

## Collaborative partnership to implement oral health care into primary health care

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Good afternoon and thank you for his opportunity to present our early childhood oral health program.

We would like to respectfully acknowledge the Traditional Owners of the land on which this conference is taking place and show our respect to the Elders past and present.

We would also like to respectfully acknowledge the Traditional Owners of the lands on which we provide our services.

We would also like to acknowledge:

- Oral Health Services Northern Territory, who developed the Healthy Smiles training program
- Royal Flying Doctor Service (Queensland Section), Health Services supporting the implementation and provision of the program to rural, remote and very remote areas of Queensland
- This Project has been funded by the Australian Government through a Rural Health Continuing Education Stream Two grant administered by the National Rural Health Alliance.

### Introduction and background

The Declaration of Alma-Ata states that primary health care is essential health care based on scientifically sound and socially acceptable methods, universally accessible to individuals and families with their full participation at a cost that the community and country can afford in a spirit of self-reliance and self-determination.

The ultimate goal of primary health care is better health for all.

WHO (World Health Organisation) has identified five key elements to achieving that goal:

- reducing exclusion and social disparities in health (universal coverage reforms);
- organising health services around people's needs and expectations (service delivery reforms);
- integrating health into all sectors (public policy reforms);
- pursuing collaborative models of policy dialogue (leadership reforms); and
- increasing stakeholder participation.

The most up to date universal thinking strongly advocates that 'health' should be inclusive of oral health; something not traditionally embraced by the general health sector.

Historically, the medical and dental professions have operated fairly exclusively within their own self-regulated and specific realms of patient health management with minimal acknowledgment or understanding of the complexities of the link between good oral health and good general health.

However, it is now becoming more widely accepted that an integrated partnership approach is needed to reduce the dental and oral disease rates of Australians. Improving both people's oral health and oral health literacy will substantially assist in minimising the suffering and financial burden of chronic health conditions like diabetes, renal and heart disease, Chronic Obstructive Pulmonary Disease, and premature and low birth weight babies. All of which have been shown to be directly linked to the virulent anaerobic bacteria present in infected gums. (Marinho VCC, Higgins JPT, Logan S, Sheiham A. 2009 Cochrane Review). Improving the appalling decay rates in young children, particularly

Indigenous children by engaging Primary Health Care (PHC) professionals - Child and Family Health Nurses and Aboriginal and Torres Strait Islander Health Practitioner's in particular, as the first point of contact has formed the core focus of the Healthy Smiles – Oral Health and Fluoride Varnish Training Program for Health Professionals.

### Northern Territory Healthy Smiles Program

In 2011 Oral Health Services Northern Territory, with funding from Colgate Oral Care, designed and developed a comprehensive training package for Primary Health Care practitioners working in remote areas of the Northern Territory called the Healthy Smiles – Oral Health and Fluoride Varnish Program.

The training package provides registered health practitioners with the underpinning skills and knowledge to:

- identify oral disease in young children and establish appropriate referral pathways
- assess oral health risk and provide guidance for parents and carers
- apply fluoride varnish as a preventive strategy to the teeth of children from the age of 18 months up to 4 years, and to
- document the information within a recognised early childhood health care plan.

The Healthy Smiles Program is a population health program, based on a continuum of preventive oral health care and the Package can be easily modelled for other remote jurisdictions areas outside the Northern Territory, such as has been done by RFDS Qld.

According to Australia's National Oral Health Plan 2004-2013:

- Aboriginal children have around twice the amount of the caries (decay) compared to non-Indigenous children of similar ages
- Aboriginal adults have more missing teeth and their gum (periodontal) health is worse than their non-Indigenous counterparts
- gum (periodontal) disease is evident earlier in young Indigenous adults.

General anaesthetics are the single most common reason for admission to hospital for children under 5 years of age in Australia.

If we can improve both people's oral health and oral health literacy, substantial gains can be made in minimising the suffering and financial burden of diabetes, renal and heart diseases, Chronic Obstructive Pulmonary Disease and premature and low birth weight babies; all conditions that are directly linked to the virulent anaerobic bacteria present in the infected gums of people with periodontal or gum disease. (Australian Institute of Health and Welfare, 2007).

Periodontal disease is an insidious disease that can progress silently from adolescence onwards. Lack of awareness, lack of diagnosis and treatment can result in these bacteria spilling over into the bloodstream, compromising the immune response of our blood vessels and other organs.

If we are to impact on the appalling decay rates of young indigenous children in remote communities, early intervention is critical. Due to the difficulty, Australia wide, in providing regular oral health care services to remote areas, the engagement of non-oral health professionals as the first point of contact is necessary. It is the child health nurses, Aboriginal and Torres Strait Islander Health Practitioners, paediatricians and medical practitioners that are in a position to deliver this early intervention and preventive oral health strategies much earlier in people's lives.

There have been a number of the other factors that were behind the development of the Healthy Smiles Program

## Trends in dental decay rates

- gradual decrease in decay rates of Australians post WW II
- further decreases with introduction of water fluoridation in the 50s and fluoride toothpastes in the 60s and 70s
- dietary and social changes of the 80s and 90s (such as working parents, greater access to high sugar fast foods)
- sharp increase (21%) in decay rates of 5 year olds between 1996-9
- rates have continued to rise.

In 2006-8 Menzies conducted a randomised controlled trial in remote aboriginal communities in the NT called the Strong Teeth for Little Kids Project. The project aimed to gauge whether 6 monthly applications of fluoride varnish by oral health professionals could impact on the substantial decay rates of Indigenous children. (Menzies School of Health Research, 2006-2008).

Results showed a significant reduction in caries of approximately 30%, reflecting results from many other international studies from Canada, USA Brazil and Europe supporting the efficacy of fluoride varnish.

In 2009, not long after the Menzies study, the NT's Department of Health developed a series of standardised health checks called the Healthy Under 5 Kids Well Child Health checks. In acknowledgement of the importance of good oral health from an early age, a number of oral health components were included in these health checks.

The checks included a Lift the Lip oral health check and risk assessment, the provision of age relevant oral health messages to parents and the preventive application of fluoride varnish for children aged 18 months up to 4 years. The inclusion of oral health into the broader primary health care regime was certainly a big step in the right direction as it recognised that primary health care staff were the first point of contact for professional assessment and advice for people in remote communities.

With the inclusion of these oral health components into well child health checks, health staff needed training to identify dental and oral disease, to provide appropriate oral health advice and develop the clinical skills and knowledge to safely and effectively apply fluoride varnish.

The Healthy Smiles training package and resources was developed to comply with the National Industry Skills Council and Australian Quality Training Framework as a nationally accredited Certificate IV unit of competency (HLTOHC408A - Apply fluoride varnish).

In February 2012, the two-day face-to-face theory and practical workshops commenced in Darwin with the theory modules released as an online package in June 2013. It is the online package that has been adopted and adapted by RFDS Qld for their unique health service delivery.

## Queensland Healthy Smiles Program

The Queensland Child Oral Health Survey 2010-12 was conducted by Queensland Health in collaboration with The University of Adelaide with over 5,000 Queensland children aged 5 to 14 years.

The Report shows substantial differences between the levels of primary tooth decay in long-term fluoridated Townsville (at 39% of decay) and the previously non-fluoridated rest of north Queensland (at 57% of decay).

Other key findings were:

- One in 3 children aged 5-6 years old have never visited a dentist.

- Almost half of the state's 5-10 year olds have had decay in their primary teeth.
- Over a quarter of 6-14 year olds have had decay in their permanent teeth.
- Only three-quarters of children brush their teeth the recommended twice a day.

Similarities to previous research were also observed.

In mid 2013, Queensland approached the Northern Territory regarding the Healthy Smiles program, having recognised the value of the package and in partnership with Northern Territory developed the program to suit Queensland requirements. PHC services are offered from Charleville and the south west; Mount Isa, the western border and Lower Gulf; and Cairns Hinterland, Cape York and the Tablelands west of Townsville.

In November 2013:

- RFDS Queensland partnered with Northern Territory Oral Health Service to access the Healthy Smiles training and education package
- The Nurse Manager PHC Education, RFDS (Queensland) completed training as the Queensland Healthy Smiles Program Coordinator
- Contacted the Office of the Chief Dental Officer for Support in the implementation of fluoride varnish into rural and remote Queensland Health PHC Clinics
- Reviewed Queensland Health (Drugs & Poisons) Regulation 1996 and Therapeutic Goods Administration for access and use of Duraphat (Fluoride Varnish) by authorised non-dental health professionals. As Duraphat was not listed in the Qld Health Act (Drugs & Poisons) Regulation 1996, an application was made to Queensland Medicines, Regulation and Quality for a Section 18(1) Exemption to provide fluoride varnish by authorised providers.
- Sought funding through Rural Health Continuing Education Scheme to assist with the education and training of primary health care professionals by accredited dental professionals
- The Healthy Smiles program is supported by RFDS Mobile Dental Unit and local QH dental teams
- Commenced incorporating fluoride varnishing into Queensland's Well Child Health Checks being provided by RFDS in rural and remote communities

In Queensland, delivery of the Health Smiles program is through the on-line training program and face to face competency workshops. It includes a Training Manual, CD with pre-reading activities and additional readings which provide culturally appropriate information and resources for health promotion activities.

In April 2014, this program commenced for two RFDS (Qld) PHC Nurses, three Queensland Health PHC nurses and one Indigenous Health Worker, and was facilitated by the Northern Territory Oral Health Service accredited trainer. These registered non-dental health practitioners completed competency assessment workshop to become Authorised Providers of Fluoride Varnish.

By October 2014, there were 10 non dental health professionals who are Authorised Providers of Fluoride Varnish. Within RFDS (Qld), there are four registered nurses about to complete their competency workshop and a further six will commence the online training, followed by competency workshops to be facilitated in their local area. Training is also being offered to Queensland Health and Non Government Organisations working with families in rural and remote areas of Queensland.

As this is a preventive population health program and not treatment for decay, participating non-dental health professionals will complement local dental teams to promote the oral health programs and early intervention and referral for oral health care to children in Indigenous rural and remote communities as part of their clinical practice. (Australian Institute of Health and Welfare, 2007).

Currently, all workshops are facilitated by the Northern Territory Oral Health Service accredited dental health professional with assessment skills training (Cert IV Training & Assessment and Vocational Skills Supervisor training).

While there was support in principle by Medical Officers, Paediatricians and Queensland Health Oral Health Services, a number of challenges were raised from areas within the health services.

- Training relied on the Northern Territory Oral Health Service to provide the Program. Queensland did not have any oral health practitioners available or trained to provide competency assessment workshops
- Duraphat – the fluoride varnish product used – is listed by the Therapeutic Goods Authority and MIMS as an unscheduled drug
- Duraphat is not listed in the Queensland Health Act (Drugs & Poisons) Regulation 1996 and had been grandfathered for future review. Some oral health professionals expressed concern that the program may contravene the Queensland Dental Act in regard to the use of Duraphat by non dental health professionals and it needed to be prescribed by a dentist or medical officer
- Underlying this was the potential concern for professional boundaries, accessing, supplying and using Duraphat.
- This uncertainty resulted in the use of Duraphat being put on hold while further investigations were undertaken.

To address these and the future sustainability of the Program in Queensland we

- Reviewed the Queensland Dental Act in consultation with the Queensland Health Office of the Chief Dental Officer. Along with completion of the Healthy Smiles Program and successful completion of the competency assessment workshop, there was no issue with the Dental Act and approval was given to implement the Healthy Smiles Training Program.
- Discussions continued with the Queensland Health Office of the Chief Dental Officer to support for the program in local Hospital and Health Services through training of oral health professionals to obtain a Cert IV TEA Training and Assessment and Vocational Skills Supervisor training to enable facilitation of competency assessment workshops locally.
- In consultation with Medicines, Regulation & Quality, Therapeutic Goods Authority and Queensland Health Office of the Chief Dental Officer we reviewed the Qld Health Act (Drugs & Poisons) Regulation 1996 and submitted an application for an exemption to section 18(1) to obtain, possess and administer Duraphat. Approval to obtain, possess and administer Duraphat has been granted for 2 years. It is equivalent to a Schedule 2 Drug.
- Consulted with Australian Dental Association Queensland to investigate the options for participation in the Healthy Smiles Program and ability to provide an appropriately qualified trainer to participate in Vocational Skills Supervisor training.
- Applied for funding through the National Rural Health Alliance (NHRA) to support and progress the training program for non-dental health professionals.

Funding has been received through Remote Health Continuing Education administered by the NHRA to:

- continue training and competency workshops for non-dental health professionals working with young children in rural and remote areas of Queensland

- provide four (4) x Certificate IV TAE Training and Assessment opportunities for eligible oral health practitioners in Charleville, Mount Isa and Cairns Queensland Hospital and Health Service areas
- Vocational Skills Supervisor training for five (5) oral health practitioners

## Summary

As part of Closing the Gap Initiatives, the Healthy Smiles Program meets the National Partnership Agreement on Closing the Gap on Indigenous Health Outcomes providing targeted Aboriginal and Torres Strait Islander services, and awareness of and access to health measures to better promote their health and wellbeing, in particular dental caries.

The Oral Health Program will provide expansion of PHC services at low cost and will be an extension of basic oral health services – teeth cleaning and ‘Lift the Lip’ - delivered as part of our everyday child and family health program.

It will grow our primary health and oral health care services in rural and remote areas, enhance our relationships with our partners and facilitate high quality oral health care services to rural, remote and regional Queenslanders.

At the same time, we will continue to work with and maintain a collaborative partnership with all of our relevant health stakeholders.

## Recommendations

Using the Healthy Smiles Training Program (Qld), Queensland Health and the Office of the Chief Dental Officer fund Oral Health Services in rural and remote areas of Queensland to include fluoride varnishing as part of the well child health check provided by trained non-dental health professionals, by June 2016.

To sustain the Healthy Smiles Program in Queensland

- Registered oral health practitioners in Queensland obtain a Certificate IV TAE Training and Assessment qualification and Vocational Skills Supervisor Training to provide competency assessment workshops for non-dental health professionals who have completed the on-line Healthy Smiles Program
- Lobbying by the NRHA to promote the need for preventive and improved oral health programs in rural, remote and very remote areas in Queensland, particularly for under five year olds.

## Closure

Thank you for your time today and we are happy to take any questions you may have.

## References

Australian Institute of Health and Welfare 2011. Dental decay among Australian children. Research report series n0 53. Cat. no. DEN 210. Canberra: AIHW

Australian Institute of Health and Welfare 2014. Oral health and dental care in Australia: key facts and figures trends 2014. Cat. no. DEN 228. Canberra: AIHW.

Christian B, Blinkhorn A S. A review of dental caries in Australian Aboriginal Children: the health inequalities perspective. *Rural and Remote Health* 12: 2032. (Online) Available <http://www.rrh.org.au>

Department of Health Northern Territory 2011. Oral Health Promotion Plan 2011-2015. Available [www.healthynt.nt.gov.au](http://www.healthynt.nt.gov.au)

Department of Health, Northern Territory 2011. Healthy Smiles. Oral Health and Fluoride Varnish Information for Health Professionals. Available [www.healthynt.nt.gov.au/](http://www.healthynt.nt.gov.au/)

<http://www.health.nt.gov.au/>

Do LG and Spencer AJ (Editors) 2014. The Beginning of Change: Queensland Child Oral Health Survey 2010-2012. Available at <http://www.health.qld.gov.au/research-reports/reports/oral-health/default.asp>

Marinho VCC, Higgins JPT, Logan S, Sheiham A Fluoride Varnishes for preventing dental caries in children and adolescents. *Cochrane Database of Systematic Review* 2002

Menzies School of Health Research (2006-2008) STLK Project.

National Advisory Committee on Oral Health (2004) Healthy Mouths, Healthy Lives: Australia's National Oral Health Plan 2004 – 2013.  
<http://www.adelaide.edu.au/arcpoh/publications/reports/national-oral-health-plan/>

Queensland Oral Health Service. Available <http://www.health.qld.gov.au/oralhealth/>

Paediatrics Volume 134, Number 3, September 2014. Downloaded 27 September 2014

## Presenters

**Margaret Dawson** is a registered nurse and midwife with qualifications in Community Health, Child and Family Health, Endorsed Nurse Immuniser (Qld) and Health Promotion and Education. She also holds Certificates IV in Training and Assessment and Project Management. Margaret's main focus of her professional career has been providing primary health clinical services in Community Child and Family Health in urban, rural and remote areas of Victoria, New South Wales and Queensland. She brings a broad range of skills and knowledge to her current role with the Royal Flying Doctor Service (Queensland Section). As the Nurse Manager Primary Health Care Training, she provides training and support to the state-wide Primary Health Care Programs, including child and family health and chronic disease, delivered from Cairns, Charleville and Mount Isa Bases to rural and remote communities in Queensland. She is an active member of the Northern Child and Youth and Maternity and Neonatal Clinical Networks, State-wide Maternity and Neonatal Clinical Network and Queensland Immunisation Program Partnership Group. Margaret is a wife, a mother of 2 adult children and Nan to three beautiful grandchildren.

**Jo Leonard** graduated as a dental therapist in Adelaide in 1975, moving to Katherine in the Northern Territory in February 1999 and then to Darwin in 2001. After decades of delivering clinical dental services from transportable dental chairs on the verandahs of remote cattle stations, single operator caravans in outback SA, health clinics in Indigenous communities, school based dental clinics and from the collaborative environments of urban poly clinics and hospitals, Jo took a professional U turn in 2012 taking on the role as the Oral Health Promotion Officer within Oral Health Services NT. Enjoying a new focus and involvement with the development and implementation of **preventive** oral health strategies after decades of confronting the traumatic repercussions of oral disease in remote children of the NT, Jo took on the role of the Training Coordinator for the recently launched Healthy Smiles Training Program. Since September 2012 Jo has coordinated and delivered training workshops for this nationally accredited course for primary health care professionals across the Northern Territory. After the value of the training was recognised by the Royal Flying Doctor Service/Queensland, Jo was pleased to be able to provide the inaugural face-to-face training for RFDS staff in 2014.