

## Advice

### Using data to reduce unwarranted healthcare variation

#### Introduction

The June 2018 Victorian Clinical Council meeting focused on unwarranted variation in healthcare. Unwarranted variation was identified by the council as a priority topic to be addressed in its first term.

The stakeholder engagement phase of topic development highlighted how various areas of the department, the Victorian Agency for Health Information (VAHI), and Safer Care Victoria (SCV) are working towards reducing unwarranted variation in practice. It also highlighted outcomes for regions, health services and clinicians.

There are clear similarities across the various pieces of work being undertaken, but each organisation has approached the issue from a different perspective. This made it challenging to identify how the council could best add value.

A common, but broad theme during the meeting was data, data quality, access, linkage, usefulness and focus (e.g. clinician, unit/ health service, regional). From a strategic perspective, the reduction of unwarranted variation in healthcare and the proposed introduction of a value-based healthcare approach in Victoria is an opportunity for the council to provide early input into statewide reform.

#### Meeting Purpose

The purpose of the meeting was to advise on:

- effective data needed by clinicians and consumers to support consistent health outcomes
- other mechanisms and tools which support clinicians to act on unwarranted variation.

#### Council discussion and recommendations on unwarranted variation

The council engaged several highly regarded speakers including:

- Professor Stephen Duckett, Grattan Institute
- Dr Anne Duggan, Australian Commission on Safety and Quality in Health Care
- Ms Mirella Matthews, Victorian Integrated Cancer Services
- Ms Kira Leeb, Victoria Agency for Health Information
- Mr Keith Donohoe, consumer.

Presentations focused on current data available and key areas of variation at a local, national and international scale. Stephen Duckett discussed variation in complications of care, including the cost to hospitals and the potential savings if complication rates were reduced. Stephen provided a strong argument for a new approach to improvement, one that better links staff and patient experience to outcomes. Anne Duggan detailed how variation is reported in *The Atlas for Healthcare Variation*. Anne provided examples of health services taking the Atlas findings further in order to identify and implement strategies to reduce their own variation. Mirella Matthews shared an example of cancer

tumour summits connecting the available data and successfully using it to drive improvements in care. Mirella's key message centred on the importance of using data already available to identify variation and then exploring this data further to identify possible causes for variation.

Kira Leeb provided an international perspective on how data can drive improvement, highlighting the fact that change will happen when ongoing attention is paid to variation. Keith Donohoe provided a consumer perspective on how data can support personal health care decisions. Keith emphasised the importance of care plans to ensure consumers receive streamlined care.

Later in the day David Bevan from Safer Care Victoria shared detailed Victorian data relevant to variation in preventable hospital admissions for people with diabetes complications. David provided information on geographical variations in healthcare outcomes and their possible link to socioeconomic variation.

### **Council recommendations overview**

1. The council recommends that VAHI prioritise efforts to develop a clinical portal with reliable and accessible real time information to support a system-wide response to unwarranted variation.
2. The council recommends that portal data or equivalent be publicly reported.
3. The council supports the Victorian Government's focus on ensuring all acute health services are moving towards fully electronic health records.
4. The council supports the recommendation that the Victorian Unique Patient Identification project be prioritised for 2018.
5. The council recommends the development of clinical care standards in areas identified with significant unwarranted variation in Victoria.
6. The council recommends that VAHI and the department await work released by the commission on patient reported outcome measures and then apply recommendations as they are relevant to a local perspective.
7. The council supports the Centre for Victorian Data Linkages (CVDL) in their application to become an accredited integrating authority.
8. The council supports current work underway at VAHI and the CVDL, prioritising the submission of all data registry data to VAHI for incorporation into the Victorian data linkages map.
9. The council recommends VAHI work towards routine reporting of a minimum set of agreed indicators using linked data.

Council members used the data and presentation topics to workshop key themes in relation to unwarranted variation. The group identified several priority recommendations.

## Recommendations: data requirements

The *Targeting Zero: supporting the Victorian hospital system to eliminate avoidable harm and strengthen quality of care* (Targeting Zero) report commissioned by the Department of Health and Human Services (2016) made a number of recommendations relating to data and its role in driving improvement. The *Department of Health and Human Services 2017 Strategic Plan* also emphasises the importance of adequate data to enable response to variation and drive improvement.

These recommendations were mirrored during council discussions. Council members prioritised the need for data that is accessible, reliable, real time, benchmarked and granular enough to allow for local application in order to reduce unwarranted variation.

These priorities are highlighted in the *Targeting Zero* report and the department's *2017 Strategic Plan*, as well as by VAHI who, in conjunction with key stakeholders, are working towards a clinical portal with accessible and reliable data with drill down capability.

### Council recommendation 1 and 2

1. The council recommends that VAHI prioritise efforts to develop a clinical portal with reliable and accessible real time information to support a system-wide response to unwarranted variation.
2. The council recommends that portal data or equivalent be publicly reported.

## Recommendations: supporting mechanisms to enable best use of data

The *Targeting Zero* report recommended an 'interoperative electronic medical record' to enable data sharing between organisations and a 'statewide unique patient identifier' to enable better data linkage. The report also recommended that data be available for interrogation to the unit, patient and clinician level by users at health services via an interactive portal. The Victorian Government's (2016) *Digitising Health, How information and communications technology will enable person-centred health and wellbeing within Victoria* framework acknowledges the need for a statewide master patient index. This will require a Victorian unique patient identification to be used by healthcare providers. Both recommendations propose new data requirements for admitted and non-admitted Victorian services for 2018 as detailed in the department's (2017) data specification proposal reports; *Proposals for revisions to the Victorian Admitted Episodes Dataset (VAED) for 1 July 2018* September 2017 and *Proposals for revisions to the Victorian Integrated Non-Admitted Health minimum dataset (VINAH) for 1 July 2018*.

The council strongly supports the *Targeting Zero* and the *Digitising Health* recommendation of the development of a master patient index. The need for linking individual care episodes, through a patient master index, was highlighted by the paramedic council members, including Victoria's chief paramedic. The paramedic members informed the council that patients using ambulance services multiple times (even within a single day) will generate a separate, unlinked medical record for each presentation. Any ambulance transfer of service, both between ambulance services and between ambulance services and acute care, requires the generation of an entirely new medical record.

Primary and community care members of the council also advocated for the use of My Health Record to link patient information.

The council acknowledges that there is a move towards all health services being fully electronic as stated in the Victorian Government's (2016) *Digitising Health* framework. It is recommended that this be prioritised and that development include interoperability requirements. Interoperability should cover linkages between health services and with primary and community care.

Clinical care standards informing clinical, consumer and health service expectations of care were identified by council members as important tools to enable consistency in care. Chronic health conditions were seen as a priority for clinical care standards as most care occurs within primary and community settings and effective self-care can significantly improve health outcomes. These care standards were considered essential for identifying key parameters to be monitored and unwarranted variation.

Key priorities identified by the council to reduce unwarranted variation include:

- a supportive culture
- leadership across the system
- support for training on data analysis and reporting
- fostering a culture where data is integral to drive improvement
- data capability and data literacy for clinicians and consumers.

### **Council recommendations 3, 4 and 5**

3. The council supports the Victorian Government's focus on ensuring all acute health services are moving towards fully electronic health records and that IT infrastructure is interoperable/shared with private hospital, primary care, community care and ambulance services.
4. The council supports the recommendation that the Victorian unique patient Identification project be prioritised for 2018 and be inclusive of both public and private Victorian health services.
5. The council recommends the development of clinical care standards in areas identified with significant unwarranted variation in Victoria. These should be developed by clinical networks where established or by working parties. Possible options for care standards could include COPD and diabetes. These clinical care standards should be incorporated into care pathways in tertiary, secondary and primary health settings, enabling access to integrated models of care.

## **Recommendations: patient reported experience and outcomes**

Recommendations of the *Targeting Zero* report include that data on patient reported outcomes and experience be prioritised and that process measures such as within care pathways are collected routinely.

Inclusion of patient reported measures, ideally linked to other relevant health outcome data sets, was a key recommendation from the council members.

Current work is underway at VAHI on data linkages through clinical quality registries and patient reported outcome measures (PROMs). Federally there is yet to be a national stance on PROMs. The Australian Commission for Safety and Quality in Health Care (the commission) is currently convening an expert advisory group on PROMs to inform a national position.

### **Council recommendation 6**

6. The council recommends that VAHI and the department await work released by the commission on PROMs and then apply recommendations as relevant to a local perspective. The council also recommends that the development of PROMs should include capacity for data linkage to routine data, registry data and MBS/PBS data.

## **Recommendations: data linkage**

A key theme raised by council members was a lack of data linkage and the importance of building this to enable the use of data for system-wide health service improvement. This was highlighted in the examples from paramedics. Patient episode data that is linked, across all levels of health, is a priority to support a systems view of the healthcare journey and identify sources of unwarranted variation. Ideally the council felt this should include linkage to data on social determinants of health such as socioeconomic status, housing status, and access parameters, including to a healthy environment.

The council also felt that data should be linked to federally held data sources, including the Pharmaceutical Benefits Schedule (PBS) and the Medical Benefits Schedule (MBS).

Data linking was the focus of a recent Grattan Institute review by Stephen Duckett (Duckett, 2017). The review recommends that governments link routine data with registry data and PROMs. It also recommends linkages between routine state data and PBS and MBS data.

Data linkage was identified as a priority with the establishment of the Centre for Victorian Data Linkage (CVDL) in 2009. The centre has created a Victorian Data Linkages Map (VDLM). The VDLM allows data to be connected across a number of areas and sources. However, at present this linked data is primarily used for specific project proposals and is accessible on a case by case basis. It is not currently used in any routine reporting to identify systems variation. Examples of projects using data from the CVDL include the Health Links project and the Cancer Pathways project.

### **Council recommendations 7, 8 and 9**

7. The council supports the Centre for Victorian Data Linkages in their application to become an accredited integrating authority to expedite inclusion of MBS and PBS data into the Victorian Data Linkages Map.
8. The council supports current work underway at VAHI and the Centre for Victorian Data Linkages, prioritising the submission of all data registry data to VAHI for incorporation into the Victorian data linkages map. Further development of a minimum data set should be prioritised to allow for reporting and use of linked registry data.
9. The council recommends VAHI work towards routine reporting of a minimum set of agreed indicators using linked data.