

2014 ORAL HEALTH POLICY for GRENADA



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World Health Organization (PAHO/WHO)

Approved: January 2014

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"2014 ORAL HEALTH POLICY for GRENADA"

FOREWORD

The recently concluded first phase of the National Oral Health Programme (2011 - 2013) -

'Smile Grenada' - focused on resolving the most pressing oral health needs of 26,000 children

across Grenada, Carriacou, and Petite Martinique. So now, our children can confidently 'celebrate

healthy smiles' following the success of that 'Smile Grenada' Programme.

The development and implementation of this '2014 Oral Health Policy for Grenada' is a very

crucial next step since it embraces PAHO's Oral Health Program mission of "...strengthening

oral health services through communication and collaboration ...and providing the information

and resources necessary to promote equal and quality oral health care for all people...especially

for the most vulnerable populations".

"Health policy refers to decisions, plans, and actions that are undertaken to achieve specific

health care goals within a society. An explicit health policy can achieve several things. It defines

a vision for the future which in turn helps to establish targets and points of reference for the short

and medium term. It outlines priorities and the expected roles of different groups; and it builds

consensus and informs people" (World Health Organization, 2013).

This "2014 Oral Health Policy for Grenada" embraces all of these best practice points and is

expected to yield the desired outcomes for the entire Grenadian population through continuous

collaboration among our health professionals & stakeholders, educational stakeholders, social

partners, donor & supporting agencies, parents, teachers, community and church organizations.

As the Ministry of Health moves to implement this '2014 Oral Health Policy for Grenada',

which will expand oral health benefits to the wider Grenadian population, may we all 'celebrate

healthy smiles'.

.....

Minister of Health & Social Security

Honourable Dr. Clarice Modeste

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1. ORAL HEALTH IN GRENADA OVER THE LAST 3 YEARS.

This section gives a very up-to-date overview of oral health in Grenada¹, under each of the six (6) major policy areas of concern addressed herein, by examining the last three (3) years, between January 2010 and November 2013.

1. Caries Prevalence

In January 2010, the New York University College of Dentistry (NYUCD) conducted a National Oral Health Survey in Grenada. Using a decayed/missing/filled surface (DMFS) technique of evaluation (*see Appendix 1*), NYUCD examined 1,075 school children aged 6 to 15 years old, across twenty-two (22) schools in Grenada, Carriacou & Petit Martinique. A summary of the results is shown in *Appendix 2*.

"While the latest recommendations encourage children to get an oral health exam by age one, studies confirm that most infants and young toddlers rarely see a dentist until they are older" (Institute for Oral Health, 2011). In Grenada's case, 50% of the 1,075 children examined in the 2010 NYUCD survey had never seen a dentist (see Appendix 2).

2. Oral Health Promotion & Protection

In February 2011, following the NYUCD's 2010 Survey, the Ministries of Health & Education, in collaboration with NYUCD, launched *'Smile Grenada'*; a multi-faceted prevention programme which addressed the pressing oral health needs of 26,000 school children in Grenada, Carriacou, and Petite Martinique with the aim of reducing new tooth decay by 50% over the 3-year period 2011-2013. The school children benefited from this 3-year initiative through the:

- a. <u>School-based tooth brushing programme</u>, wherein they each received a toothbrush and tube of fluoridated toothpaste at the beginning of each school year and were introduced to daily brushing of teeth as part of their normal school routine.
- b. <u>School-based fluoride varnish programme</u>, whereby fluoride varnish was applied to their teeth, once every three (3) months, in order to prevent smooth surface tooth decay. Brevity herein

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¹ For the key purpose of brevity, Grenada herein refers to the tri-island state of Grenada, Carriacou & Petite Martinique.

c. <u>School-based glass ionomer sealant programme</u>, whereby a protective coating containing fluoride was applied to the newly erupted permanent first molars of 5 through 9 year olds, every three (3) months, in order to prevent new tooth decay.

It has been reported since that, whereas in January 2010 the average number of demineralized teeth per child was six (6), following NYUCD's intervention this average was reduced to one (1) demineralized tooth² per child in 2013. Additionally, while an average of 9.1 decayed surfaces per child was diagnosed in 2010, following NYUCD's intervention, a 90% reduction of new tooth decay among the children was realized (Hirsch, S. Dr., 2013).

3. Oral Health Services

In dentistry, filling and cleaning services are considered primary preventative services, while dental surgery and tooth extractions are classified as secondary preventative and therapeutic services.

Currently, dental services are offered at five (5) of the nation's six (6) Health Centers (see Appendix 3). Although the Gouyave Health Center does not offer any dental services to the public, this gap is being filled by the Victoria Medical Station, which offers extraction services to the parishioners of St. Mark and St. John. Only two (2) Health Centers – Sauteurs & St. David – offer teeth cleaning and filling services for children. Teeth cleaning services are not offered for adults at any of the Health Centers or Medical Stations. Fillings are only done at three (3) of the Health Centers - St. George, St. David & Sauteurs - while extractions are performed by five (5) of the six (6) Health Centers and one (1) Medical Station on varying days during the week.

A formalized system of dental care for physically and mentally challenged persons does not exist currently but is very important for inclusion in any oral health care system, since, as Dr. Jason Grinter (2012) points out "Dentists can overlook how dental pain affects people with special needs because they cannot always communicate it as we can. Patients may stop eating, they may start hitting their head or injuring themselves, they may require higher doses of their medications, they may have increased seizure activity - all things that are completely unnecessary if we can diagnose and treat them".

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² "Demineralization is the process of removing minerals, in the form of mineral ions, from dental enamel... When too many minerals are dissolved ...you have a cavity..." (http://mizar5.com/demin.htm)

A special oral health care education programme needs to be set up for the elderly (persons 60 years and over) and the caregivers/families of elderly persons in order to educate them on preventing oral health issues associated with aging since, "As with other health issues, older people have very different oral health needs to children and younger adults. They are more likely to take medication that causes dry mouth, leading to tooth decay and infections of the mouth" (Braine, 2005).

Such a programme will also help to dispel myths about declining oral health being an inevitable consequence of old age because there is "...an unfounded belief by families and health-care practitioners that tooth loss is inevitable during ageing... [but] starting people on dental programmes and exposing them to fluoridated water and toothpaste improves dental health regardless of a person's age" (Braine, 2005).

Currently, pregnant women do not receive specific education on oral health during pregnancy. A US study consisting of 40 antenatal women between the ages of 21-40, in their 12-40th week of pregnancy was conducted by Cardenas & Ross (2010), in order "...to evaluate the gain in knowledge of oral health after education to pregnant women on dental anticipatory guidance and to determine how much of this information pregnant women retain over time". This study concluded that pregnant women's knowledge improved by 33% after a presentation on dental anticipatory guidance and that after four (4) weeks, pregnant women were able to retain most of the information (up to 87.08%).

This and other research provide positive support for the development and inclusion of a structured and well-targeted oral health education programme in Grenada for antenatal women so that they can effectively improve their own oral health and that of their babies while still in the womb, through infancy and while growing up.

With respect to persons with chronic diseases, a March 2013 study³ conducted by UnitedHealthcare provided tangible evidence that "Improving the oral health of people with chronic medical conditions, such as diabetes, asthma and cardiovascular disease, can reduce health care costs...by more than [US]\$1,000 per person per year, even after the added expense of

³ The study consisted of 130,546 UnitedHealthcare commercial dental and medical members between the ages of 18 and 65 based on claims data for the twelve month period ending May 31, 2011.

providing the dental care" (Business Wire, 2013). So with limited public finances available in Grenada, it is crucial that the oral health disease burden of this group of persons be reduced through screening and targeted self-help oral health/hygiene education programmes.

4. Human Resource Development

Public dental services are currently provided by a team of eighteen (18) oral health professionals as follows:

1 Senior Dental Surgeon (Acting)

4 Dental Auxilliaries

1 Oral & Maxillofacial Surgeon

6 Dental Orderlies

6 Dental Surgeons

There are currently eighteen (18) practicing dentists in Grenada and ten (10) of these dentists have private practices and work only in the private sector, while eight (8) of them work in the public sector but also have private practices (*Dr. Jerome Keens-Douglas, Senior Dental Surgeon* (Ag.), 2013)

"The distribution of dentists within the population is an important factor in assessing how well the dental profession is meeting the current needs of the public. A complete assessment should also include both the need and demand for services, third-party programs, and related issues. The data needed to conduct this type of assessment are not available and, consequently, most estimates still rely on dentists to population ratios (*Waldman*, 1998)⁴. "Between countries, the density of qualified dentists varies from 1 dentist per 560 people in Croatia to 1 dentist per 1,278,446 people in Ethiopia" (*FDI World Dental Federation Vision 2020*).

In Grenada, the Dentist to Population ratio⁵ is 1:5,926 representing a relatively fair amount of access to dental services by the population and a comparatively fair ability by the dental profession to meet the needs of the Grenadian population.

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⁴ Excerpt from" Oral Health, U.S. 2002 Annual Report", Section 16.5: Ratio of dentists to population and ratio of physicians to population.

⁵ A PAHO/WHO Health Indicator of Resources, Access & Coverage. Actual population (2011) - 106,667; Estimated population (2012) – 107,599 (Central Statistical Office, 2013)

5. Oral Health Information Systems

An Epidemiology & Information Unit exists but it is not effectively and fully utilized to capture, store and disseminate information about oral health.

The Ministry of Health has a well-organized website (see http://www.health.gov.gd) but it needs to be more prominently featured on the official government 'gov.gd' website. On that website, there is a very useful and interactive eHealth Map which provides contact details and information on services offered at all of Grenada's Hospitals, Health Centers and Medical Stations. However, this eHealth Map and the general website need to be more actively promoted to the public, more prominently displayed on the official government 'gov.gd' website and kept updated in order to benefit both oral health care patients and primary health care patients.

6. Injuries (Trauma) Treatment

The current public dental division comprises one (1) Oral & Maxillofacial Surgeon, which sometimes results in patient backlog during busy periods and delayed attention to oral and maxillofacial injuries when the Oral & Maxillofacial Surgeon is on vacation, on sick leave or off island.

Currently, there is no disaggregation of data on oral & maxillofacial injuries according to amount, categories/types, frequency, causes (vehicular, workplace, sports & other accidents, domestic abuse & other types of violence) and extent, which inhibits proper planning. There needs to be greater collaboration between the Ministry of Health and other societal partners, such as the Royal Grenada Police Force (RGPF), women's organizations and sports clubs, in order to effectively and accurately capture and disaggregate this data.

2. BACKGROUND

The Pan American Health Organization (PAHO) "...through its Oral Health Program, is responsible for spearheading the development and implementation of oral health policy for the Organization's 35 Members States" (PAHO, Oral Health Program, 2013).

Additionally, in 2003, a strategic policy document was developed for the Caribbean region with the two-fold aim of:

- 1. Providing a strategy for countries in the English-speaking Caribbean to improve the oral health of their populations by focusing on issues of treatment needs, oral health promotion and appropriate methods of oral care.
- 2. Providing a framework for PAHO to provide future assistance for countries in the region. ("Oral Health for the Caribbean 2003: A strategic policy document")

In the ensuing ten (10) years following development of that 2003 strategic policy document, Grenada still does not have an "Oral Health Policy" nor is oral health specifically addressed in the "Grenada National Strategic Plan for Health (2007 - 2011)".

Then in 2010, the NYUCD conducted a National Oral Health Survey which revealed some disturbing oral health statistics. (see Appendix 2 for a summary of the results).

Added to all of this, as at 2013, the World Health Organization (WHO) is still not satisfied with the global implementation rate of the 'Health for All' strategy through Primary Health Care and there is a growing body of research and knowledge which support the idea that, "As most young children see a family physician or pediatrician many more times than a dentist, it is important to engage these [Primary Health Care] providers in helping to improve oral health and reduce the incidence of early childhood caries" (Institute for Health, 2011).

It is against the backdrop of these five (5) motivating factors – PAHO's mandate, the 2003 Caribbean Oral Health strategic policy document, the disquieting results of NYUCD's 2010 National Oral Health Survey, growing recognition of the importance of engaging Primary Health Care in oral health prevention and no existing official Oral Health Policy for Grenada – that this "2014 Oral Health Policy for Grenada" was developed.

3. POLICY PURPOSE & OUTCOMES

Grenada's Ministry of Health (MOH) is committed to making a reality of its vision for "An enhanced quality of life, improved health status of individuals, families and communities and maintenance of a state of optimum wellness" (*Ministry of Health, 2013*), especially as it relates to oral health, through provision of the requisite human, physical, financial and other resources to effectively implement the oral health policy solutions outlined in this "2014 Oral Health Policy for Grenada".

Following effective and timely implementation, this "2014 Oral Health Policy for Grenada" is expected to yield the following outcomes of ensuring that:

- 1. All Grenadians have access to quality oral health care services, human resources and facilities.
- 2. All Grenadians are exposed to, made aware of and empowered to practice good self-care oral hygiene.
- 3. All oral health practitioners/professionals are adequately trained, motivated and equipped to deliver optimal oral health care services to the Grenadian public.
- 4. Grenada builds on its past oral health practices & experiences using both primary information, garnered from key oral health practitioners and stakeholders, and secondary data collected through an efficient oral health information system.
- 5. Oral Health Care is seamlessly and efficiently integrated into Primary Health Care so as to effectively make use of already available primary health care human resources in order to improve general oral health in Grenada and reduce the incidence of early childhood caries.
- 6. Grenada moves confidently into the future armed with a definitive Oral Health Policy that provides the necessary resources, structures, systems and framework to effectively support preventative oral health and improve general oral health statistics in Grenada at all stages of the life cycle (i.e. infant to elderly).

4. POLICY RESEARCH & CONTRIBUTION METHODS USED

In developing this "2014 Oral Health Policy for Grenada", the Consultant conducted focused research around existing oral health best practices, policy development methods and research, past oral health programmes undertaken and surveys conducted in Grenada, as well as the ongoing oral health-related work of international organizations such as the Pan American Health Organization (PAHO), the World Health Organization (WHO) and the FDI World Dental Federation (FDI).

The development framework used by the Consultant to prepare this '2014 Oral Health Policy for Grenada' concentrated heavily on the six (6) major oral health areas of concern raised in "<u>Oral Health for the Caribbean 2003: A strategic policy document</u>", which was used as the base document, with obvious customization to Grenada's oral health needs and concerns.

The Consultant sought contributions from key oral health stakeholders, through the facilitation of two (2) 1-day stakeholder consultations, as follows:

<u>Stakeholder Consultation No. 1:</u> Thirteen (13) of the twenty (20) invited oral health stakeholders attended the Consultation which was held on Tuesday, October 29, 2013 at the Grenada National Stadium. Through a PowerPoint presentation and a brainstorming session, the Consultant guided the oral health discussion and encouraged participants to voice their honest opinions on the key problems and challenges being experienced in each of six (6) key oral health areas of concern. Participants were then placed in one of six groups, organized around the six (6) key oral health areas of concern, and asked to find solutions to the problems/challenges they had identified earlier.

➤ <u>Stakeholder Consultation No. 2:</u> On Thursday, November 21, 2013, fifteen (15) oral health stakeholders attended this 2nd consultation which was again held at the Grenada National Stadium. Stakeholders reviewed and constructively commented on the 'Draft Oral Health Policy for Grenada'. The Consultant made appropriate notes for finalization of the '2014 Oral Health Policy for Grenada'.

⁶ **Key Oral Health areas of concern:** Oral Health Promotion & Protection; Caries; Oral Health Services; Human Resource Development; Oral Health Information Systems; Injuries (Trauma)

5. POLICY APPLICABILITY, SCOPE & ORAL HEALTH STAKEHOLDERS

This "2014 Oral Health Policy for Grenada" is applicable to all age groups and segments of the Grenadian population. Stakeholders refer, both, to those who will be affected by this Policy and to those who can & will influence this Policy. Therefore, each and every Grenadian is a stakeholder in this "2014 Oral Health Policy for Grenada" and it has been developed with the best interest of all Grenadians in mind.

"Every stakeholder group within the industry has strong thoughts and ideas about what's in the best interest of their group, as one would expect them to. Our concern is what's in the best interest of the entire system." ~ Danny Davis

5.1 Impacting & Implementing Oral Health Stakeholders

<u>During the Policy Development stage</u>, the Consultant sought input and feedback from the following key stakeholders, through two (2) 1-day stakeholder consultations and other ad hoc communications, given the fact that they would be tasked with effectively and actively implementing the "2014 Oral Health Policy for Grenada":

- ✓ Permanent Secretary, MOH
- ✓ Country Program Specialist, PAHO
- ✓ Senior Dental Surgeon (Ag.)
- ✓ Oral & Maxillofacial Surgeon
- ✓ Dental Surgeons (Public & Private)
- ✓ Chief Planner
- ✓ Chief Nursing Officer
- ✓ Senior Health Promotion Officer
- ✓ Dental Auxiliaries/Assistants
- <u>During the Policy Implementation stage</u>, the following additional key stakeholders will play a key role in ensuring primary prevention & early detection of dental problems among the Grenadian

✓ Curriculum Development Officer - Health & Family Life Education

populace and making early & appropriate patient referrals to dental professionals:

✓ Medical Doctors

✓ Physician Assistants

✓ Registered Nurses

✓ Pharmacists

These health care professionals are often the first and primary points of contact for the average Grenadian in any given calendar year. Through their interactions with patients,

- they can provide invaluable advice to and referrals for patients in relation to observed oral health issues, when approached on other health issues/problems.
- ✓ **Social Workers:** by recognizing, referring and reporting on instances of oral health neglect as well as oral & maxillofacial injuries (trauma) as a result of accidents, violence or abuse and abnormalities as a result of birth defects.
- ✓ **Community Leaders:** through facilitation of educational community meetings about oral health/hygiene awareness, prevention & practices and mobilization of community members to participate.

5.2 Affected & Influencing Oral Health Stakeholders

For Grenadians aged 0 - 15 years old, the key stakeholders are:

- ✓ **Students:** who will benefit from fewer or no interruptions in their school life due to absences from school because of toothaches &/or dental visits to extract teeth or fix dental problems; will have healthy oral health & hygiene practices instilled that will benefit them throughout their lives.
- ✓ Parents/Guardians: who will not have to spend time and money treating with their children's dental problems; will be raising healthy citizens; will be able to apply the oral health knowledge learned with respect to their children's health to improve their own oral health.
- ✓ **Teachers:** in whose presence students spend the majority of their waking hours in any given week and who have the potential to strongly influence students' behaviours, educate them about proper oral health & hygiene and supervise their school-based oral health prevention programmes.

For Grenadians aged 15+ to 60 years old, the key stakeholders are:

- ✓ **Employees:** who will be more productive as a result of the absence of nagging or chronic dental problems.
- ✓ **Employers:** who will experience reduced absenteeism among staff for treatment of dental problems.
- ✓ **Clients/Customers/Co-workers:** who will be interfacing with persons practicing good oral hygiene.

✓ Church & Community Organization Leaders: who in many instances have weekly contact with their congregations/communities and exert great influence over them, since they are highly respected by the parishioners & communities they serve.

For Grenadians aged 60+ and over, the key stakeholders are:

- ✓ **Pensioners:** who will still be able to enjoy and savour their food as a result of less tooth extractions, missing teeth, dental implants, full & partial dentures, which often reduce the sensation of taste, make chewing difficult and in some cases painful.
- ✓ Family/Relatives: who will be able to put age benefits (i.e. pensions & grants) to better use for the elderly with activities or things that bring comfort and enjoyment, rather than spending on dentures and expensive dental procedures.

For Special & Vulnerable Groups in Society, the key stakeholders are:

- ✓ Antenatal (pregnant) women.
- ✓ Orphans & abandoned children.
- ✓ Physically challenged citizens (including the deaf, mute, disabled, mentally challenged)
- ✓ Chronic disease patients, including persons living with HIV/AIDS and other communicable diseases/illnesses.
- ✓ Persons living with hypertension, diabetes and other non-communicable diseases/illnesses.
- ✓ Inmates of homes and institutions.

6. ORAL HEALTH POLICY

This "2014 Oral Health Policy for Grenada" focuses on oral health education, promotion and prevention for all ages of the Grenadian population, as well as, the development of skilled oral health personnel, quality service delivery and effective monitoring & evaluation systems using 6 key areas:

- 1. Oral Health Promotion & Protection
- 2. Caries Prevention
- 3. Oral Health Services

- 4. Human Resource Development
- 5. Oral Health Information Systems
- 6. Injuries (Trauma) Treatment

6.1 Oral Health Promotion & Protection

"The first line of oral health care is with the individual through prevention, especially good brushing habits and regular check-ups" (FDI World Dental Federation, 2013).

In order to successfully implement and sustain the major priority area of **Oral Health Promotion & Protection**, the Ministry of Health will:

- ➤ Launch an ongoing public media campaign with targeted oral health messages in order to educate the public, dispel oral health misconceptions, and encourage preventive oral health practices by:
 - Training community health nurses and physicians in oral health awareness and education and incorporation of the information into their regular patient interactions (NYUCD, 2010).
 - Providing community and public health centers with educational material on oral health for distribution to the public.
- Launch a special oral health care education programme for antenatal (pregnant) women in order to educate them on the importance of practicing good oral hygiene for themselves as well as their babies while in the womb, during infancy and while growing up.
- ➤ Launch a special oral health care education programme for chronic disease patients in order to educate them on how they can avoid further oral health-related complications in relation to their chronic disease.
- ➤ Launch a special oral health care education programme for managers and inmates of homes and institutions in order to educate them on the importance of preventing oral health issues and practicing good oral hygiene.

- Launch a special oral health care education programme for the elderly and the caregivers/families of elderly persons in order to educate them on preventing oral health issues associated with aging and dispel myths about ageing and oral health.
- > Actively promote and celebrate World Oral Health Day on March 20th each year, through:
 - The organization of well-planned and targeted activities in collaboration with the Ministry of Education, Grenada Dental Association, schools, churches, sponsors & other social partners, in order to highlight the national importance of practicing good oral hygiene and its implications for an overall healthy life.
 - Development &/or adaption of effective promotional material on oral health in celebration of 'World Oral Health Day'.
- ➤ Develop an annual public spending proposal, specific to oral health, in order to ensure that oral health is not sidelined or lost within Primary Health Care, that the available health financial resources allocated to oral health are put to the best use, that the allocated oral health financial resources are fairly distributed among the six (6) key policy areas of concern.

6.2 Caries Prevention

"Children have 20 milk teeth...seniors should have 20 natural teeth at the end of their life... healthy adults should have, 32 teeth and 0 caries ..." (FDI World Dental Federation, 2013).

In order to successfully implement and sustain the major priority area of **Caries**, the Ministry of Health will:

- > Sustain the 'Smile Grenada' Programme in all pre-primary, primary and secondary schools, by:
 - Appointing a Central Coordinator, positioned within the Ministry of Health (MOH) or Ministry of Education (MOE), who would be primarily responsible for coordinating and overseeing the logistics of the Programme and supporting the dental team (Padgett, Hill, Hodge, Kurtz – NYUCD, 2013).
 - e Establishing a dental team that would be split up into several smaller teams, assigned a parish or educational district for which they are responsible and oversee the daily tooth brushing and fluoride varnish routines...and make oral health presentations at PTA meetings for the purposes of enhancing communication, educating the public, and increasing oral health awareness (*Padgett et al.*, 2013).
 - Assigning volunteer "coordinator teachers" at each public pre-primary & primary school to be in charge of applying fluoride varnish, reminding their fellow teachers about classroom brushing protocols and monitoring the classroom logs, and coordinating replenishment of supplies for their respective schools (*Padgett et al.*, 2013).
 - Training volunteer "coordinator teachers" in basic oral health, at the start of each school term, through the dental team assigned to their area, in order to ensure confidence, skill, and a clear understanding of the goals and procedures of the program (Padgett et al., 2013).
 - Training volunteer "coordinator teachers" in fluoride varnish application, at the start of each school term (NYUCD, 2010).
 - Training volunteer "coordinator teachers" to detect and intercept dental emergencies among students and make appropriate referrals to local public health dentists (NYUCD, 2010).
 - Ensuring that fluoride varnish application is done in each public school every three
 (3) months (NYUCD, 2010).

- Ensuring that daily tooth brushing with fluoridated toothpaste is done in each public school (NYUCD, 2010).
- Ensuring development/acquisition and proper integration of grade & age-appropriate
 oral health teaching material in the school curriculum (NYUCD, 2010).
- Providing toothbrushes and fluoridated toothpaste, at the beginning of each school year, for those students' whose parents are unable to afford such materials (NYUCD, 2010).
- Educating parents about the importance of oral health and preventative self-help oral hygiene practices, proper diet & nutrition.
- Providing parents with information about the 'Smile Grenada' programme and the related school-based tooth brushing, fluoride varnishing and sealant routines (NYUCD, 2010).
- > Mandate that all parents/guardians of children entering the public school system in Grenada present a record of good oral health for the child/children from a registered Dentist to their respective schools before being admitted.

6.3 Oral Health Services

"Oral health services in the Caribbean are currently experiencing several problems, which include inequitable access to care, inadequate maintenance of equipment, inadequate budget allocation in the public sector, lack of cohesive functioning of oral health care personnel, inadequate protocols for oral health care and inadequate non-standardized methods of monitoring and evaluation" (PAHO, 2007).

In order to successfully implement and sustain the major priority area of **Oral Health Services**, the Ministry of Health will:

- ➤ Continue offering tooth extraction services at all Health Centers along with compulsory education on why tooth extraction should be sought as a last resort, the consequences and associated effects of tooth extraction and how it will affect patients' overall health.
- Expand the oral health services offered in the Health Centers to include more dental education and preventative dental services, such as filling and cleaning.
- > Extend the hours for dental service offerings in the Health Centers beyond the normal working hours of 8:00 a.m. to 4:00 p.m., in order to reduce productive working hours lost as a result of persons taking time off to perform dental procedures.
- Introduce oral screening for antenatal women, persons diagnosed with HIV/AIDS and other chronic diseases, persons 60 years & over, mentally & physically challenged persons and inmates of homes & institutions in order to ensure that the oral needs of these high risk groups and vulnerable groups in the Grenadian society are not overlooked.

6.4 Human Resource Development

"There is now broad recognition that oral disease shares common risk factors with other NCDs, and that oral disease cannot be addressed in isolation from other health issues. The rise of a new type of oral health worker provides an opportunity to reshape and expand the role of oral health care professionals" (FDI World Dental Federation, 2013).

In order to successfully implement and sustain the major priority area of **Human Resource**Development, the Ministry of Health will:

➤ Provide ongoing training in management for the Senior Dental Surgeon and Dental Surgeons in order to encourage proper succession planning and improve the efficiency of resource allocation & distribution, service delivery, manpower planning and dissemination of information within the dental division.

- Retain the services of one (1) additional Maxillofacial Surgeon to provide services related to oral and maxillofacial injuries (trauma) and ensure continuous service to the public.
- ➤ Train and retain the services of two (2) backup/standby Dental Surgeons, from the existing pool of Dental Surgeons, to assist the Maxillofacial Surgeon(s) with treating oral injuries (trauma), in cases of emergency &/or patient overload and to act as relief staff when either of the Maxillofacial Surgeons is on vacation, sick leave, off island, etc.
- ➤ Retain the services of a full-time Dental Surgeon for Carriacou & Petite Martinique in order to expand the dental service offerings to patients on those islands and effectively service their dental needs.
- ➤ Employ six (6) Dental Hygienists to serve the public in the Health Centers across the country by engaging in preventative oral/dental care and educating patients on ways to improve and maintain good oral health.
- ➤ Educate and provide practical training for Hospital 'Accidents & Emergency' staff on how to quickly and effectively treat with oral & maxillofacial injuries (trauma), prior to patients receiving treatment from the Oral & Maxillofacial Surgeons &/or Dental Surgeons, in order to avoid permanent or more severe damage.
- ➤ Educate and provide practical training for Primary Health Care professionals on how to detect unreported injuries to patients' mouth, face, jaw and neck, as a result of domestic violence, sexual and other abuse and make the requisite referrals.
- ➤ Encourage the formation of an official and functioning Grenada Dental Association to which all practicing dental professionals should belong, in order to facilitate dialogue among professionals about common problems, challenges and solutions to oral health care in Grenada and to act as the collective voice for oral health in Grenada.
- ➤ Mandate that the Senior Dental Surgeon hold quarterly meetings with dental professionals in order to engage in periodic assessments, set goals, review progress, treat with concerns/challenges, provide collegial support, encourage peer learning, solve problems/challenges, review and establish proper protocols for oral health care and inform them of what is happening administratively and otherwise, as relates to oral health in Grenada.
- ➤ Recruit a Biomedical Equipment Technician/Technologist to routinely service, maintain and configure all dental equipment and machinery, as well as, make recommendations on equipment/machinery and spare parts purchases.

6.5 Oral Health Information Systems

"The extent of periodontal disease and the actual incidence of oral cancers and traumatic dental injuries in this [Caribbean] sub-region are not known" (PAHO, 2007).

In order to successfully implement and sustain the major priority area of **Oral Health Information Systems**, the Ministry of Health will:

- **Revise the existing 'Dental Statistics Form/Card'** in order to facilitate:
 - o Better capturing of oral health information with respect to the Grenadian public.
 - o Better analysis of oral health information in relation to the Grenadian population.
 - o Proper implementation, monitoring and evaluation of the '2014 Oral Health Policy'.
 - Better identification and fulfillment of oral health needs in Grenada.
- ➤ Develop a 'Patient History Form' that is more pertinent to Oral Health through its capture of patients' medical conditions that are likely to affect proper diagnosis and treatment of oral health issues.
- Establish and maintain a properly integrated surveillance system in relation to preventative and therapeutic oral health services performed in order to accurately capture data, verify accuracy of data collected, effectively evaluate and monitor oral health practices among Grenadians for future planning and intervention.
- Establish and maintain a properly integrated injury (trauma) surveillance system that will effectively capture the amount, categories/types, frequency, causes and extent of oral and maxillofacial injuries suffered by persons in Grenada.
- > Establish and maintain a well-integrated and up-to-date electronic and physical library system in order to:
 - Store all oral health reports and documents produced internally or in partnership with external collaborators.
 - Ensure continuous future access to documents even after public officials have left office, resigned, retired, taken vacation or are on sick leave, etc.
- Update the eHealth Map and create a prominent link for the Ministry of Health's website, http://www.health.gov.gd, on the official government 'gov.gd' website.
- ➤ Actively and regularly promote the Ministry of Health's website and the eHealth Map to the general public.
 - Ensure that multiple copies of documents are always readily available and accessible to authorized persons.

6.6 Injuries (Trauma) Treatment

"The frontal sinus fracture is common among trauma patients, especially in young males. It can involve the anterior and/or posterior wall, with or without involvement of the nasofrontal duct. It has high potential for complications and their management is still a controversy, mainly due to the possibility of late complications and sequelae... Care needs to be taken since most complications result from incorrect indication for reconstruction" (Buysse A., Mussalem D., Souza D., Piva F.; Journal of Maxillofacial Trauma 2012).

In order to successfully implement and sustain the major priority area of **Injuries** (**Trauma**), the Ministry of Health will:

- Educate parents, teachers and the general public on basic interim treatment procedures for persons with oral & maxillofacial injuries, including how to properly position and keep injury (trauma) victims pain free and comfortable, while awaiting medical help.
- Educate the public on the importance of adhering to the national laws in relation to the compulsory wearing of seatbelts by vehicle passengers in order to save more lives and reduce oral & maxillofacial injuries (trauma) during vehicular accidents.
- Educate the public on the importance of using appropriate safety gear on work sites &/or while doing jobs which require the use of safety gear.
- Educate sports clubs, coaches, sportsmen and sportswomen about the importance of wearing appropriate head gear in order to diminish oral & maxillofacial injuries (trauma) while practicing or playing sports.

7. POLICY IMPLEMENTATION TASKS, TIME LINES & ACCOUNTABLE PARTIES

	Oral Health Policy' Implementation Schedule - ORAL HEALTH PROMOTION & PROTECTION				
	Implementation Tasks	Timeline	Accountable Parties		
1	Launch a public media campaign with targeted oral health messages to the public.	Ongoing (daily, at prime time)	Senior Health Promotion Officer (MOH) Private Sector Sponsors Radio Stations (Private & Public) Television Stations (Private & Public) Government Gazette & Newspapers		
2	Launch special oral health care education programmes for antenatal (pregnant) women, chronic disease patients, managers and inmates of homes and institutions, the elderly and the caregivers/families of elderly persons.	Ongoing (Beginning January 2014)	Min. of Social Development & Housing Health Centers & Medical Stations Desk for the Elderly Mobile Care Givers Programme Homes for the Aged & other institutions Senior Citizens Associations Food & Nutrition Council		
3	Train community health nurses and doctors in oral health	Ongoing	Ministry of Health		
	awareness and education.	(Beginning January 2014)	Dental Surgeons		
4	Develop, obtain and disseminate educational material on oral health to community and public health centres for distribution to the public.	Ongoing (Beginning January 2014)	Dental Division Senior Health Promotion Officer (MOH) Central Coordinator		
5	Organize well-planned and targeted activities, leading up to 'World Oral Health Day'.	January - March (for final rollout on March 20th each year)	Dental Division Senior Health Promotion Officer Central Coordinator Ministry of Education Grenada Dental Association Public schools Churches Sponsors/Donors Other social partners		
6	Develop &/or adapt promotional material on oral health in order to actively promote and celebrate 'World Oral Health Day'.	January - March (for final rollout on March 20th each year)	Senior Health Promotion Officer (MOH) Ministry of Education Grenada Dental Association Dental Division Public schools & churches Private sector sponsors/social partners		
7	Develop an annual public spending proposal, specific to oral health.	Ongoing (January each year, beginning January 2014)	Chief Medical Officer Senior Dental Surgeon Chief Planner (MOH)		

	Oral Health Policy' Implementation Schedule - CARIES					
	Implementation Tasks	Timeline	Accountable Parties			
1	Appoint a Central Coordinator for the school-based 'Smile Grenada' programme.	January 2014	Ministry of Health Ministry of Education			
2	Establish a dental team to service all schools in the Programme.	January 2014	Ministry of Health			
3	Develop, obtain and integrate grade & age-appropriate oral health teaching material in the school curriculum.	Ongoing (Beginning January 2014)	Senior Health Promotion Officer (MOH) Curriculum Development Officer - Health & Family Life Education (Ministry of Education) Senior Dental Surgeon Dental Surgeons			
4	Assign volunteer "coordinator teachers" at each public preprimary & primary school.	January 2014	Central Coordinator School Principals			
5	Train volunteer "coordinator teachers" in basic oral health, fluoride varnish application as well as detection and interception of dental emergencies among students.	Start of each school term (Beginning January 2014)	Dental Division			
6	Provide public schools with toothbrushes and fluoridated toothpaste for students with identified need.	Start of each school term	Ministry of Health Private Sector Sponsors/Donors			
7	Oversee the tooth brushing (TB) and fluoride varnish (FLV) routines in public schools.	Tooth brushing (TB) - daily FLV - 4 times per annum Sealant - once per annum	Volunteer "coordinator teachers" Central Coordinator Dental Division			
8	Monitor classroom logs & coordinate replenishment of school supplies (toothbrushes, fluoridated toothpaste, flouride varnish, sealant, classroom logs, educational oral health material).	Middle of each school term	Volunteer "coordinator teachers" at Public Primary & Secondary Schools. Central Coordinator Dental Division			
9	Educate parents about the 'Smile Grenada' programme, oral health and oral hygiene, proper diet & nutrition at Parent Teacher Association (PTA) meetings.	Start of each school term	Dental Division			
10	Mandate that all parents/guardians of children entering the public school system in Grenada present a record of good oral health for the child/children from a registered Dentist to their respective schools before being admitted.	September 2014	Ministry of Health Ministry of Education Dental Division Parents/Guardians			

	Oral Health Policy' Implementation Schedule - ORAL HEALTH SERVICES					
	Implementation Tasks	Timeline	Accountable Parties			
1	Continue offering tooth extraction services at all Health Centers along with compulsory education.	Ongoing	Senior Dental Surgeon Health Centers			
2	Expand the oral health services offered in the Health Centers to include filling and cleaning.	Ongoing (Phased introduction between Jan Jun. 2014)	Permanent Secretary (MOH) Chief Medical Officer Senior Dental Surgeon Health Centers			
3	Extend the hours for dental service offerings in the Health Centers beyond the normal working hours (8:00 a.m. to 4:00 p.m.)	Ongoing (Phased introduction between Jan Jun. 2014)	Permanent Secretary (MOH) Chief Medical Officer Senior Dental Surgeon Health Centers			
4	Introduce oral screening for antenatal (pregnant) women, persons diagnosed with HIV/AIDS and other chronic diseases, persons 60 years & over, mentally & physically challenged persons and inmates of home & institutions.	Ongoing (Phased introduction between Jan Jun. 2014)	Permanent Secretary (MOH) Chief Medical Officer Senior Dental Surgeon Health Centers Homes & Institutions National Infectious Disease Control Unit G'da National Council of the Disabled			

	Oral Health Policy' Implementation Schedule - HUMAN RESOURCE DEVELOPMENT					
	Implementation Tasks	Timeline	Accountable Parties			
1	Provide ongoing training in management for Senior Dental Surgeon and Dental Surgeons in order to improve the efficiency of resource allocation & distribution, service delivery, succession & manpower planning and dissemination of information within the dental team.	Ongoing (Beginning January 2014)	Ministry of Health			
2	Employ one (1) additional Oral & Maxillofacial Surgeon to serve the public.	By March 2014	Ministry of Health			
3	Train and employ two (2) backup/standby Dental Surgeons to assist the Maxillofacial Surgeon(s).	January - June 2014	Ministries of Health & Labour Senior Dental Surgeon Maxillofacial Surgeon(s)			
4	Retain the services of a full-time Dental Surgeon for Carriacou & Petite Martinique.	By March 2014	Ministries of Health & Labour Senior Dental Surgeon			
5	Employ six (6) Dental Hygienists to serve the public in the Health Centers.	By March 2014	Ministries of Health & Labour Senior Dental Surgeon			
6	Educate and provide practical training for Hospital 'Accidents &		Maxillofacial Surgeon(s)			
7	Educate and provide practical training for Primary Health Care professionals on how to detect unreported injuries to patients' mouth, face, jaw and neck, as a result of domestic violence, sexual and other abuse and make the requisite referrals.	Twice per annum	Maxillofacial Surgeon(s) Medical Stations & Health Centres Min. of Social Development & Housing Grenada National Organisation of Women (GNOW)			
8	Encourage the formation of an official and functioning Grenada Dental Association to which all practicing Dental professionals should belong.	By March 2014	Ministry of Health Ministry of Labour			
9	Mandate that the Senior Dental Surgeon hold quarterly meetings with dental professionals.	January 2014	Permanent Secretary (MOH) Chief Medical Officer			
10	Recruit a Biomedical Equipment Technician/Technologist.	By March 2014	Ministry of Health Ministry of Labour			

	Oral Health Policy' Implementation Schedule - ORAL HEALTH INFORMATION SYSTEMS					
	Implementation Tasks	Timeline	Accountable Parties			
1	Revise the existing 'Dental Statistics Form/Card' and Develop a 'Patient History Form' more pertinent to Oral Health.	By February 2014	Dental Division			
2	Establish and maintain a properly integrated surveillance system in relation to preventative and therapeutic oral health services performed.	Ongoing (Beginning January 2014)	Dental Surgeons Maxillofacial Surgeon(s) Epidemiology & Information Unit (MOH) Hospitals & Health Centres Min. of Social Development & Housing GNOW Royal Grenada Police Force (RGPF)			
3	Establish and maintain a properly integrated injury (trauma) surveillance system.	Ongoing (Beginning January 2014)	Maxillofacial Surgeon(s) Epidemiology & Information Unit (MOH) Health Centres Min. of Social Development & Housing GNOW Royal Grenada Police Force (RGPF)			
4	Establish and maintain a well-integrated and up-to-date electronic and physical library system.	Ongoing (Beginning January 2014)	Chief Medical Officer Senior Dental Surgeon Chief Planner Central Coordinator			
5	Update eHealth Map and create a prominent link for the Ministry of Health's website - http://www.health.gov.gd - on the official government 'gov.gd' website.	Ongoing (Beginning January 2014)	Senior Dental Surgeon Epidemiology & Information Unit (MOH) Ministry of Health (IT Department)			
6	Actively and regularly promote the Ministry of Health's website - http://www.health.gov.gd - and the eHealth Map to the public.	Ongoing (Beginning January 2014)	Senior Dental Surgeon Senior Health Promotion Officer (MOH) Health Centres & Medical Stations			

	Oral Health Policy' Implementation Schedule - INJURIES (TRAUMA)					
	Implementation Tasks	Timeline	Accountable Parties			
1	Educate parents, teachers and the general public on basic interim treatment procedures for persons with oral & maxillofacial injuries.	Ongoing (Beginning January 2014)	Maxillofacial Surgeon(s) Senior Health Promotion Officer (MOH) Ministry of Education			
2	Educate the public on the importance of adhering to the national laws in relation to the compulsory wearing of seatbelts by vehicle passengers.	Ongoing (Beginning January 2014)	Maxillofacial Surgeon(s) Senior Health Promotion Officer (MOH) Royal Grenada Police Force (RGPF)			
3	Educate the public on the importance of using appropriate safety gear on work sites .	Ongoing (Beginning January 2014)	Maxillofacial Surgeon(s) Senior Health Promotion Officer (MOH) Ministry of Labour Employers Federation Labour Unions			
4	Educate sports clubs, coaches, sportsmen and sportswomen about the importance of wearing appropriate head gear.	Ongoing (Beginning January 2014)	Maxillofacial Surgeon(s) Senior Health Promotion Officer (MOH) Ministry of Youth Empowerment & Sports Ministry of Education Sports Clubs & Coaches			

8. EFFECTIVE POLICY ENFORCEMENT PERIOD

This '2014 Oral Health Policy for Grenada' will be enforced with immediate effect from January 2014 and continue in force until such time as the Policy is revised, altered, amended or updated, following proper monitoring and evaluation of implementation results/outcomes.

The actual and practical rolling out of implementation tasks (see Section 7) that are necessary to fully and efficiently effect this '2014 Oral Health Policy for Grenada' will be conducted over the course of six (6) months, from January to June 2014. This systematic rolling out of implementation tasks will ensure sustainability of the new prevention-oriented oral health care system being endorsed in this Policy, since it will allow time for:

- 1. Understanding by existing oral health care & primary health care personnel of how their role(s), with respect to oral health, would change/be affected, how their perspectives should change/be improved and what specific changes they need to make.
- 2. Smooth transitioning from the old therapeutic-focused oral health care system to the new prevention-oriented oral health care system.
- 3. The necessary addition, modification, integration and coordination of human and technical resources to effect the improved oral health care model.
- 4. Proper and effective planning/budgeting/costing and allocation/distribution of available financial resources among the varied oral health priority areas, as well as sourcing of private/donor funds and sponsorship monies.
- 5. Expansion and creation of new oral health promotional & support programmes.

9. RELATED POLICY CONSIDERATIONS

Oral health was not specifically addressed in the "Grenada National Strategic Plan for Health (2007 - 2011)". This was an unfortunate omission, since, as the World Health Organization (2013) notes, "Oral health is part of total health and essential to quality of life". This oversight is being corrected in the new "National Strategic Plan for Health (2014-2018), since the Ministry of Health understands that oral health has implications for all age groups in the Grenadian population (i.e. babies, preschoolers, pre-teens, teens, young adults, adults and the elderly).

A new "National Strategic Plan for Health (2014-2018)" is being developed concurrently with this "2014 Oral Health Policy for Grenada" and given the disquieting results of the "2010 National Oral Health Survey" (see Appendix 2), conducted by the New York University College of Dentistry (NYUCD) in collaboration with Henry Schein Cares Global Student Outreach (HSCGSO) Program, oral health will be included under the concern areas for non-communicable diseases and given adequate recognition and coverage within the new Plan as a priority strategic area.

CONCLUSION 10.

What was highlighted in the 2003 strategic policy document, "Oral Health for the Caribbean", is once again emphasized here because of its relevance and importance to oral health care in Grenada:

"It is important that Health and Dental Services be able to access modern information technology, conduct standardized epidemiological studies and meet regularly to allow the planning, implementation and assessment of national and regional oral health programmes" (PAHO, 2007).

"It also becomes incumbent upon Ministers for Health in their respective islands to ratify [the "Oral Health for the Caribbean 2003" strategic policy document] and enable its implementation across the region" (PAHO, 2007).

Authorization to proceed with this "2014 Oral Health Policy for Grenada"

X	2014 x
Honourable Dr. Clarice Modeste	Date
Minister of Health & Social Security	(dd-mm-yyyy)

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APPENDIX 1: Explanation of Caries Prevalence Measures

- Caries Prevalence: DMFT and DMFS -

DMFT and **DMFS** describe the amount - the prevalence - of dental caries in an individual. DMFT and DMFS are means to numerically express the caries prevalence and are obtained by calculating the number of

- Decayed (D)
- Missing (M)
- Filled (F)

teeth (T) or surfaces (S).

It is thus used to get an estimation illustrating how much the dentition until the day of examination has become affected by dental caries. It is either calculated for 28 (permanent) teeth, excluding 18, 28, 38 and 48 (the "wisdom" teeth) or for 32 teeth (The Third edition of "Oral Health Surveys - Basic methods", Geneva 1987, recommends 32 teeth). Thus:

- How many teeth have caries lesions (incipient caries not included)?
- How many teeth have been extracted?
- How many teeth have fillings or crowns?

The sum of the three figures forms the DMFT-value. For example: DMFT of 4-3-9=16 means that 4 teeth are decayed, 3 teeth are missing and 9 teeth have fillings. It also means that 12 teeth are intact.

Note: If a tooth has both a caries lesion and a filling it is calculated as D only. A DMFT of 28 (or 32, if "wisdom" teeth included) is maximum, meaning that all teeth are affected.

A more detailed index is DMF calculated **per tooth surface**, **DMFS**. Molars and premolars are considered having 5 surfaces, front teeth 4 surfaces. Again, a surface with both caries and filling is scored as D. Maximum value for DMFS comes to 128 for 28 teeth.

For the **primary dentition**, consisting of maximum 20 teeth, the corresponding designations are "deft" or "defs", where "e" indicates "extracted tooth".

In Tables presenting caries data for adults, the following designations are used:

	DMFT: Mean number of decayed, missing or filled teeth						
%DMFT:	%DMFT: Percentage of population affected with dental caries		Mean number of missing teeth				
%D:	Percentage with untreated decayed teeth MNT: Mean in		Mean number of teeth				
DT:	Mean number of decayed teeth	%Ed:	Percentage edentulous				

Source: Malmo University, 'Oral Health Database'. Electronic access: http://www.mah.se/CAPP/Methods-and-Indices/for-Caries-prevalence/?id=31941

APPENDIX 2: Summary Findings from the 2010 NYUCD Oral Health Survey

SUMMARY of NYUCD 2010 National Oral Health Survey Results			
Analyzed Variable	Result		
Children missing at least 1 tooth due to Dental Caries	33.33%		
Prevalence of Dental Caries	83.40%		
Mean Caries surface per child	8.62		
Mean Filled surfaces per child	0.74		
Mean demineralized surfaces per child (predictive of future Caries)	5.84		
Children without tooth brushes	10%		
Children who had never seen a Dentist before	50%		
Of the 50% who saw a Dentist before, those who had not seen a dentist in the last 2 years.	66.66%%		
Source: Ministry of Health, 2013			

Average Disease Burden per Child based on the amount of **Decayed/Missing/Filled/Demineralized Surfaces** detected in the 2010 National Oral Health Survey

No. of Children diagnosed	DECAYED surfaces	MISSING surfaces	FILLED surfaces	DEMINERALIZED surfaces
1,075	9.1	1.8	0.4	6

Source: NYUCD, July 2010

APPENDIX 3: Public Dental Services Offered in Grenada

HEALTH	Public Dental Services Offered in Grenada					
CENTERS	Extraction	Fillings	Cleaning	Starting Time	Finishing Time	Physical Address & Contact Info
St. George's Health Center	Mondays to Fridays	Every Morning (Mon Fri.)	N/A	8:00 AM	4:00 PM	Melville St., St. George's Tel: 435-8823
Gouyave Health Center	N/A	N/A	N/A	8:00 AM	4:00 PM	Upper Depradine St., Gouyave, St. John Tel: 444-8764
Victoria Medical Station	Tuesdays & Fridays	N/A	N/A	8:00 AM	12 noon	Queen's Street, Victoria, St. Mark Tel: 444-8427
ADULTS Sauteurs	Wednesdays & Fridays	Thursdays & Fridays	N/A	0.00 414	12	La Fortune,
Health Center CHILDREN	Mondays & Fridays	Mondays, Tuesdays, Fridays	Mondays & Fridays	8:00 AM	12 noon	St. Patrick Tel: 442-9317
Grand Bras Health Center	Mondays, Tuesdays, Wednesdays, Fridays	N/A	N/A	8:00 AM	12 noon	Grand Bras, St. Andrew Tel: 442-7623
ADULTS St. David	Thursdays	N/A	N/A	8:00 AM	4:00 PM	
Health Center CHILDREN	Tuesdays & Wednesdays	Tuesdays & Wednesdays	Tuesdays & Wednesdays	8:00 AM	4:00 PM	Belle Vue, St. David Tel: 444-6892
Hillsborough Health Center	Thursdays	N/A	N/A	8:00 AM	12 noon	Hillsborough, Carriacou Tel: 443-7280