Value Based Health Care Framework explained



dental health services victoria oral health for better health



Dental Health Services Victoria Level 1, Corporate Services Building 720 Swanston Street Carlton VIC 3053 Produced by: The VBHC Practice Design Team Email. vbhc@dhsv.org.au Dental Health Services Victoria: 2019, Dental Health Services Victoria Value Based Health Care Framework.

Further copies of this publication can be obtained from: www.dhsv.org.au

Disclaimer: Content within this publication was accurate at the time of publication. This work is copyright. It may be reproduced in whole or part for study or training purposes subject to the inclusion of an acknowledgment of the source.

It may not be reproduced for commercial usage or sale. Reproduction for purposes other than those indicated above, requires written permission from the Office of the Chief Oral Health Advisor.

© This work is copyright. Apart from any use permitted under the Copyright Act 1968, no part may be reproduced by any process, nor may any other exclusive right be exercised, without the permission of Dental Health Services Victoria, 720 Swanston Street, Carlton, Victoria. 2019.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	4
FOREWARD	5
BACKGROUND	7
CASE FOR CHANGE	8
At an individual level	8
At a health system and economic level	8
From a systems perspective	8
From a workforce perspective	9
From a consumer perspective,	9
DHSV'S STRATEGIC INTENT	10
Table 1. Value Based Health Care alignment with strategy	11
Consumer & Workforce Engagement and Co-design	11
THE VALUE AGENDA	12
Principles of Value Based Health Care	12
Figure 1: The Value Equation	13
Figure 2: Porter and Lee - The Value Agenda	13
Figure 2: Porter and Lee - The Value Agenda	14
Figure 2: Porter and Lee - The Value Agenda DHSV VALUE BASED HEALTH CARE FRAMEWORK	14 15
Figure 2: Porter and Lee - The Value Agenda DHSV VALUE BASED HEALTH CARE FRAMEWORK Figure 3: DHSV Value Based Health Care Framework 2019	14 15 16
Figure 2: Porter and Lee - The Value Agenda DHSV VALUE BASED HEALTH CARE FRAMEWORK Figure 3: DHSV Value Based Health Care Framework 2019 Table 2: DHSV Value Based Health Care Framework Explained	14 15 16 22
Figure 2: Porter and Lee - The Value Agenda DHSV VALUE BASED HEALTH CARE FRAMEWORK Figure 3: DHSV Value Based Health Care Framework 2019 Table 2: DHSV Value Based Health Care Framework Explained METHODOLOGY	
Figure 2: Porter and Lee - The Value Agenda DHSV VALUE BASED HEALTH CARE FRAMEWORK Figure 3: DHSV Value Based Health Care Framework 2019 Table 2: DHSV Value Based Health Care Framework Explained METHODOLOGY Initiation	
Figure 2: Porter and Lee - The Value Agenda DHSV VALUE BASED HEALTH CARE FRAMEWORK Figure 3: DHSV Value Based Health Care Framework 2019 Table 2: DHSV Value Based Health Care Framework Explained METHODOLOGY Initiation Co-design	
Figure 2: Porter and Lee - The Value Agenda DHSV VALUE BASED HEALTH CARE FRAMEWORK Figure 3: DHSV Value Based Health Care Framework 2019 Table 2: DHSV Value Based Health Care Framework Explained METHODOLOGY Initiation Co-design Portfolio projects	14
Figure 2: Porter and Lee - The Value Agenda DHSV VALUE BASED HEALTH CARE FRAMEWORK Figure 3: DHSV Value Based Health Care Framework 2019 Table 2: DHSV Value Based Health Care Framework Explained METHODOLOGY Initiation Co-design Portfolio projects VBHC Central Hub	14 15 16 22 22 22 22
Figure 2: Porter and Lee - The Value Agenda DHSV VALUE BASED HEALTH CARE FRAMEWORK Figure 3: DHSV Value Based Health Care Framework 2019 Table 2: DHSV Value Based Health Care Framework Explained METHODOLOGY Initiation Co-design Portfolio projects VBHC Central Hub Program governance	14 15 16 22 22 22 22 22 22 22 22 22 22 22 22 22
Figure 2: Porter and Lee - The Value Agenda DHSV VALUE BASED HEALTH CARE FRAMEWORK Figure 3: DHSV Value Based Health Care Framework 2019 Table 2: DHSV Value Based Health Care Framework Explained METHODOLOGY Initiation Co-design Portfolio projects VBHC Central Hub Program governance Model of Care Proof of Concept	14 15 16 22
Figure 2: Porter and Lee - The Value Agenda. DHSV VALUE BASED HEALTH CARE FRAMEWORK. Figure 3: DHSV Value Based Health Care Framework 2019. Table 2: DHSV Value Based Health Care Framework Explained. METHODOLOGY Initiation Co-design Portfolio projects. VBHC Central Hub Program governance. Model of Care Proof of Concept. Figure 4: Governance Structure	14 15 16 22
Figure 2: Porter and Lee - The Value Agenda DHSV VALUE BASED HEALTH CARE FRAMEWORK Figure 3: DHSV Value Based Health Care Framework 2019 Table 2: DHSV Value Based Health Care Framework Explained METHODOLOGY Initiation Co-design Portfolio projects VBHC Central Hub Program governance Model of Care Proof of Concept Figure 4: Governance Structure FRAMEWORK IMPLEMENTATION	14 15 16 22 22 22 22 22 22 22 22 22 22 22 22 22

ACKNOWLEDGEMENTS

Working with clinicians, consumers and the Victorian Government, Dental Health Services Victoria (DHSV) has designed a better way to deliver public oral health services.

Together we have co-designed Australia's first Value Based Health Care Framework for public dental services. Put simply, the Framework will:

- Be a person-centred system based on what people need;
- Provide the right services, by the right person, at the right time, in the right locations;
- Achieve the best outcomes at the lowest cost;
- Integrate care across separate facilities; and
- Measure outcomes and costs for every client.

DHSV would like to thank the Practice Design Team and members of the Model of Care Working Groups for lending their expertise, time and commitment to developing these guiding principles that will transform oral health services in Victoria.

This work would not be possible without contributions from many consumers, clinicians, staff and other interested people, who have helped design the Framework. A priority for DHSV is identifying and reducing unwarranted variation in clinical practice and working in partnership with other health care providers. Our aim is to improve both clinical practice and client care.

As part of DHSV's work in establishing Value Based Health Care (VBHC), we collaborated with the International Consortium of Health Outcome Measures (ICHOM) and the World Dental Federation to develop an Adult Oral Health Standard Set (AOHSS) of oral health outcome indicators.

We also acknowledge the work of Harvard Business School Professor Michael Porter and transformation expert Professor Elizabeth Olmsted Teisberg. Together, they pioneered VBHC. This work has informed the way forward for the oral health sector.

We recognise the unique position of Aboriginal peoples in the history and culture of Victoria, and we acknowledge the traditional owners of the lands and pay respect to elders of the communities covered in this manual.

FOREWARD

Introducing a Framework aimed at managing the increasing demand for public dental services and improving coordination of care across the system.

As the leading public oral health agency in the state, DHSV delivers care through the Royal Dental Hospital of Melbourne (RDHM) and partners with over 50 Community Dental Agencies (CDAs). Together we provide eligible Victorians with oral health care. As a result, more than 400,000 people received oral health care in the past 12 months.

The health system is a complicated matrix of service providers, funding bodies and governance structures. Due to population growth, ageing and technology, more people than ever need access to public dental services. With expanding waiting lists, our focus is on how we can ensure care is readily accessible to the individuals and families who need it most.

To help, we support the case for change using the principles of Value Based Health Care, including clinical evidence, health economics, research and evaluation.

DHSV's new Value Based Health Care Framework (the Framework) will provide people at the highest

Dr Deborah Cole *Chief Executive Officer* Dental Health Services Victoria

risk of dental and oral diseases with faster access to assessment by oral health interdisciplinary teams, who can plan their care and achieve the best outcomes.

New Care Pathways are designed to reduce unwarranted variations in practice and activity that fails to improve oral health.

The Framework supports a family-centred approach with improved client flow for efficiency, and better experiences and outcomes for the oral health care team and clients alike.

On behalf of DHSV, we are pleased to introduce our Framework and its set of guiding principles.

A key strategy is to be a global leader with our local partners, and to make sure the Framework is a success, we welcome feedback. Please email VBHC@dhsv.org.au.

This is an exciting time for the profession and one of collaboration. We look forward to hearing from you.

Dr Zoe Wainer Board Chair Dental Health Services Victoria

Learn more at: www.dhsv.org.au



BACKGROUND

An overview of who receives oral health care, when and why in Victoria.

DHSV is the leading public oral health agency in the state. Our aim is to improve the oral health of all Victorians – but particularly vulnerable groups and those most in need. Established in 1996, DHSV is accountable to the Victorian Minister for Health and funded by the Victorian Government. In short, DHSV is responsible for improving, planning, integration, coordination and management of Victoria's public dental services.

DHSV provides oral health services through RDHM and by purchasing dental services for public patients from more than 50 CDAs. In 2017-18, RDHM and CDAs delivered services to around 225,036 adults across Victoria¹, this included:

- 4,643 patients with special needs;
- 7,541 patients who received oral surgery at RDHM; and
- 149,546 who were treated for emergency care in Victoria¹.

DHSV implements state-wide oral health promotion programs, invests in oral health research, advises the government on oral health policy and supports the education of future oral health professionals. It also contributes significantly to the delivery of the key strategies identified in Australia's National Oral Health Plan 2015-2024, the Victorian Health and Wellbeing Plan 2015-2019 and the Victorian Action Plan for Oral Promotion 2013-2017.

We know, oral disease is a key marker of disadvantage, with greater levels of oral disease experienced by people on low incomes, dependent older people, Aboriginal and Torres Strait Islander peoples, rural dwellers, people with a disability and immigrant groups from culturally and linguistically diverse backgrounds – particularly refugees².

Due to finite resources allocated to the public dental sector, access is restricted using eligibility criteria. The Department of Health and Human Services (DHHS) policy on eligibility and priority access for public dental services defines eligible people as:

- All children (0-12 years);
- People who hold a valid social security concession card as well as their dependents;
- All refugees and asylum seekers;
- Aboriginal and Torres Strait Islander people; and
- Young people (up to 18 years) in out of home care or in youth justice custodial care.

A key 2018 election promise of the Andrew's Government was to expand the eligibility to all school aged children attending public schools.

The most recent report from the Auditor General in 2016 indicated, from June 2015, an estimated 2.46 million Victorians were eligible for public dental services (41 per cent of the population)³. However, just one in four eligible people accessed public dental services in 2015-16, with another six per cent of eligible people waiting for access³. There is also an indication that a sizable proportion of eligible people seek private dental care³, the reason for which is not apparent, but is important to explore.

Access to public dental services is not universal and the available funding is not enough for all eligible people to access services in a single year. With limited health care budgets, a new way of thinking and delivering public dental services is needed. This provides for a strong case for change.

CASE FOR CHANGE

Understanding the impact of poor oral health on our systems, workforce and consumers.

At an individual level

At an Individual Level, poor oral health can cause pain, suffering and distress. It can also impair the ability to eat, leading to poor nutritional status and diet-related ill health⁴. Furthermore, it can disrupt speech, sleep and productivity, affect self-esteem, employment prospects, psychological and social wellbeing and impact relationships^{4,5}.

At a health system and economic level

At a Health System and Economic Level, oral diseases are among the most common health diseases contributing to the rising rates of health care costs⁶. Expenditure on oral diseases is ranked second highest after cardiovascular disease⁷. In 2015-16, an estimated \$9.9 billion was spent on oral health with most of the expenditure incurred^{8.9} associated with the treatment of preventable oral diseases. In fact, more than 63,000 Australians are hospitalised each year for preventable dental conditions – the third highest reason for acute preventable hospital admissions in Australia¹⁰.

Despite our best efforts, DHSV understands a person accessing public dental care in Victoria:

- Has more disease and fewer teeth than the general population;
- Is less likely to access services than the general population;
- Has to wait 20 months on average to get routine care with no recall arrangements (this varies across the state); and

• Receives care not always focused on achieving better health outcomes. This is reflected in the significant variation in services provided across the state.

In addition to boosting the number of people under care, there are many other reasons from a systems, workforce and consumer perspective for changing the way we deliver oral health care.

From a systems perspective

From a Systems Perspective, the case for change is clear and resonates globally through the whole health system. This has been confirmed by the Victorian Auditor-General's Office and the Productivity Commission reports, which assessed the efficiency and effectiveness of public dental services in Victoria and Australia (3, 11). The findings from the reports suggest fundamental reform is needed to improve public dental services. From a systems perspective the main reasons for reform are:

- Treatment is prioritised over prevention. The current funding model encourages 'over-servicing' (supplier-induced demand) with an emphasis on higher cost, more invasive treatments rather than low cost preventive treatments^{11,12}.
- Oral health outcomes are not measured. The current performance monitoring and reporting on the delivery of public dental services in Victoria is output focused and lacks indicators for measuring improved oral health outcomes³. As a result, we are unable to show whether delivery of public dental services have been effective.

- There are high levels of demand for dental services. Government funding constraints mean that public dental services, while they do address emergency cases in a timely manner, do not prioritise care according to need. All people on the waitlist are offered care on a 'first come, first served' basis.
- The waiting list protocols do not support early interventions that can be less costly in the long run.
- The public dental service mix is not based on what patient's value. Patients are receiving some services that are low value, with little or no positive impact on oral health outcomes.
- Large variations in the quality and type of health care have been reported at the clinician, service and geographic levels. Most of these variations are unwarranted and directly impact on equity of access to services, the health outcomes of populations and efficient use of resources.

From a workforce perspective

From a Workforce Perspective, the main reasons for reform are:

- Providers in the public oral health sector are driven to make a difference. However, providers have become increasingly disillusioned by the drive for more outputs rather than a drive to improve health outcomes.
- As most oral diseases are preventable, providers express the need to be able to prevent or identify and treat the disease at an early stage. However, the current funding environment, waitlist and access policies result in people being treated in an advanced state of disease and poor oral health. Providers do not feel they are making a difference and over time become discouraged.

The current workforce mix does not maximise the use of all skills. To achieve a cost-effective oral health care system, the most resourceintensive staff (Dentists) should focus on the most complex types of services, while less resourceintensive staff such as Oral Health Therapists and Educators should carry out the services they are trained to deliver safely and competently such as assessments, oral hygiene, oral health education and patient support³.

From a consumer perspective,

From a Consumer Perspective, the experience of people who are current or potential users of the health services, including their families and carers is vital¹³. A consumer perspective is needed to increase efficiencies in health services, improve health outcomes, increase consumer trust in health care professionals, reduce health care costs including increased consumer satisfaction and compliance with treatment regimens (14, 16). The main reasons for reform are:

- An increasing demand from consumers to be able to live life to the full without being affected by poor oral health.
- Consumers want to understand how they can prevent oral disease and maintain good oral health.
- Consumers want to genuinely be a part of a supported decision-making process with their health care providers that allows them to make an informed decision about the care they receive.
- Consumers want to be listened to, be respected for their time and their views and be treated without judgement.

DHSV'S STRATEGIC INTENT

Poor oral health is a significant contributor to the burden of disease in Australia, not only at an individual level, but also at the broader health system and economic, social and environmental levels.

A clear strategy that defines the vision, purpose and goals – and empowers staff to see how their work contributes to the overall vision – is imperative.

Released in September 2016, DHSV's 2016-2021 Strategic Plan aims to use a population and life course approach to improve health outcomes through a new Model¹⁶.

Here's how the Strategic Plan offers a strong and consolidated commitment to improve oral health, it:

- 1. Uses a population and targeted life course approach to identify strategies to improve health outcomes.
- 2. Develops models of care that are:
 - respectful and responsive to preferences, needs and values of our consumers by placing the community at the centre of all we do;
 - Supporting the right interventions, by the right staff, at the right time and in the right place; and
 - Addressing common risk factors for chronic disease such as diet, personal hygiene, alcohol consumption and smoking.
- 3. Sustains and builds a positive culture and enhances our capability to support strategic partnerships.
- 4. Embraces technology.
- 5. Uses the current evidence base to determine appropriate care.

To reflect this, DHSV's Strategic Plan embeds four main themes:

- 1. Improving health outcomes;
- 2. Improving the experience;
- 3. To be global leaders with our local partners; and
- 4. To be a great place to work and a great organisation to work with¹⁶.

These themes are underpinned by DHSV's core values:

- 1. To act with **respect** towards every person or idea that we encounter;
- 2. To be **accountable** to the people we care for and those we work with;
- 3. To embrace **collaboration** with all partners that help us achieve our goals; and
- 4. To **transform** ourselves and our organisation to achieve better health outcomes for the community.

The overarching goal for DHSV is to improve health outcomes that matter to the client relative to the cost of achieving those outcomes. To do this, DHSV is redesigning the way public dental services are delivered in our community. And, the new Framework allows DHSV to deliver on its strategic plan.

Table 1. Value Based Health Care alignment with strategy

respect	accountable	collaboration	transform	
	Strategic	Themes		
mprove health outcomes	Improve the experience	Be global leaders with our local partners	Be a great place to work and a great organisation to work with	
	The Value	e Agenda		
Achieve the best outcome at the lowest oossible cost Person-centred systems organised around client needs	Right services, at the right time, by the right person and in the right place. Reduce variation	Measuring outcomes and costs for every client	Integrate care across separate systems	
			-	
DHSV Value Based Health Care Model				
Nodels of Care	Information & Communication Technology Platforms Infrastructure	Measuring Outcomes and Costs Funding Model Data Collection and Evaluation	Culture and Capability Integrating Care Across Providers and Systems	

THE VALUE AGENDA

The transformational approach required to become a patient-centred system organised around consumers' needs.

Internationally renowned innovation expert Professor Elizabeth Olmsted Teisberg and strategy expert Professor Michael Porter co-created the concept of VBHC. They provide a compelling critique of the health care system in their book *Redefining Health Care Creating Value-Based Competition on Results*¹⁷.

Teisberg and Porter reveal the underlying, and largely overlooked, causes of problems in our health care systems and provide powerful arguments for restructuring the health care system^{17,18}. They point out that achieving high value for patients should be the overarching goal of health care delivery, with value defined as the health outcomes achieved per dollar spent¹⁸.

This approach dictates moving away from a supplydriven health care system organised around what clinicians do, towards a patient-centred system organised around what patients need¹⁸. They define the Value Equation as the health outcomes that matter to clients divided by the cost at client level to deliver those outcomes (see Figure 1).

Principles of Value Based Health Care

These are the principles DHSV has adopted, which underpin VBHC:

- Achieve the best outcomes at the lowest possible cost;
- Client centred systems organised around what clients need;
- The right services, provided by the right person, at the right time and in the right place;
- Integrated care across providers and systems;
- Measure outcomes and costs for every client; and
- Reduced variation.

In the Harvard review article, *The strategy that will fix health care*¹⁸, Porter and Thomas Lee's Model for moving to a high-value health care delivery has six independent and mutually reinforcing components (see Figure 2). They indicate that progress will be greatest if the components are advanced together.

Figure 1: The Value Equation

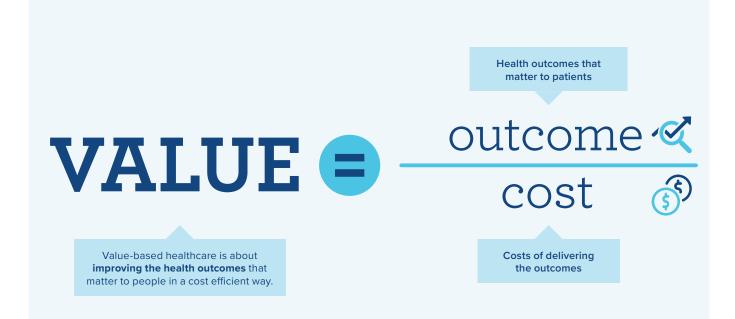
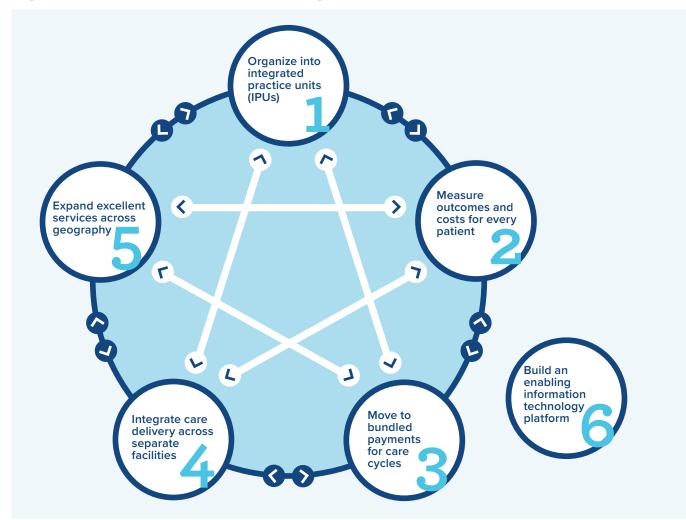


Figure 2: Porter and Lee - The Value Agenda



DHSV VALUE BASED HEALTH CARE FRAMEWORK

How DHSV is setting its own Value Agenda based on two central enablers – 1. Consumer & Workforce Engagement and 2. Co-design – plus, nine important components.

Inspired by Porter and Teisberg's work on economic sustainability in health care, DHSV's Board Chair Dr Wainer and CEO Dr Cole began work on DHSV's Value Agenda in 2016.

To improve health outcomes that matter to the client, relative to the cost of achieving those outcomes, DHSV has taken Porter and Lee's Model and contextualised it to the oral health environment of Victoria, Australia. In short, we have aligned the Framework to DHSV's strategic intent.

The Framework has evolved over time as DHSV's understanding of VBHC – and the change that is needed to implement this across the oral health service – has improved.

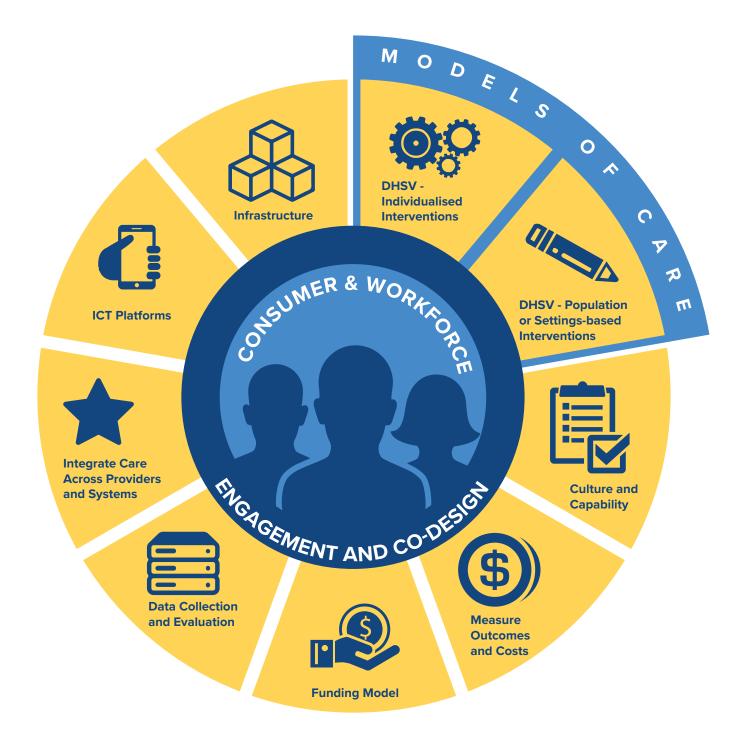
The central enablers of the DHSV Framework are Consumer & Workforce Engagement and Co-design. The Framework then consists of nine components, which include the six as defined by Porter and Lee. Plus, a seventh component related to Culture and Capability, which clearly articulates the substantial change needed to implement the Framework across the whole health service.

An eighth component was also added, which is dedicated to Population and Settings-based Interventions. This signifies the importance of population level prevention programs in improving the oral health of the community – and shows the breadth of DHSV programs provided across Victoria.

The most recent component created was Infrastructure, which highlights how the introduction of VBHC across multiple environments, with a focus on the client, requires a redesign of our spaces. This will enhance consumer engagement and provide environments, vehicles and equipment that allow us to deliver clientcentred care in the most appropriate locations.

Multiple projects are now underway to transform DHSV into a VBHC organisation. This transformation is a major undertaking to enable DHSV to deliver on its strategic agenda.

Figure 3: DHSV Value Based Health Care Framework 2019



DHSV's Why, What & How

To describe the journey the following table defines:

- The Why: driving forces behind each component of the Framework;
- The What: what will be achieved going on the VBHC journey; and
- **The How**: how the products, services and changes will be implemented.

DHSV recognises this is a journey and the 'What' and 'How' may change over time, however 'Why' will most likely remain constant.

Table 2: DHSV Value Based Health Care Framework Explained

Consumer engagement & co-design

Why

Consumers want to:

- Be healthy and not have their life affected by poor health
- have control of their health care decision making
- have information on what will affect their health outcomes
- feel valued, respected and treated as a 'person' instead of an illness
- know who is providing their care and how they can help

What

Consumers will:

- co-design 'the consumer journey' from the initial to the last contact
- understand every segment of the Framework from setting the outcome measures, designing the experience, and participating in care plan options including preventative interventions
- help ensure our buildings and clinics are:
- welcoming and culturally sensitive
- easy to navigate for both consumers and staff
- help build staff capability to walk the journey together

How

223

Consumers:

- developed a co-design framework
- were involved in the ICHOM working group to create an oral health outcome indicator set
- participated in a cultural development program
- were involved in value stream mapping
- DHSV listened to the consumer
- DHSV designed with consumers
- will be part of workforce and consumer capability building
- will be part of the evaluation of the Framework at each step
- will continue to codesign all aspects of the Framework with DHSV

Workforce engagement and co-designWhyWhatH

- Our workforce wants:
- to make a difference to the people they provide services for
- change the way we deliver care, which in the past has not always improved health outcomes or the experience
- work in a joyful environment that is safe, respectful and encourages them to do the best they can

Our workforce will:

- continue to create a respectful workplace that uses the strength of our diversity to create better outcomes for clients and colleagues
- embrace collaboration and co-produce care plans with consumers
- ensure the right people are providing the right care, at the right time in the right place
- advocate to improve the client experience
- collaborate as a team and provide services where each person works to their maximum scope of practice, and are supported to do so
- share and exchange knowledge to improve health outcomes and the client experience
- constantly ask the value equation: "What am I doing to help maximise the client's health outcomes at the best cost option?"
- be courageous in challenging the status quo so we can create a better working environment to enable us to achieve better health outcomes and improve the consumer and staff experience



Our workforce:

- has annual respectful workplace learning days
- behaves in line with our values and behaviours that support the strategic intent and recognizes their colleagues when they do so
- has the courage to call out behaviours that do not align with our values
- relies on value stream mapping
 - > listening to the voice of our people
 - > designing the experience with staff
- is a part of the evaluation of the Framework at each step
- is working to develop new roles to improve the client health outcomes and experience

 e.g. Client Advocate, Oral Health Coach
- leaders are supported to be role models and to take care of the people in their charge and be the leader they wish they had
- is engaged to co-design best practice ways of working

DHSV - Individualised interventions

Why

- Any intervention needs to contribute to better health outcomes and the value proposition
- Most oral disease is preventable, so the interventions should aim to prevent where possible
- Low value care and significant service variation contributes to a waste of resources that could be better used to see more people and improve health outcomes
- Consumers are currently put on waiting lists without any interventions to prevent them deteriorating
- The Value Agenda is underpinned by upholding high ethical standards in all decision making, interacting with consumers, and measuring/reporting transparently on the outcomes that DHSV produces for consumers
- Truly successful long-term outcomes of care should decrease individuals' reliance on seeking subsequent care in the future

What

- Self-management is key to a person improving their health outcomes
- A philosophy of minimal intervention is essential – as soon as clinicians cut or extract, they can't go back
- Evidence informed care is used to support the Framework
- The right care will be provided at the right time, in the right place, by the right person
- A clearly documented model of care will describe the patient journey with care pathways, care plans and clinical guidelines to ensure consistency of practice, reduced variation and improved outcomes
- While considering the value equation, we will strive to take care of people in the best place for them rather than have people coming to us for care
- Ethical principles underpin the design and implementation of VBHC



- Document the care pathways, clinical pathways and clinical guidelines for the whole client journey, for all settings and all specialties
- Document the policies and standard operating procedures
- Design the physical environment, clinical set-up, consumables and instrument imprest
- Measure, evaluate and continuously improve the models we develop to better the experience for our workforce and our consumers
- Assess our clients risks and needs to determine the appropriate pathway and prevent their oral health from deteriorating
- Co-design a care plan with our clients
- Measure and monitor variation in oral healthcare use
- Measure changes in health outcomes across cycles of care and longitudinally
- Develop an Access Policy which reflects care needs, including care pathways and frequency of access, based on population and system data

DHSV - Population or settings-based interventions

Why

- As only one in four of our eligible population attends, we need to apply interventions that are community based and/or at population level to help people who don't attend dental services
- Prevention and early identification can improve health outcomes at the lowest cost – hence improving value
- The value equation for population level public health prevention has not been defined
- To be sustainable, systems need to decrease reliance on care into the future by preventing disease in the first place
- Providing effective and appropriate care includes empowering individuals to maintain and improve their own health over time through healthy behaviours
- Significant global threats to human health require local action to provide the ultimate value in healthcare

What

- Evidence informed interventions will be used to improve health outcomes
- The right interventions will be provided at the right time and in the right place, by the right person with a focus on those with the highest need
- Interventions will include working with individuals and families to improve behavioural risk factors for disease
- While considering the value equation, we will strive to take the interventions to the people in settings that work for them or at a population level
- Population level interventions which relate to the risk factors for disease will be implemented if they add value
- Recognise the link between the health and wellbeing of the population and the health and wellbeing of the environment.
- Reflect Global Green and Healthy Hospitals Sustainability Principles and DHHS Environmental sustainability strategy principles in the Model of Care, by promoting sustainable environments for a healthy lifestyle and sustainability in health system performance

- Develop a state-based prevention plan with our key partners
- Use our evidence informed oral health promotion resource and Cochrane Reviews to identify the best interventions
- Define the outcomes measures that best measure Population level interventions
- Identify the highest risk settings to implement preventative interventions
- Evaluate the interventions to ensure improvements in health outcomes and value
- Embed climate action messaging in healthy behavioural messaging
- Develop a DHSV Value Based Sustainability Policy



Culture and capability

Why

- Highly engaged and committed staff result in engaged patients with better client safety and improved health outcomes
- Providing purpose and connecting the strategic intent to everyday work helps people be part of making a difference
- The workforce needs to be supported and encouraged to continuously learn and develop
- The workforce needs to be orientated and trained to the organization, the team and their role to enable them to do their job well
- Environments that are physically and psychologically safe enable staff to work at their best
- The workforce needs to be equipped to respond to emerging health needs in the context of an increasing burden of chronic disease, higher care needs associated with ageing and fiscal pressures into the future.

What

- A culture where staff are committed and engaged and find joy at work
- A safe working and clinical environment
- Clinicians are happily working to the top of their scope of practice
- Our employment brand is recognised as a great place to work
- Leaders are coaches and encourage high performance, reward and recognise their staff and invest in their wellbeing
- Systems, processes and policies are streamlined and support the work our staff do
- Workforce development frameworks which support clinical teamwork and working to the highest levels of skills and abilities

How

- Continued implementation of the Respectful Workplace Framework
- We underpin our decision making with the principles of equity, diversity, inclusion, flexibility, safety and wellbeing
- All staff are trained on the 'DHSV Way' values and behaviours
- We train staff to lead change using the change management framework
- Implement leadership training programs to improve leadership and management capability
- Review policies, systems, processes to streamline and reduce rework and red tape
- Redesign recruitment and on-boarding and ongoing training process to ensure staff are best prepared to do their role
- Develop workforce competency and development frameworks and relate these to clinical scope of practice

Measure outcomes and costs

Why

- We want to see more people, which is not possible at our current costs and is unsustainable into the future
- Currently no patient reported outcomes are measured
- We cannot tell if health outcomes are improving following our interventions
- There is significant variation in services delivered, but no understanding what level is expected to deliver the ideal health outcome
- We don't know the costs to deliver care for each client
- Measures help us continually improve
- Efficient systems have less wastage and a lower carbon footprint

What

- A standard set of oral health outcome indicators are measured
- Costs are measured at the client level
- The focus is on value not volume
- Waste and rework is reduced
- Measure what we value
- The right people delivering the right intervention at the right time, in the right place, for the right reason
- Disease reduction through health maintenance and disease prevention will lower the carbon footprint of the oral healthcare system and will be more efficient
- Unwarranted variations in care across parts of the system are quantified and reduced

- Work with International Consortium for Health Outcome Measures (ICHOM) to develop the standard set of oral health outcome indicators
- Implement outcomes measures for all client interventions
- Use Time Based Activity Allocation methodology to measure costs at client level
- Develop a costing model to test scenarios and ensure the value equation is maintained, (e.g. we do not want Rolls Royce treatment on a small number of people)
- Analyse current variation in care between clinics, locations and providers for different consumer groups and use this as the basis to reduce unwarranted and wasteful variations in care Identify and reduce current sources of environmental wastage, such as the use of plastics
- Quantify and reduce the carbon footprint of different types of services





Funding model

Why

- Current funding models drive volume of services without always improving health outcomes
- We need a model to encourage a multidisciplinary team that collaborates on health outcomes with clients
- We need a model that sustainably funds systems to cope with emerging health threats and an increasing burden of disease

What

- Incentives that improve health outcomes, not increase volume
- Use funding models to drive the care to improve value

How

- Investigate the funding model options that could be used
- Work with DHHS to develop a blended funding model
- Shadow the funding model to test its applicability and sustainability
- Introduce a new funding model after testing and adjusting
- Develop a case for funding primary prevention

Data collection and evaluation

Why

- Our current clinical systems provide information from across the state for eligible clients
- We have no Patient Reported Outcome Measures (PROMs) or a method to collect them
- Our clinical outcome measures must be more robust and consistently collected
- We have no way of measuring value because we do not measure outcome or costs at client level
- No Australian research exists on VBHC. DHSV will inform a national approach to VBHC
- We are limited in our ability to project how the system will cope with emerging health issues and demands

What

- The Electronic Oral Health Record (EOHR) allows better reporting of the new oral health outcome indicators
- PROMs are collected in an accessible and meaningful way
- The evaluation and research team will develop standard tools and resources to help staff monitor and evaluate PROMS.
- The PROMS data will be used to assist clients and clinicians to co-produce care plans
- Artificial Intelligence (AI) will be used to derive predictive analytics from localised and decentralised datasets



- A data dictionary will be developed to determine the data collection and reporting standards
- Data collection methodology will be determined and implemented
- A standard reporting framework will be co-designed with our leaders
- An evaluation and research framework will ensure outcomes and costs are measured , evaluated and published
- DHSV will share information on the implementation and impact of VBHC via publication in academic journals, at academic conferences and in government reports
- Al will be utilized to enhance DHSV's capability to analyse data and improve systems and processes
- Data analysis will be used to understand differences in patterns of care and minimise unwarranted variation
- Data analysis will inform modifications to future systems in response to emerging demands

Integrate care across providers and systems

Why

- There are many links between poor oral health and poor general health, particularly non-communicable diseases
- Oral health providers are inconsistent in their integration with other health and social service providers
- Health outcomes are affected by the social determinants of health, but we rarely attempt to influence them

What

- Strong interdisciplinary pathways will be established to enable cross referral to other health and social services
- Use other service providers to identify oral health issues, provide advice and refer for early intervention
- Establish a policy position for Value Based Systems
- Include sustainability imperatives in the Value Based System policy position

How



- Processes to support interdisciplinary care will be included into the models of care
- Provide support and capability building through learning and development interventions on oral health care for other service providers. This will allow them to identify issues, provide advice and refer on
- Use tele-dentistry and settings-based interventions to improve access to oral health care in other service settings
- Conduct and use research on the value basis for population health and social interventions
- Develop policy positions to support the Framework

Information and communication technology platforms

Why

- IT enables the business to function efficiently
- IT reduces waste and rework
- IT improves safety
- IT is central to the ability of healthcare systems to meet our present needs, without compromising system needs in the future
- What
- EOHR will be delivered
- Digital radiology will be implemented
- A client portal will enable clients to schedule appointments and access health information
- A clinician portal will support clinical decision making
- Tele-dentistry will be further developed
- Back of house IT platforms will be enhanced to enable the value equation
- Al will help improve the experience and the outcomes
- Al will help to equip systems to adapt to future needs and demands

Search for and implement a new EOHR

- Introduction of client centered portals to deliver curated information and direct interaction
- Improve business processes:
 - > Systems integration
 - > Rostering system
 - > Predictive analytics
 - > Management reporting
 - > Electronic instrument tracking
 - > Electronic interpreter services
 - > Collaboration platforms
- Al explored to improve the experience for example in way finding and consumer support
- Analytical capabilities of IT systems explored to provide predictive analytics and modifications in the future

Infrastructure

Why

Our infrastructure supports:

- client-centred care
- safe and efficient clinical practice
- us to do our best
- us to provide services in the most appropriate settings
- us to meet the needs of consumers now and in the future
- healthy families living in healthy communities

What

Our infrastructure is:

- welcoming, easy to access and navigate for our diverse client and staff groups
- > standardised to reduce variation
- Encouraging us to see clients in their community settings
- Considerate of future needs and demands of health services
- Supportive of healthy decisions and behaviours
- Environmentally "green" and lower carbon cost

How

Our infrastructure plan is to:

- Develop standardised clinic set ups
- Upgrade areas used by clients to enhance client flow and enable a confidential clientcentred approach
- Provide clinical areas that support clients' needs
- Provide areas that support staff needs
- Source facilities, vehicles and equipment that allow care to be delivered in the most appropriate setting
- Use data analytics to inform infrastructure growth and development needs
- Utilise healthy and green design principles in new infrastructure developments

METHODOLOGY

Innovation and forward-thinking underpin the process of transformation.

Initiation

The alignment of key stakeholders from the Board to the consumer has been a key feature of the Frameworks implementation. Dr Wainer and Dr Cole's vision to transform DHSV into a VBHC organisation would not be possible without integral support from the Board, Executive, staff, consumers, community, DHHS and the state government. Their strong resolve and effective leadership are critical in bringing people on board and motivating them to act. Furthermore, their commitment to health care, expertise in public health and passion for VBHC has driven formal collaborations with the right stakeholders at various levels of bureaucracy. In addition, Dr Wainer and Dr Cole's strategic insights in designing the VBHC solution from a strategic lens was instrumental in gaining political and financial support from the government.

DHSV began exploring the term 'value' and relating it to the oral health context in 2016. The focus became: the assessment of patient outcomes achieved, relative to the cost of achieving them. This included strengthening the efficiency and sustainability of health services.

Co-design

Co-design is at the heart of the Framework; it is when consumers and staff are able to work as partners in health care. It empowers both parties to have a greater say in the planning, designing and delivery of health services that prioritises clients' needs and provides a meaningful measure of quality of care (13,14).

DHSV recognises the importance of the concept: 'Nothing About Me, Without Me' when delivering person-centred care. A series of Voice of Consumer focus groups took place with representatives from DHSV's priority population groups. This helped better understand the lived experiences of consumers accessing oral health services. It also meant services were designed to be respectful of, and responsive to, individual patient/family preferences, needs and values.

To explain further, DHSV's priority population groups are those who have priority access for public oral health care. The Voice of Consumer focus groups attempted to understand from a consumer's perspective what they do and do not value from public oral health services. Cultural safety issues and sensitivities relevant to each priority group were discussed with community and advocacy groups representing them. The groups were guided by Appreciative Inquiry – a method which uses strengths-based approach to create change.

To ensure our workforce voices were also heard, consultation forums were held with the DHSV executive team, academics and researchers, clinical and nonclinical staff and senior management. This helped to identify the challenges of those working in the public dental system.

With DHSV staff, the current, ideal and future states were documented using value stream mapping. This included resource allocation, costing and staff allocation to ensure all members of the oral health team are working to their full scope of practice.

Portfolio projects

Based on staff and consumer feedback and the value stream mapping process, the steering committee identified five key portfolios and transformation projects that would deliver the Framework.

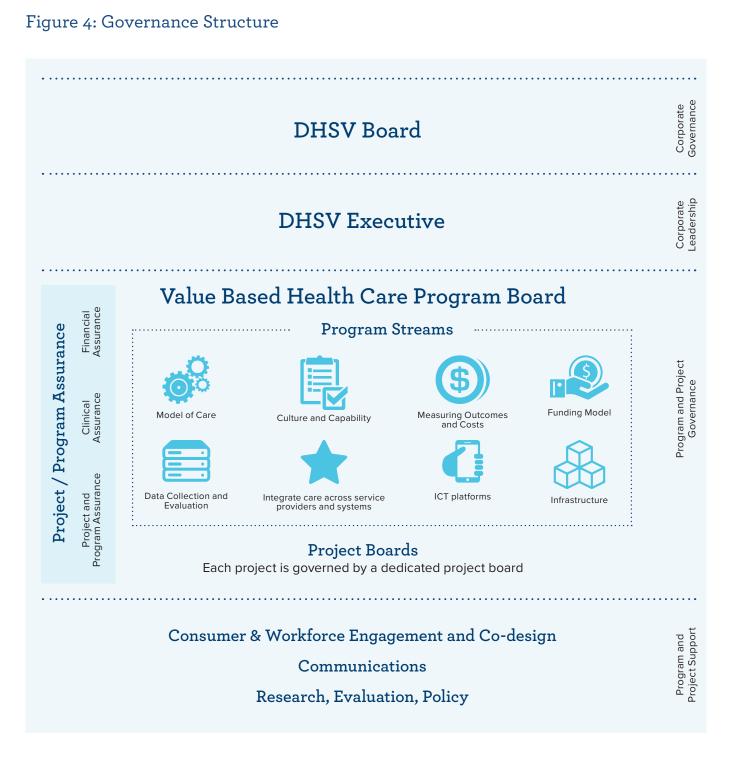
These portfolios and transformation projects have been modified as DHSV's understanding of the Framework has deepened and the areas that require attention have been more clearly defined. The current portfolios and projects align with the latest version of the Framework as outlined in Figure 3. Multiple, mutually reinforcing, projects are already in flight to implement DHSV's VBHC Framework.

VBHC Central Hub

DHSV created a VBHC central hub which allows people to come together to research, debate, hypothesise, plan and evaluate. It is commonly referred to as the Value Based Health Care 'War Room' and is essential to provide focus for the delivery of the Framework.

Program governance

A Program Board has been established to oversee the implementation of all parts of the Framework. Each of the components of the Model has a number of projects to be delivered. DHSV is using project management practices to govern both the program and individual projects.



Model of Care Proof of Concept

Our clinical journey to VBHC began in October 2018 with the new General Dental Model of Care in four dental chairs in the Primary Care clinic at RDHM.

This allowed DHSV and RDHM to trial and evaluate:

- How clients access our services;
- How we assess and measure their condition;
- The Care Pathways we have developed based on client risk and need;
- How the maintenance and ongoing care phase will work; and
- How we will measure outcomes.

The Proof of Concept is also used to assess, review and improve how we onboard and train our staff, as well as how we develop self-managing teams and multidisciplinary team functioning. A costing model will be developed, used and assessed as will new data collection tools. In other words, we need to ensure the new model of care improves value.

FRAMEWORK IMPLEMENTATION

Working together we have made great progress, but more planning, design and implementation is ahead.

The Board, clinical and executive leadership are essential to driving DHSV's Value Agenda forward. Each executive has been working on components of the VBHC delivery plan to ensure successful implementation at DHSV.

Clinical leaders are engaged in discussing, debating and deciding on the future models of care. While the executives are focused on different streams of work to design everything from the consumer's first point of contact to the Electronic Oral Health Record that is required to support consistent data collection and measurement of outcomes. Each component of the Framework will have its own implementation protocols, which will be made available as they are developed.

Implementation of all components of the Framework will take a number of years to complete. There are multiple projects within the Framework that require significant planning and resourcing. Many of the projects have interdependencies and cannot be delivered in a linear fashion. Substantial program planning is underway to ensure all parts of the Framework will be delivered in a timely and effective manner.

DHSV gains international recognition for leading VBHC in Australia

DHSV's efforts in implementing VBHC in Australia were globally recognised in October 2018. DHSV was the proud recipient of the Gold Award of the International Hospital Federation (IHF). The Dr Kwang Tae Kim Grand Award was given for 'Value Based Health Care: A new approach to improve oral health outcomes. This is the most prestigious among all the IHF awards, which honours excellence and achievements in health system transformation. This is a phenomenal achievement and a recognition of DHSV's leadership in the VBHC space.

NEXT STEPS

Following the Proof of Concept those processes, systems and artefacts that have been shown to add value will be transitioned across to the rest of RDHM and to the CDAs. The ongoing evaluation of all components is an integral part of the Framework as we continuously improve the services we provide to our community and each other.

Additional models of care are under development for implementation with other cohorts of DHSV clients, including School Children Oral Health, Special Needs Dentistry and General Dental Teaching Clinic.

This is an exciting time for the profession and one of collaboration. To make sure the Framework is a success, we welcome your feedback. Please email VBHC@dhsv.org.au.

REFERENCES

- Dental Health Services Victoria. Dental Health Services Victoria Annual Report 2017-18. Melbourne: Dental Health Services Victoria 2018.
- 2. Australian Institute of Health and Welfare. Oral health and dental care in Australia: key facts and figures 2014. Canberra: AIHW; 2014.
- Victorian Auditor-General's Office. Access to Public Dental Services in Victoria. 2016.
- Gerritsen A, Allen P, Witter D, Bronkhorst E, Creugers N. Tooth loss and oral health related quality of life: a systematic review and metaanalysis. Health and Quality of Life Outcomes. 2010;8(126).
- Kramer P, Feldens C, Helena Ferreira S, Bervian J, Rodrigues P, Peres M. Exploring the impact of oral diseases and disorders on quality of life of preschool children. Community Dentistry and Oral Epidemiology. 2013;41:327-35.
- Australian Institute of Health and Welfare. Australia's health 2014. Canberra: Australian Institute of Health and Welfare; 2014.
- Australian Institute of Health and Welfare. Health expenditure Australia 2015–16. Canberra: Australian Institute of Health and Welfare; 2017.
- Manton D, Foley M, Gikas A, Ivanoski S, McCullough M, Peres M, et al. Australia's Oral Health Tracker: Technical Paper, Australian Health Policy Collaboration Melbourne: Victoria University; 2018
- Australian Institute of Health and Welfare. Australian hospital statistics 2012–13. Canberra: Australian Institute of Health and Welfare 2014.

- Productivity Commission. Introducing Competition and Informed User Choice into Human Services: Identifying Sectors for Reform. Canberra: Commonwealth Government; 2016.
- 11. Productivity Commission. Shifting the Dial: 5 Year Productivity Review. Canberra; 2017.
- 12. Australian Commission on Safety and Quality in Health Care. Patient-centred care: Improving quality and safety through partnerships with patients and consumers. ACSQHC; 2011.
- Grondahl A, Karlsson I, Hall-Lord M, Wilde-Larsson B. Quality of care from patients' perspective: impact of the combination of personal-related and external objective care conditions. J Clin Nurs. 2011;20:2540-51
- Frow P, Nenonen S, Payne A, Storbacka K. Managing co-creation design: a strategic approach to innovation. Br J Manag. 2015;26:463-83.
- Kohler G, Sampalli T, Ryer A, Porter J, Wood L, Bedford L, et al. Bringing Value-Based Perspectives to Care: Including Patient and Family Members in Decision-Making Processes. Int J Health Policy Manag 2017;6¹¹:661-8.
- Dental Health Services Victoria. DHSV Strategic Plan 2016-2021, available at https://www.dhsv.org. au/about-us/reports-and-publications#strat 2016
- Porter M, Teisberg E. Redefining health care: creating value-based competition on results. Boston: Harvard Business School Press; 2006.
- Porter M, Lee T. The Strategy That Will Fix Health Care. Harvard Business Review. 2013;91(10):50–70.



