Healthy Families, Healthy Smiles

Evaluation Report 2019-23

SEPTEMBER 2023

dental health services victoria
oral health for better health

State Government Victoria

healthy families healthy smiles

Table of contents

List of tables

List of figures

Acronyms and abbreviations

ACCHOs	Aboriginal Community Controlled Health Organisations
ACCOs	Aboriginal Community Controlled Organisations
ACM	Australian College of Midwives
ACIOH	Australian Centre for Integration of Oral Health
ADOHTA	Australian Dental and Oral Health Therapists' Association
BADAC	Ballarat and District Aboriginal Co-operative
BBB	Brush Book Bed
BOS	Birthing Outcomes System
CALD	Culturally and linguistically diverse
CPD	Continuing professional development
DA	Dietitians Australia
DET	Department of Education and Training
DFFH	Department of Families, Fairness and Housing
DH	Department of Health (formerly Department of Health and Human Services-DHHS)
DHSV	Dental Health Services Victoria
EPC	Early Parenting Centre
GP	General Practitioner
HFHS	Healthy Families, Healthy Smiles
KAS	Key Ages and Stages
KMS	Koori Maternity Services
LGA	Local Government Areas
LMARG	Loddon Mallee Aboriginal Reference Group
LMS	Learning management system
MAV	Municipal Association of Victoria
MCH	Maternal and child health
MDAS	Mallee District Aboriginal Service
MIOH	Midwifery Initiated Oral Health education program
VACCA	Victorian Aboriginal Child Care Agency
VACCHO	Victorian Aboriginal Community Controlled Health Organisation
VAHS	Victorian Aboriginal Health Service
VEYLDF	Victorian Early Years Learning and Development Framework
VICSEG	Victorian Cooperative on Children's Services for Ethnic Groups
WSU	Western Sydney University

Acknowledgement of Country

Dental Health Services Victoria (DHSV) and the Healthy Families, Healthy Smiles (HFHS) team acknowledge the Traditional Owners of the land we work on, the Wurundjeri peoples of the Kulin Nations. We pay our respects to Elders past and present.

Acknowledgements

DHSV would like to acknowledge the Victorian Government Department of Health (DH) for funding the HFHS program and for the guidance and support from key stakeholders.

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

This report is a collaborative effort of the HFHS team and the Health Informatics-Research and Evaluation team at DHSV.

Message from the Chief Operating Officer

I am proud to present the Healthy Families Healthy Smiles (HFHS) program phase 3 implementation and evaluation report 2019-2023. This report provides information on the implementation, main achievements, and performance of the HFHS program against the 2019-23 plan. Challenges for implementation, opportunities for expansion and improvement, and program priorities for the future of the program are reported.

Since 2012, HFHS has worked to build the oral health promotion capacity of the non-dental workforce, particularly health professionals and early childhood professionals who work with young children aged 0-3 and pregnant women. HFHS program activities are aligned with Dental Health Services Victoria (DHSV) *Strategic Plan 2016- 21*, and *Our Strategic Direction 2022* which contribute to meeting the goals of the *Victorian Action Plan to Prevent Oral Disease 2020-30.*

Phase three saw HFHS celebrate its 10th anniversary, which provided the opportunity to reflect on the program's successes, achievements, and milestones across the decade. This phase of the program has built upon the strong foundations developed since the inception of the program in 2012. This involved developing new and existing partnerships, continuing to deliver and improve our professional development initiatives and strengthening efforts to embed oral health into professional practice. While the COVID-19 pandemic posed unique challenges for the implementation of the program during this phase, it also provided an impetus for the program to explore new ways to engage and deliver initiatives with partners to enhance and expand reach of the program.

I would like to acknowledge the Victorian Government's continued investment in oral health promotion, and the Department of Health's continued funding of the program, without which such achievements and progress would not have been possible. In addition, my sincere thanks go out to the hard-working HFHS team, and our partners who contributed to the success of the program.

Mark Sullivan

Chief Operating Officer

Executive summary

Main Messages

- Healthy Families, Healthy Smiles is an oral health promotion program funded by the Victorian Government. The program aims to embed oral health promotion in the everyday practice of key non-dental workforces that engage with pregnant women and young children.
- Phase three of Healthy Families, Healthy Smiles consolidated and built on gains from previous phases.
- Strong partnerships remain the key success factor in building oral health promotion capacity among health and early childhood professionals.
- Over 1,500 health and early childhood professionals have been trained in oral health promotion during phase 3 of the program (2019-2023). This brings the total number of professionals trained to more than 7,000. If each professional went on to engage with only one family per week about good oral health, the potential reach of the program each year is many tens of thousands of children and pregnant women.
- New (or updated) professional and consumer facing resources continued to support program delivery.
- New gains in embedding oral health promotion in tertiary education midwifery curricula have been made. This has been a long-term strategy building support and demonstrating achievements in the current workforce, long term investment in partnerships, and recruiting lecturers and course convenors to undertake training. Continued efforts are needed to consolidate these gains.
- The COVID 19 pandemic presented challenges to program delivery. Restrictions in Victoria and particularly metropolitan Melbourne made it difficult to engage with program partners. In addition, the sectors the program engages with were also impacted by restrictions, making engagement with families and program delivery more difficult. However, the pandemic also created opportunities to reorient the program to support digital delivery of professional development and explore other ways of conducting needs analysis and consultation.
- The program would be well served by a more sophisticated platform to support digital delivery of professional development and supporting resources.
- To continue to build on the success of the program:
    - New partnership opportunities in a range of sectors will be explored, to increase reach into the non-dental workforce.
    - Capacity building efforts will be extended to workforces and sectors that engage with people and communities across the whole life course.
    - Continue to strengthen its alignment to DHSV Strategic Direction's three key pillars: Empower, Care, Lead and the Victorian Action Plan to Prevent Oral Disease 2020-30.

Background and program aim

Healthy Families, Healthy Smiles (HFHS), funded by the Victorian Government Department of Health (DH), aims to improve the oral health of Victorian children aged 0-3 years and pregnant women by building capacity of health and early childhood professionals to promote oral health. Through partnerships with key organisations, the provision of training, professional development packages and resources, HFHS initiatives support professionals working with young families to embed oral health promotion into everyday practice.

Oral health problems place a large burden on individuals, families and communities through pain and suffering, loss of income or productivity. In 2020-21, dental conditions were the second highest cause of preventable hospital admissions in Victorian children under 5 years. In a study of Victorian preschool children in high-risk areas, 57% had a history of decay of any kind, however 51% presented with early stages of decay that are reversible highlighting an opportunity for prevention (1). Families who experience disadvantage are disproportionally affected, with 20% of the child population in Australia aged 5–10 years having 80% of the population burden of dental caries (2). Likewise, pregnancy is a time when women are highly susceptible to oral health conditions, with such conditions being associated with adverse pregnancy outcomes (3). Hence, the program's focus is on these two life stages.

Established in 2012, HFHS has supported Victorian professionals for more than a decade. Since the program began, more than 6,900 health and early childhood professionals have undertaken training to deliver oral health promotion activities to pregnant women, young children, and their families. The program has also sought to influence policy and practice to provide supportive environments for oral health.

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; and 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. Phase 2 of the program (2015-2019) focussed on consolidating and expanding existing initiatives, addressing identified gaps and exploring avenues for potential new partnerships.

Phase 3 (2019-2023) saw a period of transformation for HFHS with program initiatives reviewed and adapted in response to the changing needs of professionals brought on by the COVID pandemic. This report outlines the implementation and evaluation of phase 3 and recommendations for future programs.

Evaluation

The evaluation of phase 3 of the HFHS program aimed to determine the impact of the program to build the capacity of health and early childhood professionals to promote oral health of children aged 0-3 years and pregnant women in Victoria. A mixed-methods evaluation was used to assess the impact of the HFHS program. Quantitative methods (questionnaires) were used to capture the changes in oral health related knowledge, attitudes, skills, confidence, and professional practices.

Qualitative methods (interviews) were employed to explore the translation of OH promotion knowledge and skills into routine clinical and educational practice and the impact of the program on networks, partnerships, and policy.

Implementation, achievements & key evaluation findings

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

Partnerships

- Healthy Families, Healthy Smiles worked closely with more than 40 organisations to build capacity of health and early childhood professionals to integrate oral health promotion in their everyday practice during phase 3 of the program.
- Regular communication occurred with more than 500 stakeholders to maintain engagement, promote opportunities, and provide program information.
- Strong partnerships continued to be the cornerstone of the success of Healthy Families, Healthy Smiles program with partners contributing advice and in-kind support to the program.
- The COVID 19 pandemic restrictions made engaging with partners difficult. In addition, the sectors the program engages with were also impacted by restrictions, making engagement with families and program delivery more difficult. However, the pandemic also created opportunities to reorient the program to support digital delivery of professional development and explore other ways of conducting needs analysis and consultation.

Professional development

- A total of 1,530 professionals participated in oral health promotion training during phase 3, bringing the total number of professionals reached to 7,048 over the life of the program (since 2012).
- Reviewed and updated professional development packages include:
  - Midwifery Initiated Oral Health education program (MIOH) package - updated 2022
  - Healthy Little Smiles training package (Healthy Little Smiles booklet, Healthy Teeth: fun learning activities booklet)
  - Brush Book Bed for supported playgroup facilitators
  - Healthy Little Smiles for early childhood educators
  - Baby teeth count too! online training course for maternal and child health nurses
  - Supporting oral health in the early parenting centre online training course
  - Pharmacy teams supporting oral health online training course

Tools and resources

- New or revised fact sheets included:
  - Caring for teeth and gums 0-6 years: published in 2020. A pictorial 'how to' guide for toothbrushing. It has also been translated into 15 community languages with QR codes linking to the 'Toothbrushing with young children' videos.

  - Keeping Teeth Healthy 0-3 years and 3-5 years, published in 2022. This fact sheet contains key messages relating to Eat Well, Drink Well and Clean Well Messages
  - Deadly Tooth Tips, published in July 2021. These fact sheets feature three oral health animal ambassadors and celebrate Aboriginal culture.
  - *Pharmacy teams supporting oral health,* published in 2022.
  - A review and update of the factsheets for GPs and practice nurses, '*Pregnancy and oral health*' and '*Oral health: and essential part of care in early childhood*' was completed.
- Social Media kits were developed to support professionals to share oral health information via social media, newsletters and parent portals to link parents to these resources. The kits included:
  - *Talking about teeth* Social Media Kit
  - The Keeping Teeth Healthy Social Media Kit
  - Deadly Tooth Tips Social Media Kit
- Deadly Tooth Tips posters (companion resources for Deadly Tooth Tips fact sheet)
- New video content was produced including:
  - *Toothbrushing with young children video series*, released in 2021 to make oral health information more accessible. The videos provide practical advice to families about toothbrushing and overcoming challenges many families experience. in 2022 this was translated into 15 community languages to support the oral health of Victoria's diverse families.
  - *Let's brush! with Tash and Chomper* video series was developed in partnership with City of Melbourne library service to engage families around toothbrushing. The video was also translated into Arabic, Burmese, Vietnamese, Punjabi, Dari, Mandarin and Persian.
  - In early 2023 the team supported the development of oral health training videos for pharmacy staff a project led by Manager Commercial Business (under development). It is anticipated that these videos will complement the online training available via the HFHS program.
- Professional packages developed included:
  - *Healthy Teeth: Fun learning activities for children 0-5 years* (revised and rebranded *Brush Book Bed Activity Kit* for SPG Facilitators)
  - A Storytime (Activity) Kit for public libraries was developed in early 2023. The Kit includes a toothbrushing alligator puppet and two storybooks, along with resources to share with families (toothbrushes, toothpaste, information leaflet, child-friendly instructions, and Toothbrushing Chart).
- HFHS content was also Integrated into the MyBabyNow app (developed for Deakin University's Infant program). The intervention is part of the Infant2Child study, led by Murdoch Children's Research Institute.
- Oral hygiene products (tooth packs) were provided through maternal and child health, early parenting centres, supported playgroup, and libraries. Provision of tooth packs supported program delivery, facilitated professional and family engagement and provided practical support to families around toothbrushing. Strategies targeted programs/settings, populations and geographical areas where children experienced higher rates of tooth decay.

Policies and systems

- Joint Position Statement with Dietitians Australia and DHSV reviewed, revised and endorsed by ADA, ADHOTA, Deakin University, DHAA, Tasmanian Government and University of Melbourne.
- Oral health embedded into Early Parenting Centre training frameworks.

- Review of Joint Position Statement on Oral Health by Pharmaceutical Society of Australia (Vic), Dental Health Services Victoria and Australian Dental Association (Vic Branch) underway.

Reporting and dissemination

- More than 500 stakeholders remain engaged with the program and continue to receive regular updates and program news through a range of program newsletters including the HFHS News, Advancing Oral Health in Midwifery Practice newsletter and the inaugural Everyday Habits for Healthy Little Smiles newsletter (for early childhood professionals)
- Articles were published in partners' newsletters and website, including:
  - Department of Health's Maternal and Child Health Bulletin
  - Department of Health's Early Parenting Centre Bulletin
  - Dietitians Australia website
  - Bite Magazine
  - Mirage News
  - RACGP member newsletter
- The DHSV website (HFHS program page and dedicated professional's pages) continued to be used to promote tools, resources, professional development opportunities and program news to stakeholders.
- HFHS was an exhibitor at the Municipal Association of Victoria (MAV) MCH conference with over 500 in person attendees with an estimate of 60-80 individual interactions with maternal and child health nurses about the program.
- Following a review of the governance structure the Project Reference Group was replaced with a more flexible and open engagement forum in 2021. Due to the impact of the Covid - 19 pandemic the HFHS Annual Forum has been conducted virtually and has been a successful way to showcase partnership achievements, engage, consult, provide education, and disseminate program findings.
- Quarterly status reports were delivered to Department of Health as per agreed deliverables in the HFHS Project Plan 2019/20 – 2022/2023

Key recommendations

The following is a summary of key recommendations to support and inform ongoing delivery of oral health promotion initiatives working across a diverse range of sectors and workforces to improve oral health of pregnant women and young children. Similar themes and recommendations emerged across the different workforces and are listed below, however more detailed sector specific recommendations can be found at the end of each workforce section in the full report.

Program delivery

- Continue to focus on oral health promotion in early childhood and pregnancy to contribute towards achieving the target set in the Victorian Action Plan to Prevent Oral Disease 2020-2030 to *Increase the proportion of children entering primary school without dental cavities to 85% (baseline 64%).*
- Review scope of program to be more inclusive of a lifespan approach for relevant professional groups such as pharmacists, dietitians, primary health workers and Aboriginal Health Service staff etc. (while remaining focused on early years).
- Maintain a capacity building approach to delivery of oral health promotion programs with non-dental workforces which multiplies gains many times over by creating an oral health promotion workforce in every program, service, and settings the program reaches.
- Continue to target efforts in programs, services, and settings that will help to reduce oral health inequities by reaching communities that experience higher rates of oral disease.
- Consider relevant recommendations arising from VACCHO's state-wide oral health needs assessment and Aboriginal Oral Health Model of Care when findings are published and work collaboratively with VACCHO and other partners to implement recommendations that have implications for the work of HFHS.
- Integrate successful strategies from Healthy Families, Healthy Smiles into the proposed model of care for early childhood and pregnancy.

Partnerships

- Continue to nurture existing partnerships.
- Explore opportunities to expand partnerships to other workforces, sectors and programs supporting young families, including community health centres, neo-natal, early parenting centres, acute settings.

Professional development

- Investment is required in more sophisticated platforms to deliver online learning to support continuous improvement and strengthen evaluation data. When the proposed learning management system is available at DHSV, review existing online courses to take advantage of system capabilities to improve the learning experience. The review should also include use of reporting and analytical tools to support continuous quality improvement, enhance engagement and evaluation data.
- Continue to evaluate, review and update training packages at regular intervals to ensure content remains current, evidence based and relevant to each sector's needs.
- Build communities of practice to support translation of knowledge into practice.
- Continue to nurture partnerships with the university sector to continue and strengthen the integration of oral health in courses for relevant workforces, particularly new gains in this phase for midwifery curricula.

Tools and resources

- Establish a standardised review timeframe and process to ensure that high quality and evidence-based resources, both professional and consumer facing, continue to be available to support better oral health for young families.
- Continue with digital transformation of packages and resources including conducting evaluation and continuous improvement activities.
- Advocate for increased funding to develop more video based oral health information, including translated content to improve reach and access, specific for groups with low literacy.
- Advocate for ongoing funding to continue provision of tooth packs, targeting populations and communities where children experience higher rates of tooth decay. The most advantageous settings through which to deliver this strategy have been maternal and child health, early parenting centres and supported playgroup services.

Policies and systems

- Continue to work in partnership with clinical services to strengthen referral pathways.
- Continue to advocate for inclusion of oral health in practice guides, frameworks, and policy to support and sustain capacity building gains and translation to practice.

Reporting and dissemination

- Strengthen data collection and evaluation methods, to be able to effectively assess the impact of the program on translation to practice and improvement in the oral health of young children and pregnant women.
- Continue to communicate program findings and achievements to key stakeholders to support engagement and uptake of opportunities.

Next Steps

The future of HFHS program activities will be informed by the findings and recommendations from this evaluation. Program activities will continue to strengthen its alignment with the DHSV Strategic Direction 2022 and the Victorian Action Plan to Prevent Oral Disease 2020-30. To achieve this, the program will continue to scope new partnership opportunities to increase reach into the non-dental workforce, as well as maintain and strengthen existing partnerships. The program will also explore how to extend its reach to include a lifespan approach. Existing training packages and resources will be continuously reviewed and updated, taking advantage of technology where possible to increase accessibility and user experience.

Future direction of the program will be consolidated into the broader direction of the Population Health team at DHSV, which will result in a whole of program plan. An interim plan has been established to continue delivery for Healthy Families, Healthy Smiles activity for 2023/24.

1 Project overview

1.1 Introduction

This report focuses on the implementation of HFHS against the agreed deliverables, during the four-year period from July 2019 to June 2023 (phase 3). Evaluation findings and reflections on the implementation, appropriateness and reach of the program are included in this report. The evaluation findings will inform the ongoing direction and planning of the program into phase 4.

1.2 Background and aim

Funded by the Victorian Government Department of Health (DH), the HFHS program aims to improve the oral health of Victorian children aged 0-3 years and pregnant women by building the capacity of health and early childhood professionals to promote oral health as part of their everyday practice. 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 (4). The framework identifies organisational development, workforce development, resource allocation, partnership, and leadership as its fundamental elements.

HFHS phase 1 (late 2011 – 2015) included an intense planning and development phase with a strong focus on partnership development. Phase 2 (2015-2019) focussed on consolidating existing partnerships and programs, expanding efforts to address identified gaps and exploring new partnerships. The findings from the evaluation phase 2 informed planning for phase 3 of the program.

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

1.3 Implementation

The HFHS program activities implemented in phase 3 have been grouped into five domains, namely:

- Partnerships
- Professional development
- Tools and resources
- Policy and Systems
- 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 detail the implementation of the program according to each domain.

Table 1 presents an overview of HFHS activities/ intervention delivered from 2019 to 2023 and respective supporting resources (as at 31 March 2023)

Table 1 Overview of HFHS program implementation, 2019-2023

Professional group/sector	Partnerships*	Professional development	# trained	Tools and resources**	Policy & Systems	Reporting & dissemination
Midwifery sector	• Western Sydney University (WSU)/Australian Centre for Integration of Oral Health (ACIOH) • Australian College of Midwives (ACM) • University sector • Victorian Aboriginal Community Controlled Health Organisation (VACCHO) Koori Maternity Service (KMS) team	• Midwifery Initiated Oral Health education program (MIOH) - online training with 16 CPD points	157	• Midwifery Initiated Oral Health education program (MIOH) package - updated 2022 • Healthy teeth, healthy pregnancy fact sheet • Caring for teeth while pregnant fact sheet	• Oral health embedded in antenatal care • Oral health questions included in the Birthing Outcomes System (BOS) • Submission for changes to VPDC to capture and report on oral health • Oral health content included in midwifery tertiary courses in Victorian universities	*Publications:* • Advancing Oral Health in Midwifery Practice newsletter • HFHS newsletter *Events:* • HFHS Annual Forums
Maternal child health (MCH) sector	• Department of Health MCH Program team • Safer Care Victoria • Municipal Association of Victoria • Colgate-Palmolive company • State-wide MCH services • University sector (RMIT, Federation University, La Trobe University)	• Baby teeth count too! face-to-face or virtual workshop for MCHN - 1.5 hour • Baby teeth count too! online training course for MCHN – 2 hours • Oral health promotion face-to-face or virtual lecture for Graduate Diploma in Child & Family Nursing Students – 1.5 hours	653	• Little teeth book and user guide • Tooth tips resources • Caring for gums and teeth 0-6 years flyer • Brushing with young children video series • Oral health milestones fact sheet • TEETH: Oral health information for Maternal and Child Health Nurses • list of Apps/Videos; List of story books, • Baby Teeth Count Too - distribution of family tooth packs • Mrs Marsh – distribution of family tooth packs supported by Colgate	• Oral health embedded in MCH Key Ages and Stages framework • Oral health embedded in the tertiary education at three Victorian universities	*Publications:* • HFHS newsletter • MCH Bulletin *Events:* • HFHS Annual Forums • Municipal Association of Victoria (MAV) MCH conference exhibitor

Professional group/sector	Partnerships*	Professional development	# trained	Tools and resources**	Policy & Systems	Reporting & dissemination
Early Parenting Centre (EPC) Practitioners	• Department of Health Early Parenting Centre Expansion project team • Queen Elizabeth Centre • Tweddle Child & Family Health Service • O'Connell Family Centre - Mercy Health	• Supporting oral health in the early parenting centre online training course – 2 hours	31	• Family tooth packs	• Oral health embedded into EPC training frameworks	*Publications:* • HFHS newsletters • DH EPC Bulletin *Events:* • HFHS Annual Forums
Supported Playgroups	• Playgroups Victoria	• Brush Book Bed face-to-face workshop – 1 hour • Brush Book Bed for supported playgroups online course – 30 mins • Little Koorie Smiles face-to-face workshops	189	• Brush Book Bed training package (Baby teeth count too! flipchart, Healthy Teeth: fun learning activities booklet) Little Koorie Smiles training package (Little Koorie Smiles flipchart, toothbrushing demonstration puppet, story books and props)	• Supported playgroup facilitators provided with knowledge, tools and resources to promote oral health	*Publications:* • HFHS newsletters *Events:* • HFHS Annual Forums
Early childhood education & care settings	• Merri Health, Community Engagement Officer	• Healthy Little Smiles face-to-face workshop – 2 hour • Healthy Little Smiles online course – 1 hour	79	• Healthy Little Smiles training package (Healthy Little Smiles booklet, Healthy Teeth: fun learning activities booklet)	• Oral health promotion linked with the National Quality Framework in use in the setting	*Publications:* • HFHS newsletters *Events:* • HFHS Annual Forums
Aboriginal Community and Health Settings	• VACCHO • Bendigo and District Aboriginal Cooperation (BADAC) • Loddon Mallee Aboriginal Reference Group (LMARG) • WSU	• Bigger Better Smiles • Recruitment of midwives in the Koori Maternity Service to complete MIOH education program	8	• Deadly Tooth Tips • Caring for your teeth while pregnant fact sheet • Family tooth packs	• N/A	*Publications:* • HFHS newsletters *Events:* • HFHS Annual Forums
Libraries	• State Libraries Victoria • City of Melbourne	• Brush Book Bed for library storytime online course – 30 mins	14	• Brush Book Bed for library storytime training package (Healthy Teeth: fun learning activities booklet)	• Supported playgroup facilitators provided with knowledge, tools and resources to promote oral health • Knowledge, skill and confidence to promote tooth brushing	*Publications:* • HFHS newsletters *Events:* • HFHS Annual Forums

Professional group/sector	Partnerships*	Professional development	# trained	Tools and resources**	Policy & Systems	Reporting & dissemination

Dietitians and nutrition professionals	• Dietitians Australia
	• Nutrition and oral health working group comprising of representatives from:
	  • Dietitians Australia
	  • DHSV
	  • Deakin University
	  • Australian Dental Association (ADA)
	  • Australian Dental and Oral Health Therapists' Association (ADOHTA)
	  • Tasmanian Health Service
	  • Victorian Department of Health
	  • Nutrition Society Australia
	  • Department of Health
	  • Dr John Rogers, Principal Fellow - Faculty of Medicine, Dentistry and Health Sciences, University of Melbourne
		• Webinar and position statement launch: Oral Health and Nutrition: Collaborative opportunities for Accredited Practising Dietitians, nutrition and oral health professionals	212	• Dietitians Australia and Dental Health Services Victoria joint position statement on Interdisciplinary Collaboration between Accredited Practising Dietitians, Nutrition and Oral Health Professionals for Oral Health and Nutrition.	• Joint Position Statement – endorsed by ADA, ADHOTA, Deakin University, DHAA, Tasmanian Government and University of Melbourne.	*Publications*:
						• HFHS newsletters
						• DHSV website
						• Dietitians Australia website
						• Bite Magazine
						• Mirage News
						• DHSV State-wide Newsletter
						
						Events:
						• HFHS Annual Forums

Professional group/sector	Partnerships*	Professional development	# trained	Tools and resources**	Policy & Systems	Reporting & dissemination
Pharmacy sector	• Supercare pharmacies • Victorian Government Department of Health - Primary, Community and Oral Health Unit • Australian Network for Integration of Oral Health (NIOH) • The University of Queensland School of Pharmacy • La Trobe University's School of Rural Health • Australian Dental Association • Pharmaceutical Society of Australia	• *Pharmacy teams supporting oral health* – 1-hour online training course	15	• *Pharmacy teams supporting oral health* - fact sheet	• Review of Joint Position Statement on Oral Health by Pharmaceutical Society of Australia (Vic), Dental Health Services Victoria and Australian Dental Association (Vic Branch) underway	<u>*Publications:*</u> • HFHS newsletters <u>*Events:*</u> • HFHS Annual Forums
Oral health professionals	• Melbourne University • RMIT	• Lectures to Bachelor of Oral Health students on health promotion in practice • Lecture to Certificate IV in Dental Assisting students on health promotion in practice	124	• Lecture and program resources	• Embedded in tertiary education • Students provided with knowledge, tools and resources to promote oral health	<u>*Publications:*</u> • HFHS newsletters <u>*Events:*</u> • HFHS Annual Forums
General practice	• Royal Australian College of General Practitioners	• N/A	N/A	• *Pregnancy and oral health* fact sheet for GPs and practice nurses • *Preventing early childhood caries* fact sheet for GPs and practice nurses	N/A	<u>*Publications:*</u> • HFHS newsletters • RACGP member newsletter <u>*Events:*</u> • HFHS Annual Forums

Professional group/sector	Partnerships*	Professional development	# trained	Tools and resources**	Policy & Systems	Reporting & dissemination
Other professionals and settings • Bicultural workers • Child Protection	• Hume Happy Mothers program • Department of Families, Fairness and Housing (Loddon Area)	• Oral Health Training of Trainer workshop for Bicultural workers • Oral health session for Child Protection Case Managers and Team Leaders • Tailored CPD workshops upon request	38	• *Caring for your baby's teeth and gums 0-6 years fact sheet* (translated into 15 community languages) • *Toothbrushing with young children* video series (translated into 15 community languages)	N/A	<u>*Publications:*</u> • HFHS newsletters

*Partners listed include both formal and informal partners that HFHS works with on various levels to collaborate, inform, consult and guide HFHS initiatives. This is not an exhaustive list.

**Items listed in tools and resources include those developed in prior phases of the program that continued to be used and disseminated in phase 3.

A total of 1,530 professionals participated in oral health promotion training during phase 3 (including 201 professionals reached in Apr-Jun 2023 period not reported in *Table 1*). This brings the total number of professionals reached to 7,048 over the life of the program.

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

- Expansion of prevention initiatives for pre-schoolers 2017/18 to 2021/22 provided 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 delivered by DHSV in partnership with funded agencies in high-risk areas, to promote oral health in early childhood services). The expansion of prevention initiatives aims to improve oral health outcomes of pre-schoolers in high-risk areas and reduce oral health inequalities. A project report was submitted to Department of Health in early 2023.
- Rolled over funds from Oral Health Promotion for populations at high-risk project 2017/18 supported the continuation and expansion of the Brush Book Bed initiative in 2019/20. This initiative focussed on promotion of toothbrushing through supported playgroup programs. Refer to the *Supported playgroups* section starting on page 58 for further details.
- Expansion of Tooth Packs funding 2017/18 rolled over to 2019/20 to support the delivery of Baby teeth need cleaning too! initiative which provided tooth packs to high-risk communities through the maternal and child health service. Refer to the *Maternal and child health sector* section, starting on page 38.

1.3.1 Policy and strategic alignment

HFHS activities were aligned with DHSV's *2016-2021 Strategic Plan* and *Our Strategic Direction 2022* which contributes to meeting the Victorian Government's *Victorian Action Plan To Prevent Oral Disease 2020–30*. At the federal level, the work is aligned to the delivery of the Australian Government's plan: *Healthy Mouths, Healthy Lives - Australia's National Oral health Plan 2015-2024*.

1.3.2 Governance structures and roles

To ensure successful implementation of the HFHS program, a governance structure with clear roles and responsibilities was established during phase 1. As the program has matured the governance has been streamlined, replacing a Stakeholder Reference Group with an annual forum and greater reliance on targeted sector consultation (*Figure 1*).

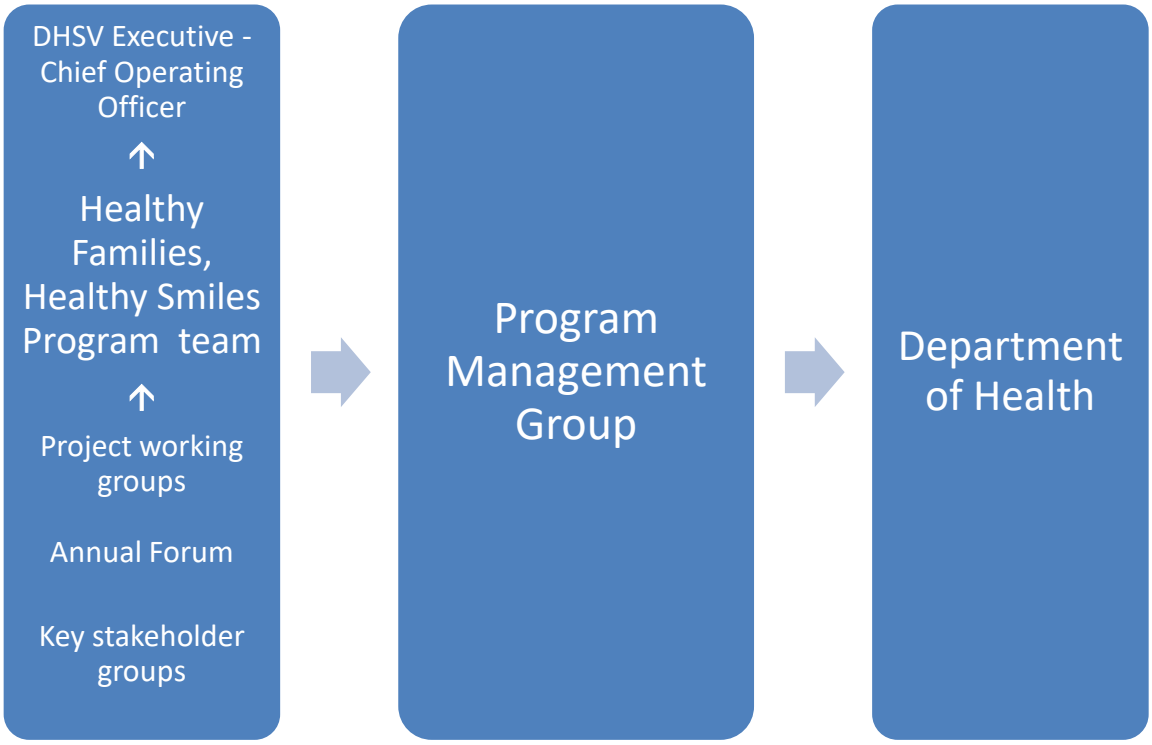

Figure 1 Project Governance Structure

The governance structure encompasses:

Executive level – DH and DHSV

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

Management level – Project Management Group

- Overall accountability for the 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 DH, HFHS team and Research and Evaluation team.

Operational level - Working parties and key stakeholders

HFHS engages and works with key stakeholders and convenes working groups, where relevant at all stages of the program cycle, including planning/design, implementation, monitoring and evaluation. During Phase 3, HFHS primarily targeted consultation to specific stakeholders seeking advice and guidance on program design and delivery. This is done on an as needed basis for program planning and delivery but also includes regular partnership meetings with key stakeholders to keep abreast of reforms or initiatives that have relevance. Working parties with relevant stakeholder representation were convened for the life of specific initiatives to facilitate collaboration.

1.4 Evaluation overview

1.4.1 Ethics

The evaluation of the HFHS initiative (Phase 3) was approved by the Department of Health and Human Services Human Research Ethics Committee (Project no. 70417/10-21) on 8 November 2021.

1.4.2 Evaluation aim & objectives

This report focuses on findings from the evaluation of phase 3 of the HFHS program covering the period between July 2019 to June 2023, recognising this phase has continued and expanded on the work from Phase 1 (2012-2015) and Phase 2 (2015-2019).

The aim of the phase 3 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 objectives of the evaluation are 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:

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

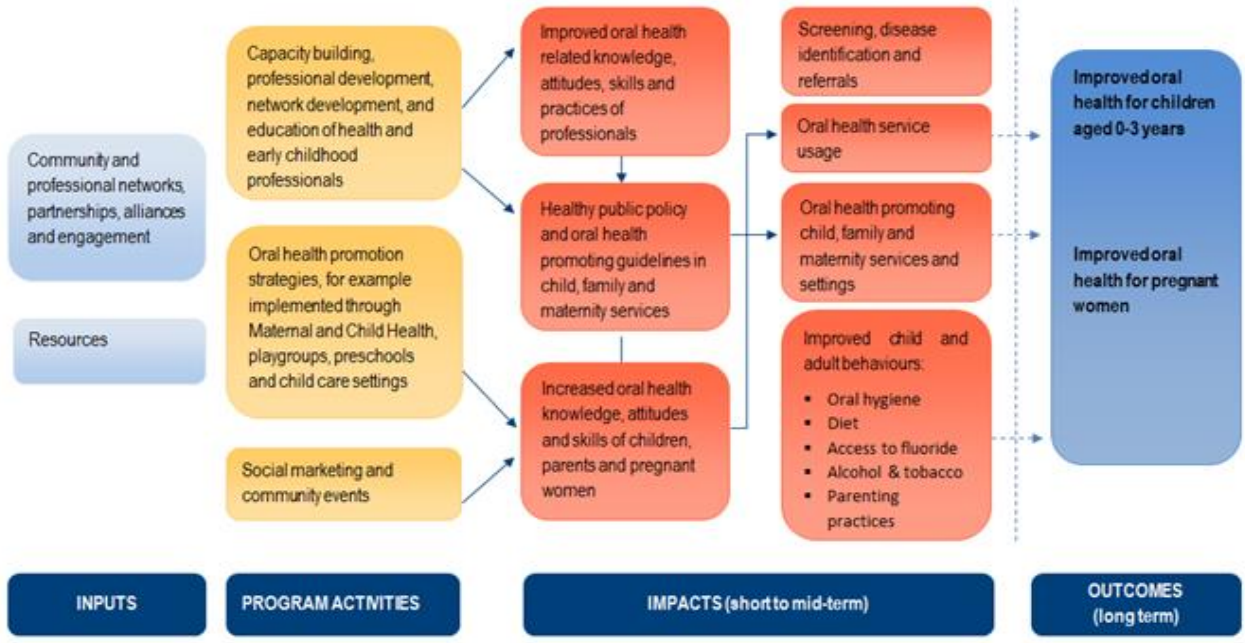

Figure 2 Program Logic Model

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. Participants in the evaluation included: midwives, MCHN and students, library staff, supported playgroup facilitators, early childhood educators, pharmacy staff, 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 were embedded into the Midwifery Initiated Oral Health (MIOH) education sponsorship program offered by HFHS, to assess knowledge, confidence, and professional practice of participating midwives.
2. Post oral health training interviews were conducted with a convenience sample of consenting MIOH participants (via phone) approximately 12 months after completing the MIOH program. The interviews examined changes in the midwives organisational and professional practices as a result of the oral health training.
3. Post-only questionnaires were embedded into training packages and workshops for library staff, Maternal Child Health Nurses (MCHN) and MCH student nurses, supported playgroup facilitators and early childhood educators, pharmacy staff and Early Parenting Centre clinicians. These questionnaires were used to assess self-reported improvements in oral health knowledge and confidence. Participant feedback relating to how the training could be improved, the most useful aspects of the training and intended

changes in practice were assessed.

4. Key stakeholder 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, MCH and dietitian sectors.
5. Reflective interviews with the HFHS implementation team: Reflective interviews were 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.
6. Assessment of Victorian state-wide public dental service access data: public dental service accessed by pregnant women was assessed through analysis of Titanium data (Titanium is the software used in the public dental system that collects patient data).
7. Process data: HFHS program documentation was reviewed (for example minutes of meetings, planning documents, progress reports, training and communication logs, short questionnaires/feedback forms). 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 activities 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 pre and/or post questionnaires are presented as frequencies and percentages and where appropriate and 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. Short answer responses were reviewed and allocated into ≥1 categories, these groups were named and counted, and key quotes listed. A summary of main themes being elicited from all responses is included in the report and detailed tables including the group name and number of participants in each category and key quotes is provided in the appendices.

Interview data were analysed, and illustrative quotes are presented in the appendices.

Table 2 presents an overview of the evaluation design, methods and measures used to assess each of the evaluation objectives.

Table 2 Overview of evaluation design, methods and measures

	Obj.	Program activity	Measure	Method	Collection period 2020-2023
PROCESS	**Formative evaluation**	Stakeholder engagement and program development	*Engagement, network development, development and implementation of strategies*	*Qualitative & Quantitative* Reports, training and activity database, minutes of meetings, feedback forms	Throughout (2020-2023)
	Objective 1	Professional development strategies and resources	*Oral health-related knowledge, attitude, confidence, skills, current practice and intended changes to practices of professionals* *Appropriateness and usefulness of resources*	*Quantitative* • Pre- and post-training questionnaires *Qualitative* • Key informant interview	Pre and post-questionnaires included within each training component Interviews 6-12 months follow-up post- intervention
IMPACTS	**Objective 3**	Capacity building	*Oral health promotion capacity, partnerships and network development*	*Qualitative* • Capacity building key informant interviews	Follow-up interviews with key stakeholders Interviews 6-12 months follow-up after intervention
	Objective 2 & 4	Translation of knowledge to practice and sustainability	*Implementation and translation to professional practice*	*Quantitative* • Questionnaires *Qualitative* • Key informant interviews	Post-questionnaires Interviews 6 months-12 months follow-up after intervention
HEALTH SERVICE REFERRALS		Oral health assessment, referrals, and service use	*Oral health assessment and referrals to dental services*	*Quantitative* • Pre- and post-intervention assessment of oral health data and referrals (where available)	Baseline to follow-up and throughout (2020-2023)

1.4.4 Evaluation strengths and limitations

The strength of this evaluation is its comprehensive 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 capacity and understanding of and engagement in oral health promotion.

The evaluation provides a picture of most of the activities from phase 3 and includes the perspectives of some of the program's partners. Where appropriate, data from phase 1 and/or 2 has been included to enable a more comprehensive analysis which was not possible in earlier HFHS phase evaluation due to small participant numbers. While past 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 a referral source and changes in recording of priority access within Titanium, inability to obtain referral and mouth check data from the statewide Maternal Child Health service) mean these findings cannot be directly linked to the HFHS program.

A limitation of this evaluation is that the program has far reaching partnerships across multiple organisational levels, e.g., changing complex systems/processes within the health and education sectors where the true impact can be difficult to measure. Therefore, the key focus of this evaluation has 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 a summary of implementation activities developed and delivered, together with the evaluation findings, for each professional group that HFHS has targeted with capacity building strategies throughout phase 3. For each professional group, we provide an overview of the implementation, evaluation, and recommendations according to the relevant program domains:

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

2.1 Midwifery sector

2.1.1 Overview

Pregnancy-related physiological changes can have an impact on the gums and teeth, increasing the risk of oral disease (5). Poor oral health may affect pregnancy outcomes, with research suggesting an association with preterm birth and low birth weight (5). Unfortunately, factors such as lack of education, concerns about the safety of treatment and cost, prevent many people accessing dental care during pregnancy (6).

Australian National pregnancy care guidelines recommend that oral health assessment and referral be included in the practice of antenatal care providers (7). Midwives are well positioned to provide such services, given their predominant role in pregnant women's healthcare. However, historically there has been a lack of focus on oral health in practice due to gaps in midwives' knowledge, confidence and time barriers (8). Since 2012 (phase 1), HFHS has worked to address this in various ways. Predominantly, DHSV has funded sponsorships for eligible midwives to complete the Midwifery Initiated Oral Health education program (MIOH), a 16-hour course developed by Western Sydney University (WSU) and partners. This course aims to provide midwives with the practical skills required to promote oral health to pregnant women.

In 2015 (phase 2) HFHS successfully lobbied for the inclusion for two oral health assessment/referral items in the Birthing Outcomes System (BOS) – the medical record database used by majority of Victorian public maternity services. The inclusion of these items serves as a prompt for midwives and GPs to conduct oral health screening and referrals and allows for the capturing of data to evaluate the effectiveness of MIOH training and the inclusion of oral health in practice.

Past MIOH evaluation findings (phase 1 and 2) have shown midwives receive limited oral health promotion training within their undergraduate or post graduate training. Therefore, other key work in this sector has included advocating for the inclusion of oral health into the midwifery tertiary curriculum. In addition, the HFHS program has focused on strengthening relationships and referral pathways between community dental agencies and maternity settings.

Phase 3 has focused on building upon this foundation, continuing to increase reach of and work with partners to improve MIOH, and further establishing oral health screening, promotion and referral as routine practice in the workforce.

2.1.2 Partnerships

2.1.2.1 Implementation

Phase three of HFHS involved maintaining and strengthening the program's existing partnerships in the sector. In 2012 (phase 1) the HFHS team established a partnership with WSU (phase 1) to adapt the New South Wales-based MIOH training program to the Victorian context. In 2021, after 14 rounds of MIOH scholarships being offered by DHSV, it was identified that an update to the course was required to ensure relevancy of the content and enhance user experience. This required collaboration between the HFHS team and partners at WSU and the Australian College of Midwives (ACM), where the course is hosted. Over the course of a year, the HFHS team met regularly with WSU and ACM with the goal of reviewing the MIOH course content and supporting ACM to transfer the course to a new learning platform, which went live before Round 16, in September 2022. This has helped to solidify relationships with both partners.

The strong relationship with WSU led to the formation of a MIOH DHSV/WSU working group in 2022. Meetings in this group are focused on assessing the impact and sustainability of MIOH. In addition to discussing past MIOH evaluation findings, the group scopes opportunities to scale up the program.

During phase 3, contact was made with Coordinators of Victorian universities offering midwifery courses, to offer support to embed oral health content into their curriculum (further detailed in section 2.1.4). This resulted in new relationships with university staff, and existing relationships being strengthened.

2.1.3 Professional development

2.1.3.1 Implementation

During phase 3 of HFHS, nine sponsorship rounds for eligible midwives to undertake the MIOH education program were completed (Round 9 – Round 17). Phase 3 saw 157 midwives complete MIOH, taking the total number of Victorian midwives trained since the inception of HFHS to 427.

To be eligible for DHSV sponsorship of the MIOH Education Program, participants were required to be a Victorian-based midwife and meet at least one of the below criteria:

- working in the antenatal clinic and doing the first booking visit under midwifery care, GP shared Care or the caseload model
- a Women's Health Unit Manager and/or Assistant Manager
- a midwifery clinical educator in Victorian hospital settings
- a Victorian University midwifery lecturer
- working in the Koori Maternity Service
- a childbirth and early parenting educator

Recruitment strategies for MIOH scholarship participants remained similar to those reported in the phase 2 report, with a focus on targeting maternity services with fewer trained midwives. Such strategies included contacting managers at maternity services and midwifery course coordinators at universities via email and/or phone, encouraging past participants to recommend the training to colleagues, promotion via the DHSV website, and articles in HFHS' *Advancing oral health in midwifery* newsletter. Partners at VACCHO helped to promote the course to midwives working in the Koori Maternity Service (see section 2.7 for more information).

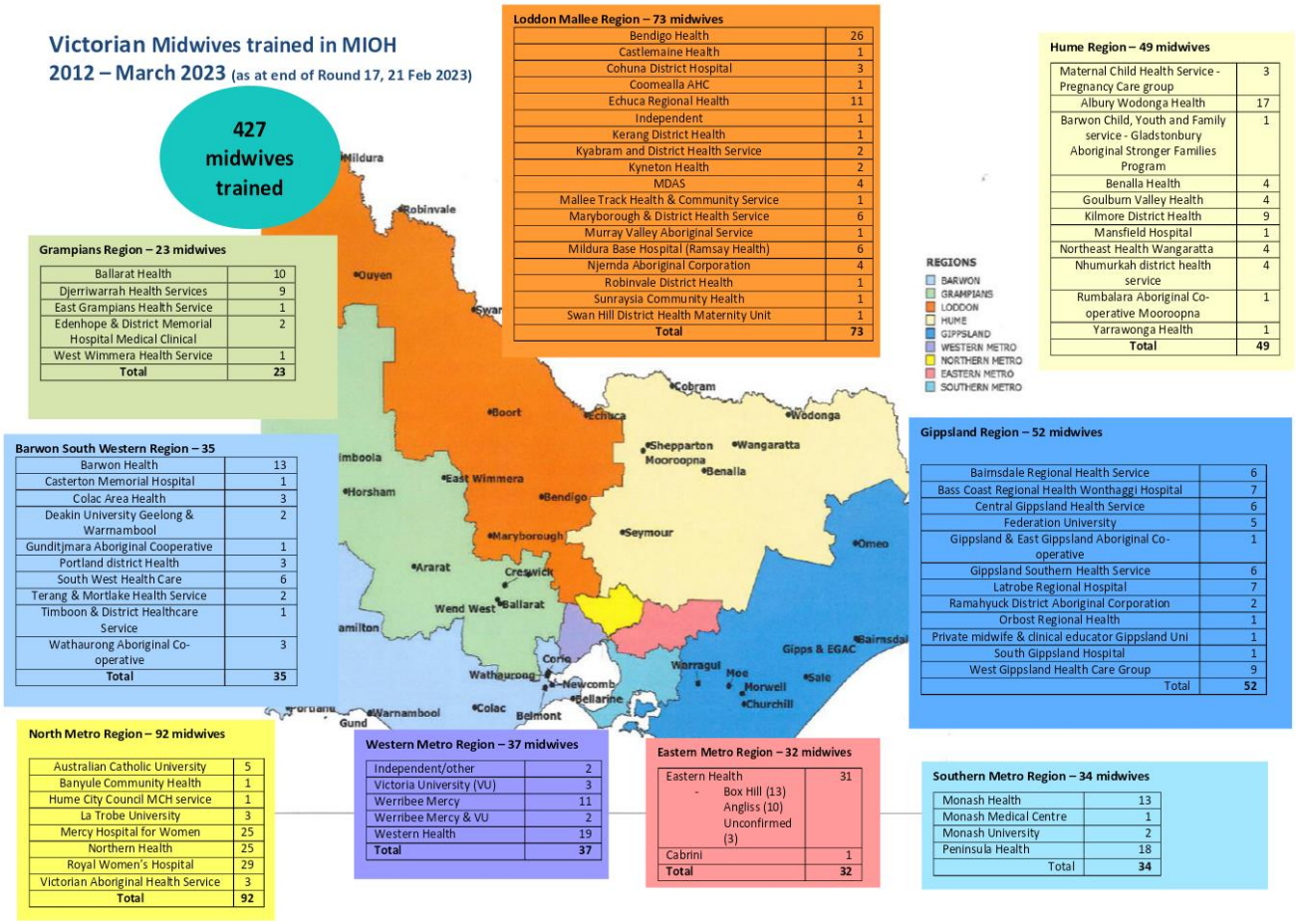

Figure 3 Map of Victorian midwives trained in MIOH November 2012-March 2023

2.1.4 Tools and resources

Oral health education resources for consumers have been developed in prior phases to support midwives to share oral health messages. These included a fact sheet called 'Healthy Teeth, Healthy Pregnancy' and 'Caring for your teeth while pregnant'. These are available for download for Victorian midwives in the MIOH Education program and on the DHSV website. Through the MIOH education program, participants also have access to other resources developed specifically for Victorian midwives by HFHS, including Tooth Tips for families 0-12 months, a factsheet outlining how to record

oral health promotion in BOS, oral health screening and referral pathway, sample oral health referral forms and a Victorian Public Dental Agency List.

2.1.5 Policy and systems

2.1.5.1 Implementation

Throughout phase 3, the HFHS program has continued working to influence policies and systems that create an environment that supports the inclusion of oral health in midwifery practice.

Three main areas of focus include advocating for:

- The use of and improvements within state-wide data monitoring of the Birthing Outcome System (BOS)
- Strengthening referral pathways between maternity services and public dental services; and
- The inclusion of oral health content into the curriculum of midwifery tertiary courses.

HFHS work with the Victorian Birthing Outcome System

Early pilot evaluations of MIOH identified a gap on the medical record database for pregnant women, this prompted HFHS program (in phase 2) to advocate for the inclusion of oral health items (oral health assessment and referral) into the Birthing Outcomes System (BOS) medical record database. BOS is an integrated pregnancy, birthing and neonatal record used by most (around 75% were identified as using it within Phase 2 HFHS report) (9) Victorian public maternity services.

By July 2015 the HFHS implementation team had successfully negotiated the inclusion of oral health assessment and referral questions in BOS. Oral health data is presented in two sections in the BOS; one used by a midwife and the other by the doctor/obstetrician. Apart from the midwives participating in the MIOH training, to our knowledge no other training or information is provided on these added items within BOS and completion of these items is not compulsory.

Between 1 August 2015 and 31 March 2019 within 18 Victorian maternity services it was found that oral health assessments were performed on 39% of women who saw a midwife during their antenatal care, and 16% of these women were referred to dental services by the midwife; 10% of all women were referred to dental services regardless of whether they received an oral health assessment (9).

As individual hospital administrations can decide what data to collect using BOS (other than what is required by the State Government), not all midwives or practitioners complete the oral health fields. To encourage their use, information about the BOS oral health fields has been embedded into the MIOH course and within the *Advancing Oral Health in Midwifery Practice* newsletter; sent by HFHS to past MIOH participants and relevant stakeholders.

In 2021 and 2022, the HFHS implementation team submitted proposals to the Victorian DH, requesting oral health data in the BOS database be retrieved by the Victorian Perinatal Data Collection (VPDC) and reported. It was anticipated that this would assist advocacy efforts to mandate the oral health items in BOS and support the integration of oral health promotion in antenatal care. It would also allow for systemised tracking of oral health practices and referrals within Victoria. Unfortunately, these proposals were rejected.

Due to difficulties regarding accessing BOS data and the expectation that COVID may have severely impacted on results the statewide evaluation of the BOS was not included within this current phase report; however, evaluation questions assessing their use were included within the MIOH participant interviews.

Strengthening referral pathways

Strengthening referral processes to the public dental service has been a key strategy of HFHS to create systems that support oral health. During this reporting period, field trips were taken to visit managers of maternity services and community dental agencies in areas where public dental access was comparatively low (according to public dental service data). The aim of these field trips was to enhance relationships with stakeholders, raise awareness of the local public dental service and MIOH program among maternity settings and spark discussion about improving referral processes between parties. *Table 3* outlines where meetings were held. COVID-19 halted discussions regarding improving referral processes between public dental services and maternity services, so it is unknown whether any progression was made after these field trips.

Table 3 Strengthening referral between maternity settings and public dental field trips held

Date	Service	Region
22/08/2019	Bass Coast Health	Gippsland
13/08/2019	Djerriwarrh Health Service	Grampians Region
21/01/2020 – 23/01/2020	Echuca Regional Health Service Njernda Aboriginal Cooperative Campaspe MCH service Swan Hill District Health Mallee District Aboriginal Service	Loddon Mallee

Figure 4 Staff at Echuca Regional Health HFHS field trip meeting

Figure 5 Staff at Echuca Regional Health in Dental Clinic

Inclusion of oral health content into the curriculum of midwifery tertiary courses

The evaluation of MIOH in phase 2 showed that 5% of midwives received oral health education within their undergraduate and post-graduate midwifery studies. Therefore, within phase 3 the HFHS implementation team focused attention on working with partners to embed oral health within their midwifery training. In previous phases, recruitment strategies for MIOH had included university teaching staff in midwifery courses to build awareness and support for inclusion of oral health in midwifery curricula. During this phase, connection was established with Midwifery Academics Victoria (MIDAC) a tertiary education network to discuss opportunities for embedding oral health in midwifery curricula.

In 2019, a Memorandum of Understanding (MOU) between DHSV and WSU was established. This MOU enabled HFHS to continue offering MIOH scholarships and allowed HFHS to share materials from WSU's undergraduate oral health module for midwifery students with Victorian universities. Through MIDAC and individual meetings with Coordinators at all Victorian universities offering undergraduate or postgraduate midwifery courses, the HFHS implementation team offered support to embed this material into their curriculum. As a result of these discussions Deakin University, Federation University and Monash University have embedded oral health content (to varying degrees) into either their undergraduate or post-graduate midwifery curriculum. Further work will continue into the next phase with the remaining universities to support the integration of oral health content into their curriculum.

2.1.6 Reporting and dissemination

The implementation team publish the *Advancing oral health in midwifery practice* newsletter to provide midwives with relevant oral health information and MIOH program updates. The newsletter is produced annually and shared with over 400 people including past MIOH participants and other relevant stakeholders. During phase 3, three issues of the newsletter were published (April 2020, September 2021 and July 2022) and disseminated via email and the DHSV website.

2.1.7 Key evaluation findings

MIOH Education Program

The evaluation findings in this report explores the reach of the MIOH education program during phase 3, the midwives' satisfaction with the MIOH education program and how it has impacted their oral health knowledge, confidence and practices. This evaluation reports on eight rounds of MIOH that

occurred during phase 3 (rounds 9 – 16), during which 135 midwives completed MIOH. An additional 22 midwives completed the training in round 17, taking the total trained in phase 3 to 157, however data from round 17 is not included in this report due to time constraints.

MIOH participant information

Midwives who completed the course held a range of professional roles such as clinical midwives, midwives in management positions, antenatal care midwives, midwives working with Aboriginal pregnant women, clinical nurse/midwife educators in hospital settings, midwifery university lecturer and/or coordinator, and childbirth and parenting educators. Midwives showed a variety of training backgrounds with 37.8% having completed a Graduate/Post Graduate Diploma or Master of Midwifery.

Prior oral health knowledge/training

Most midwives (93.3%) reported no previous oral health training. This aligns with the existing gap in midwives' knowledge in oral health and confidence to promote oral health within their midwifery practice, as reported in previous evaluation reports (9). Prior to participation in MIOH 48.2% of midwives never discussed the prevention of tooth decay (e.g., providing nutrition and oral health advice) with their clients. In the interviews midwives described having limited background or understanding of the importance of oral health suggesting a need for oral health capacity building.

Prior to the [MIOH] course I never checked people's teeth. I used to notice a lot of people had bad teeth and I wasn't actually aware of the correlation between small babies and the teeth. I didn't know that even [though] I've been a midwife for 40 years. [MIOH interview participant quote]

Oral health knowledge and confidence

The responses to the questionnaires in the MIOH program showed significant increases from pre-to post-training in midwives on their self-reported oral health knowledge as good/very good (15.9% vs 94.7%, p<0.001) (*Figure 6*).

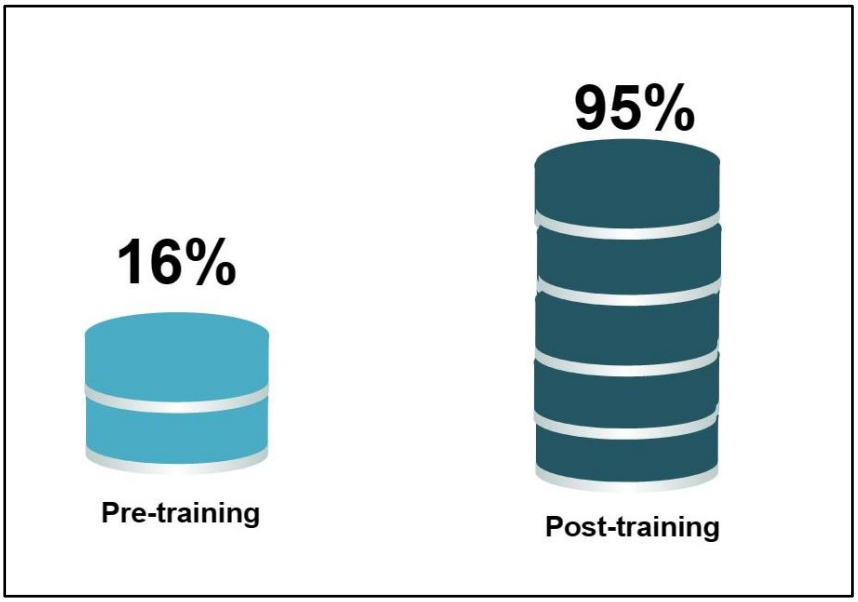

Figure 6 Midwives reporting their oral health knowledge as good or very good-pre/post MIOH training

Midwives showed significant improvements ($p<0.001$) in their 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, reasons for increased susceptibility to tooth decay in pregnancy, and misconceptions around dental treatment during pregnancy (e.g., safety of x-rays and dental care during pregnancy).

Questionnaire responses also showed midwives improved their confidence ($p<0.001$) from pre to post training regarding introducing the topic of oral health, assisting women to determine if eligibility for public health, answering questions about oral health, finding the nearest public dental clinic, referring to dental services, and incorporating an oral health assessment into the appointment.

Intention/translation to change practice

Almost all (99.2%) midwives reported the training was useful for changing and informing their practice. Midwives reported (via short answer questions) that they intended to incorporate oral health information into antenatal visits, conduct mouth check assessments, refer patients appropriately and encourage other midwives to complete the course. In the interviews midwives described how they had incorporated oral health information into their discussions with clients, utilizing the assessments and resources provided in the course and sharing the knowledge gained with others within their practice.

Within the interviews midwives described organisational constraints to incorporating oral health into their practices such as time limitations in antenatal visits and competing priorities. Client related barriers to incorporating oral health promotion into practice were identified (through short answer responses) and included eligibility of access to public dental services, affordability of dental care, clients with other socio and health related complications where oral health is not viewed as a priority and cultural/language barriers.

Midwives reported (via interviews) retaining knowledge of the importance of oral health during pregnancy, oral health promotion resources and referral advice 12 months after the training. Midwives expressed when referring clients for dental care, the preference was to empower the client to take responsibility for their own referral and understand the importance of oral health during their pregnancy. One of the midwives highlighted the challenges accessing public dental services because of the COVID-19 pandemic its strain on the capacity of health services. Midwives reflected on the next steps of the program with a few suggesting refresher trainings would be valuable to sustain oral health knowledge and the skills gained from the course, along with providing up to date evidence. Some participants commented on the value of embedding oral health within the undergraduate midwifery training.

Participant satisfaction with the training

Almost all midwives agreed or strongly agreed with a range of statements assessing their satisfaction with the MIOH training (*Figure 7*).

Figure 7 Participant satisfaction with MIOH training

Appendix A presents detailed survey findings/results tables and Appendix B presents interview results for the MIOH program evaluation.

Partnerships-Evaluation

One member of the DHSV HFHS partner organisations participated in an in-depth, open ended semi-structured interview via Teams to explore their experiences collaborating with DHSV and the HFHS Program.

The partner believed tailoring the program for a Victorian health system and making it suitable for that context was a challenge. Technological issues arising from hosting training on a third-party platform were also cited as barriers/challenges for the partnership.

Raising the profile of oral health within the midwifery professional cohort has been a long-term goal of the MIOH program and was viewed by the partner as one of the most important achievements of the collaboration, resulting in a genuine perspective shift within the professional group, which is confirmed by other qualitative interviews within the midwifery profession.

The partner suggested for the next stage of HFHS could focus on delivering MIOH refresher courses, strengthening engagement with Aboriginal Health Workers and associated services, continuing to advocate for the inclusion of oral health training in undergraduate courses, and mandating oral health through policy, guidelines, and systems.

Overall, the partner viewed the partnership as successful, noting the flexibility and understanding between DHSV and WSU around variation between key outputs and goals, and being able to provide a "give-and-take" relationship so each collaborator was able to meet their KPI's.

Further details are provided in Appendix C.

Evaluation tools and resources

Improving the MIOH resources/training

Post MIOH training midwives provided their ideas regarding improving the resources/course. Many midwives thought the training should be made available to all midwives (online access via DHSV). Some thought the brochures and referral pathways should be available in all antenatal clinics and that there should be improved advertising of the resources as many midwives didn't know they existed.

In the MIOH interviews when asked how DHSV could best continue supporting training, the participant praised MIOH staff for their support in delivering the training program and making themselves available for support with accessing resources and general information.

You know, they've been amazing. They've been able to give brochures, flow charts, quiz questions, everything that we've needed, and they've even been really clear on the differentiation between resources that are Victorian specific and resources that are more generalised. So, I can't fault the support, we've had somebody to be able to call with any questions and asking for assistance. So yeah, I think we've had really brilliant support from DHSV. [MIOH interview participant-1]

Evaluation-policies and systems

Birthing Outcome System-MIOH interview findings

Within the MIOH interviews midwives believed being able to record oral health checks in the BOS database supported initiating oral health screenings and potential referrals at future and ongoing appointments, even if the care was continued by another midwife.

For the interviewees in teaching and program delivery positions, these systems were also raised as supportive structures.

We also look at it from the way that we use BOS or the other online digital records. And look for those prompts and make them [the students] really aware because it's really easy to skim over them. Unless it's one of the mandatory tick boxes, it can be skipped really easily. So, bringing the students awareness to it and integrating that into their routine discussion is really important. [MIOH interview participant-1]

One of the interviewees that worked in a program coordination position, mentioned how they encourage students to discuss these systems and processes with staff at their clinical placements. This aligned with the information raised from clinical staff during interviews, where only one interviewee mentioned the BOS or any similar process for tracking oral health in their records.

We have asked the students to reflect as they go out on practice to see how many midwives have actually incorporated [oral health screening] into their practice, and to have a chat with the midwives who they're working with as to whether or not they do oral health screenings and why. So that's part of their reflective piece for this particular unit actually. [MIOH interview participant-1]

Attendance of pregnant women at public dental services

As part of the evaluation, changes in pregnant women's attendance at public dental services between 2011 through to 2022 were explored.

Data for pregnant women attending Victorian public dental services (obtained from Titanium data set) showed a steady increasing trend in the number of pregnant women attending dental services from

2011 to 2018. However, in both regional and metropolitan areas of Victoria there is an observed decline or no change in access during phase 3 (since 2018-2019). It is likely that this decline can be associated with the COVID-19 pandemic and lockdowns impacting ability to access dental and other healthcare services.

An overview of the numbers of accessing Victorian public dental services by oral health agency and region between 2011 and 2022 are shown in *Figure 8* and further details are provided in Appendix D.

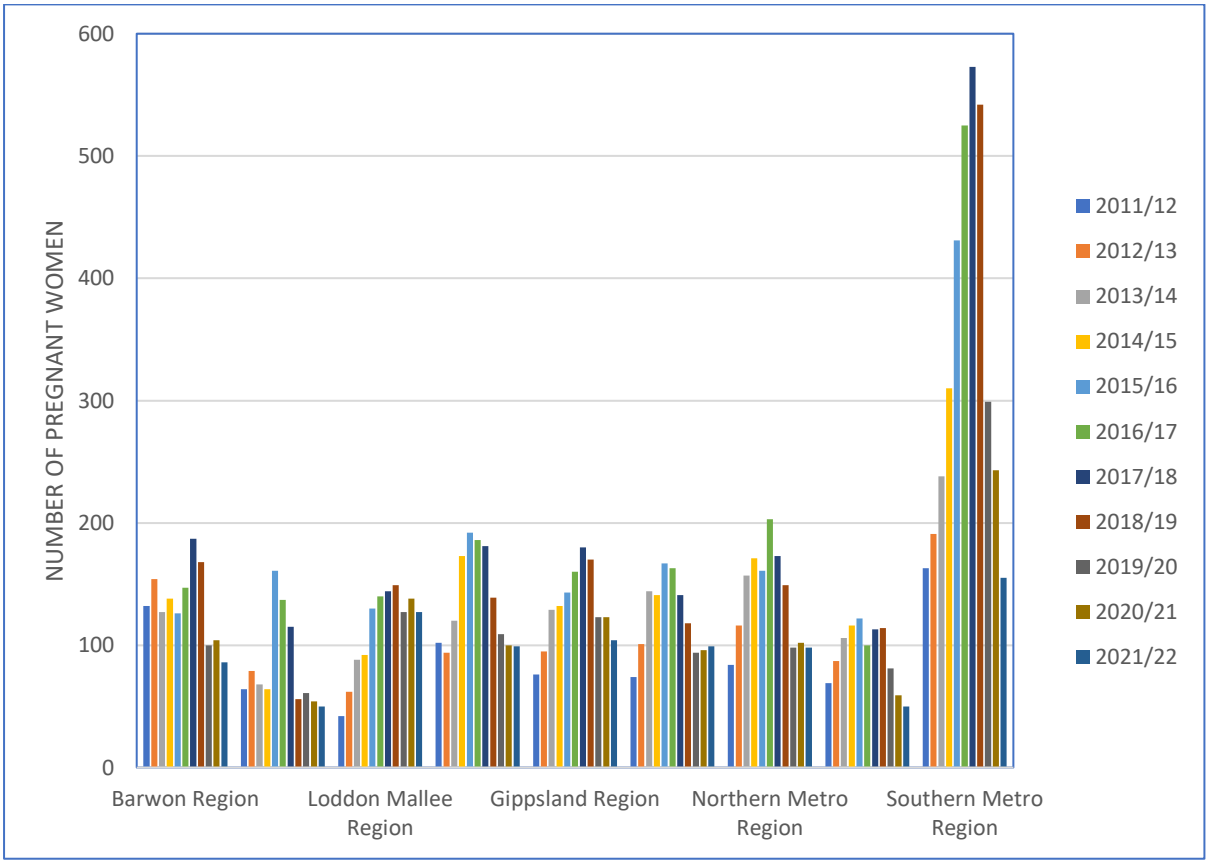

Figure 8 Pregnant women accessing public dental services 2011/12- 2021/22

2.1.7.1 Challenges and success factors

As is highlighted in the evaluation findings, HFHS delivery of the MIOH program to Victorian midwives continues to be an effective method of building the oral health promotion capacity of this workforce. However, much like previous evaluations have revealed, midwives are still facing barriers when it comes to including oral health promotion in their work, such as limited time to allocate to the topic in antenatal appointments. This demonstrates that further work needs to be done at a policy and systems level to support midwives embedding this into their practice. Recommendations from phase 2 evaluation suggested focussing on recruiting senior midwives, as they are more likely to have an influence over policy and systems. This was pursued in phase 3 and should be continued going forward.

Another recommendation from phase 2 was to consider exploring offering refresher training for MIOH. While this was discussed with partners during phase 3, limited progress was made due to competing priorities. As the suggestion for a refresher has also been raised by midwives in this evaluation, a refresher course should be explored by the program with partners in the next phase.

As outlined in previous evaluations it is believed several factors continue to contribute to high completion rates for MIOH, including:

- Having a dedicated HFHS team member to check-in on participants
- A policy of participants having to pay for their course fee if the course is not completed
- Recognition including 16 CPD points awarded by the ACM upon completion, providing another incentive to undertake and finish the course.

However, recruiting for and administering the MIOH course is a significant time commitment for program staffing resources.

COVID-19 created significant pressures on the healthcare workforce, which may have impacted midwives' capacity to undertake professional development and engage in the MIOH education program. Recruitment for MIOH dipped during the peak of COVID, however late 2022 saw participation numbers rising back to numbers reflective of pre-COVID times. The impact of COVID is also reflected in the declining number of pregnant women accessing public dental services.

It is clear from this evaluation that midwives are still receiving limited oral health education prior to undertaking the MIOH course, despite oral health being incorporated in their clinical practice guidelines. This emphasises the importance of the HFHS team's work to build momentum and awareness of the importance of oral health in the tertiary sector (particularly by targeting midwifery staff at universities to undertake MIOH and developing relationships with university staff). This long-term investment has paid off in this phase, with oral health content now being incorporated within the midwifery curriculum of three universities.

HFHS' ongoing partnership with WSU has been key to HFHS work and success in the maternity sector during phase 3, enabling the continued delivery of the MIOH program to Victorian midwives and sharing of oral health content with Victorian universities.

2.1.7.2 Key recommendations

It is recommended that the HFHS program:

- Remain responsive to the needs of the midwifery sector and continue to work collaboratively to co-design, develop, update and refine relevant resources as required
- Continue to work collaboratively with the tertiary sector to support the integration of oral health into the midwifery curriculum
- Continue targeting midwives at senior levels (e.g. Midwifery Unit Manager) to complete the MIOH course, to encourage changes at an organisational level
- Scope and explore the development of a MIOH refresher course with partners to enhance sustainability of learnings
- Continue to work to strengthen referral pathways between maternity and local public community dental agencies.

2.2 Maternal and child health sector

2.2.1 Overview

The Victorian Maternal and Child Health (MCH) service is a free primary health service available to all Victorian families with young children from birth to school age. MCH services are located in 79 Local Government Areas (LGAs) across the state where families can bring their children for physical and developmental assessment, early detection and intervention, health promotion, developmental assessment, early detection and referral and social support (10). Victorian children are likely to be seen by a MCH nurse (MCHN) for a Key Ages and Stages (KAS) visit at some point during their early childhood.

Under the Key Ages and Stages (KAS) framework - MCH clinical practice framework - mouth checks, oral health information and intervention are to be provided to children and their families by MCHN at certain visits. DHSV has worked with the MCH sector for over 20 years to support this oral health promotion role, with responsibility for this support being integrated into the HFHS program in 2012.

A key strategy to build the oral health promotion capacity of the MCH workforce throughout prior phases of the program has been the delivery of professional development workshops to nurses in MCH services across the state. The *Baby Teeth Count Too! (BTCT)* 1.5 – 2-hour CPD workshop was developed by HFHS in 2014. These CPD workshops are available to MCH services upon request and are delivered by a member of the HFHS team and an oral health clinician from a public dental service within the MCH service's LGA (subject to availability). The HFHS team have also worked with La Trobe University and RMIT since 2015-16 to facilitate an adapted version of these workshops for students studying a Graduate Diploma of Child and Family nursing (required to become an MCH nurse).

Within phase 1 and 2 the HFHS team developed many oral health promotion resources designed to support the MCH workforce, such as Tooth Tips fact sheets, an Oral Health Key Milestones fact sheet and the Little Teeth Book and User Guide. These continued to be utilised in phase 3.

The provision of tooth packs to MCH services has been a key strategy to support the oral health screening and promotion role of MCHN. Tooth pack initiatives have been delivered by the HFHS program under various funding mechanisms during prior phases. Due to the effectiveness and success of this, tooth pack distribution has continued in various ways in phase 3 where funding allowed.

Given that oral health promotion is now strongly embedded in the practice of this professional group, phase 3 has focused on maintaining and improving the strength of existing initiatives, tools and partnerships and adapting these to serve the changing needs of the workforce.

2.2.2 Partnerships

2.2.2.1 Implementation

Regular meetings with the governing bodies of the MCH program – the MCH team at DH, Safer Care Victoria and Municipal Association of Victoria - continued to be convened throughout this phase of the program, in order to maintain relationships and allow for the sharing of information and collaboration opportunities. Due to COVID-19 pandemic related pressures on the sector, these meetings were suspended from the end of 2019 but were re-established mid-2022.

HFHS has had a longstanding partnership with Colgate since 2014, securing a funding agreement called the 'Mrs Marsh Oral Health Education Grant' enabling the provision of tooth packs to select MCH sites. During phase 3, this agreement was renewed (until end of 2023), enabling the maintenance of relationships with Colgate and the participating sites while supporting the oral health of families in high-risk areas. Further information on the implementation of the Mrs Marsh initiative is outlined in section 2.2.4.

During phase 3, HFHS has strengthened informal partnerships at a service level with many local MCH sites, due to regular contact required for the distribution of tooth packs as part of the *Baby Teeth Need Cleaning Too!* Initiative (BTNCT), reported in section 2.2.4. In addition, the HFHS team conducted partnership visits (*Table 4*) to meet with representatives from various MCH services to gain feedback on initiatives and resources. This provided an opportunity to sustain and nurture relationships within the sector.

Table 4 Field trips conducted to local MCH Services during phase 3

Date	Service	Region
22/08/2019	Bass Coast MCH Service	Gippsland
21/01/2020 – 23/01/2020	Campaspe MCH Service Swan Hill MCH Service Greater Shepparton MCH Service Njernda Aboriginal Cooperative	Loddon Mallee

Existing partnerships with coordinators of the Graduate Diploma of Child and Family Nursing Coordinators at La Trobe University and RMIT university were maintained during phase 3 as delivery of BTCT workshops to students continued. Course coordinators from the universities contacted the HFHS team to arrange workshops annually or bi-annually. In September 2021, an additional partnership was established with Federation University to deliver the workshops for their students.

2.2.3 Professional development

2.2.3.1 Implementation

Ongoing revisions of the BTCT workshop were undertaken during phase 3 to ensure relevancy and currency of content. While initially delivered in-person, due to COVID-19 the workshops were delivered virtually over Microsoft teams where necessary. In total, 76 MCHN completed a BTCT workshop during phase 3, either virtually or face-to-face (*Table 5*).

With COVID-19 preventing the delivery of in-person workshops, the content of *BTCT* was adapted into an online, interactive eLearning course using Articulate. The 2-hour course, *Baby Teeth Count Too! Online oral health training for MCHN* was initially piloted by fourteen MCHNs from Glen Eira, Macedon Ranges, Swan Hill and Orbost MCH services. Feedback from these nurses was used to improve the content and the course was then made publicly available in June 2022 and promoted to MCH services via the MCH newsletter, emails to MCH coordinators and the DHSV website. Designed to be a refresher for those who have already completed a workshop with DHSV or comprehensive training for new staff, the online training can be completed on-demand from any device. In this reporting period, the online course was completed by at least 116 participants (*Table 6*). This brings the total number of MCHN who participated in either the online course, face-to-face or virtual workshop during this reporting period to 206 (*Table 5* & *6*).

An adapted version of *BTCT* continued to be delivered to students attending the post graduate degree in Child and Family Health Nursing at La Trobe University and RMIT, with workshops at Federation University commencing in 2021 (as outlined in section 2.2.2). These were delivered either virtually or face to face, and students received a resource pack containing the Little Teeth Book, user guide and other oral health promotion resources. During this reporting period, workshops were delivered to 447 students (*Table 7*).

Table 5 Number of MCHN participating in Baby Teeth Count Too! CPD workshops, 2019-23

Date	Service	CPD Activity	Number of participants
19/02/2020	Moorabool Shire Council MCH Service	Baby Teeth Count Too! Workshop for MCHN (face-to-face)	6
24/11/2021	Glen Eira City Council MCH Service	Baby Teeth Count Too! Workshop for MCHN (virtual)	21
26/07/2022	Northern Grampians Shire Council MCH Service	Baby Teeth Count Too! Workshop for MCHN (virtual)	4
08/02/2023	City of Whittlesea MCH Service	Baby Teeth Count Too! Workshop for MCHN (face-to-face)	45
		Total	76

Table 6 Number of MCHN participating in Baby Teeth Count Too! online course, 2019-23

Date	Service	CPD Activity	Number of participants
06/10/2021 – 26/11/2022	Macedon Ranges Shire Council MCH Service, Glen Eira City Council MCH Service, Swan Hill Rural City Council MCH Service, Orbost MCH Service (East Gippsland Shire Council)	Baby Teeth Count Too! Online oral health training for MCHN (Pilot)	14
31/05/2022 – 30/03/2023	Various	Baby Teeth Count Too! Online oral health training for MCHN	116
		Total	130

Table 7 MCH Number of MCH student nurses participating in Baby Teeth Count Too! CPD workshops 2019-23

Date	University	CPD Activity	Number of participants
11/07/2019	La Trobe University	Baby Teeth Count Too! Workshop for MCH students (face-to-face)	34
09/08/2019	RMIT University	Baby Teeth Count Too! Workshop for MCH students (face-to-face)	38
04/02/2020	La Trobe University	Baby Teeth Count Too! Workshop for MCH students (face-to-face)	50
27/07/2020	RMIT University	Baby Teeth Count Too! Workshop for MCH students (face-to-face)	65
11/02/2021	La Trobe University	Baby Teeth Count Too! Workshop for MCH students (face-to-face)	75
22/08/2021	RMIT University	Baby Teeth Count Too! Workshop for MCH students (virtual)	58
22/09/2021	Federation University	Baby Teeth Count Too! Workshop for MCH students (virtual)	12
15/02/2022	Federation University	Baby Teeth Count Too! Workshop for MCH students (face-to-face)	25
01/03/2022	La Trobe University	Baby Teeth Count Too! Workshop for MCH students (face-to-face)	50
07/07/2022	RMIT University	Baby Teeth Count Too! Workshop for MCH students (face-to-face)	40
		Total	447

2.2.4 Tools and resources

2.2.4.1 Implementation

A strong body of evidence supports the targeted provision of oral hygiene products to improve oral health outcomes (11-14). In prior phases of HFHS, the program has delivered the Baby Teeth Need Cleaning Too! (BTNCT) initiative (distribution of family tooth packs to MCH services), to support family engagement in toothbrushing and oral health. The MCHN are guided to distribute the packs alongside the provision of oral health education, a lift the lip oral health check, toothbrushing demonstration and referral to a dental practitioner (if necessary).

In 2021-22, the BTNCT initiative was delivered again however due to funding limitations, a more targeted approach was employed to reach those families in areas with higher burden of childhood tooth decay. Public dental service data of children under 5 years from across the state from 2017-19 was reviewed. Twenty-three local government areas that had 14% or more of children with a history of four or more decayed teeth were identified and the MCH services approached with an offer of oral hygiene products for family tooth packs for use in both the Enhanced and Universal programs.

Between September and December 2021, a total of 75,042 products and resources were distributed across 26 MCH services sites within 23 Victorian LGAs (*Table 8*). This included 10 resources for MCH services to collate into tooth packs, as well as three resources to support MCHN to administer the program and promote oral health. It is estimated that the number of products provided would reach approximately 6,100 families. A formal evaluation report of the BTNCT 2021-22 initiative was developed by the HFHS team and submitted to DH separately (15).

In 2022-23 the initiative was delivered again, using the same selection criteria, however this time based on public dental service data from 2018/2019-2020/2021 (noting that some sites rejected the offer as they had leftover product from previous distributions, possibly due to pandemic impacts on service provision). Tooth packs were also offered to MCHN working in Aboriginal Health Services.

Between September 2022 and February 2023, a total of 73,683 products and resources were distributed to 38 MCH sites across 37 LGAs (*Table 8*). It is estimated that this number of products would reach approximately 6,100 families.

Table 8 Tooth packs distributed to MCH services as part of BTNCT initiative 2021-22 and 2022-23

Product type	Product	Distribution method	Total quantity distributed 2021-22	Total quantity distributed 2022-23
Tooth pack resources	Standard fluoride toothpaste (for adults and children 6+years)	Post/courier	6,100	6,345
	Children's low fluoride toothpaste (for 18months – 6 years)		6,100	6,680
	Adult toothbrush		12,400	12,665
	Child toothbrush		12,400	12,800
	Brown paper show bags		6,100	6,180
	Caring gums and teeth 0-6 years flyer		6,260	6,080
	Story time books flyer		6,260	5,730
	Let's get ready for bed flyer		6,260	5,710
	Toothbrushing videos flyer		6,560	5,730
	Toothbrushing apps flyer		6,301	5,530
Practical resources to support MCH nurse practice	The Little Teeth Book	Post/courier	139	104
	The Little Teeth Book Guide		139	101
	Baby teeth need cleaning too! Information guide	Email	23	38
Total products/resources			75,042	73,683

Since 2014, DHSV has also received support from Colgate under their 'Mrs Marsh Oral Health Education Grant', to deliver tooth packs (adult toothbrushes and toothpaste, junior toothbrushes and toothpaste and oral health information flyer) to select high-risk MCH sites.

These sites include:

- Greater Dandenong LGA MCH Service
- Brimbank LGA MCH Service
- Gippsland Lakes MCH Service
- Orbost Shire MCH Service
- Swan Hill Rural City Council MCH Service
- Robinvale MCH Site (part of Swan Hill MCH service)

Much like the BTNCT initiative, these tooth packs are designed to be given out during KAS visits alongside a lift the lip check, referral (if necessary) and provision of oral health advice.

During phase 3, distribution of tooth packs via Colgate to these sites continued, with over 30000 oral hygiene products provided between Sept 2019 – March 2023 and an estimated family reach of at least 4750. Quantity of product provided to participating sites is outlined in *Table 9*.

Table 9 Oral hygiene product distributed to MCH sites via Colgate Mrs Marsh Oral Health Education Grant during phase 3

Product detail	Quantity provided to MCH sites
0-2yrs brushes	6395
2-5 years junior brushes (introduced 2022)	903
2yrs+ children's brushes	6607
Adult brushes	5595
18mths–6yrs low fluoride paste	7214
6yrs+ adult regular fluoride paste	4839
Total product provided	**31553**
DHSV A4 fact sheet	4750

Other tools and resources for MCH

Resources developed in phase 1 and 2 (The Little Teeth Book, The Tooth Tips fact sheet series, Oral health milestones and key messages, TEETH manual: information guide for Maternal and Child Health Nurses) continued to be offered to MCH services via the DHSV website, as well as provided to participants during CPD workshops, promoted at conferences, via the statewide MCH newsletter developed by DH, and opportunistically via email.

Through additional funding from DH under the Expansion of Prevention Initiatives for Pre-schoolers funding, during phase 3 the HFHS team worked with the wider Health Promotion team at DHSV to produce the resources listed below. These have been used widely across sectors for all programs focussing on the early years, including the MCH sector as a resource to share with families to support

their oral health. They have been promoted to the MCH sector via the DH MCH newsletter, emails to MCH coordinators, MCH conferences and in BTCT workshops and online course.

- Toothbrushing with young children video series: These videos, published in 2021, aimed to support and encourage families to make toothbrushing part of their child's routine from an early age. These were translated into 15 community languages (under Expansion of Prevention for Preschoolers Funding) to support the oral health of Victoria's diverse families.
- Caring for teeth and gums 0-6 years fact sheet: published in 2020, this fact sheet offers advice and tips on looking after toddlers' gums and teeth, as well as how to brush children's teeth from 18 months – 6 years. The fact sheet was the outcome of a consultation process with over 50 families and health and early childhood professionals. The resource provides simple messages with images that reflect the diverse faces of families living in Victoria. It has since been translated into 15 community languages with QR codes linking to the 'Toothbrushing with young children' videos.
- Keeping Teeth Healthy 0-3 years and 3-5 years fact sheet: Published in 2022, these fact sheets offer information about how to eat well, drink well and clean well across this key developmental time. These resources can be shared with families with young children to instil good oral health habits for life. There is also a companion social media kit containing colourful images and key messages to support professionals to share oral health information via social media, newsletters and parent portals and link parents to these resources.
- Deadly Tooth Tips: Deadly Tooth Tips includes a series of posters, a tip sheet and social media kit, featuring three oral health ambassadors designed by Yorta Yorta, Dja Dja Wurrung and Kamilaroi artist Madison Connors (nee Saunders). The resources, published in July 2021, can be shared by professional's families and aim to deliver 'Eat Well, Drink Well and Clean Well' messages in a culturally safe way. While developed as culturally relevant resources for Aboriginal families, they are promoted as resources celebrating Aboriginal culture that can be shared with all families. These resources were published in July 2021.

2.2.5 Policy and Systems

2.2.5.1 Implementation

Oral health is already embedded within MCHN's daily practice, being part of the KAS framework. With the view of supporting MCHN to conduct their oral health promotion activities, as with previous phases the HFHS program focused on delivering professional development activities, development of resources and provision of tools 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.

2.2.6 Reporting and dissemination

Key program updates, relevant information and resources are shared with MCHN predominantly via the quarterly Healthy Families, Healthy Smiles newsletter and the Department of Health's monthly MCH program newsletter. During phase 3, the HFHS program has also shared program updates, resources and information to the MCH sector by attending MAV's MCH conferences as an exhibitor, outlined in *Table 10*.

Table 10 HFHS presence at MCH state-wide conferences

Date	Activity	Reach
01/11/2019	Participated as an exhibitor at the Maternal and Child Health Conference – in person	Data not available
03/11/2022 – 11/11/2022	Participated as an exhibitor at the Maternal and Child Health Conference – online conference	~1242 attendees
08/03/2023	Participated as an exhibitor at the Maternal and Child Health Conference - in person	~600 in person, ~900 online attendees

While records of interactions at conferences were not recorded it is estimated that over 60-80 individual interactions occurred at each conference as attendees visited the booth during break times. Overwhelmingly positive feedback was provided to team members regarding resources and support available. Any queries unable to be answered were noted and followed up post conference.

2.2.7 Key evaluation findings

Baby Teeth Count Too! Online oral health training for MCHN (Pilot)

As discussed in section 2.2.3, the implementation team pivoted the delivery of the BTCT workshop from face-to-face to a virtual setting due to COVID-19. MCH services in four LGAs took part in piloting the *Baby Teeth Count Too! Online oral health training for MCHN.*

All fourteen participants who completed the pilot course between September 2021 and November 2021 also completed a post evaluation form. Most of the nurses (>92%) strongly agreed or agreed that they had gained new knowledge and or skills, the content was clear and easy to follow, the amount of information was sufficient, and they felt more confident about supporting good oral health for their clients. Twelve participants (85.7%) strongly agreed or agreed the training met their expectations.

The most useful aspects (as reported by participants, n=13) of the refresher course were:

- Interactive nature of the training
- Visual aids e.g. videos, pamphlets/charts, diagrams/pictures, resources that could be shared with families, in particular the videos on toothbrushing 'how to brush'
- Statistics-particularly those that showed early childhood caries by LGA
- Information on the tooth decay process
- Guidance around 'Lift the Lip'
- Course content- easy, concise and interactive
- Training was a good reminder to suggest dental visit by 2 years of age.

Suggested improvements to the course included:

- Run a refresher each year
- Conduct a pre-training quiz to establish existing knowledge

- Include information regarding managing breastfeeding and cleaning teeth
- Include Information for parents about fluoride, reversing tooth decay and dealing with difficult toddlers when regarding toothbrushing.

Intended practice changes post course completion were reported (n=12 responded) as:

- Allocate more time to discuss oral health with parents at specific ages e.g. either 8 or 12 months
- Use the DHSV Toothbrushing with young children's videos with parents
- Look for white banding/spots on teeth in mouth checks
- Be more concise with oral health messages
- Change advice regarding rinsing after brushing
- More confident to demonstrate brushing using the jumbo might mouth model
- Discuss worrying oral health statistics with families.

Baby Teeth Count Too! Online oral health training for MCHN

The feedback from the pilot was used to refine the course, it was then promoted to MCH services via the MCH newsletter, emails to MCH coordinators and the DHSV website. This online course was completed by at least 116 participants between June 2022 and March 2023. One-hundred and sixteen participants working across 40 different local government municipalities responded to the post evaluation questionnaire. Just under half (49.1%, n=57) worked in metro areas and 44.8% (n=52) worked in regional areas. Two respondents worked in the 24-hour MCH telephone line.

Post training ≥91% of participants reported they had gained new knowledge and or skills, the content was clear and easy to follow, the amount of information was sufficient, they felt more confident about supporting good oral health for their clients and the training met their expectations.

Participants (n=62 responded) provided the following information on how they would change their practice following the training:

- Include more detailed oral health discissions with clients e.g. schedule oral health discussion at 8/12 month KAS visit
- Utilise DHSV resources with clients e.g., website, factsheets, picture cards, videos, photos
- Include *Lift the Lip* or look closely within the child's mouth e.g., 8-month check
- Introduce toothbrushing demonstrations/discussions with clients at 8 or 12-months
- Recommend earlier dental visits
- Be more consistent with oral health advice

Limitations to deliver the online training meant that the feedback regarding including quizzes to establish pre/post knowledge was not addressed. These improvements, including potential enhancements to data collection should be revisited when a more sophisticated learning management system is available to support delivery of online learning.

Baby Teeth Count Too! CPD workshop for nurses

The Baby Teeth Count Too! CPD workshop for MCHN were delivered face to face and virtually. Seventy-six nurses attended four workshops held between February 2020 and February 2023, with 69.7% (n=53) completing a post evaluation survey. Evaluation surveys were not completed for those who attended the Moorabool session (February 2020). Participants worked across three local government municipalities: Glen Eira (n=10, virtual), North Grampians (n=4, virtual) and Whittlesea (n=39, face-to-face). Most participants worked within a Universal MCH service (n = 48, 90.6%); with two working in both an Enhanced and Universal MCH service.

Post-training, ≥90% of the participants either strongly agreed (40-62%) or agreed (35-55%) they had gained new knowledge and or skills, the content was clear and easy to follow, the workshop met their expectations, and the amount of information was sufficient. However, fewer (70%) strongly agreed or agreed that they were more confident about supporting good oral health for their clients. Twenty-five per cent did not provide a response to this statement.

Participants (n=45 provided a response) thought the most useful aspects of the workshops were:

- Access to resources e.g., referral pathway information, videos, handouts, resources in different languages, website links, tips for healthy teeth sheet
- Referral pathway information
- Information about fluoride/water tanks
- Child eligibility for public dental, government provisions
- How to conduct Lift the Lip oral health checks
- Dental decay prevalence and statistics
- Time allocated for questions
- Oral health information being clear and easy to follow
- Reinforcement of previous oral health knowledge.

Participants (n=24 responded) reported that the practice changes they intended to make following the workshop were:

- Include Lift the Lip or look closely within the child's mouth
- Promote oral health more actively
- Utilise resources e.g. CALD information sheets, graphs
- Recommended dental visits to their clients earlier with one participant more confident to refer
- Introduce toothbrushing discussions with clients
- Discussing tooth discolouration, provide information on tooth decay process, oral disease statistics.

Suggestions (n=9 responded) for improving the workshop were:

- Provide pictures of different types of decay
- Provide more information on different types of childhood oral diseases
- Have a pre-training survey to find out the needs and streamline training to suit.

Baby Teeth Count Too! workshop for students

An adapted version of *BTCT* was delivered to students attending the post graduate degree in Child and Family Health Nursing at La Trobe University, RMIT and Federation University. Ten workshops were delivered to 447 students between 11 July 2019 and 7 July 2022, however post-evaluation surveys were collected between 22 Aug 2021 and 7 July 2022 only (no evaluation: 11 July 2019 and 11 February 2021). Generally, the BTCT workshops were held face to face, however during COVID-19 two sessions were delivered virtually, one at Federation University and the other at RMIT. Thirty-six students (19.5% 36/185 who participated in training during evaluated period) completed the post evaluation surveys.

More than 90% of the participants either strongly agreed or agreed they had gained new knowledge and or skills, the content was clear and easy to follow, the workshops met their expectations, the workshop was relevant to their professional practice, the amount of information was sufficient; and they intended to use what they had learnt. Twenty-nine participants (80.6%) strongly agreed or agreed that they were more confident about supporting good oral health for their clients and 19.4% did not provide a response to this statement.

Useful aspects of the training

Participants (n=31 responded) thought the most useful aspects of the training were:

- Information on decay in general and how to check a child's mouth for decay (n=13)
- Access to resources (n=10) including picture cards and slides and where to find them
- Tooth brushing tips, including the demonstrations (n=6)
- Encouraging parents to take their child to the dentist before 2 years (n=3)
- Dental decay prevalence and other dental statistics (n=3)
- Information re: public dental (n=3) e.g., eligibility, cost for dental, locality of services and statistics around hospital admissions for dental.
- Dental care whilst breast feeding (n=2).

Suggestions for improving the training

Recommendations (n=9 responded) to improve the training included:

- Provide more resources: including more activities or live demonstrations, the teeth book/demonstration model, videos and a copy of the PowerPoint (n=4).
- Scheduling a reminder to complete a refresher, or reminder in team meetings annually (n=2)
- Reduce the length of the training from 1.5 hours to one hour (n=2)
- Breastfeeding: more specific studies that it poses a problem re: caries (n=2).

Further survey results are provided in Appendix E and Appendix F (students).

Tools and resources

Tooth packs

Baby teeth need cleaning too!

As discussed in section 2.2.4, HFHS has distributed tooth packs to the MCH service through various funding mechanisms during phase 3. An evaluation report for the *Baby teeth need cleaning too!*

(BTNCT) initiative 2021-22 was completed by the HFHS team and submitted separately to DH (15). As part of this evaluation, MCHN were asked to complete a form every time they gave a pack to a family to capture how many products were distributed, the number of lift the lip oral health checks completed, and referrals made. Interviews with MCH Coordinators and Team Leads were held to gauge their perspectives on the initiative. While only a small proportion of data collection forms were completed, interviews with MCH coordinators provided insight into the impact of the program from a service level point of view.

Overall, findings were generally consistent with those of previous tooth pack evaluation projects completed by DHSV (16). The data captured indicated that the program has achieved its intended impacts and that there was strong support for its continuation, albeit with some minor changes to the evaluation and distribution methods. Evaluation findings reinforced that tooth packs were effective in strengthening oral health promotion, screening and referral within MCH practice. MCH coordinators also reported that the targeted distribution of tooth pack products to high-risk LGAs has reduced cost barriers to oral hygiene for participating families, increasing their control and ability to improve their oral health outcomes. Oral hygiene knowledge and behaviour changes within families was not measured by this evaluation, however the findings, together with the existing body of international evidence that outlines the effectiveness of the targeted provision of oral hygiene products in improving oral health outcomes, supports a case for continued funding and implementation of the initiative in the future.

Mrs Marsh tooth packs

The *Mrs Marsh tooth pack* initiative (supported by Colgate) has been running since 2014, however only data pertaining to 2018-22 (phase 3 and data not reported in previous evaluations) is reported. Similar to the *BTNCT* initiatives, MCHN involved in the Mrs Marsh tooth pack initiative were asked to complete a hard copy or online Microsoft Forms survey to record how many products they distributed, at which KAS visit that the product was distributed, whether a mouth check was performed, a dental referral provided, or oral disease identified. It should be noted that not all nurses completed a survey.

According to surveys returned, 535 Mrs Marsh tooth packs were provided by MCHN across all KAS age group visits, with most of the packs (76.4%) distributed to children between 12 months to 3.5 years. Mouth checks were undertaken at visits from 2 weeks, however high rates were shown from 12 months onwards (81.1% of the children whose mouths were checked were ≥12 months). Overall, 16.3% (n=87) of the children were referred by the MCHN to a dental professional regardless of whether oral disease had been identified or not. This data indicates that the tooth packs are effective in supporting MCHN to conduct a mouth check and provide a referral to a dental professional.

Oral hygiene product provision to families

- 1486 toothbrushes (0-2 years, child >2years and adult) and 866 tubes of toothpaste (low fluoride and standard fluoride) were provided to families across the KAS visits between 11 January 2018 and 31 August 2022

Further detailed findings can be found in Appendix G.

Information resources and professional development packages

Key informant interviews were held with MCHN to explore their engagement with and perspectives on HFHS professional development activities, tools and resources developed for their sector and their experiences and perspectives of incorporating oral health promotion into their practice.

MCHN reported that the HFHS resources developed in prior phases of HFHS (such as Tooth Tips, Little Teeth Book) and tooth packs continued to be well received by families and effective in facilitating natural oral health conversations to occur with families during phase 3. The visual resources were helpful in delivering the oral health messages to children and families. The simple and concise language used in the resources made it easy for the MCHN to convey information. This is of particular relevance to high-risk groups who may experience low literacy and sensitivities around oral health.

Two qualitative interviews explored the suite of resources and engagement with the MCH sector, which included:

- The Little Teeth Book
- Tooth Tips fact sheets for families
- TEETH: oral health information for Maternal and Child Health nurses [practice guide]
- Tooth packs
- Professional development workshops.

Participating MCHN worked in metropolitan and regional areas, and the use of the resources varied. Overall MCHN identified HFHS resources helped to support their existing practice in delivering oral health messages to families at KAS visits. Practical resources (such as Tooth Tips and the Little Teeth Book) acted as a prompt to bring oral health discussions into the visits and increased their confidence to discuss oral health with families, supported by a strong evidence base. MCHN reported the Tooth Tips and The Little Teeth Book reinforced key oral health messages and found the visuals of children's tooth decay helpful.

In interviews, MCHN explained they understand that a dental referral is necessary however there are no formal referral pathways within their services. The MCHN advises clients of local dental service options.

Interviews with MCHN revealed that, besides the Tooth packs, the suite of other HFHS tools, resources and professional development activities for MCHN were also key enablers of their oral health promotion practice. The delivery of HFHS' online training course for this professional group was advantageous as the training was more accessible and could fit within their busy schedules.

Further detailed findings from evaluation interviews exploring MCH resources can be found in Appendix H.

2.2.7.1 Challenges and success factors

As with other sectors, COVID-19 placed immense workforce pressures on the MCH sector and had a large impact on MCH workforce service delivery. Many MCH services restricted face-to-face visits for younger children only. During the initial phases of the pandemic many of HFHS face-to-face MCH workshops were cancelled. Offering these workshops virtually, over Microsoft Teams, as an alternative allowed to continued provision of PD to the sector throughout the reporting period, however it can be assumed that uptake of PD was impacted due to workforce pressures. Evaluation findings demonstrate that the delivery of these workshops virtually was an effective delivery method and did not result in decreased learning outcomes. Virtual workshops should therefore continue to be offered into the future, particularly to reach rural and remote MCH services and reduce HFHS staff resourcing.

The development of the online course for MCHN during phase 3 has been successful at catering to the changing PD preferences and needs of the workforce as a result of the pandemic, whilst expanding the accessibility of oral health PD. Evaluation findings have demonstrated that the online course is an effective tool for improving MCHN oral health knowledge, skills and confidence. However, the HFHS team does not currently have access to a learning management system (LMS) or platform to host the online course, meaning that participants can only complete the course via a 'preview' link, whereby completion data is unable to be captured. The exact overall number of participants is therefore unknown, and the reported estimate is based upon those who have completed the post-training survey. The actual completion rate is likely to be higher as not all participants may have filled in the post-training questionnaire. DHSV is currently exploring the implementation of an LMS which HFHS will have access to in the future. Most LMS provide the ability to track learner progress, and feature reporting and analytic tools to identify areas of online training that may be lacking (e.g., where participants drop out or fail to proceed further). Having access to such features would enhance the continuous quality improvement of all HFHS online courses.

Re-establishing regular partnership meetings with MCH governing bodies as reported in Section 2.2.2 has been a beneficial way of keeping informed of updates in the sector and gaining advice and input for HFHS initiatives.

In prior phases of HFHS, the distribution of tooth packs to the MCH sector was repeatedly reported as an effective strategy in strengthening oral health promotion, screening and referral within MCH practice. This was once again reflected during phase 3, with the distribution of tooth packs during this time being highly valued by participating sites.

While there would be immense value in the ongoing distribution of tooth packs across MCH services statewide, funding and resource limitations have prevented HFHS from being able to do so. The additional funding stream provided to extend the reach of oral health promotion initiatives for preschoolers has been discontinued and ability to continue tooth pack distribution in the future will be significantly reduced. This will also mean that additional engagement advantages around oral health promotion that were observed in services participating in oral hygiene product distribution may be compromised in these high-risk communities. The sustainability of this initiative is therefore uncertain.

2.2.7.2 Key recommendations

- Advocate for ongoing funding for the provision of tooth packs for distribution through MCH services to support their oral health promotion role, particularly for communities where children experience higher rates of tooth decay.
- When the proposed learning management system is available at DHSV, review existing online courses to take advantage of system capabilities to improve the learning experience. The review should also include use of reporting and analytical tools to support continuous quality improvement, enhance engagement with MCH sector and evaluation data.
- Continue to review and update CPD workshops and online courses at regular intervals to ensure content remains current, evidence based and relevant to sector's needs.
- Continue regular engagement with MCH governing bodies to inform and support HFHS future initiatives for the sector.
- Continue to review and update existing HFHS resources for the MCH sector and develop new resources based on sector and community need, considering a shift in preferences towards digital resources for sharing health information with families (rather than paper-based resources)
- Continue to support MCH services to strengthen referral pathways with local community dental agencies.

2.3 Early Parenting Centres

2.3.1 Overview

Early Parenting Centres (EPCs) provide specialist services to Victorian families with children up to four years of age who require additional intensive support to build their parenting skills and capacity. EPCs offer day stay services, residential and group services, as well as other education opportunities and programs. Typically, programs focus on areas such as sleep and settling, child behaviour and parent and child health and wellbeing. At the time of writing, there are three EPCs in Victoria – Tweddle Child and Family Health Service, Queen Elizabeth Centre and Mercy Health O'Connell Family Centre – with eight new centres to open over the coming years under the Victorian Government's EPC expansion project.

In 2012, HFHS worked in partnership with the existing EPCs to develop a training package for clinicians – *Baby Teeth Count Too!* - of which multiple sessions were delivered from 2013-2018. HFHS has also maintained engagement and supported the oral health promotion role of EPC clinicians through the provision of family tooth packs.

Phase 3 has focused on reviewing HFHS' existing PD package for EPCs and adapting this to meet the changing needs of the sector, whilst maintaining relationships through the continued provision of tools and resources.

2.3.2 Partnerships

2.3.2.1 Implementation

As of June 2022, the HFHS team strengthened relationships at a policy level with the sector, with representatives from DH's Early Parenting Centre Expansion Project unit attending partnership meetings as of mid-2022 (together with the MCH unit, MAV and SCV). These meetings allowed the HFHS team to keep informed regarding expansion project progress, the future of the sector and reforms to statewide training frameworks which may have implications for HFHS work.

Within this reporting period, relationships with the three existing EPCs were sustained. These relationships were supported by the supply of tooth packs to the centres (under Expansion of prevention initiatives for preschoolers funding).

2.3.3 Professional development

2.3.3.1 Implementation

In 2022, HFHS engaged in conversations with managers at each EPC to gain an understanding of their oral health training needs within the COVID-19 climate. The consensus from these discussions was that an online training module would be beneficial to build the oral health capacity of staff.

A 1-hour training course was consequently developed, adapting HFHS' online training course for MCHN and content from the *Baby teeth count too!* education program for EPC clinicians (developed in Phase 1). Content covered included:

- The importance of oral health during early childhood and pregnancy
- Oral health basics: early childhood caries, the tooth decay process, risk and protective factors
- Key oral health messages to share with parents/caregivers
- Supporting oral health within the EPC
- Referring to local public dental services

Managers from all three centres played a fundamental role in reviewing the module once developed and providing valuable feedback. A link to the finalised module was then shared with representatives at the three EPCs to distribute to relevant staff. Due to lack of an LMS to host the online module, exact completion data could not be captured. At the time of writing, post-training evaluation surveys have been completed by 31 participants, indicating that at least 31 early parenting practitioners have completed the training.

Where EPCs embedded the course into their service's LMS, completion data is available to the service. Informal agreement to provide updates on training participation from services was made. *Table 11* details completion rates as reported by EPCs.

Table 11 Number of EPC staff participating in PD activities, 2019-23

Date	Service	CPD Activity	Number of participants
06/2023	Queen Elizabeth Centre	Supporting oral health in the early parenting centre online learning module	92 (of 108 clinicians)
02/2023	Mercy O'Connell	Supporting oral health in the early parenting centre online learning module	~30
05/2023	Tweddle Child & Family Health Services	Supporting oral health in the early parenting centre online learning module	Not available

2.3.4 Tools and resources

2.3.4.1 Implementation

Healthy Families, Healthy Smile sought to support professionals working in EPCs by providing tooth packs and other supporting resources. These resources were intended to encourage toothbrushing demonstrations and other oral health promotion to be delivered to families participating in various programs at the EPC that targeted vulnerable families, including:

- Parenting Assessment and Skill Development Services (PASDS)
- Stronger Families
- Home Parenting Education Support Service (HoPES)
- Cradle to Kinder
- Family Preservation and Reunification Response (FPRR)

From 2018, HFHS has distributed tooth packs to the three EPCs via Expansion of Prevention Initiatives for Preschoolers funding. Distribution during 2018-19 falls outside this reporting period, however, is

included as it was not reported upon in the HFHS phase 2 evaluation. Since 2018, tooth packs were distributed to approximately 1930 families (1365 during phase 3). Family tooth packs were distributed in 2018/19 (565), 2021/22 (615) and 2022/23 (750) via the 3 EPCs (*Table 12*). The Little Teeth Book resource and mouth models were also provided to the three EPCs to support toothbrushing demonstrations. Distribution ceased in 2019/20 and 2020/21 due to pandemic impacts.

Links to other oral health promotion resources (Caring for teeth and gums, Deadly Tooth Tips, Toothbrushing with young children videos as reported in section 2.2.4) were shared via email with key contacts at each EPC to promote to staff for use with families. Links to these resources are also included in the *Supporting oral health in the Early Parenting Centre* online course.

Table 12 Tooth pack products distributed to EPCs

Early Parenting Centre	Quantity of tooth packs provided		
	2018-19 (phase 2)	**2021-22**	**2022-23**
QEC	380	380	300
Tweddle Child and Family Health Service	150	200	400
Mercy O'Connell Family Centre	35	35	50
TOTAL	**565**	**615**	**750**

2.3.5 Policy and Systems

2.3.5.1 Implementation

The *Supporting Oral Health in the Early Learning Centre* online module has been beneficial tool to support the inclusion of oral health training into the policy and systems of EPCs. QEC have reportedly embedded the module into their Clinical Practice Framework; meaning that all clinical staff are required to complete the module.

Partnership meetings with the DH Early Parenting Centre Expansion Unit have provided a platform to raise awareness and advocate for the inclusion of oral health into the new statewide frameworks that are being established as part of the Expansion Project. HFHS will continue to pursue this as the expansion project progresses.

2.3.6 Reporting and dissemination

Resources, tools and initiatives relevant to EPC practitioners have been shared via the HFHS newsletter, and the DH MCH monthly newsletter (which EPC clinicians are recipients of). The *Supporting oral health in the early parenting centre* online learning module was also promoted in the DH EPC Bulletin.

2.3.7 Key evaluation findings

This evaluation reports on initial data from *the Supporting Oral Health in the Early Parenting Centre* online course. As the course has only recently been implemented, it should be noted that sample size is small, however provides an insight into the effectiveness of the course thus far.

Based on date reported by EPC, at least 100 early parenting practitioners completed online oral health training. Almost one third of participants (31), across two Melbourne based EPCs completed the post-training questionnaire after completing the *Supporting Oral Health in the Early Parenting Centre* online training. The post-training evaluation captures participant satisfaction, impact on knowledge and confidence to promote oral health and participants' views on changes in their practice due to participation in the training.

After completing the workshop, most participants (>93%) strongly agreed/agreed they gained new knowledge or skills, felt more confident about supporting good oral health for their clients, the content was clear and easy to follow, the amount of information was sufficient and the course met their expectations. Participants found the resources especially useful, including the handouts for clients, links to other resources and videos/photos. Information provided on various oral health related topics such as the tooth decay process and pregnancy were considered useful. Following the training participants felt more proactive, confident and equipped to have oral health discussions with their clients and intended to include toothbrushing demonstrations as part of their practice.

For further evaluation findings, please see Appendix I.

2.3.7.1 Challenges and success factors

As is demonstrated in the evaluation findings, the online course has been successful in improving oral health knowledge, skills and confidence of EPC clinicians. The development of the online course has thus far proved beneficial at providing an accessible PD opportunity for the workforce, reflected in the willingness of managers to embed and promote the training to their clinicians. Again, the lack of a LMS to host the course hinders HFHS ability to provide accurate completion data for reporting and tracking.

As with other sectors, COVID-19 limited the ability for HFHS to engage with the sector and hindered the distribution of tooth packs and resources during peak lockdown periods. Nonetheless, the provision of tooth packs (regardless of COVID interruptions) has been a particularly successful strategy to enhance and maintain engagement with the three EPCs. Not only do families benefit from this strategy, but it also supports the EPC practitioners by creating an opportunity to embed oral health promotion in their practice. As additional funding provided by DH was used to supply tooth packs to the EPCs (the future of which is uncertain), avenues for continued funding of tooth packs to the sector should be considered to ensure sustainability.

In addition, regular meetings with the EPC expansion team at DH have been highly beneficial in providing guidance for HFHS work and engagement with the sector and can be considered a success factor for this phase.

2.3.7.2 Recommendations

- Advocate for ongoing funding for continuous distribution of tooth packs to EPCs, including all new sites that open under the Expansion Project.
- Continue regular partnership meetings with the Early Parenting Centre Project team at DH, to keep abreast of developments, inform future HFHS initiatives, and advocate for the inclusion of oral health in new training frameworks and policies.
- Evaluate effectiveness of the *Supporting oral health in the early parenting centre* online learning module once more clinicians have completed, and review and update at regular intervals.

2.4 Supported playgroups

2.4.1 Overview

Playgroups provide opportunities for young children and their parents or caregivers to meet, play and socialise. Supported playgroups (SPGs) differ from community playgroups in that they are led by a paid facilitator and focus on supporting families with particular needs. SPGs typically provide services to culturally and linguistically diverse families, including migrant and humanitarian entrants, Aboriginal and Torres Strait Islander families, young parent families, socially isolated and disadvantaged families. These groups are known to experience higher rates of oral disease (11, 17).

In Victoria, typically several SPGs are delivered within each local government area. The majority are funded by the state government (Victorian Department of Families, Fairness and Housing), and required to deliver *smalltalk*, an evidence-based parenting program. These state government funded supported playgroups are targeted to families experiencing disadvantage and have eligibility criteria. Other non-government organisations and community sector organisations also offer SPGs, typically focused on culturally diverse communities. The role of the facilitator is to coordinate play activities to promote positive parent-child relationships and provide information and links to local community services (17).

For these reasons, SPGs were identified as an essential setting for oral health promotion activities in the initial consultation and design phase of the HFHS program. Originally, a professional development package for SPG facilitators, *Baby teeth count too!* consisting of face-to-face training and provision of a resource (A3 flipchart), was designed to improve knowledge and awareness of oral health and increase confidence to share key oral health messages with parents and caregivers. Late in Phase 2 (2018-19), with additional funding from DHHS, HFHS designed and piloted a new intervention that focused on parent-child toothbrushing, *Brush Book Bed (BBB)*. Face-to-face training continued, and a fun resource (toothbrushing alligator puppet) was provided to facilitators to develop skills and confidence with demonstrating toothbrushing to children and families. Family-centred play activity ideas were provided to encourage conversations around toothbrushing and family learning through play, along with various resources for families (toothbrushes, toothpaste, information leaflets and child-friendly instructions and Toothbrushing Chart) to support toothbrushing at home.

In this reporting period, work to support the SPG sector continued with the aim to expand the reach of *Brush Book Bed* initiative.

2.4.2 Partnerships

2.4.2.1 Implementation

During earlier HFHS phases, the HFHS team met with Playgroup Victoria (PV), the peak body for playgroups, to explore opportunities and shared interests. In this four-year period, the HFHS and PV met to discuss opportunities to promote dental health in PV's communications program. PV presented HFHS team with a proposal to develop a musical adaptation of dental health messages, based on a similar model they implemented to raise awareness of respectful relationships and physical activity, however the financial investment requested was not considered viable.

2.4.3 Professional development

2.4.3.1 Implementation

The evaluation of the Brush Book Bed pilot (2018-19) confirmed that the family-centred approach, integrating toothbrushing into fun, play-based activities, was successful in engaging facilitators, as well as children and families (18). Therefore, this approach was adopted into the professional development package.

At the commencement of HFHS phase 3 we planned to implement the Brush Book Bed initiative statewide. However, as a list for Victorian SPGs was not available, Victorian local governments and community sector organisations responsible for delivering SPGs were contacted and asked to connect the HFHS team with SPG facilitators. Brush Book Bed workshops were promoted, coordinated and delivered to SPG facilitators. Initially Brush Book Bed workshops were delivered face to face, however during the COVID period (from March 2020), a virtual (real-time) format was offered, in addition to an online self-paced course. After a period (July 2021), the Alligator toothbrushing puppets were no longer available to SPG Facilitators.

In early 2023, Brush Book Bed professional development was reviewed, revised and rebranded as *Let's brush* and re-launched as an online course (with face-to-face or virtual delivery on request), together with a bundle of existing HFHS resources for facilitators (including the toothbrushing alligator puppet and two storybooks); and families (toothbrushes, toothpaste, information leaflet, child-friendly instructions, and Toothbrushing Chart). This redesign aimed to reinvigorate SPGs to carry out oral health promoting activities following COVID-19, reaching facilitators new to the role as well as encouraging previous participants to undertake 'refresher' training. In mid-2023, *Let's brush* was promoted to reach SPG facilitators in high-risk areas (41 LGAs), as an activity for Dental Health Week (August 2023). The initiative has not yet been evaluated as more time is needed for delivery.

In this current phase, HFHS planned to reach Supported Playgroups providing programs for Aboriginal families across Victoria. Victorian Aboriginal Child Care Agency (VACCA) was a key organisation, offering *Koorie Kids Playgroups* in Melbourne suburbs, in addition to a number of Aboriginal Community Controlled Organisations. In past phases the HFHS team developed the *Little Koorie Smiles* program, which incorporates a one-hour professional development workshop including supportive resources (Activities booklet and Flipchart), designed for Aboriginal Supported Playgroup staff working with Aboriginal and Torres Strait Islander children and families. Disappointingly, there was little interest in *Little Koorie Smiles*, and only one *Little Koorie Smiles* workshop was delivered during Phase 3, to 4 participants at Victorian Aboriginal Child Care Agency. HFHS intends to review, update and relaunch the course going forward, with the development of an ongoing sector engagement strategy.

In total, at least 189 facilitators participated in the various Brush Book Bed workshops/training in 2019-2023 (*Table 13*).

Table 13 Number of Supported Playgroup Facilitators completing CPD activities 2019-2023

Date	LGA	LGA/Service	CPD Activity	Participants
10/06/2020 – 10/02/2022	Ballarat Baw Baw Mornington Peninsula Central Goldfields Glen Eira Warrnambool Mitchell Maribyrnong	Various	BBB online course	*66
1/10/2019	Banyule	Banyule Community Health	BBB workshop (face to face)	5
9/10/2019	Hume	Meadows Early Learning Centre	BBB workshop (face to face)	10
17/10/2019	Kingston	City of Kingston	BBB workshop (face to face)	5
25/10/2019	Banyule	Banyule Community Health	BBB workshop (face to face)	1
28/10/2019	Port Phillip	City of Port Phillip	BBB workshop (face to face)	2
6/11/2019	Moreland	Moreland City Council	BBB workshop (face to face)	4
13/11/2019	Frankston	Frankston City Council	BBB workshop (face to face)	2
15/11/2019	Mildura	Mallee Family Care	BBB workshop (face to face)	4
25/11/2019	Brimbank	Community Hubs - Brimbank	BBB workshop (face to face)	5
27/11/2019	Wodonga	Albury/Wodonga	BBB workshop (face to face)	8
27/11/2019	Towong	Beechworth	BBB workshop (face to face)	1
28/11/2019	Hobsons Bay	Hobsons Bay Council	BBB workshop (face to face)	6
3/12/2019	Latrobe	Latrobe City	BBB workshop (face to face)	6
4/12/2019	Bayside	Sandringham	BBB workshop (face to face)	2
17/12/2019	Moorabool	Darley (Moorabool)	BBB workshop (face to face)	1
3/02/2020	Horsham	Horsham Rural City Council	BBB workshop (face to face)	6
5/02/2020	Geelong	Ariston House - Newtown	BBB workshop (face to face)	7
25/02/2020	Surf Coast	HIPPY leaders, BCYF Winchelsea	BBB workshop (face to face)	13
26/02/2020	Wyndham	Wyndham City	BBB workshop (face to face)	9
4/03/2020	Whitehorse	Burwood	BBB workshop (face to face)	3
26/05/2020	(various)	Playgroup Victoria	BBB workshop (virtual)	5
12/06/2020	Dandenong	Dandenong	BBB workshop (virtual)	2
01/04/2022		Victorian Aboriginal Child Care Authority	Little Koorie Smiles workshop (virtual)	4
7/02/2023	Hume	Community Hubs - Hume	BBB workshop (face to face)	11
9/02/2023	Mansfield	Mansfield Shire Council	BBB workshop (face to face)	1
			Total	189

**Actual total is unknown sixty-six completed an online evaluation, therefore ≥66 completed training.*

2.4.4 Tools and resources

2.4.4.1 Implementation

SPG facilitators are given several resources, designed to incentivise them to include dental health in their practice, and increase their confidence to engage with children and families around key dental health behaviours. *Baby teeth count too!* an A3-size highly visual flipchart, developed in Phase 1, continues to be a staple resource for the SPG setting.

The evaluation of the Brush Book Bed pilot (2018-19) confirmed that the child-friendly resources were effective in gaining interest and engagement of children and families about toothbrushing, both at playgroup and at home. Key Brush Book Bed suite resources were incorporated into the package for the SPG setting.

In 2021, with the support of library staff from City of Melbourne, the HFHS team developed the *Let's brush! with Tash and Chomper* video series. These child-friendly videos were designed to engage children with, and provide a demonstration of the steps, of toothbrushing and be a helpful model for parents. It was originally produced in English and then translated into Arabic, Burmese, Vietnamese, Punjabi, Dari, Mandarin and Persian. See the *Let's brush! with Tash and Chomper* series here https://youtube.com/playlist?list=PLcAjB30TLQlEYCk_wPiHgUqvyOVa0Rnqf). To date, the videos have received 3034 views.

The *Brush Book Bed Activity Kit* for SPG Facilitators was revised and rebranded as *Healthy Teeth: Fun learning activities for children 0-5 years,* to support its use across various early years professionals and settings. This was supplemented by the development of several play-based learning activities, working in collaboration with an independent education consultant (Hydon Consulting), to ensure they met the needs of the professional group and aligned with key early childhood education frameworks, Victorian Early Years Learning and Development Framework (VEYLDF).

In early 2023, a program package, a Storytime (Activity) Kit, was developed and will be promoted to encourage implementation during Dental Health Week (August) 2023. The Kit includes a toothbrushing alligator puppet and two storybooks supplied to facilitators, along with resources to share with families (toothbrushes, toothpaste, information leaflet, child-friendly instructions, and Toothbrushing Chart).

Due to the impact of COVID-19, online and digital tools and resources were created to continue to support professionals and families. Consultation and feedback from SPG Facilitators, described conducting virtual playgroups with families and utilising closed social media groups (i.e., Facebook and WhatsApp groups) to communicate and share information. Working together with a Social Media Consultant, HFHS designed and developed a suite of templates and assets (*Talking about teeth* Social Media Kit) tailored to share key dental health messages with families and provide fun and practical strategies encourage toothbrushing and help create a positive attitude to teeth and dental health.

The *Deadly Tooth Tips* handouts, posters and social media kit (reported in section 2.2.4) were also included in professional development packages for this setting.

2.4.5 Policy and Systems

2.4.5.1 Implementation

The HFHS program has deliberately aligned information, tools and resources with best practice principles in *smalltalk* framework (evidence-based parenting program) and the state's framework that describes the principles, practices and outcomes that support and enhance young children's learning (VEYLDF), to support Facilitators to embed oral health promoting activities within their practice and policies.

2.4.6 Reporting and dissemination

Updates and achievements in this sector have been reported in HFHS quarterly newsletters and annual reports throughout phase 3.

To maintain engagement with professionals, an email communication plan was developed, and circulation is commended in 2023. The inaugural *Everyday Habits for Healthy Little Smiles* e-newsletter was distributed to 250 stakeholders in May 2023. A schedule of regular emails will provide information plus activity ideas and resources to motivate facilitators to carry out oral health promoting activities with children and families in their setting.

2.4.7 Key evaluation findings

This section reports on the evaluation of the Brush Book Bed workshops and online training for SPG facilitators that occurred during phase 3. The rebranded *Healthy Little Smiles: Let's brush* initiative has not yet been evaluated. During HFHS Phase 3 (2019-2023), 189 supported playgroup facilitators across at least 23 Victorian LGA sites participated in Brush Book Bed workshops (face to face or virtual) (n=119), online training (≥n=66) and Koorie Little Smiles (n=4). No evaluation surveys were collected for the Koorie Little Smiles workshop.

The post-workshop evaluation captures:

- participant satisfaction
- impact on knowledge and confidence to promote oral health.
- capacity of facilitators to demonstrate toothbrushing and discuss oral health topics.

2.4.7.1 ***Brush Book Bed workshops (face to face/virtual, n=85)***

Of the 119 participants in the Brush Book Bed workshops 71.4% (n=85) completed a post evaluation survey. Prior to completing this workshop just under half the participants never/rarely shared information about dental health (45.9%) or toothbrushing (49.4%) with families. After completing the workshop (face to face/virtual), most participants (>80%) agreed they:

- felt confident to demonstrate toothbrushing to children and families.
- planned to deliver a toothbrushing demonstration in their playgroup.
- would recommend this workshop to other playgroup facilitators.

The workshop was well received, and 16 participants thought the information was relevant/useful

while 12 participants indicated an intention to use the learning within their playgroups. Suggestion for further resources included providing a poster with dental hygiene/toothbrushing tips and a variety of toothbrushes/brands to try.

All participants agreed they were satisfied with the workshop and would recommend this workshop to other playgroup facilitators. Many expressed it was a great initiative was relevant to their practice.

Further information is provided in Appendix J.

2.4.7.2 Brush Book Bed online training (n=66)

Of those who completed the online Brush Book Bed training (participant numbers unknown due to LMS issue explained earlier) sixty-six completed a post evaluation survey.

Prior to completing the online training, many facilitators rarely/never shared information about dental health (24.1%, n=14/58) and toothbrushing (34.4%, n=20/58) with families. After completing the online workshop, all participants (100%, n=66) agreed they felt confident to explain the four steps of toothbrushing and demonstrate toothbrushing to children and families.

When participants were asked what obstacles or challenges, they anticipated regarding delivery a toothbrushing demonstration in their playgroup session, their responses related to COVID-19, language barriers, changing parents' behaviours regarding oral health and healthy eating. As many of the playgroups were meeting virtually at the time due to COVID-19, delivering toothbrushing demonstrations were a challenge. To overcome this obstacle, five participants suggested posting videos online or speaking over the phone.

Many participants (n=10/58) praised the resources with reference to the videos and puppet being great and intended to use the learnings within their playgroup. Many (n=8/58) thought the information was relevant/useful and intended (n=6/58) to use the learnings within their playgroups.

For further evaluation results, please see Appendix K.

2.4.7.2 Challenges and success factors

The process evaluation has shown that the Brush Book Bed initiative is well received with self-reported gains in confidence to assist children and families with toothbrushing. Brush Book Bed has enabled the development and trial of innovative resources that aim to appeal to professionals initially, and through their adoption, support parents and carers with children's oral health behaviours. Tailored tools, resources and activities that aligned with the role of the playgroup program and aligned with evidence-based parenting strategies (*smalltalk*) and a family-centred education approach, appealed to facilitators, and gave them the confidence to incorporate into their practice. The alligator toothbrushing puppet appealed to many facilitators, creating a positive and fun environment to support children and families to explore dental health topics together, with strategies they could transfer to home.

Provision of free tooth packs (toothbrushes and fluoride toothpaste) is known to be an effective and evidence-based strategy (11) to support professionals to engage with clients about oral health while also providing benefit for families. However, provision of tooth packs for SPGs and other professional groups is limited within the existing funding allocation. In 2019, Colgate-Palmolive Pty Ltd also withdrew their support of the free Tooth Pack program (Alliance for a Cavity Free Future, previously Global Child Oral Health Taskforce), administered in partnership with DHSV. Expanding the provision of tooth packs to families in this setting could provide additional benefits.

One advantage of promoting the initiative via LGAs and early years networks, was that it attracted interest from other professionals and settings including HIPPY Australia (Brotherhood of St Laurence) which present valuable opportunities for collaboration and partnerships.

As COVID-19 pandemic restrictions prevented the delivery of face-to-face training, several sessions were modified to deliver virtually. While online training was in development, the effects of the pandemic brought forward the development of a self-paced online course, together with a range of digital resources to support facilitators working in a digital/virtual environment. Providing accessibility to the training in this online format has provided an opportunity to expand the reach of the course, particularly for those who prefer to access their PD online, reduced travel costs and staff time lost to travel to deliver face to face sessions. The pandemic may also have made this modality more accessible as video conferencing and online learning were more prevalent as a result of lockdowns and in -person meeting restrictions being in place for significant periods in Victoria and particularly in Melbourne.

Currently HFHS is unable to access DHSVs digital LMS, and therefore manual administrative processes are implemented to capture registration and participation, which are less accurate. By utilising a LMS, the program could capture more sophisticated data to inform and guide continuous improvement and better track engagement and reach, as well as requiring less administrative work.

2.4.7.3 Key recommendations

Considering the evaluation findings, it is recommended that the HFHS program continue offering these professional development activities to the Supported Playgroup setting, and:

- Continue exploring opportunities to expand reach of HFHS' capacity building initiatives for SPG facilitators.
- Continue to maintain engagement with SPG facilitators through ongoing communications offering oral health promoting information, resources and activity ideas
- Continue to respond to SPG facilitator's priorities, needs, policy and practice environment to ensure activities and resources align to relevant practice frameworks and professional roles
- Develop and trial new and innovative strategies to increase appeal and take-up of HFHS initiatives for SPG facilitators
- Evaluate effectiveness of *Healthy Little Smiles: Let's Brush* series
- Utilise LMS when available to support the continuous quality improvement of updated online learning packages for this setting

2.5 Early childhood education & care settings

2.5.1 Overview

Early childhood education and care (ECE&C) settings such as long day care, family day care and kindergarten (or preschool) reach most children up to 5 years and engage closely with parents and carers. Health conditions often have their roots in the health attitudes and behaviours formed in early childhood. According to a recent report, not only is health promotion in early childhood an essential strategy to improve population health, but it also has significant potential to promote and influence health (19).

Oral health promotion activities that may be appropriate in ECE&C settings include supporting children's learning ('Health education and skills development'), engaging and supporting parents and caregivers with information and strategies ('Social marketing and health information') and providing opportunities for children to practice good oral health (20). The National Quality Framework (NQF) regulates and guides programs, including children's health and safety and educational program and practice, facilitates the integration of health promotion in ECE&C settings.

Designed and piloted in phase 1 the *Healthy Little Smiles* early childhood educator professional package included face-to-face training and accompanying guidebook. The phase 2 evaluation of the *Healthy Little Smiles* training session found that whilst the training was well received by educators, a lack of management support to participate in the 2-hour session within work hours was seen as barrier to their attendance as they were required to attend in their own time.

A comprehensive review of *Healthy Little Smiles* was completed during phase 3 with the aim to better meet the needs of early childhood educators and therefore increase participation in the HFHS oral health promotion training and education initiatives.

2.5.2 Partnerships

2.5.2.1 Implementation

The HFHS team worked in collaboration with the Manager of Professional Learning (a consultancy firm) at Gowrie NSW during phase 3 to review *Healthy Little Smiles* content, to ensure it is useful and relevant to education professional roles and supports translation to practice. Working across both early years oral health promotion programs (Smiles 4 Miles and HFHS), DHSV's Health Promotion team established an Early Childhood Education and Care Advisory Group, engaging with professionals working within the early childhood services sector directly, to support program activities, including contributing to the review and feedback of the revised *Healthy Little Smiles* initiative.
Eight professionals were invited to join the Advisory Group, consisting of staff working at eight different early years services across Victoria.

A total of seven meetings and one email engagement were conducted with the advisory group between February 2022 and June 2023.

2.5.3 Professional development

2.5.3.1 Implementation

In the beginning of this four-year period, participation in *Healthy Little Smiles* remained below its potential. Being a 2-hour face-to-face workshop appeared to be a barrier as identified in earlier phases of the program, and this was magnified by the impact of the COVID-19 pandemic.

A comprehensive review of the professional development package was undertaken in collaboration with several key stakeholders, including Gowrie NSW, a leader in early childhood education, Children's Services Operational Coordinator, City of Melbourne, DHSV's Early Childhood Education and Care Advisory Group, together with a HFHS team member studying Graduate Diploma of Early Childhood Education, undertaking student placement across various ECE&C settings.

The *Healthy Little Smiles* professional development package was re-launched in 2023 primarily as a self-paced online course supported by a range of digital resources (with face-to-face workshops available to professionals and settings in 'priority' locations, where children have higher rates of tooth decay). The online course takes approximately one hour to complete and enables flexibility for learners as it is accessible via mobile, tablet or desktop.

The revised content focuses on supporting translation of educator knowledge and skills into practice, by ensuring oral health promoting activities align with key elements of the Victorian Early Years Learning and Development Framework and the National Quality Standard. *Healthy Little Smiles* professional development course covers basic oral health information and is designed to build the capacity of educators to implement fun, play-based learning activities that engage children and help develop a positive attitude towards their teeth and increase awareness of how we take care of them (centred around key dental health behaviours). The package also includes information and practical strategies to support educators to share resources with families.

Although pandemic restrictions prevented the delivery of face-to-face training, some sessions were modified and delivered virtually.

A promotional strategy for the *Healthy Little Smiles* online course was developed, targeting ECE&C (long day care, family day care and Kindergarten [or preschool]) in priority locations in Victoria (identified by DHSV public dental service data as postcodes characterised by children with decayed teeth) and not covered by the Smiles 4 Miles program. This is still being implemented, so is not reported on in this evaluation.

Table 14 Number of early childhood professionals participating in CPD activities, 2019-2023

Date	Organisation	CPD Activity	Number of participants
24/03/2021	Brighton & Brighton Beach Early Learning Centres	Healthy Little Smiles face-to-face workshop	15
17/06/2021	Latrobe City Council	Healthy Little Smiles virtual workshop	7
9/09/2021	Central Bayside Community Health Services & Caulfield Community Health Service	Healthy Little Smiles virtual workshop	19
10/05/2022	Latrobe City Council	Healthy Little Smiles virtual workshop	4

19/07/2022	Latrobe Community Health Service	Healthy Little Smiles virtual workshop	8
22/07/2022	Latrobe Community Health Service	Healthy Little Smiles virtual workshop	3
27/07/2022	Latrobe Community Health Service	Healthy Little Smiles virtual workshop	15
10/08/2022	Bacchus Marsh Montessori Uniting Kindergarten	Healthy Little Smiles virtual workshop	8
TOTAL			79

2.5.4 Tools and resources

2.5.4.1 Implementation

To support and complement professional learning, several resources were designed and developed to encourage translation to practice: play-based learning experiences that guide educators to teach young children about dental health and healthy behaviours. As well, there is information, practical tips and resources for families, provided in *Healthy Little Smiles* facilitates educators to engage with families. Many of the Brush Book Bed updated resources (reported in section 2.4.4) are also applicable and useful for early childhood educators and for families. These resources are available in the online course and shared on DHSVs 'Good dental health habits' webpage.

To maintain engagement with early childhood professionals, an email communication strategy was developed, and is anticipated to commence in 2023 to expand the roll out of the revised training package. A schedule of regular emails will provide information, resources and activity ideas designed to motivate educators to conduct oral health promoting activities with children and families in their setting.

2.5.5 Policy and Systems

2.5.5.1 Implementation

HFHS has intentionally aligned information, tools and resources with pivotal frameworks that guide educators' everyday practice in early childhood education settings (NQS and VEYLDF), to support for educators to embed oral health promoting activities within their practice.

2.5.6 Reporting and dissemination

Updates and achievements in this sector were reported in HFHS quarterly newsletters and annual reports throughout phase 3.

To maintain engagement with professionals, an email communication plan was developed, and circulation commenced in 2023. The inaugural *Everyday Habits for Healthy Little Smiles* e-newsletter was distributed to 250 stakeholders in May 2023. A schedule of regular emails will provide information plus activity ideas and resources to motivate facilitators to conduct oral health promoting activities with children and families in their setting.

2.5.7 Key evaluation findings

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. The revised *Healthy Little Smiles* online course has not been evaluated yet so is not reported.

During phase 3 of the HFHS program (2019-2023), eight Healthy Little Smiles workshops were delivered to 79 early childhood professionals and one education leader. Ten (12.5%) participants from four of the Healthy Little Smiles virtual workshops completed the post-training evaluation questionnaire. The small number of responses limit the representativeness of the findings.

The *Healthy Little Smiles* workshop was well received by educators and most participants (n=9, 90%) agreed they gained new knowledge and/or skills, the content was clear and easy to follow, the amount of information was sufficient and would recommend the training to others.

These participants felt the workshop was relevant to their professional practice and the information would help them translate the learnings into practice. The resources (images, links, brochures), fluoride information and toothbrushing information were useful.

Participants (n=6 responded) reported that barriers to promoting oral health at their service included:

- parents/carers not following the oral health promotion advise
- limited access to a dentist locally

One participant suggested the workshop would be useful as a refresher for all staff in their service and another participant identified a visit from a dental service would be useful as an education program.

For Healthy Little Smiles evaluation results, please see Appendix K.

2.5.7.1 Challenges and success factors

The process evaluation has shown the *Healthy Little Smiles* initiative was well received with self-reported gains in oral health knowledge and confidence of educators. The *Healthy Little Smiles* initiative is now more closely aligned to the professional requirements of early childhood educators, with content covering knowledge and skills that enable educators to carry out play-based learning activities that promote oral health messages and behaviours in developmentally appropriate ways. Activities are now aligned with the pivotal frameworks and standards that guide educators' everyday practice (National Quality Standards NQS and Victorian Early Years Learning and Development Framework VEYLDF).

Despite its disruption, the COVID-19 pandemic also provided the impetus to transition professional development to an online training format, which is more appealing and more convenience for participants. The requisite skills, technology and capabilities were also more prevalent as a result of

the pandemic, likely supporting uptake. Online professional development also requires less administration from HFHS staff, however opportunities to build connections with professionals and services were greatly reduced. Limitations of the platform to deliver online training also meant that tracking participation and other analytics to support continuous improvement were not available.

The Early Childhood Education & Care Advisory Group has been a great asset to the program during this period, providing feedback and advice on various topics, questions and input into the design of oral health promoting activities of HFHS. They have been a very engaged group and have provided a valuable perspective of professionals working within the early childhood services sector.

2.5.7.2 Key recommendations

Considering the evaluation findings, it is recommended that the HFHS program continue offering these professional development activities to early childhood education settings.

- Formally evaluate the *Healthy Little Smiles* online course to assess its effectiveness
- Continue exploring opportunities to expand the reach of *Healthy Little Smiles*
- Continue to maintain engagement with trained professionals through ongoing communications offering oral health promoting information, resources and activity ideas
- Continue to respond to professionals' priorities, needs, policy and practice environment to ensure activities and resources align to relevant practice frameworks and professional roles
- When available, embed the training packages into a more sophisticated learning management system
- Develop and trial new and innovative strategies to increase appeal and take-up by professionals.

2.6 Libraries

2.6.1 Overview

Libraries are a welcoming, highly regarded and trusted community resource (21), and through a variety of free early literacy programs, including preschool and bilingual Storytime, reach parents and children under 5 years. Libraries and library staff provide a unique opportunity to promote dental health to young children and families. Storytime sessions offer activities like playgroups, and typically include sharing stories, craft activities and sing-alongs.

There are 51 public library services, 291 public library branches, and 233 mobile library stops across Victoria, most owned and operated by the relevant local government. Libraries present an opportunity to broaden the program reach and impact. A new strategic framework by Public Libraries Victoria and State Library Victoria formally recognises the role public libraries play in supporting health and wellbeing and strengthens opportunities for collaboration (22).

In the preceding phase of the HFHS program, the HFHS team undertook consultations and needs assessment with key stakeholders, using *Brush Book Bed* (Supported Playgroup initiative, reported in section 2.4) as a foundation, and developed and piloted a professional development package for library settings, *Brush Book Bed for Library Storytime*. In this current phase, HFHS has worked to increase traction and uptake of professional development activities by librarians and library staff.

In 2022 Public Libraries Victoria launched a new strategic plan, *Libraries for Health and Wellbeing: A strategic framework for Victorian public libraries towards 2024.* This policy strengthened the opportunities for collaboration established in phase 2 of the program.

2.6.2 Partnerships

2.6.2.1 Implementation

In 2022, Public Libraries Victoria launched a new strategic plan, *Libraries for Health and Wellbeing: A strategic framework for Victorian public libraries towards 2024* (22), which documents the role and priorities of Victoria's public libraries in supporting community health and wellbeing. HFHS met with Senior Program Manager, Library Sector Engagement, State Libraries Victoria to explore opportunities for HFHS to collaborate and develop an effective program for public libraries.

The children's library staff from the City of Melbourne Library have been very supportive partners and have collaborated with HFHS since the inception of this project (2019) in its development and to pilot a dental health-themed story time session during Dental Health Week. The partnership and collaboration extended to the design and production of the toothbrushing story time video, *Let's brush with Tash and Chomper (see section 2.4.4 for further detail).*

2.6.3 Professional development

2.6.3.1 Implementation

Brush Book Bed for Library Storytime online course was developed and piloted with a small group of librarians, with the view to launch more broadly in Dental Health Week (August) 2021. Following

feedback and minor modifications, the program was promoted to public libraries in priority locations in Victoria (identified by DHSV public dental service data as postcodes characterised by children with decayed teeth), however COVID-19 restrictions forced libraries to close to public access.

Following the release of State Library Victoria and Public Libraries Victoria's *Strategic Framework 2030* and consultation with key stakeholders, the professional development package was revisited and revised, and is anticipated to launch in Dental Health Week 2023.

Table 15 Number of library staff participating in CPD activities, 2019-2023

Date	Organisation	CPD Activity	Number of participants
26/07/2021	Brimbank Libraries	BBB for library storytime online course	1
27/07/2021	Hume Libraries	BBB for library storytime online course	3
16/11/2021	Wellington City Council Libraries	BBB for library storytime online course	1
16/11/2021	Melton City Libraries, Caroline Springs Branch	BBB for library storytime online course	1
17/11/2021	Campaspe Libraries - Echuca	BBB for library storytime online course	1
17/11/2021	Swan Hill Libraries	BBB for library storytime online course	2
28/01/2022	various	BBB for library storytime online course	5
TOTAL			14

2.6.4 Tools and resources

2.6.4.1 Implementation

The *Brush Book Bed* updated resources (reported in section 2.4.4) are also applicable for professionals in the library setting. *Brush Book Bed for Library Storytime* package consisted of the alligator puppet toothbrushing model, play-based learning experiences that guide educators to teach young children about dental health and healthy behaviours. As well, there is information and resources tailored to meet the practical needs of families, including Tooth Packs (toothbrushes and fluoride toothpaste). These resources are available in the online course and are shared on DHSVs 'Good dental health habits' webpage.

2.6.5 Policy and Systems

2.6.5.1 Implementation

HFHS has intentionally aligned information, tools and resources with pivotal frameworks that guide library programs. *Libraries for Health and Wellbeing strategic framework* (22)provides motivation and support for librarians to embed oral health promoting activities within their practice, and HFHS aims to leverage this to encourage uptake and translation to practice.

2.6.6 Reporting and dissemination

Updates and achievements in this sector were reported in HFHS quarterly newsletters and annual reports throughout phase 3.

To maintain engagement with professionals in this setting, an email communication plan is in development and circulation will begin in 2023. A schedule of regular emails will provide information plus activity ideas and resources to motivate facilitators to conduct oral health promoting activities with children and families in their setting.

2.6.7 Key evaluation findings

The following evaluation findings provide an overview of the *Brush Book Bed for Library Storytime* online course, library staff satisfaction with the workshop, the impact on their oral health knowledge, confidence and intentions to share dental health tips in story time sessions.

During Phase 3 of the HFHS program, the *Brush Book Bed for Library Storytime* online course was piloted with seven organisations, with 14 attendees, with all (100%) completing the post workshop evaluation.

Prior to attending the *Brush Book Bed for Library Storytime* workshop, less than half (n=6, 42.9%) never shared dental information with children and families.

Following the workshop, all participants responded they were confident to:

- explain the 4 steps of toothbrushing
- explain 'bite-size' dental health tips
- demonstrate how to brush using the alligator puppet
- deliver a toothbrushing story time session

Participants thought the online toolkit would be a useful addition to their dental week activities and having the resources available in multiple languages enabled greater reach to diverse members of the community during story time sessions. Library staff suggested ways to improve the toolkit was to have the information in an audio form rather than written and one staff member commented:

'The toolkit includes all the information relevant to my job. I can implement what I've learnt in my story time session. The toolkit also includes all the resources to share this information, I'm not sure what else could be improved'.

For further evaluation findings see Appendix L.

2.6.7.1 Challenges and success factors

The *Brush Book Bed for Library Storytime* package was designed in mid-2021, and then piloted with a small number of libraries, ready to launch for Dental Health Week (August) that year. COVID-19 restrictions were imposed at the same time, preventing attendance at library on-site programs.

Therefore, this initiative was postponed limiting the ability of the HFHS program to reach this professional group. Although evaluation data was available from a limited number of participants, feedback was positive and indicated increased confidence in delivering oral health promotion.

The launch of the strategic framework for Victorian public libraries, outlining the role of Victoria's public libraries in supporting community health and wellbeing in 2022 was timely, and offered an opportunity to re-engage with the peak body, consult and collaborate with library staff and re-launch the *Brush Book Bed for Library Storytime*, which is anticipated for Dental Health Week (August) 2023.

2.6.7.2 Key recommendations

It is recommended that the HFHS program continue engaging with the public library setting, and:

- Continue strengthening partnerships with State Libraries Victoria to pursue further opportunities for collaboration and ensure sustainability of *Brush Book Bed for Library Storytime*
- Scope opportunities to expand reach of *Brush Book Bed for Library Storytime*
- Continue to respond to professionals' priorities, needs, policy and practice environment to ensure activities and resources align to relevant practice frameworks and professional roles
- Develop and trial new and innovative strategies to increase appeal and take-up in the library setting.
- Continue to evaluate the program so as to review its effectiveness.

2.7 Professionals working with Aboriginal families

2.7.1 Overview

Aboriginal and Torres Strait Islander people experience poorer oral health and are less likely to access oral health care than the rest of the population (23). Working with professionals that engage with Aboriginal families has been a significant focus of HFHS, with work in previous phases including:

- Bigger Better Smiles (BBS) - an oral health education program developed in 2014 (Phase 1) in collaboration with Mallee District Aboriginal Service, for staff working in Aboriginal Community Controlled Health Organisations (ACCHOs). During prior phases of the program, Bigger Better Smiles workshops were delivered to Aboriginal Community Controlled Health Organisations (ACCHOs), Aboriginal Early Years Services and mainstream services.
- Little Koorie Smiles - a resource package including a one-hour workshop, activity kit and *Little Koorie Smiles* flipchart, produced collaboratively by HFHS and VACCHO. The workshop is designed for Aboriginal Supported playgroup staff and includes basic oral health information, familiarises staff with the *Little Koorie Smiles* package resources and focuses on delivering toothbrushing demonstrations. Little Koorie Smiles is reported in section 2.4.3.
- MIOH sponsorship for midwives working in the Koori Maternity Service (KMS): HFHS has focused efforts on recruiting midwives working in Koori Maternity Services (KMS) to take part in the pilot of the MIOH Education program (reported in section 2.1.3) in 2012 and subsequent expansion of the program. The Koori 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. In 2018/19, about 95% of KMS sites had at least one midwife who had completed MIOH training.
- Caring for your teeth while pregnant: To support KMS midwives' discussions with Aboriginal pregnant women on oral health, a culturally appropriate resource ("Caring for your teeth while pregnant") was developed in partnership with VACCHO KMS.

Phase 3 focused on expanding and developing partnerships in this sector, pursuing projects to further build the capacity of the workforce, and exploring reviews of existing training packages for professionals to increase uptake and reflect changes in training needs.

2.7.2 Partnerships

2.7.2.1 Implementation

Since 2021, HFHS has engaged in partnership meetings with representatives from WSU, VACCHO and Bendigo and District Aboriginal Cooperative (BDAC) to pilot test oral health capacity building initiatives for Aboriginal Health Workers with regards to pregnant women. This project and partnership arose after WSU developed and pilot tested the 'Grinnin' Up Mums and Bubs' program, a culturally appropriate model of care that builds the capacity of Aboriginal Health Workers (AHWs) to promote oral health during pregnancy. It was recognised that the program and resources could be

adapted and implemented in the Victorian context. At the time of writing, partnership meetings are still ongoing to progress the project. This project is further detailed in section 2.7.3.

HFHS also continued to work with partners at VACCHO's Koori Maternity Service (KMS), who have promoted the MIOH course among the KMS. This is further discussed in section 2.7.3.1.

2.7.3 Professional development

2.7.3.1 Implementation

Little Koorie Smiles: Implementation of Little Koorie Smiles is reported in section 2.4.3.

Bigger Better Smiles: Due to COVID-19, there were limited opportunities to deliver BBS workshops during Phase 3. This, together with the barrier services face in releasing staff for whole of service training resulted in a decision to undertake a review of the program during this period. The intention was to determine training needs for this professional group in the post-pandemic climate and explore alternative ways of delivering professional development that would reduce the impact on service delivery for participating Aboriginal Community Controlled Health Organisations (ACCHO).

In 2021, VACCHO received funding from the Department of Health to develop an Aboriginal Model of Oral Healthcare, in partnership with DHSV. This involved a state-wide consultation/needs assessment process. The team awaits results from VACCHO and DHSV's Aboriginal Model of Care project to guide this revision and future OHP work for professionals working with Aboriginal communities. Therefore, work to review BBS and other initiatives for this sector have been deferred.

In 2022, a Drugs and Poisons Regulations amendment approved Aboriginal Health Practitioners (AHPs) to apply fluoride varnish to children, to help prevent tooth decay. Following this decision, the Department of Health funded a project to train AHPs and support ACCHOs to embed fluoride varnish application in their practice. Twelve AHPs from across Victoria received training, led by RMIT and DHSV in Bendigo and Melbourne, consisting of knowledge building and skill building. A 2-day pre-training course was developed to ensure that participating AHPs had sufficient understanding of oral health to undertake the RMIT Apply Fluoride Varnish course.

The Healthy Families, Healthy Smiles team supported the development of this training in partnership with the Manager Commercial Business and RMIT. HFHS delivered an adapted BBS workshop designed to support AHPs to promote the oral health of young children and pregnant women to complement fluoride varnish application. The original 4-hour workshop was reviewed and condensed as a half-day session at the start of the two-day pre-training. The report on the training is available in *Appendix O: Evaluation Report for the Aboriginal Health Practitioner Fluoride varnish Pre-training course September 2022* on page 187

Figure 9 HFHS team members and AHPs at the Fluoride Varnish Application pre-training workshop 2022

In total eight AHPs were trained during phase 3.

Koorie Maternity Service:

During phase 3 of HFHS, sponsorship to undertake MIOH continued to be offered to staff working in the KMS. Partners at VACCHO helped to promote MIOH course to managers at KMS upon request by the HFHS team, via email and at meetings/verbally when opportunities arose. A total of 14 midwives working in the KMS or with Aboriginal families in public hospitals completed the training in phase 3 (from July 2019 to end of March 2023). This takes the total number of KMS midwives trained since phase 1 to 37. While it is possible to map where training has been delivered, staff turnover in ACCHOs is unknown, therefore it would be beneficial to understand current coverage of oral health promotion trained midwives in KMS for future recruitment drives.

Aboriginal Health Worker Oral Health Capacity Building Partnership Project

As a result of interest in the sector for MIOH training for AHP working in KMS, discussions were initiated with VACCHO's Koorie Maternity Services Unit The MIOH program was developed for midwives specifically so alternatives were explored including the adaptation of the course for AHPs. Discussions were also undertaken with WSU to explore opportunities to collaborate on an adapted course. Agreement was reached with VACCHO to offer an in-person workshop via their KMS network as a first step, however this did not proceed due to staff changes at VACCHO.

In 2021, HFHS in partnership with WSU, VACCHO and BDAC embarked on a project to determine whether WSU's program would be suitable and acceptable for use in the Victorian context, in order to fill the gaps of MIOH and BBS. The aim of this project is to develop and pilot test an oral health and pregnancy capacity building program for AHWs across Victoria, using NSW Grinnin' Up Mums and Bubs initiative as a framework. WSU had developed and pilot tested the Grinnin' Up Mums and Bubs program, as a culturally appropriate model of care that builds the capacity of Aboriginal Health Workers (AHWs) to promote oral health during pregnancy. The program was designed to be easily integrated by AHW into antenatal appointments. The pilot, conducted in Western Sydney, indicated that the program increased the knowledge and confidence of AHWs to promote oral health and

undertake dental referrals for pregnant women; and that there was a high level of satisfaction with the model of care among AHWs.

Reengagement with VACCHO KMS unit explored interest in adapting the NSW resource and WSU were supportive of further work in partnership to support this initiative. The adaptation for KMS project objectives includes:

1. Consult with Victorian AHW and ACCOs to determine the determine the suitability of existing oral health and pregnancy training and resources
2. Develop/source a culturally appropriate and evidence-based capacity building program (including training, screening tools, resources and referral pathways) for Victorian AHW
3. Develop a mentoring and support framework for AHW to embed theory into practice
4. Develop oral health and pregnancy resources for Aboriginal and Torres Strait Islander pregnant women
5. Develop a model of care framework for ACCOs to embed oral health promotion into antenatal care
6. Pilot test the capacity building program and resources and assess its acceptability and impact on the capacity of AHW to provide oral health education, screening and dental referrals for pregnant women.

The project group worked collaboratively with VACCHO to have questions pertaining to this project added into their statewide oral health consultation/needs assessment, in order to address objective one. At the time of writing this report, the findings from this needs assessment had not yet been finalised. Progressing this initiative with the project group is pending the release of the consultation however preliminary findings appear to support moving forward with this initiative.

2.7.4 Tools and resources

2.7.4.1 Implementation

In 2020, the DHSV Health Promotion team in collaboration with DHSV's Aboriginal Community Development Officer developed the 'Deadly Tooth Tips' resource under *Expansion of prevention initiatives for pre-schoolers* funding. The resources can be shared by professionals working with Aboriginal families and aim to deliver 'Eat Well, Drink Well and Clean Well' messages in a culturally safe way. Please refer to section 2.2.4 for more detail regarding these resources.

In the BTCNT 2022-23 tooth pack distribution to MCH services (reported in section 2.2.4), tooth packs were offered to nurses working in Aboriginal MCH services, to support their oral health promotion and screening role and encourage positive oral health habits among Aboriginal families. To support distribution, these sites were also sent resources including mouth models, copies of the 'Children's Deadly Toothbrush Colouring-in Chart' designed by Gunditjmara artist Shakara Montalto, and copies of the 'Secrets of Solid Teeth' story book developed by The University of Western Australia in partnership with Aboriginal communities and artists.

2.7.5 Policy and Systems

2.7.5.1 Implementation

Not applicable for this reporting period.

2.7.6 Reporting and dissemination

HFHS disseminates its resources to professionals working in Aboriginal and Community Health settings opportunistically when engaging with relevant stakeholders. In addition, the Deadly Tooth Tips resource was disseminated to HFHS stakeholders in this professional group as outlined in *Table 16*.

Table 16 Dissemination of Deadly Tooth Tips resources

Date of dissemination	Method	Reach
9/07/2021	Email campaign promoting Deadly Ambassadors and Deadly Tooth Tips - for Aboriginal & Torres Strait Islander Children's Day and Dental Health Week	circulated to VACCA, VACCHO, ACCHOs (via Steph) SNAICC, VAHS, Yappera and VAEAI and S4M Coordinators.
2/08/2021	Deadly Tooth Tips (printed resource) disseminated to Aboriginal families via VACCHO	25 ACCOS (approx. 920 families)
1/09/2021	Deadly Tooth Tips promoted in Maternal Child Health Newsletter	Statewide MCHN

2.7.7 Key evaluation findings

Due to the minimal amount of CPD workshops delivered in this reporting period, no formal evaluation of BBS, Little Koorie Smiles or other resources and initiatives for this setting has been undertaken. Evaluation of the MIOH course offered to workers in the KMS is presented in section 2.1.6.

2.7.7.1 Challenges and success factors

COVID-19 limited engagement with this sector during Phase 3. In addition, the role of Aboriginal Community Development Officer (a role that sits jointly across VACCO and DHSV) was vacant for at least 12 months during this reporting period. This role was key to supporting the team's engagement with ACCHOs and increasing awareness of relevant HFHS initiatives. The vacancy of this role limited capacity to develop and progress partnerships with the sector.

DH's investment to develop the Aboriginal Model of Oral Health Care has helped to ignite interest in oral health among the sector and the findings of this consultation process will ideally clarify the oral health promotion needs of the workforce, providing validation and/or future direction for HFHS initiatives in this space. To ensure HFHS initiatives meet the needs of the sector appropriately, reviews of HFHS' existing training packages (Bigger, Better Smiles and Little Koorie Smiles) have been held off until VACCHO's needs assessment is complete.

A recommendation from previous evaluations was to resume liaising with VACCHO to explore the feasibility of including oral health information within existing training courses for Aboriginal health workers. While oral health is still not included in the curriculum of the courses required to become an AHP/AHW, the change in legislation allowing AHPs to apply fluoride varnish in 2022 has provided a gateway for HFHS to integrate oral health promotion CPD as part of the pre-training for the fluoride varnish application training, as reported in 2.7.3.1. It is hoped that this will continue as more AHWs undertake fluoride varnish training, increasing oral health promotion knowledge in the sector.

2.7.7.2 Key recommendations

- Consider relevant recommendations arising from VACCHO's statewide oral health needs assessment and Aboriginal Oral Health Model of Care when findings are published, and work collaboratively with VACCHO and other partners to implement recommendations that have implications for the work of HFHS
- Map coverage of MIOH trained midwives in KMS and continue to target recruitment for MIOH in KMS, particularly in services that do not or no longer have a midwife with oral health promotion training.
- Reconvene the project working group to progress the KMS capacity building initiative for AHP should the Aboriginal Oral Health Model of Care consultation finding support progressing with the adaptation of the *Grinnin' up mums and bubs* resource and the development of a supporting education package
- Review and redevelop BBS and Little Koorie Smiles packages to ensure they are meeting the needs of the workforce post-COVID and reflect findings from VACCHO's statewide oral health needs assessment
- Work collaboratively with DHSV's recently appointed Aboriginal Community Development Lead to strengthen relationships within the sector and ensure programs and initiatives are culturally appropriate
- Continue to provide oral health training for AHPs undertaking fluoride varnish training
- Continue to advocate for oral health to be included in courses to become and AHW/AHP.

2.8 Dietitians and nutrition professionals

2.8.1 Overview

Oral health and nutrition have a symbiotic and bidirectional relationship, and influence health and wellbeing across the life course (24). Malnutrition is both a consequence and cause of poor oral health. HFHS needs assessment (conducted during phase 1 of the program) identified that oral health was not readily incorporated into the practice of dietitians, yet they are well placed to do so. To address this, key capacity building activities have been undertaken with this professional group throughout the lifespan of HFHS.

HFHS has worked in partnership with Dietitians Australia (DA) since 2013 (Phase 1). A working group was established in 2014 comprising of representatives from DA, DSHV and DH to produce a Joint Position Statement on Oral Health and Nutrition (JPS). In 2016 (Phase 2), the statement was finalised and publicly launched at the 2016 Dietitians Australia Conference.

During phase 3, work in this sector has included reviewing and updating the JPS to foster interdisciplinary collaboration and strengthen the integration of oral health into the practice of this professional group.

2.8.2 Partnerships

2.8.2.1 Implementation

Phase 3 of the HFHS program saw the 2014 working group re-established, under request of the DA CEO, to review and update the JPS. Additional members were invited to join the working group, fostering HFHS' partnerships across the nutrition and oral health sector. Members included representatives from Dietitians Australia, DHSV, Deakin University, Australian Dental Association (ADA), Australian Dental and Oral Health Therapists' Association (ADOHTA), Tasmanian Health Service, Victorian Department of Health, Nutrition Society Australia, Department of Health.

2.8.3 Professional development

2.8.3.1 Implementation

Together with DA, HFHS and the working group organised a webinar to launch the revised JPS and promote interdisciplinary collaboration. The webinar was held in December 2021, providing an overview of the JPS along with three case studies demonstrating how dietitians, nutrition and oral health professionals can work together to benefit client and public health outcomes, and a panel discussion. The webinar reached a total of 212 participants (*Table 17*).

Table 17 Number of dietitians and nutrition professionals participating in CPD activities, 2019-2023

Date	CPD Activity	Number of participants
01/12/2021	Webinar and Joint Position Statement Launch – Oral Health and Nutrition: Collaborative opportunities for Accredited Practising Dietitians, nutrition and oral health professionals	140
17-12/2021 -27/06/2022	Recording of webinar promoting the JPS	72
	Total	**212**

2.8.4 Tools and resources

2.8.4.1 Implementation

The working group responsible for reviewing the JPS (refer to section 2.8.5 Policy and Systems, below for details) made a decision to split the content into a more streamlined position statement with a companion document that would be an educational resource to support dietitians and nutrition professionals as well as a resource for students in relevant tertiary education courses. This resource is designed to be a companion document to the JPS, providing key oral health information, referral advice and preventative messages for dietitians and nutrition professionals to incorporate into practice, in order to support inter-disciplinary collaboration. The resource is currently being finalised with an anticipated launch in mid-2023.

2.8.5 Policy and Systems

2.8.5.1 Implementation

Reviewing and updating the JPS was a collaborative process. An external consultant was employed to do a rapid literature review, focusing on any new systematic review evidence that had been published since the initial JPS. Regular meetings were held with the working group, and a decision was made to adjust the scope of the position statement to focus on interdisciplinary collaboration between dietitians and oral health professionals. The *Joint Position Statement on Interdisciplinary Collaboration between Accredited Practising Dietitians, Nutrition and Oral Health Professionals for Oral Health and Nutrition* was finalised and launched in November 2021. The JPS outlines the evidence and actions that can be taken by oral health, nutrition and public health professionals to strengthen their practice through interdisciplinary collaboration across the life course and in various work settings.

The JPS was endorsed by peak bodies including the Australian Dental Association, Australian Dental and Oral Health Therapists' Association, Oral Health Services Tasmania, Dental Hygienists Association of Australia, Deakin University, and University of Melbourne.

The JPS aims to strengthen the policy platform for the integration of oral health into the practice of dietitians and nutrition professionals. Being endorsed by peak bodies in both oral health and nutrition, this resource provides a foundation for these two professional groups to work collaboratively to support oral health.

2.8.6 Reporting and dissemination

Work in this sector has been reported on in HFHS newsletters and annual forums. Specifically, dissemination of the updated JPS resulted in an estimated reach of 12,000 stakeholders, via:

- Link on DHSV and DA website
- Media release - resulting in an article in Bite Magazine
- Emails sent to all key stakeholders requesting dissemination to networks (ADA, ADOHTA, Deakin, Oral Heath Services Tas, DHAA, Nutrition Australia, CCVic, Peter Mac, DH)
- Disseminated internally to health promotion and clinical staff
- Included in DHSV daily communications

- Emailed via ART to Community Dental Agencies
- Circulated to all Dietitians Australia members
- Emailed to University departmental heads
- Sent to DHSV service leadership team
- Included in DHSV's Statewide newsletter.

2.8.7 Key evaluation findings

No formal evaluation was undertaken on professional development, tools and resources or policy and systems for this professional group. To evaluate work done in this sector, an interview was held with a key informant from Dietitians Australia, who played a key role in the partnership and development of the updated JPS and webinar in phase three. This interview revealed that the webinar and the position statement have been positively received by the professional group. Initially, the development of the joint position statement was seen as a useful advocacy tool, but further discussion showed that there is a desire to build upon the statement to build a meaningful collaborative and on-going partnership that could benefit both professional client groups. The informant recognised the position statement and supporting tools had time and funding allocated, and while there are further opportunities to explore in the partnership, there is also the ongoing challenge of funding, particularly when bringing together peak organisational bodies. Overall, the collaboration between DHSV and Dietitians Australia has been viewed as a positive experience and the informant was open to keeping the lines of communication going and identify future opportunities for collaboration between nutrition and oral health sectors.

For further detail, see Appendix M.

2.8.7.1 Challenges and success factors

Dietitians and nutrition professionals are a large and diverse workforce, with professionals working with populations across the lifespan in various settings such as private practice, hospital settings, public health and community. While the aim of HFHS is to focus on professionals working with 0-3 year olds and pregnant women, it has been necessary for the program to take a lifespan approach with the JPS in order to engage and provide the most benefit for the sector. This approach was endorsed by the funding body through discussions via formal governance structures. The flexibility to negotiate the scope of the program enabled the program to impact policy and systems beyond the target population.

The program's strong partnership with Dietitians Australia since the early stages of HFHS has enabled sustained buy-in at a national level. This partnership should be nurtured and sustained into the future.

2.8.7.2 Key recommendations

- Continue partnership with Dietitians Australia, in order to maintain momentum and interest in oral health of the sector
- Explore and gauge interest in the development of online or face-to-face training to build capacity of staff to support the incorporation of recommendations from JPS into practice
- Develop partnerships with tertiary institutes offering Nutrition/Dietetics courses to encourage uptake of recommendations of the JPS and support the inclusion of oral health content into curriculum

2.9 Pharmacy sector

2.9.1 Overview

Pharmacy professionals are in a unique position when it comes to having contact with consumers who avoid or have limited capacity to see a dentist or other health professional. In fact, approximately 80% of Australian pharmacists and 84% of pharmacy assistants are consulted for oral health advice up to five times per week, with the pharmacy being the first port of call regarding health issues for community members (25). As such, pharmacists and pharmacy staff have been identified as a key professional group to engage with oral health promotion capacity building.

In prior phases of HFHS, development of a Joint Position Statement (JPS) was identified as a key piece of work to develop a policy platform and support pharmacists' role in preventative health care services. In partnership with the Pharmaceutical Society of Australia (Victoria) and the Australian Dental Association Victorian Branch, a statement was finalised and launched in March 2015. HFHS also provided support to PSA's CPD program to develop the oral health knowledge and skills of pharmacy staff.

During Phase 3, HFHS worked to build the capacity of pharmacy staff via the development of a fact sheet, piloting an online learning module, developing new and existing partnerships and beginning a review and update of the JPS.

2.9.2 Partnerships

2.9.2.1 Implementation

During phase 3, the HFHS team developed a relationship with the Department of Health's Primary, Community and Oral Health Unit, which led to the opportunity to develop and pilot an online learning module for Supercare pharmacies. Supercare Pharmacies are a Victorian Government Initiative (funded until 30th June 2022), offering afterhours healthcare advice and treatment in 20 pharmacies across Victoria. The selected pharmacies are funded to operate seven days a week with registered nurses onsite from 6pm - 10pm.

Additional partnerships in this sector were developed and maintained with interested stakeholders from the Australian Network for Integration of Oral Health (NIOH), University of Queensland School of Pharmacy and La Trobe University's School of Rural Health. This group provided valuable feedback and input into the development of the Supercare pharmacy module and fact sheet (see section 2.9.4 for further information).

2.9.3 Professional development

2.9.3.1 Implementation

As a result of the partnership with DH's Primary, Community and Oral Health Unit, an 1-hour online training course was developed by the HFHS team to meet the needs of all staff members within the Supercare pharmacy (including retail staff, pharmacists, pharmacy assistants, nurses, retail managers). Throughout the process, consultation, input and feedback was provided by

representatives from the Australian Network for Integration of Oral Health (NIOH), The University of Queensland School of Pharmacy, La Trobe University's School of Rural Health, other teams within DHSV and the pharmacy sector. In October 2022, a link to the finalised module was shared via email to all 20 Supercare pharmacies. A comprehensive evaluation report for this pilot was prepared by the HFHS team and provided to DH in early 2022, however only key information has been detailed in this report (26).

Table 18 Number of pharmacy staff participating in CPD activities, 2019-2023

Date	CPD ctivity	Number of participants
07/10/2023	Online training module pilot for Supercare pharmacy staff – *Pharmacy teams supporting oral health*	15

2.9.4 Tools and resources

2.9.4.1 Implementation

In 2022, the HFHS team developed and published a fact sheet, *Pharmacy teams supporting oral health,* designed to support pharmacists and pharmacy teams to provide patients with accurate oral health advice, products and referral. The two-page document was reviewed by pharmacy stakeholders, published on the DHSV website and shared with sector stakeholders for dissemination to their networks, including the Pharmacy Guild of Australia, Department of Health, Pharmaceutical Society of Australia and Pharmacy Guild.

In early 2023, DHSV (under a philanthropic grant) commenced a project to develop oral health training videos for pharmacy staff. Members of the HFHS were invited to sit on the steering committee for this project group, alongside other DHSV staff members, consumers and representatives from both the pharmacy and oral health sectors. The three videos focusing on oral health during pregnancy and early childhood; disability and older adulthood, outlining advice and information that the pharmacy staff can provide. The HFHS team provide advice, resources and review work of the group. It is anticipated that this project will be completed mid-2023, and will provide a valuable resource to support the practice of this professional group.

2.9.5 Policy and Systems

2.9.5.1 Implementation

In October 2022, La Trobe University Rural School of Health convened a meeting with interested stakeholders to explore opportunities for dental and pharmacy sectors to collaborate. Initial discussions at this meeting identified the review of the 2015 JPS as a priority. There was also interest in taking the statement to a national level.

In February 2023 DHSV held a meeting with the partners to the inaugural JPS (PSA, DHSV and ADAVB). At the partnership meeting the group confirmed agreement to proceed with a review of the 2015 position statement. In mid-2023, the group had agreed to proceed with the establishment of a working group with DHSV leading the review process on behalf of the partnership. The group had also

agreed to pursue a national level statement given PSA is a national organisation. ADAVB handed over to their national office to continue the partnership, given the national approach.

2.9.6 Reporting and dissemination

An evaluation report on the *Pharmacy teams supporting oral health* online learning module was completed in early 2023 and submitted to HFHS funder at the DH. Work in this sector has been promoted via the HFHS newsletter and Annual Forums.

2.9.7 Key evaluation findings

No formal evaluation of HFHS work in the pharmacy sector was undertaken during this reporting period. The following findings are excerpts from an evaluation report submitted directly to the HFHS funder at Department of Health (26).

Pharmacy teams supporting oral health online learning module evaluation

Participants in the Pharmacy teams supporting oral health online learning module were asked to provide feedback via a Microsoft Forms questionnaire post-training. Evaluation feedback regarding the Pharmacy teams supporting oral health online learning module was provided from 15 participants, representing only seven of the 20 participating Supercare pharmacies (35%), restricting the generalisability of the results. In addition, feedback was only provided by pharmacists, nurses and retail managers, which limits the ability to assess the suitability of the course for retail and other staff who may have not have a health qualification or training.

Overall, the course was well received by participants, with 80% (n =12) strongly agreeing or agreeing that they gained new knowledge and/or skills and were more confident about supporting good oral health for their clients. Ninety-four per cent (n =14) strongly agreed or agreed that the course met their expectations and that the content was clear and easy to follow, and 73% (n=11) strongly agreed or agreed that the amount of information was sufficient. This feedback suggests that the course was effective in meetings its intended outcomes.

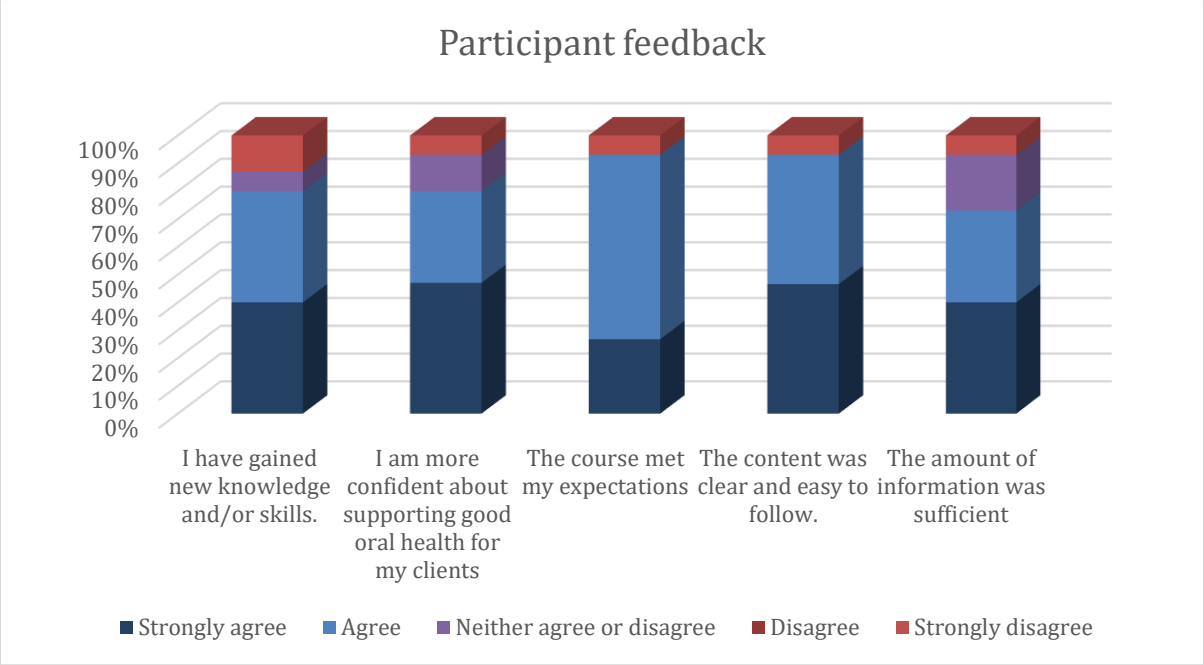

Figure 10 Pharmacist satisfaction with online learning module

Qualitative feedback indicated that the presentation style, case studies, preventative advice, pathophysiology, and referral information were the most useful parts of the course. While 53% (n=8) of participants indicated that no improvements to the course were required, some suggestions were made. Participants recommended including more case studies, more in-depth information (particularly around oral health products in the pharmacy) and delivering the content as a seminar. It can be inferred from these responses that the case studies were an effective method to demonstrate translating oral health promotion into practice. Positively, 53% per of participants indicated that they would be more pro-active about including oral health promotion/discussion with customers/patients in their work as a result of the course, whilst 40% indicated that they would not change their practice as a result of their course.

2.9.7.1 Challenges and success factors

The pilot of *Pharmacy teams supporting oral health* has provided an opportunity to assess whether an online learning course is an acceptable and effective method of building the oral health capacity of pharmacy staff. Given that majority of participants reported improved knowledge and confidence and found the course clear and easy to follow, it can be assumed that this is a suitable delivery mode of oral health education for the sector. While the sample size was small, results indicate that the course was effective in improving the oral health capacity of these participants and encouraging staff to be more proactive about oral health. Therefore, they may be more likely to provide oral health promotion and advice among the community members they work with. This is further evidenced by over half of respondents indicating an intention to change their practice and incorporate oral health discussions after completing the course.

As the pharmacy sector engage with public across the lifespan, it was necessary to include content for all life stages beyond the scope of HFHS (early childhood and pregnancy). This has helped to ensure relevancy and that the course met the needs of the workforce. However, it was difficult to condense

relevant information into a one-hour course, meaning that the course may have lacked depth and information in some areas.

Further investigation is needed to confirm the indicative findings with a larger sample group of participants. Overcoming technology limitations or finding an alternative method of measuring engagement and completion would help to answer the question of acceptability among different roles in the pharmacy and uptake.

A general momentum in interest around oral health among stakeholders in the pharmacy sector during phase 3 has helped to drive HFHS work in this area and build partnerships, particularly the review of the JPS.

2.9.7.2 Key recommendations

The following recommendations relate specifically to the *Pharmacy teams supporting oral health* online learning module and are taken from the evaluation report provided to DH in early 2023.

- Consult with DH and wider pharmacy sector around engaging with community pharmacies to provide similar training opportunities.
- Consider breaking up content into smaller courses on specific topics and tailoring them to specific roles within the pharmacy (for example oral health products in the pharmacy, prevention advice for specific age groups, referral) to enable the provision of more in-depth and detailed content.
- When developing future online courses, include case studies as these are a favourable learning mechanism.
- Scope interest in virtual or in-person seminars/training for pharmacy staff.
- If the Supercare pharmacy initiative is continued, explore potential of having an online training course such as *Pharmacy teams supporting oral health* embedded into staff onboarding/mandatory training.

Additional recommendations for the sector:

- Continue review of JPS and use this as a leverage to gauge and build interest in PD such as online training or workshops
- Continue to develop and maintain partnerships in the sector

2.10 Oral health professionals

2.10.1 Overview

Oral health professionals can play a key role in the provision of oral health promotion directly to individuals in the clinic, and in any community roles they may work in.

Since 2014, the HFHS team in collaboration with the wider Health Promotion team at DHSV, have periodically delivered lectures for students enrolled in the Bachelor of Oral Health, the qualification required to practise as an oral health therapist, dental therapist or dental hygienist, and students enrolled in Certificate III and IV in dental assisting. Both courses require students to undertake units in oral health promotion. The lectures focus on providing students with an overview of capacity building and oral health promotion in the real world, as well as linking students in with resources and tools they can use to promote oral health in practice.

2.10.2 Partnerships

2.10.2.1 Implementation

The HFHS team have established relationships in prior phases with the University of Melbourne and RMIT, who offer the Bachelor of Oral Health and the Certificate III and IV in Dental Assisting. The delivery of health promotion workshops to these cohorts during phase 3 has helped to sustain relationships with the key contacts for these courses, with the universities engaging with the HFHS team to support health promotion elements in their courses.

2.10.3 Professional development

2.10.3.1 Implementation

Throughout phase 3, HFHS has delivered five lectures to students undertaking a Certificate IV in Dental Assisting at RMIT University and the Bachelor of Oral health at University of Melbourne, reaching a total of 124 students (see *Table 19*). Presentations are adapted for each cohort, covering content such as:

- The policy context of oral health promotion at DHSV
- An overview of capacity building, partnerships and planning for oral health promotion
- An overview of DHSV's oral health promotion programs, including HFHS
- DHSV's oral health promotion resources.

Table 19 Oral health professionals participating in CPD Activities 2019-2023

Date	Organisation	CPD Activity	Number of participants
16/03/2020	RMIT University	Face-to-face health promotion workshop for students enrolled in Certificate IV in Dental Assisting	4
16/04/2020	University of Melbourne	Virtual health promotion workshop for students enrolled in Bachelor of Oral Health	52
26/05/2021	University of Melbourne	Face-to-face health promotion workshop for students enrolled in Bachelor of Oral Health	36
28/07/2022	University of Melbourne	Face-to-face health promotion workshop for students enrolled in Bachelor of Oral Health	25
28/03/2022	RMIT University	Virtual health promotion workshop for students enrolled in Certificate IV in Dental Assisting	7
		Total	124

2.10.4 Tools and resources

2.10.4.1 Implementation

HFHS and the Health Promotion team's range of oral health promotion resources were promoted to students in the lectures outlined in section 2.10.3.

The DHSV website continues to be the most significant platform for accessing resources for all professionals integrating oral health promotion in their practice. Oral health professionals can access the professional resources as well as the consumer facing resources that support education and skill development for use in their practice.

2.10.5 Policy and Systems

2.10.5.1 Implementation

Not applicable for this reporting period.

2.10.6 Reporting and dissemination

Not applicable for this reporting period.

2.10.7 Key evaluation findings

Activities for this professional group have not been formally evaluated.

2.10.7.1 Challenges and success factors

While health promotion and education are recognised competencies for oral health professionals, challenges exist in integrating prevention in clinical practice. Item codes are in place for dietary counselling and oral hygiene instruction (as well as smoking cessation), clinical prevention is beginning to be integrated into models of care and tertiary education courses are including prevention competencies however more emphasis is needed on funding models and other levers to shift the culture of practice to a more preventative approach.

The proposed pregnancy and early childhood model of care presents an opportunity to make progress. Finding from all phases of Healthy Families, Healthy Smiles program, the existing body of work on the preschool model of care and the Fluoride Varnish project finding (interrupted by COVID_19 pandemic) provide valuable insights on existing components and considerations for future planning.

2.10.7.2 Key recommendations

- Continue to work in partnership with universities offering tertiary courses to become an oral health professional
- Continue to make available and promote tools and resources that oral health professionals can use when working with young families to support behaviour change for good oral health
- Integrate successful strategies from Healthy Families, Healthy Smiles and other pregnancy and early childhood oral health promotion programs into the proposed model of care for early childhood and pregnancy.
- The Department of Health should consider funding models that incentivise evidence based prevention strategies for future models of care.

2.11 General practice

2.11.1 Overview

General practitioners (GPs) are often seen for advice on oral health problems, particularly in areas where access to a dental practitioner is limited and for those on low incomes (27).

Prior to this reporting period, HFHS has worked in various ways to build the capacity of GPs and practice nurses, such as partnering with organisations to integrate oral health into professional development activities, advocating for oral health assessment to be included in clinical guidelines, seeking partnerships with peak bodies and associations to explore capacity building opportunities and developing supporting resources such as fact sheets. Phase 3 has involved reviewing and updating HFHS' existing fact sheets for GPs and practice nurses and exploring partnerships to continue building momentum in the sector and willingness to engage in PD.

2.11.2 Partnerships

2.11.2.1 Implementation

Partnerships within the GP sector during this reporting period were largely a product of the review and update of HFHS' existing fact sheets for GPs (detailed further in 2.11.4). In 2022, HFHS reached out via email to the Royal Australian College of General Practitioners (RACGP) to gauge their interest in oral health and seek guidance for the review of HFHS fact sheets. As a result, a meeting with a representative from RACGP was held and a relationship established.

2.11.3 Professional development

2.11.3.1 Implementation

Throughout 2019-2021, meetings were held with the Australian Nursing and Midwifery Federation Branch to explore partnership opportunities for capacity building of practice nurses. A proposal was then developed to create an oral health learning module to be offered through the ANMF education centre. A formal agreement was then written up, but unfortunately this did not come to fruition. Engagement with ANMF subsequently stalled and was not able to be re-established, likely due to pandemic impacts. This opportunity could be taken up at a later date to explore interest in reestablishing a partnership.

2.11.4 Tools and resources

2.11.4.1 Implementation

A review and update of the program's existing factsheets for GPs and practice nurses, 'Pregnancy and oral health' and 'Oral health: and essential part of care in early childhood' was undertaken during phase 3, as these had not been reviewed since 2013. This involved reviewing and updating the evidence-base, working with DHSV Communications team to update the design and consulting with the GP sector for review and feedback. Feedback was provided by representatives from RACGP and Northwestern Melbourne Primary Health Network (as discussed in 2.11.2). At the time of writing, the updated fact sheets are undergoing final review and will be promoted to the sector later in 2023.

2.11.5 Policy and Systems

2.11.5.1 Implementation

Not applicable for this reporting period.

2.11.6 Reporting and dissemination

Not applicable for this reporting period.

2.11.7 Key evaluation findings

Activities for this professional group have not been formally evaluated.

2.11.7.1 Challenges and success factors

As has been the case in previous phases of the program, the GP sector has been difficult to engage around oral health. COVID-19 added further barriers for engaging this workforce, limiting the ability for HFHS to build momentum and interest in oral health in the sector.

Establishing contact with RACGP was extremely beneficial for the fact sheet review process and this relationship will be extremely valuable for future initiatives. Given this is a difficult sector to engage, this relationship should be nurtured and fostered.

2.11.7.2 Key recommendations

- Re-establish contact with ANMF to re-visit proposal for PD development collaboration
- Maintain and enhance relationships with the RACGP to explore future capacity building and partnership opportunities.

2.12 Other settings

2.12.1 Overview

During phase 3, HFHS continued to explore opportunities and partnerships with other non-dental professionals working with children 0-3 and pregnant women, such as those working with families from culturally and linguistically diverse communities, speech pathologists and child protection.

2.12.2 Partnerships

2.12.2.1 Implementation

During phase 3, HFHS attempted to develop partnerships with agencies in other sectors working with young children and pregnant women, including speech pathology, CALD workforces and child protection. However, progress was limited due to COVID-19, and staff capacity. In 2022, a proposal to offer CPD to speech pathology students was developed and provided to a contact at the University of Melbourne. Unfortunately, no response was received. Details of partnership meetings are documented in the HFHS Quarterly Reports to Department of Health.

2.12.3 Professional development

2.12.3.1 Implementation

HFHS has developed and tailored PD workshops and presentations for other professional groups on an ad-hoc basis. In November 2020, a meeting was held with community health service Cohealth to discuss oral health training needs of bicultural workers. This resulted in an opportunity for the HFHS team to deliver one-time oral health promotion 'training of the trainer' style workshop to this group.

In 2020, HFHS was introduced to the team running the Group Pregnancy Care Study at Murdoch Children's Research Institute. The aim of this study is to evaluate a program that provides culturally appropriate preventative care, information, and support to refugee women during and after pregnancy in a group setting Group Pregnancy Care Study - Murdoch Children's Research Institute (mcri.edu.au). As a result of this connection, HFHS was invited to deliver workshops to the research team leading the program (bicultural workers).

During phase 3, DH funded an oral health literacy project in the Loddon Mallee Region, examining oral health access and resources for children in out of home care. This helped to build interest and momentum of the sector which HFHS has leveraged, providing PD and promoting resources as a result.

Tailored professional development workshops have been delivered for other professional groups on request, as outlined in *Table 20*.

Table 20 Number of other professionals participating in PD activities, 2019-23

Date	Service	CPD Activity	Number of participants
18/08/2021	HiPPY Group Leaders/Tutors	Brush Book Bed HiPPY	4
08/06/2021	'Parents within City of Moreland participating in the 'Community Champions' program	Adapted HLS virtual workshop delivered to Merri Health Community Champions. The Community Champions are active community members tasked with sharing relevant health information within their networks. They are focusing on various aspects of health and wellbeing and requested a training session on oral health to support their program.	7
03/06/2021	Cohealth (Bicultural workers)	Face to face training of trainer workshop held for bicultural workers from refugee communities.	12
23/04/2021	Happy Mothers - Assyrian Chadlean Group Pregnancy Care (Bicultural workers)	Oral health promotion session for pregnancy and post-natal care.	3
28/02/2021	Department of Families, Fairness and Housing (DFFH) Child Protection team Loddon	30-minute oral health promotion session for team leaders and case managers working with children in out of home care.	12
		Total	38

2.12.4 Tools and resources

2.12.4.1 Implementation

The Toothbrushing with Young Children video series developed during phase three and translated Caring for Teeth and Gums fact sheets (reported in section 2.2.4) have been shared with other professional groups opportunistically. They are also available on the DHSV website, Health Translations website, Better Health Channel and Raising Children's Network for professionals working in other settings to access.

A partnership with a research project also provided an opportunity to influence an existing parenting app, adding to the digital information resources available to support young families. The Infant2Child study, led by Murdoch Children's Research Institute, involved the integration of oral health promotion into the preexisting Infant program led by Deakin University. The oral health promotion intervention involved inclusion of information in the MyBabyNow app. DHSV contributed to the program by providing content and resources for inclusion in the app. A formal licensing agreement exists to allow Deakin University (the owner of the app) to use agreed content.

2.12.5 Policy and Systems

2.12.5.1 Implementation

Not applicable for this reporting period.

2.12.6 Reporting and dissemination

Not applicable for this reporting period.

2.12.7 Key evaluation findings

No formal evaluation has been completed for work in these settings during this reporting period.

2.12.7.1 Challenges and success factors

Sustaining momentum with new partners and settings has proved difficult during phase 3. It is likely this is due to COVID-19 and HFHS staff turnover. The Child Protection workforce has typically been a difficult professional group for HFHS to engage with, given their demanding workload and competing priorities. However, during this phase, a Department of Families, Fairness and Housing (DFFH) funded oral health literacy project (reported in section 2.12.3) in the Loddon Mallee Region, has helped to build interest and momentum of the sector which HFHS has leveraged, providing PD and promoting resources as a result.

Opportunities to partner and contribute to other programs or research projects can be valuable in extending the reach of existing materials, resources and sharing the rich experience DHSV has established over decades working with health and early childhood professionals. This supports organisation and colleagues working on common goals, provides additional opportunities to extend the reach and also provides opportunities for learning and continuous improvement in the program.

2.12.7.2 Key recommendations

- Continue to develop relationships and gauge interest in PD among professionals working in other settings, particularly bicultural workers and others working with CALD communities, as well as speech pathologists
- Maintain and further develop relationship with contacts at DFFH to provide further capacity building opportunities for child protection workers
- Consider findings of the Infant2Child study, when available, to inform future partnership opportunities.
- Continue to review, reassess and seek out new partnerships to extend the reach of the existing body of work as well as explore new innovative initiatives.

2.13 Reporting and dissemination – program level

In addition to dissemination that occurs at a professional or sector level, HFHS uses Annual Forums and newsletters as program level dissemination and communication strategies, to maintain existing partnerships and build new ones. *Table 21* details the reach of these strategies.

The HFHS newsletter is typically published on a quarterly basis, via the DHSV website and sent to the HFHS stakeholder data base via email. This database comprises stakeholders from all levels and professional groups since the beginning of the program.

HFHS also delivers an Annual Forum to celebrate program achievements, share case studies, develop ideas for the program and maintain engagement with invited stakeholders. Historically these have been held in person, however due to COVID-19, moved to an online format for phase 3.

Table 21 HFHS Program level reporting and dissemination strategies

Communication method	Reach
2021 Annual Forum (May 2021)	42
2022 Annual Forum (April 2022)	71
2023 Annual Forum (June 2023)	64
Newsletter No. 26 March 2023	680
Newsletter No. 25 December 2022	632
Newsletter No. 24 September 2022	684
Newsletter No. 23 June 2022	696
Newsletter No. 22 March 2022	446
Newsletter No. 21 December 2021	466
Newsletter No. 20 September 2021	452
HFHS Newsletter No. 17 July 2020	517
HFHS Newsletter No. 16 July 2019	~400+

2.14 Reflections from the implementation team

Semi-structured, open-ended interviews were conducted with three members of the HFHS Implementation team to explore their views on key achievements and experiences of the program over the most recent stage of the program, 2019-2023. Discussion focused on the challenges, enablers, and future directions of HFHS. The interviews provided a significant amount of qualitative data around challenges, enablers, program achievements, and future directions. An overview of the interview findings is detailed below.

Project strengths

To summarise, some of the major achievements and project strengths raised in the interviews included: beginning to address the gap identified within the midwifery undergraduate curriculum, team flexibility and resilience to shift priorities and maintain HFHS during the COVID-19 pandemic, providing greater accessibility for professional development, building on learnings from course

feedback and previous evaluations to improve content and experience, and engaging with existing and new partners e.g. Dieticians Australia to develop a joint position statement.

Challenges

Challenges included the impact of the pandemic on the program requiring the team to pivot on how the program is delivered, technological issues and learnings from working in new digital formats and losing momentum on existing engagement and disruption to future partnerships due to the unfamiliar nature of delivering a program during a pandemic.

Recommendations from the implementation team

Moving forward, interviewees suggested the future of HFHS could look at:

- Review how to measure and manage new and existing communication strategies which were modified from rapid digitalisation
- Seek to integrate new technologies to support evaluation, engage with other professionals and/or sectors to diversify HFHS
- Seek ways to expand partnerships beyond their initial scope, and review what strategies should be used in the next phase for HFHS to deliver change that is self-sustaining.

3 Priorities for the next 4-year phase (2023-2027)

Evaluation of the HFHS program 2019-2023 has informed the areas of focus for the next four-year funding cycle. Key recommendations based on the current evaluation are as follows:

Investment in and focus on the early years is critical to meeting the target established in the Victorian Governments Action Plan for the prevention of oral disease 2020-2030 which is to *Increase the proportion of children entering primary school without dental cavities to 85% (baseline 64%).* Improving maternal oral health is good for the mother but also for her child's oral health outcomes.

Program activities will continue to align with the Victorian Action Plan to Prevent Oral Disease 2020-30. To achieve this, the program will continue to scope new partnership opportunities to increase reach into the non-dental workforce, as well as maintain and strengthen existing partnerships. Existing training packages and resources will be continuously reviewed and updated, taking advantage of technology where possible to increase accessibility and user experience.

While the COVID-19 pandemic presented challenges for the program it also offered opportunities to transform the way that the program was delivered. While the program was in the process of offering and planning for more digital content the pandemic fast tracked this work out of necessity and improved access to necessary technologies and platforms. This rapid transformation requires evaluation and analysis to better understand the pros and cons so that future work can incorporate successful strategies.

A lot has been achieved over the 11 years of the program but continued investment to maintain the gains and consolidate more recent achievements is needed. This can be seen comparing maternal and child health with other more recent sectors. The longer-term focus (predating this program) has resulted in more sustainable gains in policy and system changes that require less input for greater return. There is potential to build on the gains with other sectors with continued investment.

Future direction of the program is currently pending a review and realignment of broader oral health promotion funding from Department of Health to DHSV. An interim plan has been established to continue delivery of Healthy Families, Healthy Smiles program activity for 2023/24. Evaluation planning and ethics approval for ongoing activity is pending the outcome of this review.

4 References

1. Graesser H, Sore R, Rogers J, Cole D, Hegde S. Early Childhood Caries in Victorian Preschoolers: A Cross-Sectional Study. Int Dent J. 2021;72(3):381-91.
2. Ha D, Roberts-Thomson K, Arrow P, Peres K, Do L. Children's oral health status in Australia, 2012-2014. Adelaide: University of Adelaide Press.; 2016.
3. Daalderop LA, Wieland BV, Tomsin K, Reyes L, Kramer BW, Vanterpool SF, et al. Periodontal Disease and Pregnancy Outcomes: Overview of Systematic Reviews. JDR Clin Trans Res. 2018;3(1):10-27.
4. Health N. A Framework for Building Capacity to Improve Health. NSW: Better Health Centre; 2001 08/06/2023.
5. Silk H, Douglass AB, Douglass JM, Silk L. Oral health during pregnancy. Am Fam Physician. 2008;77(8):1139-44.
6. George A, Johnson M, Blinkhorn A, Ajwani S, Ellis S, Bhole S. Views of pregnant women in South Western Sydney towards dental care and an oral-health program initiated by midwives. Health Promotion Journal of Australia. 2013;24(3):178-84.
7. Health Do. Clinical Practice Guidelines: Pregnancy Care. In: Care DoHaA, editor. Canberra: Australian Government Department of Health; 2020.
8. George A, Johnson M, Duff M, Blinkhorn A, Ajwani S, Bhole S, et al. Maintaining oral health during pregnancy: perceptions of midwives in Southwest Sydney. Collegian. 2011;18(2):71-9.
9. Dental Health Services Victoria. Healthy Families, Healthy Smiles Evaluation Report 2015-19. Carlton, Victoria: Dental Health Services Victoria; 2020 July 2020.
10. Government V. Maternal and Child Health Services guidelines. In: Health Do, editor. Melbourne: Victorian Government; 2021. p. 1-81.
11. JG R. Evidence-based oral health promotion resource. In: Prevention and Population Helath Branch, editor. Melbourne: Department of Health; 2011.
12. Davies GM, Worthington HV, Ellwood RP, Bentley EM, Blinkhorn AS, Taylor GO, et al. A randomised controlled trial of the effectiveness of providing free fluoride toothpaste from the age of 12 months on reducing caries in 5-6 year old children. Community Dent Health. 2002;19(3):131-6.
13. Davies GM, Worthington HV, Ellwood RP, Blinkhorn AS, Taylor GO, Davies RM, et al. An assessment of the cost effectiveness of a postal toothpaste programme to prevent caries among five-year-old children in the North West of England. Community Dent Health. 2003;20(4):207-10.
14. England PH. Return on investment of oral health imrpovement programmes for 0-5 year olds. In: England PH, editor. Public Health England. England: Public Health England; 2016. p. 1.
15. Dental Health Services Victoria. Baby Teeth Need Cleaning Too! Initative 2021-22: A toothbrushing initative through Maternal and Child Health Nurses. Health Promotion Unit, Dental Health Services Victoria: Dental Health Services Victoria, Unit HP; 2022 December 2022.
16. Dental Health Services Victoria. Baby Teeth Need Cleaning Too! intitaive-A toothbrushing initiative through Maternal and Child Health Nurses. June 2018-Dec 2019. Carlton: Dental Health Services Victoria; 2020.
17. Commerford J RE. Supported playgroups for parents and children. The evidence for their benefits. Australian Institue of Family Studies2016.
18. Dental Health Services Victoria. Brush Book Bed-Toothbrushing in Supported Playgroups-Final Report July 2018-June 2019. Carlton, Victoria: Dental Health Services Victoria; 2020.
19. Noble KF, Havel; jackson, Jen; Craike, Melinda. Effective integration of health promotion in early childhood education and care settings. Melbourne, Australia: Australian Health Policy Collaboration, Mitchell Institute; 2020.
20. Department of Human Services. Integrated health promotion: A practice guide for service providers Melbourne: Primary and Community Health Branch in partnership with the Public Health Branch, Rural and Regional Health and Aged Care Services Division, Victorian Government

Department of Human Services; 2003 [Available from: http://www.health.vic.gov.au/healthpromotion/downloads/integrated_health_promo.pdf.
21. Association ALaI. Submission in response to the Australian Government Inquiry into Australia's
creative and cultural industries and institutions. Canberra: Australian Library and Information Association; 2020.
22. Victoria SLo. Libraries for Health and Wellbeing. A strategic framework for Victorian public libraries towards. 2024. Melbourne: State Library of Victoria; 2021.
23. Oral health and dental care in Australia [press release]. Canberra: Australian Institute of Health and Welfare2023.
24. Victoria DADHS. Interdisciplinary Collaboration between Accredited Practising Dietitians, Nutrition and Oral Health Professionals for Oral Health and Nutrition. Canberra/Carlton: Dietitians Australia & Dental Health Services Victoria; 2021.
25. Freeman CR, Abdullah N, Ford PJ, Taing MW. A national survey exploring oral healthcare service provision across Australian community pharmacies. BMJ Open. 2017;7(9):e017940.
26. Dental Health Services Victoria. Pharmacy teams supporting oral health-online oral health training for pharmacy staff pilot. Carlton, Victoria: Dental Health Services Victoria; 2023.
27. Barnett T, Hoang H, Stuart J, Crocombe L. "Sorry, I'm not a dentist": perspectives of rural GPs on oral health in the bush. Med J Aust. 2016;204(1):26.

Appendices

Appendix A: Midwifery Initiated Oral Health (MIOH) education program evaluation questionnaire overview and tables

Overview of MIOH education program evaluation findings from pre- and post-training questionnaires

Note: All short answer question responses were categorised and summarised.

Participant characteristics and practices of midwives prior to the MIOH training

Questionnaires were distributed to midwives participating in the MIOH training program of two time points: prior to (pre-training) participation in the online training (participants are given 4 months to complete training) and immediately upon completion (post-training). During phase 3 of the HFHS program, MIOH was completed by 135 midwives (Rounds 9-16, conducted from late 2018 to late 2022). Only those who completed the course were included in the analysis; 132 completed pre and post; 3 completed pre only).

Five of these midwives participated in the follow-up telephone interviews to explore their experiences of the program and translation to practice in more depth (results reported in Appendix D).

Participant characteristics

- Over half of the participants (n=70, 51.9%) were 40 years of age or older and the majority were female (n=134, 99.3%). Years practicing varied with 45.2% of midwives practicing for ≤5 years (n=61), 6-15 years (n=41, 30.3%) and ≥15 years (n=33, 24.4%).
- Participants showed a variety of training backgrounds with just over a third having completed a Graduation/Post Graduation Diploma or Master of Midwifery (n=51, 37.8%).
- Professional roles varied with almost half of the participants working as clinical midwives (n=72, 53.3%); midwifery educators in a hospital (n=24, 17.8%); midwifery university lecturers/coordinators (n=13, 9.6%); midwives in a management position (n=11, 8.2%); independent practicing midwife (n=5; 3.7%) antenatal care (n=3, 2.2%); midwives working specifically with Aboriginal pregnant clients (n=2, 1.5%) and the remaining as childbirth/parenting educators (n=5, 3.7%)
- Refer to *Table 1*.

Oral health training and practices prior to MIOH participation

- Most midwives reported no oral health training (n=126, 93.3%) prior to commencing the MIOH course.
- The nine who had received training did so through:
    - Previous MIOH course at DHSV
    - Part of undergraduate and postgraduate degrees
    - In-service at work
    - Previous involvement -Dental Health Services Victoria's Smiles 4 Miles program
    - Previous course in dental assisting

Resources available for clients to access (pre-training)

- Some midwives reported being aware of available resources within their organisation regarding pregnant women's (n=34, 25.2%) or infant/toddler (n=12, 8.9%) oral health or infant/toddler nutrition (n=34, 25.2%).

- Information about pregnant women's nutrition was more prevalent with (n=115, 85.2%) reporting their organisation had these resources available (*Table 2*).

Oral health assessment and referral process prior to participation in MIOH training (pre-training)

- Prior to participation in MIOH 48.2% (n=65) never discussed the prevention of tooth decay (e.g., providing nutrition and oral health advice) with their clients (*Table 3*)
- Sixty (44.4%) participants reported they would refer clients to dental services (public or private).

Factors leading to a referral (pre-training, n=60)

- Referrals to a dental service were made mostly in response to the midwife identifying a dental problem such as: pain/discomfort, oral hygiene or dental related issues (bad breath, tooth decay, poor smile, tooth damage, abscess, or loss of a filling).

- Referrals were often initiated in response to women reporting no or irregular prior dental visits or sometimes in response to the midwife informing the client of their eligibility.

- Very few midwives referred all women as a matter of course or as part of an organisational policy where they discussed oral health as part of planned visits and advise clients to attend dental services.

- See further details in *Table 4*.

Steps involved in the referral process and any follow-up with clients (pre-training, n=60)

- Participants provided varying degrees of support to clients when making dental care referrals.
- Many provided contact details of a dental service to the patient for self-referral or encouraged them to visit their own dentist (private) whilst a few simply provided a pregnant women's brochure (containing information on how to book an appointment through the public health system).
- Some hospitals had a formal referral process, and many participants reported utilizing this service via fax, email or online. Others reported having a dental clinic on site, so they referred the patient to that service whilst others referred to public dental but didn't mention a formal process and others booked the appointment.
- Few participants would only refer in a case of an urgent issue or if the client didn't have the capacity to book the appointment.
- One participant referred the patient to a social worker if required.
- A few participants were unsure how to refer patients for dental appointments and deferred this responsibility to their manager.
- Only a few hadn't completed direct referrals.
- The level of follow up provided by the participants varied with some reporting never following up, others followed up at the client's next appointment; some admitted this follow-up could be sporadic and didn't always occur. A few made a note in the client's file and sometimes this was the trigger to conduct the follow up.
- More details are shown in *Table 5*.

Oral health information provided to women (pre-training, n=69)

- Most midwives reported providing general information about accessing a dental check, dental care practices and healthy eating/nutrition
- Many midwives provided information about when to visit the dentist during pregnancy, priority access to public dental information and the importance of a dental check; sometimes allaying their fears regarding safety of dental visiting during pregnancy.
- Midwives also provide information regarding the importance of good nutrition and/or drinking water (non-sugary drinks); one mentioned referring a client to a dietician.
- Others provided information about oral hygiene during pregnancy and for their child and some also provided further advice about how to look after their teeth when they experienced hyperemesis.
- Participants often provided this type of information regularly within specific visits e.g., the first antenatal clinic, birthing classes, second visit etc.
- Further detail is provided in *Table 6*.

Knowledge and confidence before and after MIOH training

Self-reported knowledge:

- Significant increases in midwives self-reported oral health knowledge as good/very good (16% vs 95%, $p<0.001$) were shown from pre- to post-training and supported the notion that the MIOH program filled the gap in midwife's oral health education (*Table 7*).

Knowledge test:

- Despite limited prior training in oral health (93% had no previous oral health training), participants displayed some oral health knowledge in the pre-training knowledge test component which further increased following the MIOH training.
- Prior to the training participants showed a good understanding of the importance of baby teeth, regular tooth brushing, drinking water and that hyperemesis gravidarum could affect teeth. There was significant improvement in participants understanding of the importance and implications of oral health in pregnancy, the transmission of decay causing bacteria from mother to baby, reasons for high-risk of tooth decay in pregnancy and misconceptions around pregnancy.
- Further improvements in oral health knowledge are detailed in *Table 8*.

Confidence:

- Participants showed significant ($p<0.01$) improvements in confidence from pre- to post-training in introducing the topic of oral health, assisting women to determine if she is eligible for public health, answering questions about oral health, finding the nearest public dental clinic, referring a woman to dental services, incorporating an oral health assessment into the appointment and give advice about adopting healthy oral health behaviours.
- Whilst their confidence to answer questions about healthy eating remained high from pre- to post-training (pre: 95.4% vs post: 99.2%) significant improvements were shown to $p<0.05$ level ($p=0.025$).
- Further results are shown in *Table 9*.

Feedback on the MIOH training package

- Overall, the MIOH training was well received and most midwives either agreed/strongly agreed that the training met their expectations (n=124, 94%) and was relevant to their professional practice (n=, 124, 99.2%).
- Post training almost all participants found the training useful for changing or informing professional and organisational practice.
- Most participants agreed/strongly agreed that the Victorian oral health assessment and referral pathway (flow-chart) was easy to follow (n=128, 96.9%); that the Victorian resources provided key information for each of the steps outlined in Module 3 (n=127, 96.2%); that the list of public dental services would assist them to link eligible pregnant women to their local public dental service (n=127, 96.2%); and that they would keep the Victorian resources provided to refer to in the future (n=131, 99.2%).
- See *Table 10* for further details.

Most useful aspects of the training (post-training, n=130)

- Some participants reported that all the information was useful, informative, and comprehensive.
- Many responded with the most useful aspects were the: articles, the flow chart/referral pathways, videos/images, dental check prompts/questions, the significance of oral health in pregnancy, scenarios on how to introduce the topic of oral health, oral health screening, information specifically on eligibility for public health and the enhanced knowledge questions.
- Further details are provided in *Table 11*.

Least useful aspects of the training (post-training, n=130)

- Many participants reported that they couldn't think of a least useful aspect.
- The most reported least useful aspects of the training related to the articles being repetitive, lengthy, included conflicting information, resources out-dated, and were difficult to read online.
- Some participants noted the use of American/NSW data and expressed a preference for local information/statistics.
- IT problems were also highlighted including navigating their way through the course, broken links, and IT issues relating to access to the exam.
- Further details are provided in *Table 12*.

Improving MIOH training – midwives' suggestions (post-training, n=126)

- Many participants responded the MIOH training didn't needed and improvement.
- There were three main areas identified where improvement was warranted. These included:
  - *Usability of the course:* it was suggested the flow/navigation of the course platform and links to resources.
  - *Interactivity and engagement of the course:* Many suggested the interactivity and engagement of the course could be improved by adding more videos, slide shows, diagrams, presentations, case studies, breaking up the reading, including an online Zoom session at specific time, providing the opportunity for an attempt at a visual inspection and more live speaker content.

- *Training package information:* Participants felt the training would be improved by reducing repetitive and/or lengthy articles, and reviewing articles for conflicting and/or out-of-date information and for relevance e.g. non-American/NSW.

- Further details provided in *Table 13*.

Translation to practice (post-training n=131)

- Post-training almost all midwives (97.7%, n=129) found the MIOH training useful for changing or informing professional and organisational practice.
- Participants reported the training helped build their oral health knowledge, provided evidence-based resources to inform their practice, confidence to promote oral health and the significance of oral health in pregnancy.
- Participants intended or changed their practice by incorporating oral health information/education, assessment, and referral into the antenatal visits.
- The training encouraged participants to promote oral health as a priority however the time limitations and competing priorities of antenatal visits was a challenge within their organisations.
- Participants noted the capturing of oral health information in BOS is not mandatory in booking appointments and its importance is underrated.
- Participants planned to share knowledge, resources and encouraged other colleagues to complete the course.
- Further details in *Table 14*.

Applying the learnings from the online training in midwives' daily practice or workplace (post-training n=131)

- Many participants stated they either had already incorporated the learnings into their practice or intend to utilise the new learnings. Some suggested they would ask more questions about oral health, provide more oral health education with clients in the clinic or antenatal classes, encouraging clients to see a dentist or would make the referral, share information with the client about eligibility to the public oral health system, using the training information to educate students and/or colleagues, encouraging staff/students to complete this course and sharing resources with colleagues.
- Two participants stated they would include an oral health assessment simulation in their teaching of first year midwifery students.
- Further results are shown on *Table 15*.

Improving the Victorian resources and systems (post-training n=122)

- Some participants suggested the resources/course should be made available to all midwives (online access via DHSV) and others believed that the brochures and referral pathways should be available in all antenatal clinics. One suggestion was the resources should be made available to the public.
- Some noted that there should be improved advertising of the resources as many participants didn't know they existed.

- A few raised concerns about the affordability and accessibility of public dental for pregnant clients with most believing the eligibility criteria should be removed allowing priority access to affordable public dental care for all pregnant clients.
- The accuracy and relevancy of the material could be improved, and further information provided in *Table 16*.

Barriers to promoting oral health to clients accessing services (post-training n=130)

- Some midwives reported that they did not believe there were any barriers to promoting oral health to their clients accessing their services.
- The most common barrier identified related to time and more specifically limitations/constraints during consultations with increasing demands on the antenatal appointment identified as a reason.
- Dental costs to women were also identified by midwives as a significant barrier both generally and more specifically i.e., women who are not covered by healthcare card/pension face in accessing affordable dental treatment.
- Many responses related to client-centred and socioeconomic issues in relation to women with high needs not viewing oral health as a priority, with language also being a barrier. Clients' access to transport, childcare, dental services and food/nutrition, or accommodation were seen as barriers.
- COVID-19 was mentioned by some midwives as a barrier.
- Midwives reported that organisational barriers such as lack of resources/pamphlets, policies, and oral health training could impacting their ability to promote oral health to women accessing services. Some midwives highlighted their lack of oral health knowledge and confidence could also be a barrier.
- One midwife explained that the Birthing Outcome System (BOS) doesn't allow for documenting complex information.
- Further information is detailed in *Table 17*.

Additional comments

- Most of the midwives (n=127) provided a comment after completing the training, generally stating the course was useful in providing information and improving their knowledge
- One midwife provided feedback on the brochures for Aboriginal clients (Caring for your teeth while pregnant and Healthy teeth, healthy pregnancy)
    - Information on safety of going to the dentist during pregnancy
    - Clear explanation about fluoride in tap water
    - Suggestion of using a graphic instead of a photo as an image within the brochures- depicting a few different images of pregnant figures
    - Information to be more inclusive around gender identity e.g. suggesting changing 'pregnant women do not go on a waiting list' to 'there is no waiting list if you are pregnant'.

- Further information is provided in *Table 18*.

Table 1 About the participants (n=^135)

Variable	*n*	*%
Age (years)		
20-29	30	22.2
30-39	35	25.9
40-49	31	23.0
50-59	30	22.2
≥60 or more	9	6.7
Gender		
Female	134	99.3
Male	1	0.7
Training		
Bachelor of Midwifery or Bachelor of Science (Midwifery)	32	23.7
Graduate/Post Graduate Diploma or Master of Midwifery	51	37.8
Double Degree-Bachelor of Science (Nursing)/Bachelor of Midwifery	31	23.0
Registered Nurse/Midwife hospital trained	5	3.7
Other-Bachelor of Midwifery/Bachelor of Science (mid)/Hospital trained midwifery-plus another speciality e.g. lactation consultant, Masters of social science	16	11.9
Current position		
Midwife	72	53.3
Clinical nurse/midwife educator (hospital)	24	17.8
Midwifery university lecturer and/or coordinator	13	9.6
Midwife in management position	11	8.2
Independent practicing midwife	5	3.7
Childbirth and parenting educator	5	3.7
Antenatal Care midwife	3	2.2
Midwife working with Aboriginal pregnant women	2	1.5
How long participant had worked in current profession (years)		
≤5	61	45.2
6-10	28	20.7
11-15	13	9.6
>15	33	24.4

**Due to rounding errors, percentages may not equal 100%.*

^Includes n=3 MIOH participants that completed the pre-training questionnaire only.

Table 2. Information and/or resources available within organisation to clients within MIOH participant's organisation (pre-training, n=135)

Information/resources	Yes n (%)	No n (%)	Don't Know n (%)
Information/resources about pregnant women's oral health	34 (25.2)	54 (40.0)	47 (34.8)
Information/resources about pregnant women's nutrition	115 (85.2)	9 (6.7)	11 (8.2)
Information/resources about infant/toddler oral health	12 (8.9)	65 (48.2)	57 (42.2)
Information/resources about infant/toddler nutrition	34 (25.2)	50 (37.0)	51 (37.8)

**Rounding will affect percentage totals.*

Table 3. Number of MIOH participant's discussing how to prevent tooth decay (e.g. providing nutrition and oral health advice) with clients' accessing their service (pre-training, n=135)

Response	n (%)
Yes, always	11 (8.2)
Yes, sometimes	59 (43.7)
No, never	65 (48.2)

**Includes n=3 MIOH participants that completed the pre-training questionnaire only.*

Table 4. Factors leading midwives to refer clients to dental services (pre-training, n=60)

Theme	Category
Dental problems observed by the midwife or reported by the client	Client complains of dental issues: pain/discomfort from teeth/discomfort in gums
	Midwife probes clients about new dental issues
	Clients' dental hygiene/bad breath
	Midwife examination of oral cavity/observes caries or dental damage
Dental visiting: policy of the organisation	Clients with a health care card are referred to public dental through internal referral process
Dental visiting: personal choice of midwife or organisational policy/practice	Refer, recommend or book all clients as a matter of course
Dental visiting: client reporting infrequent or no dental visiting	Client reported they haven't had a dental check-up in 12 months
Dental visiting: midwife advises of complications if client delays dental visit	Midwife explains the difficulty in using the service later in the pregnancy associated with hypotension from the gravid uterus
Other health/ social considerations	Client's poor socioeconomic status
	Client is unaware as a health care card holder they were eligible for public dental and referral to dentist is priority due to pregnancy and shorter waiting list
	Clients eligible for public dental e.g. refugee, ATSI, health care card holders
	Client has history of health problems and advised to see a dentist/oral hygienist as a preventative measure
	Client is referred for dental services via a social work department e.g. substance abuse issues.
	Clients with financial issues e.g. dental visits are expensive.
Client initiated referral	Client requesting a referral when reporting on an OH concern/issue
Don't refer clients	Midwife not aware of any public dental services/ clients have not asked for dental services
	Midwife hasn't done direct referral, but have given advice about dental services, and eligibility for public dentist
Client declines referral	Midwife offers internal referral form-client declines.

**Participant responses were classified into one or more categories.*

Table 5. Participants report regarding the steps involved in the referral process and levels of follow provided to clients (pre-training, n=60)

Theme	Category
Use of internal referral system in various forms	An online referral process through the organisation's website
	Service is accessed by clients identifying as ATSI and referred directly to the local community health centre.
Midwife books appointment through public dental	Midwife makes a booking with the public dentist.
	Midwife advises client how to use the government dental benefits to access local public dental care.
	Midwife coordinates appointment with public dentist or GP on behalf of the client
	Midwife initiates the call to the reception of the local health centre and the client continues with arranging an appointment.
	In emergency the midwife refers directly to the Dental hospital.
Informal referral, advised to visit a dentist, patient lead (books own appointment), sometimes with follow-up at next antenatal appointment.	Encourage client to see their regular dentist
	Encourage client to make their own appt with their own dentist
Assess access for public eligibility	Women are referred to public dental health check if they have no means for private.
	Internal dental referral – midwife completes an online referral form and the client will receive a booking phone call for the public dentist
	Private assessment- client to book themselves
	Midwife makes health care card client a referral to public dentist, with the understanding the client's booking will receive priority due to pregnancy and shorter waiting list
	Mentioned referrals for public, but no mention of what happens for private patients (n=19)
Uncertainty around referring, no formal referral process in place, referral process in review	Never done a direct referral
	No follow up due to the nature of fragmented care

Theme	Category
Provide brochure, information and sometimes referral	Not sure of the referral process – refers to senior manager for referral assistance
	No knowledge of a formal referral process
	Unsure how to refer-advises client to contact the dental hospital to arrange or discuss how to get referral to dental service
	Provide client contact details and information-client to make appointment
	Provide brochure and contact details
	Provide OH education and encourages client to book dental visit
No referral, makes a note to follow-up at next antenatal appointment	Inform client to visit a dentist-make note to follow-up at next antenatal visit -client to book own appointment.

**Participant responses were classified into one or more categories.*

Table 6. Midwives report of information they provided to women (pre-training, n=69)

Categories
Dental care while pregnant
Seek regular dental care for gum related problems
Advise to see dental care/check-up if there is no recent dental visit
Using the "what to expect" brochure to explain OH in pregnancy
Eligibility in accessing dental services during pregnancy
Referral to dental services internal or external to the organisation
Healthy eating/nutrition
Healthy eating/nutrition and dental care
Healthy eating/nutrition discussed in booking appointment during 2nd trimester
Smoking in pregnancy
Referral to dietitian about nutrition concerns
Implications of poor oral hygiene in pregnancy
Provide OH information for children/ how families can do a mouth check in children
Rinsing mouth after vomit
Mouth check when poor OH is visible or client is concerned
Routine OH information provided at 1st antenatal visit
Information about dental caries passed from mother to babies during feeding
Providing OH information to a specific cultural group
Links between OH and risk of birth complications
Physiological changes during pregnancy e.g. bleeding gums
DHSV brochure (Caring for your teeth while pregnant)

**Participant responses were classified into one or more categories.*

Table 7. MIOH participant's self-report of oral health knowledge (pre- vs post-training, n=132)

Self-report category	Pre-training n (%)	Post-training n (%)	*p-value*
Very Good/Good	21 (15.9)	125 (94.7)	
Average/Poor/Very Poor	111 (84.1)	7(5.3)	*P<0.001*

Note: Response categories were combined to allow for appropriate analysis of changes from pre- to post-training (only those who completed a pre and post included in table). (*McNemar's chi2(1)=104, p<.001)*

Table 8. Oral health knowledge test responses (pre-vs post-training, n=132*)

Level of agreement with statements	Pre-training n (%)	Post-training n (%)	*p-value* (Pre-vs post-training)
Bad breath is a sign of poor oral health			
Agree *(Correct)*	104 (78.8)	129 (97.7)	
Disagree/don't know (Incorrect)	28 (21.2)	3 (2.3)	*p<0.001*
Women that have gingivitis before pregnancy can find it improves during pregnancy			
Agree/don't know (Incorrect)	38 (28.8)	3(2.3)	
Disagree (Correct)	94 (71.2)	129(97.7)	*p<0.001*
The withdrawal of calcium (required for foetal bone development) from the mother's teeth during pregnancy can cause dental caries			
Agree/Don't know (Incorrect)	119(90.2)	52 (39.4)	
Disagree *(Correct)*	13(9.9)	80 (60.6)	*p<0.001*
Mothers can transmit decay causing bacteria to babies			
Agree *(Correct)*	77(58.3)	132 (100)	
Disagree/don't know *(Incorrect)*	55(41.7)	0	*p<0.001*
Women with hyperemesis gravidarum can experience tooth enamel erosion			
Agree *(Correct)*	126(95.5)	131(99.2)	
Disagree/don't know *(Incorrect)*	6(4.6)	1(0.8)	*p=0.059*
Brushing teeth twice a day is one step towards preventing tooth decay			
Agree *(Correct)*	131(99.2)	132(100)	
Disagree/don't know *(Incorrect)*	1(0.8)	0	*p=0.317*
Having healthy baby teeth is not important as they will fall out			
Agree/Don't know (Incorrect)	3(2.3)	0	
Disagree *(Correct)*	129(97.7)	132(100)	*p=0.083*
Only giving sugary snacks at mealtimes can assist in preventing tooth decay in children			
Agree *(Correct)*	24 (18.2)	103 (78)	
Disagree/don't know *(Incorrect)*	108 (81.8)	29 (22.0)	*p<0.001*
Parents should feed their child with the same spoon they use to taste their child's food with			
Agree/Don't know (Incorrect)	36 (27.3)	1(0.8)	
Disagree *(Correct)*	96 (72.7)	131(99.2)	*p<0.001*
Women that have morning sickness should be encouraged to brush their teeth immediately after vomiting			
Agree/Don't know (Incorrect)	93(70.5)	6(4.6)	

Level of agreement with statements	Pre-training n (%)	Post-training n (%)	*p-value* (Pre- vs post-training)
Disagree *(Correct)*	39(29.6)	126(95.5)	*p<0.001*
Babies are born with tooth decay–causing bacteria in their mouth			
Agree/Don't know (Incorrect)	70(53.0)	42(31.8)	
Disagree *(Correct)*	62(47.0)	90(68.2)	*p<0.001*
The physiological changes during pregnancy may result in an increased risk of gum disease, tooth erosion and tooth decay for the expectant mother			
Agree *(Correct)*	118(89.4)	128(97.0)	
Disagree/don't know *(Incorrect)*	14(10.6)	4(3.0)	*p=0.012*
It is not safe to have dental treatment during pregnancy			
Agree*/don't know (incorrect)*	20(15.2)	1(0.8)	
Disagree (correct)	112(84.9)	131(99.2)	*p<0.001*
Dental caries is which type of infection?			
Bacterial *(correct)*	102(77.3)	131(99.2)	
Viral/fungal/none of the above/don't know (incorrect)	30(22.7)	1(0.8)	*p<0.001*
Which of the following drinks does NOT contribute to tooth decay?			
Water *(correct)*	131(99.2)	132(100)	
Sports/energy drinks/soft drinks/cordial/fruit juice/don't know (incorrect)	1(0.8)	0	*p=0.317*
Early childhood caries is			
the single most common chronic childhood disease *(correct)*	66(50.0)	126(95.5)	
less common than asthma in children/showing a sharp decline in prevalence/none of the above/don't know (incorrect)	66(50.0)	6(4.6)	*p<0.001*
Which practice has been specifically associated with an increased risk of Early Childhood caries?			
infant/toddler sipping from bottle/cup throughout the day containing some sweet drinks *(correct)*	123(93.2)	130(98.5)	
Breast feeding beyond 12 months/discontinuing bottle feeding before 12 months/none of the above/don't know (incorrect)	9(6.8)	2(1.5)	*p=0.020*
Pregnant women are at higher risk of tooth decay because of:			
All of the above *(correct)*	54 (40.9)	114(86.4)	
Increased acidity in the oral cavity as a result of more frequent vomiting/eating more sugary	78 (59.1)	18(13.6)	*p<0.001*

Level of agreement with statements	Pre-training n (%)	Post-training n (%)	*p-value* (Pre- vs post-training)
foods as a result of food cravings/decreased salivary production /don't know (incorrect)			
During pregnancy: None of the above *(correct)* • women should not have dental x-rays • women are expected to lose a tooth for every pregnancy • women need to wait nine months before having dental care	70(53.0)	122(92.4)	
Incorrect	62 (47.0)	10(7.6)	*p<0.001*
Untreated dental caries can lead to: oral abscess and facial cellulitis *(Correct)*	108 (81.8)	127(96.2)	
increased saliva/decreased saliva/none of the above/don't know (Incorrect)	24 (18.2)	5(3.8)	*p<0.001*
Gingivitis is the most common oral disease in pregnancy with prevalence of: 60 to 75% (Correct)	22 (16.7)	115(87.1)	
20 to 35%, 40 to 55 % ,80 to 90%, don't know (Incorrect)	110 (83.3)	17(12.9)	*p<0.001*
Periodontitis is a destructive inflammation of the periodontium affecting approximately: 30% of childbearing aged women *(Correct)*	5(3.8)	106 (80.3)	
10% of childbearing aged women, 20% of childbearing aged women, 40% of childbearing aged women, don't know (Incorrect)	127(96.2)	26 (19.7)	*p<0.001*
Periodontal disease is associated with all of the following conditions, except: Asthma *(Correct)*	55(41.7)	116 (87.9)	
pre-term, low birth weight baby, diabetes, heart problems, don't know *(Incorrect)*	77(58.3)	16 (12.1)	*p<0.001*
Pregnancy granuloma can be described as: Nodular gingival growths that bleed easily *(Correct)*	37 (28.0)	124 (93.9)	
Tooth erosions related to the effects of acid reflux, extensive periodontal infection, all of the above, don't know *(Incorrect)*	95 (72.0)	8(6.1)	*p<0.001*
Generally, gums tend to bleed during pregnancy: Due to changes in the woman's hormones during pregnancy (Correct)	103 (78.0)	119(90.2)	
Because a woman's haemoglobin is lower during pregnancy, because women do not perform adequate oral health care, none of the above, don't know (Incorrect)	29(22.0)	13(9.9)	*p=0.008*
Who is eligible for public dental service's priority access in Victoria? All of the above *(Correct)*	113(85.6)	125(94.7)	
Incorrect	19(14.4)	7(5.3)	*p=0.014*

**Total numbers of participants may vary slightly due to participant responses.*

Table 9. Midwives' self-reported level of confidence to include oral health within their practice (pre- vs post-training) *n=132

Statements and level of confidence	Pre-training n (%)	Post-training n (%)	*p-value*
Introduce the topic of oral health during consultations with clients			
Confident/somewhat confident	89 (67.4)	131 (99.2)	
Not confident	43 (32.6)	1 (0.8)	*p<0.001*
Assist a pregnant woman to determine if she is eligible for public dental services			
Confident/somewhat confident	54(40.9)	131 (99.2)	
Not confident	78(59.1)	1 (0.8)	*p<0.001*
Answer questions about oral health			
Confident/somewhat confident	64(48.5)	132(100)	
Not confident	68(51.5)	0	*p<0.001*
Answer questions about healthy eating			
Confident/somewhat confident	125 (95.4)	130(99.2)	
Not confident	6(4.6)	1(0.8)	*#p=0.025*
Find the nearest public dental service			
Confident/somewhat confident	85 (64.9)	128 (97.7)	
Not confident	46 (35.1)	3(2.3)	*#p<0.001*
Refer a pregnant woman for dental services			
Confident/somewhat confident	60 (45.8)	129(98.5)	
Not confident	71 (54.2)	2(1.5)	*#p<0.001*
Incorporate oral health assessment into consultations with clients			
Confident/somewhat confident	51 (38.6)	131 (99.2)	
Not confident	81 (61.4)	1 (0.8)	*p<0.001*
Identifying opportunities to promote oral health in my workplace			
Confident/somewhat confident	N/A	131 (99.2)	
Not confident	N/A	1(0.8)	*N/A*
Support pregnant women/families to recognise the importance of oral health and give advice about adopting healthy oral health behaviours			
Confident/somewhat confident	N/A	131 (99.2)	
Not confident	N/A	1(0.8)	*N/A*

**Total numbers of participants may vary slightly due to participant responses.*

Table 10. Participants level of agreement with statements about the MIOH training (post-training, n=132)

Knowledge and skill development	Strongly Agree n(%)	Agree n(%)	Neither agree nor disagree n(%)	Disagree n(%)	Strongly Disagree n(%)
I have gained new knowledge and/or skills	104 (78.8)	28 (21.2)	0	0	0
I intend to use what I have learnt from this training in my workplace	103 (78)	29 (22.0)	0	0	0
I am more confident about supporting good oral health for clients accessing my service	101(76.5)	30 (22.7)	1(0.8)	0	0
About the training					
The training met my expectations	67(50.8)	57(43.2)	5(3.8)	2(1.5)	1(0.8)
The training was relevant to my professional practice	84(63.6)	47(35.6)	1(0.8)	0	0
The content was clear and easy to follow	50(37.9)	56(42.4)	13(9.9)	12(9.1)	1(0.8)
The amount of information was sufficient	65 (49.2)	59(44.7)	5(3.8)	2(1.5)	1(0.8)
I would recommend this training opportunity to others	75(56.8)	44(33.3)	11(8.3)	2(1.5)	0
About the resources					
The Victorian oral health assessment and referral pathway (flow-chart) was easy to follow	77(58.3)	51(38.6)	4(3.0)	0	0
The Victorian resources provided key information for each of the steps outlined in Module 3.	73(55.3)	54(40.9)	5(3.8)	0	0
The list of public dental services will assist me to link eligible pregnant women to their local public dental service.	70(53.0)	57(43.2)	5(3.8)	0	0
I will keep the Victorian resources provided to refer to in the future	83(62.9)	48 (36.4)	1(0.8)	0	0

Rounding may affect percentage totals

Table 11. Participant reported most useful aspects of the MIOH training (post-training, n=130)

Categories
All useful
Resources – easy to use
Referral pathway/flowchart resources/links to referral resources
Practical information including articles, images, evidence-based research, dental discussion steps, how to introduce OH in antenatal visits, eligibility for public dental
Scenario based modules
Role playing discussions with clients
Midwifery specific dental education
Videos e.g. inspection of the mouth
Hard copy (to refer to)
Posters
Online web pages to refer clients to the dentist within a specific location
Information relating to OH and pregnancy e.g. hormones, dental issues, adverse birth outcomes
Information about OH, anatomy and physiology of the oral cavity
Questions following each module, enhanced knowledge
Reflection on practice and what can be implemented to address OH
Flexible (done in own time)
Layout/ navigating through modules
How to incorporate OH into midwifery practice
When to visit the dentist
Self-reflection- Reflect on current poor assessment of OH within practice and if dental decay caused adverse birth outcomes

**Participant responses were classified into one or more categories.*

Table 12. Participants reported least useful aspects of the MIOH training (post-training, n=130)

Theme	Category
Information	Not enough information on conducting a practical oral exam
	Content- preference for slide show presentation, video clips
	Online learning was not engaging
	Articles similar in structure and content
	Contradicting information in journal articles
	Lengthy resources/time consuming
	Research articles were too old
	Lack of evidence-based information in articles
	Images are too detailed/distressing
	Dental terminology heavy
	OH anatomy too detailed
	Not relevant content e.g. American/NSW content
	Content was not relevant for translation into practice
	Childhood oral care not relevant to midwives e.g. suitable for maternal child health nurses
IT problems	Difficult to navigate through the course
	Format of articles was difficult to read online
	Unable to access assessment e.g. locked out of program
	Links within content and resources are broken
Questions/Assessment	Repetitive questions
	Preference for multiple choice question over open answer questions
	Structure of assessment was not engaging e.g. read a few articles and answer follow-up questions
	Reflective exercises not useful
	Responses to multiple choice questions contained double negatives
Miscellaneous	Time constraints in antenatal booking not sufficient to perform oral health assessment, discuss OH, provide a referral

**Participant responses were classified into one or more categories.*

Table 13. Participant ideas on improving the MIOH online training (post-training, n=126)

**Participant responses were classified into one or more categories.*

Theme	Response
Content	More videos
	More diagrams
	Access to all articles in the one place
	Place summary of readings within course/integration of articles
	More Australian resources
	Reduce number of articles
	Update references (articles too old)
	Conflicting information
	Provide more information on practical application
	Check readings for repetition, relevance, accuracy
IT issues	Easy flow/navigation through the course
	Improve progression through the course
	Ensure links to articles/attachments/videos are accessible
	Downloaded resources are in the correct orientation/readable
	Course compatibility with electronic devices e.g. iPads
	Ensure answers to exam are recorded e.g. avoiding going back to re-fill the same sections
Availability of the training	Make course available to all midwives
	Make course available to MCHN through LGA
Assessment	Repetitive e.g. evaluation training questions and survey evaluation questions are the same
	Few mini quizzes after module
	Format of assessment e.g. drag and drop answers, memory games, fill in the missing words
Handbook	Prefer hard copy
Miscellaneous	More practical applications within course
	Reduce the cost of the course
	Evidence on the rates of changes in practice in hospital settings

**Participant responses were classified into one or more categories.*

Table 14. Midwives responses on how the online training was useful for changing or informing professional and organisational practice (post-training, n=129)

Theme	Category
Building OH knowledge	Improved OH knowledge
	Importance has reinforced the need to discuss the topic with clients
	Direct link of how pregnancy affects dental health
Change in practice	Will use this OH information when talking to clients about teeth and refer to the dentist
	Provide appropriate OH care information/ dental referral
	Training helps midwives with own OH education and improve their practice
	Prior to training midwives didn't discuss dental health in antenatal care visits due to limited OH knowledge however after training can educate their clients on importance of OH
	Course has provided knowledge and confidence in approach to OH in pregnancy with clients which will change the practice of antenatal care
	Implemented the OH questions into practice while doing the course and clients forthcoming in disclosing dental concerns
	Can complete the oral health question within booking appointments (BOS) and discuss OH regime with clients
Transferring OH knowledge	Provide other staff with information to assist in providing a oral health check
	Discuss the learnings from the training with other midwives
	Sharing resources and information
	Encourage other midwives to attend the course
	Information should be included in the current midwifery curricula
Building confidence	Feel more confident/empowered to provide OH information and resources to clients
	Confident to discuss OH of child in early childhood
	Confident to refer clients to the relevant service
Organisational change	Training is important for professional practice however difficult to introduce into hospital policies
	Time restriction e.g. Appointment scheduling needs to be longer to incorporate OH discussion with client

Theme	Category
	Currently no OH information, handouts or OH screening provided to clients
	OH section of BOS overlooked as completion of questions is not mandatory for midwives to complete in booking appointments
	Importance of capturing OH information in BOS is underrated
Resources	Sample referral resource was helpful
	Flow charts/referral pathway posters highlighted on clinic boards
	Useful government websites/resources from training available for quick reference

**Participant responses were classified into one or more categories.*

Table 15. Midwives' responses regarding how they intend to apply learnings from the online training in their daily practice or workplace (post-training, n=131)

Response
Incorporate new OH knowledge, dental checks into antenatal appointments/clinics
Introduce OH information and discussions e.g. students, colleagues, incorporate into the midwifery curriculum
Encourage colleagues to complete the course
Using the tools provided to complete dental referral when required
Improve the information in brochures/welcome packs in pregnancy/booking clinic
Continue to document OH information in BOS
Discuss OH with clients e.g. risks of premature birth, transfer of dental caries, nutrition, safety of dental treatment, provide OH check if client presents with OH issues
Prioritise dental health in appointments
Develop quick reference templates e.g. from resources provided in training
More confident to discuss public dental health system and eligibility criteria
Midwives reporting changes in practice
Resources – easy to use
Referral pathway/flowchart resources/links to referral resources
Training helpful however uncertain about conducting dental assessments
Difficult to apply learning when seeing clients only in third trimester

**Participant responses were classified into one or more categories.*

Table 16. Midwives' suggestions on how to improve Victorian resources (post-training, n=122)

Theme	Category
No changes/ unsure	No improvement needed
	Unsure
Education and training, promotion of training and resources	OH in pregnancy needs to be covered in midwifery studies
Additional dental services/ affordable dental services	More information on how to find a dentist if client is not eligible for public dental
	More information on eligibility of children 0-12 years for public dental
	Utilisation of dental students in practice
Content improvement	Articles need to be updated regularly
	Too many articles
	Repetitive articles
	More information outlining relationship of dental health and low birth weight
	Clear information on dental visit during pregnancy and OH information aligns with dental practice
	Content currently not relevant for rural Victorian setting
	Address conflicting information in articles
	Provide Victorian resources e.g. NSW leaflets provided
	Resources provided in more languages
	Resources that cover children's teeth till 5 years e.g. currently till 12 months
Brochures/posters	Have more printouts/brochures to share with clients in antenatal bookings
	Improve colour of brochures e.g. NSW pamphlet has a better layout/design
More interactive/videos/clips	More visual aids/flow charts
Promotion of resources	Resources/course more visible for health practitioners
	Advertise the resources within the workplace
	Make resources available to general public
Design/order	List of resources reduced to once page for ease of use
Miscellaneous	Importance has reinforced the need to discuss the topic with clients
	Victorian resources not obvious while doing the course.

Table 17. Midwives' responses regarding the perceived barriers for clients accessing services (post-training, n=130)

Theme	Category
Time limitations / constraints	Time allocation for antenatal clinic appointment are constrained
	Each appointment has so many topics to cover
	Not enough time
	Extra OH education and assessment will add to time pressures
Confidence in raising the issue of OH/hygiene	Not confident/experienced to perform OH check
	Lack of knowledge about eligibility for public dentistry
COVID-19 issues	Appointment over the phone -less opportunities to perform an oral assessment
Access issues	Transport
	Distance to dental services
	Difficulties in booking a dental appointment e.g. long waiting time
	Competing priorities e.g. childcare for children, complex social situation
	Difficulty with booking dental appointments in rural areas
	Substance abuse
	Homelessness/access to regular accommodation
	Access to nutritious food limited
Issues relating to cost	Cost-in general
	Cost - client who are ineligible for Medicare/health care card.
	Concerns about predictability of cost
Resources	Literacy e.g. clients reliance on verbal and information on posters
	Need information for low literacy level
	Lack of information in other language other than English
Client related concerns	Competing social issues with the client can take priority over oral health discussions
	Client not accepting of the information provided by the midwife in the antenatal appointment
	Poor antenatal attendance/engagement
	Cultural sensitivity
	Reluctance to visit the dentist
	Reluctance to have an oral health assessment
	Client dental phobias
Organisational issues	Lack of resources in organisation
	OH is not standard care for pregnant clients
	Not within organisational policy
	Organisational BOS system do not have a specific section for OH documentation
	Continuity of care e.g. clients don't always see the same midwife
	Clients are not seen by midwives early in their pregnancy
Miscellaneous	Technology issues
	Private hospital consultation is completed by the doctor
	Safety issues with dental visiting for pregnant clients .e.g. conflicting information from GP and midwives given to clients
	OH knowledge in the general population needs improvement

**Participant responses were classified into one or more categories.*

Table 18. Participant additional comments at post-training (n=127)

Theme	Category
Improved knowledge and skills, building confidence and translation to practice	Comfortable to implement OH knowledge into practice
	Support pregnant clients with information on how to care for their oral health e.g. vomiting
About the training	Very high quality course
	Recommend to colleagues
	Useful information
	Relevant course for midwives
Transferring knowledge	To educate midwives in bulk – utilise lunchtime forums, team meetings
Resources	Requested video provided in this course to be played in waiting rooms
General comments	Raised awareness of personal oral health practice
	Articles were interesting to read
	Issues with course– journal articles out of date, American content, time consuming, repetitive, technical issues, repeating surveys

**Participant responses were classified into one or more categories.*

Appendix B: Midwifery Initiated Oral Health education program (MIOH) follow-up key informant interviews with illustrative quotes

Overview of evaluation findings from key informant interviews with midwives exploring perspectives on the MIOH education program and impacts on practice

Five midwives participated in 12-month post training in-depth telephone interviews exploring their experiences and perspectives on the MIOH training program and how oral health promotion was incorporated within their professional practice, health service and systems.
The roles of the midwives are shown in *Table 1*.

Table 1: Midwife/interviewee roles

ID	Role
M1	Program coordinator of a university midwifery course
M2	Formerly a midwife in a hospital antenatal clinic
M3	University midwifery course lecturer
M4	Formerly a postgraduate midwifery student undertaking clinical placement in a hospital
M5	Midwife in antenatal care within a health service

Training

The MIOH training received positive feedback from all interviewees. Interviewees spoke of having limited background or understanding of the importance of oral health. They highlighted that there was a real need for capacity building in their field, that the content itself was relevant and informative, and that they did take their new learning and apply them into their fields.

> *Prior to the [MIOH] course I never checked people's teeth. I used to notice a lot of people had bad teeth and I wasn't actually aware of the correlation between small babies and the teeth. I didn't know that even [though] I've been a midwife for 40 years.* (M5)

> *I found it very interesting and the correlation between poor dental health and heart attacks, and stuff like that, and I wasn't aware that there was this strong link, you know, and it increased my knowledge and that's very helpful.* (M5)

> *A colleague, who completed the course, she recommended it so we've been trying to get our whole team to go through the course.* (M1)

> *I was more knowledgeable at the end of the program, [I] was able to have discussions with women in a more knowledgeable way after the course.* (M2)

> *For me, it was a huge learning curve to have this completely new knowledge after, you know, a few too many years without it.* (M1)

Discussing why participants were taking up the training in the first place, key enablers were recognizing it as a piece of missing knowledge, that the course was free and that there was a time limit to complete the course to prompt them to do so in a timely way, and that they had been encouraged to take up the course by their colleagues.

[Oral health] was an area of practice I recognized I wasn't terribly confident in, so I just wanted to make sure […] as an educator that I was aware of the factors in terms of oral health in pregnant women. (M3)

Yes, so the fact that [MIOH training] was free was a big driver… I did it through the ACM [Australian College for Midwives] but if you didn't complete it you had to pay. […] It kind of drove me to complete it so I thought that was actually quite clever. (M3)

To not pay for the course was very much appreciated. It puts a little time factor on there, so you do have to get this done in a timely manner, which can be some of the issues with academics is we are very, very time poor. So being able to put a time frame on it and have that financial incentive to do so was one of the things that made it a feasible option for me. (M1)

Regarding the content, the option to take the training online, in their own time, was an enabler for midwives, as it took into account their busy schedules. Most interviewees mentioned being quite visual learners so the images provided helped to build the understanding of dental diseases, and the simulated interviews and other videos were also helpful as examples of how they could apply the new information into their sessions with clients.

Online was really good. (M5)

Particularly videos, watching simulated interviews or all those sorts of things really much more engaging. (M3)

It was all new to me and I hadn't really studied anything [about oral health] before, so having the photos of what we're looking for and being able to differentiate the different types of oral health conditions was really, really helpful. They were really clear, and they showed exactly what we're looking for, and I don't think that I would have got that from just a description of, you know, 'inflamed gums'. (M1)

Change in practice

There was variation in the fields that the interviewees worked in, ranging from midwives in hospitals or community care, a student completing post graduate training clinical placement, and those in midwifery academics. All interviewees responded that the training was relevant to them in their field, and they felt there was space to change the way they delivered care and/or training, based on what they learned.

For those in the clinical setting, enablers included organisational support to create longer general appointments which could fit in the high load of content required, including oral health.

Screening and talking to women about their oral health and understanding that it was really important that they followed up any issues. (M3)

My employer is really- good they allow me to have a long time for initial consult when booking [women] in. (M5)

The midwives working in academia saw plenty of benefits in having their colleagues also undertake training so that as a collective they could pass the knowledge onto their students and look into implementing oral health promotion into their coursework.

We've actually been able to integrate [training] into our teaching as well as being able to have multiple staff that have completed the program. (M1)

> *We've actually been able to build online theoretical units. We've completed real-time online tutorials, so the students are interacting with us via Teams and completing education activities. Applying that theoretical knowledge so we've also integrated […] being able to physically check a woman's mouth when we do our clinical skills labs.* (M1)

Building upon providing these learnings to the students, the interviewees in academia, also discussed how their students were engaging with the oral health teachings and gaining confidence in delivering oral health screening for pregnant women.

> *Our students are already registered nurses, so they've got […] foundation work of working with people. It's more about what we're talking about and why. In a couple of months' time they will [need] a much more detailed course of study on how to apply all of this. They'll be practicing the conversation skills and all those kinds of elements as well in their labs. So, they'll have a little bit more time spent on this to make sure they develop the skills because they have got that foundation of communication, education, and that experience working with families already.* (M1)

Barriers

For midwives working in general clinical settings the main barriers to delivering oral health education to their clients were time and the client's ability to follow through with any need for treatments.

> *Well, there is so many things to go through in the antenatal initial visit.* (M5)

> *The most needy for dental care its more difficult for them because they don't have transport or [they have] other issues in their life so it's not always easy [but] I keep encouraging them.* (M5)

> *Quite a lot of the women are working and don't have a health care card.* (M5)

If oral health needs were identified for a client, receiving the required dental care relied on other outside factors to align. Issues impacting receiving care ranged from concerns over cost, lack of health care cards, time required to travel and location, as well as general access and waitlists.

> *You can give them the referral letter, but they still have to make contact with the service.* (M5)

> *It's just about getting in and seeing them is challenging, particularly in the last two years [2020 - 2022] I think it's much worse than it's ever been. Cases of triage to public services, unless a woman has severe [oral health] issues, she's unlikely to be seen straight away.* (M3)

Referrals

The conversations with interviewees that worked in clinical settings delivering antenatal care discussed the issues of access as a barrier to their capacity for referrals. The referrals themselves ranged from informal and verbal, to formal and written, but without the knowledge of where to send clients that suited their lives and their means, was a consistent challenge.

> *Yeah, I think it was mostly knowing what to look for being able to refer appropriately.* (M2)

> *From our education [prior to MIOH], we kind of got told dental health is important and then that was pretty much it […] it was one of the things that we kind of assumed that the medical staff would deal with.* (M1)

> *It was my preference to get them to take responsibility of their own referrals […] to take the steps themselves, so they're taking more responsibilities for their own health and wellbeing, and mostly as far as I'm aware, they did.* (M2)

> *I don't very often do an actual referral but I tell the women and I give them a brochure and tell them where they have got to ring and explain to them you know tell them that they're pregnant and put up the next available appointment so I don't actually do referrals but I strongly encourage the women.* (M5)

> *Most of the time I got the women to do the self-referral but it was mainly about getting them to understand that the general dental check was free for them and how to go about it.* (M2)
> *From my point of view, practically I think it's really challenging because our public dental services are not quite at the point that we need them to make those referrals and actually have them acted upon.* (M3)

To support clients to follow through with referrals, referral pathway resources provided in the MIOH formal training were discussed.

> *We've used the Victorian Referral Pathway that was provided by University of Western Sydney. We've integrated that flow chart of exactly what action needs to be taken and how to find where women can go and who needs urgent referrals and who can just be, you know, left to […] find their dental appointment for themselves. So yeah, that's part of the program.* (M1)

The interviews highlighted the need for further support at systems level to improve and support referral pathways between maternity setting and dental services, this was raised by interviewees in both the clinical setting and in education and teaching.

Supportive systems

Having systems and procedures in place for referrals, and the ability to record oral health checks in the BOS database were raised as structures that support initiating an oral health screening and potential referrals at future and ongoing appointments, even if the care was continued by another midwife.

> *I follow up with them at their next visit...seeing them the whole pregnancy so if you've noted it on your first visit you can just keep reminding them.* (M5)

> *My employer is really good they allow me to have a long time for initial consult when booking [women] in.* (M5)

> *BOS you know the birth outcomes system we use [there are prompts] dental examination completed, and it asks do you do a referral for dental care.* (M5)

For the interviewees in teaching and program delivery positions, these systems were also raised as supportive structures.

> *We also look at it from the way that we use BOS or the other online digital records. And look for those prompts and make them [the students] really aware because it's really easy to skim over them. Unless it's one of the mandatory tick boxes, it can be skipped really easily. So, bringing the students awareness to it and integrating that into their routine discussion is really important.* (M1)

One of the interviewees that works in a program coordination position, mentioned how they encourage students to discuss these systems and processes with staff at their clinical placements. This aligned with the information raised from clinical staff during interviews, where only one interviewee mentioned the BOS or any similar process for tracking oral health in their records.

> *We have asked the students to reflect as they go out on practice to see how many midwives have actually incorporated [oral health screening] into their practice, and to have a chat with the midwives who they're working with as to whether or not they do oral health screenings and why. So that's part of their reflective piece for this particular unit actually.* (M1)

Support and resources provided by DHSV

When asked how DHSV could best continue to deliver training, the staff at HFHS and DHSV organisation received praise for their support in delivering the training program and being available for support in terms of resources and general information.

> *You know, they've been amazing. They've been able to give brochures, flow charts, quiz questions, everything that we've needed, and they've even been really clear on the differentiation between resources that are Victorian specific and resources that are more generalised. So I can't fault the support, we've had somebody to be able to call with any questions and asking for assistance. So yeah, I think we've had really brilliant support from DHSV. (M1)*

Additional knowledge required

An interviewee who worked within the university setting raised that having insight into the experience of going to see a dental practitioner for a pregnant women would be helpful to support discussions with patients.

> *I think probably more of that kind of applied knowledge and potentially videos of completing the oral health exam and actually seeing the clinician and the woman looking inside the mouth, and actually showing what they're seeing, would be another way of bringing in that extra practical [element].* (M1)

> *We actually did have a student that was a dental nurse previously […] she was able to help fill in some of those gaps in the practical elements and in those conversations about how she works with pregnant women [in the dental setting] and those kinds of things.* (M1)

> *She was really able to talk about the different ways of working with women, like positioning in the chair and being able to make sure that we do shorter bursts of active treatment so the women can actually get up and move around, or [how] to work with women that have really sensitive gag reflexes to smells or textures, all those kinds of things that were really practical elements.* (M1)

For future reviews and discussions surrounding content or for partnerships with universities, this practical information from the dental setting would be useful to consider.

Sustainability

As mentioned earlier when discussing referrals, there is a need for ongoing training and a desire for refresher training from those in clinical settings, as well as a level of discrepancy in training and confidence between students who receive oral health training and those that do not. Conversations with the participants at universities that are currently trying to include oral health into their curriculum, also showed this discrepancy as the staff were learning about oral health at the same time as their students. These discussions showed the need and the support for further training.

> *A refresher program would actually be really useful just to be able to keep it at the forefront and keep it, particularly if you're in education, you're not using it every day […] yeah, to be able to refine those skills.* (M1)

There's obviously a tonne to cover, we only have a 12-month program but I think because we've made it [oral health] a focus, it's in our online program, it's in our tutorials, it's in our classroom laboratory sessions and it's part of their [students] clinical practice. (M1)

The other thing that we're doing is linking that [oral health] when we talk about the 'complex baby', then obviously it comes back up again as one of the potential causes or being associated with, poor foetal outcomes. So it does get brought up again in the second semester when we're looking at the outcomes of what happens, but […] not in terms of an active practice. (M1)

Next steps

All of the participants in the interviews raised midwifery students as a valuable cohort to receive oral health training. In addition, they expressed that all midwives working in antenatal care should be required to complete the course.

Passing on [oral health] information to students is probably the most valuable. (M3)

Incorporated into the basic training for midwifery students. (M5)

Probably mid-graduate midwives should have some exposure to the content. I think all midwives working in antenatal clinics should have done the course. (M2)

I think all midwives working in antenatal clinics should have done the course. (M3)

However, there were some challenges raised in terms of integrating oral health content into the curriculum of midwifery students.

Because of how much we're fitting into the undergraduate and post-graduate courses in a very short period of time. (M3)

Probably in terms of what we're teaching them [midwifery students], they wouldn't see it as a priority. (M3)

The importance of ensuring all midwifery university staff have access to the MIOH program, or oral health education was raised, to ensure they have capacity to educate their students. One participant raised the idea that they would like to add the MIOH program to their onboarding process.

All academics in this space [midwifery] should be qualified in this particular area [oral health]. Completing this course in order for them to be able to speak to the students and to their colleagues and to be able to produce those kinds of educational opportunities for the students, it's really important. (M1)

We are actually re-developing our induction process as we speak [for midwifery teaching staff]. We wanted to be able to add this program as one of the things we want them [new staff] to be able to do in the first 12 – 24 months of starting with us [at the university]. So being able to put that on the standardized induction list would make it hugely sustainable and constantly bringing it to the forefront of our staffs' minds. Then it will also be more formalized for the university to support as well, so that's definitely something we'll be looking into. (M1)

Appendix C: Midwifery partnership interview overview of themes and illustrative quotes

The partnership between DHSV and Western Sydney University (WSU) started with the adaptation of the MIOH training program to suit the Victorian setting in 2012. Here we report the findings from one interview with a key informant from WSU, discussing progression of the partnership during phase three. The interview explored the informant's perspective on the partnership, including benefits, challenges and directions for the future.

Perspective on the partnership

Benefits

HFHS evaluation of MIOH in previous phases identified a need for the content of the CPD program to be updated to meet the needs of the midwives. Since 2021, DHSV and WSU have strengthened their partnership by coming together to review and improve the learning experience of the module, along with the Australian College of Midwives (ACM), who host the course on their online platform. The interviewee discussed how DHSV has since become a valuable collaborator and partner of the MIOH program, particularly in translating evidence into practice.

> *For me, the biggest benefit has been the translation to practice and the evidence that has been coming out from DHSV. We spent a lot of years generating or evaluating the program and gathering the evidence, publishing it. But […] uptake and promotion has always been a challenge and an issue.*
> *From a policy point of view, DHSV adopted it early and […] ran with it and continue to give us that evidence that this can work and really the long-term impact of the program and the partnership has been amazing. I guess, you know, it's been mutually beneficial.*

Challenges

The interviewee reported that there were initially technological challenges hosting a program on a third-party platform and as the program was initially developed for another state, there were also challenges in modifying content and ensuring MIOH was fit for purpose within the Victorian context.

> *It [this barrier] was just seen as part and parcel of the process. I think [this partnership] was the easiest and most, you know, smooth sailing partnership in terms of rolling it out and, you know, the fact that we were getting constantly getting good data and we had someone on your team who was strongly, I guess, going to stakeholders and promoting this program and getting people to access it. That's the hardest thing and, you know, you guys [HFHS implementation team] are doing all the hard work. So, I think it a way it was easy for us. Apart from the initial teething issues and the amount of time it took us to ensure that it was tailored appropriately to the needs of your midwives there [in Victoria], everything else is fine.*

The interviewee highlighted that time-poor midwives needed to prioritize many competing factors within appointment discussions. Discussing how oral health can be prioritized during these appointments whilst focusing on patient outcomes emerged as a common theme.

Midwives and nurses, if you can show them that this is actually going to improve the delivery of care and patient outcomes, they will definitely adopt it.

For HFHS, getting oral health onto the radar of midwives has been a long journey. This was raised in this interview in terms of the achievements made by HFHS in bringing oral health as an important component to these professional groups.

Midwives and nurses [those] doing it for many years, they're [often] very hesitant to change, whereas the younger ones [more recent graduates], they acknowledge it [oral health]. If I reflect back on when we started this 12 – 13 years ago to now, if you ask a midwife about oral health they will no longer say "what are you talking about?", they'll say "yes, I know [about] it". I think it's a lot more accepted to a certain extent because there's a lot of stuff in the media about pregnancy. It's more of "well, how do I do it?" versus earlier it was "no way, I'm never gonna do this."

The interviewee felt there were challenges relating to meeting each organisation's goals within the partnership and that the core component of a successful partnership will rely on having data and information to share and publish.

Whenever you've got a university and a health service collaborating, each organisation's KPIs are different, and there are very few that may be aligned from a health service point of view. From a university point of view, yes, it's important to have stakeholders, but it's also important to have key outputs that tick the university box, like publications, conferences, and all that stuff.

Future directions

The interviewee suggested shorter refresher courses could be developed from the MIOH program to extend the reach of the program into other professional groups. Interviewees from several professional groups (e.g., MIOH, MCHN) also raised this within their interviews and felt refresher courses would be beneficial.

We've started the discussions and potentially having a refresher program, a shortened version of it. I do feel that we've already started that aspect, by you know, tailoring it for other antenatal care providers. Maybe again you'll need to go through another co design process. It may need to be a shortened version – we may not need to go into such detail, but I do feel that is the next avenue to go. We already started the undergraduate one […] so undergraduate and the other health professionals and other ante-[natal] care providers.

And even for, you know, Aboriginal Health Workers. Once those things, like the systems [and guidelines] are reflective of oral health and there's some sort of referral pathway […] then from a scalability point of view, really getting other health professionals to start doing it, because we know from the work and what we publish that there is no consensus among antenatal care providers.

The participant flagged embedding oral health into organisational policies and systems as an important focus for the HFHS program in future phases to ensure sustainability of MIOH learnings and oral health promotion in midwifery practice.

> *The midwives themselves acknowledging this [oral health] is important. The management needs to acknowledge that this is an important thing and be part of mandatory training. More simple promotional material to say "this is working" would help with that. So that way it can be sustainable.*

> *If oral health is not embedded into the systems, it is not part of obstetric screens, and there is not onus for the midwives to do some sort of training in this space. So, I think policy, guidelines, systems – if they are mandated, then maybe that would become sustainable.*

Another suggestion shared was to disseminate the data being collected and promote the MIOH evaluation findings such as through videos capturing feedback from midwives to promote oral health training among the cohort.

> *We are in a spot evaluation, you collect all this data and evaluating it all. But I think from a promotion point of view, it would be good to capture feedback of midwives through videos. That could be played on the websites, for example, Australian College of Midwives could promote the program. By having a video of a midwife in Victoria who's loved the program and promoting it with others. Those are some things that could really strengthen and help in promoting in other states.*

> *I guess, liaising, consulting, which you are doing now, but consulting in terms of what are the different research questions we can answer along the way so that you actually get the best bang for buck in terms of publications. So I think, you know, making sure that all parties get something out of it. Moving forward, it would be good to continue having those meetings [program management meetings] in terms of where we could disseminate this work, presentations, awards, applying for awards, you know I guess where all parties are equally recognized to their process.*

Appendix D: Dental services accessed by pregnant women (2011-2022) (Titanium data table)

Table 1 provides an overview of the numbers of pregnant women that accessed public dental services, by oral health agency and region between 2011 and 2022.

Table 1. Number of pregnant women that accessed dental services reported by oral health agency and region (2011-2022)

Region	2011/12 n	2012/13 n	2013/14 n	2014/15 n	2015/16 n	2016/17 n	2017/18 n	2018/19 n	2019/20 n	2020/21 n	2021/22 n
Barwon	132	154	127	138	126	147	187	168	100	104	86
Grampians	64	79	68	64	161	137	115	56	61	54	50
Loddon Mallee	42	62	88	92	130	140	144	149	127	138	127
Hume	102	94	120	173	192	186	181	139	109	100	99
Gippsland	76	95	129	132	143	160	180	170	123	123	104
Western Metro	74	101	144	141	167	163	141	118	94	96	99
Northern Metro	84	116	157	171	161	203	173	149	98	102	98
Eastern Metro	69	87	106	116	122	100	113	114	81	59	50
Southern Metro	163	191	238	310	431	525	573	542	299	243	155
Total	806	979	1177	1337	1633	1761	1807	1605	1092	1019	868

Appendix E: Maternal and Child Health (MCH) Professional development overview and tables

MCH nurse continuing professional development - evaluation findings from post-training feedback forms

This section summarises evaluation feedback from HFHS range of CPD offerings for the Maternal and Child Health Sector, including:

- Baby Teeth Count Too! CPD Workshops (face-to-face and virtual)
- Baby Teeth Count Too! Online training course pilot
- Baby Teeth Count Too! online training course

The Baby Teeth Count Too! (BTCT) workshops were face-to-face workshops designed by HFHS during a prior phase of the program, to build the oral health promotion skills of Maternal and Child Health (MCH) nurses and students studying towards this profession.

Baby Teeth Count Too! online training course - Pilot

Due to the impact of COVID-19 on the training landscape, HFHS adapted this workshop into an interactive, online course. MCH services from four LGAs that had previously participated in a BTCT face-to-face workshop were invited to complete this new online course as a pilot.

The online course pilot was conducted between 6 September 2021 and 26 November 2021 and all 14 participants completed a post evaluation form.

Participants

More than half of the participants (57.14%, n=8) worked in MCH services in the local government area of Macedon Ranges Shire Council, with an additional 21.43% of participants from Glen Eira (n=3). The same number of participants were from Swan Hill Rural City Council and East Gippsland (7.14%, n=1, respectively). Participants identified their primary work within

Most participants worked as part of a Universal MCH service (71.43%, n=10) and 14.29% in Enhanced Service (n=2). One participant noted they worked across both services and another participant worked as part of a sleep and settling service (7.14%).

Participant feedback on Baby Teeth Count Too! Online training course - Pilot

After completing the course, most participants (>92%) responded with having gained new knowledge and or skills, the content was clear and easy to follow, the amount of information was sufficient and in turn felt more confident about supporting good oral health for their clients. Majority felt the course had met their expectations (85.72%, n=12).

Useful aspects of the course

Thirteen participants mentioned the most useful aspects of the course were:

- Access to resources that could be shared with families, in particular the videos on toothbrushing

- Information regarding oral health milestones and key messages
- Statistics- particularly those that showed early childhood caries by LGA
- Visual aids e.g. diagrams, pictures and videos
- Information on the tooth decay process
- Guidance around 'Lift the Lip'
- Course content- easy, concise and interactive

Intended changes to practice as a result of participating in the course

After completing the course, 12 participants responded they intended to change their practice by:

- Starting oral health education with families from 8 months
- Encouraging a dental health check earlier than 2 years
- Improving the quality of oral health checks
- Being more concise and clear with delivery of oral health advice e.g. not rinsing mouth with water after brushing, when to commence brushing, how to brush, about the risks of sugar content in drinks/juice
- Not assuming families know about teeth cleaning
- Greater emphasis on the importance of oral health

Suggestions for improving the course

Eleven participants responded that the course could be improved with the following suggestions:

- Specific guidance related to breastfeeding and oral health
- Mode of course delivery- content is presented rather than providing written content
- More strategies for families to manage difficult toddlers and teeth cleaning
- IT issues- ability to pause and resume the course later
- Encouraging participants to complete the refresher annually
- Including a quiz at the beginning to determine baseline knowledge

Baby Teeth Count Too! online training course

The HFHS implementation team reviewed the feedback from the BTCT! Online course pilot and refined the course, with the final version being launched 30 May 2022. After completing the training, participants had the opportunity to complete a post evaluation survey. Feedback collected between 31 May 2022 and 31 March 2023 is presented in this report. One hundred-sixteen participants working across 38 different local government areas completed the online training feedback form.

Participants

Almost half of the participants worked in services within the metro area of Melbourne (49.1%). With many participants working with Melton City Council (n=12, 10.3%), Boroondara (n=6, 5.2%), City of Greater Dandenong (n=6, 5.2%) and Whittlesea (n=5, 4.3%). Many of those working in regional areas were from City of Greater Geelong (n=10, 8.6%), City of Greater Bendigo (n=6, 5.2%) and Greater Shepparton City Council (n=5, 4.3%). A further two respondents worked in a 24-hour MCH telephone line and did not provide the area where the service was delivered. Frequencies and percentages are presented in *Figure 1*/*Table 1*.

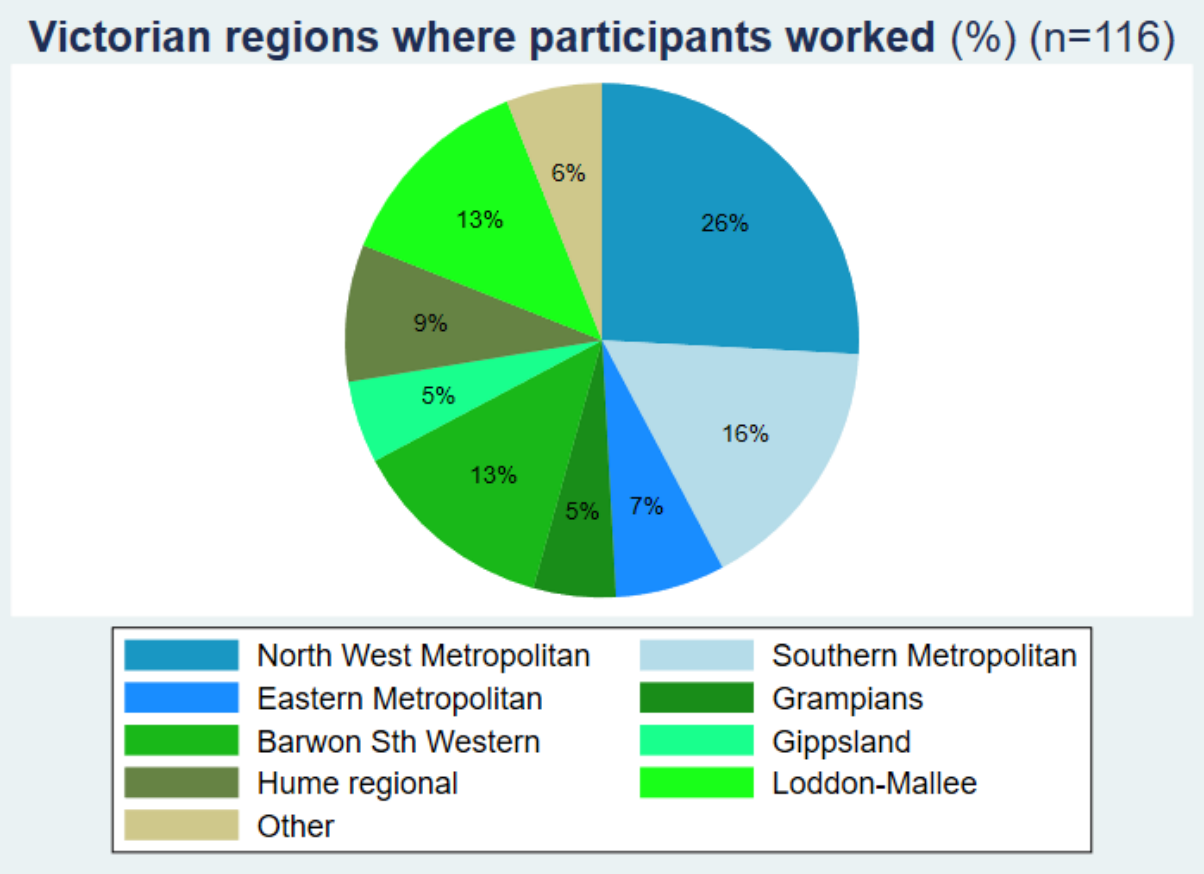

Figure 1 Region where participants were practicing (%) (n=116)

(Other includes missing data n=4, 24-hour telephone services n=2 and Department of Health n=1)

Participants identified their primary work within Universal MCH services (69.8%, n=81),15.5% in Enhanced Services (n=18) and both (n=2, 1.7%). See *Figure 2*/*Table 2* for further information.

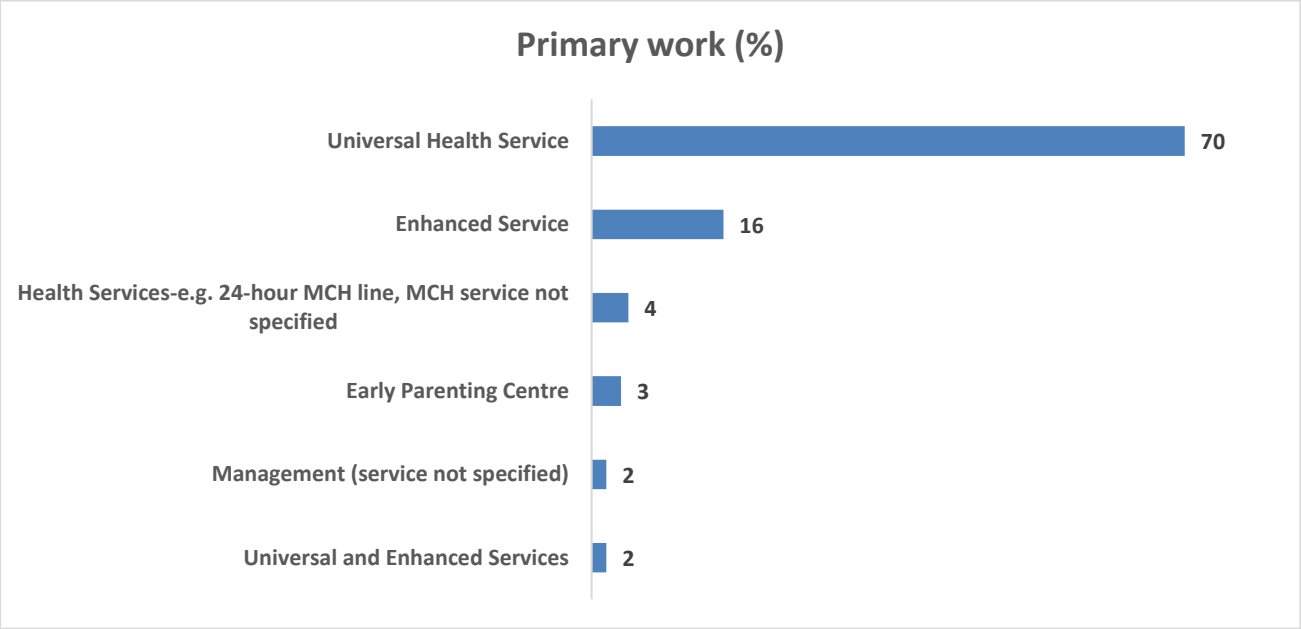

Figure 2 Primary work experience (n=116) *Missing 3% not shown.*

Participant feedback on Baby Teeth Count Too! online training

After completing the training, most participants (>91%) responded that they gained new knowledge and/or skills, the content was clear and easy to follow, the workshop met their expectations, they felt more confident about supporting good oral health for their clients and the amount of information was sufficient. See *Figure 3* and *Table 3*.

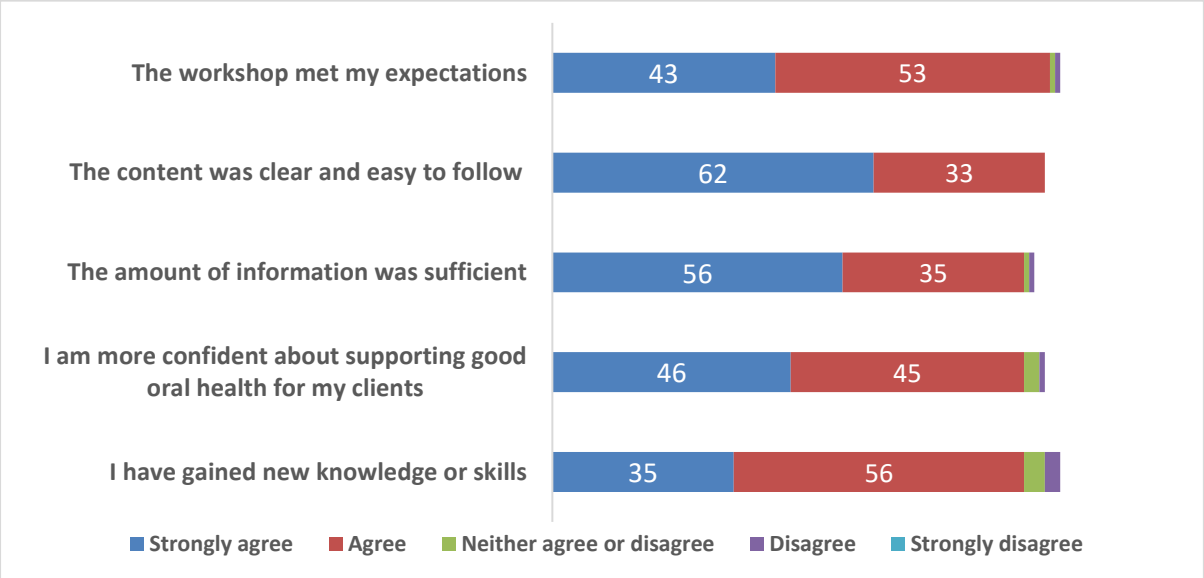

Figure 3 MCHN online course participant feedback (%) (n=116) *Missing data not shown (2-7%)*

Useful aspects of the training

Eighty-one participants mentioned the most useful aspects of the training were:

- Access to resources including videos, picture cards, information sheets, oral milestones and photos
- The process of tooth decay information e.g., Stephan Curve
- Check a child's mouth for decay e.g., 'Lift the Lip'.
- Toothbrushing demonstrations
- Dental decay prevalence and other dental statistics

Intended changes to practice as a result of participating in the training

Sixty-two participants responded with what they would do differently in their practice following the training. Fifteen participants responded that they weren't going to change anything (with some confirming that the course confirmed their current practices).

Changes respondents would undertake were:

- More detailed oral health discussions with clients e.g. schedule the oral health discussion at 8mth/12mth KAS visit.
- Introduce toothbrushing demonstrations with clients e.g., introduce this demonstration at 8 or 12 months or earlier.
- Resource sharing with clients e.g., website, fact sheets, resources, videos, and photos
- Include mouth checks e.g., 'Lift the Lip' at the 8-month check.
- Recommend earlier dental visits to their clients e.g., rather than recommending two years for a dental visit, recommend an earlier visit with a dental professional.
- More consistent with advice.

Suggestions for improving the training

Fifteen participants responded the course could be improved with the following suggestions (a further thirty-one didn't think anything needed improving):

- Provide more resources for parents e.g., toothbrushing demonstrations, videos for families about preparing a child for a dental visit and oral health information posters for families.
- Revise or use the course as a refresher e.g., an annual refresher.
- Providing a quiz to test knowledge and refresh on learnings.
- Provide more information around toothbrushing e.g., how to get toddlers to brush or spit after brushing, or how to help children with learning difficulties.

Baby Teeth Count Too! CPD Workshops (face-to-face and virtual)

Four BTCT! CPD workshops for Maternal Child Health Nurses were held between 24 November 2020 and 8 February 2023. Fifty-three respondents worked across three different local government municipalities: Glen Eira (n=10, virtual), North Grampians (n=4, virtual) and Whittlesea (n=39, face-to-face). Most worked (92.5%, n=49) in metro areas of Melbourne with 7.5% (n=4) from regional areas. No evaluation surveys were collected from the session held at Moorabool. Most participants worked within a Universal MCH service (n = 48, 90.6%); with two working in both an Enhanced and Universal MCH service and one each working in an Enhanced service, an outreach capacity, and a leadership role.

Post-training, at least 90% of respondents either strongly agreed (between 40%-62%) or agreed (between 35-55%) that they gained new knowledge and or skills, the content was clear and easy to follow, the workshop met their expectations, and that the amount of information was sufficient. Fewer (70%) strongly agreed/agreed that they felt more confident about supporting good oral health for their clients, however 25% (n=13) didn't provide a response for this statement. Frequencies and percentages are presented in *Figure 1*.

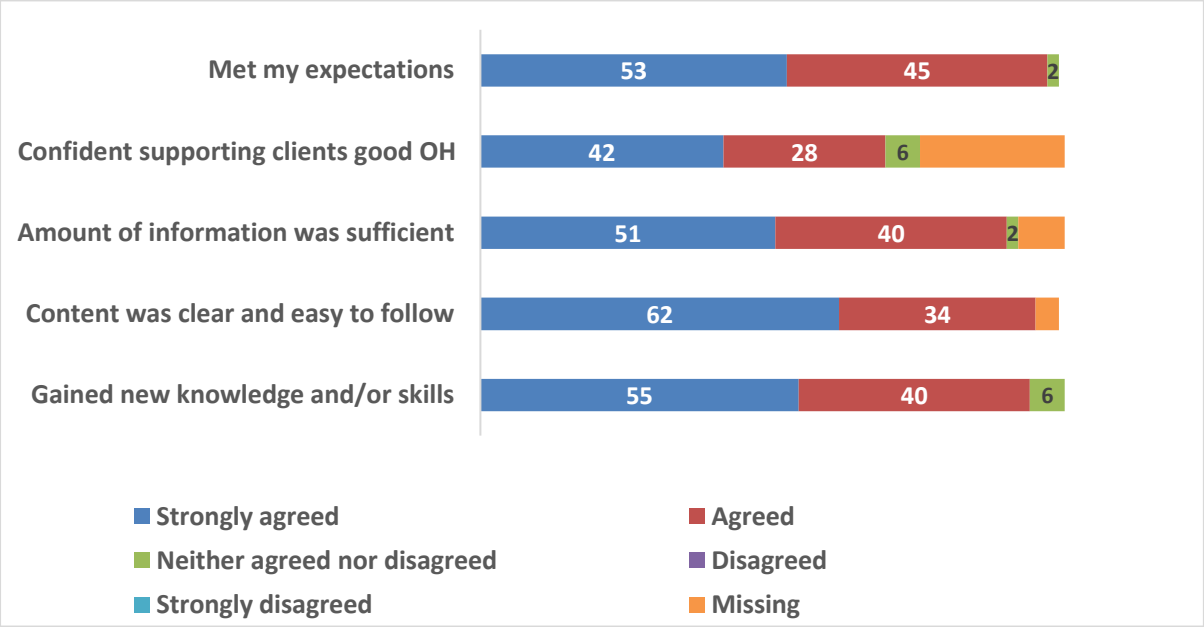

Figure 1 MCHN online course participant feedback (%) (n=53)

Changes to current practice post training

Thirty-three participants (62.3%) provided information about how they would change their practice following the training. Eight (of the 33) participants responded that they thought the course confirmed their current practice, and therefore didn't need to change and one indicated 'yes' there would be changes but didn't provide information about the changes.

Changes respondents would undertake were:

- Include 'Lift the lip' or look more closely within the child's mouth (n=9)
- Promote oral health more actively (n=5) with clients, with one stating they would schedule the oral health discussion earlier.
- Use resources (n=5) more frequently e.g. CALD info sheets, graphs
- Will recommend dental visits (n=5) to their clients with three mentioning they would do this earlier and one indicating they'd feel more confident to refer.
- Introduce toothbrushing discussions (n=3) with clients.
- Others mentioned that they would discuss tooth discolouration (n=1), provide information about the tooth decay process (n=1) and oral disease statistics (n=1).

Refer to *Table 5* for more details.

Most useful aspects of online training

Forty-five participants provided information on what they thought were the most useful aspect of the training. Six of the 45 mentioned that all areas were useful and four thought the training reinforced previous oral health knowledge.

MCH nurses thought the most useful aspects of the online training were:

- Access to resources (17 participants mentioned resources, with several identifying more than one type of resource) including videos (n=5), where to find links (n=4), handouts (n=2), resources in different languages (n=1), and the Tips for healthy teeth sheet (n=1).
- Referral pathway information (n=11)
- Information about fluoride/water tanks (n=5)
- Children's eligibility for public dental, government provisions (n=4)
- How to check a child's mouth for decay e.g., 'lift the lip' (n=4)
- Dental decay prevalence and other dental statistics (n=4)
- Information e.g., on oral health (n=2), clear and easy to follow (n=1)
- Allowed time for questions (n=2)

Refer to *Table 6* for more details.

Improving the workshop

Twenty-four respondents provided ideas on how the online training could be improved, with 10 of the 24 believing nothing needed improvement. Nine provided general course improvements such as less repetition (n=1), providing face to face training (n=1), more time for questions (n=1), less information (more pictures) (n=1), reducing the time of the training (n=2) or creating the training as a refresher every year or two (n=1)

Other ideas on training improvements included:

- Provide pictures of different types of decay (n=2)
- Provide more information
- Conduct a pre training survey to find out needs and streamline training to suit (n=1)
- More information on public dental referrals (n=1), on nutrition for parents (n=1) or on different type of childhood oral diseases (n=1)

MCHN CPD online training tables

Table 1 BTCT online training-Participant municipalities/DH regions of service (n=116)

Department of health region/LGA of service	n	%
• Melton City Council	12	10.3
• Maribyrnong	3	2.6
• Merri-Bek (formerly Moreland City Council)	3	2.6
• Whittlesea	5	4.3
• Wyndham	4	3.4
• Darebin	1	0.9
• Hume City Council	1	0.9
• Hobsons Bay City Council	1	0.9
North-western metropolitan total	**30**	**25.9**
• Boroondara	6	5.2
• City of Monash	1	0.9
• Yarra Ranges	1	0.9
Eastern metropolitan total	**8**	**6.9**
• City of Greater Dandenong	6	5.2
• Frankston City Council	4	3.4
• Kingston City Council	3	2.6
• Cardinia	2	1.7

• Casey	2	1.7
• Mornington Peninsula	1	0.9
• Stonington	1	0.9
Southern metropolitan total	19	16.4
Metropolitan region-total	57	49.1
• City of Greater Geelong	10	8.6
• Warrnambool City Council	2	1.7
• Other-Barwon Southwestern region (didn't provide council)	2	1.7
• Moira Shire Council	1	0.9
Barwon Southwestern regional total	15	12.9
• City of Greater Bendigo	6	5.2
• Central Goldfields Shire Council	3	2.6
• Campaspe	2	1.7
• Swan Hill Rural City Council	2	1.7
• Macedon Ranges	1	0.9
• Gannawarra	1	0.9
Loddon Mallee total	15	12.9
• Greater Shepparton City Council	5	4.3
• Mitchell Shire Council	2	1.7
• Murrindindi	2	1.7
• Indigo Shire	1	0.9
Hume regional total	10	8.6
• City of Ballarat	3	2.6
• Horsham Rural City Council	1	0.9
• Golden Plains Shire Council	2	1.7
Grampians total	6	5.2
• Baw Baw Shire Council	3	2.6
• Wellington	1	0.9
• Bass Coast Health	1	0.9
• East Gippsland	1	0.9
Gippsland total	6	5.2
Regional-total	52	44.8
• 24-hour MCH line	2	1.7
• Department of Health	1	0.9
Other-total	3	2.6

Note. Due to rounding errors, percentages may not equal 100% (missing n=4, 3.4% not shown)

Table 2 Participants' primary work (n=116)

Primary work	n (%)
Universal MCH Service	81 (69.8)
Enhanced Service	18(15.5)
Early Parenting Education/Centre/Practitioner/Parent group leader	4 (3.4)
Health Service not specified	3(2.6)
Both-Universal MCH service & Enhanced service	2 (1.7)

Management/Universal Team Leader	2 (1.7)
Maternal and Child Health 24-hour Telephone Line	2 (1.7)

Note. Due to rounding errors, percentages may not equal 100%. (Missing, n=4, 3.4%)

Table 3 Participants' level of agreement statements re: CPD post-workshop (n=116)

Knowledge and skill development	Strongly Agree n (%)	Agree n (%)	Neither agree nor disagree n (%)	Disagree n (%)	Strongly Disagree n (%)
I have gained new knowledge and or skills	41(35.3)	65(56.0)	5(4.3)	3(2.6)	0(0)
The content was clear and easy to follow	72(62.0)	38(32.8)	0(0)	0(0)	0(0)
The amount of information was sufficient	65(56.0)	41(35.3)	1(0.9)	1(0.9)	0(0)
I am more confident about supporting good oral health for my clients	53(44.8)	52(45.7)	4(3.4)	1(0.9)	0(0)
The workshop met my expectations	50(43.1)	61(52.6)	1(0.9)	1(0.9)	0(0)

**Rounding may affect percentage totals. Missing data not shown in table (n=2-8, 2-7%)*

Table 4 General comments about the training

Comments
Informative and useful refresher training, especially for new staff
Good to revise
Enjoyed the training online
Planning to share with other clinical staff-not only MCHN
More free dental cleaning products for low-income families
Course was easy to navigate

MCHN CPD workshop tables

Table 5 Reported intended changes to practice as a result of the course (n=33)

Theme	n	*Key quotes*
Include lift the lip/look more closely in child's mouth	9	*Encourage dental mouth check/lift the flap regardless of parent or child behaviour*
		Checking children's teeth more thoroughly, oral education to parents
		Perhaps more detailed attention of oral check…
		Position of child for assessment
		Just continue to check the children's teeth…
Confirmed current practices/no nothing different	8	*N/A*

Changes to dental referrals e.g more often, earlier or more confident.	7	Send clients before 2yrs.
		Referring children before 2 years as currently i speak to parents at 2 years
		Feel better equipped to make referrals
		Refer and suggest the community Centres for Dental care
Use resources (n=5) more frequently e.g. CALD info sheets, graphs	5	*Would like to show graph on how refined sugars can lead to tooth decay.*
		Encourage the CALD resources more
		Yes - print more handouts to give to families and in multiple languages - that's great!
Promote oral health more actively with clients (sometimes earlier).	6	*Promote dental health more actively*
		Yes more emphasis with background knowledge
		Referring children before 2 years as currently i speak to parents at 2 years
		Perhaps more detailed attention of oral check and taking more time to educate parents using statistics.
		….oral education to parents
Include more information about toothbrushing	3	*Better brush teeth. Didn't know over 6-year-olds should use normal toothpaste.*
		Just continue to check the children's teeth and reinforce the teeth brushing process.
		Mention more about teeth wet cloth
Discuss discolouration causes	1	*Discuss other possible causes of discolouration/brown spots.*
Provide information about tooth decay process	1	*Would like to show graph on how refined sugars can lead to tooth decay.*

Table 6 Most useful aspects of the workshop (n=45)

Theme	Number	Key quotes
Access to resources e.g. videos, photos, links	17 (n=5 mentioned videos, n=4 links, n=1 CALD and n=2 info sheets)	*The new resources were great.*
		Useful resources.
		Videos and links
		Updated resources
		…where to find resources.
		Updated resources in other languages & videos available
		The videos and handouts for families
		Links to resources and information on where to find them.
		Where to access more resources
Referral pathway information	11	*Discussion re referral pathway.*
		having the Dental Hygienist speaking about referral systems and the government systems for children.
		Referring children under 2 years to the dentist

		Services available for clients in or near our LGA
All areas	6	*All good, All of it*
Reinforce previous oral health knowledge	4	*Reminder/refresher*
		..refresher around dental care
Information about fluoride/water tanks	5	*Information on fluoride*
		Information about low fluoride intake e.g. tank water etc
		Fluoridation of water
		Advice for communities without water fluoridation, knowing that there are over the counter options and measures for preventing decay
Dental decay prevalence and other dental statistics	4	*Some of the statistics were thought provoking.*
		Information about dental stats and refresher around dental care
How to check a child's mouth for tooth decay i.e. lift the lip.	4	*All good. Positions for mouth check handy info. Have generally done it in parent lap to date*
		Tips on how to do a dental check on 18 month old
		the demonstration of examining a toddler's mouth
Children's eligibility for public dental, government provisions	4	*having the Dental Hygienist speaking about referral systems and the government systems for children.*
		learning about another public dental service
		Access and process of referring to public health (dental) e.g. cost and waiting periods etc.
General oral health information	2	*Common issues seen in children's teeth….*
Ease of use/ease of understanding content	1	*Clear, easy to follow…*
Allowing questions	2	*Questions asked*
		…suitable time for questions and discussions.
Positive feelings about Face-to-face	1	*So nice to have a face to face session!!*
Hypoplasia/demineralisation	1	*Information about hypoplasia and hypomineralisation,*
General prevention measures	2	*Clinical prevention measures*

Table 7. MCH workshop participant feedback (n=53)

Statement	Strongly Agreed n(%)	Agreed n(%)	Neither agreed nor disagreed n(%)	Disagreed n(%)	Strongly Disagreed n(%)	Missing n(%)
I have gained new knowledge and or skills	21 (39.6)	29(54.7)	3(5.7)	0(0)	0(0)	0(0)
The content was clear and easy to follow	33(62.3)	18(34.0)	0(0)	0(0)	0(0)	2(3.8)
The amount of information was sufficient	27(50.9)	21(39.6)	1(1.9)	0(0)	0(0)	4(7.6)

I am more confident about supporting good oral health for my clients	22(41.5)	15(28.3)	3(5.7)	0(0)	0(0)	13(24.5)
The workshop met my expectations	28(52.8)	24(45.2)	1(1.9)	0(0)	0(0)	0(0)

Table 8. Primary Work (frequencies and percentages) n=53

Primary work	*n*	*%*
Universal MCH Service	48	90.6
Enhanced Service	1	1.9
Both -Enhanced/Universal service	2	5.7
Team Leader	1	1.9
Outreach MCH	1	1.9

Note. Due to rounding errors, percentages may not equal 100%.

Appendix F: Maternal and Child Health (MCH) students capacity building overview and tables

MCH students post-workshop evaluation findings feedback forms

An adapted version of BTCT was delivered to students attending the post graduate degree in Child and Family Health Nursing at La Trobe University, RMIT and Federation University. These training workshops were delivered either virtually or face to face between 11 July 2019 to 7 July 2022. Post evaluation surveys were collected and analysed for sessions held between 22 Aug 2021 and 7 July 2023. Sessions held between 11 July 2019 and 11 Feb 2021 were not included in the evaluation due to a problem with the data collection during this period. Generally, the BTCT workshops were held face to face for most sessions, however during COVID-19 two sessions were delivered virtually, for students at Federation University and RMIT university.

Participants

Overall, 447 students attended 10 sessions, with 185 students attending sessions where post evaluation surveys were completed. Thirty-six students (19.5%) of the 185 completed the post evaluation surveys.
Participants providing responses were enrolled in Federation university (n=22, 61.1%), Latrobe University (n=9, 25.0%) and RMIT (n=5, 13.9%). Refer to *Table 1*.

Participant feedback on Baby Teeth Count Too! workshop

More than 90% of the participants either strongly agreed or agreed they had:

- gained new knowledge and or skills
- the content was clear and easy to follow
- the workshops met their expectations
- the workshop was relevant to their professional practice
- the amount of information was sufficient and they intended to use what they had learnt.

Twenty-nine participants (80.6%) strongly agreed or agreed that they were more confident about supporting good oral health for their clients and 19.4% did not provide a response to this statement. Refer to *Table 2*.

Useful aspects of the training

Thirty-one respondents (of the 36) provided their thoughts on what was the most useful aspects of the training:

- Information on decay in general and how to check a child's mouth for decay (n=13)
- Access to resources (n=10) including picture cards and slides and where to find them
- All areas were useful (n=3)
- Tooth brushing tips (including the demonstrations) (n=6)
- Encouraging parents to take their child to the dentist before 2 years (n=3)
- Dental decay prevalence and other dental statistics (n=3)
- Information re: public dental (n=3) e.g., eligibility, cost for dental, locality of services and statistics around hospital admissions for dental.

- Dental care whilst breast feeding (n=2)
- Clear explanations and interactive questions and answers (n=2)
- Refer to *Table 3* for more details.

Suggestions for improving the training

Twenty respondents provided their ideas on how the workshops could be improved (including five that believed nothing needed improvement) and six provided positive feedback and thought the training was very useful, informative, engaging and helpful.
Ideas on training improvements included:

- Provide more resources: including more activities or live demonstrations, the teeth book/demonstration model, videos and a copy of the PowerPoint (n=4).
- Scheduling a reminder to complete a refresher, or reminder in team meetings annually (n=2)
- Reduce the length of the training from 1.5 hours to one hour (n=2)
- Breastfeeding: more specific studies that it poses a problem re: caries (n=2)
- Information regarding the funding of dental benefits (n=1)
- difficulties with the course being online (n=1) (no specific information)
- More strategies to help parents with children not willing to brush (n=1)
- Condensing course for students that acknowledges pre-existing knowledge (n=1).
- More focus on common questions that parents might ask perhaps, the basic stuff can be moved through quite quickly (n=1)
- Refer to *Table 4* for more details.

General comments

Twenty respondents provided a general comment regarding the workshops, with 18 simply praising/thanking organisers for the training and four stating it was informative, interesting, and easy to follow and another mentioning it was a great reminder of the importance of oral health. One person thought the information relating to how decay forms after grazing (Stephan Curve) was easy to understand.

Table 1. Number of MCH students participating in training and evaluation

Date	University	CPD Activity	Number of trainees	Number of participants
11/07/2019	La Trobe University	Baby Teeth Count Too! Workshop for MCH students (face-to-face)	34	0
09/08/2019	RMIT University	Baby Teeth Count Too! Workshop for MCH students (face-to-face)	38	0
04/02/2020	La Trobe University	Baby Teeth Count Too! Workshop for MCH students (face-to-face)	50	0
27/07/2020	RMIT University	Baby Teeth Count Too! Workshop for MCH students (face-to-face)	65	0
11/02/2021	La Trobe University	Baby Teeth Count Too! Workshop for MCH students (face-to-face)	75	0
22/08/2021	RMIT University	Baby Teeth Count Too! Workshop for MCH students (virtual)	58	2
22/09/2021	Federation University	Baby Teeth Count Too! Workshop for MCH students (virtual)	12	11
15/02/2022	Federation University	Baby Teeth Count Too! Workshop for MCH students (face-to-face)	25	11
01/03/2022	La Trobe University	Baby Teeth Count Too! Workshop for MCH students (face-to-face)	50	9
07/07/2022	RMIT University	Baby Teeth Count Too! Workshop for MCH students (face-to-face)	40	3
Total			**447**	**36**

Table 2 MCH student nurse workshop participant feedback (n=36)

Statement	*Strongly Agreed n (%)*	*Agreed n(%)*	*Neither agreed nor disagreed n(%)*	*Disagreed* n(%)	*Strongly Disagreed n(%)*
I have gained new knowledge and or skills	28(77.8)	8(22.2)	0	0	0
The content was clear and easy to follow	26(72.2)	7(19.4)	1(2.8)	0	0
The amount of information was sufficient	24(66.7)	10(27.8)	0	0	0
I am more confident about supporting good oral health within an MCH role	22(61.1)	7(19.4)	0	0	0
The session met my expectations	23(63.9)	12(33.3)	0	0	0
I intend to use what I have learnt from this session	29(80.6)	5(13.9)	0	0	0
The session was relevant to my professional practice	28(77.8)	6(16.7)	0	0	0

Missing data not shown (n=1-2, 2.8%-5.6%)

Table 3 Most useful aspects of the workshop

Theme	Number	Key quotes
Tools for checking oral health/information about tooth decay e.g. Lift the lip assessment	13	*Showing how to assess the child's mouth and what to look for - healthy/non healthy gums and teeth*
		Discussion from Rayleen about identifying tooth decay etc.
		Learning the signs of early decay and how to prevent/when to refer
		Tolls (tools?) for checking dental health *Useful commercial products for promoting dental health*
		I found the research and evidence behind why we need to be educating families on dental hygiene and preventing dental decay very useful. Also, the picture slides on what as MCHN need to look at for referrals and how to go about checking at each stage.
		lift the lip assessment what to look out for
		visual pics of how to assess the child
Resources e.g. handouts and tips, picture slides, pictures of decay, where to find resources	10	*The handouts and the tips for working with children and toothbrushing*
		Graph and resources used
		I found the research and evidence behind why we need to be educating families on dental hygiene and preventing dental decay very useful. Also, the picture slides on what as MCHN need to look at for referrals and how to go about checking at each stage.
		The pictures of dental decay
		Oral decay, very jarring photos but really shows how important oral health is from very early on in the child's life.
		Visual pictures of how to assess the child
		Providing additional resources
		Resources for parents
		Where to find resources, visual pics of how to assess the child,
		The graph showing how long sugar stays on the teeth, comparing a baby that frequently snacks with the one that doesn't
Tips: tooth brushing	6	*Tips for teeth brushing and giving demos*
		How to discuss brushing, what to use for brushing
		It is a good reminder that not all parents know to brush their children's teeth or have had the upbringing I have had to brush their teeth twice a day.
All of it	3	*Every part of the session was useful for my learning.*
Information: first dental visit before 2 years	3	*First dental visit before 2 years old*
		when the first dental check is recommended
		First visit at 2 yrs.
Information: Public dental e.g., eligibility, cost for dental, locality of services, admissions for dental	3	*Eligibility for public dental services*
		No cost for Dental benefit schedule.
		Checking out where the dental medical service is in the municipality
Statistics e.g., tooth decay	3	*The statistics were mind blowing*
		It was all very helpful especially seeing the statistics on tooth decay.
		rate of cavies in toddlers!

Breastfeeding and tooth care information	2	*Breast milk residue and potential tooth decay if left in mouth- similar to when a bottle is left in the mouth*
		That breastfeeding to sleep can still cause dental caries like formula
Clear explanations/interactive	2	*Clear explanations*
		interactive, and Q&A's
How to promote oral health to families	1	*How to impart education to families*
Advice for those on tank water regarding using fluoride toothpaste	1	*Use fluoride toothpaste if you are on tank water*
Useful products for promoting oral health	1	*Tolls for checking dental health* *Useful commercial products for promoting dental health*
Refresher/upskilling	1	*There was aspects throughout the presentation that built onto my current knowledge*
Information: fluoride-need to add to tank water	1	*That people using tank water may need added fluoride*
Stages of decay	1	*Stages of decay*
General discussion	1	*General discussion*
Importance of baby teeth	1	*Importance of baby teeth*
More information on sippy cups	1	*'Information about sippy cups was the main new information - however it was only briefly mentioned and would have been good to get more information about why etc. (ie more common questions that parents will ask).*

Each response was categorized into ≥1 categories

Table 4 Suggested improvements to the MCHN online training

Category	**n**	**Key quotes**
Positive feedback: Informative: used terms such as very informative, engaging, helpful, useful	6	*It was very informative and helpful*
		it was very informative
		Nothing, it was engaging and informative
		Tricky online but good info
		Great session, covered all expectations
		nothing it was really interesting
More resources: e.g., activities/live demonstrations/videos/copy of PowerPoint, provide Little Teeth Book/demo model	4	More activities or live demos
		More videos
		Copy of the PowerPoint to follow
		Send all MCHN students a demo model and the Little Teeth Book
Reduce time	3	Went for too long
		1 hour would be long enough instead of 1 and 1/2 hours
		Condensing for students later in course (with existing knowledge)
Breastfeeding: more specific studies that it poses a problem re: caries	2	*Would be good to see some specific studies to support the claim that breastfeeding to sleep poses a specific risk to development of caries.*
		more information on Breast feeding and tooth decay

Found difficulties with online	1	*Tricky online*
More strategies to help parents with children not willing to brush	1	*Also, more trouble shooting techniques for brushing the teeth of young children who are 'spirited' and not willing to participate in brushing, as the videos were not necessarily reflective of the struggles that many parents have at brushing time (I frequently see parents asking for tips and support to manage tantrums at this time)*
Funding of dental benefits is confusing.	1	Funding and eligibility of dental health benefits is confusing

Each response was categorized into ≥1 categories

Appendix G: Mrs Marsh Tooth packs distribution evaluation overview and tables of results

Findings from the evaluation of the Mrs Marsh Tooth packs initiative for Maternal and Child Health Services

Tooth Packs distribution overall

- Maternal Child Health Nurses (MCH) completed Tooth Pack distribution surveys via Microsoft Forms recording child mouth checks performed, dental referrals, oral disease identified, and the number of toothbrushes and tubes of toothpaste provided to families.
- Not all surveys were returned so the distribution numbers could be under reported.
- According to the surveys returned, tooth packs were distributed to 535 families across the Key Age and Stages (KAS) visits from January 2018 to August 2022 in five local government areas. This is not indicative of the actual number of tooth packs distributed as not all MCHN returned a distribution survey.

KAS visits, mouth checks, oral disease identified and referrals

- Tooth Packs were provided at all KAS visits and packs were distributed at 8-month (7.6%), 12-month (15.6%), 18-month (23.9%), 2 year (17.4%) and 3.5 year (20.9%) visits.
- Mouth checks were completed for 89.9% of children at their KAS visits (n=617)
- Mouth checks were performed at all ages, however higher rates were recorded from 4 months onwards (5.2%)
- Oral disease was identified in 11.8% of all children.
- The highest rates of oral disease were identified at the 3.5-year visit (24.6%)
- Overall, 13.3% of children were referred by the MCHN to a dental professional where oral disease has been identified or not.
- Referrals to a dental professional ranged from 12.1-12.8% of children aged 12 months to 2 years and increased to 25.9% at the 3.5-year visit.
- See *Table 1* for further information.

Oral health resource provision to families

- 1486 toothbrushes (0-2 years, child >2years and adult) and 866 tubes of toothpaste (low fluoride and standard fluoride) were provided to families across the KAS visits between 11 January 2018 and 31 August 2022
- See *Table 2* for further information.

Table 1. Number of children at KAS visit, mouth checks, oral disease identified and referrals (n=535)

KAS visit	KAS visits (all records) n (%)*	Mouth checks n (%)#	Oral disease identified n (%)^	Referral (oral health professional) n (%)+
	n=535	n=471 (88)	n=65 (13.8)	n=87 (16.3)
Home visit 1	5 (0.9)	0(0)	0(0)	0(0)
2 weeks	7 (1.3)	4(0.9)	0(0)	0(0)
4 weeks	3(0.6)	2(0.4)	0(0)	0(0)
8 weeks	9(1.7)	7(1.5)	0(0)	0(0)
4 months	33(6.2)	27(5.7)	0(0)	0(0)
8 months	43(8.0)	39 (8.3)	0(0)	0(0)
12 months	91(17.0)	86(18.3)	4(4.7)	13 (14.3)
18 months	129(24.1)	117(24.8)	14 (12.0)	19 (14.7)
2 years	84(15.7)	78(16.6)	15(19.2)	20(23.8)
3.5 years	105(19.6)	101(21.4)	32(31.7)	35(33.3)
Age not provided	26(4.9)	10(2.1)	0(0)	0(0)

**% of all children attending KAS visits (n=535) regardless of whether they had a mouth check or OD identified*

#% of children who received a mouth check out of all children in that age group that attended the KAS visit

^% of children who had oral disease, of those who had received a mouth check (for each age group).

+% of children referred to an oral health professional regardless of mouth check or OD identified (for each age group).

Table 2. Number of toothbrushes provided to families who attended KAS visit (11/01/2018 – 31/08/2022)

Item	Toothbrushes					Toothpaste tubes		
Item type	Child: (0-2 years)	Child: (2 years plus)	Bluey (2-5 years)	Adult: Slimsoft	Total	Child (18mth-6 years) Low fluoride	Child/Adult (7 years plus) Standard fluoride	Total
Number	409	509	51	568	**1486**	506	360	**866**

Appendix H: Maternal and child health (MCH) nurse key informant interviews overview of themes and illustrative quotes

Key informant interviews with MCHN exploring their engagement with HFHS/DHSV tools, resources and professional development.

The HFHS program has engaged with MCHN to support their practice in promoting oral health through the provision of a range of resources, materials and professional development opportunities including Tooth Packs, Tooth Tips fact sheets for families, The Little Teeth Book, Teeth Manual, mouth models and professional development sessions. MCHN were identified by the HFHS implementation team based on varying engagement with HFHS and invited to participate.

Two MCHN agreed to participate in telephone interviews. MCHN worked in regional areas and engaged to different extents with professional development and resources.

The following provides the key evaluation findings from the MCH nurse key informant interviews.

Training and resources

In one of the regions, the MCH nurse stated that their team comprises of experienced nurses that had worked in that shire for around 20 years, however it was the newest graduate that made them aware of the training.

> *We do have one nurse that has probably completed her course in the last 5 years but she's been a rural nurse and a mum … she had also known about Dental [Health] Services Victoria, so yeah.*

This internal word of mouth from staff with lived experience as a new parent was a driver for staff in that region to partake in oral health training with DHSV, as well as the regular communication channels such as newsletters, flyers, emails from MAV.

When MCHN see families with oral health needs in KAS visits, the staff are aware that a referral is necessary and have some idea of where to send these families for care, even though there are no formal referral pathways.

> *Part of our education is let's talk about teeth before the teeth come through […] talking about brushing them and all the rest of it. We also really try and really encourage them to start taking the children to a dentist.*
>
> *So we don't have a formal referral pathway [but] we have lots of dentists up here. We also have Latrobe Uni, Dental Hospital Melbourne, dental training, so lots of options.*

Although HFHS commenced delivering some of the training workshops for MCHN virtually over Microsoft Teams (rather than face-to-face) due to the COVID-19 pandemic, these changes were viewed positively. This made the training more accessible. One of the MCHN suggested providing pre-reading material prior to the workshops which could reduce the time required for the session.

I think in this new modern age, COVID helped that a lot of people send us some information like pre-reading material to us and then you can do a virtual group session. So then the length of time comes down to, I can't recall as we did It earlier in the year, but I put it being at an hour maybe. We do ask a lot of questions so we may have gone over time. I think the pre-reading certainly helps.
It was probably allocated for half an hour but with the amount of questions we were asking it probably went for the whole hour. But if we know well in advance, we can accommodate that. There's only one day in the week where we all work the same day, otherwise we're all part-time but that's ok – we can work around that.

Resource use and impact of oral health activities on families

HFHS resources were spoken of highly by the MCHN. Staff could refer to specific resources and tool provided by HFHS that they use on an ongoing basis in their practice to speak to families about oral health.

The spiral [little teeth] books are really helpful resources. The pictures are great.
They did enjoy it and they did say they liked that booklet at the end of the day (training session) […] we are quite visual ourselves which reflects our clients too.
I think for the moment for our MCH current workforce, the resources, it's just being able to give the product to the people they seem to go "oh my goodness, thank you very much I didn't realize that" – without being able to provide some tooth packs for them, I don't know if it would hit home like it does.
It's like when we give somebody a book and we can actually read the book with them and the only thing we haven't done is go to the bathroom and clean the child's teeth with them. That could be something talked about I think, the [nurses] may start that with our enhanced clients [who receive home visits] depending on the time of day they visit.

Challenges and barriers

One notable challenge for MCHN staff has been translating their knowledge of oral health into behaviour change among their cohort of clients. This is always a challenge for health promotion, but as demonstrated in the one interview, MCHN are seeing behaviour change happen over time.

The challenges are really getting them to understand the importance of looking after their teeth now for later on in life, you know, and healthy diet when you're introducing foods at the very start. It's about less sugar and that will help with dental along the way. I think over time we are slowly getting there, what do they say, it takes 1 – 3 generations to start making change? I think over time we are getting there and what is helping in that we are only 20-minute drive away from the school dental van.

Another challenge raised in an interview, is how oral health is often "invisible" when focusing on prevention. Other health issues are visual and more obvious indicators of health, such as a high BMI, making these are seen as easier topics to broach.

So with teeth it's really tricky unless you see that discoloration happening – then they'll [parents] act on that really quickly. Mind you it frustrates the nurse because they're in a preventive role.

The dental vans were brought up several times across interviews. The perception of their visibility at childcare sites was seen as positive. Participants noted the presence was a prompt to discuss oral health with clients.

We are co-located with a kinder with the dentist van (van from a local dental service) onsite this week. So that visual gives context to having these conversations and generally saying to them [parents] that they need to book in an appointment.

Organisation support, systems and referrals

Training sessions were received well and supported by organisations for staff to attend. Internally, MCHN are receptive to attending training, found the online modules useful to their practice, and would be interested in attending refresher sessions in the future.

> *Yes absolutely, there's always room for internal training with MCH […] that can be whatever we want it to be where we bring in speaker and things like that.*
>
> *I think you'll find that in 2020 I got one new staff member, so everyone has pretty much done the [HFHS] training other than one person. So it's always good to get updates and things like that, which is very helpful.*

While systems for tracking patients and taking notes vary, MCHN do attempt to find out past dental information when they can, whether it be from previous clinical notes, or asking about client dental history.

> *We have a database that is statewide by Maternal Child Health Nurses in every council, so when we write notes on any clients, we have to go through certain tick boxes and certain categories and oral health is actually one of those categories that we need to tick off every time they visit.*
>
> *For the last three to four years, finally we're all 70-something councils on the same page. If a client transfers from one council to another, we can just hit a button on the computer with their permission that can bring up their history.*
>
> *We have a section in our notes on the computer that's about [oral health] education of the parents and also any referrals. You would put that you have referred to a dentist so the next time, whether it's that same nurse or a different nurse seeing the families, [they can] have a look and read "Ok they were referred to the dentist" and that's part of the conversation.*
>
> *As MCHN we do tend to be a triage point for a lot of families, they will often ring and trust us to know "where can I go for this?" or "where can I go for that?". In all fairness we certainly discuss it but as far as a formal referral process – no. We ring them a month later and say "how did you get on, getting to the dentist?". Our dentists here do try to accommodate and not have big waiting lists, particularly for the children.*

Sustainability of the program

Oral health is already part of the MCHN clinical practice framework (KAS framework), it is well embedded into their practice. This has enhanced the sustainability of HFHS program, as there is a consistent need for training and resources to support MCHN in their oral health promotion role.

> *It's built into our practice, built into the guidelines. We have to work by [the guidelines] from the department and oral health is always in there, so I guess it falls back on us to define the appropriate training to support staff.*

It's at a level where we can decide how much or how little we give to it [oral health], if that makes sense. It's not a prescribed text that you have to spiel every time. It works for the way we work.
I think with the nurses it's pretty ingrained in what we do in the visits. If I, or one of the senior nurses left, we would still continue on, it would just be a matter of when DHSV will contact us.

Future directions

Delving further into the topic elucidated that MCHN staff had little awareness about other DHSV health promotion programs and initiatives (e.g. Smiles 4 Miles), and what oral health services and programs are available for families once a child is older and beyond the ages seen by MCHN. Creating awareness among MCHN of other DHSV health promotion programs such as Smiles 4 Miles, could be useful so they know where children might access oral health services as they get older.

Bring back the school dental van, I say bring back the Kinder visits at the schools.
We have a good working relationship with all the childcare and kindergartens in our LGA […] from an organisation point of view to help health promotion, we have a coordinator of early years who has done a lot of work in that early year's space. Smiles for Miles? Is that now Healthy Families Healthy Smiles?

Appendix I: Supporting oral health in the early parenting centre online course evaluation overview and tables

Early Parenting Centre training evaluation findings from post-workshop feedback forms
Note: All short answer question responses were categorised and summarised.

Supporting oral health in the Early Parenting Centre online course

The HFHS implementation team developed an online course *Supporting oral health in the Early Parenting Centre* to build the oral health promotion capacity of early parenting centre clinicians in Victoria's three Early Parenting Centres from the online course was shared with Early Parenting Centres early 2023. After completing the training, participants had the opportunity to complete a post evaluation survey. Feedback presented in this report has been provided by 31 participants. This evaluation reports on evaluation data from 24 January 2023 through to 29 March 2023.

Participants

Most participants (n=19, 61.3%) worked as an Early Childhood practitioner with others working as a Maternal Child Health nurse (n=6, 19.3%), midwife (n=2, 6.4%), clinical educator (n=1, 3.2%) or a social worker (n=1, 3.2%).

Participant feedback on Supporting oral health in the early parenting centre

After completing the training, most participants (>93%) strongly agreed/agreed with having gained new knowledge and/or skills, the content was clear and easy to follow, the amount of information was sufficient, felt more confident about supporting good oral health for their clients and the course met their expectations.

See *Table 1* for further information.

Useful aspects of the training

Participants found the resources useful, including the handouts for clients (n=4), links to other resources (n=2) and videos/photo (n=3) Oral health related topics such as tooth decay process (n=4) and pregnancy (n=2) were considered useful.

Intended changes to practice as a result of participating in the training

Participants mentioned in relation to oral health discussions within their practice:

- They would be more aware.
- Be more proactive.
- Feel more confident/equipped.
- Include toothbrushing discussions.
- Utilise resources – handouts, resources in different languages.

General comments

Majority of participants believed no improvement was necessary, commented it was a great course and one commented it was an excellent refresher.

Table 1. Participant agreement with knowledge and translation to practice statements (n=31)

Statement	Strongly Agree n (%)	Agree n (%)	Neither agree nor disagree n (%)	Disagree n (%)	Strongly disagree n (%)
I have gained new knowledge and or skills	15 (48.4)	14 (45.2)	1 (3.2)	1 (3.2)	0 (0)
I am more confident about supporting good oral health for my clients	10 (32.3)	20 (64.5)	1 (3.2)	0 (0)	0 (0)
The course met my expectations	15 (48.4)	15 (48.4)	1 (3.2)	0 (0)	0 (0)
The content was clear and easy to follow	18 (58.1)	12 (38.7)	0 (0)	0 (0)	1 (3.2)
The amount of information was sufficient	18 (58.1)	13 (41.9)	0 (0)	0 (0)	0 (0)

**Rounding may affect percentage totals.*

Appendix J: Brush Book Bed for Supported Playgroup Facilitators questionnaire overview and tables

Overview of Brush Book Bed evaluation findings from post-training questionnaires

Note: All short answer question responses were categorised and summarised.

Brush Book Bed workshop -face to face/virtual delivery

The Brush Book Bed workshops were designed by HFHS to build oral health promotion of Supported Playgroup facilitators.

During phase 3 the HFHS implementation team delivered 23 workshops to a total of 119 participants. The locations of the workshops and the regions are provided in *Table 1*. Eighty-five participants completed a post-workshop evaluation form (completed between 01/10/2019-04/03/2020).

After completing the workshop, most participants (>80%) agreed they felt confident to demonstrate toothbrushing to children and families, they planned to deliver a toothbrushing demonstration in their playgroup and all the participants (n=85, 100%,) agreed they would recommend this workshop to other playgroup facilitators. See *Figure 1* below.

Prior to completing the workshop just under half of the participants never or rarely shared information about dental health and toothbrushing with families.

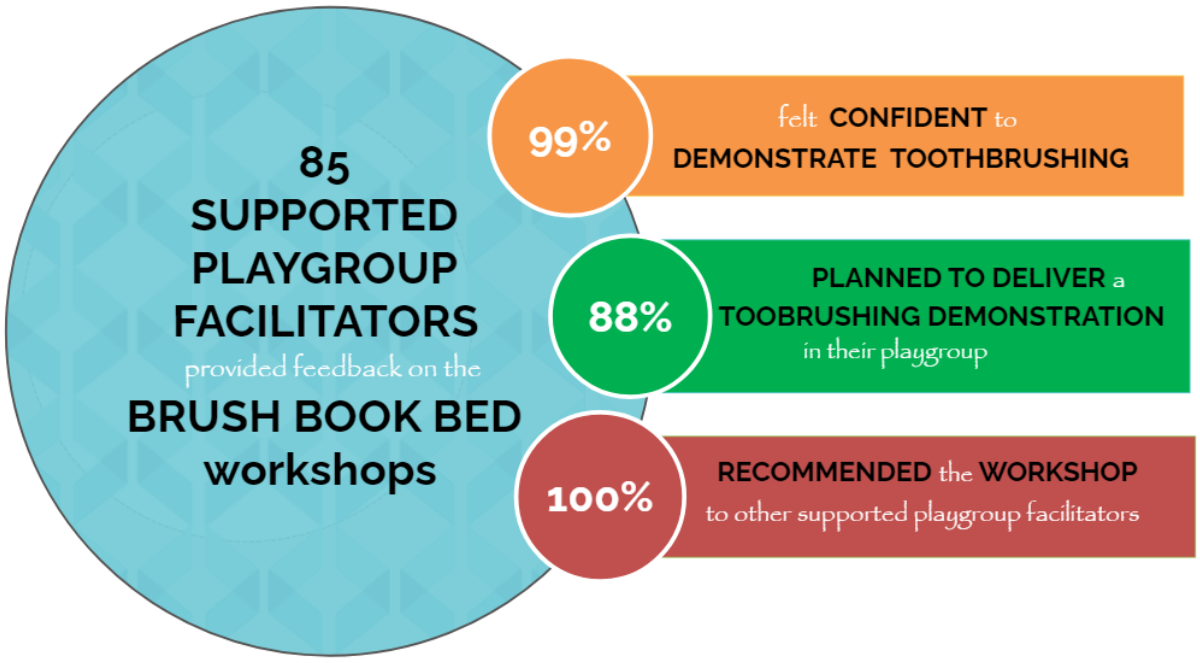

Figure 1 Participant feedback about the Brush Book Bed workshop (n=85)

General comments

Overall, the workshops were well received, and participants commented it was a great presentation/great initiative.

- Participants thought the information was relevant/useful and indicated an intention to use the learnings within their playgroups.
- Participants responded positively to the resources e.g., the puppet.
- Suggested resources were the small crocodile for all families or an A3 sized poster summarising the dental hygiene/toothbrushing tips.
- Participants commented on the workshop delivery method e.g., it was relaxed, easy to follow, practical and user friendly.
- One participant suggested running workshops in parts per session
- See details in *Table 2*.

Brush Book Bed online training

During the period of 9/11/2020-10/02/2022, HFHS implementation team delivered training online. Sixty-six participants completed an online post-workshop evaluation form. Two different questionnaires were used within this reporting period (Survey 1: n=58 and survey 2: n=8).

Brush Book Bed online training (survey 1) n=58

Fifty-eight Supported Playgroup Facilitators completed the online Brush Book Bed training also completed the post evaluation form between 11 October 2019 and 27 May 2021. Following participating in the online training 100% (n=58) participants agreed they felt confident to explain the 4 steps of toothbrushing and demonstrate toothbrushing to children and families.

Prior to completing the online training around a quarter (24.1%, n=14) of participants rarely/never shared information about dental health with families and 34.4% (n=20) never/rarely shared information about toothbrushing with families. Percentages are presented in *Figure 2* and *3*.

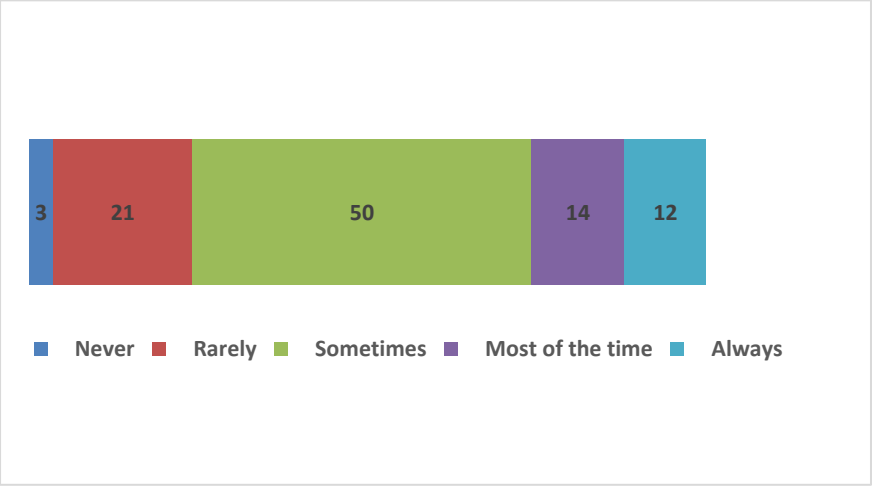

Figure 2. How often dental health information was shared with families (% responses) (n=58)

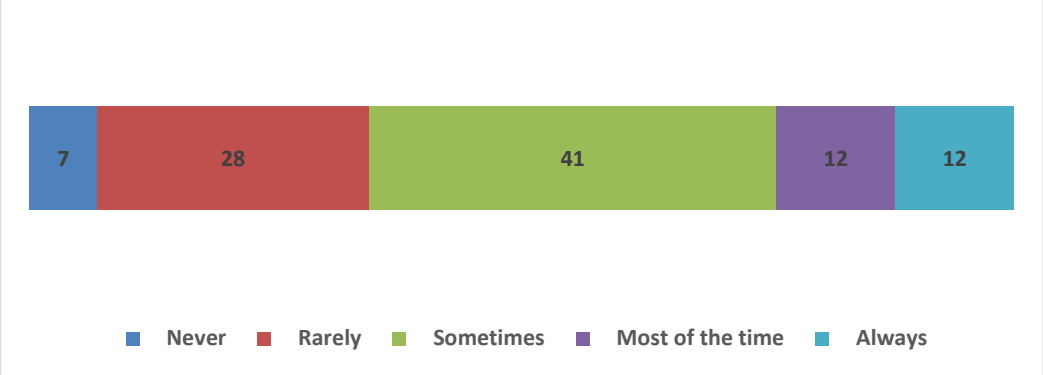

Figure 3. How often toothbrushing information was shared with families (% responses) (n=58)

Obstacles or challenges in delivering a toothbrushing demonstration in playgroup sessions

Forty-two participants provided information about the challenges/obstacles they experienced when delivering toothbrush demonstrations in their playgroup session. Twenty-four considered Covid-19 (or not meeting in person) an obstacle to delivering toothbrushing demonstrations in their playgroup, as many of the groups were meeting virtually. Five also mentioned that whilst Covid-19 was an obstacle, they were working on solutions e.g., posting videos online or speaking over the phone. Nine participants didn't think there were any obstacles to delivering toothbrushing demonstrations in their playgroup with one person stating the training will provide "a fresh new spin on discussing when we hand out toothbrushes and toothpaste, and the children will be more interested with my new resources". Five facilitators mentioned issues relating to parents preconceived ideas on oral health and healthy eating and that it can be difficult to change these behaviours. Other obstacles mentioned included getting resources to families (n=2), language barriers (n=1), technical issues with videos (n=1), absent families (n=2) and difficulties experienced in getting parents attention during a busy playgroup session (n=1).

Brush Book Bed online training (survey 2) n=8

Eight Supported Playgroup Facilitators completed the Brush Book Bed online training and post evaluation form between 16/07/2021 and 10/02/2022. After completing the workshop, all participants (100%, n=8) agreed they gained new knowledge and/or skills, felt confident to demonstrate toothbrushing to children and families, confident to deliver a toothbrushing demonstration in their playgroup (including using resources e.g. puppet), confident to explain dental health tips with families and all the participants agreed they would recommend this training to other playgroup facilitators. Participants reported the information in the training is relevant to their practice. See *Table 5* and *Table 6* for further details.

Prior to completing the online training around a quarter (25%) of the participants never shared information about dental health with families. Frequencies and percentages are presented in *Table 7*.

Participants were asked for feedback regarding what factors could affect the supported playgroup facilitators from sharing dental health tips in playgroup session. Four participants agreed with the statement "I do not have the resources I need" regarding the dental health tips.

Table 1 Brush Book Bed participant workshops and online training locations

Date	LGA/Service	CPD Activity	Participants	Number- workshop respondents	Number - online respondents	Number -Koorie Little Smiles respondents
10/06/2020 – 10/02/2022	Various	Brush Book Bed online course	66	n/a	66	n/a
1/10/2019	Banyule Community Health	Brush Book Bed workshop (face to face)	5	5	n/a	n/a
9/10/2019	Meadows Early Learning Centre	Brush Book Bed workshop (face to face)	10	4	n/a	n/a
17/10/2019	City of Kingston	Brush Book Bed workshop (face to face)	5	5	n/a	n/a
25/10/2019	Banyule Community Health	Brush Book Bed workshop (face to face)	1	0	n/a	n/a
28/10/2019	City of Port Phillip	Brush Book Bed workshop (face to face)	2	2	n/a	n/a
6/11/2019	Moreland City Council	Brush Book Bed workshop (face to face)	4	2	n/a	n/a
13/11/2019	Frankston City Council	Brush Book Bed workshop (face to face)	2	2	n/a	n/a
15/11/2019	Mallee Family Care	Brush Book Bed workshop (face to face)	4	3	n/a	n/a
25/11/2019	Community Hubs - Brimbank	Brush Book Bed workshop (face to face)	5	5	n/a	n/a
27/11/2019	Albury/Wodonga	Brush Book Bed workshop (face to face)	8	8	n/a	n/a
27/11/2019	Beechworth	Brush Book Bed workshop (face to face)	1	1	n/a	n/a
28/11/2019	Hobsons Bay Council	Brush Book Bed workshop (face to face)	6	5	n/a	n/a
3/12/2019	Latrobe City	Brush Book Bed workshop (face to face)	6	6	n/a	n/a
4/12/2019	Sandringham	Brush Book Bed workshop (face to face)	2	2	n/a	n/a
17/12/2019	Darley (Moorabool)	Brush Book Bed workshop (face to face)	1	1	n/a	n/a

3/02/2020	Horsham Rural City Council	Brush Book Bed workshop (face to face)	6	4	n/a	n/a
5/02/2020	Ariston House - Newtown	Brush Book Bed workshop (face to face)	7	6	n/a	n/a
25/02/2020	HIPPY leaders, BCYF Winchelsea	Brush Book Bed workshop (face to face)	13	12	n/a	n/a
26/02/2020	Wyndham City	Brush Book Bed workshop (face to face)	9	9	n/a	n/a
4/03/2020	Burwood	Brush Book Bed workshop (face to face)	3	3	n/a	n/a
26/05/2020	Playgroup Victoria	Brush Book Bed workshop (face to face)	5	0	n/a	n/a
12/06/2020	Dandenong	Brush Book Bed workshop (virtual)	2	0	n/a	n/a
7/02/2023	Community Hubs - Hume	Brush Book Bed workshop (face to face)	11	0	n/a	n/a
9/02/2023	Mansfield Shire Council	Brush Book Bed workshop (face to face)	1	0	n/a	n/a
01/04/2022	Victorian Aboriginal Child Care Authority	Little Koorie Smiles workshop	4	n/a	n/a	0
		Total	**189**	**85**	**66**	**0**

Table 2. Brush Book Bed workshop (face to face/virtual)-General comments about the training

Comments
Great initiative
Great presentation
thoroughly enjoyed the information learned
Valuable if delivered to other council services such as preschools, childcare centres, MCH and Enhanced MCH services
Really interesting and helpful information provided to facilitators at workshop. Program is very relevant for the families attending our Supported Playgroups - I can't wait to implement it!
Thank you for sharing your knowledge and resources
Highly support families and age-appropriate to brush teeth, great feedback to support families routine of teeth brush, circle brush, rinse and clean
Great tips which I can pass on to families
Would love to share this with families its a nice easy, fun way to get kids involved in brushing their teeth.
What a fantastic program

Resources are fantastic - really engaging and in a variety of different forms
Large poster (A3) with summary of dental hygiene/toothbrushing tips (we use flipchart - but something to hang on the wall)
Variety of brushes/brands to try.
Sugar content in food chart
This program benefits other council programs e.g. mothers' groups and youth programs
describe how to gradually expose younger children to having their teeth looked at, or rubbed with a soft face washer as part of bath time
Promote via storytime, libraries. Toothbrushing demonstration with adult toothpaste AND a toothbrush

Brush Book Bed online training results tables

Table 3. How often shared dental health information with families (n=58)

Response	n	%
Sometimes	29	50.0
Rarely	12	20.7
Most of the time	8	13.8
Always	7	12.1
Never	2	3.4

Table 4. How often shared toothbrushing information with families (n=58)

Response	n	%
Sometimes	24	41.4
Rarely	16	27.6
Most of the time	7	12.1
Always	7	12.1
Never	4	6.9

Note. Due to rounding errors, percentages may not equal 100%.

Table 5. Participants level of agreement with statements re:toothbrushing capacity building (n=8)

Statement	Very confident n (%)	Confident n (%)	Not confident n (%)

Explain the "bite-size" (dental health) tips	1(12.5%)	7(87.5%)	0
Explain the 4 steps of toothbrushing	5(62.5)	3(37.5%)	0
Demonstrate how to brush using the alligator puppet	1(12.5%)	6(75%)	1(12.5%)
Deliver a toothbrushing session in your playgroup	1(12.5%)	7(87.5%)	0

**Rounding may affect percentage totals.*

Table 6. Participants level of agreement with statements re:CPD post-workshop (n=8)

Knowledge and skill development	Strongly Agreed n (%)	Agreed n (%)	Neither agree nor disagree n (%)
I have gained new knowledge and/or skills	0	8 (100%)	0
I intend to use what I have learnt in my work	4(50)	4(50)	0
The information is relevant to my professional practice	5(62.5)	3(37.5)	0
The content was clear and easy to follow	6(75)	2(25)	0
I would recommend this to others	8(100)	0(0)	0
The amount of information was sufficient	4(40)	4(50)	0

**Rounding may affect percentage totals.*

Table 7. How often shared dental health information with families (n=8)

Response	n(%)
Never	2(25)
Yearly	3(37.5)
Quarterly	1(12.5)
Monthly	1(12.5)
Weekly	1(12.5)

Note. Due to rounding errors, percentages may not equal 100%.

Appendix K: Healthy Little Smiles questionnaire overview and tables

Professional development workshop for Early Childhood Educators - evaluation findings from post-workshop feedback forms.

Note: All short answer question responses were categorised and summarised.

Healthy Little Smiles training

The HFHS implementation team delivered Healthy Little Smiles workshops for Early Childhood Educators which commenced from 9 September 2021.

After completing the training, participants had the opportunity to complete a post evaluation survey. Feedback presented in this report has been provided by ten participants across 4 workshops.

Participants

Participants identified as degree-qualified teachers (n=3, 50%), educators with certificate/diploma qualifications (n=2, 33.3%) and an educational leader (n=1, 16.7%).
Most participants (n=7, 70%) worked in a kindergarten program (4-year-old: n=3, 30% and both 3- 4-year old kindergarten: n=4,40%) and three (30%) worked in long day care.

Participant feedback on Healthy Little Smiles training

After completing the training, all participants (n=10, 100%) agreed with having gained new knowledge and/or skills, the content was clear and easy to follow, the amount of information was sufficient, and they would recommend the training to others. Participants agreed the information would help them translate the learning into practice, was relevant to their professional practice and that they intend to use the HLS training learning in their work.

See *Table 1* for further information.

Translation to practice

Difficulties and barriers to promoting oral health in educator service (n=10)

Participants mentioned the barriers to promoting oral health at their service:

- Parents not following oral health promotion advice
- Limited access to a dentist locally
- COVID related issues- inability to physically brush children's team as part of oral health promotion

Suggestions for improving the training

Four participants responded the course could be improved with the following suggestions:

- Resources- more dental information/brochures, links to local dental services

Table 1. Participant agreement with knowledge and translation to practice statements (n=10)

Statement	Strongly Agree n (%)	Agree n (%)	Neither agree nor disagree n (%)	Disagree n (%)	Strongly disagree n (%)
I have gained new knowledge and or skills	4 (40)	5 (50)	1 (10)	0 (0)	0 (0)
I intend to use what I have learnt from this training in my work	6 (60)	3 (30)	1 (10)	0 (0)	0 (0)
The workshop met my expectations	4 (40)	5 (50)	1 (10)	0 (0)	0 (0)
The workshop is relevant to my professional practice	6 (60)	3 (30)	1 (10)	0 (0)	0 (0)
The content was clear and easy to follow	7 (70)	2 (20)	1 (10)	0 (0)	0 (0)
The amount of information was sufficient	6 (60)	3 (30)	1 (10)	0 (0)	0 (0)
I would recommend this to others	6 (60)	3 (30)	1 (10)	0 (0)	0 (0)

**Rounding may affect percentage totals.*

Table 2. Self-reported confidence levels regarding oral health knowledge and practices (n=10)

Statement	Confident n (%)	Somewhat confident n (%)	Neither n (%)	Not confident n (%)
Discuss the topic of oral health with children and families at my service	9 (90%)	1 (10%)	0 (0)	0 (0)
Answer questions about oral health	7 (70%)	3 (30%)	0 (0)	0 (0)
Answer questions about healthy eating	8 (80%)	2 (20%)	0 (0)	0 (0)
Identifying opportunities to promote oral health in my workplace	8 (80%)	2 (20%)	0 (0)	0 (0)
Talk to parents about their child's oral health issues	6 (60%)	4 (40%)	0 (0)	0 (0)
Support families to access dental services	8 (80%)	2 (20%)	0 (0)	0 (0)

**Rounding may affect percentage totals.*

Appendix L: Brush Book Bed for library storytime workshop questionnaire overview and tables

Library staff professional development workshop evaluation findings from post-workshop feedback forms.

Note: All short answer question responses were categorised and summarised.

The Brush Book Bed (BBB) for library story time online course was designed by HFHS to build oral health promotion capacity of library staff. The Brush Book Bed for Library Storytime online course was piloted with 7 organisations. All 14 attendees provided feedback in the post workshop evaluation.

Participant feedback on Brush Book Bed for library story time workshop

Prior to attending the Brush Book Bed for library story time online course, less than half (42.9%, n=6) never shared dental information with children and families.

After participating in the online course, all participants (n=14) agreed they gained new knowledge and/or skills, felt confident to explain the 4 steps of toothbrushing, to explain 'bite-size' dental health tips, demonstrate how to brush using the alligator puppet, deliver a toothbrushing story time session, intend to use what they have learnt in their work, the information was relevant to their professional practice, content was clear and easy to follow and they would recommend this workshop to others.

Almost all (92.8%, n=13) library staff agreed or strongly agreed the amount of information was sufficient.

Participants thought the toolkit would be a useful addition to their dental week activities and having the resources available in multiple languages enabled greater reach to diverse members of the community during story time sessions.

Difficulties and barriers to sharing the 'bite-size' dental health tips in the story time sessions (n=8)

Participants mentioned the factors keeping them from sharing 'bite-size' dental health tips (n=8) included needing more information on the subject matter (n=3) and COVID lockdowns (n=2).

Suggestions for improving the toolkit

Three participants responded the course could be improved by having the information delivered via audio rather than in written format (n=1), one suggested the toolkit be downloadable and/or accessible without the internet and another suggested no improvements were needed-simply stating: *'The toolkit includes all the information relevant to my job. I can implement what I've learnt in my story time session. The toolkit also includes all the resources to share this information, I'm not sure what else could be improved'*.

Table 1. Participant agreement with knowledge and translation to practice statements (n=14)

Statement	Strongly Agree n (%)	Agree n (%)	Neither agreed nor disagree n (%)	Disagreed n (%)	Strongly disagreed n (%)
I have gained new knowledge and/or skills	6(42.9)	8(57.1)	0(0)	0(0)	0(0)
I intend to use what I have learnt in my work	9(64.3)	5(35.7)	0(0)	0(0)	0(0)
The information is relevant to my professional practice	7(50.0)	7(50.0)	0(0)	0(0)	0(0)
The content was clear and easy to follow	8(57.1)	6(42.9)	0(0)	0(0)	0(0)
I would recommend this to others	9(64.3)	5(35.7)	0(0)	0(0)	0(0)
The amount of information was sufficient	10(71.4)	3(21.4)	1(7.1)	0(0)	0(0)

**Rounding may affect percentage totals.*

Table 2. Self-reported confidence levels regarding oral health knowledge and practices (n=13)

Statement	Very confident n (%)	Confident n (%)	Somewhat confident n (%)	Neither n (%)	Not confident n (%)
Explain the 'bite-size' (dental health) tips	3(21.4)	11(78.6)	0(0)	0(0)	0(0)
Explain the 4 steps of toothbrushing	3(21.4)	11(78.6)	0(0)	0(0)	0(0)
Demonstration how to brush using the alligator puppet	3(21.4)	11(78.6)	0(0)	0(0)	0(0)
Deliver a toothbrushing story time session	4(28.6)	10(71.4)	0(0)	0(0)	0(0)

**Rounding may affect percentage totals.*

Appendix M: Dietitians partnership interview findings and illustrative quotes

Overview of evaluation findings from a key informant interview exploring the Dietitians Australia partnership.

Partnerships represent a key component of the HFHS program. Findings from an interview with a partner at Dietitians Australia are presented. The interview explored their perspectives on their experience partnering with HFHS, the degree of involvement in the HFHS program, the benefits and impacts of the partnership, challenges and future directions.

Perspective on the partnership

The informant for this interview discussed their experience and perception in partnering with DHSV/HFHS from the field of Dietetics. DHSV led a working group which included professional bodies such as Dietitians Australia, to review evidence and produce a joint position statement.

> *The joint position statement is related to oral health and nutrition. So, I think the original statement was developed in 2015 […] and the position was around education of dietitians. But this new statement, the revised statement, is around interdisciplinary collaboration between oral health professionals and dietitians.*
> *It's a good starting point to sort of, you know explain the rationale for why we should be working together.*

Benefits

The development of the joint position statement was seen as a useful advocacy tool, but the discussion showed that there is a desire to build upon the statement to build a meaningful collaborative and lasting partnership that could benefit both professional client groups.

> *I think there's a lot of unrealized benefits in terms of actually making that collaborative, like bringing that position to life in real terms, I think that there has been some collaboration between our various professions, particularly in probably the aged care setting, but I still think that there's a lot more that be done to […] bring our two professions together to work more consistently and support referral pathways and interdisciplinary, you know, education and awareness building. So I think the position is great, but there's probably more that's needed to actually realise it.*

Barriers/challenges

The partnership and the resources this collaboration has contributed towards developing have been received well. The informant mentioned while there is interest in keeping the channels of communication open to developing future collaborative opportunities, they were realistic in terms of the requirements needed to keep a collaboration moving forward. The position statement and supporting tools had time and funding allocated, and while there is further opportunities and spaces to explore in the partnership, there is also the ongoing challenge of funding, particularly when bringing together peak organizational bodies.

I think definitely from our point of view we would need more resources to be able to drive any work.
If there's like, mainstream oral health programs that could look at integrating […] oral health and nutrition services, or something like that, I think that there's definitely going to be funding opportunities coming out around mainstream capacity building.
Looking at opportunities related to different sectors where, you know, oral health and nutrition would be relevant and then targeting funding, trying to get funding from those various funding streams.

This informant discussed some of the barriers encountered in developing this current position statement when looking at interdisciplinary research and raised this as an avenue to investigate when it is time for the statement to be reviewed. They also raised accessibility as another avenue to strengthen the position statement.

So, in the position statement […] and the education resource, there's not a lot of actual research on programs that have involved collaboration between professions, so that's a bit of a gap in the actual evidence base of that position statement. Which could be useful for when we update.
There also wasn't a lot of evidence around disability. But because it was updating the literature that was collected back in 2015 and there was limited resources, there just wasn't scope to do that work, so I think oral health problems and nutritional issues are very highly prevalent in certain populations of people with disability, so I think […] any future review of this time and money and resources, it would be worthwhile looking at that population group as well.

Impacts of the partnership

Out of this partnership, a supporting webinar resource was also developed alongside the position statement, and an educational resource for dietitians is also in progress to expand their knowledge on how their field can impact positive changes for client's oral health.

The original statement – a lot of information there was for dietitians to educate them about oral health and because that wasn't dietetic information, a lot of that was stripped out of the core position statement, but it has since been developed into an education resource, because you know, there's a lot of useful information there.

We just launched the position statement, there was a webinar too, to provide some education to dietitians around the launch of the statement and what it meant for collaboration and dietetic education. I believe DHSV and the oral health organisations did similar for their members. And I think that, you know, there's a benefit there of having that advocacy tool.

Development of the accompanying resource webinar to support the position statement was raised as a useful tool for dietitians. The informant expressed a limited understanding with the background behind the collaboration, however it has the potential to also demonstrate to dietitians' future collaboration opportunities between nutrition and oral health.

Another benefit for our members that this evidence-based resource around oral health, and that will be of a lot of interest to our members, is the benefit to their practice. But I think there's a bigger potential there for benefits to really foster that collaboration between professions. But that's something that would require more investment and work.

Organisational support

The informant discussed some early anecdotal feedback provided by staff that have engaged with the webinar supporting the position statement, which was deemed positive.

After the webinar, there was a lot of positive feedback that came through the chat […] but I don't have a record of that to be able to give you precise feedback.

I think the dietitians who have been introduced to oral health practice or worked in an oral health setting, I think they've found it very rewarding. Another message that has come through that I noticed from dietitians that have worked in the sector embedded sort of oral health practice and messaging in the work. Definitely it was something that enhances their practice and thinking […] it is a good message to get out there to our profession – seems to be very well received.

Sustainability of oral health information within dietetics profession

The partnership between DHSV/HFHS and Dietitian professional bodies is a new partnership, so it is an interesting opportunity to discuss how to create sustainability of knowledge based on the earlier stages of collaboration, as opposed to other partnerships that have been running for many years.

Well, the education resource, when that's finished, will be made available to members so that whenever they're interested or searching through our resources on the topic of oral health, they'll be able to access it.

I'm not sure at this stage in terms of sustaining, you know, doing more work on oral health. It would probably be have to be driven by member interest in input.

I'm sure that we'll probably be open to reviewing the current position statement when the time comes, but that's probably not going to be for a few years at this stage and I think resourcing is the main constraint for any more work.

The education centre does do surveys of the membership to find out their interests for CPD opportunities […] so if there was a demand, if it was an area of high need, it would probably be picked up there. Having said that, I do recognize that a lot of the time there are topics that are important to, say, disability for example, where there is a need, but it won't necessarily pop up as a priority for other people because it won't be on their radar. So oral health might be one of those things that flies under the radar.

Future directions

Despite the challenges and barriers discussed in the interview, the informant brought forward ideas for how future collaboration could be focused.

The direction that we could take, for example, is the disability space, where there's a roadmap for supporting the health of people with intellectual disability, and within that road map, there's certain actions around preventive health and oral health and nutrition. I was looking at it from over a year ago now, but at the time when I was reading through the road map, I could see that there was potential. You know, synergies there between our professional that could be fostered. So, I think it would be looking at these upcoming health policies and, you know,

health reforms that are taking place and seeing where our professions […] have work that crosses over and we could support each other.

I was sort of under the assumption that DHSV was leading the development of this joint position statement and now finalizing the education resource and think that with the project almost finished at this point […] there was discussion around all of the possibilities for collaboration and that there was a great appetite across the working group for that. However, I don't think there is any funding. There was no real discussion of any next steps of taking that forward per se, because this was a finite project with finite resources.

It seems there is interest to continue partnering together, with the main limitation being organisational resources, as previously mentioned. Importantly, despite wherever the future direction of the partnership goes, this has been a rewarding and valuable collaborative experience.

It was definitely a positive experience working with DHSV. Everyone who was representing DHSV has been really lovely and good collaborative partners, so we would certainly be open to keeping the lines of communication open.

It's hard to say exactly what the opportunities are off the top off my head – all the funding reforms and where the professions crossover. But in terms of feedback around DHSV, everyone that I've dealt with has been very professional and it was just a nice group to work with, so year, definitely enjoyed the experience.

Appendix N: Evaluation and reflection on the implementation of HFHS over the past four years

Overview of interview findings from the HFHS team reflecting on implementation of HFHS over the past four years.

Interviews were conducted with the HFHS implementation team (n=3) to explore their key achievements and experiences of implementing the HFHS program over the last four years, discussing the challenges, enablers and future directions for the program. Illustrative quotes are provided in *Table 1* within the thematic summaries.

Key Achievements

The HFHS team described their key achievements over the last four years, including for example:

- Learning from prior phases over the last ten years to continuously improve initiatives and build momentum around oral health in different settings.
- The team used COVID-19 as an opportunity to adapt existing initiatives to meet the changing priorities and needs of professionals: adapting learning packages into online formats, continuing to deliver professional development, and developing resources to support training of non-oral health professionals.
- The COVID period, while difficult, also demonstrated the strength of HFHS partnerships. Experiencing periods of low engagement and a shift in priority for many partners, HFHS demonstrated respect for the needs of their partners and took a step back until the partners were ready to continue. The temporary shift in engagement is not always an indicator that there is no interest in continuing the partnership, rather it is about finding the right time to put oral health on the agenda.
- Offering flexible digital forms of professional development to enable greater accessibility of HFHS PD offerings and extending reach.
- Working closely with an existing partnership to review and improve the content and learning experience of the MIOH course based on feedback from past program evaluations.
- Development of a joint position statement through a working group led by DHSV and Dietitians Australia which brought together peak organisational bodies and professionals.
- Addressing the oral health content gap which existed within the midwifery undergraduate curriculum with advocacy by the HFHS implementation team. This resulted in the creation of partnerships with the tertiary education sector and moved the agenda towards embedding oral health into their curriculum.

Program strengths and enablers

The interviewees raised the following points as key enablers for HFHS success in the past four years:

- The liaison officer role that sits between VACCHO and DHSV was a valuable role for the HFHS program, ensuring that initiatives are being designed in a way that is culturally safe and meaningful to Aboriginal and Torres Strait Islander people.
- Anecdotal feedback at events and through casual conversations with stakeholders provided reassurance that the program is reaching professionals and they are engaging with the

learnings from their training and implementing them along with HFHS resources and in their work.

- Having a good understanding of what various sectors need to promote oral health, and aligning training and resources to the policies and frameworks of each sector so they are more likely to be adopted.
- Clear strategic plans, learnings from earlier phases, and consultation were the key supports as new team members joined the Implementation team.
- Within the DHSV general health promotion team, general feedback and shared learnings between programs enabled the development of the HFHS program to grow from strength to strength.

Limitations and challenges

Barriers which were brough up during the interviews included:

- The impact of COVID resulted in the slowing down of work with 'priority groups'. There needed to be a pivot in how the programs were being delivered and major changes that were needed within a short period of time.
- Learning to create PD opportunities in a digital format that could be delivered as self-directed learning, and associated challenges that come with using a new digital setting.

Future direction

Despite the challenges of the past four years, the successes of HFHS show that there are many exciting avenues to explore for the future, suggestions from interviewees included:

- While the rapid digitising of the HFHS program meant the HFHS team had to pivot quickly and without warning, with some future work, there can be new ways to measure and monitor engagement of existing communication strategies e.g. newsletters.
- Systems at DHSV may not be designed to monitor engagement as required for a large program such as HFHS. In order to support evaluation, HFHS should seek to integrate new technologies to enhance work as they become available.
- Explore opportunities to engage with other professionals and/or sectors. Over the previous phase, this was limited by the time and staffing constraints. Funding towards the program can give the team greater capacity to diversify professional engagement.
- Looking for ways to expand partnerships beyond their initial scope.
- The program in the past has been successful due to oral health champions keeping oral health on the agenda. Moving forward, HFHS can explore what strategies are needed to develop a program that is self-sustaining.

Table 1: Illustrative quotes aligned to key themes from HFHS implementation team interviews

Themes	Illustrative quotes
Key achievements	
	In 2022, it was our ten-year milestone of the program and so it's just such an achievement that the team has been able to deliver so much over the last 10 years and I want to recognise all their hard work that the team have put in, and in particular the adaption that needed to

	happen during COVID to continue engaging with professionals around oral health (Participant A).
	The team, rightly so, backed out a little bit of that kind of hard engagement during the 2021-2022 period and instead focused on what we could do to support the professional sectors we work with to still be able to participate in PD [professional development], to still be able to engage in oral health in this kind of new format (Participant A).
	The content is basically the same, it's just the method of delivery that's different. So, for us to actually spend some time internally to adapt what we're doing […] is that a benefit of [the time allocated from] COVID is that now we're able to offer our learning modules in multiple formats (Participant A).
	We've been able to create an online learning course for early childhood professionals to engage in at a time of their choosing. So now we still have the original workshop to offer, if that's what a service wants, but now we have other options as well. That's been a really great […] learning, that no two professionals, even if they're from the same professional sector, are going to want to learn in the same way and no two services are going to have the same needs. So, it actually is really great to be able to offer professional development and information and resources in multiple formats (Participant A).
	So in 2022, we did work really closely with Western Sydney University to support a review of the midwifery course using the experiences that we had had to improve the experience for the learner in terms of the course being engaging and interesting and really easy to navigate, but also updating the content and sharing some of the feedback that had come out of our evaluation. So, it's been really nice working with them so closely on that, and I think really appreciated by them that we've been able to contribute back to the course (Participant A).
Overcoming barriers	*Moving to more kind of digital forms of professional development, for example, like the online course we've created for maternal and child health, that enables us to kind of be able to offer something in a more blanket way across the sector. So in terms of the way we are engaging, I think that we've had to move our engagements more towards those kinds of peak bodies and stakeholders (Participant A).*
	Putting our courses online, it was probably something we wanted to do, but the pandemic really fast tracked that. It's a different style of learning so it compliments what we do face to face. It enables a broader reach because we're such a small team - face to face training is limited by our availability, so having online courses is a huge potential for us to reach more professionals (Participant C).

Overcoming challenges and engaging with partners	*During the last four year period, COVID really impacted on our engagement. It was a period of time where it was very hard to engage them [partners] to have regular partnership meetings and […] that's because they had other priorities with COVID. But it just took persistence on our end and regular checking in and requesting meetings for when they were available. And those meetings have now been re-established. So I think it just shows that partnerships take work and you have to be understanding of the other partners priorities. You just have to be there […] making sure they know that you're still interested in working with them. And when the time is right, they will re-engage (Participant A).*
Program strengths and enablers	
	I found that because there's been so much history and work that's been done before [me], that set a really good foundation that I was able to, sort of, come in and leverage off the work that had already been done. There's already such a strong existing bases there […] from a health professional side of things […] it was easy to come in and pick them up where they were and keep building on them (Participant B).
	We have so many different professional groups that we work with, it's not a one size fits all. It's [about] meeting them where they are, what's going to work for them, something that will work for them and keep them engaged with oral health (Participant B).
Enabler- tailoring resources to meet the needs of the sector	*Libraries are a good example of where we had engaged with libraries, we got an understanding that, you know, oral health was something that they did think was feasible to incorporate into that kind of library story time and so we did some consultation. We designed that course and went to roll it out and, unfortunately, when we kind of launched it, we went straight back into another lockdown. When it came time for us to relaunch it, we actually realised there had been some changes in the sector with the new health and wellbeing framework launch and so libraries now actually have a directive to be embedding health and wellbeing activities into their library and we hadn't aligned our course with the framework because it was so new. So rather than just going "oh well" and trying to push the library framework back out. We [acknowledged] that actually what we need […] is making our training and resources something that helps the libraries achieve parts of their framework […] as opposed to just trying to have our own agenda and push our training and our partnerships onto a sector (Participant A).*
Enabler of OH promotion	*At the end of phase three we did "Brush Book Bed" and was new, it was different. We reached all the supported playgroup facilities […] and then the pandemic hit. So we've gone back to "Brush Book Bed" and redesigned it into something that was more about brushing teeth. Now we're complimenting that with a visit to the dentist and a separate sort of package on healthy eating (Participant C).*

Strategic direction	*As someone who missed the first implementation phase, the strategic plans and action plans really helped give context and give guidance (Participant C).*
Partnership	*Dietitians Australia had a real focus on interdisciplinary collaboration. So I think that was a change of direction in the way the partnership went together. Then just having regular meetings of that partnership group to check in, review the position statement, come up with [solutions for] challenges and come up with strategies for dissemination together as well (Participant A).*
	There was also a really strong desire from the working group to seek endorsements from key organisations who had been involved in the working group, but also other organisations who we thought that they have professionals […] that they are overseeing or reaching a professional group that we want these messages to stick with, so there were letters sent to the CEO's of these organisations requesting their endorsement – subsequently the position statement has been endorsed by several organisations which adds credibility to the whole document (Participant A)
	So we're using it with the pharmacy sector, we are now about to start working there and there's a working group that's in establishment at the moment. And I guess some of the lessons that I'm taking into those early discussions is that having a […] good governance structure for the working group would be very beneficial. To consider that the position statement is on kind of self-directed piece of resource that professionals can use, but it's not the only thing. And so to consider what other things that working group can be working on in addition to a position statement as well (Participant A).
	Through our partnership with Western Sydney University, they've got their own health unit for their midwifery courses and we've got a MoU [memorandum of understanding] with then and they've enabled us to share that curriculum with the Victorian Universities and help them to adapt it into the Victorian context and use that as evidence to say "oh, this works and we can help you do what they've done" (Participant B).
	Another partnership that's had some changes over this four year period has been the partnership that we've had with VACCHO and also some of the ACCOs and ACCHOs more broadly. I do believe that with the Aboriginal Community Development Officer role that was sitting between DHSV and VACCHO showed previously that role really helped us to start […] making some headway in that space. (Participant A).
	University curriculums don't get updated every year. So we need to be constantly engaging with them and trying to advocate for it [oral health] to be embedded so that when a curriculum review does come up, they've got a relationship with us, they know about us, they know

	that we can support that work, and that they've got enough information to see that as a good thing to do (Participant A).
Partnership-continuous improvement	*Each year, within the four year phases, we've just continued to learn more about the professionals that we work with [and] the settings that we work in so that's helped us to go back and review and adapt and refine and enhance our work. The plans help us focus our work […] and cycles of evaluation help feed into how we update it, change it, and then reimplement it (Participant C).*
	I rely on the consultation process that was done beforehand and that fed into creating something to meet that need. So I guess I feel more confident sharing it because we know we've done our due diligence in developing it (Participant C).
	The capacity that we have is extended because we can lean into the bigger team. We might, through our programs and conversations, come to understand a hard copy tip sheet isn't going to cut it because of [poor] literacy and so that helps us to go back to the drawing board and see what we can develop (Participant C).
Organisational commitment to OH promotion	*The benefit of that working group was that there were two key driving organisations, being DHSV and Dietitians Australia, but then input from those other organisations so it helped ensure there was […] multiple options and it wasn't just those two leading organisations just driving their own objectives. The input of those other organisations to make sure that what they [the position statement] were saying did align to the evidence and was considered best-practice across other organisations that are working in this space as well (Participant A).*
Engaging resources	*We had a table at the Maternal Child Health Conference a couple of weeks ago […] we had so many nurses come up to the table and looking at all our flyers and our resources and pointing out "I love that, I always use that". And then our newer Deadly Tooth Tips, which came out of that EPIC [Expansion of Prevention for Preschoolers] group that the wider health promotion team worked on. They were all really drawn to that, so I guess it's an achievement in that it's nice to know the resources work. But some of them created in prior phases, they're still working and they're still being loved and used by the professional groups, and that there is a passion among maternal child health nurses about oral health. That's probably also an achievement, being able to adapt and maintain our presence (Participant B).*
Limitations, challenges and areas of improvement	
Limitations	*The maternal and child health online course that we created, the easiest way for us to disseminate that to the sector, was to go through the Department of Health MCH program and use the partnerships we've established there to disseminate that course far and wide. As opposed to trying to go to each individual service and*

	knock on their door and say "hey, do you know that we've got this online course?", we need to have a communication strategy or promotion strategy that uses some of the newsletters, uses the existing resources where the professional is, so I think it's just changed the strategy a bit. But I actually think it's more efficient to have a bigger reach across the professional groups than what we've been able to have before (Participant A).
	We really wanted to engage in 2021 and […] we were thinking it might get rolled out in early 2022. But we really had to acknowledge that with the change of the way vaccines were delivered […] we really just had to go "this is not the right time to engage with the sector" and to put it on hold for a little while and just pick it up again later (Participant A).
	There is a lot of fatigue in Aboriginal health services, in particular consultation fatigue, so there is just a lot of consultation going on at the moment and it's hard to know when do we […] ask these questions and when […] it may not be appropriate for us to do that (Participant A).
	Services, especially health services – with COVID, they've been more overwhelmed with other high priorities, more kinds of policies and procedures that have been lumped on top of them. So perhaps some of these service-level engagements may not have actually even been possible amongst all that COVID impact anyway (Participant A).
Limitation – system constraints	*There are systems out there that would help us to not just monitor engagement with our promotion of new courses and promotion of new resources, so if we had better […] systems and tools that enabled us to monitor engagement, I think that would be very beneficial for us (Participant A).*
	The DHSV website, which is the […] avenue to learn about Healthy Families, Healthy Smiles program and to get resources and link to sector, or like, professional appropriate resources, is also not really meeting the needs of our program at the moment. So it would be really good to have a dedicated kind of website that really met the needs of our program […] with LMS or learning management system that enabled us to really manage and order our online course and understand how people are engaging with them. And it would be really good to have those newsletter engagement systems, customer relationship management sort of systems so that we are understanding those engagement strategies a lot better (Participant A).
Challenges	*With that Community Development Officer role [at DHSV] becoming vacant, it was really difficult for us to sustain our engagement with this sector (Participant A).*
Challenges with forming partnerships	*I think there's the potential for us to build stronger relationships with the peak bodies or key stakeholders across the sectors, but maybe less ability for us to form good service-level partnerships. Whereas*

	previously I'd say some of the relationships that the [HFHS] team might have been having with individual services were able to kind of, advocate and progress change at that level. Even though it might only be 5 services, but it may have been 5 services who have been able to implement a policy or be able to embed oral health as part of their systems. Then we can use then as examples of case studies for other organisations to try and motivate change, so I think there's benefits and challenges to either approach (Participant A).
Future directions	
	It's more sustainable for things to come from the policy level and having the funding and having the support – that is more sustainable (Participant B).
Explore new areas	*New sectors that I think we would really love to engage, but don't currently have the capacity, [include] newly arrived migrant, refugee asylum seeker populations. We know that there are professionals working with those populations and that just will take a little bit more time for us to understand the needs of those professionals, understand how they work with families, and then develop some sort of training package or resources to support their needs (Participant A).*
	We know that speech pathology would be a great sector to engage with, there are speech pathologists who specifically work with young children, and they are already looking in children's mouths, so we can see a lot of synergies between oral health and the work they're already doing. However, we also acknowledge that some of the engagement we've had with the speech pathology sector so far indicates a really strong desire to incorporate disability, understanding disability and oral health, and doesn't quite fit currently within the scope of Healthy Families Healthy Smiles. So, it just requires a little bit more thought, a little bit more engagement, and a little bit more capacity for us to do those programs justice (Participant A).
Partnership relationships	*It's really important to be meeting regularly and engaging with […] key stakeholders within the sectors that you're working with. You should always see partnerships as not being single project focused […] we should always be thinking about whether there's opportunities for us to look at what's next in that partnership. The Dieticians Australia partnership is a good example of, we didn't just do the position statement and then say "alright, our partnership is done". We looked forward at what else we could do to work together and support the oral health and nutrition sectors. The same with our partnership with VACCHO – it's a partnership for the long term (Participant A).*
Sustainability	*The constant change that's happened in all sectors over the last few years just highlights how important it is to […] be collaborating and co-designing your work with the sector because if you […] create a*

	program in isolation, you will not understand their needs. You will not understand the challenges and you will create something that is not accepted by the sector (Participant A).
Future direction and sustainability – enablers of change	*Maybe in previous years we've tried to mould people into champions. But I don't know if we need to be there to shape someone into that […] by the nature of what we do, it sort of just drives people to become their own champions (Participant B).*
	Do we create the champion or does the champion come to us? Facilitators that I lean on would be my champions in that setting […] they will give honest and constructive feedback […] but I feel like, once it's embedded into the systems and frameworks, or their policies, whatever, there's less of a need for specific champions because it's what they have to be doing anyway. It takes away the need for one specific person in the workforce to be driving the momentum (Participant B).

Appendix O: Evaluation Report for the Aboriginal Health Practitioner Fluoride varnish Pre-training course September 2022

Introduction

On 11 February 2022, Drugs and Poisons Regulations were amended to allow Aboriginal Health Practitioners (AHP) with appropriate training to apply fluoride varnish on children aged 3-17 who are clients of an Aboriginal Community Controlled Health Organisation (ACCHO) in Victoria. Department of Health has subsequently funded a project to train AHP and support ACCHOs to embed fluoride varnish application in their practice.

A consultation session held with the sector and key stakeholders identified that AHPs have little or no prior learning in oral health. As a result, a decision was made to offer a pre-training course to prepare AHPs with basic oral health knowledge prior to them undertaking the Apply Fluoride Varnish course.

A two-day training course was developed in partnership with DHSV and RMIT. The course was delivered in Bendigo on 12 and 13 September 2022.

An abridged version of DHSV's Bigger Better Smiles education package was delivered in the morning of Day 1 by Lauren Zappa and Allison Ridge from the Health Promotion Unit at DHSV. This content covered the importance of oral health, tooth decay process overview, key messages to protect oral health and making a referral to dental services.

Eleanor Schroeder from RMIT delivered more in-depth clinical information which covered mouth anatomy and recognising common oral health issues in the afternoon of day 1. Day 2 included a practical focus with a visit to a dental clinic to familiarise participants with the dental clinic environment, equipment as well as conducting a mouth check.

Of the 12 AHPs enrolled only eight were able to attend the training. Participants were from Mallee District Aboriginal Service (n=3), Murray Valley Aboriginal Cooperative (n=1), Njernda (n=2), Ramahyuck (n=1) and VACCHO (n=1).

Feedback on the training package

A post training evaluation was conducted with all eight participants completing the feedback form.

Participants were asked to rate their level of agreement with a series of statements about the training. All participants either strongly agreed or agreed that they had gained new knowledge and/or skills, that they intended to use this knowledge in their work and that they were more confident about applying what they had learnt to support clients they see as part of their practice.

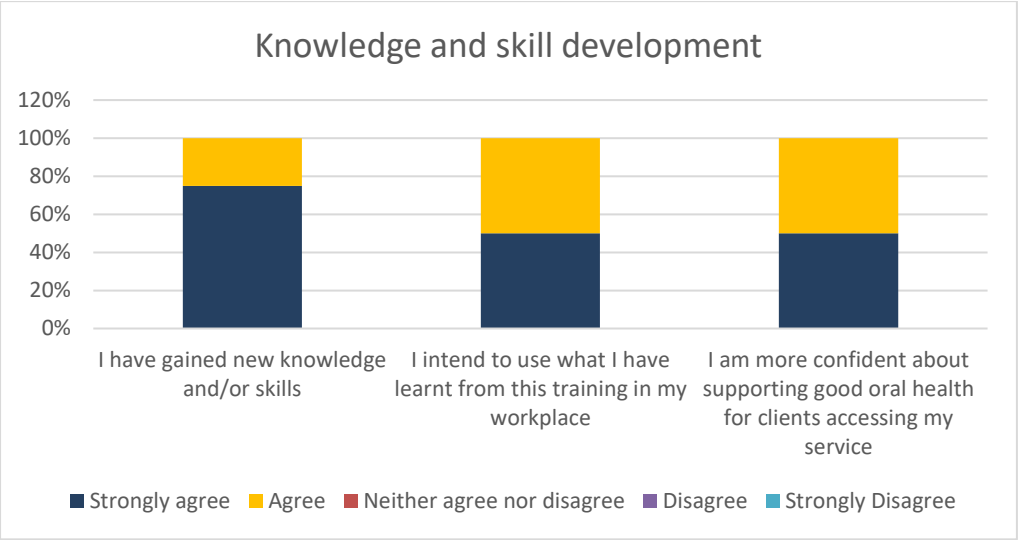

Figure 1 Participant feedback

All participants either strongly agreed or agreed that the training met expectations, was clear, sufficient and that they would recommend the training to others. Most (87.5%) either strongly agreed or agreed that the training was relevant to their practice and only one participant (12.5%) neither agreed or disagreed.

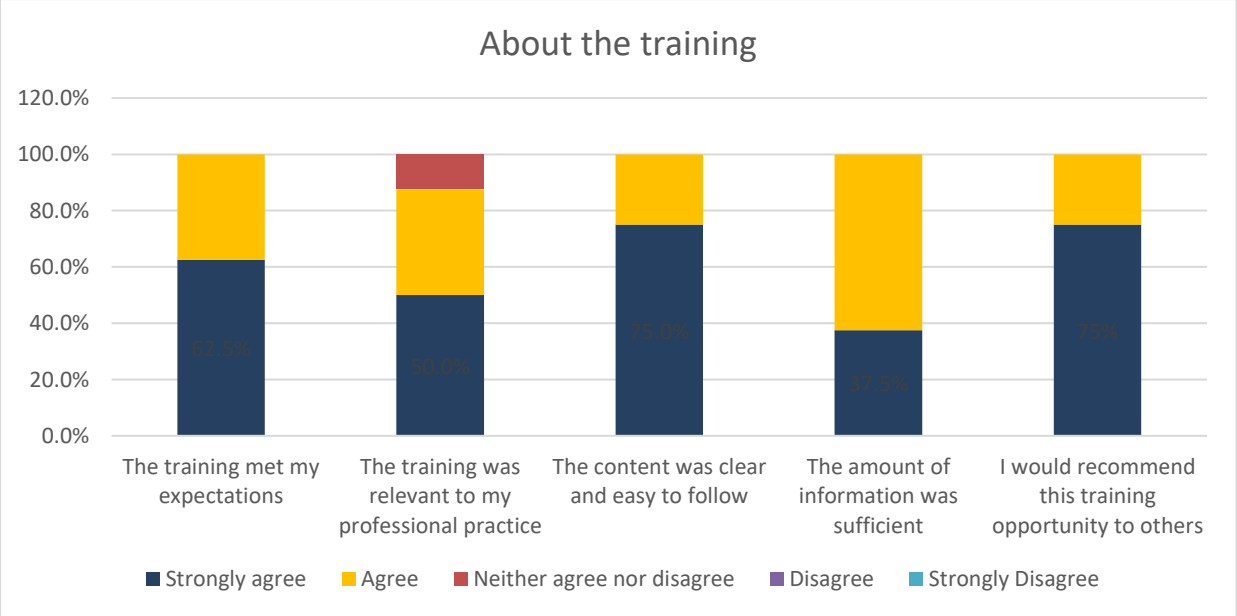

Figure 2 Participant satisfaction of the training

When asked about the **most useful parts of the training** several participants indicated all of the training was useful and some participants identified specific areas of the training ranging from health promotion to learning about mouth issues. One participant indicated that it was valuable to be in a group of peers to learn.

Responses:

- I found all parts of the training useful. Very clear presentation by presenters.
- Health Promotion
- Visuals of how the mouth can look
- Being with other AHPs as we all work under a similar model

- Just learning new things
- What different diseases look like on the tongue
- All of it as I haven't learnt about oral health before
- All of the training was useful
- The different types of issues with the mouth
- The whole training was very useful.

When asked about the least useful parts of the training seven of the eight participants (87.5%) responded. All of those that responded indicated that there wasn't anything that was not useful.

Responses:

- It was all useful information
- I found all the parts helpful as oral health training withing the AHP course is quite basic and doesn't go into depth.
- It was all useful
- None (x4)

When asked about suggested improvements, there were also seven responses most of which (6 out of 7) indicated there were no improvements needed. One respondent suggested including information to explain that few ACCHOs are funded to deliver dental services, and this is why prevention is not a strong focus for oral health.

Responses:

- I think it's important to explain that dental isn't funded in most ACCHOs which is why health promotion/preventative measures aren't undertaken?
- The training was good
- Nothing needs improving as it is very thorough

Translation to practice

All participants indicated that they found the training sessions to be useful for changing or informing professional and organisational practice. When asked to expand on this, comments focussed on the provision of knowledge, seeing the relevance to their role and remaining up to date with changes.

Responses:

- Yes, very useful, need upskilling annually for ongoing changes in regulations etc.
- I can now explain the importance of this program and how it fits in the 715 health check
- Just how to ask more question about the mouth
- I think it will be beneficial to do this in our clinics
- Will be able to use in our medical unit
- It gave a lot of education and awareness around dental hygiene
- Gives me confidence to give education to mob
- It gave the knowledge I wanted to know.

When asked how they would apply what they had learnt from this training in their daily practice or workplace, the majority of respondents indicated it could be incorporated into the health assessments (715 item code) they conduct with clients. Some also indicated educating their community, with promotion and events specifically mentioned.

Responses:

- Include in the 715's

- Promoting other AHPs to undertake the training
- Explaining it to clients and how it will benefit them
- By asking open ended question during a health check
- I would apply it in the health checks
- Health assessments and promotion
- When doing our 715 health checks and events
- During 715 health assessments
- Help mob understand the importance of oral health and to also educate mob.

Difficulties or barriers to promoting oral health to clients accessing their service were also explored. The five respondents that answered this question indicated gaps in knowledge about dental services among primary health care clinic or role definition, embarrassment and talking about oral health with clients without teeth.

Responses:

- Dental services within ACCHOs are very siloed so it's hard to provide wrap around services when the process isn't widely known in the primary health care part of the clinic
- Our dental team promotes oral health
- I have a bit of trouble with educating clients about gum health even if they have no teeth
- Embarrassment to have teeth checked

Only two additional comments were made in the general feedback, they were:

- I'll look forward to the RMIT visit
- I would love to see this course become part of the actual AHP course as it makes sense for it to be embedded in practice.

Staff observations

Feedback from participating AHPs indicated that their role focussed mainly on older children and adult populations, however the scope of the training and legislation allowed application on children 3-18 years. Contextualising the oral health promotion capacity building with how AHP can partner with other programs and professionals within their ACCHO to engage with early years may be useful for future iterations of the program.

The interactive group work was well received, and it was observed that more reserved members of the group engaged more in the smaller groups, however this mode of learning requires time for effective learning.

Conclusion

The training was well received with very positive feedback provided through the formal feedback forms. Observations were made by staff involved in the development and delivery of the training about changes that could be made to improve the learning experience.