

SUMMIT TO ADDRESS ORAL HEALTH IN EAST AFRICA:
**A FRAMEWORK TO INTEGRATE
ORAL HEALTH AND HEALTH**

COLUMBIA GLOBAL CENTERS | NAIROBI

EXECUTIVE SUMMARY

The original East African Community (Kenya, Uganda and Tanzania) is on track to become an economic powerhouse. Important strides are underway to improve the quality and length of human life.

Overlooked however, is the importance of the mouth and teeth to health and wellness. Oral health is rarely included among priorities that inform health policy and funding for the systems that aim to improve the health and quality of life of the citizens of East Africa.

In March 2016, over 100 key stakeholders from Kenya, Uganda, and Tanzania were brought together to discuss the region's oral health needs, resources, challenges, and opportunities at a two-day Summit convened by Columbia University, the University of Nairobi School of Dental Sciences, the Kenyan Ministry of Health, the Kenya Dental Association, and Unilever, Kenya LTD. The outcome of the two-day Summit was the development of a framework for future actions to improve oral health in East Africa.

CHALLENGES TO ACTION

Four areas were identified as posing the greatest challenges to progress:

- 1) Lack of fiscal and human resources;
- 2) Poor oral health data and metrics;
- 3) Out-of-date oral health policies across local, national and regional levels;
- 4) Poor integration of oral health within health, education and social services systems and policies.

FRAMEWORK FOR A WAY FORWARD: SIX KEY ACTION AREAS

Consensus-building exercises, SWOT analyses, and follow-up discussions identified twenty-seven Action Areas, which through a modified Delphi method were prioritized to the most important Six Key Action Areas:

- 1) Develop practical, effective and efficient oral health policy based on oral health needs;
- 2) Empower counties to develop and implement local oral health policies;
- 3) Review and develop oral health indicators appropriate to Kenya and the East Africa region;
- 4) Advocate for better distribution of potable water;
- 5) Educate non-dental personnel to address oral health; and
- 6) Collaborate with non-health sectors to address oral health.

PURPOSE OF THIS DOCUMENT

These proceedings are intended to serve as a blueprint for stakeholders at all levels who seek to identify funding sources, inform and implement oral health policy, and determine opportunities for the integration of oral health within existing health, education and social services systems. We believe that this document will provide ballast for our mutual efforts. The time has come to put the mouth back into the body, and care for everyone, from head to toe.

SUGGESTED CITATION FOR THIS DOCUMENT

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It is vital that oral health and its role in health and wellness be highlighted at all levels. Efforts to integrate oral health in existing health and policy infrastructure is central to sustainable programming.

PROGRESS SINCE THE SUMMIT

A number of key initiatives have resulted directly from the Summit:

- The Inter-Religious Council of Kenya has added oral health to their health education mandate;
- The Kenyan Ministry of Health has included oral health messaging in its social media output;
- The Kenyan Ministry of Health has included oral health content in its Maternal and Child Health Booklet, used to provide new mothers with child health information
- Kenya's National Demographic Health Information System bi-annual survey has expanded the number of oral health indicators from two to eighteen;
- Members who participated in the Summit have begun to work with physicians in Uganda to integrate oral health and healthcare for adolescents in Uganda.

BACKGROUND

Although oral diseases and dysfunction have profound impact on health, quality of life and wellness, oral health is often under-represented in health policy frameworks, especially in middle and low-income countries. There are a number of key issues facing oral health and healthcare in East Africa - lack of funding at local, national and regional levels, uncoordinated policy, small numbers of dentists, lack of awareness of oral health and healthcare among community, and rural-urban disparities in access to and utilization of oral health services¹. For example, the 2016 fiscal year budget for oral health initiatives at the Ministry of Health (Kenya) was Ksh 380,000 (\$3,800), and while funding for health was devolved to counties in 2013, most counties have not earmarked funds for oral health.

As the population ages, and as access to processed foods and life-style behaviors such as tobacco become more accessible, the impact of oral diseases on health and quality of life will likely increase. Efforts to integrate oral health into existing health and policy infrastructures is central to developing sustainable programming that can result in improved oral health outcomes.

A collaborative that included the Columbia University Medical Center, the University of Nairobi School of Dental Sciences, the Ministry of Health (Kenya), the Kenya Dental Association and Unilever, Kenya LTD conceived of and hosted a high level two-day Regional Oral Health Summit in Nairobi, Kenya on March 22 and 23, 2016. The goal of the Summit, which was underwritten by Unilever, was to bring



1: Kaimenyi JT. Oral health in Kenya. *International Dental Journal* 2004;54:378-382.

together key stakeholders from Kenya, Uganda and Tanzania to discuss oral health needs, resources, challenges and opportunities; prioritize policy, training and infrastructure needs; and develop a framework for future work. The collaborative chose to focus on the East African Region because shared political, social and economic histories have resulted in similar oral health needs and challenges in the three original East African Community nations of Kenya, Uganda and Tanzania.

The Summit, whose theme was “Integrating Oral Health and Health,” brought together almost 100 stakeholders including a number of high level dentists, physicians, nurses, policy-makers, para-professionals, academicians, educators, clinicians, funders, corporations, and not-for-profit organizations.

FRAMEWORK DEVELOPMENT

Stakeholders conducted focused work in order to develop priorities and “a way forward” during the Summit. They participated in formal presentations, consensus building exercises, SWOT analyses and follow-up discussions, and came to consensus around 27 Action Areas. These 27 Action Areas were further prioritized to a final Six Key Action Areas, using a modified Delphi method which was conducted with key stakeholders from the University of Nairobi School of Dental Sciences, the Kenya Dental Association, the Ministry of Health and Unilever, Kenya LTD.



SIX KEY ACTION AREAS

The Six Key Action Areas which will be used to develop a framework for future initiatives and funding requests are:

1. **Develop practical, effective and efficient oral health policy based on oral health needs;**
2. **Empower counties to develop and implement local oral health policies;**
3. **Review and develop oral health indicators appropriate to Kenya/East Africa;**
4. **Advocate for better distribution of potable water;**
5. **Educate non-dental personnel to address oral health; and**
6. **Collaborate with non-health sectors to address oral health.**

SUMMIT PROCEEDINGS

CHALLENGES TO ORAL HEALTH AND HEALTHCARE IN EAST AFRICA

This document was prepared by cross-referencing formal presentations, SWOT analyses and consensus documents, with transcripts of Summit recordings and the rapporteur's notes. It is organized by key areas that participants' considered were challenges to addressing oral health in East Africa.

1) RESOURCES: Fiscal and human resources are vital to the development and sustainability of oral healthcare systems. Fiscal resources are required to develop infrastructure including clinical, educational and outreach facilities, procurement and maintenance of equipment and materials, development and implementation of outreach, and training of dentists and dental auxiliaries. Additionally, monies and personnel are needed to conduct program/systems evaluations that can inform future policy and spending. Summit participants evaluated current resources for oral health care systems in Kenya, Uganda and Tanzania followed by deliberation about needs and gaps.

A) FISCAL AND HUMAN RESOURCES: Government financing for oral health has consistently fallen below five percent of the total health budget agreed upon at the 1987 Bamako Initiative². Kenya, for example, allocated KSH350,000 (\$3,500), which represents 0.006% of the nation's health budget, to the Ministry of Health's Unit of Oral Health for the 2015/2016 fiscal year. This amount, which is earmarked for operations and management, is a reduction from 0.016% in previous budgets. The total public financing for oral health is unclear, because of the country's recent move to devolution, and the delegation of responsibility for delivery of health care to each of the country's 47 counties. There is no unified policy that dictates if and how county funds are allocated for oral health, what services must be provided, or how to ensure that payments received for oral health services are appropriately reallocated.

During the Summit, it was reported that 9% of Uganda's GDP is allocated to health, and that 0.9% of this budget is allocated to oral health; in Tanzania 6% of GDP is allocated to health, but only a small proportion is earmarked for oral health, and is being used to purchase equipment and fund Ministry officials' salaries.

Private sector contributions have been used to close gaps that cannot be met by public financing. Non-Governmental Organizations and stakeholders such as oral care product manufacturers have supported outreach activities, purchasing of dental chairs/equipment and underwriting dental education initiatives. In Kenya, for example, the curriculum designed to train Community Oral Health Officers (COHO's) was developed with aid from USAID. Although the private sector plays a vital role in program development, activities are not monitored or systematic, quantification of contribution is difficult, and impact on oral health or program sustainability has not been measured.



Public funding for oral health is a tiny proportion of the health budget. Corporate stakeholders have played an important role in closing the gap, but their impact has not been assessed.

²: Bamako Initiative Management Unit, UNICEF. *The Bamako Initiative. Reaching Health Goals Through Strengthened Services Delivery*. New York: UNICEF, 1990 (Mimeo).

Action Areas (Kenya)

- Budget preparation has been participatory in Kenya since 2013; this represents an ideal opportunity for oral health and health advocates to come together to **lobby** for additional funding for oral health during budgeting processes.
- **Advocacy** for a unified health policy that seeks to integrate oral health policy and spending with health policy at the county level is needed to ensure that oral health services are equitably distributed.

Action Areas (Region)

- Partner with private sector funders to **quantify** contribution to oral health in order to determine additional gaps in need and service delivery
- Partner with private sector and non-governmental funders to **develop monitoring and oversight** parameters that can be used to provide equitable resource delivery and inform future policy.

B) HUMAN RESOURCES: Accurate data on dental personnel in the region is not easily accessible, but the numbers of dental care providers remains low. In addition, equitable deployment of the workforce is challenging, resulting in rural-urban disparity in access to, and utilization of oral healthcare services across the three nations.

i) DENTISTS: The dentist to population ratios for Kenya, Tanzania and Uganda are well below the ratio of 1:2000 in developed nations³. The latest available data indicate that the dentist to population ratio in Kenya is 0.024 (2013), in Tanzania it is 0.01 (2012) and in Uganda it is 0.015 (2005)⁴. In addition to each nations' training capacity being inadequate, dentists' migration to other countries or movement into professional capacities that offer better remuneration have resulted in even smaller numbers of dentists in practice.

Kenya, which has approximately 1000 practicing dentists, trains an average of 28 new dentists annually through the University of Nairobi and Moi University, but there are no clear mechanisms for aligning training needs with local or national health needs. In keeping with the public health priority, many dentists choose to study public health, but because training in dental public health is not available, dentists with public health training are absorbed in nondental health sectors and are therefore unable to advance the oral health agenda. Similarly, although the nation's devolved political structure is designed to ensure that healthcare is responsive to community needs, there are no policies to ensure that the oral workforce, in particular, dentists, are deployed in response to county needs. This has resulted in rural-urban disparity in access to and utilization of dental services - 80% of the dentists practice privately in urban areas, which house less than 20% of the population⁵.

3: Petersen PE, Bourgeois D, Ogawa H, Estupinan-Day S, Ndiaye C. *The global burden of oral diseases and risks to oral health*. *Bull World Health Organ*. 2005 Sep;83(9):661-9.

4: WHO Global Health Observatory Data Repository. <http://apps.who.int/gho/data/node.main.A1444?lang=en&showonly=HWF> Accessed 12/17/2017.

5: Ministry of Health, Unit of Oral Health. *Kenya National Oral Health Survey Report 2015*. Available at: https://profiles.uonbi.ac.ke/gathecel/files/kenya_national_oral_health_survey_report_2015.pdf. Accessed 12/17/2017



Community Oral Health Officers, and dental therapists are being trained to offset the shortage of dentists, but policies governing their training and practice need to be strengthened.

Uganda's 330 dentists in practice are primarily trained at Makerere University; in Tanzania, two universities train the country's dentists, of which 152 general dentists and 82 specialists are currently in practice. Most of Tanzania's dentists work in the public sector, but some are now beginning to work in the private sector.

CADRE	TOTAL REGISTERED (2007)	PUBLIC SECTOR (2008)	PRIVATE SECTOR (2008)	PRIVATE SECTOR (% OF TOTAL)
Doctors	6,271	1,605	4,666	74
Dentists	631	205	426	68
Pharmacists	2,775	382	2,393	86
Pharmaceutical Technologist	1,680	227	1,453	86
Nursing Officers	12,198	3,013	9,185	75
Enrolled Nurses	31,971	11,679	20,238	63
Clinical Officers	5,797	2,202	3,595	62

Action Areas (Regional)

- **Advocate** for policies and incentives that seek to align dentist distribution and deployment with oral health needs in order to ensure equitable access to oral health services.
- **Collaborate** across the region to develop metrics designed to ensure that training priorities are aligned with national and local oral health needs.

ii) COMMUNITY HEALTH/AUXILIARY DENTAL WORKERS: In keeping with the World Health Organization's recommendations, all three countries have developed and implemented training programs for dental auxiliary providers. Kenya has trained almost 700 Clinical Oral Health Officers (COHOs) to diploma level through the Kenya Medical Training College, which is overseen by the Ministry of Health. Although the mandate for COHO training emerged from rural workforce needs, a majority of COHOs work in urban areas and have privatized services in group practices, thus exacerbating disparities associated with unequal distribution of services to areas of most need.

In Uganda, similar cadres of personnel are trained, and in Tanzania, three colleges train Dental Therapists, but Assistant Dental Officers (ADOs), who receive advanced diplomas are trained at Muhimbili University. Tanzanian Community Health Officers/Assistant Dental Officers were singled out for commendable work, but there is need to strengthen and refocus their training and regulatory frameworks in order to ensure responsiveness to community needs. Since auxiliary workers in all three countries, are trained and regulated by the Ministry of Health (not the Ministry of Education), input from organized and academic dentistry regarding education and oversight should be considered.

Action Areas (Kenya)

- **Advocate** for policies that seek to align training, distribution and oversight of Auxiliary Dental Providers with county needs.

Action Areas (Regional)

- **Advocate** for improved oversight and training of Auxiliary Dental Providers that includes input both from academic and organized dentistry.

CJ EQUIPMENT: Dental equipment and materials are expensive; many public facilities lack the equipment and materials needed to offer comprehensive dental care. Often, dentists in rural public facilities are unable to provide dental services due to poor infrastructure; in locations where equipment is available, frequent breakdown due to lack of maintenance is common. Similarly, irregular access to electricity and/or potable water, complicates provision of dental care, compounding rural-urban disparities. As a result, the primary method of dental disease management is tooth extraction without replacement, which can result in difficulty eating and speaking, and can impact self-esteem and social interactions.

Action Areas (Region)

- **Advocate** for improvements in infrastructure (potable water and electricity) in rural areas
- **Advocate** for policy that aligns procurement of dental equipment and materials with community needs.

2) ORAL HEALTH DATA AND METRICS: The quality of oral health related data is poor across East Africa. Good quality data that are packaged appropriately is vital to informing policy and funding priorities.

Kenya's recently conducted National Oral Health Survey⁶ revealed that oral disease prevalence is high. Data from small research projects suggest that over half of Uganda's population is suffering from oral diseases. While these data suggest oral health needs are high, they do not provide indications of trends and future needs which are vital to future planning and funding. Furthermore, methods are not standardized across the region, thus comparative analyses are not possible. It is vital therefore, that oral health surveillance tools and data collection methods are implemented consistently in order to inform future individual and collaborative policy and funding initiatives.

The World Health Organization (WHO)⁷ has a regional strategy for oral health, with clearly developed tools for oral disease screening. The region can modify and use these tools to monitor and generate data to guide service delivery. Screening efforts must be pursued even in the absence of ideal infrastructure, as the value of data in informing investment frameworks is immense.

Integrating oral health in existing data collection systems is an untapped opportunity that can be utilized to ensure that oral health needs are measured and receive visibility with donors and policy makers. The Ministry of Health (Kenya) has identified 22 key health indicators; high priority populations and areas such as reproductive health and MCH have been identified for targeted services, but oral health is not featured in these target areas. Similarly, although the Sustainable Development Goals (<https://sustainabledevelopment.un.org/sdgs>), in particular the Goal on Good Health and Wellbeing, include indicators that can incorporate oral health, oral health is not



Although the Sustainable Development Goals include indicators that can incorporate oral health, oral health measures are not specifically included in them.

6: Ministry of Health, Unit of Oral Health. Kenya National Oral Health Survey Report 2015. Available at: https://profiles.uonbi.ac.ke/gathecel/files/kenya_national_oral_health_survey_report_2015.pdf. Accessed 12/17/2017

7: World Health Organization (WHO) Regional Office for Africa, Non-Communicable Diseases Cluster. Promoting Oral Health in Africa. Available at: <http://apps.who.int/liris/bitstream/10665/205886/1/9789290232971.pdf?ua=1&ua=1&ua=1> Accessed: 12/17/2017.

specifically included in them. Inclusion of a small number of oral health indicators within these and similar existing systems will be a cost effective way of collecting oral health information while gathering the evidence needed to impress upon funders and policy makers the need to address this underfunded, but important health need.

In addition to providing valuable information about oral health needs, data can be used to indicate how oral health may be aligned with funder goals and objectives. For example, reliable data regarding oral health needs among people living with HIV/AIDS, and the impact of oral diseases on nutrition and quality of life, can highlight oral health to HIV/AIDS and chronic disease funders. In this respect, capacity building around data collection, management and analysis are vital.

Funding, lack of integration with national policy priorities, and shifting governance structures are major challenges. Since many of these challenges are similar across the three countries, efforts to share resources around data collection, disease surveillance, training and best practices may be prudent.

Action Areas (Regional):

- **Collaborate** on development of oral health metrics and outcome measures.
- **Collaborate** on development of oral health surveillance systems.
- Work with stakeholders to **package data** and distill information directed at target audiences such as policy makers, educators, funders and corporate institutions.

3) ORAL HEALTH POLICY: Policy documents targeting local, national and regional oral healthcare, and oral health promotion/disease prevention are not regularly revised and/or updated. This has resulted in gaps in oral health policy across East Africa.

In Kenya, the 2002-2012 Kenya Oral Health Policy document has not been revised. While this document aims to establish a comprehensive oral healthcare system that is integrated with healthcare policy, funding mechanisms to do this are not aligned. Much of the current policy document focuses on restorative care; it is vital that future policy initiatives include oral health promotion/disease prevention, disease surveillance, training, and advocacy.

Although responsibility for healthcare in Kenya has devolved to counties⁸, there has been no assessment of which counties, if any, have oral health policies, services or funding. Policies must assure the population of the right to equitable, affordable, accessible, and quality healthcare as espoused in the Kenyan Constitution's Bill of Rights (2010)⁹, and will require development of metrics that take into account oral health needs.

It is important that a multi-sector approach to development of policies, standards and regulations be taken, requiring a concerted effort to develop oversight mechanisms that are relevant to oral health. For example, both Kenya and Tanzania have high levels of dental fluorosis due to their geographical position relative to the Great Rift Valley. The 2015 Kenya National Oral Health survey indicated that the prevalence of fluorosis



It is vital that future policy initiatives address oral health promotion/disease prevention, training and advocacy through multiple stakeholders at all levels

8: Republic of Kenya, Ministry of Devolution and Planning. Draft Devolution Policy, May 2015. Available at: <http://www.devolutionplanning.go.ke/wp-content/uploads/2015/04/DEVOLUTION%20POLICY%20DRAFT%20.pdf>. Accessed: 12/17/2017

9: Kenya Law Reform Commission. Constitution of Kenya. Available at: <http://www.klrc.go.ke/index.php/constitution-of-kenya/111-chapter-four-the-bill-of-rights/part-1-general-provisions-relating-to-the-bill-of-rights/185-19-rights-and-fundamental-freedoms>

among children was 42%¹⁰, but there is no national policy regarding fluoride management in potable water, defluoridation, or fluorides in toothpastes and rinses, and there is no policy to guide fluoride use at the healthcare provider or consumer level. Similarly, there are no school-based policies regarding dental injuries associated with sports, and while an increasing number of children are being educated at boarding schools, diet, nutrition and daily care policies that incorporate oral health have not been enacted in these schools. Additionally, although there has been an attempt by insurers to provide some cover for dental care, there are no policies that specify a minimum service package, and out-patient dental services are excluded.

Action Areas (Regional):

- **Advocacy** to ensure that the health structure is more responsive to oral health needs at the national, county and community levels.
- Develop metrics designed to **inform policy** around equitable distribution of oral health workforce and infrastructure.
- Establish **regional cooperation** and sharing of resources for workforce training, and disease surveillance.
- **Advocate** for engagement of oral health personnel in critical decision making at all levels to ensure the oral health agenda is visible and discussed alongside all health issues.
- **Advocate** for a multi-sector approach to bring about regulations and standards enforcement on water quality, road safety.
- Distill data and develop policy briefs and other communications targeting the public, policy makers and funders in order to **bring visibility and funding** to oral health.
- Ensure that academic institutions and non-governmental organizations conducting research provide access to data in order to **inform policy** and funding priorities.

4) POOR INTEGRATION OF ORAL HEALTH WITHIN HEALTH AND OTHER

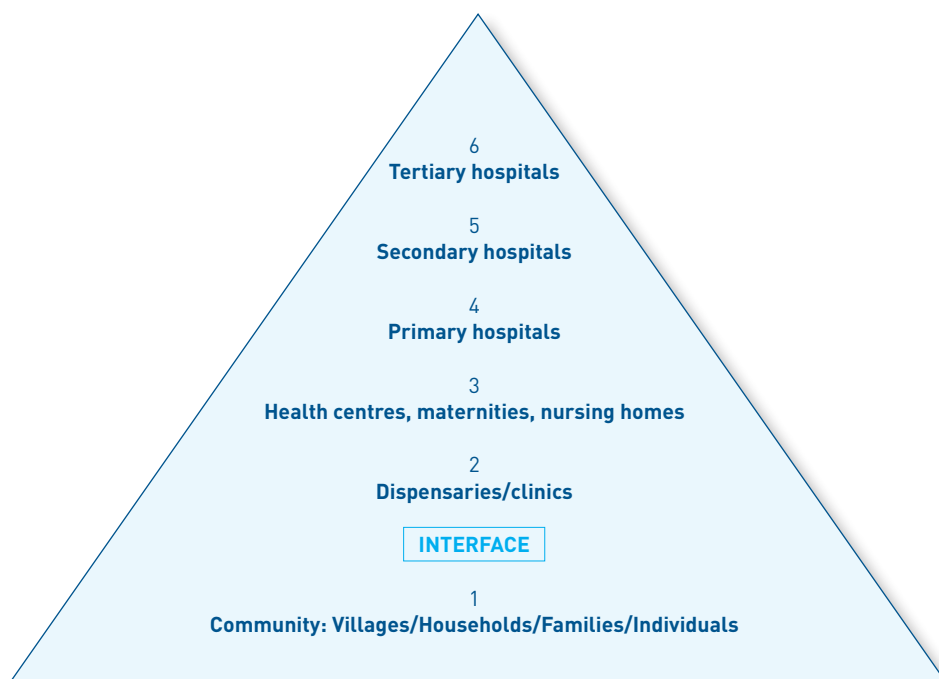
SERVICE SYSTEMS: Oral diseases are among the most common chronic conditions experienced by children and adults. Left untreated, the morbidity associated with them is high, and can impact health, wellness, quality of life and national economies due to lost school and work days. While oral diseases are easily prevented through good daily self care, regular professional preventive care, improvements in diet, and judicious use of fluorides, the burden and morbidity associated with oral diseases remains high in East Africa. Dentists are the provider of choice to promote and maintain oral health, but the small number of dentists practicing in Kenya, Uganda and Tanzania are unable to respond to the population's oral health needs. In response, these nations have trained Dental Therapists, Clinical Health Officers, and other auxiliary workers to provide dental services and preventive interventions in underserved areas. Despite these new cadres of oral health providers, oral disease and associated morbidity remain high. Given that each of these countries has a robust public health system that relies on primary care health workers to provide preventive

10: Ministry of Health, Unit of Oral Health. Kenya National Oral Health Survey Report 2015. Available at: https://profiles.uonbi.ac.ke/gathece/files/kenya_national_oral_health_survey_report_2015.pdf. Accessed 12/17/2017

services at the community level, and since many chronic conditions share risk factors with oral diseases, integrating oral health services with existing health, social, faith-based and educational systems will likely result in improvements in oral health in underserved areas.

A) PUBLIC HEALTH/PRIMARY HEALTH APPROACH: There is generally low public awareness of oral diseases and conditions and their appropriate management. The service most sought after in many health facilities is tooth extraction, suggesting that early disease management and prevention are not widely practiced. Oral health should be considered a health/public health issue, and a concerted effort to promote oral health at the community level should be made. Additionally, oral health services should be made available at the primary health care level. Such an approach, that seeks to integrate oral health at the most basic care level, will result in increased access to dental services and increased awareness about oral health promotion/disease prevention. In this respect, it is important that the non-dental workforce, including physicians, nurses, and clinical officers are trained to provide oral health promotion/disease prevention services in routine practice, which will require collaborative approaches to training. Organized and academic dentistry must take a leadership role in crafting public health messages that can be delivered by nursing and medical staff. *It is important that messaging be consistent across providers, and aligned with hygiene messages such as hand-washing to increase reach.*

Kenya has documented a minimum healthcare package which includes oral health, but oral healthcare is only delivered in Level 4 health facilities. Currently, very few oral health services are available at Levels 2 and 3 of the health care system, which are staffed by nurses and Clinical Officers (See figure below). Expanding nurses' and Clinical Officers'



LEVELS OF HEALTH CARE DELIVERY IN THE KENYA ESSENTIAL PACKAGE FOR HEALTH (KEPH)¹¹

11: Muga R, Kizito P, Mbayah M and Gakuruh T. Overview of the health system in Kenya in National Coordinating Agency for Population and Development (NACPD)(Kenya), Ministry of Health (MOH), Central Bureau of Statistics, ORC Macro. 2005

scopes of practice to include oral screening, referral and delivery of preventive services will provide a new model of care delivery that integrates oral health, health and health-care delivery. Not only will such as system build efficiencies, but screening, referral and prevention at the primary care level will promote oral health awareness among under-served populations.

There is increasing evidence that oral disease prevention through self-care (tooth-brushing, rinsing etc), fluorides, sealants, and diet modification is effective¹². What is unclear is how effective these interventions are when delivered through the non-dental auxiliary workforce, especially in low and middle income regions; it is vital that nurses, Clinical Officers and Clinical Oral Health Officers are trained to deliver relevant and effective preventive oral care, screening and referral. In order to do this, it is important that academic and organized dentistry work with organizations that represent non-dental providers to develop and implement education and training, examine/modify professional scopes of practice, and advocate for opportunities to develop and test best practices for non-dental providers.

Action Areas (Regional)

- **Collaborate** with medical and nursing stakeholders to develop oral health related scopes of practice for these healthcare providers.
- **Collaborate** with medical and nursing stakeholders to determine points of service that can include oral health interventions.
- **Collaborate** with medical and nursing stakeholders to develop and implement oral health related training.
- **Advocate** for an expanded role for Level 1, 2 and 3 workers that includes oral health assessment, referral and oral health promotion/disease prevention.
- **Advocate** for funding to conduct demonstration projects to inform scopes of practice for Level 1, 2, and 3 workers.

B) INTEGRATION WITH EXISTING SERVICE DELIVERY SYSTEMS: There are numerous opportunities for the provision of oral health promotion within the existing healthcare, social services, educational and other systems. The 2015 Kenya National Oral Health Survey¹³ suggested that about half of Kenya's children aged 5 years experienced tooth decay and nearly all had bleeding gums, suggesting the need to target oral health education to mothers of young children. Kenya has recently included oral health information in its Maternal and Child Health (MCH) booklet, which is given to mothers bringing babies to MCH clinics for well- and sick- child visits. **What is missing however, is trained MCH personnel who are able to discuss oral health with mothers, provide targeted advice, and make referrals for preventive and restorative services.**

Similarly, it is important to evaluate existing health education curriculae in schools to determine whether/how well oral health promotion is addressed, and how and



Organized and academic dentistry must work with communities and government to underscore the central role oral health plays in health and wellness

12: Ministry of Health, Unit of Oral Health. Kenya National Oral Health Survey Report 2015. Available at: https://profiles.uonbi.ac.ke/gathece/files/kenya_national_oral_health_survey_report_2015.pdf. Accessed 12/17/2017

13: Ministry of Health, Unit of Oral Health. Kenya National Oral Health Survey Report 2015. Available at: https://profiles.uonbi.ac.ke/gathece/files/kenya_national_oral_health_survey_report_2015.pdf. Accessed 12/17/2017

where gaps can be addressed through educational systems. A cursory evaluation of existing curriculae in Kenya indicates that oral health education is not consistent, and that didactic and operational education are not linked. For example, children in grade three receive limited information about dental caries process and risky behaviors, but preventive behaviors are not taught until grade four. Since children are able to motivate families and communities in unique ways, but require family and caregiver support to engage in health protective behaviors, a concomitant effort to educate families will be important. A number of private and corporate entities such as toothpaste manufacturers have developed school-based educational systems that can easily be modified for local conditions, but academic and organized dentistry should work with these groups to strengthen their efforts and to evaluate outcomes.

Additional systems that are ideally situated to address oral health include faith-based institutions, and nutrition and HIV/AIDS programs. Since all these systems represent high-priority foci in East Africa, integration of oral health services within these sectors will result in high visibility, expanding reach and sustainability. *The challenge lies in ensuring consistency of information across all populations and systems, developing oral health benchmarks that can easily be assessed, building referral networks that have the capacity to treat new patients, and training staff to respond to health promotion queries.*

Strategies that can be used frame oral health as a public health issue in order to improve integration with other systems of care include:

- Aligning oral health with local and international donor and funder priorities
- Encouraging public-private partnerships in oral health care
- Working with media to spread community awareness of oral disease prevention
- Identifying socially prominent individuals who can highlight the oral health agenda
- Engaging with well funded existing systems of care, to provide oral health promotion and disease prevention

Action Areas (Regional)

- Identify non-dental systems and stakeholders that can be engaged to systematically **engage in oral health promotion/disease prevention.**
- **Collaborate** with policymakers and community stakeholders to develop measurable oral health benchmarks (to inform future policy and funding needs).



Integrating oral health services with existing health, social, faith-based and educational systems will likely result in improvements in oral health outcomes



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**A FRAMEWORK TO INTEGRATE
ORAL HEALTH AND HEALTH**



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