete picture of health in Victoria.

VAHI'S ROLES





Data acquisition and management

Analysis and insights



Data linkage

Reporting

Population health

Better data access for Victoria:

One of our key initiatives is the VAHI Data Request Hub, which provides a simple way for researchers, government agencies and academic organisations to request access to Victorian health data. Working closely with data custodians, we provide access to the major hospital data sets or link up with other data collections, acting as a single point of contact for health-related data and analytics requests. This helps improve data transparency and supports innovation in Victoria's health and academic sectors.

Data requests have increased substantially since the establishment of the Hub, with the system able to accommodate this growing demand while supporting improvements in data access for routine requests and managing special requests such as those related to the COVID-19 pandemic.



Data acquisition and management

VAHI supports the development, collection and use of Victoria's health datasets, including data relating to hospital admissions, emergency department attendances, elective surgery waiting lists, births, alcohol and other drugs services, mental health services, financial data and more.

VAHI works to ensure high quality and accurate data is available to inform planning and policy development, and enable monitoring of safe, high-quality care in Victoria's health services, while also allowing state and national reporting obligations to be met.

VAHI also supports data collection and management for several specific programs and purposes, including the Victorian Healthcare Experience Survey, the statewide patient experience monitoring and reporting program. The VHES records the healthcare experiences of patients across Victoria's public health services, covering everything from patient/service communication to their impressions of safety and quality of the services provided. Now collected digitally, the program allows for near real time reporting of results, benchmarking with peer health services and supports collaboration and continuous improvement. Coding for COVID: During the early stages of the COVID-19 pandemic, VAHI clinical coders worked closely with the sector and relevant agencies to guide appropriate coding practice. We published specialised coding advice for Victorian health services to clarify the national advice, helping ensure COVID-19 data was accurate and usable from the point of testing and care. Our health data integrity program conducted a series of COVID-19 audits remotely with health services in late 2020, building an understanding of compliance against national standards - to ensure we are coding to clinical truth.



Analysis and insights

Better data analysis and insights help create better health care.

At VAHI we are building our analytic capabilities to help the department answer the key questions that support health decision making – questions such as:

- how can we improve the patient journey through the system to achieve better health outcomes?
- are we delivering the health outcomes that matter the most to the community?
- are health services performing in line with expectations, both clinically and financially?

A restructure at the end of 2022 further enhanced the role of analytics within the division, with the formation of an analytics branch alongside existing data collection and management functions.

Our analytics activities include:

Better analytics for better care: VAHI is leading the implementation of the department's new analytics strategy, which is focused on building analytics capacity and expertise within the department to inform better decisions for quality, safety, performance, prevention and value-based healthcare. The VAHI portal will play an increasingly important role in improving analytics across the department, providing a secure and interactive environment for data visualisation, sharing and analysis.

Monitoring the quality of health care: Clinical Quality Registries (CQRs) systematically monitor the quality of health care within specific clinical domains by routinely collecting, analysing and reporting health-related information. VAHI supports the administrative side of the CQR program and works with Safer Care Victoria to provide an escalation path for issues identified through the data.

CQRs in actions: A Victorian public health service experienced a high proportion of post-operative deep sternal wound infections among its coronary artery bypass surgery patients over a six-month period. The Victorian Cardiac Outcomes Registry notified the hospital, leading them to undertake an investigation and implement a series of infection control changes. The outcome was a decrease in deep sternal wound infections over the following year, to below the average rate for all the hospitals contributing to the registry.



I love the fact that it's digital. And I love the fact that I can look at how I was two years ago, compared to what I am now. Hard copy is really difficult to see where you're making improvements."

Safer Care Victoria staff

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Reporting

VAHI produces a suite of reports for the department, Safer Care Victoria, health services, clinicians and the public. Each report is developed to meet the specific needs of the particular audience, with the objective of improving healthcare for all Victorians.

Some key reports include:

- Monitor reports on the performance of public health services against key indicators related to access, safety, quality, operational and financial performance. Each health service receives a tailored edition of the report, with their results shown against their targets.
- **PRISM** the *Program Report for Integrated Service Monitoring* (PRISM) contains health services' results across a wide range of access, safety, quality, operational and financial performance indicators not contained in Monitor, providing public health service executives and the department with a broader range of performance information.
- Board safety and quality contains a selection of safety and quality measureswhich also appear in *Monitor*, targeted to public health service Boards to support oversight and governance.
- HACs the Hospital Acquired Complications report (HACs) provides meaningful and actionable information to assist health services to identify and understand variation in the level of complications their patients experience, and to support the design of improvement activities.
- VHSP the Victorian Health Services Performance report (VHSP) is a webbased update of key health performance results, such as elective surgery lists and emergency department waiting times. It is released to the public as well as to health services and government agencies.

Digital shift driving improvements:

The launch of the digital HACs report is another step forward for the VAHI portal, which continues to grow in content and functionality.

Portal users are able to access a growing range of interactive digital reports, which allow health services a greater level of flexibility, refinement and detail when looking at their results.

Other reports include:

- Best Care
- Emergency Department interactive dashboard
- Quality and Safety in Victorian Private Hospitals
- Health Services Performance
 Monitoring Dashboard
- Public Sector Residential Aged Care
- Mental health, alcohol and other drug treatment services in Victoria
- Mental Health Performance Report



Data linkage

VAHI's data linking capabilities were greatly expanded when the Centre for Victorian Data Linkage (CVDL) joined VAHI in early 2021.

The CVDL creates and maintains linkages via its Victorian Linkage Map and the Integrated Data Resource (IDR). The IDR is a de-identified linked data asset of health, human services and other administrative and clinical datasets. The CVDL provides data linkage services for both researchers and government organisations. The CVDL also provides evidence-based insights to improve planning and service delivery, develops new data linkage capacity and facilitates opportunities for Victorian researchers to undertake innovative, worldclass research using linkable data drawn from existing datasets. Privacy tool opening new linkage frontiers: A new privacy preserving tool will enable GP and hospital patient data to be linked securely and anonymously, vastly improving the capacity to track patient journeys across the whole Victorian health system.

The new tools, developed and tailored for VAHI use by the Centre for Victorian Data Linkage and Curtin University, encrypt patient identifiers before they leave the GP system. These encrypted identifiers are then linked with similarly encrypted hospital data, allowing a secure link to be made without patient privacy and confidentiality being breached.

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The ability to securely and confidentially link patient data between primary health and hospitals will be a real game-changer in our ability to track patient care and experience throughout the entire health system."

VAHI CEO Dr Lance Emerson





Population health

VAHI plays a leading role in building a comprehensive picture of the health of Victorians through its population health program.

The population health program has been running for over 20 years in Victoria, underpinned by the annual Victorian Population Health Survey. VAHI collects, analyses, interprets, and communicates data relating to the health status of the population, informing policy development, highlighting key needs and areas of concern and directing health interventions and activities. Population health is a key part of VAHI's refreshed reporting strategy, which is driving improvement in the quality, timeliness, range and accessibility of populationlevel data and insights. Helping stop family violence:

VAHI released the Family violence in Victoria report in December 2020, the first population-representative research into family violence conducted in Victoria. The report was based on responses to five family violence questions included for the first time in the 2017 VPHS.

The report investigates the prevalence of family violence, who experienced family violence, the frequency of its occurrence, the type of family violence experienced, the services accessed in response to family violence, and the knowledge of the general population about where to get outside advice or support for family violence.

Family Safety Victoria has since used the report to inform a range of decisions, including policy development and funding allocations.

Future focus

The VAHI of the future will be very different from the standalone agency that commenced operation in 2017. In 2021 VAHI became a division of the Department of Health, opening up new opportunities, resources and responsibilities.

Building on our successful reporting program established over the last five years, VAHI's role is evolving to include a greater focus on data collection, analytics and linkage, with the goal of delivering insights that will make a difference.

This new focus will enable us to deliver meaningful insights to health services, government and the community, and drive us towards the goal of Victorians becoming the healthiest people in the world.

The COVID-19 pandemic also led to many changes in the way we work, leading to innovation in leveraginge data, analytics and reporting to support the response and recovery efforts.

Many of these changes will be enduring, and others will lead to new challenges and opportunities; embedding adaptation and flexibility as critical components of the products and services we provide. A key goal over the coming years is to become a more customer focused organisation. This will require even greater understanding and prioritisation of our stakeholder needs, and a strong focus on developing meaningful, valuable, and sustainable products to support health services.

Some priorities will include:

- evolving our core products and services into an interactive digital environment
- using our increased data linkage capabilities to create insights into the patient journey through the health system, highlighting areas of need and opportunities for prevention and early intervention
- enhancing our sector leadership in coding and classification, data integrity and data quality – supporting better quality and safer care

- growing the consumer voice in data, through further support of initiatives like Patient Reported Outcomes, the Victorian Healthcare Experience Survey and new feedback platforms
- supporting the data needs of small rural and regional health services, by providing not only relevant data, but also tools and training so they can build the capacity to interpret and use their own data
- building analysis and insights through greater interactivity – increasing understanding of how to access, expand and personalise data to meet health services' information and monitoring needs
- transitioning our core reporting products to interactive digital formats, guided by stakeholder needs and inputs.

GET INVOLVED

VAHI relies on the engagement and support of our partners and stakeholders – the best data and information can't support positive change in isolation.

We are developing the way we engage with health services, government agencies, health professionals and others to ensure we are hearing from a broad range of voices and delivering the information they want, not just the information we think they need.

There are numerous ways to get involved in shaping VAHI's reporting program and products – and more are in development all the time.

How to give feedback/get involved:

- Feedback: vahi@vahi.vic.gov.au
- Make a data request: https://vahi.freshdesk.com/support/home
- To discuss data acquisition, management and digital, contact:
 - steve.graham@vahi.vic.gov.au
 - conor.murphy@vahi.vic.gov.au (Health Services Data)
- To discuss analytics, contact:
 - rosangela.merlo@vahi.vic.gov.au (System Performance Insights)
 - adina.hamilton@vahi.vic.gov.au (Survey, Safety and Quality Insight)
- christopher.brown@vahi.vic.gov.au (Office of the Chief Analytics Officer)
- To discuss data linkage, contact:
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- To discuss corporate and operations, contact:
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