

Healthy Families, Healthy Smiles

Evaluation Report 2015-19

JULY 2020



Table of contents

List of tables	3
Acronyms and abbreviations	4
Acknowledgements	5
Message from the Chief Operating Officer	6
Executive summary	7
Main Messages.....	7
Background and program aim	8
Evaluation.....	8
Implementation, achievements & key evaluation findings	9
Next Steps	14
1 Project overview.....	15
1.1 Introduction	15
1.2 Background	15
1.3 Implementation.....	15
1.4 Evaluation overview	21
1.4.1 Ethics	21
1.4.2 Evaluation aim	21
1.4.3 Evaluation methods.....	22
1.4.4 Evaluation strengths and limitations	25
2 Implementation and evaluation findings.....	26
2.1 Partnerships	26
2.1.1 Overview - Partnerships	26
2.1.2 Implementation - Partnerships.....	26
2.1.3 Key evaluation findings - Partnerships.....	27
2.1.4 Challenges and success factors - Partnerships	32
2.1.5 Key recommendations - Partnerships	32
2.2 Professional development.....	34
2.2.1 Midwives	34
2.2.2 Maternal and child health nurses.....	40
2.2.3 Staff working with Aboriginal families	43
2.2.4 Early childhood educators	50
2.2.5 Supported playgroup facilitators	53
2.2.6 Overall challenges and success factors - Professional development	57
2.2.7 Key recommendations - Professional development.....	58
2.3 Tools and resources.....	59

2.3.1	Maternal and child health nurses	60
2.3.2	Supported playgroup facilitators	64
2.3.3	Library staff and families	70
2.3.4	Tools and resources for families	71
2.3.5	Additional evaluation findings – Tools and resources	72
2.3.6	Overall challenges and success factors - Tools and resources.....	72
2.3.7	Key recommendations - Tools and resources.....	73
2.4	Policy and systems.....	73
2.4.1	Midwives	74
2.4.2	Maternal and child health nurses	82
2.4.3	Staff working with Aboriginal families	84
2.4.4	Dietitians	89
2.4.5	Overall challenges and success factors – Policy and systems	90
2.4.6	Key recommendations – Policy and systems.....	91
2.5	Reporting and dissemination.....	93
2.5.1	Key recommendation – Reporting and dissemination	95
3	Priorities for the next 4 year phase (2019-2023).....	95
4	List of appendices	97
5	References.....	101

List of tables

Table 1 Overview of HFHS program interventions delivered by professional group, 2015-2019.....	16
Table 2 Activities funded with additional investment, 2015-2019	18
Table 3 Overview of evaluation design, methods and measures	24
Table 4 Number of partner organisations involved in HFHS initiatives, 2015-2019	28
Table 5 Number of MCH nurses participating in PD activities, 2015-19.....	42
Table 6 MCH student education 2015-19.....	43
Table 7 Count of professionals trained in Bigger Better Smiles, 2015-2019	46
Table 8 Number of Aboriginal Supported playgroup facilitators trained to deliver Little Koorie Smiles, 2015-2019	47
Table 9 Number of professionals working with Aboriginal families trained in Healthy Little Smiles, 2015-2019	47
Table 10 Number of early childhood educators who participated in Healthy Little Smiles Workshop, 2015-2019	52
Table 11 Number of Playgroup facilitators participating in CPD activities, 2015-2019	56
Table 12 List of resources developed by HFHS program, 2015-2019	59
Table 13 Summary of the Little Teeth Book consultation activities, 2015-2016	61
Table 14 Summary of consultation for the review of Baby teeth count too flipchart, Apr 2018 to Jan 2019	66
Table 15 Summary of consultation activities with MyTime groups, January -August 2017.....	67
Table 16 HFHS articles featuring WoM editions, 2015-19.....	94
Table 17 : Overview of HFHS program implementation, 2015-2019.....	98

Acronyms and abbreviations

ACCHOs	Aboriginal Community Controlled Health Organisations
ACCOs	Aboriginal Community Controlled Organisations
ACM	Australian College of Midwives
AHPA	Australian Health Promotion Association
ATSI	Aboriginal and Torres Strait Islander
BADAC	Ballarat and District Aboriginal Co-operative
BOS	Birthing Outcome System
CALD	Culturally and linguistically diverse
COHORT	Centre for Oral Health Outcomes and Research Translation
CPD	Continuing professional development
DAA	Dietitians Association of Australia
DET	Department of Education and Training
DHHS	Department of Health and Human Services
DHSV	Dental Health Services Victoria
GEGAC	Gippsland and East Gippsland Aboriginal Co-operative
GP	General Practitioner
HFHS	Healthy Families, Healthy Smiles
KAS	Key ages and stages
KMS	Koorie Maternity Services
LGA	Local Government Areas
MAV	Municipal Association of Victoria
MCH	Maternal and child health
MDAS	Mallee District Aboriginal Service
MIOH	Midwifery Initiated Oral Health education program
PEN	Practice-based Evidence in Nutrition
PRC	Parenting Research Centre
SMROHN	Southern Metropolitan Region Oral Health Network
VACCA	Victorian Aboriginal Child Care Agency
VACCHO	Victorian Aboriginal Community Controlled Health Organisation
VAHS	Victorian Aboriginal Health Service
VICSEG	Victorian Cooperative on Children's Services for Ethnic Groups
WSU	Western Sydney University

Acknowledgements

Dental Health Services Victoria (DHSV) would like to acknowledge the Victorian Government Department of Health and Human Services for funding the Healthy Families, Healthy Smiles (HFHS) program and for the guidance and support from key stakeholders.

DHSV would also like to thank the members of the HFHS project reference group and project management group for their support and guidance.

We also extend our thanks to our partners at government, service delivery, peak bodies and community levels for their commitment to improving oral health of children aged 0-3 years and pregnant women. Special thanks goes to the 18 Maternity Services which kindly assisted the evaluation by sharing their data relevant to oral health, and to the evaluation and research team for their support in the current evaluation.

This report is a collaborative effort of the HFHS team, Centre for Value Based Oral Health Care, Research and Evaluation team and the Manager Health Promotion Programs.

Message from the Chief Operating Officer

I am pleased to present the Healthy Families Healthy Smiles (HFHS) program implementation and evaluation report 2015-2019. This report provides detailed information of HFHS program, its implementation, main achievements and performance against the 2015-19 plan. Challenges for implementation, opportunities for expansion and improvement, and program priorities for the next 4 years (2019-23) are also reported.

The HFHS program was established in 2012 and since then partnerships have been the strength of this program. The program has built partnerships within a range of disciplines to support the design, planning, delivery and evaluation of program initiatives.

In this second phase of the program professional development continued to be a strong focus together with efforts to influence policy and systems and ultimately professional practice.

HFHS program activities are aligned with Dental Health Services Victoria (DHSV) Strategic Plan 2016-21, which contributes to meeting the goal of the Victorian Action Plan for Oral Health Promotion 2013-17, through building partnerships and environments that support good oral health; improvement of oral health promotion skills within non-dental workforce and addressing improvements in oral health literacy.

As the program evolves we are strengthening our leadership role in oral health promotion not only state-wide but also at national and international levels. The activities will continue to align with the Victorian Action plan to prevent oral disease 2020-30 (to be released). Opportunities of showcasing the HFHS program and sharing our learnings to other Australian jurisdictions and international visitors demonstrate the quality and influence of the program. The recognition of the program as a finalist in the prestigious Victorian Public Healthcare Awards in 2019 under the category of the Minister for Health's Award for improving maternal, child and family health highlights the success of the program.

The successful implementation of the HFHS program would have not been possible without the Victorian Government's investment in oral health; we are grateful to the Department of Health and Human Services for funding and supporting this initiative.

My sincere thanks go to our partners who directly and indirectly contributed to the success of the program. Our partners are behind the achievements presented in this report. We will continue exploring innovative ways to overcome some of the challenges our partners face in embedding oral health in their practice, particularly professionals working with vulnerable families.

I would also like to acknowledge and thank the hard working HFHS team and congratulate them on their achievements. I look forward to the next stage of the HFHS journey.

Mark Sullivan

Chief Operating Officer

Executive summary

Main Messages

- Healthy Families Healthy Smiles Program is embedding oral health promotion in everyday practice of key workforces that engage with pregnant women and young children
- Around 2,800 health and early childhood professionals have been trained in oral health promotion during phase 2 of the program (2015-2019). This brings the total to more than 5,300 professionals trained since the program's commencement in 2012.
- Professionals participating in the program consistently reported time constraints and competing priorities as one of the challenges of embedding oral health promotion in their practice. Despite this, the evaluation identified evidence of translation of knowledge into practice.
- The focus on partnerships, professional development, tools and resources and policy/system change is delivering change in professional practice to support oral health promotion in the early years. The longer term investment by Department of Health and Human Services has allowed the time required for this capacity building approach.
- Provision of tooth packs (toothbrushes and toothpaste packs) is a promising strategy to support professionals to engage with clients about oral health while also providing benefit for families. Provision of tooth packs is limited within the existing funding allocation. Expansion could provide additional benefits.
- Challenges exist for some professional groups and settings such as general practice and child protection services. The program is focussing efforts on professional groups where there is a greater chance of return on investment, while continuing to explore new opportunities.

Background and program aim

Healthy Families, Healthy Smiles (HFHS), an initiative funded by the Department of Health and Human Services (DHHS), aims to improve the oral health of Victorian children aged 0-3 years and pregnant women by working with professionals that support young families. The program seeks to expand the oral health promotion workforce in Victoria through building the capacity of health and early childhood professionals to promote oral health in their everyday practices.

Tooth decay is the most prevalent disease in Victoria with almost half of all children affected, disproportionately affecting disadvantaged families. Dental conditions are the highest cause of all preventable hospital admissions in children 0–9 years.¹ Around 57% of Victorian preschool aged children in high risk areas had a history of decay, out of which 37% were in early stages that can be reversed.² The impact of poor oral health can also create a financial burden for individuals and within the broader health system.¹¹ In addition, poor oral health in childhood is the strongest predictor of further dental disease in adulthood¹; thus, the need of improving oral health in childhood.

The HFHS program was established in 2012 and has since evolved and matured. building on the initial interventions, improving on them, extending partnerships and developing new ones. Since the program began, more than 5000 health and early childhood professionals have been trained in oral health promotion. More than 130 partners from a range of disciplines were engaged in the design, planning, delivery and evaluation of program initiatives.

The first 4 years (phase 1) were critical for setting up the foundation for the program. Activities focussed on: establishment of the project governance structures; identification of key stakeholders; consultation and needs assessment; pilot testing of interventions at a small scale. The evaluation of this phase informed the planning and expansion of activity in the second phase of HFHS program.

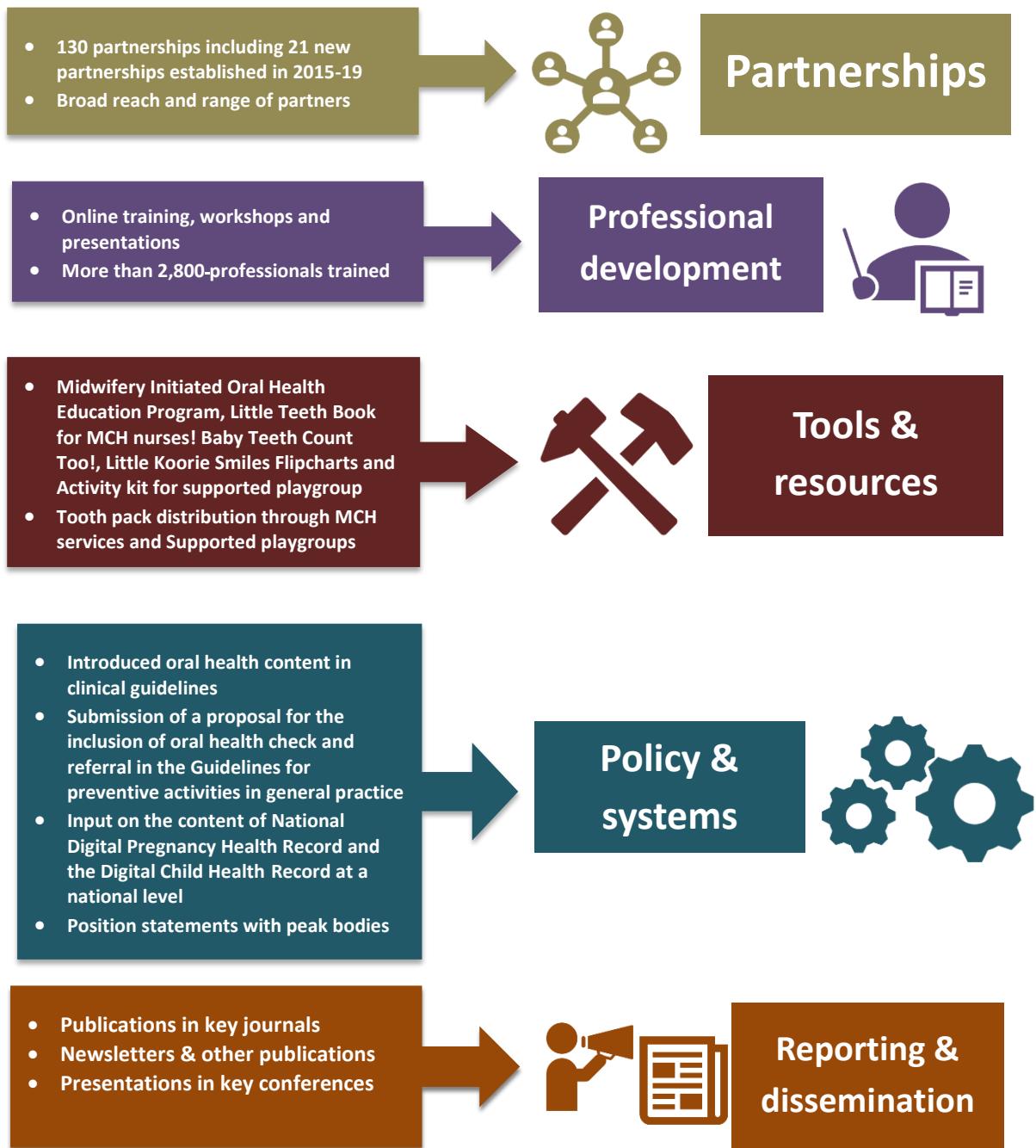
The second phase of the program (2015-2019) focussed on consolidating and expanding existing initiatives, addressing identified gaps and exploring avenues for potential new partnerships. This report outlines the implementation, evaluation and recommendations for phase 2 of the program.

Evaluation

The evaluation of phase 2 of the HFHS program aimed to determine the impact of the HFHS program in promoting the oral health of children aged 0-3 years and pregnant women in Victoria. A mixed-methods evaluation using a variety of tools such as pre- and post- training surveys, key informant interviews and focus groups informed the evaluation. A range of data sources such as program documentation, Victorian oral health and maternity service datasets were also reviewed.

Implementation, achievements & key evaluation findings

Underpinned by the theory of capacity building, the HFHS strategies in this report are discussed under the domains of partnerships, professional development, tools and resources, and policy & systems and reporting & dissemination. The implementation, achievements and key evaluation findings are discussed below:



Partnerships

- Partnerships continued to be the cornerstone of the delivery of the HFHS program in the second phase of implementation.
- The HFHS program has continued fostering strong collaborative relationships and networks with more than 130 official partnerships established (including 21 new partnerships formed between 2015-2019).

Evaluation findings:

- The ongoing nature of the program has enabled partnerships to transition from the initial engagement to collaborative and integrated partnerships further evidenced by the broad reach and range of partners involved.
- Importantly, these partnerships were found to have been critical in shaping the development of appropriate, responsive and tailored strategies to meet the capacity and needs of the workforces involved.
- Oral health champions in each setting were critical to the program's success. These champions provided beneficial links and unique insight into the everyday experiences of professionals in their sector which drove the direction and approach of the HFHS program.
- The ongoing nature of the program was a key enabler influencing the focus on oral health in organisations that did not prioritise oral health as part of their core business.
- The program has developed and nurtured strong ongoing partnerships and networks across government, service delivery, peak bodies and community sectors and actively continued exploring opportunities for building new partnerships

Professional development

- Workforce development is an important strategy for building capacity. A suite of professional development activities was implemented catering to the needs of each professional group. These ranged from in depth online training for midwives working in antenatal care to brief, one-hour workshops for playgroup facilitators.
- Over 5,300 professionals have completed training in oral health promotion since the program's inception, including approximately 2,800 health and early childhood professionals trained in phase 2 alone.

Tools and resources

- Tools and resources continued to play a vital role to enhance professional practice, particularly around family engagement and supported professional development activities designed for

Evaluation findings:

- HFHS has been successful in increasing knowledge, confidence and motivation to embed oral health promotion in targeted services.
- These professional development strategies were found to fill the oral health knowledge gaps and needs of the range of workforces that participated and increased skills and awareness of the importance of oral health. Significant increases in knowledge and confidence to incorporate oral health promotion, assessment and referrals within practices were reported.
- Overall, over 80% of participants reported high levels of knowledge and confidence to promote oral health after training.
- Each workforce indicated that the training and delivery of oral health promotion was relevant to their role. Participants expressed intentions to implement oral health promotion within their everyday practice. They felt oral health promotion training should be offered across their sectors and more broadly to other health and early childhood professionals.

different professional groups.

- Resources such as the Little Teeth Book for Maternal and child health nurses, 'Baby teeth count too!' and 'Little Koorie Smiles' flipcharts and Activity kit for Supported playgroup are a few examples of resources that are used to start conversations with families around oral health. Distribution of toothbrushes and toothpaste to families through the Maternal and child health services and Supported playgroups also provided opportunity for having these conversations in an appropriate and safe environment.

Evaluation findings:

- Tools and resources supported and encouraged the delivery of oral health promotion practice, assessment, referral and engagement with children and families.
- The HFHS tools helped professionals to initiate conversations with families about oral health with confidence. Simple, visual, interactive and practical activities and resources (such as toothbrush and toothpaste) were found to be the most valuable tools to reinforce oral health messages and for improving family engagement and behaviour change, which were noted by professionals as one of the most prominent challenges.
- These resources were helpful in particular for working with CALD and vulnerable families, helping to overcome language barriers and broach the topic of oral health which can be a sensitive matter for many of these families.

Policies and systems

- The HFHS program worked to influence policies and systems, to enable the incorporation of oral health promotion into professionals' practice.
- The HFHS program played an active role in the updating clinical guidelines on promoting oral health in pregnancy and influenced monitoring systems and establishment of referral pathways with a view to creating systems and environments supportive for translating the knowledge and skills acquired from professional development activities into daily practice.
- HFHS worked towards introducing oral health content in clinical guidelines, namely: Pregnancy Care Handbook - A Guide for Maternity Care Clinicians published by Royal Women's Hospital published in October 2015; submission of a proposal for the inclusion of oral health check and referral in the Guidelines for preventive activities in general practice (Preventative activities prior to pregnancy chapter) in September 2015; opportunity to provide input on the content of National Digital Pregnancy Health Record and the Digital Child Health Record at a national level.
- HFHS also played a fundamental role on introducing oral health questions into the medical database for pregnancy (Birthing Outcomes System – BOS), in use in the majority of maternity services in Victorian.
- The HFHS program worked to influence policies and systems, to enable the incorporation of oral health promotion into professionals' practice.

Evaluation findings:

- Combined efforts across partnerships, professional development, tools and resources and policy have influenced changes in systems and professional practices.
- Strengthening links between health and dental services was another strategy within the program used to strengthen referral pathways, make the system easier to navigate for consumers and support access to dental services.
- The provision of Tooth packs (oral health promotion information, toothbrushes and toothpaste), together with a suite of oral health promotion tools and resources prompted discussion of oral health with families, enhanced family engagement and encouraged child oral health assessment and referrals to dental services.
- Common systemic barriers identified included: the absence of formal referral pathways, poor links to dental services, limitations of time, competing priorities and working with complex clients.

Reporting and dissemination

- The HFHS program has contributed to cementing DHSV's role as leaders in the oral health promotion sphere at a state, national and international levels.

Evaluation findings:

- Opportunities for showcasing the HFHS program and sharing the learnings to international visitors and the recently published HFHS paper titled 'Family-centred oral health promotion through Victorian child-health services' in a renowned peer reviewed journal are examples of the leadership position established by the program.
- The latter validates the quality of HFHS work and adds to the evidence-based strategies supporting oral health promotion.

The Government's investment in oral health promotion through HFHS has enabled a large body of work and partnership development in the non-dental sector which could not be sustained without dedicated resources to deliver the program, support from the partners and key stakeholders and a holistic approach to health promotion offered by HFHS. The ongoing funding commitment provides reassurance for both the HFHS implementation team and their partners that the Government is committed to creating supportive environments to improve the oral health of Victorians.

The overarching recommendations from this evaluation focus on directing the areas for continuation and improvement of the HFHS program across Victoria. Detailed recommendations are included within the report were relevant for each professional group.

Partnerships:

- Maintain and strengthen existing partnerships and explore opportunities for new partnerships to broaden the program reach and impact
- Continue exploring new ways of working collaboratively with program partners to embed oral health within their organisational policies and practices as the program evolves
- Continue working closely and collaboratively with partners to remain responsive to emerging oral health needs, changes in policies, guidelines and priorities.

Professional development:

- Continue expanding capacity building and program reach through ongoing training and professional development
- Continue maintaining engagement with trained professionals through ongoing communication and offering refresher training where applicable
- Continue to respond to partners' priorities, needs, policy and practice environment to ensure professional development activities remain meaningful and appropriate to each sector
- Develop and trial new and innovative strategies to increase traction and uptake of the HFHS professional development activities.

Tools and resources:

- Remain responsive to the needs of partnering sectors and continue to work collaboratively to co-design, develop, update and refine resources as required
- Continue to develop resources and initiatives that resonate with the local context and target population, for example, visual and culturally appropriate images for culturally and linguistically diverse groups and Aboriginal communities.

Policy and systems:

- Continue to strengthen links between health, early childhood services and local public dental agencies to improve access to dental services
- Support the implementation of oral health promotion, assessment and referrals into practice.
- Leverage off established knowledge, programs and partnership to support and align with new programs and political contexts such as the School Dental Program and the Victorian public health and wellbeing plan (2019–2023)
- Lobby to sustain the ongoing investment in oral health for pregnant women and very young children as an essential part of the continuum of care within the context of the new investment in the School Dental Program
- Extend prior work and established partnerships to explore and trial innovative approaches strengthening integration of health promotion programs with clinical prevention and treatment services.

Reporting and dissemination:

- Continue maintaining regular communication with program stakeholders and increase the program audience through newsletters, participation in conferences and other avenues.

Key recommendations

Next Steps

The direction of the program for the next 4 years will be informed by the findings from the current evaluation. The HFHS program will utilise evaluation findings and recommendations as part of the continuous improvement process in the development and refinement of partnerships, professional development activities, tools and resources, policies and systems.

The HFHS program activities will align with the Victorian Action plan to prevent oral disease 2020-30 (yet to be released). Promoting the oral health of children and their families through expansion of prevention initiatives, such as HFHS is one of the key action area in the action plan.

The program will continue to search for new avenues for partnership and expand the pool of non-dental workforce who plays a role in oral health promotion. There is a potential of expanding activities in the Supported playgroup setting. Preliminary results of the evaluation of the Brush Book Bed initiative validated the feasibility and appropriateness of conducting toothbrushing demonstrations in the Supported playgroup setting. The next step to be taken by the program is to link Supported playgroup setting with local dental services and subsequent increase in dental screens. Taking fluoride varnish to this setting is another level that the program will pursue in the next 4 years. Another area of focus for the incoming years is the strengthening of referral pathways; the program will work collaboratively with our partners to explore ways of reinforcing relationships with local dental services.

1 Project overview

1.1 Introduction

This is the Healthy Families, Healthy Smiles (HFHS) phase 2 report. The report focusses on the implementation of the HFHS program against the planned activities covering the second phase of the four year implementation period from July 2015 to June 2019. Evaluation findings and reflections on the implementation, appropriateness and reach of the program are included in this report. The evaluation findings will inform the strategic direction and ongoing planning of the program.

1.2 Background

HFHS is an initiative aimed at improving the oral health of Victorian children aged 0-3 years and pregnant women. Dental Health Services Victoria (DHSV) is funded by Department of Health and Human Services (DHHS) to deliver the program. The main focus of the HFHS initiative is on building capacity of health and early childhood professionals to promote oral health in their everyday practice. Capacity building is defined as an approach to ‘the development of sustainable skills, structures, resources and commitment to health improvement in health and other sectors to prolong and multiply health gains many times over’.³ By strengthening the ability of health and early childhood professionals to promote oral health, the program seeks to expand the oral health promotion workforce in Victoria. These professionals are also more likely to see infants, toddlers and pregnant women compared to dental services and with greater frequency.

HFHS phase 1 (late 2011 – 2015) included an intense planning and development phase with a strong focus on partnership development. The second phase of the program has focussed on consolidating existing partnerships and programs, expanding efforts to address identified gaps in phase 1 and exploring avenues for potential partnerships. The findings of the first phase of evaluation have informed planning for phase 2 of the program for 2015-2019.

The investment for the HFHS program continued at \$500,000 per annum. Additional funding from DHHS (detailed below) has enabled adoption of innovative approaches and extension of existing initiatives.

1.3 Implementation

The HFHS program activities implemented in phase 2 have been grouped into five domains, namely:

- I. Partnerships
- II. Professional development
- III. Tools and resources
- IV. Policy and Systems
- V. Research and evaluation including reporting and dissemination

HFHS program activities focused on building effective partnerships; tailoring capacity building activities for different workforces according to their needs (for promoting oral health); developing

resources; and influencing policies and systems. The subsequent sections will pore over the implementation of the program according to each one of the domains mentioned.

The table below presents an overview of HFHS activities/ intervention delivered from 2015 to 2019 and respective supporting resources.

Table 1 Overview of HFHS program interventions delivered by professional group, 2015-2019

Professional group	Intervention/activity	Tools and resources	Policy and systems
Midwives	<p>Midwifery Initiated Oral Health Education (MIOH)- online training program with focus on oral health screening, education and referral of pregnant women to dental services</p> <p>Pregnancy and oral health Continuous professional development presentation for antenatal care professionals</p>	<ul style="list-style-type: none"> MIOH training package Caring for your teeth while pregnant (consumer fact sheet for pregnant Aboriginal women) 	Birthing Outcomes System (BOS) - Inclusion of oral health questions in BOS
Maternal and child health nurses	<p>Continuous professional development workshops for MCH nurses</p> <p>'Colgate education grant (Mrs Marsh)' Tooth packs distribution program in 4 targeted local government areas. Program implemented through Universal program - MCH services</p> <p>Baby teeth need cleaning too!</p> <ul style="list-style-type: none"> Tooth pack (toothbrushes and tooth paste) distribution program state-wide targeting families at risk of poor health outcomes, through Maternal and Child Health services (Enhanced program) Supporting toothbrushing demonstrations by providing toothbrushing demonstration models to all MCH services in Victoria. 	<ul style="list-style-type: none"> Little Teeth Book Little Teeth Book User Guide Early childhood oral health milestones and key messages Identifying tooth decay (lift the lip) fact sheet Translation of the Tooth Tips fact sheet series (10 languages) Tooth packs 	

Professional group	Intervention/activity	Tools and resources	Policy and systems
Staff working with Aboriginal families	Bigger Better Smiles training package - oral health education program with focus on oral health during pregnancy and early childhood (children aged 0-3 years)	<ul style="list-style-type: none"> • Bigger Better Smiles training package 	
	Little Koorie Smiles workshop a 1-hour culturally appropriate oral health promotion workshop for Aboriginal Supported playgroups facilitators.	<ul style="list-style-type: none"> • Little Koorie Smiles flipchart • Little Koorie Smiles Activity kit 	
Supported playgroup facilitators	Baby teeth count too! workshop - a 1-hour face to face education program that supports playgroup facilitators incorporating oral health messages in their daily activities	<ul style="list-style-type: none"> • Baby teeth count too! flipchart • Baby teeth count too! Activity kit 	
	Brush Book Bed initiative focuses on building capacity of supported playgroup facilitators in promoting toothbrushing. The initiative provides knowledge and resources to incorporate toothbrushing in bedtime routine. This initiative complements and builds on the Baby teeth count too! Package.	<ul style="list-style-type: none"> • Toothbrushing demonstration puppet • Brush Book Bed Activity Kit • Brush Book Bed resources for families (tooth packs, family focused information on toothbrushing) 	
Early childhood educators	Healthy Little Smiles - a 2-hour workshop designed to support promotion of key oral health messages, age appropriate learning activities, policy and practice that supports oral health and ideas to incorporate oral health promotion into daily activities and routines. The package is suitable for educators and staff working in long day care, family day care and preschools.	<ul style="list-style-type: none"> • Healthy Little Smiles resource kit 	
Library staff	Library Service Storytime program initiative aims to build oral health literacy for parents and young children. It was designed to support library staff to include oral health in story time sessions for families with young children	<ul style="list-style-type: none"> • Baby teeth count too! package for library story time 	

Additional funding streams from DHHS were made available to extend the delivery of initiatives, including:

- a) Expansion of Bigger Better Smiles oral health education program (\$50,000) during 2015/16 period. to extend delivery in Aboriginal Controlled Community Health Organisations
- b) Development of an oral health parent engagement tool for MCH nurses (The Little Teeth Book) during 2015/16 period (\$50,000).

- c) Expansion of tooth packs distribution through the Enhanced MCH Program (\$370,500), funding in 2017/18 for delivery in 2018/19. This funding is an extension of the previously implemented Tooth packs Program. The initiative aims to strengthen toothbrushing demonstrations within the MCH program and improve families' knowledge and awareness of oral hygiene practices.
- d) Oral health promotion for population groups at higher risk (\$200,000) funding in 2017/18 for delivery in 2018/19. This is another Tooth pack program, implemented through Supported playgroups. This funding supported the delivery of the Brush, Book, Bed initiative.
- e) Expansion of prevention initiatives for pre-schoolers 2017/18 to 2021/22 provides funding of \$200,000 per annum, commencing delivery in 2018/19. The funds are divided between HFHS and Smiles 4 Miles programs (Smiles 4 Miles is an award program to promote oral health in early childhood services). The expansion of prevention initiatives aim to improve oral health outcomes of pre-schoolers in high risk areas and reduce oral health inequalities. Initiatives delivered in 2018/19 include:
 - Mouth models to support toothbrushing demonstrations in early parenting centres
 - Tooth packs for vulnerable families distributed through early parenting centres and supported playgroups
 - Develop new partnerships to reach professionals working with vulnerable families
 - Development of new resources (in progress).

In addition, Department of Education and Training (DET) provided funding of approximately \$5,000 for the translation of Tooth Tips fact sheets into 10 community languages (30 sheets) in the 2016/17 period. Refer to [Table 2](#) below for details.

Table 2 Activities funded with additional investment, 2015-2019

Initiative	Funding	Financial year	Source
Expansion of Bigger Better Smiles	\$50,000	2015-16	DHHS
Development of the Little Teeth Book	\$50,000	2015-16	
Expansion of tooth packs distribution	\$370,500	2017-18*	
Oral health promotion for population groups at higher risk	\$200,000	2017-18*	
Expansion of prevention initiatives for pre-schoolers	\$200,000	2017-18**	
Translation of Tooth Tips into 10 languages	\$5,000		DET

*initiative delivered in 2018-19 as planned

**Collaborative initiative between Smiles 4 miles and HFHS program - 4 year recurrent funding

Policy and strategic alignment

HFHS activities were aligned with the DHSV Strategic Plan 2016-2022 which contributes to meeting the Victorian Action Plan for Oral Health Promotion 2013-2017 goal (to improve oral health of Victorians) which also contributes to the delivery of Australia's National Oral Health Plan 2015-2024.

Governance structures and roles

To ensure successful implementation of the HFHS program Governance structure with clear roles and responsibilities was established during phase 1 (*Figure 1*).

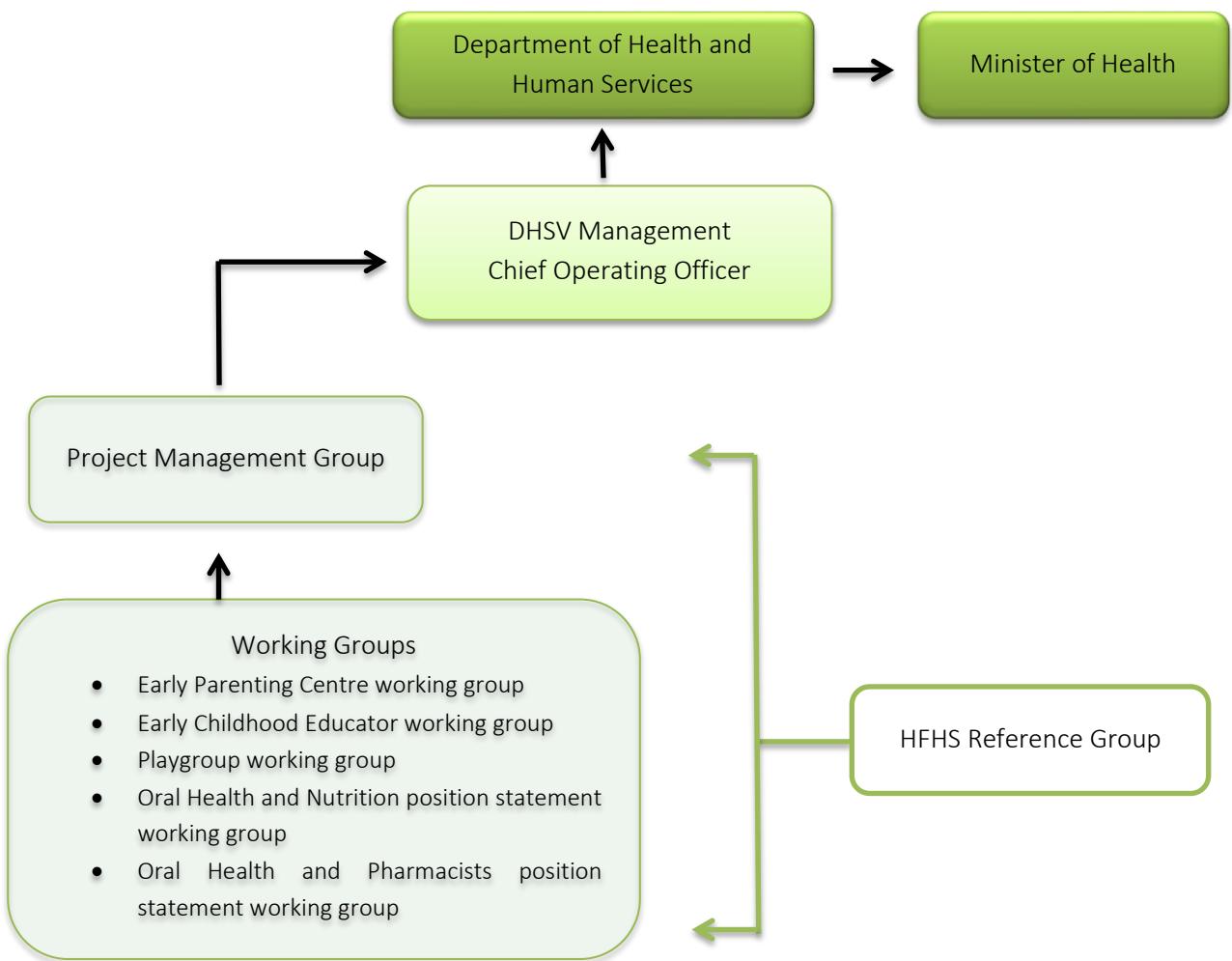


Figure 1 Project Governance Structure

The governance structure of the HFHS program is organised in a three-tier model ([Figure 2](#))

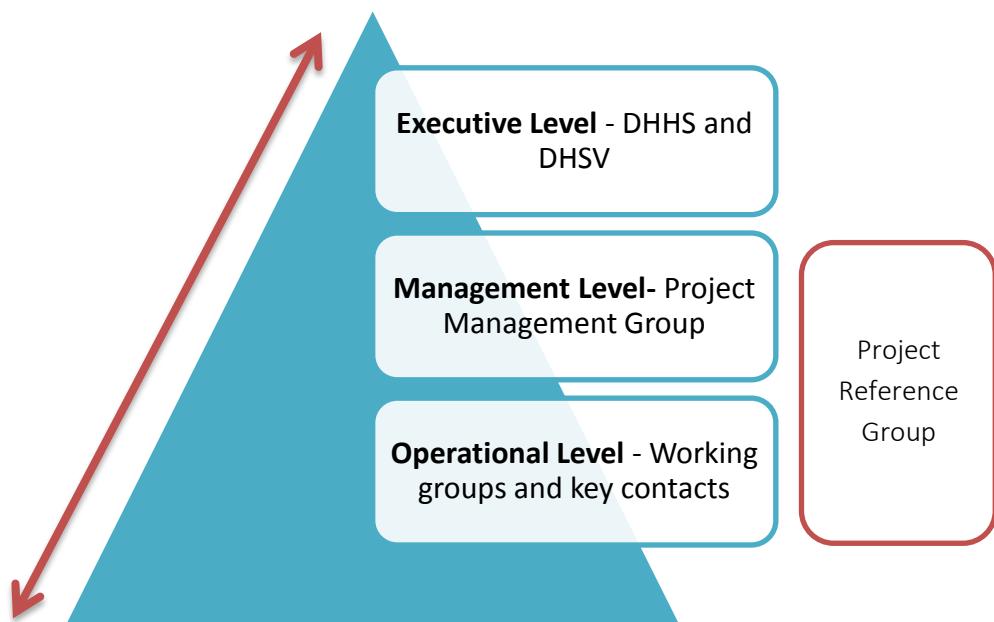


Figure 2 Project Governance Structure

The governance structure encompasses:

First governance tier (Executive level – DHHS and DHSV)

- Provides direction adopted by the Victorian Government to oral health prevention (policies and strategies).
- Focus on policy decisions and program vision
- DHHS ensures availability of funds for implementation of the oral health programs, including HFHS program.

Second tier (management level – Project Management Group)

- Overall accountability, delivery of the HFHS program within time, scope and budget agreed
- Oversees the implementation of the HFHS program
- Provides operational and strategic direction.
- Decision making process regarding the delivery of the program.

Membership for this group is made up of representatives of the DHHS, HFHS team and Centre for Value Based Oral Health Care, Research and Evaluation team.

Third tier (operational level – Working Groups and key contacts)

Working groups, comprised of professionals from a range of disciplines within the health and early childhood sectors, were formed according to the areas of expertise and/or interest. Working groups played a crucial role during the initial phase of the project. Working groups gave an insight on creating supportive environments which allow oral health promotion to be embedded in the daily practice in both health and early childhood sectors. Working Groups and key contacts assisted with identification of potential partnerships and with sharing information and resources within their broader networks.

It is at working groups and key contacts level that HFHS receives input from stakeholders in all stages of the program cycle; namely: designing, implementing, monitoring and evaluation.

Phase 2 was marked by a shift in the way the program engaged with stakeholders to consult and plan activities and initiatives. Working groups were used for consultation processes with broader networks and to inform operational decisions. For more specific activities the program moved away from formal working groups to more specific and targeted consultations with key contacts. This provided greater flexibility and reduced burden on partners to attend meetings.

Project Reference Group

The Project Reference Group acts as an advisory body, with representatives from 9 organisations from a wide range of disciplines within the health and early childhood sectors. Its main function is to provide expertise and technical guidance to Working Groups and Project Management Group. There was a shift in the way the program engaged with the Project Reference Group members over this second phase of program implementation. More targeted consultation instead of formal group meetings were preferred. This reduced the burden on group members to attend meetings and allowed more focussed discussions. The HFHS is in process of reviewing the project reference group terms of reference including better ways of engaging with the group to ensure optimisation of their expertise and guidance.

1.4 Evaluation overview

1.4.1 Ethics

The evaluation of the HFHS initiative was approved by the Department of Health and Human Services Human Research Ethics Committee (Project no. 08/15).

1.4.2 Evaluation aim

This evaluation focuses on findings from the evaluation of phase 2 of the HFHS program covering the period July 2015 to June 2019), recognising this phase has continued and expanded on the work from Phase 1 (2012-2015).

The aim of the phase 2 evaluation was to determine the impact of the HFHS program in promoting the oral health of children aged 0-3 years and pregnant women in Victoria.

The evaluation objectives were to determine the impact of the HFHS program on the capacity of health and early childhood professionals, services and settings to promote oral health through:

- reviewing and assessing professional development and changes in oral health related knowledge, attitudes, skills, confidence and professional practices
- exploring translation of oral health promotion knowledge and skills into routine clinical and educational practice
- examining the impact of the HFHS program on networks, partnerships and policies to improve oral health
- assessing the sustainability of changes achieved through program interventions.

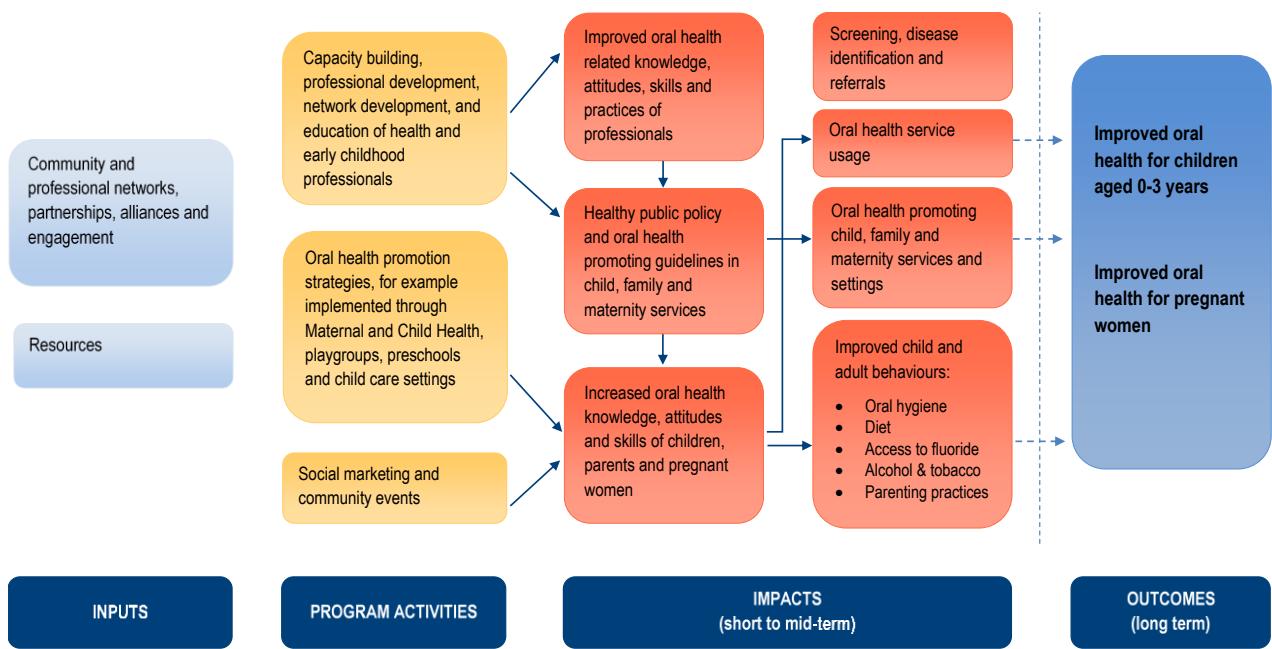


Figure 3 Program Logic Model

1.4.3 Evaluation methods

A range of data was collected using both qualitative and quantitative methods to assess the impact of the HFHS program, addressing the evaluation aim and objectives. An overview of the interventions, tools and resources implemented by the HFHS program is presented *Table 1* on page 16. Participants in the evaluation included: midwives, MCH nurses, staff working in Aboriginal Health Services, supported playgroup facilitators, early childhood educators, the HFHS implementation team and other key stakeholders in these sectors.

The evaluation design informed best practice evidence-based program delivery through an ongoing iterative feedback process and was responsively modified as the needs of the program evolved.

Methods were aligned to different interventions, tools and resources and included:

- 1. Pre and post oral health training questionnaires:** questionnaires were embedded into each HFHS oral health training package (Midwifery initiated oral health education program [MIOH], Bigger Better Smiles and Healthy Little Smiles) before and after training to assess knowledge, confidence and professional practices. Participants included midwives, staff working in Aboriginal Health Services and early childhood educators who had participated in MIOH, Bigger Better Smiles and Healthy Little Smiles oral health training programs. A sub-set of midwives (who provided their contact information to participate in a follow-up questionnaire and/or interview) were also sent an additional questionnaire at 12 months follow-up to assess their knowledge retention and the translation of knowledge into practice.
- 2. Post oral health training interviews:** telephone interviews were conducted approximately 12 months after training (MIOH and Bigger Better Smiles). These interviews were completed with a convenience sample of participants to examine their perspectives on changes in their

organisational and professional practices as a result of the oral health training. Participants included midwives and staff working in Aboriginal Health Services that had participated in training programs and consented to take part in follow-up interviews.

3. **Key stakeholder interviews:** interviews were completed by a convenience sample of identified partners and key informants to explore stakeholder engagement, partnerships, network development and capacity building. Participants included stakeholders in midwifery and playgroup sectors. MCH nurses were also interviewed to explore their engagement in the different strategies that were implemented within their sector.
4. **Reflective focus group with the HFHS implementation team:** A reflective focus group was conducted with the HFHS implementation team at DHSV to assess and reflect on the implementation achievements and experiences of implementing the HFHS program over the previous four years, exploring enablers, challenges and future directions of the program.
5. **Assessment of Victorian state-wide data and intervention data:** oral health assessment and referrals (performed by midwives and MCH nurses) and service access by pregnant women was assessed through analysis of a range of data sources including: Titanium data (Titanium is the software used in the public dental system that collects patient data); oral health related items collected within the Birthing Outcomes System public hospital maternity database; MCH service State-wide Annual Key Ages and Stages (KAS) reports; and data collected as part of the Tooth packs intervention on the distribution of Tooth packs, which also captured oral health assessments and referrals performed by MCH service who participated in the Tooth packs intervention.
6. **Process data:** all available HFHS program documentation were reviewed (for example minutes of meetings, planning documents, progress reports, training and communication logs, short questionnaires/ feedback forms, database of all key stakeholders [capturing the stakeholder names, the workforce and activities they are involved in, key contacts and communication records]). This program documentation provided numbers of stakeholders that participated in the training programs, workshops and conferences, numbers of partnerships, evaluation feedback on the implementation of particular activities (including the MCH continuing professional development workshops and the Baby teeth count too! Workshop for supported playgroup facilitators) and an overall context to the evaluation.

Data analysis

Triangulation (analysis of multiple data sources and methods) was used to increase the strength and confidence in evaluation findings. This involved integrating the results from a range of evaluation activities using different methods.

Data from questionnaires are presented as frequencies and percentages and where appropriate were analysed using the exact McNemars test to assess the significance of differences in participant responses pre- and post-training. A p-value of $p<0.05$ was considered statistically significant. Data tables are available in the appendices document.

Interview and focus group data were analysed using content and thematic analysis. The key emerging themes are reported and illustrative quotes are presented in the appendices.

The following table provides an overview of the evaluation design, methods and measures used to assess each of the evaluation objectives.

Table 3 Overview of evaluation design, methods and measures

PROCESS	Obj. Formative evaluation	Strategies Stakeholder engagement and program development	Measure <i>Engagement, network development, development and implementation of strategies</i>	Method <i>Qualitative & Quantitative Reports, database, minutes of meetings, reflective practice, feedback forms</i>	Collection period 2015-2019 Throughout (2015-19)
IMPACTS	Objective 1	Capacity building	<i>Oral health promotion capacity, partnerships and network development</i>	<i>Qualitative</i> • Capacity building key informant interviews	Follow-up interviews with key stakeholders (2018-19) Interviews 6-12 months follow-up after intervention
	Objective 2	Professional development strategies and resources	<i>Oral health-related knowledge, attitude, confidence, skills, current practice and intended changes to practices of professionals</i> <i>Appropriateness and usefulness of resources</i>	<i>Quantitative</i> • Pre- and post-training questionnaires <i>Qualitative</i> • Key informant interviews	Pre and post-questionnaires included within each training component and at 6-12 months follow-up Interviews 6-12 months follow-up after intervention
	Objective 3&4	Translation of knowledge to practice and sustainability	<i>Implementation and translation to professional practice</i>	<i>Quantitative</i> • Questionnaires <i>Qualitative</i> • Key informant interviews	Post-questionnaires and at 6-12 months follow-up Interviews 6-12 months follow-up after intervention
HEALTH SERVICE REFERRALS		Oral health assessment, referrals and service use	<i>Oral health assessment and referrals to dental services</i> <i>Overall oral health referrals (Pregnant women)</i>	<i>Quantitative</i> • Oral health assessment and referral items collected within the Birthing Outcomes System, Maternal and Child Health Service State-wide data and Tooth packs intervention data • Pre- and post-intervention oral health referrals for pregnant women (Titanium)	Baseline to follow-up and throughout (2015-2019)

1.4.4 Evaluation strengths and limitations

The strength of this evaluation is its comprehensive and holistic approach to addressing the objectives of the multifaceted and multileveled HFHS program. The evaluation was aligned to key program components targeting different health and early childhood professional groups who each hold varied levels of understanding of and engagement in oral health promotion.

The evaluation has provided a picture of all activities from phase 2 and includes the perspectives of the programs partners. Where appropriate, data from phase 1 has been included to enable a more comprehensive analysis which was not possible in the HFHS phase 1 evaluation due to small participant numbers. While the evaluation findings have shown a trend towards improved oral health service access by pregnant women in some regions with high program engagement, limitations of the existing state-wide data (such as the inability to record midwives as the referral source and changes in recording of priority access within Titanium) mean these findings cannot be directly linked to the HFHS program. The key focus of the evaluation centred on assessing the capacity of the professional workforce to embed oral health as part of their routine practice. Since there was no clinical implementation component, assessment of clinical oral health outcomes was beyond the scope of the evaluation. Despite these limitations, the findings provide evidence of the impact of the program on the capacity of health and early childhood professionals to promote oral health through achievements in partnerships, professional development, tools and resources, policy and systems change.

2 Implementation and evaluation findings

The following section provides the details of the HFHS phase 2 implementation and evaluation. This section also presents a reflection of the challenges faced in the implementation of the program, highlights the success factors and recommendations grouped into five domains:

- I. Partnerships
- II. Professional development
- III. Tools and resources
- IV. Policy and Systems
- V. Research and evaluation including reporting and dissemination

2.1 Partnerships

2.1.1 Overview - Partnerships

Similar to the first phase of the program, partnerships continued to be the cornerstone of the delivery of the HFHS program in the second phase of implementation. The program strengthened existing partnerships and actively continued exploring opportunities for building new partnerships. Partnerships continued to be critical to the success of the program. Stakeholder input, from health and early childhood professionals and where practical from families, was sought throughout different stages of the program cycle, namely: designing, planning, implementation and evaluation. HFHS partnerships are built on the basis of shared objectives, mutual respect and sharing information and resources.

2.1.2 Implementation - Partnerships

HFHS program has established a wide range of partnerships with a variable level of involvement with the program. Partnerships were formed and nurtured at government, service delivery, peak bodies and community levels.

Partner organisations collaborated on the implementation of HFHS with in-kind support to attend meetings; delivering specific tasks agreed upon; proving input on the resource development; supporting and encouraging staff members to participate in training sessions; in-kind support with storage and distribution of oral health promotion resources and in some cases funds were allocated to support their contribution to the intervention. In addition, some partner organisations facilitated HFHS access to families for consumer's input on the resource development and evaluation activities.

The wide range of organisations and disciplines that HFHS partners with has been growing over time. Continuous search of collaborative platforms for HFHS and other organisations is one of the strategic directions adopted by HFHS. Library Service Storytime program and CALD Storytime groups are examples of active search of new partnerships.

DHSV has a long standing and successful partnership with MCH services through the DET and more recently through DHHS (currently the MCH Program at state government level is part of DHHS). The

partnership enabled implementation of key initiatives and development of health promotion resources for health and early childhood professionals and families with young children.

The design and implementation of the most recent initiatives (Baby teeth need cleaning too! and Brush Book Bed) relied heavily on advice from DET/DHHS, Municipal Association of Victoria (MAV) and key contacts from MCH services and the supported playgroup sector. These initiatives aimed to improve the uptake and promotion of toothbrushing habits through demonstration and provision of toothbrushing supporting resources. Valuable advice to guide the design of the initiatives was obtained through these critical partnerships.

Partnerships were valuable for the development of the Brush Book Bed initiative concept, which encourages incorporating toothbrushing into bedtime routine. Experts from Royal Children's Hospital/Murdoch Children's Research Institute, Parenting Research Centre (PRC), Victorian Aboriginal Community Controlled Health Organisation (VACCHO), Victorian Cooperative on Children's Services for Ethnic Groups (VICSEG) Coordinator and Bass Coast Supported playgroup facilitators, provided input in the design of Brush Book Bed initiative.

The partnership between DHSV and Western Sydney University (WSU) is another example of a partnership getting stronger over the years and becoming a platform for new opportunities for collaborative work not only with WSU, but also with other organisations. The partnership started with adaptation of the MIOH training program to suit the Victorian setting in 2012. DHSV's relationship with WSU has opened up further opportunities for collaboration with the Centre for Oral Health Outcomes and Research Translation (COHORT) School of Nursing and Midwifery, under the Directorship of Dr Ajesh George. DHSV is now regarded as an official partner with the Australian College of Midwives (ACM) in the MIOH program. This partnership has opened opportunities for collaboration in other areas; one opportunity identified is around research of oral cancer in migrants from the Indian subcontinent, for COHORT and DHSV's Oral Cancer Program. Another opportunity for collaboration with WSU arose for inclusion of oral health modules into the midwifery curriculum (tertiary education). Further exploration is also underway with COHORT for development of an online pregnancy and oral health course for Aboriginal Health Workers. Negotiations have commenced between WSU, HFHS and Victorian Aboriginal Community Controlled Health Organisation (VACCHO) to be members of the Aboriginal action group.

2.1.3 Key evaluation findings - Partnerships

Program partnerships were evaluated to explore their reach, benefits, strength, limitations and impacts. Evaluation findings reported here briefly touch upon the established partnerships across the sectors involved based on data collected through the focus group with the HFHS team and interviews with key partners from the midwifery and playgroup sectors. Further detailed partnership evaluation data is provided in appendix A, B and C.

Existing and new partnerships have continued to play an important role in phase 2 of the program. Overall, 139 partners (including 21 new partners) were actively involved, to a varying extent, in the planning, implementation, delivery and evaluation of HFHS initiatives (see [Table 4](#)).

Table 4 Number of partner organisations involved in HFHS initiatives, 2015-2019

Intervention or governance group	Number of organisations
Reference group	8
MIOH	8
Building capacity of Maternal and child health nurses	45
Bigger Better Smiles for staff working with Aboriginal families	8
Building capacity of dietitians	4
Building capacity of Early Parenting Practitioners	5
Building capacity of early childhood educators	20
Building capacity of Supported playgroup facilitators	37
Library Service Storytime project	4
Total	139

Midwifery setting

The partnership between DHSV and WSU was described in the key informant interview as a “blessing”, greatly valued, mutually respectful and beneficial for both parties involved. WSU provided DHSV with access to the MIOH evidence-based training package, content and technical expertise. Later WSU facilitated further collaboration between DHSV and ACM who subsequently housed the program on their online portal (August 2018) for more sustainable impact.

The key informant from WSU described many benefits of their partnership with HFHS. By working with DHSV, WSU were able to pilot the MIOH program in another state. Organisational support from DHSV and Victorian Government policy (providing priority access to dental services for pregnant women) were key enablers of the piloting and rolling out the MIOH program in Victoria. HFHS supported the MIOH pilot from recruitment through to relationship building with the local Victorian hospital. Following the pilot, DHSV purchased the MIOH training places from WSU for Victorian midwives using program funding and this provided WSU with the funding to support ongoing program implementation and maintenance.

The partnership allowed WSU to establish and showcase a proof of concept in Victoria and evidence of program impacts and the feasibility of effective partnerships between a University and health service making real world policy and practice impacts. All of which supported their case for future funding.

Co-presenting (WSU and DHSV) at conferences and producing joint publications enabled both, WSU and DHSV to widely promote the effectiveness of MIOH program and their successful partnership, meeting DHSV’s need to share their work and university performance requirements for publications and conference presentations.

“The partnership has gone so well that we can show the impact of the program... being incorporated into the obstetric online system, the number of midwives doing the training... increase in referrals [of pregnant women to dental services] that happened because of that [the partnership].”

This generated further national interest to adapt and implement MIOH in other states and also led more broadly to the establishment of other collaborations and partnerships. The partnership and outcomes have influenced Victorian policy, with acknowledgement of the MIOH program in the Victorian oral health promotion plan, and lobbying to the NSW government on prevention and changes in their policies to focus on oral health in antenatal settings.

[The partnership success] has also sparked a debate with policy makers here in New South Wales... If Victoria can form a partnership and... roll it out there, why can't we do it here in this state?"

While an investment of time and money in adapting the MIOH program for Victorian midwives was required, the partner at WSU described that the benefits gained from these efforts outweighed the cost in the long term. For example, the partner described the great benefit of being able to roll out the program in Victoria and using this experience and evidence to engage with other states.

Due to these successes the partnership remains ongoing with continual discussion of avenues to collaborate. For further information and illustrative quotes from the midwifery partnership interview, refer to appendix A.

Playgroup setting

Key informant interviews with two key partners in the playgroup sector highlighted the strength of their relationship and ongoing support from the HFHS team as key facilitators of their partnership. They valued being able to work collaboratively in the development of relevant and appropriate resources for their setting.

"The team is amazing... and all the resources they've had, we've worked together on some of them." (Playgroup Key Informant A)

"Our playgroups were the pilot playgroups for that flipchart and the images in the flipchart are the kids from our playgroup. So that was really good and they love seeing their own images... more recently information sheets and other promotional things we've had input and discussions on how to... translate things...what would work and what wouldn't..." (Playgroup key informant B)

The key informants viewed the partnership as mutually beneficial and appreciated the ongoing nature of the relationship providing a constant source of information and prompt to keep oral health on their agenda. Time was a key enabler that allowed for strong networks and sustainable relationships to be built and to embed change into practice. Organisational and management support and alignment with their priorities were identified as key partnership enablers.

Both informants viewed their role as linking the HFHS team with the local playgroups and services to enable training and distribution of resources to playgroup facilitators working directly with families. They described the importance of passion, resilience and persistence, at all levels, from those working in broader facilitation to the staff undertaking implementation on the ground. One informant recognised their role in leadership, providing access to their broad networks (in the playgroup setting and beyond in early childhood, Maternal and child health and antenatal care sectors), seeking opportunities and making connections to expand their oral health promotion reach.

Key informants described how the partnership provided their sector with access to tools and resources which were valued (see *Additional evaluation findings – Tools and resources* page 72 for the impact of tools and resources). In addition they noted observing the impact and benefit of their partnership with HFHS such as increased oral health promotion and healthy eating activities within the playgroups and general improvements in child referrals to dental services in the region. Informants recognised their partnership with HFHS enhanced their relationships with other local organisations which lead to new partnerships.

“...Our relationship with that [HFHS] program, particularly being able to access things [Oral health resources] online and knowing where to go to get information, was key... I guess that relationship with them, we know they're there if we need information.” (Playgroup key informant B)

Some of the challenges noted by informants included oral health not being part of the core business of playgroups, the settings they engage with being time poor and the time it can take for the facilitators on the ground to see the benefits and also to empower them with knowledge and confidence to deliver oral health messages. Lack of funding to expand their work was also noted as a barrier.

Both informants intend to keep working with HFHS program team, promoting oral health as a priority in the playgroup sectors and exploring ways to embed, continue and sustain the oral health promotion work they do. For further details and participant quotes, refer to the appendix B.

Aboriginal Community setting

During the HFHS implementation team focus group, the team spoke about the progress and strength of their partnerships with Aboriginal Community Controlled Health Services. They were particularly proud of their achievements with this sector, including, for example, the large number of Aboriginal health services that have participated in the Bigger Better Smiles training program and the development and delivery of the Little Koorie Smiles workshop and package with Aboriginal Supported playgroups. The team acknowledged the time and investment it took to develop these relationships and felt their achievements were a testament to their dedication and commitment to working with their partners. For further details on the professional development activities in this setting, refer to *Staff working with Aboriginal families* section on the page 43.

“...The Department of Health and Human Services... [have] been impressed with the engagement with ACCHS [Aboriginal Community Controlled Health Services]... We all acknowledge that, it sometimes has been difficult to engage and you have to be patient and invest a lot more in the relationship development. So those projects have gone I guess a lot slower than some of our other work... I think there's a real [team] dedication and sense of commitment to that. And I think that it has been borne out in the engagement. The number of services that we've offered and taken 'Bigger Better Smiles' to, with the development of a new 'Koori Smiles' that's beginning to move into the implementation phase. But some of those partnerships and engagement... it's gotten stronger over time... I think there's still a lot that could be done, but I'm really proud of what's been achieved.” (HFHS team Participant A)

Perspective of the HFHS team on partnerships

The focus group with the HFHS implementation team identified ongoing funds and dedicated time and effort taken to establish the relationship with partners strengthened their partnerships. The team described the Government's continuing investment and commitment to the HFHS program as a critical enabler of partnership development and sustainability for oral health promotion in the non-dental sector. Being an ongoing program allowed ample time for developing relationships, building trust with partners, developing and progressing work allowing review and improvement where needed and time to see the shifts and changes that can occur. This long term commitment provided reassurance for both the HFHS team and their partners knowing strategies will continue and could be revisited at a later stage. The team felt that the development of these strong collaborative partnerships established a positive reputation for DHSV and the HFHS program. Taking a continuous improvement approach together with partners allowed for collaborative and adaptive work responsive to the needs of the partners involved.

The HFHS team described how partners offer different levels of input and support, from engagement with management staff to working with the people on the ground implementing the program. The team noted that working collaboratively with these key gatekeepers provided vital insight and valuable knowledge for working with each sector. These relationships have been built and matured over time, transitioning from the initial engagement to integrated partnerships. The team expressed the value of local champions, passionate people who go above and beyond in facilitating implementation, without which progress would not have been made. Their dedication and enthusiasm in turn motivated the HFHS team. Champions provided unique insight into the everyday experiences of professionals in their sector and have driven the direction of approaches taken by the HFHS team.

One of the challenges noted by the HFHS team was being able to identify appropriate partners. They noted that there wasn't always a clear peak body or person to reach out to partner with to facilitate engagement with the sector. In addition, the team noted that the local champions were not always people in leadership positions or the nominated contact person, and identified the need to recognise and nurture local champions wherever they might be. The HFHS team noted the challenges of getting oral health on the agenda of non-dental professionals especially with the limited time of collaborators, competing priorities and programs and those who may not view oral health as part of their core business (for example, non-health sectors such as early childhood or playgroups).

The team expressed the need to capitalise on existing established systems, networks and partnerships to enable trialling and implantation of innovative approaches across different sectors in the future. For example the work with the MIOH education program and extending to adapt the training model with other sectors. Further, the team suggested the need to leverage off existing partnerships and capacity built to continue to link local partners with community dental agencies, supporting referrals, increased access and attendance at dental services and in the future potentially trial evidence base intervention more broadly (such as Tooth packs). For continued success the HFHS team expressed the need to have an ongoing presence and relationship with partners, to keep training new professionals and keep oral health on the agenda of partners.

Further elaboration on key themes and illustrative quotes from the HFHS team focus group are presented in appendix C.

2.1.4 Challenges and success factors - Partnerships

The HFHS team described the Government's ongoing investment in oral health promotion through HFHS has enabled a large body of work and partnership development in the non-dental sector which could not be done as successfully without the funds and capacity building focus of HFHS.

It has been challenging to identify broad partners that have the detailed information and networks to facilitate engagement with the individual sites/ health services and professionals on the ground. In some sectors there isn't a broad stakeholder to facilitate cross sector engagement. Each sector is unique, has its own challenges and requires a unique approach.

The complexity and the number of sectors engaged in the program also means that high level partnership management, problem solving and program management skills are required to manage the program. The experience of the project team and stability of staffing helped to address this challenge.

The evaluation showed that partnerships were critical for the development of appropriate and responsive strategies and has provided mutual benefit, empowerment and capacity building to the stakeholders involved. While all partnerships were reported to be highly valued, each partnership was unique with distinct benefits, challenges, needs and impacts. The importance of partnering with supportive local oral health champions was key, however the oral health champion may not be in a leadership position or be the person who was nominated as the contact person for the organisation.

The HFHS team highlighted challenges of getting oral health on the agenda of non-dental professionals especially with the limited time of collaborators, competing priorities and programs and those who may not view oral health as part of their core business for example non health professionals such as early childhood or playgroups.

The evaluation has demonstrated how partnerships need to be developed over time and can lead to further opportunities for collaboration in difference settings and communities. Collaborating with each unique sector posed different challenges and required a unique approach. For example, partnering with non-health sectors may be challenging if they don't view oral health as part of their core business.

2.1.5 Key recommendations - Partnerships

Partnerships are the foundation of the HFHS program and have guided appropriate strategies developed across sectors. It is recommended that the HFHS program:

- Maintain and strengthen existing partnerships and explore opportunities for new partnerships to broaden the program reach and impact
- Continue exploring new ways of working collaboratively with program partners to embed oral health within their organisational policies and practices as the program evolves
- Continue working closely and collaboratively with partners to remain responsive to emerging oral health needs, changes in policies, guidelines and priorities.

2.2 Professional development

Building capacity to improve health outcomes is a critical strategy for effective public health practice. HFHS uses the NSW Capacity Building Framework to inform design of initiatives; this underpins the current strategies used by the program. The framework identifies organisational development, workforce development, resource allocation, partnership and leadership as its fundamental elements.

Workforce development continued to be a key strategy for building capacity for oral health promotion among health and early childhood professionals throughout phase 2 of the program. Learning opportunities were made available to a wide range of target disciplines.

Existing education programs developed in the first phase of HFHS continued to be delivered to early parenting professionals, midwives, MCH nurses, staff in Aboriginal Health Services, Supported playgroup facilitators, early childhood educators and dietitians. Presentations on Health Promotion in Practice, lecturers in Building Capacity for Oral Health Promotion and Oral health in KAS were delivered to Dental Assisting, Bachelor of Oral Health, and Graduate Diploma in Child and Family Nursing students respectively.

New settings and workforces were engaged including public library staff (story time programs), peer support playgroups for children with a disability (MyTime playgroup), Aboriginal Supported playgroups, CALD Storytime groups.

As of 30 June 2019, 2885 professionals were engaged in formal professional development activities including online learning, workshops, forums and seminars across all professional groups.

The following section will describe the implementation of professional development activities by professional group followed by a discussion of the evaluation findings, success factors, challenges and recommendations.

2.2.1 Midwives

2.2.1.1 Overview - Professional development - Midwives

During pregnancy women are at higher risk of poor oral health due to a combination of factors including hormonal and dietary changes, increased nausea and vomiting.⁴ Research suggests there is also a link between poor maternal oral health and increased risk of preterm and low birth weight babies, particularly amongst women from lower socio-economic backgrounds.^{4,5} Many women do not access dental care during pregnancy due to an array of factors including lack of awareness, safety concerns and costs related to dental care.⁶

Midwives are generally the first point of contact for health care for pregnant women and are well placed to support women's oral health, yet there is limited emphasis on dental care during antenatal care.⁷ Prior research identified gaps in midwives' knowledge and confidence to incorporate oral health promotion within their practice.⁸

In response to this identified need, the HFHS program worked collaboratively with midwives, to determine the best approach to increase their awareness of the impact of poor oral health on pregnant women and provide them with the knowledge and skills to promote oral health. This included addressing referrals pathways to dental services, a key strategy of the program, further explored in the *Visual*, practical and interactive resources are important for prompting and facilitating oral health promotion conversations and supporting good oral hygiene practice among families. It is recommended that the HFHS program:

Remain responsive to the needs of partnering sectors and continue to work collaboratively to co-design, develop, update and refine resources as required

Continue to develop resources and initiatives that resonate with the local context and target population, for example, visual and culturally appropriate images for culturally and linguistically diverse groups and Aboriginal communities.

Policy and systems section on page [73](#).

The MIOH is a comprehensive online training program developed by the WSU, which aims to provide midwives with the practical skills required to promote oral health. The education program focuses on oral health screening, education and referral of pregnant women to dental services and is accredited by the ACM as a formal continuing professional development (CPD) activity worth 16 CPD points.

A partnership between HFHS and the WSU was formed in phase 1 of HFHS to adapt and implement the MIOH to suit the Victorian context. Evaluation in phase 1 identified this was an appropriate approach. Initially available through WSU website, MIOH transitioned to the ACM eLearning portal in August 2018.

2.2.1.2 Implementation - Professional development - Midwives

DHSV continued providing sponsorship for targeted midwives to undertake the online training throughout HFHS phase 2. A range of strategies were employed to recruit eligible midwives for the online MIOH training. Eligibility criteria for DHSV sponsorship included:

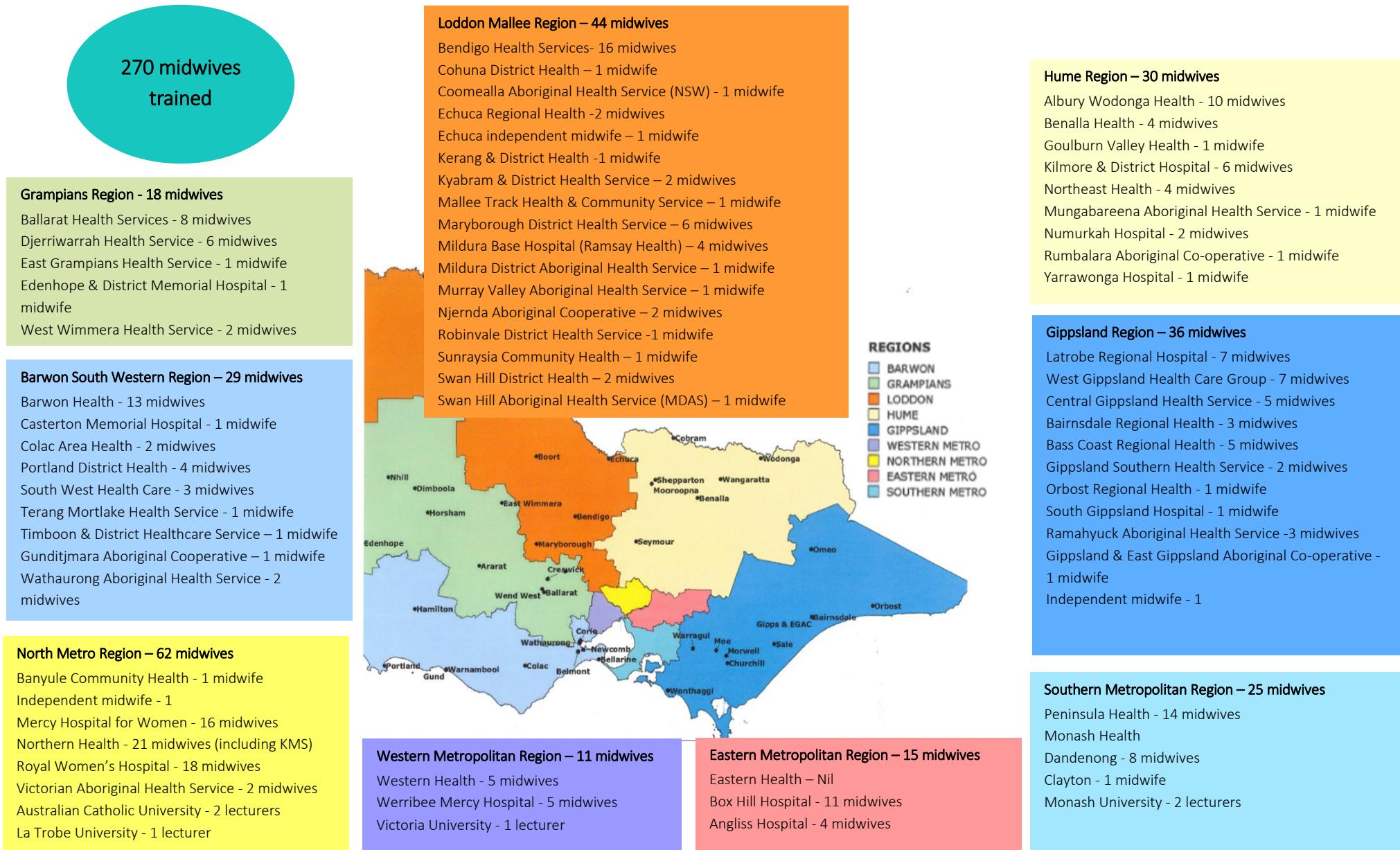
- Midwives working in antenatal clinic and undertaking the first booking visit under midwifery care, general practitioner (GP) shared care or the caseload model
- Unit manager or assistant manager
- Midwifery clinical educator in Victorian setting
- Teaching staff working in midwifery courses offered by Victorian Universities
- Midwives working in the Koorie Maternity Service (KMS)
- Childbirth and early parenting educators

Recruitment strategies comprised contacting managers at targeted maternity services, delivering oral presentations to staff meetings, as well as promotion via the dedicated professional page for midwives on the DHSV website (online oral health information for midwives) and in newsletters shared with maternity services. Midwifery course coordinators and teaching staff were approached by email and through a professional network meeting to promote the course. Two flyers promoting MIOH education program (one for mainstream maternity services and other for KMS) were developed in phase one and continued to be used to promote the learning opportunity. The flyers were circulated amongst key contacts. All contacts or communications with midwives, including

newsletters, were used as an opportunity to promote the online training. In addition, throughout phase 2, 16 CPD points continued to be offered on successful completion of the training. This was a successful strategy in phase 1 and continued to encourage participation in the program.

In phase 2 a more targeted strategy to increase the uptake of the training package was adopted, especially in maternity services with no trained midwives. Special attention was given to KMS. For more details on the professional development of KMS refer to *Koorie Maternity Service* page 43.

Figure 4 Map of coverage of Victorian Midwives trained in MIOH by region (November 2012 to April 2019)



2.2.1.3 Key evaluation findings - Professional development - Midwives

The following evaluation findings report on the MIOH program reach, midwives satisfaction with the MIOH training package and its impacts on their oral health knowledge, confidence and practices. Findings are reported across phase 1 and 2 of the program. It was not possible to assess the significance of changes in knowledge and confidence before and after training within the Phase 1 evaluation due to small participant numbers and therefore only descriptive data was included. The MIOH pilot data was included in the phase 1 evaluation report and is not included within the current analysis results.

Since the program's inception in 2012, 270 midwives have completed the MIOH training; this count encompasses 116 midwives trained in phase 1 (including 33 midwives trained in the pilot) and a further 154 midwives in the current program phase, with a 90.5% completion rate of those enrolled. This figure (270 trained midwives) represents more than half of Victorian midwives working in antenatal care out of an estimated 465 Victorian midwives (or dual registered nurses/midwives) employed (or on extended leave) working in the public and/or private sector in an antenatal area in any setting in 2013 (source: National Health Workforce Dataset).⁹ Currently 80% of the public maternity services (43 out of 54) have one or more MIOH trained midwives ([Error! Reference source not found.](#)). The progressive uptake of the training by midwives and services supports the reported relevance of the training for midwifery practice.

Evaluation questionnaires embedded across phases 1 and 2 of the MIOH program (Rounds 1-8, conducted from January 2014 to September 2018) were completed by 237 midwives (97% of these, n=229, completed questionnaires pre- and post-training). A sub-set of midwives (n=22, 9%) completed the additional 12 months follow-up questionnaire and seven of these midwives participated in follow-up in-depth telephone interviews.

Midwives held a range of professional roles such as clinical midwives, midwives in management positions, antenatal care midwives, and midwives working with Aboriginal pregnant women, midwifery educators, university lecturers, and childbirth/parenting educators.

Prior to participation in the MIOH program 95% (n=244) of midwives reported no previous oral health training. This aligns with the existing gap in midwives' knowledge and confidence to incorporate oral health promotion within their practice identified in prior research and the MIOH pilot, phase 1.⁸ In interviews, midwives described being previously unsure about how to initiate conversations about oral health with women, knowing what to discuss and what information to include in referral forms. They found the MIOH training to be informative, comprehensive, enjoyable and applicable to their practice. In interviews midwives described that the offer of program sponsorship and CPD points were enticing.

Midwives highlighted that the MIOH program filled the gap in their oral health education. Questionnaire responses reported significant increases from pre- to post-training in midwives self-reported oral health knowledge as good/very good (18% vs 95%, p<0.001) and many aspects of their self-reported confidence to implement oral health promotion within their practice immediately following training and approximately 12 months follow-up. Despite limited prior training in oral health, overall midwives displayed some oral health knowledge in the pre-training knowledge test

component which further increased following the MIOH training and was sustained after 12 months. For example, there were significant improvement in midwives understanding of the importance and implications of oral health in pregnancy, dental care after vomiting, the transmission of decay causing bacteria from mother to baby, reason for high-risk of tooth decay in pregnancy and misconceptions around pregnancy (for example perceived lack of safety of x-rays and dental care and myths around tooth loss in pregnancy).

Almost all (98%) midwives reported the training was useful for changing and informing their practice. Many midwives described intention to incorporate the provision of oral health information, discussions, assessment and referral into antenatal visits, they planned to share the knowledge gained and encourage other midwives to complete the course. Midwives describe the training provided evidence to support practice and promote oral health as a priority within their organisation despite time limitations and competing priorities. In interviews, midwives described retaining the important concepts sufficient for implementing within their practice and identified that they would value refresher training to keep up-to-date with the evidence and details. Further information on midwives changes in practice and the impact of the MIOH training on the referrals of pregnant women to dental services are reported within the *Visual, practical* and interactive resources are important for prompting and facilitating oral health promotion conversations and supporting good oral hygiene practice among families. It is recommended that the HFHS program:

Remain responsive to the needs of partnering sectors and continue to work collaboratively to co-design, develop, update and refine resources as required

Continue to develop resources and initiatives that resonate with the local context and target population, for example, visual and culturally appropriate images for culturally and linguistically diverse groups and Aboriginal communities.

Policy and systems section on page [73](#).

In post-training questionnaires, midwives raised anticipated challenges in implanting oral health promotion into their practice. They identified concerns regarding time constraints to include oral health within the limitations of antenatal consultations with increasing demands on the antenatal appointment identified as a reason. Client related barriers to incorporating oral health promotion into practice were identified including: affordability and accessibility of dental care particularly for women who were not eligible for public dental services; women with high needs not viewing oral health as a priority; language barriers; and client's willingness to engage with dental services.

To address some of these challenges, many midwives expressed that priority access to affordable public dental care should be made available for all pregnant women. Midwives also highlighted the need for accessible oral health education and resources for all midwives and professionals working with pregnant women as well as for the women themselves. Additional detail on midwives training needs to support the incorporation of oral health promotion into their practice are described in the *Visual, practical* and interactive resources are important for prompting and facilitating oral health promotion conversations and supporting good oral hygiene practice among families. It is recommended that the HFHS program:

Remain responsive to the needs of partnering sectors and continue to work collaboratively to co-design, develop, update and refine resources as required

Continue to develop resources and initiatives that resonate with the local context and target population, for example, visual and culturally appropriate images for culturally and linguistically diverse groups and Aboriginal communities.

Policy and systems section, page 78.

Detailed findings and results tables for the evaluation of the MIOH program can be found in appendix D. Full results of themes and illustrative quotes from interviews with midwives are presented in appendix E.

2.2.1.4 Challenges and success factors - Professional development - Midwives

The success of the recruitment strategy was evident from the range of roles that were engaged in the MIOH program and the continued interest in participating in the program over the last four years. The recruitment strategy enabled the inclusion of not only of the midwives who provide the first antenatal (booking) visit, but also midwives in managerial roles. Having a maternity unit manager/assistant manager undertaking the training provided a leverage point for the program, due to their ability to influence processes, systems and practices within their services and to encourage other midwives to undertake the training. Recruitment of teaching staff may have the potential to influence the spread of oral health education within the tertiary education sector.

In addition, having a dedicated health promotion officer maintaining regular communication with enrolled midwives enabled participants' concerns and issues to be addressed promptly and this may have influenced the high completion rates. Another strategy that likely influenced completion rates was charging the course fee if the enrolled midwife did not complete the course. The combination of engagement of midwives by the project officer and incentivising completion resulted in very high completion rates.

Offering program sponsorship and CPD points were successful strategies for encouraging midwives participation in the program. Evaluation findings confirmed that these program benefits were enticing for midwives.

Recommendations from the phase 1 evaluation were addressed in the current phase as part of the improvement process. Refer to section *Implementation - Policy and systems - Midwives*, page 74 for details of the activities supporting incorporation of oral health promotion in antenatal care (taking into account recommendations for past evaluation), such as inclusion of oral health content into clinical guidelines.

Efforts for incorporation of oral health content into tertiary curriculum have not paid off yet, but the program will continue pursuing this with the Midwifery Academic Group.

2.2.1.5 Key recommendations - Professional development - Midwives

Evaluation findings confirm the appropriateness of the MIOH program in building the capacity of midwives to promote oral health in their practice. In light of the evaluation findings it is recommended that the program:

- Continue to expand MIOH training to Victorian midwives and professionals working with pregnant women
 - Extend the work achieved in partnering with ACM to promote the course more broadly with a particular focus on continued recruitment of senior midwives, midwives based permanently in the antenatal care clinics and midwives in tertiary education
 - Consider exploring the suitability and feasibility of adapting/expanding MIOH training or providing other oral health training to other antenatal health professionals
 - Continue maintaining regular communication with trained midwives (for example through newsletters) and explore the possibility of offering refresher training.

2.2.2 Maternal and child health nurses

2.2.2.1 Overview - Professional development – Maternal and child health nurses

The Maternal and Child Health (MCH) service delivers state-wide services for all families with young children. The service supports families and their children with an emphasis on parenting, prevention and health promotion, developmental assessment, early detection and referral, and social support. The MCH service is a critical partner in promoting oral health in early childhood.

Children in Victoria, from birth to school age, are likely to be seen by a MCH nurse at some point through the Key Ages and Stages (KAS) visits framework. The KAS framework set out evidence-based activities for each child visit and guides the consultation with parents. As a result of a long term partnership between DHSV and MCH service, oral health is part of the KAS framework which guides the practice of Maternal and child health nurses (MCH) nurses.

2.2.2.2 Implementation - Professional development – Maternal and child health nurses

Consultation with the MCH sector in the first phase of the program identified directions for ongoing support carried over into this current program phase. CPD activities and provision of resources supporting MCH nurses' role in oral health promotion were identified as priority areas. Further details of available resources for the MCH sector and evaluation findings are presented under

Tools and resources, page 59.

Workforce development was primarily delivered through workshops targeting MCH teams in each local government area, MCH coordinator networks at regional level or via the MCH state-wide conference. The CPD workshops duration vary from 1 to 2 hours, depending on the MCH services availability. The workshops cover topics as following: current evidence on early childhood tooth decay and its impact; revision of the tooth decay process; key oral health messages and their incorporation in KAS visits; lift the lip technique; strengthening of referral process from MCH services to local public dental service. We use a participatory and interactive approach on the delivery of these workshops.

The partnership with Victoria's two tertiary MCH education providers continued. Since 2015 HFHS has regularly been invited as a guest speaker to deliver oral health lectures for MCH students attending the Child and Family Health Nursing post graduate degree at La Trobe University and/or RMIT; a total of 3 lectures were delivered at RMIT and one at La Trobe University from 2015 to 2019. These sessions were a valuable opportunity for preparing students for the oral health promotion part of their practice as per the KAS framework which guides their clinical practice. The lectures introduce the evidence around early childhood caries and include practical oral health promotion activities including demonstration of the lift the lip technique. The oral health resources available to practicing MCH nurses are also highlighted during the lectures. The oral health lectures are delivered collaboratively with an oral health clinician who co-facilitates them with a HFHS health promotion officer.

2.2.2.3 Key evaluation findings - Professional development – Maternal and child health nurses

Overall 21 professional development activities were delivered to 1,285 MCH nurses across 21 Victorian Local Government Areas (LGA) between 2015 and 2019 (see details in *Table 5*). This includes a state-wide MCH Conference (October 2018), where the new Tooth packs distribution initiative through the MCH services (*Baby Teeth Need Cleaning Too!*) was officially launched. This event alone reached 850 MCH nurses. Since 2015 HFHS provided oral health lectures for 154 MCH students attending the Child and Family Health Nursing post graduate degree at Latrobe University and RMIT University. The conference and tertiary education courses were not part of the current evaluation.

Evaluation of the 12 CPD workshops held within 12 LGAs between July 2017 and February 2019 is reported here. Evaluation questionnaires were administered to MCH nurses immediately following the CPD workshop to capture the acceptability and appropriateness of the sessions, self-reported knowledge and confidence to promote oral health and intentions to incorporate oral health within practice. Overall 194 out of 376 MCH nurses who attended the workshops (52%) attempted/completed the evaluation questionnaire.

Evaluation of the CPD workshops showed self-reported gains in knowledge and confidence to support oral health (89% or more). Although MCH nurses were already incorporating oral health promotion into their practice as part of the KAS framework, many reported the session was valuable, reinforced their knowledge and intended to further raise oral health as a priority within KAS visits. MCH nurses described various ways to improve their attention to oral health within their practice such as taking a greater focus on discussions with families about the causes of tooth decay, commencing brushing

earlier, demonstrating brushing, the need to reduce frequent eating, performing mouth checks and referrals to dental services.

In evaluation interviews with three MCH nurses, when discussing the CPD workshop, MCH nurses recalled someone coming to speak to them but did not recognise this as a formal CPD event.

Evaluation of MCH nurses engagement with *Tools and resources* are detailed in the evaluation findings section page 59 and details of translation to practice are in on page 82. Further detailed evaluation results from questionnaire can be found in appendix F and interviews in appendix G.

2.2.2.4 Challenges and success factors - Professional development – Maternal and child health nurses

Having oral health embedded in the policy framework and supporting clinical guidelines (KAS visits/framework) was the main enabler for successful delivery of the professional development activities for MCH nurses.

MCH services are an excellent platform for health promotion activities as a result many programs and initiatives, seek their support. Competing priorities for MCH nurses time and the HFHS program inability to offer incentives such as CPD points with professional development workshops may make these sessions less attractive to the MCH nurses.

The development and distribution of a new parent engagement resource (Little Teeth Book) provided an opportunity to offer CPD to MCH teams using the new resource as a focus. Additional engagement opportunities included the introduction of a Tooth packs initiative which also presented an opportunity to offer refresher CPD. These initiatives provided a focus for training and an opportunity to include refresher training to support the initiative delivery. Refer to

Tools and resources section on page 59 for further details on these initiatives.

2.2.2.5 Key recommendations - Professional development – Maternal and child health nurses

Evaluation findings show the CPD workshop was successful in supporting MCH nurses' capacity to incorporate oral health promotion within their KAS visits. It is recommended that the HFHS program:

- Continue to work with MCH services to embed oral health advice, assessment and referral within routine MCH practice
- Remain responsive to MCH services' needs for professional development, taking into account sector priorities and policy environments
- Continue to develop strategies to more effectively engage MCH nurses in professional development activities.

Table 5 Number of MCH nurses participating in PD activities, 2015-19

Date	Service	Training program	Number of participants
19/05/2016	Plenty Valley CHS/Whittlesea Council	Playgroup flipchart training for use in INFANT program – 1 hour	6
29/06/2016	Port Phillip	MCH CPD workshop in partnership with Star Health – 2 hours	25
14/11/2016	Maroondah	Playgroup flipchart training for MCH nurses supporting Burmese playgroup- 1 hour	1
16/11/2016	Barwon South West sub regions	MCH CPD workshop for Corangamite, Moyne, Southern Grampians, Warrnambool and Glenelg (held in Hamilton in partnership with Southwest Health Care – 2 hours	14
1/12/2016	Mildura Council	MCH CPD workshop - 2 hours	11
18/07/2017	City of Boroondara	MCH CPD workshop in partnership with Access Community Health – 1 hour and 15 minutes	19
25/08/2017	Loddon Mallee sub region	MCH CPD workshop for City of Greater Shepparton, City of Wangaratta, City of Wodonga, and City of Benalla (held in Shepparton) in partnership with Goulburn Valley Health, Community Dental – 2 hours	27
19/09/2017	Whitehorse City Council	MCH CPD workshop in partnership with Carrington Health – 1 hour	20
16/11/2017	Ballarat City Council	MCH CPD workshop in partnership with Ballarat Health Community Dental Service – 1.5 hours	22
21/11/2017	Moonee Valley Council	MCH CPD workshop in partnership with CoHealth – 1 hour	17
23/11/2017	Knox City Council	MCH CPD workshop in partnership with EACH (Eastern Acess Community Health) – 1 hour	25
14/12/2017	Monash City Council	MCH CPD workshop in partnership with Monash LINK - 1 hour	23
5/03/2018	Manningham Council	MCH CPD workshop in partnership with Carrington Health – 1 hour	13
6/03/2018	Maroondah City Council	MCH CPD workshop in partnership with EACH – 1 hour	14
4/04/2018	Yarra Ranges Council	MCH CPD workshop in partnership with Inspiro Community Health Services – 1.5 hours	19

Date	Service	Training program	Number of participants
30/04/2018	Victorian Association of MCH nurses	MCH CPD workshop – 1 hour	22
12/07/018	MAV - MCH Coordinators Network	MAV MCH coordinators meeting (Mildura). Train the trainer enhanced MCH toothbrushing initiative in partnership with Sunraysia Community Health – 45 minutes	46
19/07/2018	City of Greater Dandenong	MCH CPD workshop – 1 hour	24
5/09/2018	City of Kingston	MCH CPD workshop in partnership with Central Bayside Community Health Services – 1 hour	29
26/10/2018	MCH Conference	State-wide MCH Conference – 10 minutes	850
14/11/2018	City of Greater Geelong	MCH CPD workshop - 1.5 hours	30
19/02/2019	Frankston City Council	MCH CPD workshop - 1.5 hours	26
18/03/2019	MCH Coordinators - Eastern Region	Baby Teeth Need Cleaning Too! workshop to support delivery of new toothbrushing initiative - 1.5 hours	2
Total			1285

Table 6 MCH student education 2015-19

Date	University	Training program in partnership with local public dental service	Number of participants
22/07/2015	La Trobe University	Child and Family Health Nursing post graduate degree guest lecture (2.5 hr workshop)	38
25/07/2016	RMIT	Child and Family Health Nursing post graduate degree guest lecture	41
13/07/2017	RMIT	Child and Family Health Nursing post graduate degree guest lecture (1 hour)	42
3/08/2018	RMIT	Child and Family Health Nursing post graduate degree guest lecture (1 hour)	33
Total			154

2.2.3 Staff working with Aboriginal families

2.2.3.1 Overview - Professional development – Staff working with Aboriginal families

Aboriginal people have significantly worse health outcomes than the general population, and this includes poorer oral health.¹⁰ The gap in oral health outcomes between Aboriginal and non-Aboriginal children and adults is widely documented and the burden on communities is large. Aboriginal people experience poor oral health at an earlier age than the general population.¹⁰ Aboriginal children have twice the level of tooth decay, with greater levels of untreated disease compared to the non-Aboriginal population.¹¹ In some communities over 90% of young children have tooth decay¹¹; hence our collaborative work with professionals who work with Aboriginal families.

Working with professionals that engage with Aboriginal families remained a focus for HFHS during the second phase of implementation. Several initiatives were delivered including:

- Bigger Better Smiles, an oral health education package focusing on staff working in Aboriginal Health Service
- Online oral health training (MIOH program), including a focus on recruitment of midwives working in Koorie Maternity Services (KMS)
- Little Koorie Smiles, an oral health promotion package focusing on facilitators working with Aboriginal Supported playgroups
- Healthy Little Smiles, an oral health education package for early childhood educators and adapted for professionals working with Aboriginal Services.

2.2.3.2 Implementation - Professional development - Staff working with Aboriginal families

This section will describe the implementation of each of the previously mentioned initiatives.

Bigger Better Smiles

Bigger Better Smiles is an oral health education program developed by DHSV in partnership with Mallee District Aboriginal Service (MDAS) in phase 1 of the program. The purpose of the training is to equip staff with the knowledge, skills and confidence to include oral health in service provision. The package has a focus on oral health during pregnancy and early childhood (children aged 0-3 years), however was responsive to requests for a family approach (across the lifespan). Additional funding (\$50,000) was made available in 2015 to expand delivery. Due to the time required to engage Aboriginal services and to meet the needs of the partner organisations, the timeframes for delivering this initiative were extended for expansion of the training program. Bigger Better Smiles workshops were delivered to Aboriginal Community Controlled Health Organisations (ACCHOs), Aboriginal Early Years Services and mainstream services.

The workshop developed in phase 1 continued to be offered to Aboriginal Community Controlled Health Organisations in order to extend the reach across the state. Prior to the delivery of the training package, HFHS conducts a needs assessment through a face to face meeting with representatives of the organisations that expressed interest in the workshop. At this stage HFHS makes sure that the organisations' senior management is supportive of the training.

Koorie Maternity Service

The Koorie Maternity Service (KMS) program provides access to comprehensive, culturally appropriate care for Aboriginal women and their families during pregnancy. This state-wide program is delivered by midwives, Aboriginal Health Workers and Aboriginal Hospital Liaison Officers. There are 14 sites across Victoria, 11 located in Aboriginal Community Controlled Organisations (ACCOs) and three in public hospitals.

The KMS continued to be a focus for recruitment of midwives for the MIOH education program (refer to [Midwives page 34](#)). The online training program was also offered to programs or services that focus on Aboriginal pregnant women including Northern Health, Peninsula Health, Royal Women's Hospital and Glastonbury Aboriginal Stronger Families Program. In addition midwives from two Aboriginal

Health Services in NSW (Coomealla Health Aboriginal Corporation and Albury Wodonga Aboriginal Health Service), serving the Victorian communities have also completed MIOH training.

Little Koorie Smiles workshop

Little Koorie Smiles workshop is one of the elements of the Little Koorie Smiles package which is a culturally appropriate oral health promotion package for Aboriginal Supported playgroups. It was produced collaboratively by HFHS program and VACCHO. The workshop includes basic oral health information, familiarises staff with the Little Koorie Smiles package resources and focuses on delivering toothbrushing demonstrations. The resource package includes a one hour workshop; Activity kit and Little Koorie Smiles flipchart. For further information on development of the package refer to [Error! Reference source not found.](#) page [Error! Bookmark not defined..](#)

Healthy Little Smiles workshop

The Healthy Little Smiles workshop is one of the elements of the Health Little Smiles package which encompasses a two hour workshop and a resource kit, these were developed in phase 1. The workshops build capacity of early childhood professionals to include oral health promotion in their practice. The workshop content and facilitation were modified to make the package culturally appropriate for staff working with Aboriginal families. For further information on the resource kit composition refer to [Early childhood educators](#) page [50.](#)

For all of the initiatives focussing on building capacity of staff working with Aboriginal families, HFHS worked closely with the Aboriginal Community Development Officer role. This role engaged with ACCHOs and increased awareness of the HFHS programs available.

2.2.3.3 Key evaluation findings - Professional development - Staff working with Aboriginal families

Evaluation of the professional development activities targeting professionals working with Aboriginal families are presented below. Results of the evaluation of Bigger Better Smiles are included here. The reach of the program in KMS are reported below, with full results of the evaluation of MIOH reported in [Key evaluation findings](#) page [37.](#) The Healthy Little Smiles and Little Koorie Smiles training programs were not formally evaluated, only information regarding the reach of these programs is presented.

Overall across phase 2 (2015-2019), the HFHS program has reached 172 staff working with Aboriginal families through engagement in the Bigger Better Smiles training, the MIOH program in KMS, Little Koorie Smiles workshops and the Health Little Smiles workshop.

The Bigger Better Smiles training package was delivered in 8 services, reaching 109 health professionals since 2015 (see [Table 7](#)), bringing the total to 143 professionals trained since inception in 2012. The extended reach of the program was supported by additional funding (\$50,000), made available in 2015 which intended to expand the training program to three additional Aboriginal services and to reach 60 health professionals. The targets set in the Bigger Better Smiles extension project plan were exceeded with partnerships established with 7 ACCHOs, 2 Aboriginal Early Years Services, 9 mainstream services and 109 professionals trained.

Between July 2015 and June 2019, 11 midwives working in the KMS or with Aboriginal women in public hospitals completed the MIOH program bringing this to a total of 22 trained KMS midwives across 12 KMS sites (86% coverage of KMS sites).

During phase 2 of HFHS, five Little Koorie Smiles workshops were held to training 30 Aboriginal Supported playgroup facilitators (see *Table 8*).

The Healthy Little Smiles package was delivered to 22 staff working with Aboriginal families (see *Table 9*). Even though the training package was designed for staff working in early year's services or programs, in this case it also reached staff working with older children.

Table 7 Count of professionals trained in Bigger Better Smiles, 2015-2019

Date	Organisation	Training program	Number of participants
14/10/2015	Gippsland & East Gippsland Aboriginal Co-operative (GEGAC)	Bigger Better Smiles - 4 hour workshop (Lake Tyers)	11
15/10/2015	Ramahyuck District Aboriginal Corporation	Bigger Better Smiles - 4 hour workshop (Morwell)	20
19/04/2016	Peninsula Health	Bigger Better Smiles - 4 hour workshop (Frankston)	15
24/11/2016	Rumbalara Aboriginal Co-operative	Bigger Better Smiles - 4 hour workshop (Mooroopna)	11
6/12/2016	Southern Metropolitan Region Oral Health Network (SMROHN) - supporting Southern Metropolitan Region's Koolin Balit project	Bigger Better Smiles - 4 hour workshop (Central Bayside Community Health Service, Parkdale)	16
2/08/2017	Royal Children's Hospital - Wadja Health Clinic	Modified Bigger Better Smiles workshop (1hr) for Wadja Clinic team	5
22/02/2018	Albury Wodonga Aboriginal Health Service	Bigger Better Smiles - 4 hour workshop (Glenroy, NSW)	22
13/03/2019	Mallee District Aboriginal Service (Swan Hill site)	Bigger Better Smiles - 4 hour workshop (Swan Hill)	9
Total			109

Table 8 Number of Aboriginal Supported playgroup facilitators trained to deliver Little Koorie Smiles, 2015-2019

Date	Organisation	Training program	Number of participants
22/09/2017	Victorian Aboriginal Child Care Agency (VACCA)	Little Koorie Smiles Supported playgroup facilitator training (Preston) - 1.5 hour flipchart workshop.	2
12/06/2018	Swan Hill District Health	Little Koorie Smiles Supported playgroup facilitator training (Swan Hill) - 1 hour flipchart workshop.	12
21/06/2018	Victorian Aboriginal Education Association Incorporated	Little Koorie Smiles Supported playgroup facilitator training for VAEAI In Home Support and Home Based Learning Network meeting. Playgroups and in home support workers	13
29/03/2019	Victorian Aboriginal Child Care Agency (VACCA)	Little Koorie Smiles (Melton) workshop	2
30/04/2019	Ballarat and District Aboriginal Co-operative (BADAC)	Little Koorie Smiles (Ballarat) workshop	1
Total			30

Table 9 Number of professionals working with Aboriginal families trained in Healthy Little Smiles, 2015-2019

Date	Organisation	Training program	Number of participants
7/11/2016	Latrobe Community Health	Early Childhood Educators/Early Parenting Professionals working with Aboriginal families (Morwell) - 2 hour workshop.	5
9/04/2018	Kirrae Health Service	Healthy Little Smiles/Playgroup training (Purnim) - 2 hour workshop	9
28/06/2018	Winda-Mara Aboriginal Corporation	Healthy Little Smiles/Playgroup training for staff working with Aboriginal families. (Heywood).	8
Total			22

A more extensive evaluation of the Bigger Better Smiles training program was conducted. The findings below relate to aggregated data gathered across phase 1 and 2 of HFHS program (2012-2019) as there was insufficient data available in the phase 1 report for analysis of changes in knowledge and confidence. Evaluation findings report on the Bigger Better Smiles training program satisfaction and impacts of the training on participant's oral health knowledge, confidence and practices.

Overall, 131 participants completed the Bigger Better Smiles evaluation questionnaires, with 99 responses pre-training and 107 post-training (of these 75 participants could be matched with completed pre- and post-training questionnaires). The disciplines of these professionals varied including: Aboriginal health workers; allied health professionals; dieticians; diabetes educators; early years staff; case managers; counsellors; administration staff; MCH nurses; midwives; nurses; general practitioners; practice nurses; health promotion and project officers. Eleven participants completed follow-up interviews. In interviews, participants also reported working with a mixture of client groups, some working across all age groups, others with adults, children or pregnant women.

The Bigger Better Smiles training program was well received and generally met the expectations of the wide range of participating professionals. This was confirmed by the interviews, with participants describing the workshops as sufficient, interesting and valuable.

Overall responses to questionnaires indicated that the majority of participants (more than 90%) felt they gained in knowledge, skill and confidence to support good oral health. For participants with pre- and post-questionnaires that could be matched, self-reporting of oral health knowledge as good/very good increased significantly from pre- to post-training (43% vs 86%) as well as in knowledge test responses. Many participants commenced training with high confidence levels in relation to answering questions about healthy eating, referring clients and finding the nearest public dental service and reported further confidence to promote oral health within their practice after training. Twenty-two participants reported completing the lift the lip training and an overall increase in confidence to perform lift the lip was observed.

Overall 90% of the participants found the training relevant for their professional practice and 89% intended to implement their learnings in practice. While some participants described that the content of the training was not always directly associated with their role, they felt they could share the information with others in the Aboriginal Health Service who could benefit. It was suggested that for midwives more comprehensive training, such as MIOH, would be better suited. In interviews participants described benefitting from networking opportunities and saw the training as an opportunity to share information, discuss the cultural issues faced within their services and valued hearing from an Aboriginal presenter.

Interviewees reiterated that the Bigger Better Smiles training increased awareness of their importance of oral health and for some this refreshed or validated their existing knowledge. Participants took away different learnings from the training and described opportunities to apply their learnings within their daily practice. For example, regularly discussing oral health with clients, teaching children and families about good oral health, include oral health discussion in Aboriginal health checks, encourage healthy eating, referring clients to dental services, increasing clients engagement, for example, through client intake, awareness days and events, and when performing lift the lip. Results related to the influence of the Bigger Better Smiles program on professional practice are presented in *Key evaluation findings - Policy and systems – Staff working with Aboriginal families* section on the page 85.

For further detail on the results of the Bigger Better Smiles training evaluation questionnaires see appendix H and interviews in appendix I.

2.2.3.4 Challenges and success factors - Professional development – Staff working with Aboriginal families

The successful expansion of the Bigger Better Smiles training program mentioned above was facilitated by an array of complementary factors. This included tailoring workshops to meet organisations specific needs and the engagement of representatives from participating organisations including senior management which maximised participation within organisations and enabled the delivery of workshops relevant to the personnel.

In addition, professionals working in Aboriginal Health Services provide care to clients across the lifespan. The HFHS program focuses on improving oral health of pregnant women and children aged 0-3 years. Despite this limited scope, HFHS endeavoured to meet the needs of participating services to expand the training to be inclusive of staff working with older children and adults and to be more relevant for roles that work across the life span. This supported participants exploring how to incorporate oral health promotion into their practice, and it also allowed participants to network and share information amongst themselves regarding ways to improve oral health promotion activities. Using a family approach has enabled a ‘whole of service’ approach, broadened the range of participants and aligns with how ACCHOs work with their communities.

A shorter version of the training was delivered at Royal Children’s Hospital for health professionals working in the Wadja Health Clinic, a general medical outpatient clinic for Aboriginal and Torres Strait Islander children. This is another example of how the workshops are tailored in order to meet the participating organisation’s needs.

Funding availability was another factor in the successful expansion of the training to this extent (refer to *Key evaluation findings - Professional development - Staff working with Aboriginal families*, page 45 for detailed information regarding the reach of this professional development activity).

In addition, creating culturally appropriate and safe learning environment supported engagement with professionals working with Aboriginal families. The acknowledgement of the country naming the people of the country where the workshops were conducted and the opportunity given to participants to pinpoint on the map their origins contributed to create a learning environment.

Takes time to build a trusting and productive partnership when engaging Aboriginal services. As the program was able to demonstrate successful partnerships with other ACCHOs it became easier to engage with ACCHOs. Working in partnership with the Aboriginal Community Development Officer also inspired confidence in DHSV as a good organisation to work with.

In respect of the midwifery focus, HFHS seeks to have all KMS with midwives trained in MIOH, however this relies on the midwife employed at the service to be interested and have the capacity to complete the training. Attempts were made to recruit midwives from Western Health and Mungabareena Aboriginal Co-operative sites, for full coverage but barriers remained for these services. These services will be revisited in the next phase of the program.

The previous evaluation also recommended liaising with VACCHO for inclusion of oral health in training courses for Aboriginal Health Workers. There were initial negotiations, but no significant progress was registered due to staff turnover at VACCHO.

2.2.3.5 Key recommendations - Professional development – Staff working with Aboriginal families

The Bigger Better Smiles training program was appropriate and effective in building the knowledge, skill and confidence of staff working with Aboriginal families to support and promote good oral health. It is recommended that the HFHS program:

- Continue offering training packages to staff working with Aboriginal families ensuring that all KMS, ACCHOs and Aboriginal Supported playgroups take part in oral health promotion training.
- Continue to work in collaboration with the Aboriginal Community Development Officer at DHSV to identify and engage new sites for the delivery of training packages
- Resume liaising with VACCHO to explore the feasibility of including oral health information within existing training courses for Aboriginal health workers.

2.2.4 Early childhood educators

2.2.4.1 Overview - Professional development – Early childhood educators

In Australia tooth decay is the most common preventable chronic disease in childhood,¹² yet 57% of Victorian preschool aged children have experienced tooth decay.¹³ Tooth decay is highly preventable and in early stages can be reversible. Early childhood is an excellent time to build on lifelong good habits, including good oral health habits that prevent oral disease in later years.

Early childhood educators use the Victorian Early Years Learning and Development Framework to guide their day-to-day work. It enables professionals to support families with young children to recognise the early years as a critical period for wellbeing and long-term success. Therefore, early childhood services are an important setting for promoting healthy habits including oral health. It means that early childhood educators if equipped with knowledge, skills, and tools, are well placed to promote oral health.

2.2.4.2 Implementation - Professional development – Early childhood educators

The program continued to target early childhood educators working in early childhood education and care settings such as long day care, family day care and preschools using the Healthy Little Smiles package which includes a two-hour workshop and a resource kit which was developed and reported in phase 1. The resource includes key oral health messages; age appropriate learning opportunities; ideas to incorporate oral health into daily activities and routines and engage with families; links to other supporting resources and consumer factsheets and policy samples.

The aim of the two-hour workshop is to increase the capacity of educators to become more effective promoters of oral health relating to children aged 0-5 years. The Healthy Little Smiles package supports long day care, family day care and kindergartens to engage children and families about oral health and embed oral health promotion within their services. This covers basic oral health information; how early childhood services can support learning, family engagement and implement policy and practices to support good oral health. Participants also develop an action plan to support translation of knowledge into practice.

Initially, the Healthy Little Smiles package targeted services in areas not covered by the Smiles 4 Miles program. However the workshop can also support educators participating in the Smiles 4 Miles program. Workshops are run on request, often to Family Day Care networks. Requests for workshops were also generated from services finding information online. In some cases services were requesting

a presentation for parents and/or children and instead took up the offer of staff training. The resource kit is available as an online resource and can be accessed by workshop participants or independently by registering.

2.2.4.3 Key evaluation findings - Professional development – Early childhood educators

The following evaluation findings provide an overview of the reach of the Healthy Little Smiles workshop, educator's satisfaction with the workshop, the impact on their oral health knowledge, confidence and intentions to change their practice.

During HFHS phase 2 (2015-2019), 21 Healthy Little Smiles workshops were delivered to 384 early childhood professionals (see [Table 10](#)) and one to 5 Early Childhood Education and Care students.

Overall, 381 educators completed the Healthy Little Smiles evaluation questionnaire (either pre- or post-workshop). In total 186 educators responded pre-workshop and 243 post-workshop. Of these, 48 (13%) educators completed both pre- and post- workshop questionnaires that were matched for analysis.

The Healthy Little Smiles workshop was well received by educators, the majority (over 90%) were satisfied with the content, agreed/strongly agreed that the training was relevant to their practice, intended to use their learning in practice and would recommend the workshop to others.

Evaluation findings showed that the early childhood sector was already quite engaged in oral health promotion prior to involvement in HFHS. Prior to the HLS workshops 22% of educators reported they has received formal oral health training through their professional education, in-service/staff training or involvement in other health promotion programs. Many educators (83%) reported that their service participated in oral health/healthy eating related programs including: The Healthy Together Achievement program (35%), Smiles 4 Miles (28%), or a combination of other programs/activities (37%), such as, Kids Matter, annual dental visits, healthy eating puppet shows and yoga.

For educators with matched pre- and post-workshop questionnaires (n=48) self-reported knowledge level (good/very good) significantly increased from pre- to post-workshop (69% vs 86%, p<0.05). Most educators reported gaining knowledge on a variety of oral health topics such as how to promote oral health, oral hygiene and dietary practices, the process of tooth decay, available oral health resources and accessing public dental health services. For those with matched data (n=48) prior to the workshop, educators generally reported a high level of confidence to promote oral health which showed a statistically significant improvement following participation in the workshop.

Before the workshop, many educators (88%) reported that they always/sometimes provided some form of oral health, healthy eating, information, resources or activities in their centres. After the workshop, educators described their intentions to apply their learnings to practice including: more proactively initiating oral health discussions with children and families; introducing more interactive oral health activities; embedding oral health and dental care into policies and practice; promoting healthy eating; organising team discussions on oral health best practice; including newsletter articles about dental health.

Educators anticipated potential difficulties and barriers they may face in promoting oral health in their services, they mostly reported challenges associated with parents' or carers' engagement, willingness and attitude toward oral health and changing caregiver and child's behaviours, language barriers and confidence educating parents about oral health. A few systemic challenges were mentioned including staff and parent's time constraints, staff and policy issues and the availability of local dentists.

For full Healthy Little Smiles evaluation results, please see appendix J. Details of the implementation and evaluation of resources for the early childhood sector are presented under

Tools and resources (page 59).

Table 10 Number of early childhood educators who participated in Healthy Little Smiles Workshop, 2015-2019

Date	Organisation	Number of participants
28/10/2015	Dandenong, Casey, Cardinia OH working group	35
17/03/2016	Monash Community Health Service	25
18/05/2016	Glen Eira Kindergarten Association	41
19/05/2016	Peninsula Health	13
25/05/2016	City of Greater Dandenong	39
1/06/2016	Goodstart Early Learning	7
5/07/2016	City of Greater Dandenong	26
2/11/2016	Corangamite Shire	14
30/11/2016	Sunraysia Community Health/Mildura Council	14
21/03/2017	Echuca Regional Health - Pink and Blue Early Learning	27
12/09/2017	Bestchance Kindergarten Cluster Management	5
15/11/2017	Maribyrnong Early Years Forum	15
30/01/2018	Ashwood Children's Centre	24
21/03/2018	Kool Kidz Ravenhall	13
12/06/2018	Robinvale District Health Services	8
25/06/2018	Mona Family Day Care (Doveton)	7
18/09/2018	Bass Coast Health	15
3/04/2019	Melton City Council	35
6/05/2019	Golden Plains Shire Council	13
21/05/2019	Heatherhill Preschool , Noble Park	5
5/06/2019	Wallan - Family day care	3
		384

2.2.4.4 Challenges and success factors - Professional development – Early childhood educators

The workshop complements and adds new knowledge to the work already being done across the sector through, for instance, the Achievement Program, Smiles 4 Miles and in-service training in health promotion programs. This underscores the relevance of the Healthy Little Smiles training with participants' roles previously reported in the evaluation findings section.

There were however challenges in recruiting services for face to face Healthy Little Smiles workshops. The HFHS team suggested that a potential barrier was the cost to the service to release educators from duties to attend CPD session or pay staff for additional time when training is provided after hours. In order to ensure more early childhood professionals accessing appropriate tools the Healthy Little Smiles resource kit was made available online on the DHSV website, so far the resource has been accessed by 251 professionals.

2.2.4.5 Key recommendations - Professional development – Early childhood educators

The Healthy Little Smiles workshop was well received by the early childhood sector and increased knowledge and confidence to promote oral health in this already well engaged groups. In light of these finding it is recommended that the HFHS program:

- Continue to offer the Healthy Little Smiles workshop targeting communities that have not already been reached by oral health programs and focus efforts in high risk communities
- Explore other innovative approaches for delivery of professional development activities for early childhood educators.

2.2.5 Supported playgroup facilitators

2.2.5.1 Overview - Professional development – Supported playgroup facilitators

Greater levels of oral disease are experienced by people on low incomes, some Aboriginal and Torres Strait Islanders, people with disability, immigrant groups from CALD backgrounds (particularly refugees).¹¹

Supported playgroups are community based groups that bring together pre-school aged children and their parents for the purpose of play and social activities.¹⁴ These groups aim to improve learning, development and wellbeing outcomes of children until they start primary school. Supported playgroups provide services to vulnerable families including: low income; CALD and Aboriginal families. These are families that are considered to be at higher risk of having oral disease including tooth decay. Hence professionals (Supported playgroup facilitators) who work with this population group are well placed to support families to establish good oral health. Supported playgroups are facilitated by paid staff, usually early childhood educators who are employed for their skills in recruiting, engaging and supporting families.¹⁵

Supported playgroups funded by DET are required to deliver *Smalltalk* to all participating families. *Smalltalk* is a set of evidence-based strategies that introduce parents and carers to selected parenting essentials to support optimal child outcomes.

2.2.5.2 Implementation – Professional development – Supported playgroup facilitators

Professional development activities targeting Supported playgroups were designed taking into account existing policies and supporting processes (Supported playgroup guidelines). *Smalltalk*, mentioned previously, aims to encourage parents to provide opportunities that stimulate their child's learning at home by: creating routines; reading to children from birth; and supporting children's play.¹⁶

The HFHS program focused on building capacity of the Supported playgroup facilitators to incorporate oral health messages within the *Smalltalk* program and at the same time contribute to building their confidence in having oral health conversations with families.

Two main professional development activities were delivered in the playgroup setting, namely: Baby teeth count too! (for mainstream playgroups and playgroups for children with disability) and the Brush, Book, Bed workshops. The former relies on providing playgroup facilitators with essentials around oral health promotion focussing on the oral health key messages and the later builds on the former and leans on the Smalltalk program principles to include toothbrushing on the bedtime routine. The content of the *Baby teeth count too!* workshop is also integrated into the Brush Book Bed workshop.

Baby teeth count too!

Baby teeth count too! is an education program which supports Supported playgroup facilitators to introduce oral health promotion activities in to their day-to-day work. It comprises a one hour workshop for Supported playgroup facilitators, a flipchart and an activity kit with family centred activities around good oral health. Baby teeth count too! Education program was designed for mainstream Supported playgroups and its culturally appropriate version the Little Koorie smiles was later developed for Aboriginal Supported playgroups. Refer to *Little Koorie Smiles workshop* page 45 for details on the education program for Aboriginal Supported playgroup facilitators.

Since being introduced in 2014, HFHS has conducted workshops targeting Supported playgroups facilitators across the state with view of strengthening their capability to incorporate oral health promotion in the programs running in the playgroup setting.

At the end of the workshops it is expected that Supported playgroup facilitators have increased their knowledge in oral health promotion and have gained confidence to engage families in oral health themed talks. In phase 1 of the program Supported playgroup facilitators who participated in the Baby teeth count too! education program received an A3 flipchart and training. Since the program review, facilitators now also receive an Activity Kit booklet.

As part of the continual improvement process a gap in the professional development activities in the playgroup setting was identified; the training package lacked information to meet specific needs of families with young children with a disability and the professionals who support them.

MyTime, a playgroup setting for children with a disability, was identified as a potential setting to consult with and explore the needs of this particular population group. MyTime is a national program, providing peer support for parents and carers of children with a disability, developmental delay or chronic medical condition. All MyTime groups have a trained facilitator who provide skilled guidance and help families accessing information and services in their area.

In MyTime playgroups HFHS had conducted professional development sessions and consultations. For further information on the development of the training package, refer to *Reviewing Baby teeth count too! for children with a disability* page 66.

Brush Book Bed initiative

In 2018-2019, HFHS program received additional funds from the Victorian State Government (DHHS) for extension of the capacity building activities focussing on groups at high risk of oral disease. The additional funds enabled designing the Brush Book Bed initiative that builds on existing oral health

promotion activities and relationships formed over years of collaborative work with Supported playgroup facilitators.

Brush Book Bed initiative presents a new approach to encourage an important behaviour change (adoption of adequate oral hygiene habits); it focuses on addressing barriers to toothbrushing and at the same time increasing parent's confidence for brushing their children's teeth twice a day. The initiative also aimed to explore the feasibility, acceptability and appropriateness of conducting toothbrushing demonstrations for participating families.

The initiative comprises a workshop tailored to Supported playgroup facilitators, resources and activities supporting engagement with families around toothbrushing, including toothbrushes and toothpaste for families attending Supported playgroups. For detailed information about the tools and resources that support the initiative, refer to

Little Koorie Smiles package

In March 2016, a working group was established to support the planning and delivery of a culturally appropriate resource to engage Aboriginal families in Aboriginal Supported playgroups. Participants included the HFHS team together with representatives of some Aboriginal organisations, including VACCHO, VAHS (Victorian Aboriginal Health Service) and Yappera (Aboriginal) Children's Service, with apologies from VACCA (Victorian Aboriginal Child Care Agency) and DET Aboriginal Branch. A fundamental outcome from the initial meeting was that the majority of the content of the original Baby teeth count too! flipchart was supported, some additional messages were identified to include, as well as enhancing cultural acceptability through photos, artwork and a new title, Little Koorie Smiles.

DHSV's primary partner in developing the new resource was VACCHO. A photoshoot was arranged with Yappera Children's Service to develop an appropriate photo library together with commissioning Aboriginal artwork.

In mid-2017, a draft Little Koorie Smiles package was piloted. The package included a one-hour workshop, an A3 flipchart and Activity Kit manual, together with supplies to support facilitators to carry out family-centred education activities (ie storybooks, plastic fruit and vegetables). Tooth packs (toothbrushes and toothpaste) were also provided to engage with, and support families at home.

A partnership with VACCA enabled the pilot of the package. Two Koorie playgroup workers attended a one-hour workshop in September 2017. The workshop was designed to increase the capacity of playgroup facilitators in promoting oral health, including dissemination of key messages relevant for young children, as well as familiarising them with the other resources in the package. Aboriginal Supported playgroup facilitators trialled? the package with playgroups during the fourth term of 2017.

Consultation and feedback was provided from VACCA in early 2018, confirming that the package was relevant, appropriate and easy to use. Learning activities and the kit of resources (which includes A3 flipchart, Activity Kit, toothbrushing demonstration puppet, storybooks, plastic fruit and vegetables, and tooth packs) had interested and engaged children and families in dental health, prompting questions around tooth brushing and sugary drinks.

Following this consultation process, Little Koorie Smiles packages (kits) were produced to expand the implementation in Aboriginal Supported playgroups around the state. State-wide rollout commenced in 2018 and is ongoing. The Little Koorie Smiles package was not part of the formal evaluation. For further details about the use of this resource refer to page [45](#).

Brush, Book, Bed package

In mid-2018 additional funding (\$200,000) enabled DHSV to pilot an innovative initiative to extend the oral health promotion initiative in the Supported playgroup setting. Brush Book Bed aims to strengthen parents' self-efficacy to establish a regular habit of parent-child toothbrushing as many parents say they don't feel confident to carry out toothbrushing and some have never been shown how to brush a young child's teeth. Brush Book Bed was designed to strengthen the focus on positive

toothbrushing routines through the Supported playgroup setting by delivering a toothbrushing demonstration via the Supported playgroup facilitators and the provision of a family pack of resources including oral hygiene products. The initiative was designed to complement the existing body of work in the Supported playgroup setting.

Brush Book Bed piloted is an innovative approach, tying toothbrushing to the bedtime routine, to help parents establish a habit of brushing. Brush Book Bed encourages toothbrushing, reading together, and getting to bed at a regular time each night. It follows a similar approach led by the American Academy of Pediatrics and the model is supported by a number of research studies. Encouraging parents to establish and maintain routines also aligns with the *Smalltalk* model. Consultation was undertaken with a sleep expert, Royal Children's Hospital, Murdoch Children's Research Institute and Smalltalk Implementation Specialist, Parenting Research Centre (PRC).

New educational materials and the professional development workshop are designed to help professional Supported playgroup facilitators show families how to brush and share messages about toothbrushing. A toothbrushing demonstration puppet is provided to facilitators to support skill development, as well as engage children and families. A Brush Book Bed supplement for the Activity Kit was produced, including family-centred activities to provide opportunities to talk about sleep and bedtime routines.

Tooth packs (toothbrushes and toothpaste) were provided to families, and new resources developed to support families with practical strategies at home, including tips to help make brushing fun, and bedtime routine chart. A Brushing Chart, storybook, tooth brushing reminder sticker and a list of dental health-themed apps, videos, storybooks and songs were also developed to support parents and carers to engage their child and support a positive experience with toothbrushing.

A small group of families (13) as well as children and educators from Ashwood Children's Service and Kellie O'Connell Kindergarten, were consulted on the design of the two key family resources:

- It's fun to brush (Tooth brushing chart)
- Let's brush (static cling tooth brushing reminder)

A second, culturally appropriate, toothbrushing chart was developed by an Aboriginal artist, to engage Aboriginal families. Yappera Children's Service and VACCA provided advice in the development.

In late 2018, a draft Brush Book Bed package was tested with Tweddle Child and Health staff, VICSEG Playgroup Coordinator and Bass Coast Supported playgroup facilitators. The pilot program was rolled out in 2019.

Error! Reference source not found. page 68.

2.2.5.3 Key evaluation findings – Professional development – Supported playgroup facilitators

This section provides the results of the evaluation of the Baby teeth count too! workshop including: program reach, satisfaction and impact on knowledge and confidence of Supported playgroup facilitators to promote oral health. Professional development activities delivered in MyTime

playgroups were not formally evaluated. Detailed evaluation of the Brush book bed program will be presented in a separate stand-alone report.

During HFHS phase 2, the Baby teeth count too! workshop reached 179 playgroup facilitators from 18 LGAs, which brought the total of facilitators trained to 226 since the program began (see

Table 11). Evaluation feedback forms were completed by 127 playgroup facilitators after completing the training. Facilitators provided their level of agreement with a series of statements about the workshop. Overall, 70% of playgroup facilitators agreed that they were concerned about the oral health of the children attending their playgroup, the remaining 27% neither agreed nor disagree and 3% disagreed. Playgroup facilitators agreed that the workshop content was clear and easy to understand (100%), relevant to their work (98%), and that they planned to use the information provided (98%). Most participants (96%) agreed that they were confident to speak with families about oral health and use the tools and resources (for example flipchart and activities) to assist with this process (98%). Facilitators (98%) agreed that they would recommend the workshop to other playgroup facilitators and were generally satisfied with the workshop. They expressed interest in learning more about particular topics such as availability of local dental services, tooth decay processes, additional activities and resources about oral health for children and families.

Table 11 Number of Playgroup facilitators participating in CPD activities, 2015-2019

Date	Organisation	Training program	Number of participants
28/09/2015	Victorian Cooperative on Children's Services for Ethnic Groups VICSEG - Braybrook site	Supported playgroup flipchart workshop (1hr)	6
16/11/2015	Smith Family (Brimbank)	Supported playgroup flipchart workshop (1hr)	6
28/04/2016	Dandenong Primary School Hub	Supported playgroup flipchart workshop (1hr)	7
16/05/2016	Yarra Ranges	Supported playgroup flipchart workshop (1hr)	5
11/07/2016	Save the Children (Shepparton)	Supported playgroup flipchart workshop (1hr)	8
13/07/2016	City of Hume	Supported playgroup flipchart workshop (1hr)	12
18/07/2016	Merri Health (Fawkner)	Supported playgroup flipchart workshop (1hr)	6
27/07/2016	Merri Health (Glenroy)	Supported playgroup flipchart workshop (1hr)	7
11/08/2016	City of Casey	Supported playgroup flipchart workshop (1hr)	7
16/08/2016	Brimbank City Council/Salvation Army (Sunshine)	Supported playgroup flipchart workshop (1hr)	9
7/09/2016	Hume Hub (Broadmeadows)	Supported playgroup flipchart workshop (1hr)	7
14/09/2016	City of Yarra (Yarra Supported playgroup Providers Network)	Supported playgroup flipchart workshop (1hr)	5
20/09/2016	ISCHS/Launch Housing (St Kilda)	Supported playgroup flipchart workshop (1hr)	4
2/11/2016	Colac Area Health	Supported playgroup flipchart workshop (1hr)	4
10/11/2016	City of Kingston (Mentone)	Supported playgroup flipchart workshop (1hr)	6
15/11/2016	Banyule/Darebin (West Heidelberg)	Supported playgroup flipchart workshop (1hr)	2
23/11/2016	City of Wyndham/Shire of Melton (Tarneit)	Supported playgroup flipchart workshop (1hr)	13
1/12/2016	Sunraysia Community Health/Mildura Council (Mildura)	Supported playgroup flipchart workshop (1hr)	2
16/01/2017	Launch Housing (South Melbourne)	Supported playgroup flipchart workshop (1.5 hr)	5
21/03/2017	Maryborough District Health (Maryborough)	Supported playgroup flipchart workshop (1.5 hr)	2
3/04/2017	Darebin(Thornbury)	Supported playgroup flipchart workshop (1hr)	4
9/05/2017	Barwon Child, Youth & Family (Geelong)	Supported playgroup flipchart workshop (1.5 hr)	7
17/05/2017	City of Whittlesea (Mill Park)	Supported playgroup flipchart workshop (1.5 hr)	2
17/08/2017	Brimbank Council (Sunshine)	Supported playgroup flipchart workshop (1.5 hr)	11
12/06/2018	Swan Hill District Health (Swan Hill)	Supported playgroup flipchart workshop (1hr)	12
12/07/2018	Yarra Ranges Council	Supported playgroup flipchart workshop (1hr)	7
26/7/2018	Tweddle Child and Family Health Service	Supported playgroup flipchart workshop (1hr)	9
19/09/2018	Bass Coast Health and South Gippsland Shire Council (Wonthaggi)	Supported playgroup flipchart workshop (1hr) - trial of Brush Book Bed initiative	4
Total			179

Additional details of feedback from playgroup facilitators can be found in appendix K.

2.2.5.4 Challenges and success factors – Professional development – Supported playgroup facilitators

The Baby teeth count too! workshop provides a simple education package to build capacity for oral health promotion in playgroup settings. HFHS is always mindful of time constraints that Supported playgroup facilitator's face. The program engaged with this professional group using very clear and concise messaging supported by engaging and interactive resources. The training was kept as informal as possible and as brief as possible. Engagement suggests this was a successful strategy although the downside is that it is challenging to cover enough content to ensure facilitators are confident about using the resources and discussing oral health.

Review of the package and training enabled the program to be responsive to the needs of the partners and better align the package with their core business. Feedback from playgroup facilitators was consistent in how useful the flipchart was, it provides prompts and guides the conversations with parents. Feedback from parents was also positive; they found the flipchart very useful with appropriate messages.

Key informant interviews with Supported playgroups partners and the focus group with HFHS team highlighted the challenge of keeping oral health as a focus in non-dental settings. The HFHS team noted the limited time, competing priorities and programs in these playgroup and early childhood settings where oral health many not be viewed as part of their core business.

2.2.5.5 Key recommendations – Professional development – Supported playgroup facilitators

The process evaluation of the Baby teeth count too! workshop showed the workshop was well received with self-reported gains in oral health knowledge and confidence of playgroup facilitators. In light of the evaluation finding, it is recommended that the HFHS program continue offering these professional development activities to Supported playgroup setting-

2.2.6 Overall challenges and success factors - Professional development

Overall professional development activities delivered in phase 2 of the program were found relevant for participant's roles. In cases where professionals had prior training in oral health promotion, through initiatives and programs such as Healthy Together Achievement program, Smiles 4 Miles, Kids Matter and in-service staff training, professional development activities delivered by HFHS program were still considered to add value to the previous training.

Building capacity in oral health using existing policies and guidelines, such as KAS framework and Smalltalk in MCH program and Supported playgroup setting respectively, was another enabler supporting the success of these professional development activities. Professionals from different disciplines reported their intent in using the professional development learnings in their day-to-day practice.

Time constraints and competing priorities, were common concerns across different disciplines; professionals have already busy schedule and adding oral health promotion to the agenda of families with other pressing issues can also be challenging.

Barriers from the families' perspective are another factor to take into account for successful oral health promotion. Barriers such us language, personal and cultural values may make engagement with families challenging.

2.2.7 Key recommendations - Professional development

The following recommendations for the HFHS program are made in response to the findings from the implementation and evaluation of professional development activities over the last four years (2015-2019):

- Continue expanding capacity building and program reach through ongoing training and professional development
- Continue maintaining engagement with trained professionals through ongoing communication and HFHS offering refresher training where applicable
- Continue to respond to partners' priorities, needs, policy and practice environment to ensure professional development activities remain meaningful and appropriate to each sector
- Develop and trial new and innovative strategies to increase traction and uptake of the HFHS professional development activities.

2.3 Tools and resources

Tools and resources is another component of the capacity building framework adopted by HFHS program and continued to play a vital role in phase 2 of the program. As in phase 1, resources were developed and employed to support professional development activities and family engagement.

As part of the continuous improvement process, some resources developed in phase 1 were updated to meet identified gaps and new resources were developed in the current reporting period. Culturally appropriate tools and resources contributed to creating a safe environment for starting conversations around oral health.

The table below (*Table 12*) lists resources developed by the HFHS program in the period 2015-19 and the target audience.

Table 12 List of resources developed by HFHS program, 2015-2019

Date	Resource	Target audience
Sep 2015	<i>Identifying tooth decay (lift the lip)</i> fact sheet made available on webpage Sep 2015	Families
June 2016	Caring for your teeth while pregnant (consumer resource for pregnant Aboriginal women)	Pregnant Aboriginal women
Nov 2016	DAA-DHSV Nutrition & Oral Health Position Statement	Dietitians and other nutrition professionals
June 2017	Little Teeth Book (parent engagement resource for MCH nurses)	MCH nurses
Aug 2017	Tooth Tips translated into 10 community languages (30 fact sheets)	Families
Aug 2019	Baby teeth count too! flipchart (version 2)	Supported playgroup facilitators
Aug 2018	Little Koorie Smiles flipchart	Aboriginal Supported playgroup facilitators
Oct 2018	Baby teeth count too! Activity Kit	Supported playgroup facilitators
Oct 2018	Little Koorie Smiles Activity Kit	Aboriginal Supported playgroup facilitators
Jul 2018	Baby teeth count too! package for library story time (for download from DHSV website) <ul style="list-style-type: none">• Storytime activities (dental themed)• list of dental themed Apps and Videos• 'Free dental visits for children' - handout• list of dental themed Songs• list of dental themed Storybooks• Tooth brushing chart• Tooth brushing chart (black and white version for colouring)• Tooth brushing chart - Aboriginal artwork• Tooth brushing chart - Aboriginal artwork (black and white version for colouring)• Bedtime Routine chart• 6 TIPS to help your kids brush	Library staff and families

Date	Resource	Target audience
Dec 2018	<p>Brush, Book, Bed package</p> <ul style="list-style-type: none"> • Toothbrushing demonstration puppet • Baby teeth count too! flipchart (version 2) • Baby teeth count too! Activity Kit • Brush Book Bed Activity Kit <p>resources for families:</p> <ul style="list-style-type: none"> • Information sheets <ul style="list-style-type: none"> - *Brush Book Bed - steps to a good bedtime routine - *6 Tips to help your kids brush - Looking after your mouth, teeth & gums - How to brush - *List of dental health themed Apps - *List of dental health themed Videos - *List of dental health themed Songs - *List of dental health themed Storybooks • Storybook – Secrets of Solid Teeth • *Bedtime routine chart • *Tooth brushing chart • *Tooth brushing reminder (static sticker for mirror) • Tooth packs (family packs of oral hygiene products) <p>*new resources developed for Brush Book Bed</p>	Supported playgroup facilitators and families

The following section describes the development and implementation of tools and resources for each professional group followed by evaluation findings relevant to each resource where available (Maternal and child health and Supported playgroup sectors only). Additional general evaluation findings pertaining to tools and resources are also included. Evaluation of the resources developed for families was outside the scope of the present evaluation. A synthesis of overall success factors, challenges and recommendations related to tools and resources are brought together at the end of the section.

2.3.1 Maternal and child health nurses

2.3.1.1 Overview - Tools and resources - Maternal and child health nurses

DHSV has a long standing and successful partnership with MCH services. Oral health is embedded in the KAS visits within the MCH services in Victoria and resources supporting the role played by maternal and child health nurses in promotion of oral health have been developed. The Little Teeth Book and Check for tooth decay early (lift the lip) fact sheet are resources developed during phase 2. During the reporting period the Tooth Tips fact sheet were translated into 10 languages. Tooth packs (toothpaste and toothbrushes) were sourced and distributed to families through the MCH services.

2.3.1.2 Implementation - Tools and resources - Maternal and child health nurses

This subsection describes the activities that have culminated with the development of The Little Teeth Book, Check for tooth decay early (lift the lip) fact sheet, translation of the Tooth Tips fact sheet into

other languages than English, and distribution of Tooth packs through different initiatives implemented through the MCH services.

The Little Teeth Book

The Little Teeth Book is a parent engagement tool developed to meet an expressed need from MCH nurses. An out-of-print flipchart resource was referred to during consultation with the sector. The resource was no longer available as key messages were no longer accurate. Additional funding was made available by DHHS to provide a replacement resource. Extensive consultation with MCH nurses was conducted between June 2015 and January 2016. More than 200 MCH nurses provided input through face to face focus groups (86), survey (113) and consumer testing (50). MCH nurses collected feedback on a prototype of the resource with more than 225 parents participating. The table below provides details on the consultation for The Little Teeth Book.

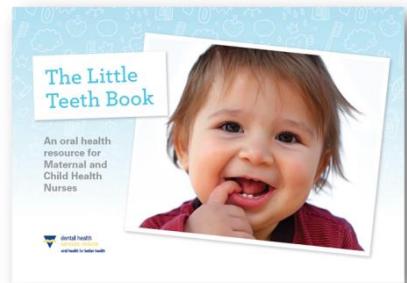


Table 13 Summary of the Little Teeth Book consultation activities, 2015-2016

Date	Consultation	Number of participants
10/06/2015	Face to face consultation (Melton).	20
12/08/2015	Face to face consultation (Brimbank - Sunshine)	5
9/09/2015	Face to face consultation e (Brimbank - Deer Park)	5
16/09/2015	Face to face consultation (Darebin).	14
24/09/2015	Face to face consultation (Casey)	8
29/10/2015	Face to face consultation (Cardinia).	18
11/11/2015	Face to face consultation (Shepparton).	16
Jan 2016	Survey distributed to all MCH services inviting input on parent engagement resource. Responses at Jan 2016.	113
Mar-Apr 2016	Prototype developed and distributed to 10 MCH services for testing with clients. Feedback from 5 MCHN at each service.	50
Total		225

In June 2017 the Little Teeth Book, the new parent engagement resource for MCHN was finalised and distributed to all MCH services (via DET). 2,300 copies were disseminated.

Check for tooth decay early (lift the lip) fact sheet

Check for tooth decay early (lift the lip) fact sheet was developed to complement the Tooth Tips series. This was in direct response to feedback from MCH nurses where they expressed a need for image-based resources to support discussions with families. Identifying tooth decay (lift the lip) fact sheet was made available on the DHSV webpage in September 2015.

The Tooth Tips fact sheet series

The Tooth Tips fact sheet series, produced in phase 1, provides valuable oral health information to families with young children. Originally developed for the MCH service, the



series is available to download for all professionals working with young families. In 2017, the DET approached DHSV concerning translation of the Tooth Tips fact sheet series, in order to meet the needs of families from CALD background, as part of a broader review of resources provided in MCH KAS information Packs. With funding from DET the Tooth Tips fact sheet series was translated into 10 community languages: Arabic, Burmese, Chin (Hakha), Simplified Chinese, Dari, Karen, Khmer, Persian, Punjabi and Vietnamese and made available for download in August 2017. In October 2017 the translated series was also made available on Health Translations Directory at www.healthtranslations.vic.gov.au. DET undertook to print copies for distribution in KAS packs in selected languages.

Tooth packs distribution through the MCH services

In phase 1 of the program (2012-2015) the tooth pack (toothbrushes and toothpaste, and other oral health promotion resources) distribution project was implemented and subsequently a research study was conducted. The pilot study aimed to determine the feasibility, acceptability and impacts of providing Tooth packs to families accessing MCH services in 4 selected LGAs (areas with high risk of tooth decay).

The research findings showed a shift towards improvement of oral hygiene habits of children and families in a socially and culturally diverse cohort. Participating MCH nurses recommended the oral hygiene products should ideally be distributed to younger children (<12 months of age) from families at greater risk of poor oral health.

A grant provided by Colgate in 2015 made it possible to continue providing Tooth packs to families with young children accessing the MCH Universal program in the selected LGAs, through the Mrs Marsh education grant. Due to limits on the amount of product available and feedback received during the evaluation of the initial Tooth packs project, MCH nurses in participating services provided Tooth packs at an earlier visit (around 12 months) and only to families they identified as high needs.

In 2018-2019 DHSV received additional funds from DHHS to enable the expansion of the Tooth pack distribution through the MCH services which had already proven to be feasible and well accepted by the nurses. The project targeted vulnerable families through the Enhanced MCH service across Victoria. Enhanced Maternal and Child Health Program is a more targeted service for families who need extra support and may be at risk of poor outcomes due to a range of factors including severe early parenting issues, prematurity, family violence and low income. Part of the funding was also allocated for provision of toothbrushing models for all MCH offices, including both the universal and the Enhanced program.

Based on evaluation findings from the Tooth packs pilot project, the Baby teeth need cleaning too! initiative was designed in consultation with MCH Program at DET(now part of DHHS) and MAV. The Tooth packs evaluation reported was developed in phase 1 of the program.

The initiative aims to strengthen toothbrushing demonstrations within the MCH program and to improve families' knowledge and awareness of oral hygiene practices for children less than 2 years of age. The strategies used to meet the planned objectives were:

- Provision of mouth models to all MCH services (offices) State-wide to support toothbrushing demonstrations
- Age appropriate toothbrushes and toothpaste for all family members (only for enhanced program)
- Printed oral health resources.

Resources supporting Baby teeth need cleaning too! initiative were distributed to MCH services across the state. Out of the existing 79 local government areas in the state, only one service opted out.

There were some challenges on the implementation and evaluation of this initiative ranging from limited capacity from MCH services to store large amount of Tooth packs and other health promotion resources to challenges on getting the evaluation forms completed. Baby teeth need cleaning too! initiative was 12 months' time bound. However, due to the challenges previously mentioned an extension of 6 months was granted by the funding body.

Baby teeth need cleaning too! Initiative is a joint venture between DHHS, DET, MAV and DHSV. A stand-alone report will be available in early 2020 and findings will be incorporated into the Phase 3 HFHS report.

2.3.1.3 Key evaluation findings - Tools and resources - Maternal and child health nurses

The following evaluation findings report on the distribution and reach of the tools and resources for MCH nurses (where available) and explore MCH nurses' engagement with resource and perspectives' on their appropriateness, usefulness and any further needs.

Information on resource distribution and reach was available for the Little Teeth Book and Tooth packs. Since its publication in June 2017, 2,300 copies of the Little Teeth Book, have been distributed. Tooth packs were distributed by MCH nurses to 2,070 families attending KAS visits in the four participating LGAs (31 January 2015 to 10 December 2018) through the Colgate Mrs Marsh education grant. The majority of Tooth packs were distributed at 8 month (11%), 12 month (17%), 18 month (26%), 2 year (18%) and 3.5 year (19%) visits. Further details of the impact of the Mrs Marsh Tooth packs program are detailed in the *Visual, practical* and interactive resources are important for prompting and facilitating oral health promotion conversations and supporting good oral hygiene practice among families. It is recommended that the HFHS program:

Remain responsive to the needs of partnering sectors and continue to work collaboratively to co-design, develop, update and refine resources as required

Continue to develop resources and initiatives that resonate with the local context and target population, for example, visual and culturally appropriate images for culturally and linguistically diverse groups and Aboriginal communities.

Policy and systems section, page 73. Data tables detailing the Tooth packs distribution, oral health assessments and referrals performed are presented in appendix N.

Qualitative interviews (n=6) exploring the suite of resources and engagement with the MCH sector were positive (The Little Teeth Book, Tooth Tips fact sheets for families, Teeth Manual [professional

reference document], Tooth packs and professional development sessions). Participating MCH nurses worked in metropolitan and regional areas and were using the resources to different extents. Overall MCH nurses identified these resources helped to support their existing practice in routinely delivering oral health messages to parents and carers at KAS visits. These practical tools (such as Tooth Tips and the Little Teeth Book) enabled MCH nurses to initiate discussions, acted as a prompt to bring oral health discussions to the fore and added to their confidence and credibility in discussing oral health with families. MCH nurses reported frequent use of the Tooth Tips which were useful for summarising their verbal advice. The Little Teeth Book appeared to be most popular particularly for use with CALD families because of its simplicity in reinforcing oral health messages and visual imagery (such as images of tooth decay). This helped to clearly convey messages to parents and carers and overcome language barriers. While MCH nurses had recalled using the Teeth Manual at some point in their career, they weren't regularly referring to it.

While not a formal part of the evaluation, great anticipation for the mouth models was expressed by MCH nurses who valued practical resources for demonstrations. Tooth packs were used by MCH nurses in creative ways, for example, during an immunisation session, the MCH nurse would offer Tooth packs to children or others would leave toothbrushes and toothpaste at reception for families in need. Further detailed findings from evaluation interviews exploring MCH resources can be found in appendix G.

2.3.2 Supported playgroup facilitators

2.3.2.1 Overview - Tools and resources - Supported playgroup facilitators

Supported playgroups are an important setting for building capacity in oral health promotion identified through a needs assessment conducted in phase 1 of the program. Baby teeth count too! flipchart, an educational tool that was developed in phase 1 especially for Supported playgroups in consultation with early childhood professionals, was reviewed in the current phase to address identified gaps and meet further needs of the program stakeholders.



2.3.2.2 Implementation - Tools and resources - Supported playgroup facilitators

This subsection looks at the activities that culminated with the review of the Baby teeth count too! flipchart and Activity kit, Little Koorie Smiles package that supports engagement with Aboriginal families, and the more recently developed resources supporting the Brush Book Bed initiative (Brush book Bed package).

Baby teeth count too! flipchart

As part of the continuous improvement cycle, the *Baby teeth count too!* package for Supported playgroups was reviewed. The educational package includes a workshop (professional development) with an A3 flipchart (to support facilitators to share information with parents/carers).

In April 2017, 70 Supported playgroup facilitators (workshop participants) were invited to complete an online survey aimed to gather feedback around how facilitators were using the resource and/or identify any barriers to its use. 22 people responded and the following is a summary of the survey results:

- The flipchart appears to be reaching population groups at higher risk of tooth decay such as CALD, refugee and Aboriginal and Torres Strait Islander SI families.
- Everyone that responded agreed (agreed or strongly agreed) that they were able, confident and wanted to discuss dental health information with families attending their playgroup.
- The majority of those who responded (>85%) were using the information
- The messages are relevant and appropriate with the majority of the messages either Always or Sometimes shared
- The main challenge facilitators face in sharing this information with families, is time.

At the same time, DHSV also met with a key stakeholder, Smalltalk Implementation Specialist, Parenting Research Centre (PRC). Smalltalk is a set of evidence-based parenting strategies implemented by Supported playgroups funded by the Victorian Department of Health and Human Services.

Recommendations from the Parenting Research Centre included better integrating oral health promotion with the philosophy of the Smalltalk program, such as using play opportunities together with conversation skills, to engage parents/carers and children to learn about ‘good oral health habits’.

Baby teeth count too! Activity Kit

Informal feedback from facilitators engaged in the delivery of Baby teeth count too! indicated that some facilitators found it challenging and awkward to introduce oral health as a topic in the Supported playgroup. In response the (Supported playgroup) Activity Kit was developed. The booklet includes family-centred activities, fun and easy-to-use activities, storybook ideas and songs, designed for children and parents to do together and learn about dental health in a playful way. Parent-centred activities are designed to start a conversation and promote discussion with parents and carers, and encourage families to share and learn from each other’s ideas and experiences.

An education consultant was engaged to review the draft Activity Kit, before a comprehensive review was carried out in late 2017. Key stakeholders participated in the consultation process including, Brimbank Council Playgroup Coordinator, VICSEG Playgroup Coordinator, Maribyrnong Early Years Alliance network members, City of Maribyrnong Inclusion Professional, KU Children’s Services.

The comprehensive review process was completed in 2018 and resulted in the current Supported playgroup package which contains:

- redesigned mainstream A3 flipchart (includes information to meet the needs of children with special health care needs), *Baby teeth count too!* [version 2]
- new A3 flipchart for the Aboriginal community, *Little Koorie Smiles*
- new mainstream Activity Kit, *Baby teeth count too!*
- new Activity Kit for the Aboriginal community (including supplies), Little Koorie Smiles

The new Supported playgroup package extends the original *Baby teeth count too!* program. A comprehensive review, engaging key stakeholders and consumers, has identified novel strategies that align with best-practice in the Supported playgroup setting. Professional development and key messages provide professionals who facilitate Supported playgroups with knowledge and confidence to engage in conversations with disadvantaged families about dental health. Resources and activities provide professionals with skills and confidence to interest and engage families about dental health.

The written content of the flipchart was reviewed, considering the messages, language, and tone. With fewer key messages, the aim is that the amount of information to share with families is manageable. Including ‘supporting topics’ enables families to explore practical tips to help adopt healthy habits at home (for example, how to read a food label and helping children try new foods). The resource embeds elements from the Family Partnership Model approach to working with families, encouraging a group discussion, where parents can learn from each other’s experiences and foster practical solutions.

Table 14 Summary of consultation for the review of Baby teeth count too flipchart, Apr 2018 to Jan 2019

Date	Review of draft product	
11/04/2018	Dr Deb Elsby, Acting Head of Unit, Paediatric Dentistry Department, DHSV	1
28/11/2018	MyTime group - Point Cook	9
03/02/2019	Tegan Bert, Support Coordinator, Cerebral Palsy Support Network	1
09/01/2019	Merri Health, Child Health Team & Early Intervention Service	4
Total		16

Reviewing Baby teeth count too! for children with a disability

An identified gap in the Supported playgroup program was catering for the needs of families with young children with a disability and the professionals who support them. MyTime, a playgroup setting for children with a disability, was identified as a potential setting for exploring ways of promoting oral health. MyTime is a national program, providing peer support for parents and carers of children with a disability, developmental delay or chronic medical condition. All MyTime groups have a trained facilitator who provide skilled guidance and help families to access information and services in their area.

The HFHS project officer worked together with DHSV’s Health Promotion Officer – Disability in identifying key stakeholders and conducting a number of interviews with community organisations to inform the review and development of resources to support facilitators working with MyTime peer support playgroups.

Ten consultation meetings were held with input from 20 professionals, along with the Parenting Research Centre (PRC), the MyTime coordinating body. A further 3 meetings were held at MyTime sessions with feedback provided by 25 parents of children with a disability. Refer to the table below for details on the consultation process.

Table 15 Summary of consultation activities with MyTime groups, January -August 2017

Date	Details of consultation	Number of people
23/01/2017	Nicole Telfer, Program Manager, MyTime, Parenting Research Centre	1
10/05/2017	MyTime group Point Cook. Consultation/capacity building session with MyTime playgroup.	6
18/05/2017	MyTime group Werribee. Consultation/capacity building session with MyTime playgroup.	15
22/05/2017	Consultation with AMAZE (peak body for people on the autism spectrum and their supporters in Victoria).	2
6/06/2017	Consultation with Down Syndrome Victoria.	1
7/06/2017	Consultation with Association for Children with a Disability.	1
16/06/2017	Association for Children with a Disability. Consultation/capacity building session with Regional Parent Support workers.	10
21/06/2017	Consultation with Early Childhood Intervention Australia.	1
22/06/2017	MyTime group Altona North. Consultation/capacity building session with MyTime playgroup.	4
4/07/2017	Consultation with speech pathologist at Merri Health to discuss resource to promote oral health among children with a disability.	1
4/07/2017	Consultation with Cerebral Palsy Support Network	1
6/07/2017	Consultation with Dr Kerrod Hallett, Paediatric Dentist, Director, Department of Dentistry, Royal Children's Hospital to discuss project	1
31/08/2017	Consultation with Dr Nicky Kirkpatrick Senior Research Fellow, Murdoch Childrens Research Institute, Royal Children's Hospital to discuss project	1
08/08/2017	Consultation with DHSV clinical experts:	3
15/08/2017	<ul style="list-style-type: none"> • Warren Scnider, Integrated Special Needs Clinical Head of Unit Specialist Care, DHSV • Dr Deb Elsby, Acting Head of Unit, Paediatric Dentistry Department, DHSV • Rana Yawary, Principal Oral Health Advisor State-wide, DHSV (corresponded via email) 	
Total		48

Little Koorie Smiles package

In March 2016, a working group was established to support the planning and delivery of a culturally appropriate resource to engage Aboriginal families in Aboriginal Supported playgroups. Participants included the HFHS team together with representatives of some Aboriginal organisations, including VACCHO, VAHS (Victorian Aboriginal Health Service) and Yappera (Aboriginal) Children's Service, with apologies from VACCA (Victorian Aboriginal Child Care Agency) and DET

Aboriginal Branch. A fundamental outcome from the initial meeting was that the majority of the content of the original Baby teeth count too! flipchart was supported, some additional messages were identified to include, as well as enhancing cultural acceptability through photos, artwork and a new title, Little Koorie Smiles.



DHSV's primary partner in developing the new resource was VACCHO. A photoshoot was arranged with Yappera Children's Service to develop an appropriate photo library together with commissioning Aboriginal artwork.

In mid-2017, a draft Little Koorie Smiles package was piloted. The package included a one-hour workshop, an A3 flipchart and Activity Kit manual, together with supplies to support facilitators to carry out family-centred education activities (ie storybooks, plastic fruit and vegetables). Tooth packs (toothbrushes and toothpaste) were also provided to engage with, and support families at home.

A partnership with VACCA enabled the pilot of the package. Two Koorie playgroup workers attended a one-hour workshop in September 2017. The workshop was designed to increase the capacity of playgroup facilitators in promoting oral health, including dissemination of key messages relevant for young children, as well as familiarising them with the other resources in the package. Aboriginal Supported playgroup facilitators trialled? the package with playgroups during the fourth term of 2017.

Consultation and feedback was provided from VACCA in early 2018, confirming that the package was relevant, appropriate and easy to use. Learning activities and the kit of resources (which includes A3 flipchart, Activity Kit, toothbrushing demonstration puppet, storybooks, plastic fruit and vegetables, and tooth packs) had interested and engaged children and families in dental health, prompting questions around tooth brushing and sugary drinks.

Following this consultation process, Little Koorie Smiles packages (Kits) were produced to expand the implementation in Aboriginal Supported playgroups around the state. State-wide rollout commenced in 2018 and is ongoing. The Little Koorie Smiles package was not part of the formal evaluation. For further details about the use of this resource refer to page [45](#).

Brush, Book, Bed package

In mid-2018 additional funding (\$200,000) enabled DHSV to pilot an innovative initiative to extend the oral health promotion initiative in the Supported playgroup setting. Brush Book Bed aims to strengthen parents' self-efficacy to establish a regular habit of parent-child toothbrushing as many parents say they don't feel confident to carry out toothbrushing and some have never been shown how to brush a young child's teeth.¹⁷ Brush Book Bed was designed to strengthen the focus on positive toothbrushing routines through the Supported playgroup setting by delivering a toothbrushing demonstration via the Supported playgroup facilitators and the provision of a family pack of resources including oral hygiene products. The initiative was designed to complement the existing body of work in the Supported playgroup setting.



Brush Book Bed piloted is an innovative approach, tying toothbrushing to the bedtime routine, to help parents establish a habit of brushing. Brush Book Bed encourages toothbrushing, reading together, and getting to bed at a regular time each night. It follows a similar approach led by the American Academy of Pediatrics and the model is supported by a number of research studies. Encouraging parents to establish and maintain routines also aligns with the *Smalltalk* model. Consultation was undertaken with a sleep expert, Royal Children's Hospital, Murdoch Children's Research Institute and Smalltalk Implementation Specialist, Parenting Research Centre (PRC).

New educational materials and the professional development workshop are designed to help professional Supported playgroup facilitators show families how to brush and share messages about toothbrushing. A toothbrushing demonstration puppet is provided to facilitators to support skill development, as well as engage children and families. A Brush Book Bed supplement for the Activity Kit was produced, including family-centred activities to provide opportunities to talk about sleep and bedtime routines.

Tooth packs (toothbrushes and toothpaste) were provided to families, and new resources developed to support families with practical strategies at home, including tips to help make brushing fun, and bedtime routine chart. A Brushing Chart, storybook, tooth brushing reminder sticker and a list of dental health-themed apps, videos, storybooks and songs were also developed to support parents and carers to engage their child and support a positive experience with toothbrushing.

A small group of families (13) as well as children and educators from Ashwood Children's Service and Kellie O'Connell Kindergarten, were consulted on the design of the two key family resources:

- It's fun to brush (Tooth brushing chart)
- Let's brush (static cling tooth brushing reminder)

A second, culturally appropriate, toothbrushing chart was developed by an Aboriginal artist, to engage Aboriginal families. Yappera Children's Service and VACCA provided advice in the development.

In late 2018, a draft Brush Book Bed package was tested with Tweddle Child and Health staff, VICSEG Playgroup Coordinator and Bass Coast Supported playgroup facilitators. The pilot program was rolled out in 2019.

2.3.2.3 Key evaluation findings - Tools and resources - Supported playgroup facilitators

Feedback from the Baby teeth count too! workshop evaluation (reported on page 55) showed the playgroup flipchart was very well received and many participants described that they thought it would help them feel more confident to discuss oral health with families. Some facilitators thought more handouts/information sheets for families would be useful as well as resources in other languages and information relating to engaging and understanding challenges for families around oral health would be useful.

Detailed evaluation of the Brush book bed program will be presented in a separate stand-alone report and will be available in early 2020.

2.3.3 Library staff and families

2.3.3.1 Overview - Tools and resources - Library staff and families

Public libraries are accessible places and centres of community engagement and education, making them logical choices as partners for improving population health.¹⁸ Public libraries in Melbourne offer educational family centred activities including Storytime programs for preschoolers. Storytime programs in public libraries and the ones for CALD groups are well placed settings for building oral health literacy in a playful way that enables children to have an active role while learning. A set of dental health -themed resources were developed for the Storytime program in 2018 and were used for the first time in the celebration of dental health week in August of the same year.

2.3.3.2 Implementation - Tools and resources - Library staff and families

Storytime resources for public libraries

At a local Early Years network meeting in 2016, the local Library Programs Officer, Gannawarra Shire Council suggested incorporating oral health into childhood literacy programs. DHSV consulted with Library Programs Officer, Gannawarra Shire Council together with Team Leader, Children's & Youth Services, Maribyrnong Library Service and Children and Youth Services Librarian, City of Melbourne to explore the idea further. Following this, draft resources were developed and each party provided feedback on these resources. These draft resources were eventually incorporated in the current version of the Activity kit.

The relationship with the Children and Youth Services Librarian, City of Melbourne has extended into a valuable partnership. City of Melbourne library branches held dental health-themed Storytimes sessions during Dental Health Week in August 2018. Six City of Melbourne library branches conducted a 'Storytimes to celebrate our teeth' session. The librarian read teeth-themed stories to a total of 145 pre-schoolers and families. Children sang songs and participated in craft activities celebrating teeth and good dental health habits.

Resources from the Activity Kit and Brush Book Bed were adapted and made available on the DHSV website. All local council libraries were emailed and invited to take part in dental health-themed story times for Dental Health Week. City of Melbourne participated in Dental Health Week again in 2019 and included a brief ‘how to brush’ demonstration with their groups using the toothbrushing puppet.

In 2019, the idea of delivering a dental health-themed Storytime together with a brief ‘how to brush’ demonstration is being explored with culturally diverse Storytime groups that reach CALD families. The City of Maribyrnong Early Years Bicultural Project Officer supports the idea and DHSV has met with the bicultural workers to seek their advice.

Partnering with Library Services has enabled existing work to be extended to a new setting and new audiences, extending the reach of the program. This initiative works towards building oral health literacy not only for parents but for children as well. Resources for library staff and families were not part of the formal evaluation.

2.3.4 Tools and resources for families

2.3.4.1 Overview - Tools and resources - Families

This section describes the process for producing a cultural appropriate resource for Aboriginal pregnant women. No formal evaluation was conducted.

2.3.4.2 Implementation - Tools and resources - Families

A new consumer information sheet – **Caring for your teeth while pregnant** was developed specifically for Aboriginal pregnant women and as a tool for midwives working within the Koorie Maternity Service to use when discussing oral health with clients (see professional development section). HFHS partnered with VACCHO KMS team to develop a culturally appropriate oral health and pregnancy fact sheet for Aboriginal women. An initial draft was presented in the *Koori Maternity Services Women’s Business Forum* on 30 October 2015 to Aboriginal Health Workers and midwives for further development/input. The prototype with Aboriginal art work was user tested with ten Aboriginal women attending the Mercy Hospital Nangnak Baban Murrup clinic in May 2015. Their feedback was incorporated into the final draft and published in June 2016 as a flyer and made available on the VACCHO and DHSV websites.



During the 2015-2016 period the VACCHO KMS Staff agreed to have the fact sheet content incorporated in the next revision and printing of the booklet for Aboriginal pregnant women - “All you need to know about a healthy pregnancy for a healthy Boorai” (which is part of a suite of materials called the Boorai Bundle). The bundle is provided to all pregnant women using the KMS. Staff

turnover and other priorities at VACCHO have delayed the process. A meeting was held with the new KMS Policy Officer in October 2018 to renew the partnership and highlight past decisions. The KMS Officer agreed to the oral health inclusion and this is currently in progress. Resources for families were not part of the formal evaluation.

The fact sheet is available at: https://www.dhsv.org.au/_data/assets/pdf_file/0006/60477/Caring-for-teeth-while-pregnant-for-Aboriginal-women.pdf

2.3.5 Additional evaluation findings – Tools and resources

Additional feedback on the usefulness of tools and resources overall was captured through evaluation interviews with staff working in Aboriginal Health services and partners in the playgroup sector, pre- and post-workshop questionnaires from early childhood educators and a focus group with the HFHS implementation team.

In interviews, staff working with Aboriginal families highlighted the usefulness of visual, interactive and practical activities and resources to assist with family engagement. The provision of practical resources such as toothbrushes and toothpaste were noted as a key facilitator for reinforcing and enabling families to take action to translate oral health messages to practice. Key informant interviews with partners in the playgroup sector reflected a similar sentiment, whereby receiving resources for their clients made it easier to engage with the playgroup facilitators and, in turn for the facilitators to deliver the oral health promotion to children and families.

“...It's nice to be able to, you know, have the presentation and promote dental health then do a whole program around it. And then the family receives the actual toothbrush and toothpaste. So that just helps them and then they take it home, they see it all the time... It's helped us to actually deliver the [oral health] messages...” (Playgroup key informant B)

Other key enabling resources mentioned were interactive oral health promotion resources that can spark conversation, for example, using posters of local community members, impactful real life images and interactive resources like giant teeth/mouth models. Early childhood educators also reiterated the need for interactive resources to enhance family engagement.

In the evaluation focus group, the HFHS team recognised the benefit of establishing simple and appropriate ways to engage professionals and families in the limited timeframe available through clear concise health messaging and suitable engaging resources as key to the success of the program.

2.3.6 Overall challenges and success factors - Tools and resources

Resources, including Tooth packs, help to initiate oral health conversation, act as a prompt, reinforce messages and support building relationships with families. Visual, practical and interactive resources were preferred across all sectors.

Resources enhanced practice and enable natural conversations to occur particularly with CALD families or high risk groups using simple effective tools. This is of particular importance in light of oral health being a sensitive topic for many of these families.

Preliminary results of the evaluation of the Brush Book Bed initiative validated the feasibility and appropriateness of conducting toothbrushing demonstrations in the Supported playgroup setting. Securing long term funding for extension of this initiative will provide another platform for strengthening links between Supported playgroups and local dental services and subsequently extend dental screens (including fluoride varnish applications to playgroup setting). This is the direction that the program is envisaging taking for the next 4 years funding cycle.

2.3.7 Key recommendations - Tools and resources

Visual, practical and interactive resources are important for prompting and facilitating oral health promotion conversations and supporting good oral hygiene practice among families. It is recommended that the HFHS program:

- Remain responsive to the needs of partnering sectors and continue to work collaboratively to co-design, develop, update and refine resources as required
- Continue to develop resources and initiatives that resonate with the local context and target population, for example, visual and culturally appropriate images for culturally and linguistically diverse groups and Aboriginal communities.

2.4 Policy and systems

Building workforce capacity to improve health is an important element of effective health promotion practice. It increases the range of people, organisations and communities who are able to address health problems, and in particular, problems that arise out of social inequity.¹

Systemic change in oral health promotion requires not only changes in policy, but necessitates the activation of these policies in combination with work across all capacity building elements (partnerships, professional development, tools and resources and policy). The HFHS program uses an integrated multi-levelled and multi-strategic approach that is fundamental for creating supportive environments for the incorporation of oral health promotion into services, systems and practice. Embedding oral health in policy and systems creates the potential for a more sustained change.

In phase 2 HFHS continued to work toward influencing and changing policy and systems and ultimately professional practice through a range of strategies, such as: embedding oral health into policy and guidelines; influencing monitoring systems and strengthening referral pathways.

The following section will describe the extent of incorporation of the oral health promotion activities into practice for each professional group. This is followed by the evaluation findings which bring together the impact of resources, professional development, policy and systems on professional practices (provision of oral health information and resources, oral health assessment and referrals) from the perspectives of key stakeholders in each professional group. Overall challenges and success factors and key recommendations are presented.

2.4.1 Midwives

2.4.1.1 Overview – Policy and systems – Midwives

Midwives are generally the first point of contact for healthcare for pregnant women and are well placed to support women's oral health. Hence, the importance of equipping midwives with the appropriate knowledge, skills, resources, policy and systems to enable the inclusion of oral health promotion within their practice.

MIOH is the training program aimed at developing midwives' capacity to embed oral health promotion within antenatal. For details on MIOH, refer to professional development activities for *Midwives, page 34*. Supportive policy and systems are necessary to support the translation of knowledge and skills, gained through the MIOH training, into changes in practice that impact on pregnant women.

This section provides a synopsis of the activities that were implemented to embed oral health into antenatal policy, systems and professional practice. This comprises the inclusion of oral health in clinical guidelines and in the Birthing Outcome System (BOS) medical record database for pregnant women. A case study outlining work toward strengthening of referral pathways activities between maternity and dental services in Peninsula Health is also presented.

2.4.1.2 Implementation – Policy and systems - Midwives

The HFHS program worked actively to influence policies and systems, to enable the incorporation of oral health promotion into professionals' practice. With a view to creating systems and environments supportive for translating the knowledge and skills acquired from professional development activities into daily practice, the HFHS program played an active role in the updating clinical guidelines on promoting good oral health in pregnancy and influencing monitoring systems and establishment of referral pathways.

Introducing oral health content in clinical guidelines

HFHS was advised of the opportunity to include oral health content into a clinical guideline by a member of the Project Reference Group. Contact was made with the Royal Women's Hospital and HFHS team were invited to review a draft of the Pregnancy Care Handbook - A Guide for Maternity Care Clinicians published by Royal Women's Hospital. The suggested inclusions were accepted and the guideline was published in October 2015.

HFHS program also submitted a proposal to the Royal Australian College of General Practitioners, in September 2015, for the inclusion of 'check oral cavity and referral' in the *Guidelines for preventive activities in general practice chapter on Preventative activities prior to pregnancy*.

HFHS participation and submission to North Western Melbourne Primary Health Network development of pregnancy pathways for Health Pathways Melbourne in April 2017 Health Pathways is a web-based information portal to support primary care clinicians in the assessment and management of common conditions. The inclusion of information about oral health during pregnancy

and referral information in this portal reaches not only midwives but all health professionals involved in the care of pregnant women.

More recently HFHS program played a role on the advocacy for inclusion of oral health in Victorian Maternity Record in September 2018. DHHS agreed to include a point on oral health referral. Lastly, the program (HFHS) had an opportunity to provide input on the content of National Digital Pregnancy Health Record (DPHR). This digital record will bring together records captured across multiple paper and electronic systems in one central location to be shared with healthcare providers. These are activities that still in progress at national level.

Introducing oral health data collection into Birthing Outcomes System

Pilot evaluation of MIOH identified a gap on the medical record database for pregnant women, this prompted HFHS program to advocate for the inclusion of oral health items in to the medical record database used by public maternity services. The same evaluation highlighted the need to include oral health assessment and referral in the Birthing Outcomes System (BOS) medical record database, an integrated pregnancy, birthing and neonatal record used by the majority (approximately 75%) of Victorian public maternity services.

In early 2014 the HFHS team met with the BOS superusers committee of midwives to submit a proposal for the inclusion of oral health in BOS. HFHS, with the support of midwives who had completed the MIOH training program, advocated for inclusion of oral health assessment and referral questions/items. The proposal was accepted and the questions were added to the BOS database in 2015 with most maternity services having the new oral health data sections fully functional by July 2015.

Oral health data is presented in two sections in the BOS; one used by a midwife and the other by the doctor/obstetrician (see appendix L). Apart from the midwives participating in the MIOH training, to our knowledge no other training or information is provided on these newly added items within BOS and completion of these items is not compulsory. Emails and phone calls to/from midwives, who underwent the MIOH training, are used to promote and encourage the use of BOS questions to record oral health activity during antenatal care.

In accordance with the MIOH recommendations and information from the BOS data managers (Management Consultants and Technology Services [MCATS]) oral health assessments and referrals should be completed by the midwife at the women's first antenatal booking visit (or might be completed at subsequent visit if previously missed) and recoded within the BOS (only once). The MIOH oral health assessment includes asking a question about any oral health issues and whether the women have seen a dentist in the last 12 months (see appendix L). However, the approach taken by midwives who have not completed the MIOH training is unknown. These questions are recorded in a Yes/No fields; there is no room for the midwife to specify on the details of what was observed on oral health assessment.

An additional oral health assessment may also be completed as part of the overall physical health check conducted by doctor/obstetrician. The doctor/obstetrician can indicate within BOS whether a women's teeth and gums have been assessed and record their observations, including abnormalities

detected, in the database. However, MIOH training is not offered to doctors and the completion of this information by doctors/obstetricians is not mandatory.

Strengthening referral pathways

The existence of an effective referral system is fundamental for successful implementation of comprehensive oral health promotion interventions and is one of the advocacy areas for the HFHS program.

Peninsula Health was one of the early services engaged in the HFHS MIOH program, who took a whole of service approach to training of their midwives in oral health. A meeting was convened to connect the Peninsula Health Dental Services and Women's Services to explore opportunities to strengthen referral pathways. A working group including Peninsula Health's health promotion team developed a referral form which then progressed into an e-referral project. This model was widely shared with other dental agencies and maternity services.

During 2016 – 2017 HFHS visited maternity services and public dental services in three health regions to promote awareness of the work with midwives around pregnancy. Summary of activities carried out in each of the health regions is described below.

- Grampians Region – meeting with the Grampians Oral Health Network and links made to support Ballarat Health's initiatives focussing on improving access by pregnant women
- Hume Region – meeting with manager of the dental service and the maternity services at Shepparton and Wangaratta
- Gippsland Region – meeting with Sue Charles from Latrobe Community Dental Service to support and mentor her initiative to engage pregnant women with the dental service earlier in their pregnancy. Also visited the maternity services in the region to encourage recruitment and linkage with their local community dental service.

In subsequent years, 2017 and 2018, a close partnership with the project manager of the Eastern Region Oral Health Network (EROHN) lead to initial work with the Eastern Health maternity services at Box Hill Hospital and Angliss Hospital. A professional development session was delivered, in collaboration with Carrington Dental Health and Each Community Dental Service, and the MIOH course was promoted. The EROHN has been successful with introducing a referral template that the five member agencies can adapt for the MCH services which could be adapted for maternity services.

2.4.1.3 Key evaluation findings - Policy and systems - Midwives

Here we report on the evaluation of the use of the oral health items in BOS by midwives and doctors and explore any changes in pregnant women's attendance at public dental services between 2011 and 2018. Follow-up evaluation interviews and questionnaires with midwives, combined with other evaluation data, provides insights into the extent to which oral health promotion has been incorporated within their professional practices, health services and systems. This included exploration of the enablers and barriers experienced in embedding oral health within practice and identifying future needs.

Introducing oral health data collection into Birthing Outcomes System (BOS)

In order to assess the impact and use of the oral health data items included in BOS, in February 2019, the HFHS team requested access to the BOS data on oral health activities from 47 Victorian public maternity services to support evaluation activities. HFHS was advised that two maternity services no longer provide birthing services. A total of 18 services shared their data.

Overall 99,609 antenatal visits were recorded across 18 Victorian maternity services between 1 August 2015 and 31 March 2019. Oral health assessments were performed on 39% (n=38,914) of women who saw a midwife during their antenatal care, and 16% (n=6,248) of these women were referred to dental services by the midwife. Overall, 10% (n=10,173) of all women were referred to dental services regardless of whether they received an oral health assessment. A large proportion of missing data (i.e. responses to questions/items had not been provided by midwives) was observed for oral health assessment (45%) and referral (52%) respectively.

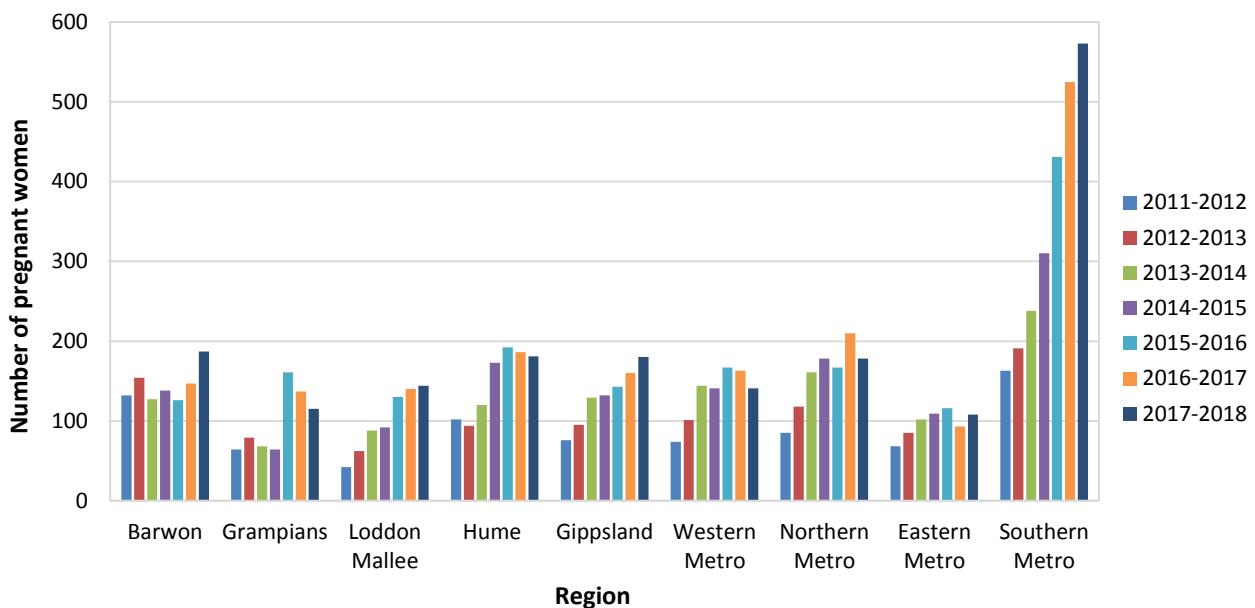
Oral health examinations were performed by doctors/obstetricians on 6% (n=6,472) of all women. Doctors/obstetricians identified oral health issues (such as cavities, gum problems, pain) in 17% (n=1,131) of these women (1% of women overall). The BOS database does not capture whether oral health referrals were made by doctors/obstetricians, however, of the women identified by the doctor/obstetrician as having oral disease 37% (n=414) were reported to have received a dental referral by a midwife.

Wide variations were shown in oral health assessment rates (completed by midwives) and levels of missing data across the 18 maternity services. See further information and full BOS data tables and figures in appendix L.

Pregnant women's attendance at dental services

Overall data for pregnant women attending dental services (obtained from Titanium data set) showed a steady increasing trend in the numbers pregnant women attending dental services from 2011/12 to 2017/18 ([Figure 5](#)[Error! Reference source not found.](#)). A table detailing the numbers pregnant women attending dental services broken down by year and region (2011/12-2017/18) is presented in appendix M.

Figure 5 Pregnant women accessing public dental services 2011/12- 2017/18



The number of pregnant women accessing public dental services in the Southern metro region had a dramatic increase in the last years. This is a region where antenatal services have a strong links with the local public dental services and an e-referral process is in place, as detailed on page 76.

Incorporating oral health into antenatal services, systems and practices

Evaluation questionnaires and interviews with midwives following participation in the MIOH program provided insight into their experiences, barriers and enablers faced in incorporating of oral health promotion within their practice, services and systems. Finding are presented within the following themes: changes in oral health knowledge, confidence and practices of midwives after MIOH training, enabling factors, challenges and future directions and needs for incorporating oral health promotion within practices of midwives.

i. Changes in oral health knowledge, confidence and practices of midwives after MIOH training

In interviews most midwives described that prior to the MIOH training they were inconsistently and very briefly addressing oral health with clients. Similarly, questionnaire responses reflected less than half of midwives discussed tooth decay prevention (including nutrition and oral health advice) with their clients or referred them to dental services. Midwives identified the MIOH training was extremely relevant to their role and despite time constraints and competing priorities felt it was important to include oral health assessment and referral within their practice.

Twelve months following the MIOH training most midwives reported retaining the important oral health concepts learnt, sufficient for use in their practice. They discussed placing greater emphasis and priority on incorporating oral health into their practice facilitated by their new consciousness, knowledge and confidence. Most midwives described routinely performing oral health assessments and providing referrals to dental services, feeling more competent to directly raise oral health conversations with clients, know what to ask and look for in detecting and address oral health issues. However, approaches to referrals differed and were mostly informal.

"[After the MIOH training] I will actually look in their mouth now which I didn't do before because I didn't see the point of looking...now I have a better idea on what I'm looking at... I am able to tell them what I see and what the impact on the pregnancy and themselves." (1163)

ii. Enabling factors for incorporating oral health promotion within practices of midwives

In interviews midwives describe the changes to their practice were facilitated by a range of enabling factors. Newly established relationships with local dental services or strengthening of existing links as a result of participating in MIOH; proximity of dental services to the maternity service; establishment of formal internal referral pathways and follow-up systems all supported the ease of translation of oral health promotion into their practice. Free or low cost dental services for women eligible for public dental services were enabling and motivating factors for both clients as well as midwives who could confidently refer women and ensure priority access to services, as well willingness of clients to have their mouth checked.

"I [now] know how to check for gingivitis and I now do the oral assessment of every woman at her book in. So I'll just ask to have a check of her gums and I look for the signs, the redness, the signs of gingivitis, the inflammation. If they have any then I'll recommend they go straight to the dentist, I'll ask when they last saw a dentist and I'll ask this normally twice, so I look in there at about 24 weeks if I haven't seen the women at booking in, I'll say when was the last time you went to the dentist? And explain why it's so important to go to the dentist... if they have a healthcare card I refer them to the public dental service... we have a priority access for them now, otherwise I refer them to one of the local dentists in town." (1150)

"...For them [clients] it's a relief to know they can go with the healthcare card and get priority access because I think often for adults public dental system has such long waiting list that you have to have an acute need to go, you can't just go for a check-up. So it's really good for them in pregnancy, they are quite motivated of their health to have access to that service readily available." (1150)

Organisational supports where oral health was embedded in the practices of services, offering continuity of care between midwives and other health professionals were viewed as important enablers. Midwives working in Aboriginal communities reflected on the significance of supportive partners, for example, who assisted with transport for clients to dental services and their ongoing relationship with women post-pregnancy.

The BOS system was found to be a useful prompt to discuss oral health; however some midwives reported using different data capturing systems which did not include oral health. These midwives suggested a formal prompt within their systems would be valuable. This validates the focus on influencing systems that support professionals to make oral health part of their everyday practice. These findings are further supported by the results of the analysis of the BOS database showing midwives are recording oral health assessment and referrals within BOS (see findings on page 77) and the rising trend of pregnant women attending Victorian public dental services (see *Figure 5* on page 77).

iii. Challenges for incorporating oral health promotion within practices of midwives

Midwives championing oral health noted that working independently without the support of many colleagues or their organisations posed a challenge for making real sustainable change. Time constraints, competing priorities and complex clients were noted as challenges, particularly common in Aboriginal, low socio-economic and non-English speaking communities. Some midwives worked on a rotational basis, the nature of their role means they are not always based in antenatal care and have less opportunity to implement their learnings into practice. These midwives did, however, see the value in using this information within their other roles, for example, work in nursing. While they found it wasn't always appropriate to apply it, for example, during night shift on the maternity ward, they said they did try find ways to address oral health as appropriate.

"[Working] as a midwife in Aboriginal Health Service is extremely complex, it is not this standard healthy well women...and the motivation level and the ability for people to proactively care for themselves and their teeth is not on people's radar...[it's] tough for these people." (1138)

In interviews and questionnaires at the 12 month follow-up midwives described barriers for their clients including: high needs clients, access to dental services relating to distances and transport issues in some remote communities, unaffordable cost of dental services for low-income families and no access to public dental services without a healthcare card. Midwives noted that while some of their clients go regularly for preventive dental checks, others were unmotivated. This may be due to past negative experience making them reluctant and fearful, only going to the dentist when problems present. A fear of dentist and misconceptions about the safety of dental visits in pregnancy were identified as barriers for clients by some midwives. Additional barriers were noted by midwives working with Aboriginal communities where midwives went above and beyond together with the local dental clinic to dispelling fear of dental visits in mothers, to enable positive associations with dental care among their children. Other challenges included the paperwork needed to prove indigenous status and access free dental coupled with client's language barriers, low literacy, and non-Aboriginal women being unable to access public dental in these communities. Time limitations and organisational issues were also reported barriers.

"The dental practice in [the local area] is run by the Aboriginal cooperation....if you have a certification that you are indigenous it is free...but a lot of people around here don't have that...getting them to do paperwork is difficult...dealing with people who have got a year six reading and comprehension...[it's] very confronting for them....A lot of them don't know their family history...Without a certification there is a cost...it might be \$60 for a round of treatment which doesn't sound like a lot of money but for people on benefits it's a huge amount of money." (1163)

"Women who don't yet have a healthcare card, don't have a high income don't have access to dentists when they're pregnant." (1150)

iv. Future directions and needs for incorporating oral health promotion within midwifery practice Training

Midwives identified further professional development needs to support the incorporation of oral health promotion within their practice including: further knowledge of referral pathways between midwives and dental service, promoting the program widely and providing training for all midwives, a simplified oral health training program for undergraduate midwives and other disciplines such as medicine , refresher training for midwives (updating midwives with new evidence or key concepts, offering short revision courses), training healthcare professionals working with pregnant women and more broadly (for example, GP, obstetricians, MCH nurses, practice nurses, Aboriginal health workers and dentists).

Health systems

To facilitate midwives role and address barriers in access to dental services, midwives suggested the need to establish a referral system that enables access to subsidised, free or low cost dental for all pregnant women and inclusion of oral health in their organisational procedure and antenatal care guidelines. Midwives also expressed the need for established formal uniform referral pathways from maternity services to dental services for sustained inclusion of oral health in midwifery practice.

Additional resources and supports

Tools needed for supporting midwifery practice were also discussed including: prompt within the Victorian Maternity record or other similar systems where oral health prompts arise at subsequent visits if not filled in on the first visit, flipcharts and visual aids (especially for Aboriginal community), toothbrush and toothpaste in packs to include in antenatal resource packs particularly in low socio-economic/Aboriginal community, posters for waiting room (detailing implications of poor oral health), inclusion of oral health in antenatal education classes. One midwife noted the need for a more integrated approach across oral health promotion programs in Victoria.

Midwives described the key skills required to promote oral health within their practice included: embedding oral health within their routine practice, knowledge of oral health and good communication skills to give over the information to clients in simple understandable terms (including the support of appropriate teaching aids/ resources), ability to assess oral health, identify disease and refer to dental services, being empathetic and able to support women from varied social background who may experience a range of barriers. Midwives working in Aboriginal communities had limited funding to offer toothbrush and toothpaste and explained these were useful supportive resources.

For further questionnaire results tables and interview quotes see appendix D and E.

2.4.1.4 Challenges and success factors – Policy and systems - Midwives

The evaluation findings reported in the section above outline some of the challenges and enablers identified by midwives. Refer to discussion of enabling factors and challenges, above, starting on page [79](#). Overall challenges and success factors for the policy and systems section are presented combined on page [90](#).

2.4.2 Maternal and child health nurses

2.4.2.1 Overview – Policy and systems – Maternal and child health nurses

Oral health is embedded within key ages and stages framework that guides the MCH nurses' practice. Professional development activities and supportive resources delivered by the HFHS program seek to support the oral health promotion role of MCH nurses.

The role played by MCH nurses in promotion of oral health in early childhood ranges from giving oral health education, detecting early signs of oral disease to referral children to the dentist.

2.4.2.2 Implementation - Policy and systems – Maternal and child health nurses

Oral health is already embedded within MCH nurses' daily practice. With the view of supporting MCH nurses strengthening their oral health promotion activities, HFHS program focused on delivering professional development activities, development of resources and provision of tools (such as toothpaste, toothbrushes and mouth models for toothbrushing demonstration) to further support professional practice. Professional development sessions were delivered in partnership with local public dental services as a deliberate strategy to strengthen links between MCH and dental services. Referral pathways were included in workshops content. Refer to pages [40](#) and [60](#) respectively for detailed information on professional development activities and tools and resources for MCH nurses.

2.4.2.3 Key evaluation findings - Policy and systems – Maternal and child health nurses

Evaluation findings report on the impact of the Tooth packs program delivered through MCH services (details of the Tooth packs program and distribution are presented in

Tools and resources, page 60). This section includes an analysis of the number of oral health assessments and referrals that were performed as part of the Tooth packs program compared against the state-wide KAS program data. Interviews with MCH nurses further explore their engagement with and perspectives on the range of professional development activities, tools and resources developed for their sector and touch upon their experiences and perspective of incorporating oral health promotion into their practice, the challenges and enablers they faced and future needs.

Performance of oral health assessment and referrals

Consistent with findings from the Tooth packs pilot study,¹⁹ interviews with MCH nurses described that the provision of resources such as Tooth packs enhanced their practices and ability to engage in oral health promotion more naturally with children and families. This was further supported by the overall higher rates of oral health assessments performed by MCH nurses in the Tooth packs sites (92%-100%) compared to state-wide data collected at KAS visits (81%-87%) between 1 July 2016 to 30 June 2017. Notably higher rates of child referrals to dental professionals following an oral health assessment were also shown at Tooth packs sites (24-75%) compared to the state-wide data (1-7%). This reflects and supports Tooth packs as an effective strategy for influencing practice. For further details on Tooth packs distribution and results tables, see appendix N.

The impact of resources and professional development on incorporating oral health assessment and referral into MCH services, systems and practices

i. Enablers for incorporating oral health promotion within practices of MCH nurses

In addition to Tooth packs, interviews with MCH nurses revealed that the suite of HFHS tools, resources and professional development activities for MCH nurses were all found to be key enablers of their oral health promotion practice. Interviews and questionnaires showed MCH nurses were already engaged in oral health promotion as part of their KAS visits/frameworks. However, the range of resources they received and the policy and systems that were in place as part of the HFHS program created a supportive environment which further enabled oral health conversations with families and oral health assessments and referrals to dental services. See

Tools and resources and *Professional development* sections for further information on the impact of these strategies on MCH knowledge, confidence and professional practice. See appendix F for results from the evaluation of the MCH nurse professional development session, including data tables. Detailed themes and quotes from interviews exploring MCH nurse engagement with tools and resources are available in appendix G.

"Before we got the resources I would... cover you know what we have to do within the visit. But with the resources I probably spend a larger proportion of my time during the visit focusing on dental health...." (5003)

"As long as you're providing us with visuals, I think most of us would be very happy, because whether you are from a non-English background or not, I think that once you see these teeth... that has a very strong statement... I think it also adds legitimacy to what we say... So, it's not just the nurse talking. It's in the book. So, it just reinforces the message that we're giving. Your service [DHSV/HFHS] really compliments what we're trying to achieve..." (5001-2)

The MCH nurses reported that the HFHS resources (such as Tooth Tips, Little Teeth Book and Tooth packs) were well received by families and effective in facilitating natural oral health conversations to occur with families. The visual resources, such as clear imagery of dental decay were helpful when working with CALD families. The simple and concise language used in the resources made it easy to convey information. This is of particular relevance to high risk groups who may experience low literacy and for which oral health may be a sensitive topic.

Some enabling skills and competencies were identified by MCH nurses for effective oral health promotion including the ability to build rapport and gain trust of families, and the ability to approach the potentially highly sensitive topic without making the parents feel being judged.

ii. Challenges for incorporating oral health promotion within practices of MCH nurses

MCH nurses identified time and competing priorities in consultations were the biggest constrain in oral health promotion. Other challenges include the need to share one set of resources between multiple MCH nurses at the centre, and the lack of space to display materials.

MCH nurses noted the challenges for parents to implement good oral hygiene practices due to the child's resistance, practices associated with the cultural background and personal values of the parents (for example, the use of Betel nuts and not understanding the importance of the first teeth).

In interviews, MCH explained noted that their services often have existing relationships with the local public dental service. However, referrals to the dentist were often informal and were either verbal or written. Verbal referrals were more common, where it was the parents' responsibility to arrange the appointment. In addition, some challenges were identified in the referral process and affect the chances of the child obtaining dental service. These include the time, distance and expenses of attending an appointment, busy parents, and administrative burden when a MCHN arranges for an appointment for the family.

“... We’re very short on dentists in our immediate area... I think the school still... have a van. And whether there was something similar to preschool children... I think it’s a big barrier... I think the dentist might actually go to [our area] now. But in the past travel [to dental appointments] has been a huge barrier... the cost of travelling to and from appointments and so forth.” (5006)

There is no formal way for a MCH nurses to follow up with families regarding a dental referral, whether public or private. Some MCH nurses reported they may talk to the family at the next KAS visit. Otherwise the MCH nurses would not be made aware of the outcome.

iii. Future directions and needs for incorporating oral health promotion within practices of MCH nurses

Future needs identified by MCH nurses included outreach dental service to childcare centres, increase in availability of public dental service to meet demands and streamlining the referral processes.

2.4.2.4 Challenges and success factors – Policy and systems – MCH nurses

The evaluation findings reported in the section above outline some of the challenges and enablers identified by MCH nurses. Refer to subsections *Enablers for incorporating oral health promotion within practices of MCH nurses* and *Challenges for incorporating oral health promotion within practices of MCH nurses* on page 83. Overall challenges and success factors for the policy and systems section are presented combined on page 90.

2.4.3 Staff working with Aboriginal families

2.4.3.1 Overview – Policy and systems – Staff working with Aboriginal families

Staff working with Aboriginal families play a pivotal role in the delivery of appropriate health promotion activities for the communities and families they work with. The relationship of trust that these professionals have with the community and the family model of care they use are key enablers of the delivery of effective health promotion activities, including oral health, in this setting.

2.4.3.2 Implementation - Policy and systems – Staff working with Aboriginal families

The HFHS program paid special attention to professional development activities targeting professionals working with Aboriginal families and resource development to influence professional practice. For details of professional development activities and resource development refer to pages 43 and 68.

2.4.3.3 Key evaluation findings - Policy and systems – Staff working with Aboriginal families

Follow-up interviews and questionnaires with staff working in Aboriginal Health Services provide insight into their perspectives of the extent to which oral health promotion has been incorporated

within professional practices, health services and systems. Findings explored themes including: changes in oral health knowledge, confidence and practices after participating in the Bigger Better Smiles training, enablers, barriers and future needs for embedding oral health within the professional practices of staff working with Aboriginal families.

i. Changes in oral health knowledge, confidence and practices after Bigger Better Smiles training

Prior to Bigger Better Smiles training, 64% of participants reported that they always/sometimes discussed prevention of tooth decay (providing nutrition and oral health advice) with their clients and 82% of participants reported referring clients to a dental service as part of their usual practice. This was further reflected in follow-up interviews with some participants reporting they were already promoting oral health prior to training in different ways, for example, having general discussions within Aboriginal health checks, encouraging dental check, reviewing oral health during intake, discussing oral health within MCH visits and at kindergarten, providing clients transport to attend dental services and running activities. One midwife reported previously participating in the MIOH pilot project.

During follow-up interviews all participants stated the training increased their awareness of oral health and each took away different learnings (for example, the effects of frequent snacking, recommendations not to brush teeth straight away after morning sickness, ideas about how to talk to children about oral health, implications of poor oral health, more confidence working with Aboriginal clients, new technique for lift the lip in MCH, increased awareness of eligibility for public dental).

Most participants described that the training raised awareness of the importance of oral health, giving it more attention, such as a greater focus on including oral health within health checks, having opportunistic conversations and providing referrals. As participants worked with varied client groups they applied their learnings in different ways, for example, participants working in antenatal care were able to talk to women about the importance of oral care in the early stages of pregnancy and MCH nurses were able to apply the lift the lip training to their existing practice and share this learning with other staff in their organisation. Other professionals had not yet been able to implement changes in their practice but described their intentions to apply their learnings. For example, an in-home support worker planned to add an oral health prompt within the family support plan and participants discussed adding oral health to intake assessments.

“[The training] Cement[ed] for me importance of continuing to have discussions around oral health in pregnancy, it increased or strengthened my understanding of referral processes in regards to referring on in the mid trimester.” (3067)

“Probably the biggest change has been knowing more about public dental health for me and suggesting families go through that path if you know they’ve got healthcare cards.” (3055)

“We check on immunisation, maternal child health checks and those sorts of things but dental wasn’t on the list so, we’ve since put that on.” (3036)

ii. Enablers of oral health promotion practice for staff working with Aboriginal families

Interviews with staff working with Aboriginal families identified important enabling factors that would support the incorporation of oral health promotion within their practice.

Having good relationships, ease of access, referral pathways and proximity to public dental services were key facilitators of oral health promotion practice, particularly referrals to dental services. Bulk billing services that offered priority access for Aboriginal and Torres Strait Islander (ATSI) clients also supported practice. Building rapport between the dental clinic staff and members of the Aboriginal community was also viewed as important as well as generally maintaining ongoing supportive and trusting relationships with clients.

“...Building their relationship with the dental staff... that makes a huge difference because a lot of I mean it is fear of going to the dentist for the parents. And then that fear being passed onto their children...” (3036)

“It takes a fair amount of work and effort to get the trust of the Aboriginal community they don’t hand over their trust lightly. And when you’ve got it, you’ve got to make sure you keep it because you can lose it very quickly.... They’re more likely to trust someone from within their own community than an outsider coming in telling them what to do and how to do it and when to do it.” (3056)

Other relationships with integrated services or programs supported practice such as: participating in other oral health training (for example, MIOH), working collaboratively referring into other services (maternity services, playgroup and in-home support programs) and working together with other services to provide transport to dental services. Involvement and support of organisational management was also identified to support practice. Participants also noted importance of continuity of care facilitated by training the whole service which would allow different professionals in the service to reinforcing oral health messages with clients. This would mean oral health would be more likely to be picked up and discussed by at least one professional if not others and would allow professionals to support each other’s practice and continuity of health messages (for example, the cross over noted by midwives trained in both MIOH and BBS).

Participants notes that the provision of visual, practical and interactive resources complimented their professional practice. See

Tools and resources section on page 59 for further information. Use of simple health messages and practical activities (such as toothbrushing demonstrations, health cooking/eating skills, having a policy/framework, promoting the aesthetic appeal of oral health) were identified as enablers for effective community engagement. Some participants suggested possible ways to engage and familiarise families with dental staff would be through dental visits and provision of oral hygiene products (toothbrush and toothpaste) in a variety of setting (for example, playgroups, gathering places) or at events such as community days, family health check and health promotion days and yarning places to gain more traction and strengthen the relationship, trust and partnerships further. Others mentioned the need for broad reaching media advertisement, Tooth Tips fact sheets and incentives (for example, dental voucher to encourage service use by complex clients).

"And if they are asking the nurse and the health workers, have you got anymore toothpaste, well that just shows its working? People are not taking at home to just, you know, they're using the toothpaste." (3078)

Skills and training needed to promote oral health were identified in interviews including: comprehensive full day training in oral health promotion, awareness and knowledge of available services, having oral health included in the tools/resources staff use (such as family support plans or part of KAS framework), support for health promotion within the organisation, skills in working with Aboriginal community in a culturally appropriate and sensitive way and gaining trust or partnering with local trusted community members, sensitivity working with clients experiencing obvious dental decay.

iii. Challenges of oral health promotion practice for staff working with Aboriginal families

At a system level barriers to accessing dental services such as distance, transport and costs to clients were identified. The additional paperwork involved in identifying client's Aboriginal status was noted by some as a significant a barrier due to the challenges of client literacy, the confronting nature of process for clients and clients limited knowledge and documentation about their family history.

Some participants described limitations in being able to apply learnings from the training due to the nature of their role, for example not working with children or not recognising the relevance of oral health within their position. While others found ways to make it relevant. Other professional constraints included limited time and funds for oral health within the organisation, lack of continuity of care and remembering to promote oral health. One participant noted concern that clients may not listen to non-dental professionals talking about oral health.

Some participants spoke about client related challenges which included: working with complex adult clients (experiencing crisis, family violence, drug or alcohol effected, suicidal, homeless) where oral health was not priority; clients only presenting for care when they experience pain or illness (often abscesses); fear of the dentist and a culture of acceptance of tooth decay/missing teeth among the Aboriginal community. Participants recognised a need for oral health promotion among youth and adults as well as clients affected by drug and alcohol addiction, dispelling fears of dental services, cultural acceptance of poor oral health and clients only presenting for dental care when they experience pain.

"I'm often surprised by the amount of women I see that have missing or broken or decayed teeth that it does not seem to motivate them to change that. And even when we have free access to ATSI women in pregnancy and outside of pregnancy for oral health it's not seen as a priority." (3067)

"I'll see adults with cans of coke and things it is a hard topic to have conversation on sometimes because really entrenched habits and you want to have an ongoing relationship with people... you can't keep harping on about it all the time, people need their can of coke.. I do try to talk about it in other ways, talk to the children 'cos I have seen a lot of parents putting the sweet soft drinks in baby's bottles as well. Try to really discourage. I have had conversations with people telling me that the world would be boring if all the kids had was to drink was water and milk. I try to have conversations... [explaining] sugar is an acquired taste... They are tricky conversations to have." (3105)

Participants reported clients related challenges including: difficulty accessing dental service due to cost, wait times, proximity and limited transport to dental services (particularly in remote areas where dental services were offsite). Many of the professionals reported going above and beyond to support their clients to attend appointments where possible, some offering official transport for clients. Poor client health literacy was also a challenge as well as having conversations addressing parent/carer habits (poor oral health/ healthy eating practices) whilst trying to maintain sensitivity and not wanting to jeopardise trusting relationships. One participant described using bean bags for mouth checks to get children engaged, comfortable and accustomed to the dental experience. In a few settings, however, participants noted that children had very poor oral health and families were difficult to engage with. A few participants noticed a positive shift in young mother's receptiveness and awareness of the importance of addressing their child's oral health.

"When I first started the group of mums who were going through weren't as conscious of health in general. They weren't probably as up to date with their appointments for anything..... Whereas some of the families we've got coming through now are younger mums and they're more aware. And they're more keen to do things like cut out sugar for their children and make sure that they're eating well as well as keeping up with appointments. So, there certainly has been a change in the community as well as just amongst the families that we work with..... We supply toothbrushes and toothpaste as well so that's well taken up." (3036)

Participants described working in varied settings each with different health service systems which impacted their practice and they reported challenges, such as: different intake systems (telephone vs face-to-face intake), dental and other services being separate services and systems, informal and varied referral processes sometimes based on families preferences, inability of childcare professionals to refer children to dental services, many sites report no continuity of care between different health professionals in promoting oral health. A few participants described working in challenging organisational cultures with poor communication between departments and difficulties getting all staff on board.

iv. *Future directions and needs to support oral health promotion practices of staff working with Aboriginal families*

A couple of participants thought refresher training would be useful and an opportunity to capture new staff. Participants described other professionals who they thought could benefit from training including: speech pathologist, children's services, doctors, Aboriginal health workers/youth workers, nurses, midwives (including KMS), MCH nurses, integrated family services, childcare workers (including Koorie specific), teachers, Supported playgroups, local women's refuge, all professionals working with young children and pregnant women, aged care, treatment/drug and alcohol services, staff delivering primary healthcare.

Additional detailed key themes and illustrative quotes from Bigger Better Smiles training interviews Appendix I.

2.4.3.4 Challenges and success factors – Policy and systems – Staff working with Aboriginal families

The evaluation findings reported in the section above outline some of the challenges and enablers identified by staff working with Aboriginal families. Refer to discussion of enablers and challenges starting on page [86](#). Overall challenges and success factors for the policy and systems section are presented combined on page [90](#).

2.4.4 Dietitians

2.4.4.1 Overview – Policy and systems – Dietitians

The synergies between nutrition and the integrity of oral cavity in health and disease are well known. According to the World Health Organisation oral health and nutrition are determinant factors for quality life, are essential for good oral health and share common risks²⁰²¹. Dietitians have knowledge and expertise of nutrition, links between diet and chronic disease. As a result, dietitians are well placed to incorporate oral health promotion within their day-to day practice.

2.4.4.2 Implementation – Policy and systems – Dietitians

Joint Position Statement on Oral Health and Nutrition

A partnership with DAA was established in the phase 1 of the program envisaging the development of a position statement on oral health and nutrition which would guide dietitians to incorporate oral health in their roles. The process for development of the joint position statement was reported in 2015.

The joint position statement was widely shared through the DAA and DHSV websites. In October 2016 it was uploaded on the Global website— PEN – Practice-based Evidence in Nutrition <https://www.pennutrition.com/index.aspx>. This website is used by 8 member nations (Canada, UK, Spain, Pakistan, South Africa, NZ, Australia and Japan. From June 2016 – April 2019 it has resulted in 31 hits. The DHSV site with the Joint Position Statement has had 913 hits from July 2016 – May 2019, at this stage the number of hits through DAA website is not available.

2.4.5 Overall challenges and success factors – Policy and systems

Similar to phase 1, time constraints continue to be a main challenge reported by almost all professional groups engaged with the program in this phase; professionals find challenging to include oral health discussions in their already busy schedule. Moreover, language barriers, affordability of dental care, personal values and views of oral health were other challenges identified by professionals. Relying on partners with busy schedules or where oral health is not as strongly embedded in practice can result in unpredictable timelines.

However, innovative oral health approaches were used by the HFHS program to overcome some of the challenges; from development of pictorial resources using simple language to incorporation of toothbrushing habits as part of the bedtime routine.

The addition of oral health questions within BOS as an adjunct to the MIOH training has provided system level support and a prompt to encourage the inclusion of oral health in promotion, assessment and referrals in midwifery practice as well as evidence of the practical implementation of these activities.

The BOS system is available in the majority of public maternity services. Differences in recorded oral health assessment across the 18 maternity services may relate to variations in uptake of MIOH training in the different services, midwives not filling in BOS and/or performing an oral health assessment, lack of knowledge and confidence about what an oral health assessment includes and limited recognition of the importance of oral health in pregnancy.

Higher referral rates in some sites might be explained by sites with higher numbers of antenatal care midwives trained in MIOH, senior midwives being trained that may influence practice in their service, direct referral relationship with public dental services in some sites and other sites where the local dental service had its own program of in-service training and a referral pathway for the midwives to use. Within larger metropolitan maternity services the range of roles of antenatal care midwives is varied. Midwives working on rotation, for example, may be less able to influence policy than sites where there may be dedicated staff in the antenatal clinic. Referrals could also be hindered in larger metropolitan services with wide catchment areas as they may lack partnership with the local public dental service.

Services with large percentages of incomplete (missing) data may be explained by the absence of any midwives trained in MIOH (some sites were not a focus for MIOH recruitment), some sites may offer GP led care and in other sites the midwives completing MIOH may not have been involved with direct service provision.

Evaluation findings suggest the intensive efforts in training midwives, the numbers of midwives trained and the addition of oral health items in BOS have likely significantly influenced the increasing trend toward more pregnant women attending public dental services. However, limitations of the available data (for example, inability to indicate midwives as a referral source, changes in recording

and capturing of priority access within Titanium) reduce the ability prove the link between public dental service use and implementation of the MIOH program.

The absence of formal referral pathways between health and early childhood services and dental service was identified across sectors by midwives, MCH nurses, staff working with Aboriginal communities, as a key barrier hindering to the successful incorporation of oral health promotion, assessment and referrals in their practice. Work in the Southern metro region (case study described on page [76](#)) provides an example of a site where the availability of an e-referral systems between maternity and dental services and developing links between dental and other health services has resulted in an increase in the numbers of pregnant women accessing dental care (refer to [Figure 5](#))

A significant challenge in formalising referral pathways and strengthening links between dental and referring services is the de-centralised model of public dental in Victoria. DHSV purchases dental services from community health services, all of which have their own policies, practices and infrastructure that support referral. Influencing referral systems across more than 50 community dental agencies and multiple referring services is resource intensive.

The provision of Tooth packs was shown to promote the performance of oral health assessment and referral by MCH nurses. Tooth packs as an adjunct to the inclusion of oral health in the KAS framework are key policies and systems that affect MCH practice.

2.4.6 Key recommendations – Policy and systems

In response to the findings from the evaluation of the impact of the HFHS program on policies and systems the following recommendations are made:

Continue to strengthen links between health, early childhood services and local public dental agencies to improve access to dental services

Support the implementation of oral health promotion, assessment and referrals into practice by:

- Continuing to explore the establishment of formal referral pathways between health, early childhood services and public dental agencies (including systems to capture referral sources)
- Continuing to encourage and promote the use of oral health items within the antenatal care database, specifically the Birthing Outcomes System, by midwives working in public maternity services
- Advocating for funding to support state-wide distribution of Tooth packs

Leverage off established HFHS knowledge, programs and partnership to support and align with new programs and political contexts such as the School Dental Program and the Victorian public health and wellbeing plan (2019–2023).

Lobby to sustain the ongoing investment in oral health for pregnant women and very young children as an essential part of the continuum of care within the context of the new investment in the School Dental Program.

Extend prior work and established partnerships to explore and trial innovative approaches strengthening integration of health promotion programs with clinical prevention and treatment services.

2.5 Reporting and dissemination

One of the strategies that the program uses to maintain existing partnerships and build new ones is sharing information. HFHS team members use different platforms for sharing information, including: program updates, conferences, seminars, program newsletters, internal and external newsletters.

Program newsletters are an effective strategy of maintain communication with program partners and stakeholders. They are useful for supporting engagement and recruitment of professionals for the initiatives.

By sharing and disseminating information the program is kept on everyone's agenda. HFHS uses the program governance structures, stakeholders' data base to regularly send newsletters that features program updates and other relevant information. The newsletters have proven to be excellent means for program exposure. For instance, in 2018 following a HFHS article on the MCH newsletter the program received an email from the CEO Playgroup Victoria a subsequent meeting aiming to explore partnership with both organisations taking place.

As the program has matured and evolved the evidence of effectiveness has also grown. Conference and seminar presentations have also been used to disseminate these findings. This also helps to raise the profile of oral health and legitimise the role of non-dental professionals in promoting oral health. In 2019 an article about the Tooth packs research was published in a renowned peer review journal. This enabled DHSV to contribute building evidence for effective oral health promotion in an Australian context.

A summary of reporting and dissemination relating to HFHS program activities from 2015-2019 is presented below.

Conferences and seminars

- National Oral Health Promotion Clearinghouse Workshop - Evaluation of oral health promotion, 27 September 2017, Adelaide. Healthy Families, Healthy Smiles presentation delivered by the then HFHS Manager and the Evaluation and Research Officer.
- Australian Health Promotion Association (AHPA) conference, Bigger Better Smiles presentation June 2016
- Public Health Association of Australia in 12-14 June 2019. One of the HFHS project officers delivered 2 short presentations at Public Health Association of Australia in 12-14 June 2019:
 - *Midwives adding the mouth to the bump in their antenatal care role*
 - *Developing policy to extend the bite in the role of dietitians*, co-presented with a Dietitians Association of Australia representative.

Peer reviewed journal publications

- Tooth packs publication in the journal Health Promotion International, 2019, 1-11 *Family-centred oral health promotion through Victorian child-health services: a pilot*

Award submissions

- In October 2016 the Baby teeth count too! oral health information flipchart and education package for the Supported playgroup setting was a finalist in the 2016 Victorian Early Years Awards - 'Promoting children's health and wellbeing' category.

- In November 2016 the Healthy Families, Healthy Smiles program was a finalist in the project category of DHSV's Public Oral Health Awards.

Global leadership

- Showcasing of Healthy Families, Healthy Smiles to international visitors – Churchill Foundation Fellowship, Shanghai Songjiang District Women's Federation and Vanuatu Ministry of Health, Oral Health Promotion and Prevention Unit.

Media coverage

- Various media coverage including a radio interview in November 2015 and articles in various publications including: 11 articles featuring in 10 editions of Word of Mouth (DHSV newsletter), for detailed information of articles in Word of Mouth refer to [Table 16](#); PHAA Intouch newsletter March 2016 - *Dietitians biting into oral health: The development of a joint position statement on oral health and nutrition*, Health Victoria Newsletter August 2017 issue - The Little Teeth Book; Health Translations Directory Newsletter November 2017 - translated Tooth Tips available in 10 languages; MCH Bulletin - 2 articles August and December 2018 about Tooth packs initiative and , a HFHS article '*Start a conversation around dental health in early years settings*' featured on the Prevention health blog in June 2019.

Program Newsletters

- 6 *Healthy Families, Healthy Smiles* newsletters distributed to more than 400 stakeholders and 2 *Oral Health and Pregnancy* newsletters distributed to more than 260 midwifery and antenatal service provider stakeholders.

Promoting program resources

- A Professional fact sheet– Nutrition & Oral Health Position Statement was developed to promote the Joint Position Statement on Oral Health and Nutrition and distributed with conference materials at the Nutrition Society of Australia Annual Scientific Congress – Melbourne held 29 November 2016 to approximately 300 nutrition professionals.

Table 16 HFHS articles featuring WoM editions, 2015-19

Date	Article
Jun 2019	International recognition for DHSV Tooth-Packs initiative
May 2019	Bigger Better Smiles in Swan Hill DHSV delivered the Bigger Better Smiles training at Mallee District Aboriginal Services (MDAS)in Swan Hill last month.
Mar 2019	Thinking outside the square: adding tooth brushing to playgroups
Aug 2018	Storytime sessions at local libraries
Mar 2018	Oral health training for midwives
Jan 2017	Caring for your teeth while pregnant': a new fact sheet for Aboriginal women
Feb 2016	Joint DHSV and dietitian partnership has plenty of bite
Jul 2016	A DHSV health promotion activity goes to the National Australia Health Promotion Conference in Perth
Nov 2016	Public Oral Health Awards, HSHF finalist for Oral Health project of the year
Aug 2015	More pregnant women accessing dental care at Peninsula Health

2.5.1 Key recommendation – Reporting and dissemination

- Continue maintaining regular communication with program stakeholders and increase the HFHS program audience through newsletters, participation in conferences and other avenues.

3 Priorities for the next 4 year phase (2019-2023)

Evaluation of the HFHS program 2015-2019 has informed the areas of focus for the next four year funding cycle. Key recommendations based on the current evaluation are as follows:

- Maintain and strengthen existing partnerships and explore opportunities for new partnerships to broaden the program reach and impact
- Continue exploring new ways of working collaboratively with program partners to embed oral health within their organisational policies and practices as the program evolves
- Continue working closely and collaboratively with partners to remain responsive to emerging oral health needs, changes in policies, guidelines and priorities.
- Continue expanding capacity building and program reach through ongoing training and professional development
- Continue maintaining engagement with trained professionals through ongoing communication and HFHS offering refresher training where applicable
- Continue to respond to partners' priorities, needs, policy and practice environment to ensure professional development activities remain meaningful and appropriate to each sector
- Develop and trial new and innovative strategies to increase traction and uptake of the HFHS professional development activities.
- Remain responsive to the needs of partnering sectors and continue to work collaboratively to co-design, develop, update and refine resources as required, ensuring resources resonate with the local context and target population
- Continue to develop resources and initiatives that resonate with the local context and target population, for example, visual and culturally appropriate images for culturally and linguistically diverse groups and Aboriginal communities
- Continue to strengthen links between health, early childhood services and local public dental agencies to improve access to dental services
- Support the implementation of oral health promotion, assessment and referrals into practice by:
 - Continuing to explore the establishment of formal referral pathways between health, early childhood services and public dental agencies (including systems to capture referral sources)
 - Continuing to encourage and promote the use of oral health items within the antenatal care database, specifically the Birthing Outcomes System, by midwives working in public maternity services
 - Advocating for funding to support state-wide distribution of Tooth packs

- Leverage off established HFHS knowledge, programs and partnership to support and align with new programs and political contexts such as the School Dental Program and the Victorian public health and wellbeing plan (2019–2023).
- Lobby to sustain the ongoing investment in oral health for pregnant women and very young children as an essential part of the continuum of care within the context of the new investment in the School Dental Program.
- Extend prior work and established partnerships to explore and trial innovative approaches strengthening integration of health promotion programs with clinical prevention and treatment services.
- Continue maintaining regular communication with program stakeholders and increase the HFHS program audience through newsletters, participation in conferences and other avenues.

The direction of the program for the next 4 years will be informed by the findings from the current evaluation. The HFHS program will utilise evaluation findings and recommendations as part of the continuous improvement process in the development and refinement of partnerships, professional development activities, tools and resources, policies and systems.

The program will continue to search for new avenues for partnership and expand the pool of non-dental workforce who plays a role in oral health promotion. There is a potential of expanding activities in the Supported playgroup setting. Preliminary results of the evaluation of the Brush Book Bed initiative validated the feasibility and appropriateness of conducting toothbrushing demonstrations in the Supported playgroup setting. The next step to be taken by the program is to link Supported playgroup setting with local dental services and support improved access to screening and preventive outreach such as offering fluoride varnish in this setting.

Another area of focus for the next four year phase is the strengthening of referral pathways; the program envisages working collaboratively with our partners to explore ways of reinforcing relationships with local dental services.

Lastly, the school dental program brings a major change in the oral health promotion landscape in Victoria. This change has potential to increase awareness and interest of oral health and strengthening links between health promotion programs and community dental services.

4 List of appendices

Detailed appendices are available for reference in a separate document. The appendix titles and page numbers are listed below:

Appendix A: Midwifery partnership interview overview of themes and illustrative quotes.....	2
Appendix B: Playgroup partnership interviews overview of themes and illustrative quotes	7
Appendix C: Evaluation and reflection on implementation of HFHS over the past four years - overview of themes and illustrative quotes – Focus group with the HFHS team.....	13
Appendix D: Midwifery Initiated Oral Health (MIOH) education program evaluation questionnaire overview and tables	25
Appendix E: Midwifery Initiated Oral Health education program (MIOH) follow-up key informant interviews overview of themes and illustrative quotes	58
Appendix F: Maternal and Child Health (MCH) nurse Professional development overview and tables	72
Appendix G: Maternal and child health (MCH) nurse key informant interviews overview of themes and illustrative quotes.....	76
Appendix H: Bigger Better Smiles questionnaire overview and tables.....	96
Appendix I: Bigger Better Smiles follow-up key informant interviews overview of themes and illustrative quotes.....	109
Appendix J: Healthy Little Smiles questionnaire overview and tables	127
Appendix K: Playgroup facilitators feedback	139
Appendix L: Birthing outcomes system (BOS) antenatal data capturing system tables and figures....	140
Appendix M: Dental services accessed by pregnant women (2011-2018) (Titanium data table)	145
Appendix N: Mrs Marsh Tooth packs distribution evaluation overview and tables of results.....	146

Table 17 : Overview of HFHS program implementation, 2015-2019

Professional group	Professional development	Tools and resources	Policy & Systems	Reporting & dissemination	Professionals trained
Midwives and other antenatal professionals	Online training program with 16 CPD points	Midwifery Initiated Oral Health education program (MIOH).	Oral health embedded in antenatal care	<u>Publications:</u> HFHS newsletter <u>Conferences:</u> <ul style="list-style-type: none">• Australian Nurses and Midwives Conference 2015• Childbirth and Parenting Educators Australia (CAPEA) 2018• Public health Association of Australia 2019	311
	Pregnancy and oral health presentation to antenatal care professionals	Pregnancy fact sheet Oral health questions included in the Birthing Outcomes System (BOS)	Oral health questions included in the Birthing Outcomes System (BOS)		
	Presentation in conferences (Childbirth and Parenting Educators Association; Australian Nurses & Midwives conference)	Conference presentation - Childbirth and Parenting Educators Association			
		Oral health and pregnancy Presentation of MIOH evaluation findings			
Maternal Child Health Nurses	Oral health presentation	Little teeth book Tooth tips resource How to brush resource	Oral health embedded in MCH Key Ages and Stages framework	<u>Publications:</u> HFHS newsletter; MCH Bulletin; Health Victoria newsletter; Health translation Directory newsletter <u>Conferences:</u> <ul style="list-style-type: none">• Australian Nurses and Midwives Conference 2015• Childbirth and Parenting Educators Australia (CAPEA) 2018• Public health Association of Australia 2019	1285
	Introduction of Baby Teeth Need Cleaning Too! initiative	Baby teeth need cleaning too! supporting resources (little teeth book, how to brush, list of Apps/Videos; List of story books, Baby teeth need cleaning too information guide, family tooth packs)			
	Launch of Baby Teeth Need Cleaning Too! initiative				
	Training in implementation of Baby Teeth Need Cleaning Too! initiative				
Graduate Diploma in Child and Family Nursery Students (MCH nurse students)	Oral health promotion lecture	Little teeth book Tooth tips resource How to brush resource	Oral health embedded in the tertiary education	HFHS program newsletters	154

Professional group	Professional development	Tools and resources	Policy & Systems	Reporting & dissemination	Professionals trained
Early Parenting Professionals	Oral health presentation to Early Parenting Practitioners	Baby teeth count too flipchart	Oral Health embedded in Early Parenting programs	<u>Publications:</u> HFHS newsletters, DHHS Prevention health blog <u>Conferences:</u> <ul style="list-style-type: none"> National Oral Health Promotion Clearinghouse workshop in 2017 Childbirth and Parenting Educators Australia (CAPEA) 2018 	59
	Consultation and capacity building session (Association for Children with Disability)	Baby teeth count too flipchart - adaptation for disability settings	Oral health embedded in services supporting children with disability		
Early Childhood Professionals	Healthy Little Smiles workshop	Healthy Little Smiles package	Early childhood professionals supported to promote oral health - oral health promotion linked with the National Quality Framework in use in the setting	<u>Publications:</u> HFHS newsletters, DHHS Prevention health blog <u>Conferences:</u> <ul style="list-style-type: none"> National Oral Health Promotion Clearinghouse workshop in 2017 Childbirth and Parenting Educators Australia (CAPEA) 2018 	389
	Oral health promotion training session				
Supported Playgroups	Consultation and capacity building session with MyTime playgroups (Altona, Werribee, Point Cook)	Oral health presentation	Supported playgroup facilitators provided with knowledge, tools and resources to promote oral health Tooth brushing embedded in bedtime routine	<u>Publications:</u> HFHS newsletters, DHHS Prevention health blog <ul style="list-style-type: none"> <u>Conferences:</u> <ul style="list-style-type: none"> National Oral Health Promotion Clearinghouse workshop in 2017 Childbirth and Parenting Educators Australia (CAPEA) 2018 	329
	Supported playgroup facilitator training	Baby teeth count too flipchart Little Koorie Smiles flipchart			
	Brush Book Bed workshops	Brush Book Bed package			

Professional group	Professional development	Tools and resources	Policy & Systems	Reporting & dissemination	Professionals trained
Aboriginal Health Workers	Bigger Better Smiles workshop	Bigger Better Smiles - Oral health education program	Oral health embedded in pregnancy and early childhood services in Aboriginal Community Controlled Health Organisations (ACCHOs)	<u>Publications:</u> HFHS newsletters <u>Conferences:</u> National Oral Health Promotion Clearinghouse workshop in 2017	131
	Oral health CPD workshop	Oral health presentation			
	ECE/EP professionals working with Aboriginal families	Bigger Better Smiles - modified version			
Dietitians	Launch of the DAA-DHSV Joint position statement oral health and nutrition	Online resource outlining the position statement	DHSV/DAA Joint Position Statement	<u>Publications:</u> Public Health Association of Australia Intouch newsletter; HFHS newsletters, DHSV website, DAA website, Practice-based Evidence in Nutrition - PEN website (a global website) <u>Conferences:</u> Nutrition Society of Australia Annual Scientific Congress - Public health Association of Australia 12-12 June 2019	64
	Webinar - putting the mouth back into dietetics		Oral health embedded in dietitians everyday business		
Oral health professionals	Lecturers to BOH students on health promotion in practice	Lecture and program resources	BOH provided with knowledge, tools and resources to promote oral health	<u>Publications:</u> HFHS newsletters; DHSV Word of Mouth Newsletter <u>Conferences:</u> • National Oral Health Promotion Clearinghouse workshop in 2017	137
Other professionals	Presentation of evaluation findings of Bigger Better Smiles	Evaluation of Bigger better Smiles		<u>Publications:</u> HFHS newsletters	26
	Dental health workshop	Baby teeth count too flipchart		<u>Conferences:</u> • National Oral Health Promotion Clearinghouse workshop in 2017	
					2885

5 References

- ¹ Australian Dental Association & Australian Health Policy Collaboration 2018. *Oral Health Tracker – Australia's Children and young people*. Accessed at <https://www.ada.org.au/Dental-professionals/Australia-s-Oral-Health-Tracker>. April 2019
- ² DHSV, 2016. Victorian pre-schooler oral health survey. Accessed at <https://www.dhsv.org.au/news/news-stories/general-news-stories/2016-news/victorian-first-insight-into-pre-schoolers-oral-health-revealed> September 2018
- ³ NSW Health. A Framework for Building Capacity to Improve Health. NSW Health Department; 2001
- ⁴ Silk H, Douglass AB, Douglass JM, Silk L. Oral health during pregnancy. Am Fam Physician. 2008;77(8):1139-44.
- ⁵ Johnson M, George A, Dahlen H, Ajwani S, Bhole S, Blinkhorn A, et al. The midwifery initiated oral health-dental service protocol: an intervention to improve oral health outcomes for pregnant women. BMC oral health. 2015;15:2.
- ⁶ Bahramian, H., Mohebbi, S.Z., Khami, M.R. et al. Qualitative exploration of barriers and facilitators of dental service utilization of pregnant women: A triangulation approach. BMC Pregnancy Childbirth 18, 153 (2018) doi:10.1186/s12884-018-1773-6
- ⁷ Dahlen HG, Johnson M, Hoolsema J, Norrie TP, Ajwani S, Blinkhorn A, et al. Process evaluation of the midwifery initiated oral health-dental service program: Perceptions of midwives in Greater Western Sydney, Australia. Women birth. 2019;32(2):e159-e65.
- ⁸ Heilbrunn-Lang AY, de Silva AM, Lang G, George A, Ridge A, Johnson M, et al. Midwives' perspectives of their ability to promote the oral health of pregnant women in Victoria, Australia. BMC pregnancy childbirth. 2015;15:110.
- ⁹ Australian Institute of Health and Welfare 2013. Nursing and midwifery workforce 2012. National Health Workforce series no.6.Cat.no.HWL 52. Canberra: AIHW
- ¹⁰ Aboriginal Health and Medical Research Council (AHMRC). AHMRC Oral Health Position Paper: Achieving oral health equity for Aboriginal communities in NSW. Sydney: AHMRC; 2016.
- ¹¹ Rogers J. Evidence-based oral health promotion resource. Melbourne: Prevention and Population Health Branch, Government of Victoria, Department of Health; 2011.
- ¹² Australian Dental Association and Australian Health Policy Collaboration. Australia's children and young people: Oral health tracker 2018 [cited 2019 April]. Available from: <https://www.ada.org.au/Dental-professionals/Australia-s-Oral-Health-Tracker>.
- ¹³ Dental Health Services Victoria. Victorian-first insight into pre-schooler's oral health revealed 2016 [cited 2018 September]. Available from: <https://www.dhsv.org.au/news/news-stories/general-news-stories/2016-news/victorian-first-insight-into-pre-schoolers-oral-health-revealed>.
- ¹⁴ Dadich A, Spooner C. Evaluating playgroups: An examination of issues and options. The Australian Community Psychologist. 2008;20(1):95-104.
- ¹⁵ Williams, K., Berthelsen, D., Nicholson, J., & Viviani, M. (2015) Systematic literature review: Research on Supported playgroups. Brisbane: School of Early Childhood, Queensland University of Technology. Available from <http://eprints.qut.edu.au/91439/>
- ¹⁶ Department of Education and Training , Supported playgroup: policy and funding guidelines 2016. Available from : <https://www.education.vic.gov.au/childhood/providers/funding/Pages/supportedplaygroups.aspx>

¹⁷ The Royal Children's Hospital Melbourne. RCH National Child Health Poll, Child oral health: Habits in Australian homes Melbourne: The Royal Children's Hospital Melbourne; 2018 [cited 2019 April]. Available from: <https://www.rchpoll.org.au/polls/child-oral-health-habits-in-australian-homes/>.

¹⁸ Whiteman ED, Dpuis R, Morgan A U, D'Alonzo B, Epstein C, Klusaritz H, et al. Public libraries as partners for health. *Prev Chronic Dis.* 2018; 15:170392. doi: <https://doi.org/10.5888/pcd15.170392>.

¹⁹ Heilbrunn-Lang AY, Carpenter LM, de Silva AM, Meyenn LK, Lang G, Ridge A, et al. Family-centred oral health promotion through Victorian child-health services: a pilot. *Health Promot Int.* 2019.

²⁰ Joint WHO/FAO Expert Consultation. Diet, Nutrition and the Prevention of Chronic Diseases. Technical Report Series 916 Geneva, World Health Organization, 2003.

²¹ Petersen PK. The World Oral Health Report 2003. Continuous improvement of oral health in the 21st century—the approach of the WGHO Global Health Programme. Geneva: World Health Organization, 2003.