

NATIONAL ORAL HEALTH POLICY AND STRATEGY















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2024 - 2034

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LIST OF ACRONYMS

AIDS Acquired Immune Deficiency Syndrome

APP Annual Performance Plan
ART Atraumatic restorative treatment

ANC Anti-natal clinics

CHCs Community health centres
CHW Community health worker

COM Dent Community dentist

CPD Continuing professional development
DAASA Dental Assistants Association of South Africa

DHIS District Health Information System

DMFT Decayed, missing and filled teeth (permanent dentition) dmft decayed, missing and filled teeth (primary dentition)
DENTASA Dental Technicians Association of South Africa

DPA Dental Professionals Association
ECD Early Childhood Development
EBD Evidence-based dentistry

FS Fissure sealants

HIV Human Immunodeficiency Virus

HMIS Health Management Information System
HPCSA Health Professions Council of South Africa
IEC Information, education and communication
ISHP Integrated School Health Programme

M and E Monitoring and Evaluation
MCH Maternal and child health
MFOS Maxillo-facial and oral surgery

MINMEC Minister and Members of Executive Council

MRC Medical Research Council
MSC Medical Schemes Council

MTEF Medium Term Expenditure Framework

NCDs Non-communicable diseases
NDP National Development Plan
NFC National Fluoridation Committee
NGO Non-governmental organisation

NHANES US National Health and Nutrition Examination Survey

NHC National Health Council
NHI National Health Insurance
NIDS National Indicators Data Set

NMHCP National Minimum Healthcare Package NOHP and S National Oral Health Policy and Strategy

OC Oral cancer

OECD Organisation for Economic Cooperation and Development

OH Oral health

OHASA Oral Hygienists Association of South Africa
OHSC Office of Health Standards Compliance

OHTI Oral Health Training Institutions [these will include dental schools and universities of technology]

PFMA Public Finance Management Act

PHC Primary Healthcare

SADA South African Dental Association

SADHS South African Demographic Health Survey
SADTA South African Dental Therapists Association
SALGA South African Local Government Association
SANOHS South African National Oral Health Strategy

SAQA South African Qualifications Authority

UHC Universal health coverage
UPFS Uniform Patient Fee Schedule
WHA World Health Assembly
WHO World Health Organization

WISN Workload indicator for staffing needs

FOREWORD BY THE MINISTER



Dr J Phaahla, MP Minister of Health

This policy and strategy are a continuation of the South African National Oral Health Strategy (SANOHS) that was approved by MinMec in 2002 and which only focused on primary oral healthcare services. This policy and strategy expand to secondary and tertiary oral services.

The World Health Organization (WHO) endorsed a resolution that recognises that oral health is an integral part of general health. This resolution has far-reaching implications on how oral health policy, services and programmes are developed for the country. Evidence from the South African Demographic Health Survey (SADHS), Oral Health Survey and other published data involving South African cohorts reveal that oral diseases are a silent epidemic that is especially prevalent among the most vulnerable groups (children, elderly and the poor)^{2, 3, 4}. Tooth decay (dental caries) is the most common condition affecting children in South Africa and it affects 60 per cent of six-year-old children's primary teeth².

The WHO states that oral diseases affect almost every individual during his or her lifetime, resulting in pain, discomfort, increased expenditure on treatment, loss of school days, reduced productivity and work hours, and some degree of social stigma^{1, 5-10}.

The WHO further states that the high cost of dental care has an impact on oral and general health and its effect on the quality of life warrants a paradigm shift in terms of policies and strategies to reduce the burden of oral disease present in our communities.^{5, 10}.

The National Development Plans (NDP) Vision 2030 has set out nine long-term health goals for South Africa, five of which relate to improving the health and well-being of the population¹¹. Oral health contributes immensely to overall health and therefore to the achievement of the NDP health goals. This policy and strategy put emphasis on improving access to oral health services, strengthening preventative oral health services and development of fit-for-purpose oral health professionals. These attributes will contribute towards the attainment of the NDP and NHI goals and plans.

Oral health is therefore an important public health concern that requires an explicit, effective and a comprehensive approach¹². Therefore, the strategy that is part of this policy outlines the package of oral health services that will be offered in the public sector at different levels of care.

DR MJ FHAAHLA, MP MINISTER OF HEALTH

DATE: 07/06/2024

COMMENTS BY THE DEPUTY MINISTER



Dr S Sibongiseni Dhlomo Deputy Minister of Health

Oral health and general health share common risk factors related to non-communicable diseases (NCDs) namely, poor diet (especially excessive sugar consumption), use of tobacco, and the excessive consumption of alcohol^{5, 7, 13}. The solutions to control oral diseases are found through shared approaches with integrated chronic disease prevention.

Oral diseases and conditions, including oral cancer, periodontal diseases, oral manifestations of HIV and AIDS, dental traumas, craniofacial anomalies, and Noma (cancrum oris) are becoming important public health concerns mainly due to the broad impact on oral health and well-being of individuals and cost of treating these conditions^{5, 13}.

The National Oral Health Policy takes cognisance of the WHO Global Goals for Oral Health 2020, World Health Assembly resolutions 60.17 of 2007, 74.5 of 2021 and Africa Regional Oral Health Strategy 2016–2025 and supports the recommendations that prioritise evidence-based approaches.

South African oral health programmes are aligned with the global and regional priorities, however the following are identified as areas that need strengthening:

senior citizens, institutionalised persons and persons with disabilities

TB, STIs and oral health

oro-facial trauma, including child abuse trauma

shortages and maldistribution of resources

This document will provide a framework for the adoption of priority strategies, target groups and indicators which can be used by provinces and districts to refine operational plans that reflect the philosophy of oral care at a national level. Furthermore, this document aims to highlight national priorities that can be used by provinces and districts when developing operational plans to implement the policy.

Mohonimo

DR SIBONGISENI DHLOMO, MP

DEPUTY MINISTER OF HEALTH

DATE: 06/06/2024



Dr SSS Buthelezi Health Director General

ACKNOWLEDGEMENTS BY THE DIRECTOR-GENERAL

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A special thanks goes to the oral health voluntary associations such as the Oral Hygienists Association of South Africa (OHASA); Dental Technicians Association of South Africa (DENTASA); Dental Assistants Association of South Africa (DAASA); Dental Professionals Association (DPA); South African Dental Association (SADA); and South African Dental Therapists Association SADTA. A word of appreciation to representatives of the Universities of Technology (Tshwane University of Technology, Central University of Technology, Cape Peninsula University of Technology and Durban University of Technology), Committee of Deans representative, South African Dental Technicians Council (SADTC) representative and Health Professions Council of South Africa (HPCSA) representative. Their contributions, comments and inputs enriched the policy and strategy formulation immensely.

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The National Oral Health Policy and Strategy will serve as a framework to guide the implementation of oral health services and programmes in South Africa, provide guidance to provincial health departments, district health, the private sector, dental schools and all stakeholders who are charged with the responsibility to provide oral health services.

It is envisaged that the National Oral Health Policy and Strategy will improve the coordination of oral health services in South Africa, guide appropriate oral health professional training and delivery of coherent systematic oral health services in the country.

DR SSS BUTHELEZI

DIRECTOR-GENERAL: HEALTH

DATE: 30/05/2024

EXECUTIVE SUMMARY

Poor oral health impacts individuals in various ways. Many conditions cause pain, affect quality of life, reduce school and work productivity and the required care results in a significant financial burden to healthcare systems and those concerned^{1, 14}.

Oral health is affected by a wide range of social determinants, which the WHO defines as 'the circumstances in which people are born, grow up, live, work and age'. In turn, these are influenced by wider socioeconomic and political circumstances"².

Oral health is poorly integrated into other health programmes. Its role in management and care of communicable diseases, genetic disorders, trauma, injury and violence is often overlooked.

This policy provides a framework for population-wide initiatives to promote oral health, customise and deliver locally relevant and effective oral health strategies, including categorising the package of services to be delivered at different levels of care.

The policy provides a framework for monitoring and evaluating the effectiveness of strategies implemented to improve oral health and outlines an ongoing process of strategy review and development.

This policy and strategy aim to achieve the following objectives:

facilitate inclusion of oral health into general health and NCDs strategies at all levels of care

outline roles and responsibilities of oral health role players at various levels of care and management

increase of access and equity to oral health services

guide the development of oral health professionals who are suited for oral health needs and demands of the general population

The document is divided into two sections, section one focuses on background, rational and policy related aspects; section two focuses on strategies and activities to achieve the policy objectives. Successful implementation of this policy and strategy will require streamlining of resources.



SECTION 1: ORAL HEALTH POLICY

1. INTRODUCTION

This policy and strategy are a review of the South African National Oral Health Strategy (SANOHS) that was approved by MinMec in 2002 which only focused on primary oral healthcare; thus, the current policy and strategy expand to secondary and tertiary oral services.

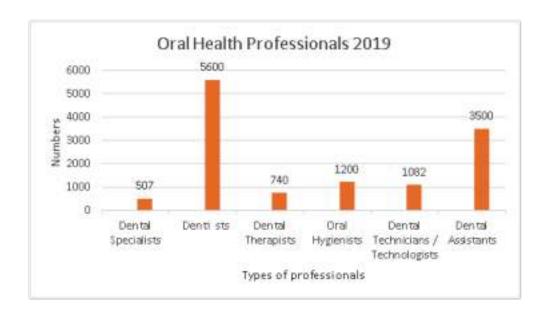
Despite great achievements in oral health globally and in South Africa, oral disease in general remains a challenge, especially dental caries, and periodontal diseases^{2, 5, 8, 9}. Under-privileged groups in low and middle income countries are the most affected⁸. The distribution and severity of oral diseases vary in different parts of the world and within the same country or region¹⁴. A number of epidemiological surveys have outlined the role of socio, economic, behavioral and environmental factors in the oral disease distribution¹. Poor oral health impacts individuals in various ways, many conditions cause pain, affect quality of life, facial appearance, malnutrition due inability to chew food, reduce school and work productivity and the required care results in a significant financial burden to healthcare systems and those concerned^{1, 14}.

Oral health is affected by a wide range of social determinants, which are defined as the circumstances in which people are born, grow up, live, work, age and die¹⁵.

1.1 PROBLEM STATEMENTS

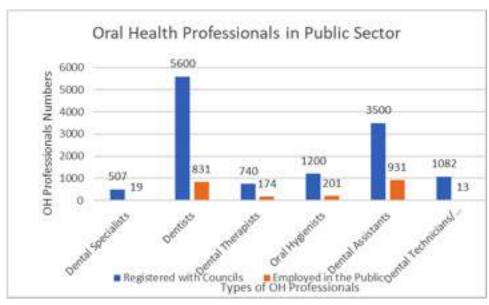
- Oral health is poorly integrated in other health programmes though it is an integral part
 of general health. Its role in management and care of communicable diseases, genetic
 disorders, trauma, injury, and violence is often overlooked.
- Inefficient implementation of oral health service standards due to lack of prioritisation of oral health coordinators at various levels of care resulting in delays transmission of oral health information and monitoring of services.
- Non-categorisation of oral health services into the various levels of care, resulting in services not adequately budgeted for at secondary and tertiary levels.
- Non-alignment of the training of oral health professionals to the oral health needs and demands of the country. For example, for the past five years, the data from five oral health training schools and dentists community service allocation indicate that there are 960 dentists, 375 oral hygienists and 165 dental therapists that have qualified during this period. Confirming the disproportionate training of oral health professionals, resulting in dentists being placed at primary healthcare facilities to provide primary healthcare services that could have been provided by primary healthcare employees in a cost-effective way.
- a) There is a greater need for primary care services than secondary and tertiary services. The available dental assistants are mainly used to assist dentist and not available for PHC services.

Graphic 1 - Oral Health Professionals 2019 16



b) There is a shortage of oral health specialists in the tertiary hospitals, due to the limited availability of training institutions; only two provinces that have dental schools train dental specialists and the budget is from these two provinces, thus limiting access for specialised training.

Graphic 2 – Oral Health Professionals in Public Sector 16



2. RATIONALE

2.1 Epidemiology

2.1.1 Oral disease burden

Oral conditions and diseases remain a population-wide health challenge and require a population-bases and multisectoral approach.¹⁷⁻¹⁹. Untreated tooth decay is the most prevalent of the 291 conditions mentioned in the international burden of diseases study between 1990 and 2010^{8,14}.

This is the most authoritative estimation of global disease burden and serves as a basis for health policy planning and resource allocation¹⁴.

Gingivitis and periodontitis are estimated to affect between five and 20 per cent of populations around the world and periodontitis was found to be the sixth most common gingival condition²⁰⁻²². Gingivitis and periodontitis are also the major cause of gum bleeding with periodontitis and dental caries considered to be the major cause of tooth loss^{20, 21}.

Oral cancer especially, squamous cell carcinoma is among the ten most common cancers in the world and even more prevalent in South-Central Asia with numbers expected to rise due to increasing tobacco and alcohol consumption^{14, 23, 24}. Squamous cell carcinoma is the most aggressive malignant cancer with a high mortality rate of the oral cancers especially, in disadvantaged communities in Sub-Saharan Africa²⁵.

Oral cancer in particular the squamous cell carcinoma is also prevalent in South Africa especially among men who smoke²⁴. In South Africa squamous cell carcinoma is the fifth most common cancer in men and tenth common cancer in women²⁴. Due to its late diagnosis because patients seek help when the cancer has already metastasised to adjacent lymph nodes the survival rate to squamous cell carcinoma is very poor, up to five years²⁶.

More than 50 per cent of patients diagnosed with human immune-deficient virus (HIV) will present with oral conditions such as oral candidiasis, necrotising ulcerative gingivitis and Karposi sarcoma which are among the early and important indicators of HIV infection^{14, 27}, ²⁸. Oral candidiasis (thrush) is the prevalent oral manifestation of HIV especially in children and babies²⁷. A study done in South Africa in 2003 found that Karposi Sarcoma was the early oral disease manifestation in 64 per cent of the adult patients diagnosed with HIV infection²⁹.

Although NOMA is rare in South Africa, in the poorest areas of Sub-Saharan Africa tens of thousands of children are still affected by it⁵.

Cleft lip and palate is the most common congenital abnormality that affects oral structures in infants or babies in South Africa³⁰. This condition impacts on the infant's ability to suck form the breast or bottle feed. The prevalence of cleft lip and palate in South Africa is fairly low at a rate of 0.3 per 1 000 live births³¹. Cleft lip and palate are very stressful conditions for both the mother and the baby because the baby cannot feed and to the mother the baby looks abnormal.

Cleft lip and palate are easy to manage and repair if the baby is brought to the health facility on time. Orthodontic palate seal plate can be constructed to seal the cleft in the palate so that the baby can suck milk from the breast or bottle.

If cleft lip and palate are left untreated they can lead to an abnormal development of maxilla, teeth and face. Untreated cleft lip and palate can lead to social stigma due to the child's facial appearance. This facial appearance can have a big impact on a child's self-esteem, self-confidence, school performance and social interaction with other children.

2.1.2 Cost of treating oral diseases

The WHO estimates that oral diseases are the fourth most expensive diseases to treat¹⁴. Annual spending on oral healthcare in the 27 European Union member states was estimated at €79 billion (annual average 2008 to 2012), while the United States of America (USA) alone spent more than US\$110 billion¹⁴. Dental expenditure also plays a significant part in household medical spending. Across Organisation for Economic Cooperation and Development (OECD) countries, average out-of-pocket payment for dental care represents about 55 per cent of total dental care expenditure, compared to an average of 20 per cent out-of-pocket spending for general healthcare¹⁴.

In South Africa most dental care is provided by dentists, dental therapists and oral hygienists in public oral healthcare facilities and private dental surgeries. Public healthcare facilities see more patients than the private health facilities. In the primary health facilities oral health services are provided for free to the patients. These services are State funded at a cost of R650 million using the Uniform Patient Fee Schedule (UPFS) 2018 prices. More than three million patients are treated in the public primary healthcare facilities annually³².

In the Medical Schemes Council (MSC) report, less than 30 per cent of the medical schemes registered patients consulted dentists and dental specialists at a cost of 9.78 billion Rand in the 2017/2018 financial year³³.

2.2 Prevalence of oral diseases in South Africa

Table 1 (National Children's Oral Health Survey, 2003) revealed that children have high rates of dental decay, attributable to frequent sugar consumption, poor oral hygiene, and probably the perception that primary teeth are not important. To ensure a nation free of caries, this is the level at which oral health promotion and prevention should be strengthened.

Table 1: Percentage of tooth decay (dental caries) and untreated decay by age group and province, South Africa, 2003.14

Age group	4-5 years	*	6 years*		12 years		15 years	
	% Decay	% Untreated decay	% Decay	% Untreated decay	% Decay	% Untreated decay	% Decay	% Untreated decay
Weighted national mean	50.6	46.6	60.3	55.1	36.9	30.3	51.0	42.2
Western Cape	77.1	72	82.3	75.2	61.8	51.6	81.1	70.7
Northern Cape			72.1**	70.9**	47.3	44.2	62.8	55.2
Eastern Cape	58.9	53.7	67.7	63.6	49.0	32.7	63.8	48.4
Free State	60.1	57.8	59.2	56.8	36.8	33.3	54.5	50.6
KwaZulu-Natal	52.4	50.8	64.8	59.9	38.7	34.9	50.9	46.3
Gauteng	49.1	37.6	59.7	50.5	34.3	26.6	49.9	31.1
North West	41.0	39.5	52.3	48.2	27.5	25.0	39.0	35.5
Mpumalanga	40.2	35.1	56.2	48.4	29.7	26.6	41.4	36.8
Limpopo	31.3	30.8	37.2	33.8	15.8	14.1	28.4	24.1

Source: Report: National Children's Oral Health Survey South Africa 1999-2002 (Department of Health – 2003)

Between 2008 and 2010 the North West conducted a provincial oral health survey for children between the ages of 4 and 15. The survey found that only 26.4 per cent of 15-year-old children have healthy gingival; 21.7 per cent of 12-year-old children have mild fluorosis; decayed, missing and filled teeth (DMFT) for 12-year-old children is 0.68; and 41.6 per cent of six-year-old children are caries free.

These results are showing similar trend to the results of a survey conducted by the national Department of Health in 20032, ³⁴.

^{*}Primary/Milk teeth **Age-adjusted figures

The risk factors and pathogenesis of the most common oral conditions have been known for a long time. Also there is a well-established finite set of evidence-based interventions that are capable of controlling or entirely preventing these conditions from occurring in the first place⁵. There is strong evidence to show that exposure to optimal levels of fluoride and reducing sugar in foods, drinks and medication have a powerful impact on reducing tooth decay^{5, 14}.

Reducing exposure to use of tobacco products can reduce the oral cancer prevalence, morbidity and the prevalence of periodontal (gum) disease^{35,36}. Safer oral sexual behaviour almost eliminates a range of sexual related oral conditions such as oral syphilis, oral gonorrhoea, etc.

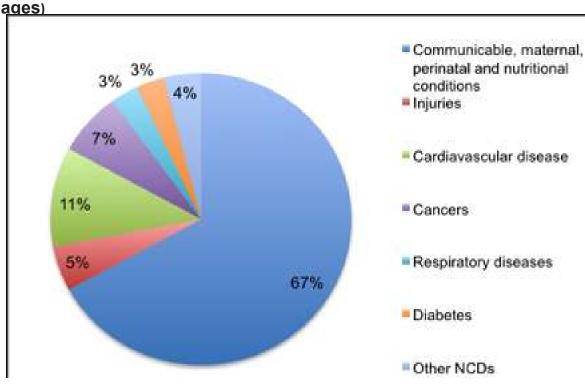
Several factors can contribute to oro-facial trauma, e.g. contact sport, irresponsible use of alcohol that can lead to interpersonal violence, motor vehicle accidents etc.

What is also known is the extent to which these oral disease risk factors are common to other systemic diseases or conditions such NCDs and trauma. Combining efforts from different disciplines can contribute to health promotion benefits, economies of scale as well as the qualitative gains of collaboration budgets. To focus resources and efforts on just one example such as reduction to tobacco exposure reveals the potential to reduce lung cancer, other respiratory disease, periodontal disease and oral cancer, as well as their patient treatment costs.

Oral diseases are of high prevalence and high burden but relatively low mortality. For example: Dental caries (tooth decay) is the most common condition affecting children in South Africa². Sixty per cent of six-year-old children, in their primary dentition, have decay and 55 per cent untreated decay. Only 18 per cent of 12-year-old children have healthy gums and only two per cent of 44-year-old adults have healthy gums².

2.3 Non-communicable diseases and oral disease relation

Graphic 3: Proportional mortality in South Africa, 2008 (percentage of total deaths, all



Oral health is intricately linked to all the NCDs discussed below:

2.3.1 Pregnancy and oral health

During pregnancy, gums inflammatory response increases due to hormonal changes which can increase the risk of gingivitis and periodontitis³⁷. This can lead to gingival epulis (large localised gingival benign tumour) which can be treated by scale and polishing. It is estimated that fifty pe rcent of all women will develop gingivitis during their pregnancy, commonly referred to as pregnancy gingivitis³⁸. In South Africa, pregnant women from disadvantaged communities are more susceptible to pregnancy gingivitis compared to pregnant women from advantaged communities³⁹.

2.3.2 Cardiovascular diseases and oral health

The association between periodontitis and other systemic diseases has been observed in different studies evaluating endothelial response in patients with known cardiovascular disease and with or without periodontitis - a significant decrease in endothelial response being recorded in the patients with severe periodontitis⁴⁰. In examination of the relationship between periodontal disease and cardiovascular disease, Machuca et al. conducted a 10-year longitudinal prospective study in which patients with coronary disease were found to have a poorer periodontal condition than patients without coronary disease⁴¹.

Streptoccocal viridans are a normal bacteria flora found in the oral cavity. However, in gingival diseases especially periodontitis, the bacterial numbers increase in and around the swollen gingival. The increased blood supply and weak walls of the gingival blood vessels increase the risk of the bacteria entering the blood stream causing bacterimia. Streptoccocal viridans will then colonise the damaged atrial valve of the heart and this can lead to valve inflammation and malfunction. Patients who will undergo heart valve heart surgery may require scaling and polishing to reduce streptococcus bacteria that can be a risk to valve infection.

2.3.3 Diabetes and oral health

There is a link between diabetic patients and swelling of gums. Also, diabetic patients take time to heal from oral lesions. Diabetes has been unequivocally confirmed as a major risk factor for periodontitis and the risk of periodontitis is increased by approximately threefold in diabetic individuals compared with non-diabetic individuals⁴². The level of glycaemic control is of key importance in determining increased risk.

For example, in the US National Health and Nutrition Examination Survey (NHANES) III, adults with an HbA1c level of more than nine per cent had a significantly higher prevalence of severe periodontitis than those without diabetes (OR 2.90; 95% CI 1.40, 6.03).

There has recently been much emphasis on the 'two-way' relationship between diabetes and periodontitis which means not only is diabetes a risk factor for periodontitis, but periodontitis could have a negative effect on glycemic control⁴². Various studies have reported that the prevalence and severity of non-oral diabetes-related complications, including retinopathy, diabetic neuropathy, proteinuria and cardiovascular complications are correlated with the severity of periodontitis^{22,42}.

2.3.4 Cancers and oral health

Oral cancers are among the top ten cancers in the world and can be fatal when they are diagnosed late³⁵. Tobacco (hot and cold) products are the main cause of oral cancers⁴³. Hot spicy (chilly) foods, betel nut, smokeless tobacco and cold tobacco can cause oral lesions that are precursors to oral cancers⁴³.

While oral and pharyngeal cancers are both preventable, they remain the main cause of death related to oral health due to late diagnosis²⁶. Early diagnosis of oral white or red lesions can reduce fatalities caused by oral cancers²³.

The prevalent oral cancer is squamous cell carcinoma which is particularly high among men, the eighth most common cancer of the world⁴⁴. Incidence rates for oral cancer vary in men from one to 10 cases per 100 000 inhabitants in many countries³⁵. The high incidence rates relate directly to risk behaviours such as smoking, use of smokeless tobacco (e.g. betel nut or miang chewing) and alcohol consumption^{35, 43}.

Studies done in South Africa on oral cancers found that 90 per cent of oral cancers are squamous cell carcinomas²⁶. Oral squamous cell carcinoma is mainly found in men who smoke and drink alcohol.^{44,26}.

2.3.5 Tobacco use and oral health

A meta-analysis study concluded that there was an association between oral cancer and smoking³⁶. Oral cancers are more prevalent in people that smoke either cold and hot tobacco products³⁵ squamous cell carcinoma is prevalent in men that smoke^{26, 35, 43}. Smoking cessation programmes can reduce the risk of oral cancers, especially squamous cell carcinoma. Multisectoral and multidisciplinary health promotion approach can be cost-effective in the reduction of the incidences of oral cancers.

2.3.6 Alcohol abuse and oral health

Alcohol abuse can lead to both oral carcinomas and oro-facial trauma^{26, 44, 45}. Squamous cell carcinoma is more prevalent in men who are heavy alcohol drinkers and are tobacco smokers²⁶. Most oro-facial trauma occurs due to interpersonal violence after heavy drinking of alcohol especially in men who are between 20 and 29 years old⁴⁵.

2.3.7 Trauma and oral health

The face, especially jaws and teeth are the most susceptible parts to injuries, especially in motor vehicle accidents, interpersonal violence, and sport¹⁴. Therefore, dentists and maxillo-facial surgeons are extremely significant in the district and tertiary hospitals to manage these injuries. Oral injuries account for five per cent of all injuries, and craniofacial trauma is responsible for about half of the estimated total 8.5 million trauma deaths worldwide¹⁴.

These include fractures of the jaws and other facial bones, as well as fractures, dislocations and loss of teeth. Risk factors include traffic, bicycle accidents, falls, physical violence, contact sports and tongue and lip piercings. Oral injuries have significant physical, psychosocial and economic impact and are a major public health problem, particularly affecting children and voung adults.¹⁴.

In South Africa a study by Mogajane and Mabongo on maxillofacial trauma, found that the majority of facial trauma is caused by interpersonal violence, especially to men between 20 and 39 years old and followed by motor vehicle accidents⁴⁵. Maxillo-facial trauma can be fatal, however most of the time it leads to facial deformity and loss of teeth. The need for prevention for this type of trauma is great, however the need for maxillo-facial specialists is great to minimise facial deformity and patient mortality.

3. PROVISION OF ORAL HEALTH SERVICES

3.1 Oral health is an integral part of general health

South Africa faces a quadruple burden of disease that also has major implications for oral health. These include HIV/AIDS and TB; maternal and child morbidity; the exploding NCD epidemic related to lifestyle; and violence and trauma.

The World Health Assembly (WHA) resolution 60.17 of 2007 recognises oral health as a component of NCDs¹. Current literature as well as WHO resolutions on NCDs identifies tobacco use; physical inactivity; unhealthy diets and harmful use of alcohol, as risk factors, three of which have a direct impact on oral health¹.

Table 2: Common risk factors for non-communicable diseases

Risk factor	Cardiovascular diseases	Diabetes	Chronic respiratory conditions	Cancer	Mental disorder	Oral diseases	Eye disease	Kidney disease	Muscular- skeletal conditions
Diet	X	Х		Х	Х	X	Х	Х	Х
Smoking	X	Х	X	X		X	Х	Х	Х
Physical activity	Х	Х		X	X			Х	Х
Alcohol	X	Х		X	X	X		Х	X

Oral health is central to our daily life and well-being and exerts a fundamental influence on the quality of life of every citizen of South Africa.

The familiar experiences of daily tooth brushing, consumption of refined carbohydrates, cigarettes use, alcohol intake, sexual practices, traffic, and other accidents, as well as oro-facial trauma because of violence, all directly determine the health of our mouths. Oral health problems are a public health concern which can be prevented.

Community experience and research evidence shows that oral health is more than just the absence of disease or loss of function. A correlation between facial deformity, dental appearance and self-esteem has been reported by researches¹⁴. Oral health awareness and prevention programmes need to be strengthened at individual and community levels, using different platforms and settings.

3.2 The integration of oral health across health disciplines and sectors.

This policy advocates for the inclusion of oral health related matters in other health policies or strategies that have the potential to affect oral health. Similarly, oral health should be part of a comprehensive health promotion strategy at various service delivery platforms (hospitals, community health centres, clinics, schools, orphanages, old age homes, etc.). Mindful of the need to capacitate other cadres such as nurses, teachers, health promoters and community health workers who may be in direct contact with clients.

4. POLICY, LEGISLATION MANDATES AND OTHER HEALTH DECLARATIONS

The following Acts and their relevant regulations bear relevance to the development and implementation of this Oral Health Policy and Strategy.

- a. The South African Constitution, 1996 (Act 108 of 1996) Section 27 states that, amongst others, everyone has a right to access health services. This right also applies to oral health services.
- b. The National Health Act, 2003 (Act 61 of 2003)

The policy is guided by the Act, which has as one of its objectives being to establish a health system based on decentralised management, principles of equity, efficiency, sound governance, internationally recognised standards of research and a spirit of enquiry and advocacy which encourage participation.

c. Patients' Rights Charter,

The development and implementation of the policy is guided by the charter, which states that every patient has a right to:

- health and safe environment
- participation in decision-making
- access to healthcare
- knowledge of one's health
- insurance/medical aid scheme
- choice of health services
- treated by a named healthcare provider
- confidentiality and privacy
- informed consent
- refusal of treatment
- a second opinion
- continuity of care
- complaints about health services

- d. The WHO declaration on Oral Health and General Health (2007) FDI Declaration [2009]. The objectives of the WHO Global Oral Health Programme, one of the technical programmes within the Department of Chronic Diseases and Health Promotion, imply that greater emphasis is put on developing global policies based on common risk factors approaches and which are coordinated more effectively with other programmes in public health. The policy of the WHO Global Oral Health Programme emphasises that oral health is integral and essential to general health, and that oral health is a determinant factor for quality of life.
- e. World Health Assembly (WHA) Resolutions 60.17-2007, 74.5-2021
- "Having considered the report on oral health: Action plan for promotion and integrated disease pevention1.
- Acknowledging the intrinsic link between oral health, general health and quality of life.
- Emphasising the need to incorporate programmes for promotion of oral health and prevention of oral diseases into programmes for the integrated prevention and treatment of chronic diseases.
- Aware that the importance of the prevention and control of non-communicable diseases has been highlighted in the Eleventh General Programme of Work 2006–2015.

Appreciating the role that WHO collaborating centres, partners and on governmental organisations play in improving oral health globally, the WHO urges Member States: "to adopt measures to ensure that oral health is incorporated as appropriate into policies for the integrated prevention and treatment of chronic non-communicable diseases and communicable diseases, and into maternal and child health policies;"

- f. Tobacco Products Control Amendment Act, 1999 (Act 12 of 1999. To prohibit or restrict smoking in public places; to regulate the sale and advertising of tobacco products in certain respects and to prescribe what is to be reflected on packages; and to provide for matters connected therewith. The regulations from this Act will reduce the incidences of oral cancer and dental stains from nicotine.
- g. Norms, standards and practice guidelines for primary oral healthcare. This policy/document outlines oral health services that will be provided at this level of care.
- h. A national set of norms and standards for level 1 hospitals oral healthcare Package. This policy/document outlines oral health services that will be provided at this level of care.
- Regulations relating to categories of hospitals; No.34521; 12 August 2011. The policy sets out to align the levels of oral health services according to the levels and categories of hospitals.
- j. National Health Insurance for South Africa. Towards universal health coverage. version 40. 10 December 2015. The National Health Insurance aims to provide universal health coverage for all South Africans. The policy aims to have basic oral health services in all PHC, secondary and tertiary facilities to promote universal coverage.

- k. The National Strategic Plan for the Prevention and Control of Non-Communicable Diseases, 2022-2027. The policy ensures that all efforts to prevent and reduce non-communicable diseases, including oral diseases are aligned to the above strategy.
- I. Minamata Convention Resolution on Mercury 2013.

5. POLICY CONTEXT

5.1 VISION

A long and healthy life for all South Africans.

5.2 MISSION

To improve the quality of life of the South African population by increasing access to oral health services at different levels of care. Promote oral health through education, preventative services, early diagnosis and appropriate treatment of oral diseases.

5.3. Table 3. GUIDING VALUES AND PRINCIPLES OF THE ORAL HEALTH POLICY.

Values	Principles
Oral health is part of general health	 Oral healthcare should be integrated into general health. People with oral conditions should be treated in primary healthcare facilities and in general hospitals. Oral health services should be planned and provided at all levels of the health service.
Accessibility and equity	 Services should be accessible and equitable to all citizens, regardless of geographical location, economic status, race, gender or social condition. Oral health services should have appropriate resources allocated to them as it is done to general health services. Training and education in oral health should be accessible to all citizens regardless of race, gender, economic status and social conditions. Oral health services should have appropriately and adequate human resources at all levels of care both clinical and management.
Comprehensiveness	Comprehensive promotive, preventive services and treatment and rehabilitation should be provided at appropriate levels of care.
Mainstreaming	Oral health should be considered in all planning, budgeting, monitoring and evaluation activities of public and private health sectors.

5.4. SCOPE OF THE ORAL HEALTH POLICY

This policy is applicable to all oral healthcare (Primary Level, Level 2 and Level 3) institutions. It will also apply to all practitioners, organisations or institutions providing oral health services in the public sector, in collaboration with the private sector and other sectors involved in the management and regulation of oral health practice.

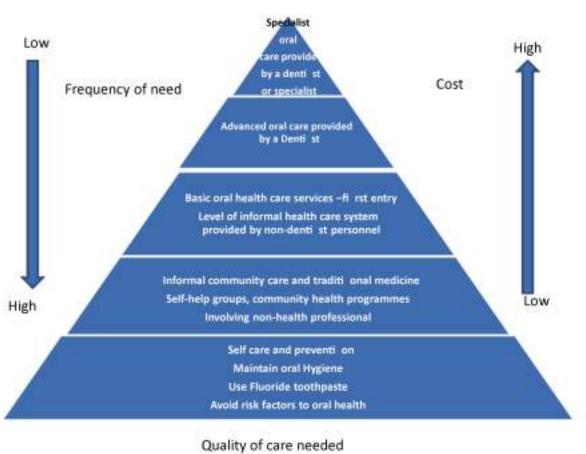
5.5. KEY GOALS OF THE NATIONAL ORAL HEALTH POLICY AND STRATEGY

- 1. Integrate oral health into general health and NCD strategies at all levels of care.
- 2. Improve efficiency in the implementation of oral health service standards by outlining roles and responsibilities of oral health role players at various levels of care and management.
- Increase access and equity to oral health services by ensuring adherence to appropriate norms and standards for the delivery of oral health services at all levels of care.
- 4. Guide the development of oral health professionals suited and well-matched to oral health needs and demands of the general population.

6. HIERARCHY OF DELIVERY OF ORAL HEALTH SERVICES

6.1 Key components/elements (organisation) of the oral health services

Graphic 4: Service needs at different levels of care



6.2 Type of services offered

Promotive and preventive services

The policy will strive to give preference to population-based health promotion strategies rather than individual interventions. The aim is to positively influence behavior and eventually lead to a change in disease profile. Examples of population-based interventions include mass fluoridation, school health programmes, mass media education campaigns, policies and programmes relating to tobacco and alcohol use control, food labelling and dietary regulations that have impact on reducing the risk of oral diseases. The programmes could be delivered through ward-based outreach teams, integrated school health programmes, oral health community outreach programmes and many other available programmes.

Table 4: Promotion of oral health and prevention of oral diseases

Strategy	Target	Platforms
Oral Health Education and Promotion	School children, youth, mothers/caregivers, elderly, people infected with HIV/AIDS and TB	Communities, schools and public institutions (old age homes, orphanages etc.)
Fissure sealants	Six and 12-year-olds, Q1 and Q2 primary schools	Quintiles1 and 2 primary schools
Mass fluoridation (water, salt or milk)	Population-based	Involvement of municipalities and Department of Water Affairs
Fluoridated toothpaste-tooth brushing programme	School programmes	Quintiles 1 and 2 primary schools and ECDs
Tobacco control, alcohol abuse, drug cessation	Alcohol and substance abusers and smokers	Health promotion initiatives at community and PHC facilities level
Prevention of oro-facial trauma	Children, athletes, drivers	Schools, sports associations, through participation in inter-departmental campaigns
Develop guidelines to phase down use of dental amalgam in line with the Minamata convention on Mercury	Phase down use of dental amalgam by 40 per cent (ex. promoting oral health, replacement of dental amalgam with alternative materials as well as safe waste management)	Health facilities

Table 5: Treatment, curative and rehabilitative services

Table 5: Treatment, curative and rei	I	
Primary oral health curative services Examination Extraction Scaling and polishing Three surface restoration Emergency endodontics Intra and extra oral x-rays	Clinics/mobile dental units/facilities where portable dental equipment will be used e.g. schools or consultation rooms CHCs	Required skill Oral hygienists Dental therapists Dental assistants
Secondary oral health curative services Minor maxilla-facial surgery Interceptive removable orthodontics Removable prosthetic dentistry Minor periodontics and oral medicine Simple crown and bridge Conservatives and endodontics Simple oral pathology (biopsies)	District hospitals Regional hospitals	Dentists Oral hygienists Dental assistants
Tertiary and rehabilitative oral health services Major maxillo-facial surgery Fixed orthodontics Fixed prosthetic dentistry Major periodontics and oral medicine Major conservative and endodontics Research and surveys of community dentistry Major oral pathology	Tertiary hospitals Central hospitals	Dental specialists Dentists Dental technicians Dental assistants
D. Emergency care for all citizens This is an on-demand service providing basic emergency oral care which should be available to all citizens. It consists of three elements: a) relief from pain b) first aid for oral infections and dento-alveolar trauma c) referral of complicated cases	Communities PHC facilities District hospitals Tertiary and central hospitals	Dental therapists Oral hygienists Dentists Dental specialists

6.3 Roles and responsibilities oral health role players

6.3.1 National Department of Health

The national Department of Health will be responsible for:

- Developing, reviewing and monitoring the implementation of national oral health policies, regulations and guidelines.
- Oversight of the formulation, implementation, monitoring and evaluation of the national fluoridation programme through the National Fluoridation Committee.
- Advising the minister on all oral health related issues.
- Developing reviewing and monitoring adherence to oral health norms and standards with reference to existing policy guidelines, including:
 - The Primary Health Care Package for South Africa A set of norms and standards.
 - National Norms, Standards and Practice Guidelines for Primary Oral Health Care.
 - National Secondary and Specialized Oral Health Norms and Standards.
 - National Oral Health Promotion Framework.
 - Dental Equipment Maintenance Guidelines.
 - Community and Home-Based Oral Health Care.
 - Participate in Treasury Transversal tender specifications for dental equipment, consumables, and instruments.
- Identifying research gaps and incorporating oral health agenda in national health surveys
- Advocating for oral health research in collaboration with appropriate stakeholders
- Sharing new information, recommendations and resolutions that impact on oral health services
- Monitoring progress on performance of oral health key indicators that are in the National Indicators Data Set (NIDS) and share with provinces
- Liaising with internal and external oral health stakeholders
- Facilitating the integration of oral health into other health programmes such as HIV and AIDS, maternal and women's health, child and adolescent health, nutrition, chronic diseases, disabilities and geriatrics.

6.3.2 Provincial health departments

The provincial health departments will be responsible for the:

- Preparation and implementation of a provincial oral health operational strategy/plan.
- Implementation of interventions and strategies aimed at preventing oral diseases and promoting oral health.
- Implementation of fluoridation programmes where applicable.
- Coordination of the oral healthcare system in the province.
- planning, support and evaluation of oral health services at all levels of care.
- Participation in health promotion interventions that impact on oral health such as tobacco, sugar, alcohol, unsafe sex, chronic medication, violence and vehicle accidents (causing oro-facial trauma).
- Awareness of oral disease risk factors and appropriate means of oral self-care.
- Integration of oral health strategy elements and strategies into programmes
- and policies of all sectors that have an impact on community health like
- · maternal and women's health, child and adolescent health, nutrition, chronic
- diseases, disabilities and geriatrics.
- Collection and analysis of the agreed minimum set of oral health data from all
- districts and regions for review at district, provincial and national level.
- Implementation of national norms and standards for oral health service delivery.
- Inclusion of oral health plans in the Service Transformation Plans.
- Inclusion of oral health plans in the provincial Annual Performance Plans.
- Provision of defined oral health packages at level 1, 2 and 3 hospitals.

6.3.3 District health

The district will be responsible for:

- Preparing a customised set of intervention strategies and targets selected according to the specific needs, determinants and other circumstances for each community.
- Match oral diseases with the best intervention strategies and available resources.
 This should at least include the following steps:
 - Assess the oral health condition of the community.
 - Prioritise the problems identified according to their prevalence, severity and social impact.

- Identify the resources available.
- Select the most appropriate interventions.
- Implement, monitor and evaluate the selected strategies.
- The provision of appropriate disease prevention and health promotion measures.
- A defined set of "Basic Oral Healthcare Services" which is part of the national PHC Package to be delivered at district level is provided.
- The implementation of cost–effective and evidence–based strategies.
- Collecting, analysing and disseminating the agreed minimum set of oral health data.
- Establishing an adequate referral system for advanced and specialised oral health services.
- Ensuring that oral health is included in the comprehensive district health plan (cost items in the budget must also cover oral health services).

6.3.4 Collaboration with private oral healthcare sector

Private sector oral health practitioners, although rendering a fee for service to the majority of patients on medical aid, contribute to providing oral healthcare in South Africa. They serve a smaller proportion of the South African population, but the existence of a two-sector health system [public and private] could be better managed to improve access.

The public and private sector will establish joint programmes to promote specific strategies for prevention, e.g., such as fissure sealant and fluoride varnish programmes as well as curative programmes e.g. sessions in public hospitals. The public and private sector will collaborate in promoting optimal delivery of oral health services in areas of need as determined by the provinces and/or national Directorate: Oral Health.

Referral of public patients to private oral health facilities or referral of private patients to public health facilities is done based on private public partnership (PPP) memoranda of agreements (MoAs) which are signed by the Heads of Department at provincial level and Director-General at the national Department of Health.

In alignment with the NHI mandate, there should be public/private initiatives to address issues such as clinical governance and the management of facilities.

6.3.5 Oral health training institutions (OHTIs).

The OHTIs are national resources that provide knowledge, skills and contribute to service delivery for the country.OHTIs should be the platforms that provide evidence-based knowledge to guide formulation of policies, interventions/strategies at all levels. Translationtype of research that shows efficacy of interventions can then be rolled out to all districts. Furthermore, teaching and training of both undergraduate and postgraduate students must have elements of community engagement and occur in settings where students are exposed to the social determinants that affect oral health.

Registrars in all disciplines must serve some of their training time in district/regional/provincial hospitals. Oral health training institutions should aim to increase access of specialised services across provinces, especially in those provinces with no oral health training institutions.

The pricing of the clinical oral health services is defined in the UPFS developed by the national Department of Health, Directorate: Revenue and these fees are charged by the institutions.

Training of oral health professionals by OHTIs should be guided by the national Department of Health Human Resource Plan to ensure that professionals produced meet the health needs of the country.

In addition to the OHTIs, training could also be provided by private institutions for dental assisting via blended learning models using a combination of onsite and distance learning training. These courses will be HPCSA accredited and South African Qualifications Authority (SAQA) certified and be offered on a full- or part-time basis. Onsite practical training will be provided at accredited health facilities and institutions.

6.3.6 Engagement with oral health stakeholders

To facilitate implementation of this policy, engagement and alignment of priorities between the national, provincial and district health authorities as well as other stakeholders is necessary. The national Directorate: Oral Health will meet with the provincial Oral Health Programme Managers at the national office at least once annually.

- Visit the provinces and districts to support or assist and guide provincial and district oral health services where necessary.
- Hold annual Oral Health Stakeholder Consultative Committee meetings.

6.4. Resource requirements

6.4.1 Fit for purpose human resources structure

Oral health human resources should be employed at each of the government administration levels e.g. national Department of Health, provincial health departments and district health offices for management of the oral health programme. Different categories of oral health professionals should be deployed at appropriate levels of oral healthcare.

South Africa presently trains several categories of oral health workers, including dental assistants, dental technicians/technologists, oral hygienists, dental therapists, dentists and dental specialists. However, these are not appropriately placed for cost effective service delivery. Community health workers (CHWs) are also an essential human resource which can be utilised for oral health promotion and education.

6.4.2 Human resources

Oral health human resources form part of an integrated health human resource plan. The oral health profession has various categories of cadres. Historically, training of oral health professionals was not guided by service needs. There is a need to establish a team that will support the development of the national human resource plan.

The role of this team will be, in consultation with the national Department of Health Human Resource Management and Development, to review the oral health workforce to forecast future interventions and workload and to monitor the distribution of employees.

- Participate in Workload Indicator for Staffing Needs (WISN) development.
- Collect workload information to determine what numbers of oral health staffing to address workload at each level of care will be sufficient. The same process will be used to determine the needs for specialist training and deployment.
- Contribute to establishment of minimum staffing norms for dental specialists: e.g. Maxillo-facial and oral surgery (MFOS) specialists, to be available at every regional and tertiary hospital; dental public health specialists supporting provinces.
- Initiate a review process to assess suitability of existing specialties and a potential to merge or establish new categories.
- Should participate in priority setting for oral health.

A review process will be set up to examine the relationship between the main strategy aims of improving oral health for all, and the profile and skills of the oral health team and the distribution of these skills across the oral healthcare system.

6.4.3 Financial resources

Budgets to be allocated at various levels depending on the categorisation of the facility and the package of service offered.

The budgets will be prepared annually to cater for:

- human resource development and training of oral health employees
- oral healthcare services at all levels of care
- oral health education and promotion
- procurement, distribution and maintenance of dental equipment and instruments
- provision of dental supplies
- oral health research where appropriate
- oral health services monitoring and evaluation
- training of oral health specialists where appropriate

The budgeting for upgrading and refurbishing of oral health facilities and equipment will follow the provincial norms as part of general upgrading and refurbishing of health facilities.

Registration and billing of oral health patients should be in line with normal norms and processes of registering billing in the health facility.

6.4.4 Physical infrastructure and equipment

In the building of clinics and upgrading/revitalisation programme of health facilities, appropriate dental rooms should be designed in consultation with oral health managers from the planning stage to the commissioning stage.

All facility plans and needs for public oral health services will be dealt with in accordance with the health facilities planning standards for oral health.

Table 6: Equipment needed for a well functional dental surgery and dental laboratory

	BASIC OR MINIMUM DENTAL SURGERY EQUIPMENT	xiii)	Ultrasonic scaler
i) ii) iii)	Dental chair Dental light Side delivery system for hand pieces and three-in-one syringes	xiv) xv) xvi) xvii) xviii)	First aid trolley with oxygen cylinder with mask Operator and assistant chairs Appropriate waste bins (sharps dispenser) Appropriate storage cabinets Appropriate flooring
iv) v) vi)	Suction system Compressor Autoclave	xix) xx)	Adequate ventilation Adequate lighting
vii) viii) ix)	Hand pieces Hand instruments for dental procedures X-ray equipment		
x) xi)	X-ray developer Curing light		
xii)	Amalgamator		

	BASIC OR MINIMUM DENTAL LABORATORY EQUIPMENT	xiv)	Motor Driven Centrifuge
i) ii) iii) iv) v) vi) viii) xiii) xiii)	Acrylic Denture Flasks Articulators 8mm and 10mm- 50 each Basins with taps Bunsen Burner Dental laboratory chairs Denture Articulators Dual purpose spatula with magnetic handpiece support includes 6 assorted tools Dust extractors (closed system) Hydraulic Press for pressing denture flask (max 3 flasks at a time) LAB Bench Top Vibrator for pouring models and investing (240X130mm) Laboratory handpiece/ Micromotor Ultimate XI-K System 230V Laboratory workbench for 1 person+ Floresence Lamp +1 Vacuum system and mouth Spray + Gas valve Light curing box with 4 timing control for curing special tray	xv) xvii) xviii) xxiii) xx) ii) xxiii) ste xxv) xxvii xxviii) xxviii) xxviii) xxxiii) xxxiii) xxxiii) xxxiii) xxxiii)	Motor Ultimate XL-K System 230V-Laboratory hand-piece Plaster Model Trimmer Polishing Lathe 2 speed settings 91400 or 2800rpm) Power: 500W Polishing Machine Polymerizing Denture Curing Bath (Stainless Steel) Capacity 12 flasks with clamps Portable Suction Unit Pressure pots (dental resins) Solar Professional (no magnifier) bench light- 3 brightness level Splash Guards (each) for polishing lathe eam Cleaner Adjustable Steam Flow, screw cap, manual refill Stone wheel (abrasive) Suction Bench (Box Only) Ultrasonic bath Sonar 30-2.75 Lt UV Polimerizing Vacuum mixer including 500cc bowl and wall bracket Wet model trimmer with adjustable water flow, includes bakelite disc

6.4.5 Transport

Outreach services are critical in ensuring service delivery in the hard-to-reach areas. For this to be achieved appropriate transport should be made available.

7. MONITORING AND EVALUATION OF THE SOUTH AFRICAN ORAL HEALTH POLICY AND STRATEGY

The national Department of Health will on a regular basis monitor the implementation of the policy and strategy and communicate gaps to the stakeholders annually. The national Department of Health will conduct a mid-term review of the implementation and the end of term evaluation to assess achievement of expected outcomes. Evaluation may be in the form of a survey.

SECTION 2: STRATEGIES TO ACHIEVE THE OBJECTIVES OF THE ORAL HEALTH POLICY

This section encompasses specific actions and targets to achieve the policy objectives.

The provincial achievement of the targets will be based on local circumstances such as the adequacy of the information base, local priorities, oral health systems, resources available as well as disease prevalence, its severity and socio-environmental conditions.

Approaches to implement the strategies may differ from province to province, district to district based on availability, allocation, and distribution of resources. However, the variations should enable the achievement of agreed upon objectives. Provincial and district plans should allow for equitable provision and access to oral health services for most communities on the assessment socio-economic and geographic location.

1. STRATEGIES AND IMPLEMENTATION PLAN TO SUCCESSFULLY IMPROVE THE ORAL HEALTH OF THE POPULATION

Table 7

GOAL 1	INTEGRATE ORAL HEALTH INTO	GENERAL HEALTH AND NCD S	STRATEGIES AT ALL LE	EVELS OF CARE
OBJECTIVE	ACTIVITIES	OUTPUTS	TIMELINES	KEY PARTNERS
Facilitate the incorporation of oral health services into general health and other NCD programmes at each level of care.	Develop a core packages of oral health services suitable for each level of care. Engage relevant directorates to include appropriate oral health elements in their programmes. Advocate for oral health packages of care to be included in District Health Plans, hospital and tertiary services and other relevant programmes.	Oral health included in general health programs, policies and strategies.	Update District and Tertiary Hospital Oral Health Packages by 2030. Continuous as the packages are reviewed.	PHC, hospital directorates, ISHP and other relevant programmes
GOAL 2	IMPROVE EFFICIENCY IN THE IMI ROLES AND RESPONSIBILITIES (MANAGEMENT			
OBJECTIVES	ACTIVITIES	OUTPUTS/TARGETS	TIMELINES	KEY PARTNERS
Improve coordination of oral health services at all levels of care.	Advocate for the filling of the funded vacant oral health posts. Advocate for oral health coordinators to participate in district health structures.	Improved coordination of oral health services at all levels of care.	2029/2030 financial year.	Provincial health departments. District health.
Strengthen collaboration with the private sector to increase access to preventative services.	Share health department priorities with private sector and agree on shared roles. Monitor target population reached through collaboration with other stakeholders.	Agreed-upon priorities and targets and annual reports.	Annually	Private sector and oral health industry.

GOAL 3	INCREASE ACCESS AND EQUITY NORMS AND STANDARDS FOR T			
OBJECTIVES	ACTIVITIES	OUTPUTS/ TARGETS	TIMELINES	KEY PARTNERS
Increase coverage of preventive oral health services.	Include oral health in the ISHP. Procure and distribute tooth fissure sealants, toothbrushes and toothpaste to identified schools. Include oral health chapter in community health workers booklet.	Oral health preventative services implemented as part of community-based programmes.	Annual	Provincial health District health Chief Directorate: Child and Youth Health District health Health Promotion
To reduce the burden of untreated oral diseases through the provision of basic primary oral healthcare treatment package.	Partner with private practicing dental practitioners to increase access to: i) tooth restoration ii) scaling and polishing	Early detection and treatment of oral diseases.	Annually	Provincial health District health, Directorate: PHC
Strengthen secondary and tertiary oral health at regional and tertiary hospitals.	Advocate for implementation of appropriate oral health service package in secondary and tertiary hospitals.	Secondary and tertiary oral health services available at regional and tertiary hospitals.	By 2030	Provincial health Chief Directorate: Hospital Services
Advocate for provision of basic oral emergency care for all citizens in health facilities.			By 2030	Chief Directorate: Hospital Services Provincial health Directorate: Emergency Medical Services (EMS)
Phase down the use of amalgam in line with the reduction of Mercury Minamata Protocol	National plan on scaling down the use of Amalgam. Identify national Department of Health key stakeholders. Develop guidelines on scaling down use of dental amalgam. Incorporate the guidelines in broader national Department of Health plan.	Guidelines on phase out use of dental amalgam developed. Guidelines on amalgam reduction incorporated into national Department of Health mercury reduction plan.	By 2030	Dental schools Directorate: Environmental Health Oral Health Associations Oral Health Professionals Dental companies
GOAL 4	GUIDE THE DEVELOPMENT OF O	RAL HEALTH PROFESSIONAL	S SUITED AND WELL-I	MATCHED TO ORAL
	HEALTH NEEDS AND DEMANDS (
OBJECTIVES Advocate for the training and placement of fit-for-purpose oral health professionals.	ACTIVITIES Engage universities to increase the training of required cadre. Advocate for departments to provide bursaries for the required cadre. Advocate to health departments to create posts for the most needed oral health professionals.	OUTPUTS Equitable re-distribution plan of appropriate oral health professionals.	TIMELINES By 2030	KEY PARTNERS Dental schools and Universities of Technology
Increase output of appropriate oral health employees/professionals Improve collaboration with Training institutions.	Annual engagement between national Department of Health and Deans of Dental schools on training of oral professionals.	Agreement reached with training institution on production of oral health professionals.	2029/2030 financial year	Dental schools and Universities of Technology. National Department of Health Human Resources

2. MONITORING AND EVALUATION

2.1 Policy implementation

To monitor the implementation of the policy, provinces will be supported to develop implementation plans with clear targets. These will include how the policy and strategy will be rolled out together with provincial specific indicators.

2.2 National Clinical Data Elements

Table 8: National Data Elements to monitor service delivery collected through the District Health Information System (DHIS)

National Indicators Data Set (NIDS) (Data Elements)	Targets	Indicators
Head count/number of patients seen	Offer oral health package at all levels of care	Number of health facilities that offer oral health services
Number of tooth extractions	To reduce the number of extractions by 20 per cent by 2034	Dental extraction restoration ratio from current level of 20: 1 to 10:1
Number of tooth fillings/restorations	To increase the number of tooth restorations by 20 per cent by 2034	Dental extraction restoration ratio from current level of 20: 1 to 10:1
Number of children who received fissure sealant applications	50 per cent of Grade R to 3 learners in Q1 to Q2 per province to receive fissure sealants per annum	Percentage of children in Q1 to Q2 receiving fissure sealant
Number of primary schools on preventive oral health programmes.	20 per cent of primary schools per province to be on oral heath preventive programme incrementally (per year)	Percentage of schools per province on oral health preventive programmes
Number of orthodontics patients treated	At least one level 1 and 2 hospitals within each district offer secondary and specialised oral health services	At least one level 1 and 2 hospitals within each district offer secondary and specialised oral health services
Number of prosthodontics patient treated	At least one level 1 and 2 hospitals within each district offer secondary and specialised oral health services	At least one level 1 and 2 hospitals within each district offer secondary and specialised oral health services
Number of Maxillo-facial patients treated	At least one level 1 and 2 hospitals within each district offer secondary and specialised oral health services	At least one level 1 and 2 hospitals within each district offer secondary and specialised oral health services
Number of patients implants done	At least oral health training schools and tertiary hospitals offer this service	At least oral health training schools and tertiary hospitals offer this service
Number of patients done emergency endodontics	To reduce the waiting times for emergency referrals by 50 per cent by 2032	Percentage of patients done emergency endodontics

2.3 Monitoring oral health indicators

In collaboration with relevant stakeholders, the current baseline will be used as a benchmark for the progress of oral health services improvement. Routine data will be collected through the DHIS and annual provincial reports. Oral health indicators will also be incorporated in national health surveys.

- DHIS of the national Department of Health will be responsible for collecting the information provided by district health authorities and the regular dissemination of summary data and reports back to all levels of the health system.
- The national Department of Health will retain this information for the ongoing strategy review process.

Evaluate the oral health programmes overall (midterm review; final outcomes). For monitoring and evaluation, specific data has to be collected from the districts (DHIS) via the provinces to the national Department of Health (Appendix 5).

Tools for monitoring and evaluation

- At district level
 - Customised Detailed Regular Monthly Reports
 - DHIS
 - Research and surveys (assisted by OHTI)
- At provincial Level
 - o DHIS
 - APP
 - Customised Detailed Regular Monthly Reports
 - Research and surveys (assisted by OHTI)
- At national Level
 - DHIS
 - o APP
 - Customised Detailed Annual Reports
 - Research and surveys (assisted by OHTI)

CUSTOMISING PLANNING OF ORAL HEALTH SERVICES

Process to customise oral health services

Background

Communities' oral health needs are often different. Depending on their social, economic, geographic, and other developmental features, the oral health risk factors to which they are exposed are likely to vary dramatically from one side of the country to the other. The oral health policy takes this into account by allowing several areas of flexibility in the design and delivery of a customised local oral health operational plan. This is based on a local assessment of disease prevalence, the risk factors present, the resources available and the capacity to deliver the chosen interventions.

The oral health operational plans should be an integral part of the District Health Plans. This will include the provision of other services including, preventive programmes, fillings, dentures, treatment of oro-facial trauma, oral cancer treatment under general anesthesia.

Step 1: Identifying priority oral conditions and determinants

Conduct simple community-based research using the tools below.

- Review current facility data.
- Develop questionnaire for facility attending patients.
- Develop questionnaire for the community survey.
- Interview several reliable community informants such as clinic employees, general
 practitioners and others, on their perception of how common (the prevalence) and how
 serious (social impact) the community views the conditions listed below. The accepted
 morbidity and mortality of each condition is given.
- Analyse data.

Oral disease	Social Impact	Prevalence	Morbidity	Mortality
Bad breath			Low	None
Benign oral tumours			Medium	Low
Bleeding gums			Medium	None
Congenital abnormalities			Medium	Medium
Early childhood caries			High	Low
Fluorosis			Low	None
Harmful practices			Medium	Medium
Loose teeth			Low	Low
Mouth sores			Medium	Medium
Noma			High	High
Oral cancer			High	High
Oral HIV			High	High
Oro-facial trauma			Medium	Medium
Pain			High	Low
Tooth decay			Medium	Low
Tooth loss			Medium	Low
Other				

Note: This is only an example. You might add other conditions or delete some of these in your own list. Indicate your assessment of Social Impact and Prevalence as High, Medium, Low or None in the blocks provided.

Step 3: Ranking data

Rank the listed conditions depending on how many times they score a High or Medium rating in their row of the table. Those conditions you move to the top of list on this basis will represent the priority oral health conditions in your community.

Step 4: Identification of available resources

Human Transport Equipment Consumables

Step 5: Match priorities to available resources

Step 6: Detailed Operational Plan

- 1. Name of district and size (land mass) with a brief description of geography, urban rural split economic development, main economic activities, etc.
- 2. Demographics
 - i. population size,
 - ii. age and gender demographics
 - iii. socio-economic status, employment status

Step 7: Setting local targets

Set target to achieve both local and national goals

Activities	Target	Actual	Constraints
Patients seen			
Teeth extracted			
Number of tooth fillings/restorations			
Fissure sealant applications			
Preventive oral health programmes			
Orthodontics done			
Prosthodontics done			
Maxillo-facial done			
Implants done			
Emergency endodontics done			

The Target column refers to number of patients that each facility can handle. For example, depending on the number of employees, equipment, consumables, etc, a clinic might only have the capacity of doing 500 extractions per month. This would then be the target.

The Actual column refers to the number that was done.

The Constraints refer to factors that might have been responsible for facility doing more of less than the target. For example, if there was a strike in that month, the number of extractions was actually done could have been far less than the amount targeted.

REFERENCES

- 1. World Health Organization. World Health Organization global policy for improvement of oral health World Health Assembly 2007. International Dental Journal. 2008 2008;58(3):115-121.
- 2. National Department of Health. The report: National Children's Oral Health Survey South Africa 1999-2002. In: Health, ed. Pretoria: National Department of Health,; 2002:1-20.
- 3. South African Medical Research Council. Second national burden of disease study for South Africa: Cause-of-death profile for South Africa, 1997–2012. In: Medical Research Council, ed. Cape Town, South Africa: Medical Research Council,; 2016:1-36.
- 4. Statistics South Africa, South African Medical Research Council, National Department of Health. South Africa Demographic and Health Survey 2016. In: Health, ed. Pretoria: National Department of Health; 2019:1-626.
- 5. WHO Regional Office for Africa. Promoting Oral Health in Africa: Prevention and control of oral diseases and noma as part of essential noncommunicable disease interventions.: a Manual. 2016:1-126, Congo Brazzaville.
- 6. World Health Organisation. Global Goals for Oral Health 2020. In: Health, ed. Geneva, Switzerland: WHO; 2010:1-20.
- 7. Watt RG. Strategies and approaches in oral disease prevention and health promotion. Bulletin of the World Health Organization. September 2005 2005;83(9):711-718.
- 8. Poul Erik Petersen, Denis Bourgeois, Hiroshi Ogawa, Saskia Estupinan-Day, Ndiaye. C. The global burden of oral diseases and risks to oral health. Bulletin of the World Health Organization. September 2005 2005;83(9):661-670.
- 9. Dye BA. The Global Burden of Oral Disease: Research and Public Health Significance. Journal of Dental Research. 2017 2017:96(4):361-363.
- 10. Petersen PE, Kwan S. Evaluation of community-based oral health promotion and oral disease prevention WHO recommendations for improved evidence in public health practice. Community Dental Health. 2004 2004;21:319-329.
- 11. National Planning Commission. National Development Plan 2030: Our Future Make it work. In: The Presidency, ed. Pretoria, South Africa: The Presidency,; 2011:1-489.
- 12. WHO Regional Office for Africa. Writing Oral Health Policy: A Manual for Oral Health Managers in the WHO African Region: a Manual. 2005:1-52, Brazzaville, Congo.
- 13. South African Medical Research Council. Where are we with noncommunicable diseases health promotion in South Africa, where should we be, and how can we get to where we need to be? In: Health, ed. Pretoria: South African Medical Research Council; 2020:1-36.
- 14. FDI World Dental Federation. The Challenge of Oral Disease: A call for global action. The Oral Health Atlas. Vol 1. 2nd ed. Geneva: World Dental Federation; 2015.
- 15. World Health Organisation. Closing the gap in a generation: Health equity through action on the social determinants of health. The Final Report of the WHO Commission on Social Determinants of Health. Geneva: World Health Organisation; 28 August 2008 2008.
- 16. National Department of Health. Report on oral health professionals 2018: National Department of Health Unpublished report; 2019:1-23.
- 17. Bernabe E. Global, Regional, and National Levels and Trends in Burden of Oral Conditions from 1990 to 2017: A Systematic Analysis for the Global Burden of Disease 2017 Study. Journal of Dental Research. 2020 2020;99(4):362-373.
- 18. W. Marcenes, N.J. Kassebaum, E. Bernabé, et al. Global Burden of Oral Conditions in 1990-2010: A Systematic Analysis. Journal of Dental Research. 2013 2013;92(7):592-597.
- 19. Williams DM. Global Oral Health Inequalities: The Research Agenda. Journal Dental Research. 2011 2011;90(5):549-551.

- 20. L.J. Jin, G.C. Armitage, B. Klinge, N.P. Lang, M. Tonetti, Williams. RC. Global Oral Health Inequalities: Task Group—Periodontal Disease. Adv Dent Res. 2011 2011;23(2):221-226.
- 21. Maurizio S.Tonetti, Søren Jepsen, Lijian Jin, Otomo-Corgel. J. Impact of the global burden of periodontal diseases on health, nutrition and wellbeing of mankind: A call for global action. Journal of Clinical Periodontology. April 2017 2017;44:456-462.
- 22. Nazir MA. Prevalence of periodontal disease, its association with systemic diseases and prevention. International Journal of Health Sciences. April 2017 2017;1(2):72-80.
- 23. Neha Gupta, Ritu Gupta, Arun Kumar Acharya, et al. Changing Trends in oral cancer a global scenario. Nepal Journal of Epidemiology. November 2016 2016;6(4):613-619.
- 24. P.J. Botha, A. Schoonees, Pontes. CC. Mapping oral cancer research in South Africa. South African Dental Journal. July 2018 2018;73(6):384-394.
- 25. Jos Hille, Johnson. NW. The burden of oral cancer in sub-Saharan Africa: An estimate 13
- 39. Charlene W. J. Africa, Mervyn Turton. Oral Health Status and Treatment Needs of Pregnant Women Attending Antenatal Clinics in KwaZulu-Natal, South Africa. International Journal of Dentistry. March 2019 2019;2019:1-8.
- 40. Higashi Y, Goto C, Jitsuiki D, Umemura T, Nishioka K, T. H. Periodontal infection is associated with endothelial dysfunction in healthy subjects and hypertensive patients. Hypertension. 2008 2008(51):446-453
- 41. Machuca G, Segura-Egea JJ, Jiménez-Beato G, Lacalle JR, Bullón P. Clinical indicators of periodontal disease in patients with coronary heart disease: a 10 years longitudinal study. . Med Oral Patol Oral Cir Bucal. 2012 2012;17::569–574.
- 42. P. M. Preshaw, A. L. Alba, D. Herrera, et al. Periodontitis and diabetes: a two-way relationship Diabetologia 2012 2012;55(1):21–31.
- 43. Zohaib Khan, Steffen Dreger, Syed Majid Hussain Shah, et al. Oral cancer via the bargain bin: The risk of oral cancer associated with a smokeless tobacco product (Naswar). Plos One. July 2017 2017;12(7):1-15.
- 44. Liviu Feller, Lemmer J. Oral Squamous Cell Carcinoma: Epidemiology, Clinical Presentation and Treatment. Journal of Cancer Therapy. August 2012 2012;3:263-268.
- 45. B.M. Mogajane, M. Mabongo. Epidemiology of maxillofacial fractures at two maxillofacial units in South Africa. South African Dental Journal. April 2018 2018;73(3):132-136.





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