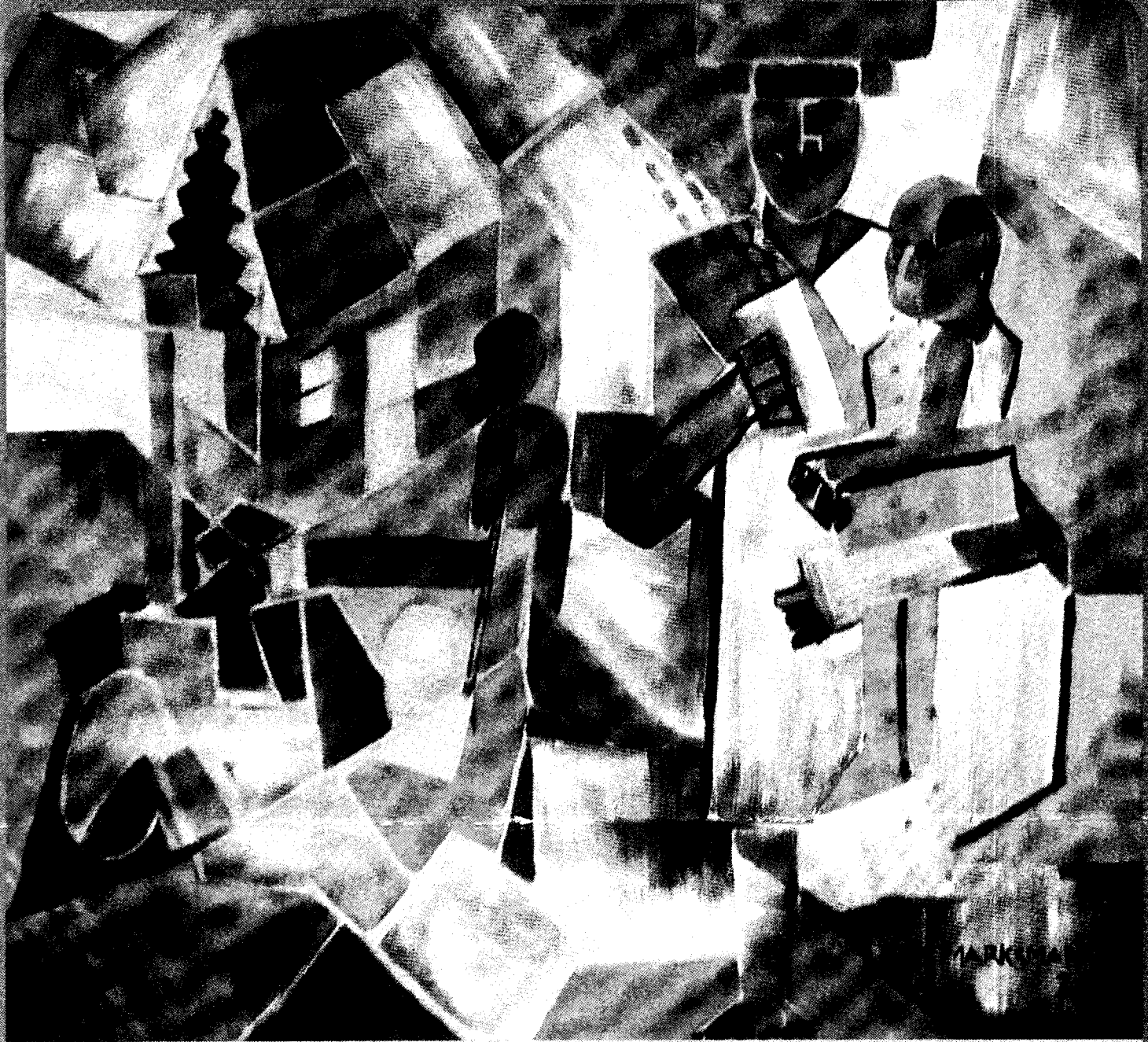


The Health of the Nation
is the Wealth of the Nation



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The Health of the Nation is the Wealth of the Nation



GOVERNMENT OF BARBADOS

Barbados Strategic Plan For Health 2002-2012

January 2003

Prepared by the
Project Design and Implementation Unit, Ministry of Health

Cover Mural: "Healthy Community"
by
Mark "Marksman" Hill

Foreword



Senator the Honourable Jerome Walcott
Minister of Health

Post Independence Barbados has been an era in which we have witnessed significant improvements in the health status of our people. The burden of infectious and parasitic diseases, as well as nutritional deficiencies, have been reduced to the extent that our epidemiological profile is now similar to that of a developed country.

Good health has been an important factor in the socio-economic development of our people. An improved quality of life has contributed to lifestyle changes, which ironically now present us with some of our greatest challenges to date. Our people are living longer and concomitantly, there is an increasing prevalence of chronic degenerative diseases.

One of our major challenges will be to place greater emphasis on prevention and the maintenance of healthy lifestyles. Health Promotion will be at the core of a new approach that will seek to strengthen the role of the people, both individually and collectively, in the delivery of health services.

Another critical challenge will be to restructure our financing mechanisms in order to ensure that we can sustain, during this millennium, the levels of care that Barbadians have grown to enjoy over the years.

This Strategic Plan charts the course for the health system to address the challenges we currently face. It is the result of collaboration involving all stakeholders, both within and beyond the public sector.

The Government of Barbados remains committed to investing resources to improve the health and well being of all Barbadians. The Government of Barbados and its partners will continue to enhance the nation's investment through wise programme and resource utilisation decisions that get the most for the funds available.

The challenge is one for all of us: for Barbados as a nation. Together, we will make it happen. All key stakeholders have pledged commitment to the Plan. These include Government, the private sector and non-governmental organisations, communities and individuals across Barbados.

I invite all of you to join me as we take this new path for health in Barbados.


Senator the Honourable Jerome Walcott

Acknowledgements

This Strategic Plan was prepared by the Chief Project Officer and staff of the Project Design and Implementation Unit of the Ministry of Health. Many thanks to the programme managers and other technical and administrative staff of the Ministry for their invaluable contributions to this Plan.

The Ministry gratefully acknowledges the ongoing support from its primary collaborators, including other agencies of Government, the Pan American Health Organization, particularly, for its guidance throughout the process, and the European Commission for its support of the National Consultation held in September 2002 at the Sherbourne Conference Centre.

Special acknowledgments are in order for those persons who participated in the National Consultation and whose verbal presentations or written submissions contributed to the development of the Plan. The list of organisations that participated in the National Consultation is at Appendix 1.

The Ministry also acknowledges those persons who worked untiringly to finalise the Plan, including its formatting, editing, proof reading and printing.

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Chapter 1.

Building On Success

Vision of a Healthy People

Health can be defined according to the World Health Organization in the following ways:

"Health is a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity."

"Health is a universal value, basic human right and a resource for everyday life."

Barbados' National Strategic Plan for Health acknowledges these definitions and is guided by the following vision:

The vision for a healthy people is to empower individuals, communities, and organisations in the pursuit of health and wellness in a health system that guarantees the equitable provision of quality health care, thus contributing fully to the continued economic, cultural, social and environmental development of Barbados.

It supports the country's overall national strategic plan, which aims "To make Barbados a fully developed small island state by 2012".

Achievements

The health status of Barbadians has markedly improved since the period of independence. Credit must go to all stakeholders of the health system including individuals, communities, non-governmental organisations [NGOs], the private sector and government.

Life expectancy at birth of the population as a whole increased from 69.9 years in the 1960s to 76.8 years in 2000. Barbados is among those countries with the highest number of centenarians living in the world.

The burden of infectious and communicable diseases, and diseases caused by nutrition

deficiency have been greatly reduced. Today, social and economic advances have brought with them an epidemiological status that resembles that of developed countries.

Health and Poverty

Barbados achieved its record eighth consecutive year of real Gross Domestic Product [GDP] growth in 2000. This growth has maintained jobs while supporting the country's significant investments in health, education and safety to maintain its position ahead of most other developing countries, ranking number 31 in the United Nations Development Programme [UNDP] 2002 report.

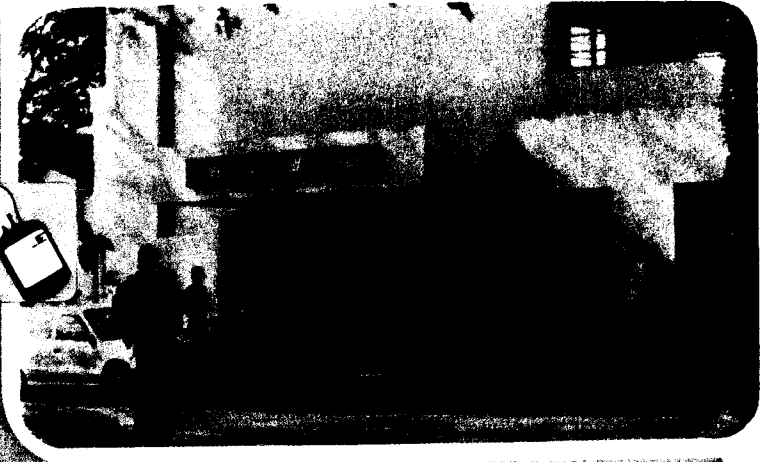
An important achievement however, has been the priority given to the 35,000 persons living below the poverty line. The Ministry of Social Transformation's empowerment and welfare programmes, businesses, the Barbados Red Cross Society, faith-based organisations, community groups and other NGOs provide shelter, food assistance, and health care to the needy. In addition, the Ministry of Health HIV/AIDS programme operates a food bank programme through donations of foodstuff received from the public that it distributes to persons living with HIV/AIDS.

Healthy Nutrition

Non-sugar agriculture and fisheries have contributed to Barbadians generally eating well. In addition, the school meals programme for primary schools ensures that all children have access to daily affordable and nutritious meals. Gains accrued from sufficient supplies of the right kinds of food and a focus on promoting better nutrition by the National Nutrition Centre are evidenced by the absence of protein energy malnutrition as a significant problem.

Clean Water

The entire population has access to potable water. Furthermore, the island's water



Winston Scott, Polyuria

supply has been supplemented through the successful introduction of a desalination plant on February 16, 2000, in order to meet the growing demand. Most of the demand, however, is still met by inland deep-water wells.

Quality Health Care Services

The policies on health are predicated on the philosophy that health care is a fundamental right of Barbadians. Universal access to health care is a tangible manifestation of this right.

Collaboration among stakeholders, including government, the private sector, NGOs and the media, has been successful in the promotion of healthy lifestyles. For example, there is a successful vector control initiative that involves communities working with area co-ordinators from the Ministry of Health to reduce mosquito-breeding places while collaboration with the Ministry of Agriculture controls the rodent population.

One community, trained in the healthy community concept, curbed their illegal dumping. Fewer mosquitoes and rodents, and a greater sense of pride and awareness of the physical environment by residents, were the result. The introduction of the Healthy Lifestyle Extravaganza is another major success.

Barbados' immunisation programme has been extremely successful. There have been no reported cases of polio since the 1960's. Since 1994, there have been no reported cases of diphtheria, whooping cough, or tuberculosis meningitis. Furthermore, levels of pulmonary tuberculosis have been persistently low.

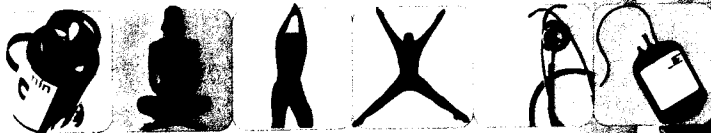
Essential drugs are provided free of cost to patients seen in government institutions. In addition, drugs listed in the Barbados National Drug Formulary are provided free at private participating pharmacies, to persons 65 years of age and over; children up to the age of 16 years and persons being treated for hypertension, diabetes, cancer, asthma, and epilepsy.

Maternal and Child Health Services and the establishment of Neonatal and Paediatric Intensive Care Units have been extremely successful in improving infant survival chances. Infants dying in their first year fell from 47.7 per 1000 live births in the 1960s to 13.4 in 2000. The age specific death rate of children in the 1- 4 age group fell from 2.4 per 1000 population in the 1960s to 0.3 in 2000. Since 1998, the Queen Elizabeth Hospital has been designated as a Baby Friendly Hospital under the United Nations Children's Fund [UNICEF] initiative.

Barbados has the only leptospirosis laboratory in the Eastern Caribbean and performs diagnostic analyses for other Caribbean countries. Construction of the sewerage system on the south coast of the country is near completion, whereas the City of Bridgetown has been sewered since 1980. These have an impact on rodent control and near shore water quality that lead to a reduction in faecal and water-borne diseases transmitted by the faecal-oral route.

Why Change

Barbados is justifiably proud of the gains it has made in health. However, conscious of the



evidence that health problems of today and tomorrow are increasingly complex and evermore related to social, economic and behavioural factors, it is believed that this is the moment for a new approach and the implementation of a National Strategic Plan for Health.

Although health is widely understood to be both a central goal and an important outcome of development, the importance of investing in health to promote economic development has been much less appreciated. Health and economic prosperity are mutually dependent. Investing in health is seen as essential to economic development. Translating this recognition into action is the challenge that faces Barbados.

This Strategic Plan for Health reflects an integrated approach to securing the national vision of health, safety, and prosperity. Barbados' health system has made significant strides within its available resources and will seek to maintain many of the tried and proven health system activities. However, the country is now challenged by changing health needs and associated escalating costs. People are surviving longer with increasing numbers suffering from chronic degenerative diseases, thus making increased demands on the health system. Rapidly evolving needs, including demands for expensive technology, are raising difficult questions about the adequacy and allocation of the nation's resources to and within the health system.

Choices have to be made in health. The health system must set priorities and implement these actions - within the resources available. There is always the need to choose between competing demands to ensure that resources are used to the best effect. Change will ensure quality, efficiency, equity, cost containment, financial sustainability, and

private/public sector collaboration. This integrated Strategic Plan for Health also actively involves all sectors in order to sustain and build on the success of the health system. The Government, as a key stakeholder, values the diverse expertise and experience that exist within the health system. The strategy reflects the best advice of experts and users. This important input has been, and will continue to be made integral to the plan through consultations, working groups, and other methods that facilitate the participation of all stakeholders. The Barbados Strategic Plan for Health will therefore continue to be developed and refined using a "bottom up" approach.

What Determines Health

An integrated approach is critical because of the number of factors that must work together to contribute to national health. These factors do not exist in isolation. Rather, they work together in a complex and interrelated system. These factors - called *determinants* of health - can be categorised as below:

Culture:

Some persons or groups may face additional health risks due to a socio-economic environment, which is largely determined by dominant cultural values.

These contribute to the perpetuation of conditions such as marginalisation, stigmatisation, loss or devaluation of language and culture and lack of access to culturally appropriate health care services.

Education:

Education is closely tied to socio-economic status. Effective education for children and lifelong learning for adults are key contributors to health and prosperity for individuals and the country.

Education contributes to health and prosperity by equipping people with knowledge and skills for problem solving, and helps to provide a sense of mastery over life circumstances. It increases opportunities for job and income security, and job satisfaction. It also improves people's ability to access and understand information to help them keep healthy.

Employment and Working Conditions:

Unemployment, stressful or unsafe work, and underemployment are associated with poor health. People who have more control over their work circumstances and fewer stress related demands of the job are healthier and often live longer than those involved in stressful or riskier work activities.

Food:

Access to food and an adequate diet are essential for health and wellbeing. Shortage of food and lack of variety are essential contributors to malnutrition and nutrition-related diseases. Excess intake of the wrong foods contributes to cardiovascular disease, diabetes, cancer, obesity, and dental caries.

Social and economic conditions result in a social gradient in diet quality that contributes to health inequalities. The poor tend to substitute cheaper processed foods for fresh food. People with low incomes are least likely to eat well.

Shelter:

Good quality housing inevitably has an important impact on health. Homes that are safe, dry, and well ventilated with amenities that meet minimum standards of comfort, for example, indoor toilets are important for good health.

Personal Health Practices and Coping Skills:

Individuals can prevent disease and promote self-care, cope with challenges and develop self-reliance, solve problems and make choices that enhance health through their personal health

practices and coping skills. There is a growing recognition that personal life choices are greatly influenced by the socio-economic environments in which people live, learn, work and play.

Social Support and Social Network:

Support from families, friends and communities is associated with better health. The caring and respect that occurs in social relationships, and the resulting sense of satisfaction and well being seem to act as a buffer against health problems.

Equity and Social Justice:

Health inequality runs throughout life, from before birth through to old age. It exists between social classes, between men and women, and between people from different ethnic backgrounds. The story of health inequality is clear: the poorer you are, the more likely you are to be ill and to die younger. That is true for almost every health problem.

Violence:

Violence has a major impact on societies, communities and families. For example, family violence and street violence tear apart families and communities and have major impacts on mental health and well being.

Biology and Genetic Endowment:

The basic biology and genetic make-up of the human body are fundamental determinants of health. Genetic endowment appears to predispose certain individuals to particular diseases or health problems.

Gender:

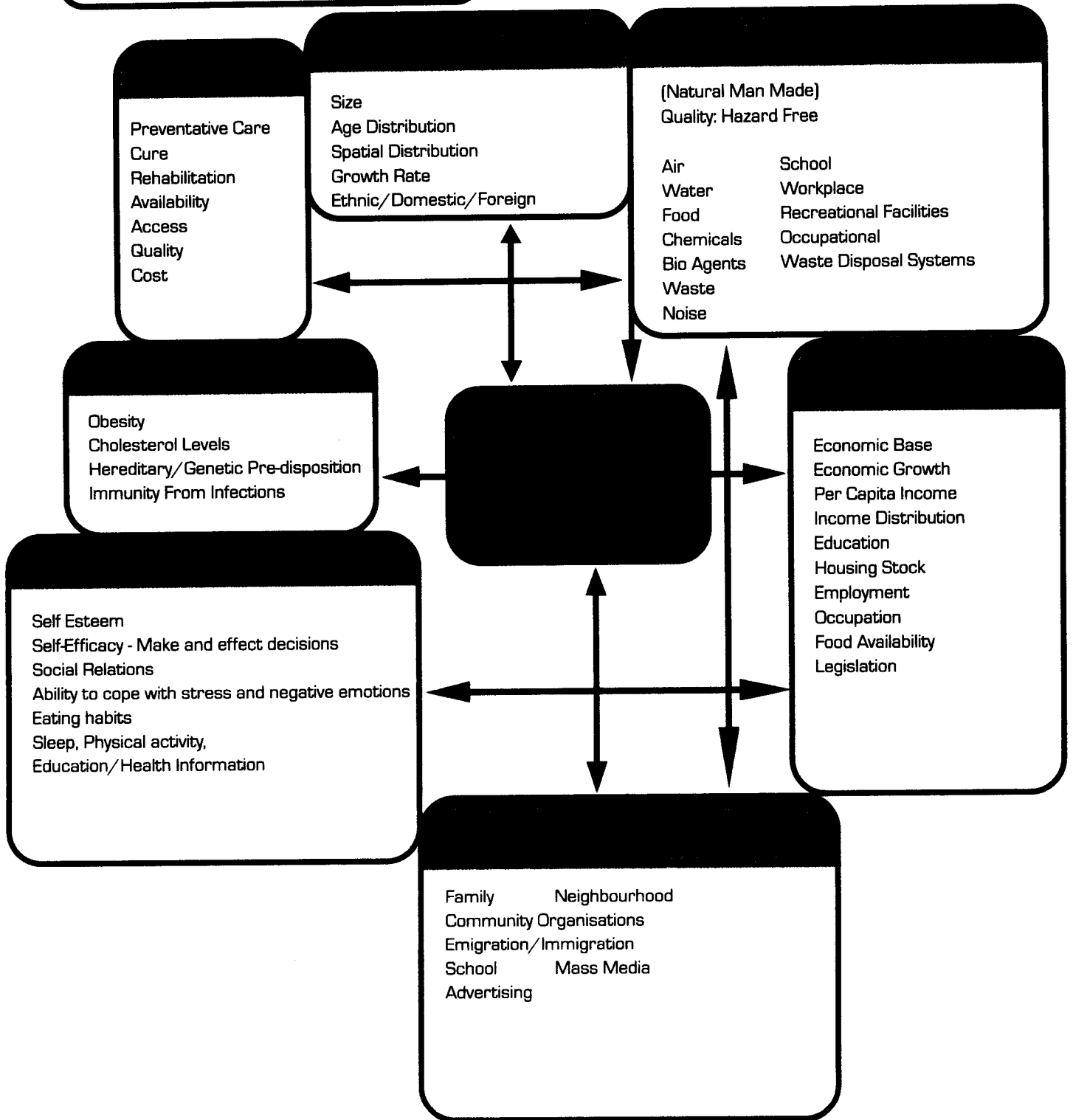
Gender norms influence the health system's practices and priorities. Many health issues are a function of gender-based social status or roles.

The Physical Environment:

At certain levels of exposure, contaminants in our air, water, food and soil can cause a variety of adverse health effects, including cancer, birth defects, respiratory illnesses and gastrointestinal ailments. Factors related to housing, indoor air quality and the design of communities and transportation systems could significantly influence our physical and psychological well being.



A Multicausal Concept of Health



Source: Office of Caribbean Program Coordination,
Pan American Health Organization



THE CARIBBEAN CHARTER
FOR HEALTH PROMOTION
WAS DEVELOPED IN
PORT-OF-SPAIN, TRINIDAD,
AT THE FIRST
CARIBBEAN CONFERENCE
ON HEALTH PROMOTION
ON JUNE 1-4, 1993



Building on Sound Principles

This Strategic Plan for Health is grounded in six principles that are based on the *Caribbean Charter for Health Promotion [1993]*:

Formulating Healthy Public Policy:

Since all dimensions of the activities of the state will impact on the health status of the people, policy makers must be ever conscious of the impact of these decisions. Multi-sectoral, multidisciplinary considerations are therefore critical to the formulation of healthy public policy.

Reorienting Health Services:

The implementation of health promotion strategies requires no less than the orientation of the health system to make it more responsive to the health needs of communities and individuals. Health systems that espouse promotion must involve members of the community in its development, and ensure that decisions about services result from genuine local and national participatory and consultative processes.

Such systems will have equity as a consideration. The allocation of resources and the establishment of programmes are crucial to ensure that health promotion assumes its proper priority position.

These systems will be open to the provisions of non-traditional services, the conduct of appropriate health research, and will legitimise the role of any member of the health team as a leader.

Empowering Communities To Achieve Well Being:

Health promotion must build on that aspect of Caribbean culture that embraces community action and the tradition of the extended family. Communities will be provided with the information

and the tools to allow them to take such actions as are needed to improve health and well being.

Proactive community action and participation, as well as the community's involvement in determining its priorities for health promotion, must be acknowledged and facilitated by policy makers, health care providers and the media.

Creating Supportive Environments:

The success of health promotion will depend in part on the commitment of governments to achieving a healthy physical, social, economic and political environment. All development activities must be guided by the need to sustain and enhance the environment, as Caribbean people aspire to live in healthy countries and healthy cities, to work in healthy places and to have their children attend healthy schools.

In turn, health promotion will advocate a commitment to securing these aspirations, turning to legislation if the need arises.

Developing/Increasing Personal Health Skills:

Education for personal health must aim to inculcate self-discipline, recognising the critical importance of early childhood education and take account of the values, beliefs and customs of the community. The development of these skills is a continuous process and must be facilitated at all stages of life - at home, school, work and leisure. Individuals will be guided and supported in achieving these goals.

The responsibility for increasing skills is one shared by all the sources of information and all the media of education and communication.

Building Alliances with Special Emphasis on the Media:

Countries and communities have diverse resources that will be brought together in a joint effort to promote health. Alliances will be formed and coordination sought among all those traditional and non-traditional sectors that impact on health.

The media in all their diversity must be key players in this partnership, bringing their considerable

power and influence to bear on the formulation of policies and programmes that affect the health of the people.

It is imperative that there be a reciprocal relationship between the media and health related sectors to ensure free flow of information on matters vital to Caribbean health.

The effectiveness of many of these alliances will depend on the attention paid to training at different levels, in the different fields from which the allies for health are drawn.

Chapter 2.

Development Challenges

Health in Development Context

Geopolitical

Barbados, the most easterly of the Caribbean islands, lies within the hurricane belt at latitude 13.3° North and longitude 50° West. Every year, hurricane vigilance increases from June through November. It is a small coral stone island with an area of 166 sq miles. Relatively flat, the highest point reaches 1,104 ft. The average temperature is 27° Celsius and annual rainfall is approximately 1,524 mm. Most of the rain falls during the wet period, between June and November each year.

Barbados is densely populated with approximately 270,400 inhabitants. The island is divided into eleven parishes, with its capital, Bridgetown, located in St. Michael.

Barbados is an independent democratic nation with a bi-cameral system of government. General elections are held every five years. Its form of government is a constitutional monarchy in which the Head of State is the Queen, who is represented by the Governor General. Legislative power is vested in Parliament, which comprises an elected House of Assembly of 28 members, a nominated senate of 21 members and the Governor General.

The country has an excellent network of roads with highways linking the airport, Bridgetown, the seaport, the industrial estates and the tourist belts on the west and south coasts. The population is well served by a system of public transportation, although during the last decade, many households acquired their own means of transportation. In 2000, 84,509 residences and 38,811 businesses were connected to the telecommunications system. Cellular service customers grew to 20,209. There are five known internet service providers and 12,000 internet subscribers. At the end of 2002, there were

101,319 consumers of electricity. Householders were the largest consumers of this commodity.

Economic

Following eight consecutive years of real economic growth, the Barbados economy contracted in 2001. Some sectors, especially manufacturing and agriculture, have experienced some difficulty as they have tried to adjust to the trade liberalisation process, while others have suffered from the spill over effects of a slowing world economy. The terrorist attacks on the United States on September 11, 2001 have served to exacerbate this situation, although the impact was not as severe as first anticipated.

Tourism has become the main foreign exchange earner with tourists arrivals climbing to almost 1 million annually. The sector declined by 5.9%, in 2001 compared to buoyant growth of 7.7% in 2000. Long stay visitors declined by 6.9% and cruise passengers declined by 1.1% in 2001. The principal markets for tourists continued to be the United Kingdom, United States, CARICOM countries and Canada.

Real GDP declined by 2.6% in 2001, in contrast to an expansion of 3.0% in 2000. Per capita GDP for 2001 was estimated at \$15,700, a decrease of 0.2% below the 2000 level.

Another major strength of the economy, the international financial and business services sector, which consists of exempt insurance companies and offshore banks, has been growing in importance as a foreign exchange earner. The total number of entities licensed fell in 2001 to 245 from 638 a year earlier. This represents a decline of 61.1 % as compared with a modest growth of 3.1 % registered in 2000.

The problem of declining prices for sugar on the world market and its high production costs were factors that contributed to agricultural diversification and alternative utilisation of land.

The unemployment rate at the end of December of 2001 was 9.9%, an increase of 0.7% over the 9.2% recorded in 2000. This was the first



increase in unemployment in eight (8) years, as the economy recorded its first year of negative growth.

Social

Barbados is widely known to have one of the most complete sets of social benefits in the region. Health care services are provided free at the point of delivery in the public sector. The literacy rate of Barbadians is estimated at 97.4%. Education at the primary and secondary levels is compulsory for students between the ages of 5 to 16 years.

According to the Inter-American Development Bank's Poverty and Income Distribution study for 1996-1997, approximately 8.7% of total households in the country live below the poverty line estimated at \$5,502 per annum. These households accounted for about 13.9% of the population.

Approximately 38% of the poor lived in the urban parish of St. Michael, while 20% lived in rural parishes.

Females headed approximately 59% of poor households. These households were larger in size than non-poor households, which had on average 2.9 persons per household. Although this study did not specifically focus on health, it does provide an indication of the extent of equity in access to the health system, as well as other social benefits that contribute to well being.

Government's policy on poverty alleviation is implemented through the Ministry of Social Transformation, which provides assistance for the indigent, the elderly and the disabled. This Ministry also disburses funds to a number of community organisations that provide programmes through

which community members are taught skills, assisted with small-business development and otherwise empowered in the fight against poverty.

Priority Issues

The following sections discuss the status of health in Barbados within the context of ten strategic directions:

- 1 **Health Systems Development;**
- 2 **Institutional Health Services;**
- 3 **Family Health;**
- 4 **Food, Nutrition and Physical Activity;**
- 5 **Chronic Non-communicable Diseases;**
- 6 **HIV/AIDS;**
- 7 **Communicable Diseases;**
- 8 **Mental Health and Substance Abuse;**
- 9 **Health and the Environment; and**
- 10 **Human Resource Management.**

These Strategic Directions provide the overarching framework for action on health. They also provide a framework for all partners in the health system to link their policy decisions and investments to health outcomes. A major challenge for the health system will be the urgency with which all stakeholders can embrace the new approach. A national effort involving fundamental changes in attitudes and behaviour will be required.

Health Systems Development

Reorganisation of Health Systems:

A broader delivery system is required because of the number of new challenges that include:

- A change in the disease profile from acute to chronic, increasing road traffic accidents and violent injuries, as well as increasing incidences of children with cerebral palsy and other related disorders that all led to disability and the associated increase in cost;
- The increased demand for high technology by both patients and providers. This demand is growing faster than the available financial resources within the health system;
- The initiatives taken by the private sector and the non-governmental organisations in the delivery of health services will require the establishment of effective quality assurance initiatives, increased access to information and the removal of restrictive practices; and
- The capacity to exercise evidence based decision-making and resource management.

The Ministry, therefore, proposes to undertake a detailed assessment and analysis of its various administrative and organisational practices, which affect decision-making in the health system.

Financing Health Systems:

The main challenges for the health system will be to ensure equity of access, improve efficiency and effectiveness and establish a sustainable financial base.

Expenditure on health services has been increasing steadily, both in the private and public sectors. Within the last 15 years, an increasing number of health services has been provided by the private sector. It is estimated that 50% of primary care services are provided by the sector and 20% of the population is covered by private health insurance. Private sector expenditure estimates in 1995 amounted to \$105.4m, which was approximately 30% of total expenditure on health by the society.

During fiscal year 2000 - 2001, the Government allocation for Health was \$280m, approximately 14.0% of total Government expenditure, in almost constant ratio since fiscal year 1997 - 1998. The 2000 - 2001 allocation represented an 11.6% increase over the revised estimate for 1999 - 2000. Per capita public expenditure on health increased by 75% between 1993 and 1999. The trend has been increased expenditure on secondary and tertiary care, with the Queen Elizabeth Hospital accounting for approximately 32% of the Ministry's expenditure.

Hospital services consumed the largest share of expenditure. Overall, the Queen Elizabeth Hospital and the Psychiatric Hospital, the Medical Aid Scheme and the Emergency Ambulance Service accounted for 53.9% or \$141m of the budget, compared to \$137.4m or 49.7% of the 1999 - 2000 quota. The allocation to Primary Health Care Services was 31.8% or \$89m, representing \$11.1m short of the allotment for the previous year, including allowances for capital works on the South Coast Sewerage Project and the Integrated Solid Waste Management Programme.

Insurance companies market group-health insurance services specifically to credit unions, trade unions and large organisations. Policies are generally basic indemnity plans, which reimburse the beneficiary based on a fixed percentage of the cost of the health care service being claimed.

This is the only type of health insurance currently being provided. There is no up-to-date information available on the degree of coverage provided or on the models utilised in private insurance schemes.

The Ministry intends to explore the feasibility of implementing an appropriate mix of financing mechanisms in order to ensure that the quality of health services can be sustained.

In view of the fact that the private sector has resources to better provide some aspects of care, this presents opportunities to strengthen linkages and create new partnerships, particularly as concerns exist about the rising cost of health care and Government's ability to financially sustain the current level of health services.



Quality Assurance:

The private sector has had a long history of continuous quality improvement [CQI] and a number of companies are ISO 9000 certified.

There are informal CQI processes within institutions and programmes in the Ministry of Health. The Ministry is now formalising the CQI and accreditation processes. The CQI Programme commenced in the Ministry of Health in May 2000 with a feasibility and sensitisation study in five Ministry of Health institutions as follows: Queen Elizabeth Hospital, Winston Scott Polyclinic, Psychiatric Hospital, Geriatric Hospital and St. Andrew's Children Centre. One of the main recommendations emerging from that study, and from which action has been taken, was the development of educational programmes within institutions to foster a culture of quality, and encourage buy-in at all levels of care.

Quality co-ordinators and quality teams have been identified and trained on tools, techniques, concepts and leadership within CQI. It is expected that these persons will initiate quality improvement projects to address the various aspects of efficiency, effectiveness and client satisfaction within their institutions. To date, over one hundred and fifty persons from the five institutions have been trained. Policy and procedure manuals, which have been developed, will facilitate sensitisation and continuous training of all staff in these five institutions. A draft policy paper on CQI and Accreditation has been prepared to support the implementation of CQI programmes in all health institutions.

Information Systems:

The value of information in the management of health services delivery cannot be overemphasised.

Strategic planning, development and strengthening of health systems, monitoring and evaluation require a proper functioning information system. At present, the Ministry of Health has a weak information base, and hence limited research to support evidence based decision-making. The Ministry of Health therefore recognises the need for a formalised research agenda to build its capacity for making sound decisions.

Guidelines for monitoring and evaluating health have been developed. Appropriate data for compiling its health profile are updated annually. The profile will be used for:

- Evaluating inequities in health conditions
- Monitoring changes in the prevalence of risk factors
- Determining the adequacy and significance of reported data
- Identifying the population's priorities and needs in terms of access to services
- Defining national health objectives and goals
- Evaluating their compliance
- Improving the efficiency and quality of the health system.

There is a lack of dissemination of health status information to the local levels, and to the communities at large.

There is no health information unit in the Ministry of Health to evaluate the quality of information. The Ministry has the capacity for and definite access to expert support in epidemiology and biostatistics.

This support is available by way of the Chronic Disease Research Centre [CDRC] of the University of the West Indies (based in Barbados) and the Caribbean Epidemiology Centre [CAREC], the regional epidemiological research institution based in Trinidad and Tobago.

Maintenance and Assessment of Technology:

Almost all of the high technology equipment in the country is located in the Queen Elizabeth Hospital, the only acute and emergency hospital in the country. However, renal dialysis, radiology and other diagnostic services are provided in the private sector.

The physical infrastructure throughout the publicly-funded health care system is generally very old and nearing the end of its useful life. It will be necessary to revise the facility development process and establish a programme that will include:

- Rehabilitation and, where appropriate, construction of new facilities;
- Preventative maintenance; and
- A repair programme.

There is the lack of formal systems to support management and assessment across all the functions. There is little evidence of a systematic maintenance programme. The result has been continued breakdowns and disruption in service. Systems will have to be established for replacement, out-sourcing, maintenance and inventory management, in order to strengthen technical management services. It will also be necessary to review the present procurement system, particularly in light of new and rapidly changing technology.

Pharmaceuticals:

The Barbados Drug Service was established in 1980 and is a WHO Collaborating Centre. Its

operations are governed by the Drug Service Act CAP 40a and the Financial Administration and Audit (Drug Service) Rules 1980.

The Barbados Drug Service is the agency responsible for procuring and distributing essential drugs and for promoting rational drug usage in Barbados. Total spending by the Barbados Drug Service increased from \$16.4m in 1993/94 to \$26.2m by the end of 1999. Per capita pharmaceutical expenditure by the Barbados Drug Service increased from \$62.24 in 1993/94 to \$97.9 in 1999.

During this period, public expenditure on drugs as a percentage of the public expenditure on health remained relatively even, between 9% and 11%.

In light of the changing morbidity patterns, the ageing of the population, and rising prices on the world market for pharmaceuticals, the expenditure of the Barbados Drug Service is expected to continue rising. Barbadians who seek medical care in the public sector, are prescribed formulary drugs, which are provided free of charge at public sector pharmacies.

There is a contractual arrangement between the Barbados Drug Service and private sector pharmacies, through which patients who meet one or more of the following criteria, obtain their prescriptions free at the point of service: persons 65 years and over; children under 16 years; persons being treated for hypertension, diabetes, cancer, epilepsy and asthma.

Disaster Management:

Barbados has not experienced any major natural disasters within recent times. Flash flooding may be experienced in some districts along the west coast and other low-lying areas during the rainy season. Government has implemented a drainage-control programme involving cleaning of wells and drains and damming gullies to areas.

There is a National Disaster Plan as well as a Health Sector Disaster Plan. The Ministry of Health collaborates with relevant agencies in emergencies and disasters. Each year, the Central Emergency Relief Organisation conducts hurricane



preparedness exercises at governmental and community levels to prepare Barbadians for disasters and to mitigate against the impact of hurricanes or any other natural disasters. The Ministry of Health is particularly strong in ensuring the training of personnel at all levels although this does not extend to rapid needs and risk assessments and the procurement of supplies and equipment.

In relation to coordination of the health sector, it is noted that both communications and transport systems are in place. However, these systems are not evaluated in a formal, documented manner.

Institutional Health Services

Secondary and Tertiary Care:

Secondary and Tertiary care in the public sector are provided at the Queen Elizabeth Hospital, the Psychiatric Hospital, the Geriatric Hospital, three District Hospitals, and specialised institutions that provide care for persons with disabilities.

The private sector also comprises the 24-bed Bayview Hospital, a renal dialysis provider, a halfway house providing mental health services, two substances abuse treatment providers, as well as 45 nursing and senior citizens homes, which provide long term care for older persons. The private sector operates on a fee for service basis.

For the year 2000, 1421 patients were admitted to Bayview Hospital. There were 4,501 inpatient days and an average length of stay of 3.16 days.

The 1996 Report on the Health Sector Rationalisation Programme estimated that over 50% of ambulatory care services are provided by the private sector in Barbados. However, most

hospitalisations occur in the Queen Elizabeth Hospital. In 2000, there were 21,281 admissions and average length of stay had declined from 7 in 1999 to 6.5 days.

The occupancy rate was 72.2% in 2000. The total number of inpatient and outpatient procedures performed in the theatres was 9,882. Minor operations accounted for 4,410.

The five most frequent diagnoses for hospitalisation, based on the discharge records of the Queen Elizabeth Hospital were diabetes, ischaemic heart disease, hypertension, injuries and HIV/AIDS. Currently there is a waiting list for elective surgeries at the hospital as well as a waiting list for admissions into the long-term care facility at the Geriatric and District Hospitals.

The Queen Elizabeth Hospital is a 600-bed facility that provides acute, secondary, tertiary and emergency care on a 24-hour basis. It is also a referral centre for patients from other English-speaking Eastern Caribbean states. The Queen Elizabeth Hospital is an accredited teaching hospital affiliated with the School of Clinical Medicine and Research of the University of the West Indies.

Specialists services are offered in the department of Paediatrics, which is supported by the Neonatal Intensive Care Unit and the Paediatric Intensive Care Unit; the department of Medicine with its various sub-specialties; and the department of Surgery. A health service for men is provided by the

Urology programme, while the department of Obstetrics and Gynaecology provides complete women's health services. The work of these departments is complemented by the paramedical and support services, which provide diagnostic, therapeutic and social support.

Over the years, there have been many changes in the environment, which have impacted on the operations of the QEH. Among the most important factors are demographic changes in the population and changes in the disease profile.

Since its establishment, the hospital has undergone major improvements in its capability to provide for the care of the acutely ill, with the development of Medical, Surgical and Paediatric Intensive Care Units, and other services. Modern technology is utilised to provide patients with access to many sophisticated tests and procedures. There has also been considerable growth in the sub-specialities.

This institutional growth has been accompanied by a growing demand for varying health care treatment modalities, especially in light of the changing demographic and epidemiological profiles. These trends, along with economic constraints associated with the spiralling health care costs, and inadequate management structures, have presented challenges in the provision of quality health care, and have driven the need to strengthen programmes and services to make available more innovative and pervasive interventions for health care delivery.

Throughout the hospital, developments have taken place in an ad hoc manner, resulting in significant imbalance in the development of the institution, creating a situation where sophisticated tertiary care structures for medical delivery are being put in place without the necessary supporting infrastructure.

The deterioration of the physical plant and the adequacy of space in the various departments are foremost among the concerns of the Ministry. The entire hospital plant is in need of a thorough refurbishment and an effective maintenance programme.

The lack of adequate space in the various departments has had a very inhibiting effect on the efficient delivery of services and the teaching function of the hospital. More specifically, over-crowding in the out-patient areas, and other departments has serious implications for the quality of services provided and the comfort to both staff and patients.

The absence of an appropriate library and other teaching facilities need to be examined, as this can compromise the international accreditation of the hospital as a teaching institution.

A number of studies and reports have been conducted on the QEH. These studies and reports have been unanimous in their findings that the problems facing the Hospital are mostly of an operational and managerial nature.

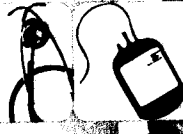
Family Health

A network of polyclinics and general practitioners provide full primary care coverage of the population.

The Ministry of Health has eight polyclinics and four satellite clinics. Polyclinics provide a broad range of preventive, curative and rehabilitative services including maternal and child health, immunisations, oral health, general practice clinics, nutrition education, physiotherapy, provision of pharmaceuticals, environmental health and a limited range of mental health services.

Each polyclinic serves a specific catchment area and is strategically located, providing easy access for the population served. Catchment areas vary in size from 17,000 to 50,000 persons, and are sub-divided into districts to facilitate the work of Public Health Nurses and Environmental Health Officers, who visit patients in their homes and work places to monitor and follow up their health situation.

Private practitioners' clinics are situated throughout the country. However, most of them are concentrated in the urban St. Michael area. General practitioners, dentists, rehabilitation therapists and



practitioners of complementary and alternative medicine working in the private sector, provide ambulatory care to the population on a fee-for-service basis. It was estimated in 1996 that the private sector accounted for over 51% of ambulatory visits to medical practitioner and over 80% of visit to dentists. There is a referral system from the polyclinics and general practitioners in the private sector to the Queen Elizabeth Hospital. In the private sector, specialists provide a wide range of secondary-care services, with support from private laboratories and pharmacies.

The five most frequent reasons for consultation include: hypertension, diabetes, respiratory tract infections, injuries and joint pains associated with arthritis. Doctors and nurses provide home care for non-ambulatory patients, including the elderly. Public Health Nurses follow up mothers of newborn babies to assist with the establishment of breast-feeding and to follow-up with children who are not up-to-date with their immunisations.

Reproductive Health:

The resident population reached 270,400 persons at December 2001. The rate of growth remained at 0.6% in 2001, the same as in the previous year. During the ten-year period ending 1999, the average rate was 0.3%.

This slow rate of population growth reflects a slow down in the birth rate, which declined to 14.0 per thousand in 2002, from 15.0 per thousand in 2001. This is the first time since 1992 that the rate exceeded 14.5 per thousand. A decrease in the age group 15 to 44 years has been recorded for the period 1997 - 2000. In 2000 the total fertility rate was 1.5 per 1000 women. Indicators point to falling fertility and an increasing mean age of child bearing

which are normally associated with developed countries.

There were no maternal deaths in the years 1998 and 1999. The maternal mortality rate was 0.8 [3 maternal deaths] per thousand in 2000.

Women's Health:

In 2000, 51.9% of the population was female. Changing dynamics within family life have contributed to more women now in the workforce.

Breast and cervical cancers were among the leading causes of cancer in women. In 2000, 908 persons were admitted for radiotherapy services. Of those 113 were diagnosed with carcinoma of the breast and 34 were diagnosed with carcinoma of the cervix. Surveys have shown that 30% of Barbadian women are obese while 58% are overweight.

Men's Health:

At December 2000, 48.1% of the population was male. Cancer of the prostate is the leading cancer in men. In 2000, 63 men were diagnosed with carcinoma of the prostate.

The inpatient population at the 100 year-old Psychiatric Hospital currently stands at approximately 600 of which 66% are males.

Twenty nine percent [29%] of men are overweight, and ten percent (10%) are obese. Evidence suggests that men can be a potentially vulnerable group due to under-utilisation of health services. The



MOH, therefore, recognises the need to address this issue, as well as to develop more comprehensive and appropriate services for this group.

Adolescent Health:

At December 2001, 22% of the population was under 15 years. In 2000, the 6 deaths occurring in the age group 5 to 14 years were due to malignant neoplasms of other unspecified sites (1), chronic rheumatic heart disease (1), pneumonia (1), other diseases of the digestive system (1), and accidental drowning (2).

The main causes of the 40 deaths in the age group 15 to 24 in 2000 were motor vehicle accidents (12), disease of the pulmonary circulation and other forms of heart disease (4), and homicide and injury purposely inflicted by other persons (5).

Health of the Elderly:

At December 2001, the elderly (persons 65 years and over) represented 12% of the general population. Elderly persons are projected to comprise more than 17% of the population by the year 2010. This increasing number of elderly persons represents a major challenge for the provision of health and other social services. Changing dynamics within family life have highlighted that the extended family is fragmented, and children live independently of their elderly relatives. As a result, there are fewer people to care for the elderly, making it necessary to devise programmes of alternative care for this group of citizens.

In 2000, the main causes of the 1,690 deaths in the age group 65 years and over were diseases of pulmonary circulation and other forms of heart disease [228], diabetes mellitus (188), cerebrovascular disease (181), hypertensive

disease (110), malignant neoplasms of the prostate (95), and pneumonia (86).

The elderly most often receive medical consultation for hypertension and cardiovascular disease, osteoarthritis, diabetes mellitus, malignant neoplasms and skin disorders.

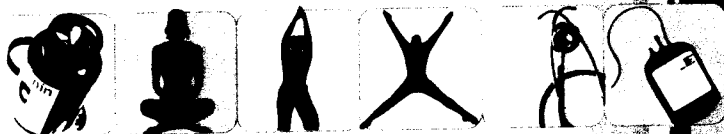
Oral Health:

The 1995 oral health survey of children indicated that their oral health has been improving. However, the combined efforts of the private sector and public sector dental care personnel were unable to treat dental disease as fast as it was occurring. On average, there are over 21,000 visits to the public dental clinics each year. Limited oral and maxillo-facial surgeries are performed.

Rehabilitation:

There is a growing acceptance of persons with disabilities in Barbadian society. The factors contributing to this phenomenon include national registration of the disabled and promotion of the rights and responsibilities of the disabled in the print and electronic media. Moreover, issues relating to parking facilities, seating on public transport, mobility on city streets, access to buildings, and greater opportunities for education and employment are supported by non-governmental organisations, trade unions and government agencies.

The services provided to the disabled are shared among government, private sector and non-governmental agencies.



A Green Paper outlining a national policy for persons with disability was completed in 2000. Its policy objectives are:

- to create supportive environments,
- to ensure equal opportunities,
- to empower persons with disabilities and their organisations,
- to provide a framework for the planning of programmes, and
- to encourage ongoing research.

There are several factors, apart from chronic diseases that contribute to escalating demand for rehabilitation services. These include: increasing incidences of road traffic accidents and violent injuries among the 25 - 44 age group, as well as increasing incidences of children with cerebral palsy and related disorders.

Sickness and injury claims by workers, shown in statistics from the National Insurance Department, increased from 57,768 for sickness and 7,347 for injury in 1997, to 66,193 and 7,616 respectively in 1999. At the rehabilitation department at the GEH, 4,262 patients, and 34,100 visits were recorded in 2000 with 155,662 treatment modalities.

The former, along with the fact that there are over 14,000 persons living with disabilities, suggest that the demand for rehabilitation services far exceeds the supply.

Food, Nutrition and Physical Activity

National food security is a concern as Barbados relies on imports of basic foods. The issue of food security is complex and has many components.

Barbados is progressively moving away from regulated markets involving state intervention in food marketing activities and price controls on basic foodstuffs, to more liberalised marketing systems. Trade liberalisation may reduce self-sufficiency in basic food production and increase reliance on imports. These changes in marketing and food price policies will impact on price levels of basic foods, affect the purchasing power of consumers and change their consumption patterns. This will in turn affect the nutrition and health status of the population either in a positive or negative manner.

In 2000, the National Nutrition Centre of the Ministry of Health in collaboration with the Ministry of Agriculture and Rural Development, the Food and Agriculture Organization [FAO], and the Caribbean Food and Nutrition Institute, conducted a food consumption survey.

The findings of the survey will guide the development of policies related to food production and eating patterns in Barbados.

Data on food availability point to a sufficiency or an over-supply of energy to meet the nutritional needs of the population in Barbados. The caloric intake was 3,203 kilocalories in 1999 compared to the recommended daily intake of 2,400 kilocalories.

The prevalence of obesity has increased mainly due to the adoption of high calorie diets and sedentary lifestyles. It is found that higher than expected proportions of school aged children, ages 11 to 17 years are overweight. Nutrition surveillance for over and under-nutrition in the under 6 age group continues to be conducted. Childhood malnutrition increases health risks later in life.

The 1995 meeting of Coordinators of Maternal and Child Health Programmes in the Caribbean concluded that childhood obesity needs attention, and education needs to focus on healthy eating. As Barbados becomes increasingly urbanised, physical activity, has decreased despite common knowledge that exercise is healthy. Physical inactivity, obesity and other malnutrition increase the risk of non-communicable disease, and worsen the prognosis when such diseases are contracted. In pregnant women, malnutrition increases the risk of obstetric complications and low-birth weight newborns.

Studies are now showing the association between low birth weight and adult disease. Relatively high rates of exclusive breastfeeding exist in the early weeks of life followed by a marked decline. There is the need to seek opportunities for nutrition and physical interventions focusing primarily on health promotion and disease prevention and secondarily on medical care services.

Promoting more active lifestyles is of great importance to the health of this nation. Programmes to increase physical activity are being carried out in a variety of settings, such as schools, community centres, parks, recreational facilities, and health clubs, and are available in most communities.

School-based interventions for youth are particularly promising, not only for their potential scope - almost all young people between the ages of 6 and 16 years attend school - but also for their potential impact. Childhood and adolescence may be pivotal times for preventing sedentary behaviour among adults by maintaining the habit of physical activity throughout the school years.

Neither Vitamin A deficiency nor iodine deficiency have been identified as health concerns in Barbados. Salt fortification programmes have been implemented.

Chronic Non-Communicable Diseases

Lifestyle-related illnesses have been the leading causes of morbidity and mortality in Barbados. Chronic non-communicable diseases such as heart disease, strokes, cancer, diabetes mellitus and hypertension have been posing serious challenges to resources for treatment, care, and prevention. Research has shown that there are direct and indirect links between lifestyles and many of these health problems that Barbados is currently facing. There is a significant amount of disability and loss of productivity associated with chronic non-communicable diseases. These problems mainly affect the productive age groups and contribute significantly to the increasing cost of health interventions.

Diabetes and hypertension contribute significantly to heart disease and stroke. Diabetes is a major cause of admissions for kidney failure, blindness and limb amputations that are not due to injuries. It therefore affects not only quality and length of life, but also has enormous economic costs. Direct costs of hospitalisation and clinic care constitute an increasing burden that Barbados can ill afford.

The prevention and control of chronic non-communicable diseases pose major challenges. Prominent among them are the costs of medication, hospitalisation and long-term treatment, and the difficulty in persuading individuals to change their behaviour. It has become evident that a broader approach to the problems of chronic non-communicable diseases and the protection of health is required. Since many of the diseases are rooted in lifestyle and behavioural practices, the challenge will be to develop effective strategies aimed at bringing about fundamental behavioural changes at the individual and community levels. The opportunity presents itself for programmes of change, which are strongly guided by a wellness focus.



HIV/AIDS

With the increased movement of people across borders, there is the likelihood of transnational spread of HIV/AIDS. This devastating disease threatens to eliminate many of the substantial gains and efforts made to improve health in the past century. Furthermore, it impacts on the economic growth and potential of any country as its labour force is being depleted.

Intensified efforts are needed in Barbados if inroads are to be made against the HIV/AIDS epidemic. There is no time for delay because HIV/AIDS is unique among diseases in combining seven attributes:

- HIV spreads very fast.
- People who contract HIV may remain infectious for many years without knowing they have the virus or showing any symptoms. The potential for spread is high.
- It reduces life expectancy, which is positively related to savings, productivity, and education.
- HIV/AIDS primarily affects young people, ages 15 to 49, who are in the prime of their lives as workers and parents
- People with AIDS suffer repeated and prolonged illnesses, imposing great costs on households and health systems.
- AIDS breaks down social cohesion, challenges value systems, and raises deeply rooted and sensitive gender inequalities.
- There is no HIV vaccine and no cure.

There is a growing recognition that HIV/AIDS is not just a serious health issue in Barbados but a major developmental catastrophe that threatens to

dismantle the social and economic achievements of the past half-century.

AIDS cases and HIV infection rates in several countries, place the Caribbean second to sub-Saharan Africa in terms of HIV prevalence and incidence.

If countries do not have more success with prevention efforts, HIV/AIDS will have a very significant impact on mortality in the coming two decades, and 3-5% of the Gross National Product [GNP] could be spent on treatment.

The prevalence of HIV/AIDS in the adult population is posing a serious challenge to the society's resources to prevent, as well as provide treatment and care for persons who are infected. With a case fatality rate of 75%, HIV/AIDS has the potential to decimate the productive segment of the labour force. A National HIV/AIDS Programme has been developed under the aegis of the Prime Minister's Office and embraces the government sector, the private sector and non-governmental organisations.

Since the first reported case in 1984 and up to June 2000, the cumulative number of reported cases of AIDS was 1,242; the total number of deaths was 1,025 and 2,525 persons tested positive for HIV.

During the period 1997 to 2000, there were 590 new cases of HIV/AIDS with 388 deaths. In 2000, of the 223 deaths occurring in the age group 25 to 44 years, 60 were due to HIV/AIDS.

Whereas, of the 405 deaths recorded in the age group 45-64 years, 27 were due to HIV/AIDS.

The major mode of transmission is through heterosexual contact. Approximately 89% of the reported cases of HIV/AIDS occur within the sexually active age group 15 to 49 years. One in every three cases is female. The reduction of mother to child HIV transmission has resulted from Government's policy to provide Zidovudine [AZT] to all pregnant women who were HIV positive. Currently, Government has also introduced the highly active anti-retroviral therapy [HAART]. This will result in HIV/AIDS infected persons living longer and experiencing a better quality of life.

The National HIV/AIDS Commission was established to provide the Government of Barbados with a mechanism by which to effectively coordinate and manage a multisectoral, expanded national programme for the prevention and control of HIV/AIDS.

The Commission is charged with the responsibility of:

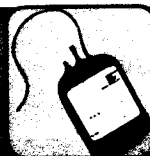
- Coordinating and implementing the five-year GOB/IBRD HIV/AIDS Prevention and Control Project - a subset of the National HIV/AIDS Programme;
- Advising Government on overall policy directives;
- Building and/or strengthening strategic partnerships to manage, control and reduce the spread of the disease
- Forging multi-sectoral collaborations; and
- Monitoring and evaluating the programme.

Communicable Diseases

Cost-effective technologies and interventions like immunisation and a clean water supply have yielded massive returns in the prevention and treatment of communicable diseases.

The country's location, its dependence on tourism and its centrality to Caribbean business and politics, have made it into a hub for international passenger travel and cargo freight into and out of the region by sea and air. It is thus extremely vulnerable to any diseases that can be transferred along with people and cargo.

The Expanded Programme on Immunisation (EPI) has been successful in achieving high immunisation coverage rates in Barbados and significant reduction in the incidence of communicable diseases. The most significant declines in morbidity and mortality due to communicable diseases have been recorded for the six target diseases of this Programme: poliomyelitis, diphtheria, pertussis,



IN 2000, THE TEN PRINCIPAL CAUSES OF DEATH WERE:

Cause	Number	Rate per 1000 population
Disease of pulmonary circulation and other forms of heart disease	307	11
Diabetes Mellitus	223	0.8
Cerebrovascular disease	201	0.7
Hypertension	123	0.5
Malignant neoplasm of the Prostate	106	0.4
Pneumonia	105	0.4
HIV/AIDS	91	0.3
Ischaemic Heart Disease	65	0.2
Septicaemia	49	0.2
Malignant neoplasms of the female breast	47	0.2

tetanus, measles and tuberculosis. The Expanded Programme on Immunisation, which was introduced in 1977, is delivered as a part of the Maternal and Child Health programme in all polyclinics. Approximately 75% of all children under five years old receive their vaccinations in the polyclinics and the remainder receive their vaccinations from private practitioners. Coverage rates are 97% for DPT, 92% for MMR vaccine, and 96% for oral polio vaccine. Currently children are vaccinated with BCG at age 5+. All children must be immunised prior to entering a primary school. It is necessary that Barbados continues to vaccinate its population.



Immunisation in Primary Schools.

Tuberculosis has re-emerged as a major public health threat particularly due to HIV/AIDS. However, there has not been a corresponding increase in the incidence rate of tuberculosis although the incidence rate of HIV/AIDS continues to increase. The incidence rate of tuberculosis varied between 0.8 per 100,000 and 4.6 per 100,000 population during the period 1995 to 1999.

For 2000, the statistics collected in the polyclinics for the number of attendances for syphilis, gonorrhoea and other sexually transmitted infections were 28, 71, and 1,592 respectively. Some sexually transmitted infections are not notifiable by law.

The Ministry of Health has a surveillance system in place that is capable of identifying and analysing the nature and magnitude of threats to public health. The system is integrated with surveillance systems at the local levels and has formal mechanisms in place for coordination and reference between the national public health laboratory and the regional laboratory at CAREC.

The Ministry of Health does not annually evaluate the quality of the information generated by the public health surveillance system, nor does it evaluate the use of this information. Although the Ministry has strict protocols for the handling, transportation and storage of samples, there is the need to develop written protocols and procedure manuals to provide a rapid response to threats to public health. The Ministry of Health maintains an up-to-date list of laboratories capable of performing specialised analyses. The quality of laboratory results is periodically evaluated by

comparing them with results from an international reference laboratory.

Mental Health

The World Health Organization defines mental health as follows:

"Mental health is not simply the absence of detectable mental disease but a state of wellbeing in which the individual utilises his or her own abilities, can work productively and fruitfully and is able to contribute to his or her community"

Research has shown that there are direct and indirect links between lifestyles and many of the health problems that Barbadians currently face. Mental illness ranks high among the chronic diseases and there are mental health components to most severe physical disorders. There is a significant amount of disability and loss of productivity associated with mental illness.

The slow pace of development of mental health in Barbados has been partly due to concepts of mental health, which seek to make a clear distinction between diseases of the "body" and those of the "mind". This has been further compounded by the absence



of policies and legislation to protect mentally ill persons from discriminatory practices in terms of employment and accessing community resources and services.

It is recognised that mental disorders disrupt the life of the community as well as that of the individual and family, but more data are needed on the epidemiology of these disorders, especially in populations such as the elderly, adolescents and children.

The inpatient population at the 100 year-old Psychiatric Hospital currently stands at approximately 600 comprising 66% males and 34% females. Of this inpatient population, 33% require acute psychiatric care, 61% require psycho-geriatric care, and 6% are mentally challenged.

The hospital provides forensic psychiatry, child guidance, day treatment services, community mental health programmes, a sheltered workshop, and a half way house. In the Psychiatric Hospital, there is also a 12-bed drug rehabilitation unit for men only. Women are housed in the general population of the Psychiatric Hospital.

The 8-bed psychiatric unit at the Queen Elizabeth Hospital caters to both men and women on a short-term stay basis. The clientele consist mainly of young females and adolescents in crisis or with major psychiatric disorders. The unit also offers an out-patient psychiatric service which includes referrals from polyclinics, private practitioners and schools.

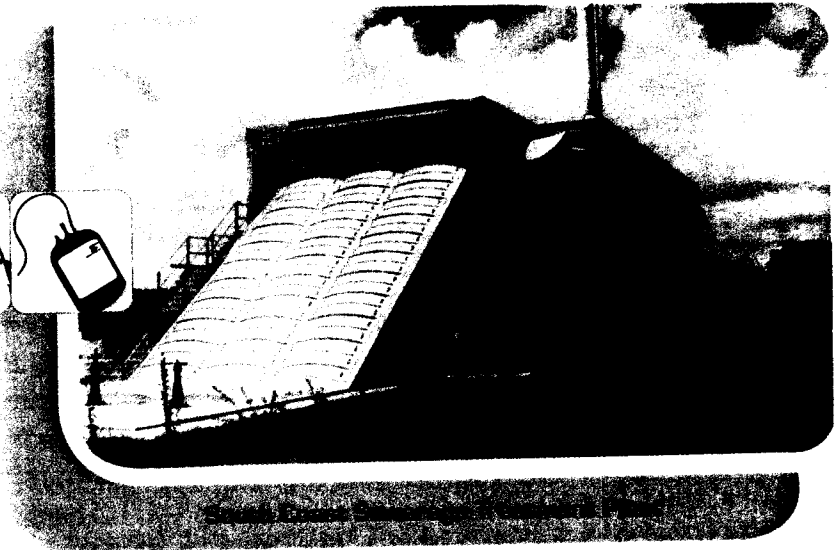
The strategy for the reform of mental health services will focus on mental health promotion rather than mental illness. It will seek to reposition mental health care from institutional to community based care. Major components of the reform programme are:

- primary mental health care interventions,
- acute and secondary mental health care,
- chronic and long-term mental health care,
- community mental health care,
- public education and sensitisation programmes,
- communication strategy, and
- review and amendment of current legislation.

Private sector providers of employee counselling services deliver individual and group counselling to employees in both the private and public sectors.

The increasing incidence of violence, and illegal drug usage, especially among young Barbadians, has converged to make them an increasingly vulnerable group. They are at risk for violence, deviant behaviour, precocious sexuality, mental health disorders, substance abuse including coping disorders rooted in depression and psycho-social stress.

There are a number of diverse substance abuse programmes in Barbados. These include Alcoholics Anonymous (AA), the Coalition Against Substance Abuse (CASA), church based programmes, private sector counsellors and therapists, guidance counsellors at schools, the Juvenile Liaison Scheme, the Drug Awareness and Education Programme by the Royal Barbados Police Force (RBPF), the National Council on Substance Abuse (NCSA), the



National Council for the Prevention of Alcoholism and Drug Dependency (NCPADD), medical practitioners, Parent Education for Development in Barbados (PAREDOS), the polyclinic system, the drug rehabilitation unit at the Psychiatric Hospital, Teen Challenge Drug Treatment Programme and the Substance Abuse Foundation (SAF) at Verdun House.

Results from the Rapid Assessment Survey conducted in 2000 indicated that marijuana (75%) was the first drug of choice, alcohol (19%) the second, and cocaine (16%) the third. Alcohol is the main drug abused by adults over 35 years old. Information from the Drug Rehabilitation Unit at the Psychiatric Hospital shows that during the years 1996 to 1998 of the 1,207 admissions that 36% was for marijuana, 28% for alcohol, and 10% for cocaine. This information mirrors the results of the Rapid Assessment Survey. The relevant stakeholders have drafted a National Anti-Drug Plan for the period 2002 to 2007 which will reposition the fight against drugs.

The report of the Barbados leg of the Global Youth Tobacco Survey (1999) showed that while 36% of the youth surveyed had experimented with cigarettes, only 1% was considered to be daily smokers with the most frequent age of tobacco initiation occurring between 11 and 13 years.

Health And The Environment

Environmental Health continues to be a priority of the health system, specifically with regard to maintaining low prevalence rates of communicable diseases, and in addressing the challenges brought on by new and re-emerging diseases.

The main environmental health concerns include:

- management of solid and liquid waste;
- monitoring of vector borne diseases;
- monitoring of food safety;
- leptospirosis; and
- developing strategies to control the threats of new and/or re-emerging diseases.

No cases of cholera, hookworm or trichuriasis have been reported in Barbados. The population has access to potable water. The entire population also has access to sewerage and excreta disposal. It is important that the existing systems for the collection and disposal of waste be upgraded.


Initiatives currently being undertaken through the Integrated Solid Waste Management Programme include:-

- improving waste collection and transportation systems;
- improving the management of hazardous materials and hazardous waste;
- facilitating a high level of community participation in waste minimisation strategies [Reduce, Reuse and Recycle] as well as strategies to combat littering and illegal dumping; and

introducing appropriate legislation and equipping the relevant agencies with the tools necessary to enforce the law.

The implementation of the South Coast Sewerage System and the proposed sewerage system for the West Coast will provide opportunities to comprehensively manage the environmental risks associated with liquid waste disposal.

Dengue fever is endemic in Barbados with the four viral serotypes circulating. The number of suspected cases and deaths from dengue are shown in the following table:



NUMBER OF SUSPECTED CASES AND DEATHS DUE TO DENGUE FEVER 1997-2000:

Year	Suspected cases	Deaths
1997	2,045	5
1998	1,148	6
1999	696	4
2000	909	3

labour intensive and are plagued by difficulties of access. At the same time, the long term use of insecticides increase the *Aedes aegypti* resistance. The Ministry's dengue prevention strategy is based on an integrated vector control programme which includes community and individual responsibility for maintaining a healthy environment.

Between 1997 and 2000, leptospirosis was the only zoonotic disease reported. Compared to the previous period (1993-1995), the number of reported cases declined. In 1997, there were 23 reported cases with four deaths, 6 reported cases and no deaths in 1998 and 15 reported

cases with one death in 1999. In 2000 there were 12 reported cases and no deaths. Barbados has the only leptospirosis laboratory in the sub-region. The island remains free of rabies.

Food-borne diseases are serious causes of public health problems. The etiological agent for the majority of outbreaks of food-borne diseases is frequently not determined. A major challenge facing the environmental health system is reforming the legislative structure of the food safety programme, which has not kept pace with developments in the food industry. Globalisation also provides an opportunity to strengthen food protection legislation in keeping with international standards, e.g. HACCP, and to address new issues in relation to biotechnology.

Whereas viral serotypes 1,2 and 4 were circulating in Barbados prior to 1998, by 1999, serotype 3 was introduced in the population.

It is estimated that to interrupt dengue transmission no more than one percent of the houses in each community should be infested with *Aedes aegypti* mosquitoes. Larval surveys are

The importance of occupational health and safety has been underscored by an initiative undertaken by the Barbados Employers Confederation in collaboration with the Government and the Trade Unions. The initiative seeks to promote worker's health through creating awareness of healthy work places, by training employers and workers in practices to maintain health and safety, to improve



air quality, reduce noise pollution as well as promoting healthy lifestyle.

The Factories Act of 1982 is currently being reviewed. The Government of Barbados has proposed to replace this legislation with the "Safety and Health at Work Act" which will address some of the current employment practices and issues. The proposed Act is not restricted to factories, but will include all work places such as hotels, schools, banks, retail businesses and offices.

Furthermore, consideration must be given to the following issues: vehicular exhaust, road worthiness and compliance, industrial factories, business houses, household disposal methods, as well as general noise emissions.

The Government of Barbados and the Pan American Health Organization hosted the first ever conference and workshop on Climate Variability and Change and their Health Effects in the Caribbean, from 21- 25 May 2002. Changes in the climate can create a suitable environment for new diseases to occur or for old and forgotten ones to re-emerge. Prolonged temperatures could see the emergence of heat-related illnesses or deaths not previously seen in this part of the world. Warmer temperatures could worsen air pollution and increase the incidence of respiratory diseases such as asthma and hay fever. Higher temperatures could also contribute to the formation of ground-level ozone which damages lung tissue, and create conditions for the spread of vector-borne, food borne and water-borne diseases such as malaria, dengue fever, yellow fever and encephalitis.



Human Resource Management

Supporting, attracting and developing skilled personnel is a challenge for Barbados' health system. The human resource challenges call for a variety of solutions. Some require a change in the way that Barbados delivers health services. Others relate to recruitment, selection, retention and training of persons to provide the services that Barbados needs.

Barbados has had to face, within its recent past, an increasing number of new and demanding challenges, both within and beyond the health system. The population exerts some influence on the demand for and utilisation of health services, including the type of human resources. Health problems and challenges will create the need for new categories of human resources as well as shifts in emphasis and focus of care, e.g. care of the elderly and community support systems. Advances in technology may require more inter-disciplinary teams of appropriately qualified health professionals.

Meeting the future need for health professionals requires a national human resources strategy. Training in the health sciences is still focused on hospitals, despite the recognised needs for the reorientation of medical training and practice. Training efforts must necessarily be accompanied by an organisational change of the health system in order to have any chance of success.

The provision of health care requires considerable human resources, physical plants, technology, research and equipment. It will be necessary to ensure that there is a cadre of well-trained health professionals to provide quality health care. The challenge will be to ensure the availability of an appropriate mix of these resources that are well managed to yield maximum returns on investments. This must be done within the overall context of promoting health and the empowerment of individuals. There is the need for health care professionals to work more closely together.

Recruiting and retaining nurses is a challenge in a market with strong competition from the United States, Canada, the United Kingdom and other Caribbean countries.

The shortage of public health nurses may be explained by the rate of training not keeping pace with the rate of retirement from the system. Yet, the shortage of other categories of nurses is due to emigration. The ratio of general practitioners to specialists in the Queen Elizabeth Hospital is approximately three to one.

Activities that involve continuing education and graduate training in public health appear to be fairly

well established, with formal and informal linkages to academic institutions.

However, the future health system requires strong health sciences education to include public health specialists and health educators, as well as academic training and research to meet the needs of the health sector.

Policies need to be developed in order to promote pro-active human resource management and development. While the Ministry of Health has some strategies in place to improve the quality of the workforce, these do not include incentive strategies or periodic evaluation. Currently, there are no periodic productivity measurements of health personnel in the main public institutions. There is the need to improve the skills of health system managers within the context of re-orientation of the health sector. In addition, the need exists to improve the "environment" in the workplace through communication, decision-making, staffing and scheduling. The application of Health Promotion strategies must be a critical component in the execution of this National Strategic Health Plan, if the proposed shift from a curative model to a wellness model of care is to be achieved.

Chapter 3.

Strategic Directions: The Way Forward

This Strategic Plan for Health provides the overarching framework for action on health in Barbados. The overall goals are not ranked and integration is emphasised. The focus for achieving each overall goal is sharpened through strategic goals to expected results and indicators. These translate the overall goals into the focused actions.

The terms used throughout the plan are defined below.

- The overall goals summarise the ultimate direction or desired achievement.
- The strategic goals are a statement of change that will contribute to the overall goal.
- The expected results contribute towards achieving the Plan's main objectives and for which resources are provided.
- The indicators are statistics or measures that are used to measure progress in implementing the Strategic Plan for Health.

Methodology

Qualitative and quantitative data, as well as internal and external consultations were used in the development of the Barbados Strategic Plan for Health 2002 - 2012.

Technical assistance was provided by relevant health related agencies. Internal collaboration with programme and institutional heads led to the development of the first draft of the Plan. A national consultative process with all stakeholders, including the private sector, Government agencies and Non-governmental Organizations [NGOs] led to the establishment of

new relationships and suggestions to strengthen the Plan.

The input of all stakeholders has been secured at various stages of the planning process. Consequently, a Review Committee was established, and where appropriate, the Plan was modified.

It is the intention that there will be continual implementation, monitoring and evaluation of this plan at the programmatic and administrative level (MOH) to inform the bi-annual evaluation at the national level [Steering Committee], in relation to identified priorities.

There were a few limitations to the finalisation of this Plan. There was little systematic and analytical rigour of the available qualitative and quantitative data.

Barbados is a signatory to the Caribbean Co-operation in Health Phase II (CCH II) initiative which is a joint framework for health action within the region. Under this initiative eight priority areas have been identified. The ten overall goals in the Barbados Strategic Plan for Health are consistent with the priority areas in CCH II.

This Plan does not identify how specific expected results will be addressed. These will be developed in more specific and detailed Action Plans. Partnership is at the heart of the National Strategic Plan for Health. This partnership approach is inclusive, integrated, comprehensive and coherent. It ensures that all stakeholders play their part. Appendix 1 shows this through a matrix of partners according to each overall goal.

Within this Plan, a framework is provided for all partners in the health system to link their policy decisions and investments to the health outcomes. Partners can integrate its content, as appropriate to them, into their policy and programme planning, resource allocation and monitoring systems.

There are ten overall goals that match each priority. These are:

1. **Health Systems Development**
To improve Health Systems to deliver efficient, effective and quality services.
2. **Institutional Health Services**
Appropriate services developed, improved and maintained within a health promotion framework.
3. **Family Health**
Health and quality of the population improved.
4. **Food, Nutrition and Physical Activity**
Nutritional and physical status of the population improved.
5. **Chronic Non-communicable Diseases**
Morbidity and mortality due to chronic non-communicable diseases reduced.
6. **HIV/AIDS -**
Reduction in the incidence and prevalence of HIV/AIDS.
7. **Communicable Diseases**
Morbidity and mortality due to communicable diseases reduced.
8. **Mental Health**
Mental health of the population improved and maintained.
9. **Health and the Environment**
Environmental health risks reduced.
10. **Human Resource Development**
Appropriate human resources available to support the health system.

The overall goals, strategic goals, and expected results are summarised in Appendix II.

Health Systems Development

Overall Goal

To improve Health Systems to deliver efficient, effective and quality services.

Re-organisation of Health Systems

Priority Issues

- Inefficient and ineffective management systems.
- Inability of the health care system to respond adequately to globalisation and liberalisation.
- Inadequate sectoral collaboration among key stakeholders in the delivery of health services.
- Fragmented health promotion strategy.

Strategic Goal

Health Systems Management improved.

Key Health Indicator

Between 2002 - 2012, 80% of customers will indicate overall satisfaction with the service delivery system.

Health Promotion Strategies Utilised

Re-orienting Health Services

Healthy Public Policy

Building Alliances with Special Emphasis on the Media.

Creating Supportive Environments

1

Expected Result

Strengthened management systems throughout the health system.

Indicators

1.1

Between 2003 - 2004, management systems in selected health institutions reformed.

Queen Elizabeth Hospital, Psychiatric Hospital, District Hospitals and Polyclinics.

1.2

Between 2004 - 2006, private sector/public sector communication policy established.

1.3

Between 2002 - 2012, framework for building alliances with key stakeholders, including communities, developed.

1.4

Between 2004 - 2006, programme for monitoring and evaluation mechanisms developed.

1.5

Between 2003 - 2004, framework for redefining the role of the Ministry of Health established.

2

Expected Result

Established regional policies to mitigate against the impact of globalisation and trade liberalisation on health.

Indicators

2.1

Between 2002 - 2006, regional policies for cost sharing of drugs and technology established.

2.2

Between 2002 - 2005, policies to engage in regional technical co-operation strengthened.

2.3

Between 2002 - 2012, policies for the free movement of skills expanded.

2.4

Between 2002 - 2005, policies for shared specialised centres of excellence for health services established.

2.5

Between 2002 - 2012, regional mechanisms for sharing best practices established.

3

Expected Result

Health Promotion model used as a planning tool in all institutions.

Indicators

3.1

By 2004, programme for training all heads of departments, institutional heads, planners and administrative personnel in the application of the health promotion model developed and implemented.

3.2

By 2004, training of trainers programme developed and implemented.

Leadership

Permanent Secretary

National Planning

Chief Medical Officer (CMO); PAHO; CARICOM Secretariat; Commonwealth Secretariat; Caribbean Development Bank (CDB); Ministry of Finance; Ministry of Health; Association of Caribbean Tertiary Institutions (ACTI); Ministry of Foreign Affairs; Trade Union Movement; NGOs; Private Sector; Ministry of Civil Service; Media and International Agencies.

Implementation

Ministry of Health; Ministry of Education; Ministry of Labour; Ministry of Civil Service and Ministry of Finance.

Financing Health Systems

Priority Issues

- Inefficient and ineffective financial management systems.
- Inappropriate cost containment and cost recovery mechanism.
- Increasing health care costs.

Strategic Goal

Financial systems improved to achieve equity, sustainability and efficiency.

Key Health Indicator

Between 2003 - 2012, cost effective and efficient services provided by 80% of institutions and programmes.

Health Promotion Strategies Utilised

Re-orienting Health Services

Health Public Policy

Building Alliances with Special Emphasis on the Media

Creating Supportive Environments

Empowering Communities

1

Expected Result

Improved cost containment.

Indicators

1.1

Between 2003 - 2005, cost accounting system for programmes and institutions established.

1.2

Between 2003 - 2012, National Health Accounting programme developed and implemented.

1.3

Between 2004 - 2008, policies governing the purchasing, acquisition of new technology and supporting services improved.

1.4

Between 2004 - 2008, policies to facilitate the decentralisation of budgets for programmes and institutions established.

2

Expected Result

Improved cost recovery mechanisms.

Indicators

2.1

Between 2003 - 2012, policies for cost recovery mechanisms established.

2.2

Between 2003 - 2012, policies for introducing and amending fee structures strengthened.

3

Expected Result

Improved equity and efficiency through appropriate financial mechanisms.

Indicators

3.1

Between 2004 - 2012, framework for financing the health system which incorporates social insurance, health insurance, user fees and Government funds developed.

3.2

Between 2003 - 2012, mechanisms to access regional and international funds improved.

3.3

Between 2004 - 2012, policies to facilitate revenue generation by programmes and institutions established.

Leadership

Permanent Secretary, Ministry of Health.

National Planning

Ministry of Health; Ministry of Finance and Economic Affairs; PAHO; Inter-American Development Bank; Caribbean Development Bank; Office of Attorney General; Private Health Insurance Industry.

Implementation

Ministry of Health; Ministry of Finance.

Quality Assurance

Priority Issues

- Lack of mechanisms for evaluating delivery of services;
- Lack of appropriate policies and standards for the provision of health care services;
- Inappropriate feedback mechanisms for evaluating client/customer satisfaction.

Strategic Goal

Client/customer satisfaction improved through effective, efficient and equitable delivery of quality care.

Key Health Indicator

Between 2002 - 2012, 80% of institutions and programmes adhering to Continuous Quality Improvement (CQI) principles.

Health Promotion Strategies Utilised

Re-orienting Health Services

Developing Personal Health Skills

Building Alliances with Special Emphasis on the Media

Empowering Communities

Health Public Policy

1

Expected Result

Established Continuous Quality Improvement programmes in all health institutions.

Indicators

1.1

Between 2003 - 2012, Continuous Quality Improvement policies identified and established.

1.2

Between 2004 - 2005, charter of patients' rights and responsibilities developed and implemented.

1.3

Between 2003 - 2007, evaluation mechanisms for client/provider satisfaction developed.

2

Expected Result

Improved supportive environments

Indicators

2.1

Between 2004 - 2006, regulatory framework for CQI developed and implemented.

2.2

Between 2005 - 2012, private sector NGOs and public sector framework for evaluation of delivery of services developed.

2.3

Between 2003 - 2007, quality service incentive policies developed.

Leadership

Continuous Quality Improvement Co-ordinator.

National Planning

PAHO; Ministry of Health; Heads of Institutions and Programmes; Ministry of the Civil Service; Ministry of Finance, Private Sector and NGOs.

Implementation

Heads of Institutions and Programmes

Information Systems

Priority Issues

- Insufficient evidence-based decision making;
- Inadequate Health Information Systems and supporting technology.

Strategic Goal

Information Systems designed for evidenced based decision-making, information sharing and research.

Key Health Indicator

Between 2003 - 2012, 80% of institutions and programmes will utilise accurate reliable and timely information.

Health Promotion Strategies Utilised

Re-orienting Health Services

Developing Personal Health Skills

Building Alliances with Special Emphasis on the Media

Empowering Communities

Healthy Public Policy

1

Expected Result

Improved comprehensive health information system.

Indicators

1.1

Between 2003 - 2004, comprehensive national health information structure developed.

1.2

Between 2003 - 2006, regional networking health information structure established.

1.3

Between 2003 - 2004, policies for the acquisition and utilisation of software and hardware developed and implemented.

1.4

Between 2003 - 2005, policies for the acquisition, access, retrieval and dissemination of data established.

2

Expected Result

Improved Management Information Systems.

Indicators

2.1

Between 2004 - 2005, comprehensive framework for determining the health needs of the population established.

2.2

Between 2003 - 2004, guidelines for data collection developed.

2.3

Between 2005 - 2012, evaluation mechanisms for the national health information system strengthened.

Leadership

Senior Systems Analyst, QEH, Project Design and Implementation Unit [PDIU]

National Planning

Steering Committee for National Health Information System; Ministry of Finance, Ministry of Civil Service; Data Processing Unit.

Implementation

Polyclinics; District Hospitals; QEH; Psychiatric Hospital; PDIU, Ministry of Finance; Ministry of Civil Service.

Maintenance and Assessment of Technology

Priority Issues

- Inappropriate procurement practices.
- Inappropriate facilities management and maintenance strategies.

Strategic Goal

Strengthen systems, procedures and standards to upgrade programmes for maintenance of buildings, plant and equipment at all levels.

Key Health Indicator

Between 2002 - 2012, 90% of maintenance programmes utilising appropriate technology.

Health Promotion Strategies Utilised

Re-orienting Health Services

Building Alliances with Special Emphasis on the Media

Healthy Public Policy

Creating Supportive Environments

1

Expected Result

Improved acquisition and maintenance programme.

1.1

Indicators

Between 2004 - 2006, facilities management programme developed.

1.2

Between 2004 - 2006, comprehensive preventative maintenance programme developed.

1.3

Between 2002 - 2012, procurement policies for equipment and technology established.

1.4

Between 2004 - 2012, policy framework to provide concessions and incentives in relation to medical supplies and equipment developed.

2.

Expected Result

Improved maintenance procurement programmes.

Indicators

2.1

Between 2002 - 2004, Inventory Control Management systems strengthened.

2.2

Between 2004 - 2009, framework for the procurement of contracts for the maintenance of vehicles and equipment established.

2.3

Between 2004 - 2009, policy framework for the assessment of current and new technology established and implemented.

2.4

Between 2004 - 2007, policy framework for acquisition and sharing of services with NGOs and the private sector strengthened.

Leadership

Hospital Engineer.

National Planning

Ministry of Health; Technical Management Services; Ministry of Finance; Office of the Attorney General; Ministry of the Civil Service.

Implementation

QEH; Technical Management Services.

Pharmaceuticals

Priority Issues

- Fragmented procurement, inventory management and distribution system;
- Inadequate communication strategy;
- Inadequate evaluation mechanisms for Pharmaceutical Services.

Strategic Goal

Improve the health of the general public through the supply of affordable quality pharmaceuticals.

Key Health Indicator

Between 2002 - 2012, 90% of pharmaceutical services delivered with a 90% customer satisfaction approval.

Health Promotion Strategies Utilised

Re-orienting Health Services

Building Alliances with Special Emphasis on the Media

Empowering Communities

Healthy Public Policy

Creating Supportive Environments

1

Expected Result

Improved procurement, inventory management and distribution system.

Indicators

1.1

Between 2003 - 2006, an Information Technology infrastructure to support the interface among Barbados Drug Service (BDS), private participating pharmacies and suppliers established.

1.2

Between 2004 - 2005, inventory management system strengthened.

1.3

Between 2004 - 2005, policy framework for operating standards established.

1.4
Between 2003 - 2005, prescription tracking systems strengthened.

1.5
Between 2003 - 2007, cost containment policies developed.

2
Expected Result
Improved stakeholder / customer relations.

2.1
Indicators
Between 2005 - 2007, payment policies for private participating pharmacies rationalised.

2.2
Between 2003 - 2005, evaluation mechanisms for customer service programmes strengthened.

2.3.
Between 2005 - 2007, audit programme for private participating pharmacies strengthened.

3
Expected Result
Improved dissemination of information to health professionals and members of the public.

Indicators
3.1
Between 2003 - 2012, legislative framework governing the BDS amended.

3.2
Between 2003 - 2004, broad guidelines for the Specially Authorised Drugs programme strengthened.

3.3
Between 2003-2009, drug utilisation programme strengthened.

3.4
Between 2003 - 2006, public education programme, in relation to drug policies and the appropriate use of drugs, strengthened.

4.
Expected Result
Improved quality assurance programme for all pharmaceutical and related products developed.

Indicators
4.1
Between 2004 - 2005, 100% compliance for mandatory analytical reports on all new products to accompany tender bids achieved.

4.2
Between 2003 - 2008, Drug Inspection programme strengthened.

5
Expected Result
Established research, educational and service partnerships locally, regionally and internationally.

Indicators
5.1
Between 2003 - 2006, Barbados' role as a World Health Organization (WHO) Collaborating Centre strengthened.

5.2
Between 2003 - 2012, alliances with the Regional Advisory Body on Drugs and Therapeutics (RABDAT) and PAHO improved.

5.3
Between 2003 - 2007, alliances with CARICOM and the Caribbean Environmental Health Institute (CEHI) improved.

Leadership
Barbados Drug Service (BDS)

National Planning
Ministry of Health; Private Pharmacies; Ministry of Finance; NGOs; Ministry of Civil Service; Caribbean Environmental Health Institute; CARICOM; Regional Advisory Body on Drugs and Therapeutics; PAHO/WHO.

Implementation
BDS; Private Pharmacies.

Disaster Management

Priority Issues

- Lack of an integrated National Disaster Management programme.
- Insufficient Disaster Management resources.
- Lack of an appropriate Disaster Management evaluation system.

Strategic Goal

Enhance capacity for disaster management and reduce health sector vulnerability to disasters.

Key Health Indicator

Between 2002 - 2012, strengthen the system for the comprehensive management of disasters in the health sector.

Health Promotion Strategies Utilised

Re-orienting Health Services
Empowering Communities
Healthy Public Policy

1

Expected Result

An integrated programme capable of addressing multi-hazard disasters and emergencies that is fully integrated into the National Disaster Management System.

Indicators

1.1

Between 2003 - 2004, National Health Sector Disaster Management Programme developed and initiated.

1.2

Between 2004 - 2006, framework for contingency plans strengthened.

1.3

Between 2003 - 2012, mechanisms for the institutionalisation of Health Sector Disaster Management established and implemented.

1.4

Between 2003 - 2012, mechanisms for inter and intra-agency communication and coordination strengthened.

2

Expected Result

Enhanced capacity of the health system to respond to disasters.

Indicators

2.1

Between 2003 - 2007, policy framework to address bio-terrorism developed.

2.2

Between 2003 - 2012, community response programmes to all disasters developed.

2.3

Between 2003 - 2012, mechanisms to address vulnerability of food and water supplies established.

2.4

Between 2003 - 2012, evaluation programmes to address bio-terrorism responses developed.

Leadership

Heads of programmes/institutions.

National Planning

Ministry of Health; CERO; Barbados Defence Force (BDF); Barbados Fire Service (BFS); Grantley Adams International Airport (GAIA); Meteorological Office; Barbados Water Authority (BWA); Barbados Light & Power (BL&P); Ministry of Agriculture; Barbados Port Authority; Royal Barbados Police Force (RBPF).

Implementation

Ministry of Health Disaster Team.

Institutional Health Services

Hospital Services - Queen Elizabeth Hospital

Priority Issues

- Inappropriate administrative management systems;
- Inappropriate financial systems;
- Inappropriate information systems;
- Weak management systems for clinical services;
- Weak customer relations;
- Lack of an integrated management system for emergency services.

Strategic Goal

Provision of acute, secondary and tertiary care services strengthened and enhanced.

Key Health Indicators

- Between 2002 - 2012, overall patient satisfaction increased from 77% to 90%.
- Between 2002 - 2012, Emergency Ambulance Service response time reduced by 50%.

Health Promotion Strategies Utilised

Re-orienting Health Services
Developing Personal Health Skills
Building Alliances with Special Emphasis on the Media
Creating Supportive Environments
Empowering Communities
Healthy Public Policy

Governance

1

Expected Result

Improved management of the hospital.

Indicators

1.1

By 2003, selection of the Board of Management completed and implemented.

1.2

By 2003, executive management tier of the hospital strengthened.

1.3

By 2005, middle management of the hospital strengthened.

1.4

By 2005, appropriate organisational structures for all departments developed.

2

Expected Result

Improved alliances with key stakeholders.

Indicators

2.1

Between 2003 - 2004, public relations policy developed.

2.2

Between 2003 - 2006, comprehensive marketing strategy developed.

2.3

Between 2004 - 2012, opportunities for public/private partnerships, ventures and alliances strengthened.

2.4

Between 2004 - 2012, regional referral policy framework strengthened.

3

Expected Result

Improved supportive environments

Indicators

3.1

Between 2002 - 2004, comprehensive security plan developed and implemented.

3.2

Between 2002 - 2005, comprehensive re-development plan completed.

3.3

Between 2003 - 2010, programme for recognising centres of excellence within QEH developed and implemented.

Leadership

Hospital Director

National Planning

QEH-Board of Management; Ministry of Health; Ministry of the Civil Service; Office of the Attorney General; Ministry of Finance; PAHO.

Implementation

QEH-Board of Management; Ministry of Health; Ministry of the Civil Service; Ministry of Finance; PAHO; Private Sector.

Financial System

4

Expected Result

Improved financial system at the Q.E.H.

Indicators

4.1

Between 2003 - 2005, appropriate financial policies developed and implemented.

4.2

Between 2004 - 2005, financial and accounting systems strengthened.

4.3

Between 2004-2007, internal audit system established.

4.4

Between 2004 - 2005, patients' billing system strengthened.

Leadership

Hospital Director

National Planning

QEH; Ministry of Finance; Office of the Attorney General.

Implementation

QEH, Systems Analyst, Financial Controller

Information Technology

5

Expected Result

Improved management of Information Systems.

Indicators

5.1

Between 2003 - 2012, medium and long-term plans for an integrated hospital information system developed.

5.2

Between 2003 - 2012, hospital information system established.

Leadership

Hospital Director

National Planning

QEH - Board of Management; Ministry of Health; PAHO; Private Sector; Data Processing Unit; Ministry of Finance.

Implementation

QEH; Private Sector; PAHO; Ministry of Health Systems Analyst.

Maintenance

6

Expected Result

Strengthened engineering and maintenance functions.

Indicators

6.1

Between 2003 - 2012, facilities and medical equipment management plan developed and implemented.

6.2

Between 2003 - 2006, inventory/stock control systems strengthened.

6.3

Between 2003 - 2012, alliances with Non-governmental and private sector providers of technical services established.

Leadership

Hospital Director.

National Planning

GEH; Private Sector; Ministry of the Civil Service; PAHO

Implementation

GEH; Senior Technical Officer

Clinical Services

7

Expected Result

Strengthened clinical services and management functions.

Indicators

7.1

Between 2003 - 2012, policies for the delivery of clinical services developed and implemented.

7.2

Between 2003 - 2005, charter of patients' rights and responsibilities developed and implemented.

7.3

Between 2004 - 2008, comprehensive referral policies established and implemented.

7.4

Between 2004 - 2006, comprehensive policy for discharge planning developed and implemented.

7.5

Between 2004 - 2006, retention policy for medical records developed.

8

Expected Result

Improved clinical services environment.

Indicators

8.1

Between 2003 - 2006, Hospital Volunteer Programme developed and implemented.

8.2

Between 2004 - 2008, telemedicine programme developed and implemented.

8.3

Between 2004 - 2009, community services programme for secondary and tertiary clinical care developed and implemented.

Leadership

Chairman, Medical Staff Committee.

National Planning

GEH; Private Sector; PAHO; Ministry of Health; Ministry of the Civil Service.

Implementation

GEH

Nursing Services Department

9

Expected Results

Improved patient satisfaction.

Indicators

9.1

Between 2003 - 2005, customer relations programme developed.

9.2

Between 2003 - 2005, Continuous Quality Improvement programmes strengthened.

9.3

Between 2003 - 2012, comprehensive Nursing Services management plan developed and implemented.

9.4

Between 2003 - 2006, nursing research programme established and implemented.

Leadership

Matron

National Planning

QEH, PAHO, Ministry of Health, Ministry of Civil Service, Ministry of Education, Barbados Community College (BCC), Trade Unions, Private Sector.

Implementation

QEH

Support Services

10

Expected Results

Expanded and strengthened support services.

Indicators

10.1

Between 2003 - 2006, policy framework for accessing death certificates and medical records strengthened.

10.2

Between 2003 - 2012, programme for support services on a 24 hour basis developed and implemented.

10.3

Between 2003 - 2006, occupational health and safety policies strengthened.

Leadership

Hospital Director

National Planning

QEH; Ministry of Health; Trade Unions; Ministry of Civil Service; Ministry of Finance; PAHO; Private sector.

Implementation

QEH

Emergency Services

11

Expected Result

Improved delivery of pre-hospital care.

Indicators

11.1

Between 2003 - 2012, comprehensive plan for emergency services developed and implemented.

11.2

Between 2004 - 2007, emergency ambulance service decentralised.

Leadership

QEH

National Planning

Ministry of Health; QEH.; BDF; BFS; RBPF; Fox Flight; Get Help; Barbados Red Cross Society. Island Care; St. John Ambulance Brigade.

Implementation

Get Help; Fox Flight; QEH; Island Care.

Family Health

Overall Goal

Health and quality of life of the population improved.

Reproductive Health

Priority Issues

- Inadequate ante/intra/post-natal and neonatal services.
- Inadequate breast feeding programme.
- Inadequate family planning services.

Strategic Goal

Quality of life for men, women and children improved.

Key Health Indicator

By 2012:

- Reduce infant mortality rate below 10 per 1000 live births;
- Maintain present 0% maternal mortality rate;
- Decreased incidence of low birth weight babies;
- Morbidity and Mortality associated with cancers and STIs in men and women reduced by 20%.

Health Promotion Strategies Utilised

Re-orienting Health Services

Developing Personal Health Skills

Building Alliances with Special Emphasis on the Media

Creating Supportive Environments

Empowering Communities

Healthy Public Policy

1

Expected Result

Strengthened ante/intra/post-natal services.

Indicators

1.1

Between 2003 - 2005, evaluation programmes for MCH strengthened and implemented.

1.2

Between 2003 - 2005, policy framework with respect to pre-natal care and post partum care implemented.

1.3

Between 2004 - 2006, a comprehensive parenting programme in all Polyclinics established.

2

Expected Result

Strengthened Neonatal Care services.

Indicators

2.1

Between 2003 - 2006, certification programme for health professionals in neonatal resuscitation developed and implemented.

2.2

Between 2003 - 2005, research programmes into the causes of obesity in the newborn initiated.

2.3

Between 2003 - 2005, milestone programme for assessing disabilities in the newborn, implemented.

3

Expected Result

Strengthened breast-feeding programme.

Indicators

3.1

Between 2004 - 2006, Baby Friendly programme for QEH maintained.

3.2

Between 2003 - 2012, national breast feeding policy revised to meet international standards.

3.3

Between 2004 - 2012, breastfeeding programmes in the workplace initiated.

3.4

Between 2003 - 2012, nutritional information programmes for caregivers and parents established and implemented.

3.5

Between 2003 - 2012, structured nutrition education programmes in polyclinics and satellite clinics strengthened.

4

Expected Result

Improved family planning clinical services.

Indicators

4.1

Between 2003 - 2007, comprehensive reproductive health policy established and implemented.

4.2

Between 2003 - 2005, referral policy for reproductive health services developed and implemented.

4.3

Between 2003 - 2012, evaluation programme for contraceptive methodologies developed and implemented.

5

Expected Result

Improved infant and pre-schooler health programme.

Indicators

5.1

Between 2003 - 2012, programme to train 100% of workers in Day Care Centres in life support techniques established.

5.2

Between 2003 - 2012 policies for Public Health visits to day nurseries strengthened.

Leadership

Senior Medical Officer of Health (S)

National Planning

Ministry of Health; Chief Medical Office; GEH; Chief Public Health Nurse, Senior Medical Officer of Health; PAHO

Implementation

Chief Public Health Nurse; Matron; Senior Health Sisters.

Women's Health

Priority Issues

- Inadequate screening services for women.
- Violence against women.

Strategic Goal

Improved quality of life for women.

Key Health Indicator

Current mortality and morbidity associated with cancers and STIs in women reduced.

Health Promotion Strategies Utilised

Re-orienting Health Services

Developing Personal Health Skills

Building Alliances with Special Emphasis on the Media

Creating Supportive Environments

Empowering Communities

Healthy Public Policy

1

Expected Result

Strengthened screening services for cancer, Sexually Transmitted Infections (STIs) and other diseases affecting women's health.

Indicators

1.1

Between 2004 - 2005, strategies to improve participation in the Pap smear screening programme developed.

1.2

Between 2003 - 2005 Breast Health Services strengthened.

1.3

By 2005 training programme for health workers in reproductive health enhanced.

1.4

By 2003 - 2009, capacity to conduct mammograms in collaboration with private and public sector agencies achieved.

1.5

Between 2003 - 2012, programmes in relation to the management of chlamydia, herpes and other STIs improved.

1.6

Between 2003 - 2005, policies to guide the management of violence against women adopted.

Leadership

Senior Medical Officer of Health (South)

National Planning

Men's Education and Support Association (MESA); National Organization of Women (NOW); Senior Health Sisters; Chief Public Health Nurse; Chief Nursing Officer (CNO); Parent Education for Development in Barbados (PAREDOS), Barbados Association of Retired Persons (BARRP); Bureau of Gender Affairs; Ministry of Finance; Barbados Association of Medical Practitioners (BAMP); PAHO; Commonwealth Secretariat; Barbados Family Planning Association (BFPA) and other NGOs.

Implementation

Senior Health Sisters; MESA; BAMP; Ministry of Health, NOW.

Men's Health

Priority Issues

- Inadequate men's health programme.
- Limited utilisation of services.
- Inadequate screening programmes for men's health.

Strategic Goal

Improved quality of life for men.

Key Health Indicator

Current mortality and morbidity associated with cancers and STIs in men reduced.

Health Promotion Strategies Utilised

Re-orienting Health Services

Developing Personal Health Skills

Building Alliances with Special Emphasis on the Media

Creating Supportive Environments

Empowering Communities

Healthy Public Policy

1

Expected Result

Improved men's health programme.

Indicators

1.1

Between 2002 - 2004, programmes to promote male participation in parenting classes achieved.

1.2

Between 2004 - 2007, men's health programmes in all Polyclinics established.

1.3

Between 2003 - 2005, training programmes for health workers and wider community in male reproductive health established and implemented.

1.4

Between 2003 - 2009, capacity to conduct tests for prostate cancer in collaboration with private and public sector agencies improved.

1.5

Between 2003 - 2012, services in relation to herpes, chlamydia and other STIs improved.

1.6

Between 2003 - 2005, policies to guide the management of violence against men adopted.

Leadership
SMOH (S)

National Planning
MESA; NOW; BARP; Bureau of Gender Affairs;
Ministry of Health; Senior Health Sisters;
Chief Public Health Nurse; Chief Nursing Officer;
Ministry of Finance; NGOs, BAMP; PAHO;
Commonwealth Secretariat; PAREDOS; BFPA;

Implementation
Senior Health Sisters; MESA; BAMP; Ministry of
Health; NOW

Adolescent Health

Priority Issue

- Lack of a comprehensive adolescent health programme.

Strategic Goal
Improved adolescent well-being.

Key Health Indicators

- Between 2003 - 2012, 80% of adolescents participating in community and school health programmes.
- Between 2003 - 2007, increase health-seeking behaviour among adolescents by 10%.
- By 2012 reduce levels of adolescent obesity by 30% of Adolescent Health and Fitness Study (1999) Survey.

- By 2012, reduce by 10% reported number of adolescents expressing feelings of depression and wanting to harm others, as expressed in the 1999 Adolescent Health Survey.
- Injuries due to accidents and violence reduced by 2% per annum.
- By 2012 substance abuse among adolescents reduced by 30%.

Health Promotion Strategies Utilised
Re-orienting Health Services
Developing Personal Health Skills
Building Alliances with Special Emphasis on the Media
Creating Supportive Environments
Empowering Communities
Heathy Public Policy

1
Expected Result
Improved health education programme in schools.

Indicators

1.1
Between 2004 - 2012, all primary and secondary schools health education curricula implemented.

1.2
Between 2003 - 2012, Parent-Teachers Association linkages in support of health education programmes strengthened.

1.3
Between 2004 - 2012, school health and education programmes in collaboration with the media and the Ministry of Education achieved.

1.4
Between 2003 - 2005, adolescent component for the National Healthy Lifestyle Extravaganza established and implemented.

1.5
By 2005, 100% coverage in adolescent sexuality education programmes established and maintained.

2

Expected Result

Strengthened health promotion initiatives in primary and secondary schools.

Indicators

2.1

Between 2002 - 2012, technical programme to assist health related NGOs conducting healthy lifestyle programmes in schools established and implemented.

2.2

Between 2002 - 2004, strategy for implementing recommendations of the Global Youth Tobacco Survey developed.

2.3

By 2003, capacity to respond to the health needs of adolescents improved.

Expected Result

Strengthened client-oriented health services for adolescents.

Indicators

3.1

Between 2003 - 2004, policy framework for establishing adolescent health programmes adopted.

3.2

Between 2003 - 2005, policies for the management of sexual and physical child abuse adopted and implemented.

3.3

Between 2003 - 2005, in-service training programme in adolescent health for all adolescent counsellors established and implemented.

3.4

Between 2003 - 2012, programme to sensitise youth leaders in adolescent health issues established and implemented.

Leadership

SMOH (S).

National Planning

Ministry of Health; Ministry of Finance; Ministry of Civil Service; Ministry of Education; Media; Health NGOs; BFPA; PAHO; NCSA; UNICEF; National Youth Committee; Health Education Officer; Co-ordinator of Adolescent Health; Chief Public Health Nurse; CNO.

Implementation

Senior Health Sisters, Health Education Officer, Co-ordinator of Adolescent Health.

Oral Health

Priority Issue

- Lack of a comprehensive oral health programme for children, the elderly and the disabled.

Strategic Goal

Oral health of children under 6 years, persons with disabilities and the elderly improved.

Key Health Indicator

Between 2002 - 2012, the Decay, Missing Filled Teeth [DMFT] index in children, persons with disabilities and persons 65 years and over reduced by 50%.

Health Promotion Strategies Utilised

Re-orienting Health Services
Developing Personal Health Skills
Building Alliances with Special Emphasis on the Media
Creating Supportive Environments
Empowering Communities
Healthy Public Policy

1

Expected Result

Oral Health policy finalised and implemented.

Indicators

1.1

Between 2003 - 2005, policies for infection control in all dental operatories developed and improved.

1.2

Between 2004 - 2005, Continuous Quality Improvement, monitoring and evaluation system established

1.3

Between 2003 - 2005, legislative framework to address issues in relation to continuous education in dentistry developed.

1.4

Between 2003 - 2012, policy to provide all women attending antenatal services with oral health care and oral health education developed and implemented.

2

Expected Result

Strengthened National Oral Health programme.

Indicators

2.1

Between 2003 - 2007, rapid assessment programme in all schools introduced and implemented.

2.2

Between 2003 - 2007, comprehensive oral health programme for children, persons with disabilities and the elderly developed.

2.3

Between 2004 - 2006, Oral Maxillo-facial programme established.

3

Expected Result

Improved information systems network for the national surveillance of the oral health situation.

Indicators

3.1

Between 2004 - 2012, Oral Health reporting and feedback system involving both public and private sector providers established and implemented.

3.2

Between 2004 - 2012, community-based oral health education programme developed and implemented.

Leadership

Senior Dental Officer.

National Planning

SMOH [S]; Ministry of Health; Ministry of the Civil Service; Ministry of Finance; Ministry of Education; Barbados Dental Association.

Implementation

Senior Dental Officer; SMOH (South).
Barbados Dental Association.

Rehabilitation

Priority Issues

- Fragmented rehabilitative services.
- Inadequate rehabilitative services.

Strategic Goal

Comprehensive rehabilitation services established throughout the health care system, with emphasis on equity and access.

Key Health Indicator

By 2012, 80% of persons receiving appropriate rehabilitative care.

Health Promotion Strategies Utilised

Re-orienting Health Services
Developing Personal Health Skills
Building Alliances with Special Emphasis on the Media
Creating Supportive Environments
Empowering Communities
Healthy Public Policy

1

Expected Result

Strengthened rehabilitation programmes.

Indicators

1.1

Between 2002 - 2004, policy framework for the organisational structure of an integrated rehabilitation service revised and approved.

1.2

Between 2004 - 2006, "Care of the Disabled" rehabilitation programme extended.

1.3

Between 2003 - 2012, policies for an integrated referral system for rehabilitation services, including the public and private sector developed and implemented.

1.4

Between 2003 - 2012, policies outlining relationships (i.e. linkages and partnerships) with stakeholders developed.

2

Expected Result

Improved accessibility to rehabilitation services.

Indicators

2.1

Between 2003 - 2012, physical infrastructure upgrade programme developed and implemented.

2.2

Between 2003 - 2007, decentralisation programme for rehabilitation services developed and implemented.

2.3

Between 2003 - 2012, community based rehabilitation programmes established and implemented.

2.4

Between 2004 - 2012, day care programmes established and implemented

2.5

Between 2003 - 2006, respite care programmes strengthened.

2.6

Between 2004 - 2008, appropriate transportation programme for persons with disabilities developed and implemented.

3

Expected Result

Improved analysis and utilisation of information within the rehabilitation system.

3.1

Between 2003 - 2005, computerised inventory system for rehabilitation supplies, materials, equipment and furniture adopted.

3.2

Between 2003 - 2007, systematic analytical evaluation and research programme developed and implemented.

Leadership

Chief Physiotherapist (QEH).

National Planning

National Assistance Board (NAB); NGOs, Disability Unit; PAHO; Ministry of Civil Service; Ministry of Health; Ministry of Finance, CDB; IDB; BARP; Barbados Council for the Disabled; Barbados Association of Occupational Therapists; BARNOD; Co-ordinator of Rehab Services; Barbados Association of Physical Therapists (BAPT).

Implementation

NAB; NGOs; Disability Unit; Ministry of Health. Barbados Council for the Disabled.

Health of the Elderly

Priority Issue

- Lack of an integrated Care of the Elderly programme.

Strategic Goal

Quality of life for older persons improved.

Key Health Indicator

Between 2002 - 2012, 80% of older persons having access to appropriate services.

Health Promotion Strategies Utilised

Re-orienting Health Services

Developing Personal Health Skills

Building Alliances with Special Emphasis on the Media

Creating Supportive Environments

Empowering Communities

Healthy Public Policy

1

Expected Result

Improved equity and access to health services for older persons.

Indicators

1.1

Between 2002 - 2003, National Policy on Ageing adopted.

1.2

Between 2002 - 2012, the framework for the collaboration of key stakeholders charged with the affairs of the elderly developed and implemented.

1.3

Between 2004 - 2012, community-based programmes to enable frail and healthy elderly persons to continue to live in the community developed and implemented.

1.4

Between 2004 - 2007, Registry System developed and implemented.

2

Expected Result

Improved quality of care programmes for nursing homes, senior citizens homes, Geriatric and District Hospitals.

Indicators

2.1

Between 2003 - 2005, accreditation programme for long-term care institutions (public and private) strengthened.

2.2

Between 2003 - 2012, recreational therapy policies in 100% of private and public long-term care programmes incorporated.

2.3

Between 2004 - 2006, specialist geriatric services programme for all older persons developed.

Leadership

SMOH(S)

National Planning

Geriatric Programmes, Ministry of Health; Ministry of Finance; National Council on Ageing; Principal Nursing Officers (PNOs); CHO; BARP; Ministry of Social Transformation.

Implementation

Ministry of Health, Ministry of Social Transformation.

Food, Nutrition and Physical Activity

Overall Goal

Nutritional and Physical Status of the population improved.

Priority Issues

- Weak Nutrition Education programme.
- Under and over nutrition in children, adolescents and adults.
- Lack of appropriate food security measures.
- Lack of appropriate fitness and activity programme.

Strategic Goal

Nutritional and physical standards promoted, developed and maintained.

Key Health Indicator

Reduction in BMI age specific by 5%.

Health Promotion Strategies Utilised

Re-orienting Health Services

Developing Personal Health Skills

Building Alliances with Special Emphasis on the Media

Creating Supportive Environments

Empowering Communities

Healthy Public Policy

1

Expected Result

Improved nutrition education programmes.

Indicators

1.1

Between 2003 - 2012, nutritional programmes in polyclinics, satellite clinics and community groups strengthened.

1.2

Between 2003 - 2005, in-service training programme for formal caregivers completed.

1.3

Between 2003 - 2005, nutrition media programmes strengthened.

1.4

Between 2003 - 2012, the Dial-A-Nutritionist programme developed and implemented.

2

Expected Result

Enhanced nutrition education programme in relation to the dietary management of Chronic Non-communicable Diseases (CNCDs).

Indicators

2.1

Between 2003 - 2006, comprehensive policy for the dietary management of CNCDs developed and implemented.

2.2

Between 2003 - 2012, alliance with Chronic Disease Research Centre and other agencies established.

2.3

Between 2002 - 2006, comprehensive policy plan for the dietary management of obesity developed and implemented.

3

Expected Result

Enhanced monitoring of over-nutrition and under-nutrition in the age group 0 - 5.

Indicators

3.1

Between 2004 - 2007, surveillance programme for follow-up care of children 0 - 5 years strengthened.

3.2

Between 2003 - 2006, monitoring of low and high birth-weight babies re-introduced.

4

Expected Result

Improved food security measures.

Indicators

4.1

Between 2003 - 2012, comprehensive food programme developed and implemented.

4.2

Between 2003 - 2007, policies to establish a framework for the collaboration of providers of food to vulnerable groups developed and implemented.

4.3

Between 2003 - 2012, framework for alliances to provide breakfast programmes in schools developed.

4.4

Between 2003 - 2012, food base dietary guidelines for Barbados produced and implemented.

4.5

Between 2004 - 2012, backyard and community gardens programme developed and implemented.

5

Expected Result

Improved monitoring systems for food service departments.

Indicators

5.1

Between 2003 - 2006, food service management system strengthened.

5.2

Between 2002 - 2005 monitoring and evaluation for Food Service Department programmes for geriatric facilities developed and implemented.

5.3

Between 2004 - 2012, policy guidelines for all food service departments updated and operationalised.

6

Expected Result

Enhanced nutrition promotion programmes.

Indicators

6.1

Between 2004 - 2012, policies for food and nutrition labelling developed and implemented.

6.2

Between 2003 - 2012, framework for inter-sectoral collaboration to co-ordinate food production at all levels strengthened.

6.3

Between 2002 - 2004, Nutrition Summer Camp programme strengthened.

6.4

Between 2003 - 2006, school-based nutrition programmes strengthened.

Leadership

National Nutrition Centre.

National Planning

SMOH(S); Chief Public Health Nurse; Geriatric Services; Ministry of Social Transformation; Ministry of Health; NGOs; Ministry of Finance; Ministry of Economic Development; Ministry of Agriculture.

Implementation

SMOH(S); Principal Nursing Officers; Chief Public Health Nurse, Chief Nursing Officer, Nutrition Officer.

Physical Activity

Priority Issues

- Increasing sedentary lifestyles.
- Inadequate physical activity programmes for the population.

Strategic Goal

Physical fitness standards promoted, developed and maintained.

Key Health Indicator

Increase from 47% to 67% number of persons supplementing daily activities with exercise.

Health Promotion Strategies Utilised

Re-orienting Health Services

Developing Personal Health

Building Alliances with Special Emphasis on the Media

Creating Supportive Environments

Empowering Communities

Healthy Public Policy.

1

Expected Result

Strengthened physical activity programmes.

Indicators

1.1

Between 2003 - 2012, Green Paper on Sports adopted.

1.2

Between 2004 - 2012, policy on the development of outdoor recreational spaces and community-based physical fitness centres developed, implemented and monitored.

1.3

Between 2003 - 2012, policy framework for the provision of financial incentives to persons taking part in physical activities developed and implemented in collaboration with the private sector, i.e. insurance companies.

1.4

Between 2004 - 2007, guidelines for the establishment of workplace health promotion programmes developed and implemented.

1.5

Between 2004 - 2007, physical activity programmes in polyclinics strengthened and expanded.

Leadership

Medical Officers of Health, Polyclinics.

National Planning

Ministry of Education, Youth Affairs and Sports; Polyclinics; Private Sector; Fitness Centres; National Sports Council; Ministry of Social Transformation; Ministry of Labour, Congress of Trade Unions.

Implementation

Polyclinics; private sector fitness centres.

Chronic Non-Communicable Diseases

Overall Goal

Morbidity and mortality due to chronic non-communicable diseases reduced.

Priority Issues

- Increased prevalence and incidence of CNCDs.
- Lack of an integrated Clinical Management programme.
- Increased prevalence of breast, cervical and prostate cancer.
- Insufficient attention paid to primary prevention of CNCDs.
- Lack of co-ordination in the planning and implementation of national programmes for CNCDs.

Strategic Goal

Reduce the incidence and prevalence of the CNCDs.

Key Health Indicator

Between 2002 - 2012, morbidity and mortality in persons forty years and over due to high blood pressure, diabetes and cardiovascular disease reduced by 10%.

Health Promotion Strategies Utilised

Re-orienting Health Services

Developing Personal Health

Building Alliances with Special Emphasis on the Media

Creating Supportive Environments

Empowering Communities

Healthy Public Policy

1

Expected Result

Reduced incidence of diabetes and occurrence of complications.

Indicators

1.1

Between 2002 - 2012, clinical policies for the management of diabetes, hypertension,

cardiovascular disease and cancer in all public and private health care facilities established and implemented.

1.2

Between 2005 - 2012, diabetes education programmes in all public and private health care facilities and the workplace developed and implemented.

1.3

Between 2004 - 2012, diabetes, hypertension, cardiovascular and cancer management education for all cadres of health professionals strengthened.

1.4

Between 2004 - 2012, the capacity of families, communities, and NGOs in the management and prevention of diabetes, hypertension, cardiovascular disease and their complications strengthened.

2

Expected Result

Improved supportive environments

Indicators

2.1

Between 2003 - 2012, policy framework for the management of hypertension and cardiovascular disease education and research developed and implemented.

2.2

Between 2003 - 2006, policy framework for the referral of persons with diabetes, hypertension and cardiovascular disease developed and implemented.

2.3

Between 2003 - 2012 policy framework for collaboration with NGOs developed and implemented.

2.4

Between 2004 - 2006, programmes to strengthen the personal health skills of clients, their families and wider community developed.

2.5

Between 2004 - 2008, prevention and early detection programmes in all primary care institutions strengthened.

Leadership

Chief Medical Officer

National Planning

Chief Public Health Nurse; Chief Nursing Officer; Health Education Officer.

Implementation

SMOH (North and South); Chief Public Health Nurse; Chief Nursing Officer; Health Education Officer; Medical Officers of Health.

HIV/AIDS

Overall Goal

Reduction in the incidence and impact of HIV infection.

Priority Issues

- Inadequate management and care of persons infected and affected with HIV/AIDS.
- Increasing incidence and prevalence of persons living with HIV/AIDS (PLWA).
- Weak information, education and communication programmes.

Strategic Goal

A national multi-sectoral programme that reduces the incidence and impact of HIV/AIDS.

Key Health Indicator

Between 2002 - 2012, 50% reduction in the morbidity and mortality rate and a 50% reduction in the HIV incidence rate.

Health Promotion Strategies Utilised

Re-orienting Health Services

Developing Personal Health Skills

Building Alliances with Special Emphasis on the Media

Creating Supportive Environments

Empowering Communities

Healthy Public Policy

1

Expected Result

Improved clinical management of HIV/AIDS.

Indicators

1.1

Between 2002 - 2004, counselling programme strengthened, such that dedicated voluntary testing and counselling services are accessible at all polyclinics and supportive counselling is available at the level of clinical psychological interventions.

1.2

By 2003, the Highly Active Anti-retroviral Therapy [HAART] programme strengthened to achieve 75%

coverage of persons living with HIV/AIDS who meet the clinical criteria for treatment.

1.3

Between 2005 - 2007, capacity of community physicians and other caregivers to manage persons living with HIV/AIDS (PLWHA) strengthened.

1.4

By 2002, redevelopment programme for the Reference Unit, laboratory and pharmacy completed.

1.5

By 2003, resources and capacity established to manage prevalent HIV associated conditions and AIDS defining illnesses.

2

Expected Result

Improved care and support for the HIV/AIDS community.

2.1

Between 2003 - 2004, redevelopment programme for Food Bank, Drop-in Centre and office accommodation completed.

2.2

Between 2004 - 2005, the expansion programme for the Elroy Phillips Hostel facility completed.

2.3

Between 2003 - 2004, domiciliary care programmes implemented.

3

Expected Result

Improved Information Systems.

3.1

By 2003, monitoring and evaluation programme for HIV/AIDS established and implemented.

3.2

Between 2003 - 2004, third generation epidemiological surveillance system implemented.

3.3

Between 2003 - 2004, HIV/AIDS research programme developed and implemented.

3.4

Between 2004 - 2006, sero-prevalence surveillance programme strengthened.

4

Expected Result

Reduction in the incidence of HIV infection and the prevalence of the associated stigma and discrimination.

Indicators

4.1

Between 2003 - 2012, Information, Education and Communication (IEC) programme strengthened.

4.2

Between 2003 - 2012, HIV/AIDS counselling programme strengthened.

4.3

Between 2003 - 2006, programme for condom promotion and distribution strengthened.

4.4

By 2003, programme to ensure safety of blood supply optimised.

4.5

By 2003, programme for prevention of mother to child transmission (PMTCT) strengthened.

4.6

Between 2004 - 2006, protocol for non-occupational post exposure prophylaxis developed and implemented.

4.7

Between 2003 - 2004, registry of discrimination related to HIV/AIDS established.

Leadership

SMOH [Communicable Diseases]

National Planning

AIDS Programme Co-ordinator/ Manager; HIV/AIDS Commission; CDRC; Ministry of Health; Ministry of Finance; Ministry of Economic Development, Ministry of Physical Development and Environment, NGOs.

Implementation

Ministry of Health; Ministry of Finance; NGOs; University of the West Indies.

Communicable Diseases

Overall Goal

Morbidity and mortality due to communicable diseases reduced.

Priority Issues

- New and re-emerging communicable diseases, e.g. West Nile virus, TB (tuberculosis)
- Weak public awareness programme for STIs.
- Lack of an Integrated Vector Control programme.

Strategic Goal

Reduce the morbidity and mortality due to existing, new and re-emerging communicable diseases.

Key Health Indicators

- Between 2002 - 2012, reduce incidence and prevalence rates for communicable diseases by 30%.
- Maintain polio, measles and rubella elimination status.
- By 2003, reduce case fatality rate for Dengue Haemorrhagic Fever to less than 5%.
- Maintain annual TB incidence rate at less than 5/100,000.
- By 2009, reduce the reported cases of STIs by 50% at the Polyclinics.

Health Promotion Strategies Utilised

Re-orienting Health Services

Developing Personal Health Skills

Building Alliances with Special Emphasis on the Media

Creating Supportive Environments

Empowering Communities

Healthy Public Policy

1

Expected Result

Strengthened immunisation control programme and management capacity.

Indicators

1.1

Between 2004 - 2006, effective Directly Observed Treatment Short Course (DOTS) programme expanded.

1.2

Between 2003 - 2012, surveillance programme for communicable diseases including Sexual Transmitted Infections (STIs) and TB strengthened and implemented.

1.3

Between 2002 - 2012, immunisation programme strengthened to ensure 100% of children entering pre-school and primary schools are immunised for Measles, Mumps and Rubella (MMR), Diphtheria, Pertussis, Tetanus (DPT), Haemophilus Influenza Bacteria (HiB) and Polio.

1.4

Between 2002 - 2012, immunisation programme strengthened to ensure 99% of children under 5 years immunised with new pentavalent vaccine (Hepatitis B, HiB, DPT)

2

Expected Result

Strengthened supportive environments.

Indicators

2.1

Between 2004 - 2006, public awareness programme for TB developed and implemented.

2.2

Between 2002 - 2012, bio-safety programmes for all public and private health care institutions developed and implemented.

2.3

Between 2004 - 2008, Expanded Programme on Immunisation (EPI) management programmes strengthened.

2.4

Between 2004 - 2009, legislative framework for the EPI control programme amended.

2.5

Between 2003 - 2012, public awareness programme for Sexually Transmitted Infections (STIs) developed and operationalised.

2.6

Between 2003 - 2012, policies for the clinical management of STIs in the public and private sectors developed and disseminated.

3

Expected Result

Strengthened clinical management of vector borne diseases.

Indicators

3.1

Between 2003 - 2006, programme for the management of Dengue Haemorrhagic Fever and Leptospirosis developed and operationalised.

3.2

Between 2003 - 2012, communications plan for dengue enhanced and implemented.

3.3

Between 2003 - 2012, programmes for the early detection of emerging and re-emerging infectious diseases, including West Nile Virus and Malaria developed and implemented.

Leadership

SMOH (N).

National Planning

BAMP; National HIV/AIDS Commission; Ministry of Health; CNO; Chief Public Health Nurse; Ministry of Finance; Ministry of Civil Service; PAHO; CAREC.

Implementation

Senior Health Sisters; General Practitioners; SMOH (North); Infection Control Co-ordinator.

Mental Health

Overall Goal

Mental health of the population improved and maintained.

Priority Issues

- Weak Community Mental Health Programme.
- Lack of an integrated mental health system.
- Weak mental health promotion strategies.
- Inadequate clinical services for children, adolescents and the mentally challenged.

Strategic Goal

Mental Health programme strengthened.

Key Health Indicator

Between 2002 - 2012, establishment of appropriate community based programmes and services to fulfill the needs of de-institutionalisation and prevention of mental disorders.

Health Promotion Strategies Utilised

Re-orienting Health Services

Developing Personal Health Skills

Building Alliances with Special Emphasis on the Media

Creating Supportive Environments

Empowering Communities

Healthy Public Policy

1

Expected Result

Improved management of the Mental Health Services.

Indicators

1.1

Between 2003 - 2012 a comprehensive, mental health programme established and implemented.

1.2

Between 2004 - 2012, decentralised programme for mental health services with reduction of admissions by 25% achieved.

1.3

Between 2003 - 2007, refurbishment programme for Mental Health facilities completed.

1.4

Between 2003 - 2012, mental health legislative framework updated and amended.

2

Expected Result

Strengthened Mental Health promotion strategies.

Indicators

2.1

Between 2003 - 2008, strategies including advocacy and public awareness strengthened.

2.2

Between 2003 - 2012, alternative housing programme for psycho-geriatric patients and the mentally challenged established.

2.3

Between 2005 - 2012, social support programme expanded.

3

Expected Result

Improved clinical services.

Indicators

3.1

Between 2004 - 2012, psychiatric programmes for children and adolescents developed and operational.

3.2

Between 2004 - 2007, workplace mental health promotion programme developed and implemented.

4

Expected Result

Strengthened mental health programme capacity for evidence based decision making.

4.1

Indicators

Between 2005 - 2012, mental health evaluation programmes developed and implemented.

4.2

Between 2004 - 2006, framework for an operational research system developed and implemented.

Leadership

Hospital Director

National Planning

Senior Consultant Psychiatrist, Ministry of the Civil Service; Ministry of Finance; Ministry of Home Affairs; Ministry of Social Transformation; Ministry of Education, NGOs and Community Groups.

Implementation

Psychiatric Hospital management team, Ministries of Health, Home Affairs, Social Transformation, and Education, NGOs, Religious Groups, the Media, Trade Union and Staff Associations.

Substance Abuse

Strategic Goal

The use and abuse of legal and illegal substance among all age groups reduced.

Key Health Indicator

Between 2002 - 2012, prevention, treatment and rehabilitation services developed.

1

Expected Result

Enhanced education programmes about legal and illegal substances.

Indicators

1.1

2003 - 2004, advocacy programme for the advertising of legal and illegal substances developed and implemented.

1.2

Between 2002 - 2004, public awareness programmes about the use and abuse of substances developed and implemented.

1.3

Between 2002 - 2005, education programme for health professionals about the use and abuse of substances developed and implemented.

1.4

Between 2002 - 2012, policy framework for collaboration with community, NGOs and private sector developed.

1.5

Between 2002 - 2012, specific programmes for vulnerable groups developed and implemented.

2

Expected Result

Enhanced treatment and rehabilitation services.

Indicators

2.1

Between 2003 - 2006, employee assistance programmes expanded.

2.2

Between 2003 - 2005, accreditation and certification programmes for the private and public sectors established and implemented.

2.3

Between 2004 - 2012, treatment and rehabilitation services for women and children established.

2.4

Between 2002 - 2004, policy framework for purchasing services from NGOs, communities and private sector developed and implemented.

Leadership

Hospital Director.

National Planning

Ministry of Health, Ministry of Home Affairs; Ministry of Education; Youth Affairs and Sports; Ministry of Social Transformation.

Implementation

Ministry of Health.

Health and the Environment

Overall Goal

Environmental health risks reduced

Priority Issues

- Lack of an integrated solid and liquid waste management system.
- Inappropriate behaviour and attitude by households and communities with respect to vector control.
- Inadequate food-borne disease surveillance and management system.
- Increased environmental risks in communities, i.e, littering and illegal dumping.
- Inadequate international health surveillance systems.

management, including hazardous waste developed and implemented.

1.2

Between 2003 - 2012, policy framework for public and private sector collaboration in solid waste management strengthened.

1.3

Between 2005 - 2012, comprehensive waste minimisation programme designed and implemented.

1.4

Between 2003 - 2007, legislative and enforcement programme for littering and illegal dumping strengthened.

Strategic Goal

Improve and maintain quality of life through an environmental health management system.

2

Expected Result

Improved near-shore water quality.

Key Health Indicator

Between 2002 - 2012, reduce 80% of environmental health risks.

Indicators

2.1

By 2003, household and commercial properties connection programmes for the South Coast Sewerage System completed.

2.2

Between 2005 - 2009, waste disposal programme in respect of septic tank design and sludge management improved.

2.3

Between 2006 - 2008, research programme for monitoring the quality of the near shore water strengthened.

Health Promotion Strategies Utilised

Re-orienting Health Services

Developing Personal Health Skills

Building Alliances with Special Emphasis on the Media

Creating Supportive Environments

Empowering Communities

Healthy Public Policy

1

Expected Result

Improved solid waste management system.

Indicators

1.1

Between 2003 - 2012, policies, legislative framework and programmes for solid waste

3

Expected Result

Improved provision of wholesome food to the consumer.

Indicators

3.1

Between 2004 - 2006, food safety programme strengthened.

3.2

Between 2004 - 2012, quality assurance programmes for all food establishments implemented.

3.3

Between 2003 - 2012, a policy framework for the collaboration of Agriculture, Health and key stakeholders in food safety developed and implemented.

3.4

Between 2003 - 2012, comprehensive food borne disease surveillance and management systems established and implemented.

4

Expected Result

Reduced environmental risks within communities.

Indicators

4.1

Between 2003 - 2006, existing programmes to assist communities in managing their environment strengthened.

4.2

Between 2003 - 2012, comprehensive evaluation programme for Health Services Regulations achieved.

4.3

Between 2003 - 2012, prosecution programme for the Environmental Health Division established and implemented.

5

Expected Result

Strengthened Integrated Vector Control Programme.

Indicators

5.1

Between 2004 - 2012, vector-borne disease surveillance system to include all emerging vector borne diseases strengthened.

5.2

Between 2005 - 2012, research programme to incorporate new approaches to control of vectors established.

5.3

Between 2003 - 2006, regulations for the use and disposal of pesticides related to vector control developed and implemented

6

Expected Result

Improved international health surveillance systems.

Indicators

6.1

Between 2003 - 2012, laboratory and epidemiological programmes for rapid identification of chemical and biological agents strengthened.

6.2

Between 2003 - 2012, vector control monitoring programme within the 400m radius of the ports of entry strengthened.

6.3

Between 2003 - 2012, regional and international strategies for the control and prevention of emerging diseases adopted.

6.4

Between 2004 - 2012, policy framework to address bio-terrorism developed and implemented.

6.5

Between 2003 - 2006, prevention programme for public and private sector agencies strengthened.

6.6

Between 2003 - 2006, port health management system restructured.

7

Expected Result

Strengthened environmental health services.

Indicators

7.1

Between 2003 - 2008, existing environmental health services programme re-organised.

7.2

Between 2003 - 2006, policies to improve environmental health protection developed.

7.3

Between 2003 - 2008, programmes for public education on environmental health services established.

7.4

Between 2003 - 2005, policies to manage and regulate all types of cemeteries and disposal of human remains developed and implemented.

8

Expected Result

Improved monitoring and evaluation mechanisms for air, noise and water pollution.

8.1

Indicator

Between 2004 - 2005, policies for control and monitoring air, noise and water pollution developed.

Leadership

SMOH (North)

National Planning

Ministry of Health; Chief Environmental Health Officer; Solid Waste Project Unit; Ministry of Agriculture; Attorney General's Office; Barbados National Standards Institution (BNSI); Private Sector Agencies; Barbados Hotel Tourism and Association; Ministry of Education; BCC; Ministry of Commerce and Consumers Affairs; Ministry of Foreign Affairs; Ministry of Physical Development and Environment.

Implementation

Ministry of Health

Human Resource Management

Overall Goal

Appropriate human resources available to support the health systems.

Priority Issues

- Lack of incentive schemes for personnel.
- Inadequate alliances with civil society, NGOs, communities and the private sector.
- Inadequate policies for human resource management.
- Lack of effective human resources management programmes.

Strategic Goal

Improve the capacity of the health system to train, manage and measure the competency of health professionals.

Key Health Indicator

Between 2002 - 2012, improved quality health services delivered within the health system.

Health Promotion Strategies Utilised

Re-orienting Health Services

Developing Personal Health Skills

Building Alliances with Special Emphasis on the Media

Creating Supportive Environments

Empowering Communities

Healthy Public Policy

1

Expected Result

Strengthened capacity of the health system to respond effectively and efficiently to training needs.

Indicators

1.1

Between 2003 - 2009, staff evaluation programmes developed and implemented.

1.2

Between 2003 - 2005, Human Resources Management Information System developed.

1.3

Between 2003 - 2012, career path and succession planning programmes developed and implemented.

1.4

Between 2003 - 2012, training programme based on training needs developed and implemented.

2

Expected Result

Improved policies, plans and procedures for the management of human resources.

2.1

Between 2003 - 2006, policy framework for recruitment, selection, placement and retention of staff with appropriate skills mix developed.

2.2

Between 2003 - 2006, policies to promote and facilitate proactive human resource management developed.

2.3

Between 2003 - 2012, evaluation programmes to measure the impact of training on the delivery of services developed and implemented.

2.4

Between 2003 - 2006, comprehensive human resource management system developed.

3

Expected Result

Improved alliances with NGOs, communities and private sector.

Indicators

3.1

Between 2003 - 2012, capacity within NGOs/communities to participate in the delivery of health services developed.

3.2

Between 2004 - 2012, linkages with the Government and Trade Unions, private sector, U.N. Agencies, Universities and Corporate Barbados to facilitate the training and development of human resources developed.

3.3

Between 2002 - 2012, policy framework to address the issues of migration, and free movement of health professionals within CARICOM supported.

3.4

Between 2003 - 2012, policy framework to foster inter and intra-sectoral multidisciplinary teams in the delivery of services implemented.

3.5

Between 2003 - 2012, comprehensive communications programme developed and implemented.

4

Expected Result

Improved supportive environment.

Indicators

4.1

Between 2004 - 2008, incentive programmes for personnel developed and implemented.

4.2

Between 2003 - 2012, wellness programme for personnel developed and implemented.

4.3

Between 2003 - 2012, risk management programmes for health care personnel developed and implemented.

4.4

Between 2002 - 2012, Employee Assistance Programmes strengthened.

Leadership

Ministry of Health

National Planning

CMO; All Health Institutions; Hospital Directors; Human Resources Manager; CQI Co-ordinator; PDIU; CNO; GEH; BCC; Ministry of Education; Training Division; PAHO; Personnel Administration Division; Ministry of the Civil Service; Private Sector; Ministry of Health; Public Sector Reform Unit; Trade Unions and Professional Organisations.

Implementation

GEH; PAHO; Ministry of the Civil Service; Training Division; Ministry of Health.

Appendix I Collaboration Matrix

Matrix for the Collaboration of Partners

	Health Systems Development	Institutional Health Services	Family Health	Food, Nutrition and Physical Activity	Chronic Non-communicable Diseases	HIV/AIDS	Communicable Diseases	Mental Health	Health and the Environment	Human Resource Development
AIDS Society of Barbados			X			X	X			
The Barbados Advocate	X		X					X		
Barbados Association of Environmental Health Officers									X	
Barbados Association of Medical Practitioners	X		X				X			X
Barbados Association of Retired Persons			X							
Barbados Cancer Society			X							
Barbados Christian Council			X							
Barbados Community College			X					X	X	
Barbados Council for the Disabled			X							
Barbados Defence Force	X	X								
Barbados Dental Association			X							
Barbados Drug Service	X		X							
Barbados Employers' Confederation			X							
Barbados Family Planning Association			X							
Barbados Mutual Life Assurance Society			X							
Barbados National Council on Aging/Help Age			X							
Barbados Pharmaceutical Society			X							
Barbados Red Cross Society			X							
Barbados Reference Lab										
Barbados Registered Nurses Association			X		X				X	X
Barbados Workers Union	X	X		X				X		X
Bayview Hospital		X								
Brazilian Embassy	X									
Black Rock Polyclinic			X							
British High Commission	X									
Canadian High Commission	X									
Caribbean Assoc. for Complementary/Alternative Medicine			X							
Caribbean Broadcasting Corporation	X		X							
Caribbean Conference of Churches			X							
Caribbean Development Bank	X									
Caribbean Epidemiology Centre							X			

Matrix for the Collaboration of Partners

	Health Systems Development	Institutional Health Services	Family Health	Food, Nutrition and Physical Activity	Chronic Non-communicable Diseases	HIV/AIDS	Communicable Diseases	Mental Health	Health and the Environment	Human Resource Development
Caribbean Environmental Health Institute	X								X	
Caribbean Food and Nutrition Institute				X	X					
Carib Rehab Ltd.			X		X					
CARICOM	X									
Central Emergency Relief Organisation	X									
Child Care Board			X							
Children's Development Centre			X							
Chronic Disease Research Centre				X	X	X				
Comfort Assistance Reach Out and Educate			X		X	X				
Community Asset Development Consultants	X		X							
Congress of Trade Unions and Staff Associations	X		X	X						
Embassy of the Republic of Cuba	X									
Delegation of the European Commission	X									
Department for International Development (DFID)	X									
Diabetes Association of Barbados			X	X	X					
Diabetes Foundation of Barbados			X	X	X					
Edgar Cochrane Polyclinic				X						
Barbados Fire Service	X									
FMH Emergency Medical Clinic			X							
Food and Agriculture Organisation				X	X					
Fox Flight Barbados										
Future Centre Trust		X	X							
Geriatric Hospital			X							
Glebe Polyclinic				X						
Government Information Service	X		X					X		
Health and Family Life Organisation			X							
Heart Foundation of Barbados Inc.			X	X	X					
Hope Foundation			X		X					
Ichirougensim Council for the Advancement of Rastafari			X							
Inter-American Development Bank	X									
Island Dialysis					X					
Super Centre Supermarkets			X	X	X					

Matrix for the Collaboration of Partners

	Health Systems Development	Institutional Health Services	Family Health	Food, Nutrition and Physical Activity	Chronic Non-communicable Diseases	HIV/AIDS	Communicable Diseases	Mental Health	Health and the Environment	Human Resource Development
Insurance Corporation of Barbados Ltd.			X		X					
Inter-American Institute for Cooperation on Agriculture			X	X	X					
Life of Barbados			X		X					
Maurice Byer Polyclinic										
Mental Health Association of Barbados			X					X		
MESA			X							
Ministry of Agriculture and Rural Development	X			X	X				X	
Ministry of the Civil Service	X	X	X	X	X	X	X	X	X	X
Director of Economic Affairs	X									
Ministry of Economic Development	X									
Ministry of Education, Youth Affairs and Sports			X	X						X
Ministry of Finance	X	X	X	X		X	X			
Ministry of Foreign Affairs	X									
Ministry of Health	X	X	X	X	X	X	X	X	X	X
Ministry of Labour and Social Security										X
Ministry of Physical Development and the Environment						X			X	
Ministry of Social Transformation			X							
Ministry of Tourism and International Transport							X			
Multiple Sclerosis Association of Barbados			X							
Nation Publishing Co. Ltd.			X							X
National HIV/AIDS Commission			X		X		X	X		
National Council for the Prevention of Alcohol and Drug Dependency			X					X		
National Council of Substance Abuse			X					X		
National Insurance Department	X				X					
National Organization of Women			X							
National Productivity Council					X					
National Sports Council				X						
National Nutrition Centre				X	X					
National Union of Public Workers	X	X		X						X
Nurses Association of Assistants and Aides of Barbados	X									
Organization of American States	X									
Pan American Health Organization	X	X	X	X	X	X	X	X	X	X

Matrix for the Collaboration of Partners

	Health Systems Development	Institutional Health Services	Family Health	Food, Nutrition and Physical Activity	Chronic Non-communicable Diseases	HIV/AIDS	Communicable Diseases	Mental Health	Health and the Environment	Human Resource Development
Pine Hill Dairy	X		X		X					
Podiatrist Association			X		X					
Royal Barbados Police Force	X	X								
Psychiatric Hospital								X		
Queen Elizabeth Hospital	X	X	X							
Randel Phillips Polyclinic			X							
Royal Free and University College Medical School										X
Sanitation Service Authority									X	
Senior Registrar Psychiatry								X		
Sewerage and Solid Waste Project Unit									X	
St. Philip Polyclinic				X						
STARCOM Network Inc.	X									
Substance Abuse Foundation			X					X		
United Nations Development Programme	X									
UNICEF	X		X							
United Nations Development Fund for Women	X		X							
United Nations International Drug Control Programme	X		X							
Embassy of the United States of America	X									
USAID	X									
The University of the West Indies						X				
Warrens Polyclinic			X							
Winston Scott Polyclinic				X						

Appendix II SUMMARY OF OBJECTIVES

Health Systems Development

Overall Goal: To Improve Health Systems to deliver efficient, effective and quality services.

Priority Areas	Strategic Goals	Key Health Indicators	Expected Results
Re-organisation of Health Systems	Health Systems Management improved.	Between 2002 - 2012, 80% of customers indicating overall satisfaction with the service delivery system.	<ol style="list-style-type: none"> 1. Strengthened management systems throughout the health systems. 2. Establish regional policies to mitigate against the impact of globalisation and trade liberalisation on health. 3. Health Promotion model used as a planning tool in all institutions.
Financing Health Systems	Financing systems improved to achieve equity, sustainability and efficiency.	Between 2002 - 2012, cost effective and efficient services provided by 80% of institutions and programmes.	<ol style="list-style-type: none"> 1. Improved cost containment. 2. Improved cost recovery mechanisms. 3. Improved equity and efficiency through appropriate financial mechanisms.
Quality Assurance	Client/customer satisfaction improved through effective, efficient and equitable delivery of quality care.	Between 2002 - 2012, 80% of institutions and programmes adhering to Continuous Quality Improvement (CQI) principles.	<ol style="list-style-type: none"> 1. Established Continuous Quality Improvement programmes in all health institutions. 2. Improved supportive environments.
Information Systems	Information Systems designed for evidence based decision-making, information sharing and research	Between 2003 - 2012, 80% of institutions and programmes utilising accurate reliable and timely information.	<ol style="list-style-type: none"> 1. Improved comprehensive health information system. 2. Improved Management Information Systems.
Maintenance and Assessment of Technology	Strengthen systems, procedures and standards to upgrade programmes for maintenance of buildings, plant and equipment at all levels.	Between 2002 - 2012, 90% of maintenance programmes utilising appropriate technology.	<ol style="list-style-type: none"> 1. Improved acquisition and maintenance programme. 2. Improved maintenance procurement programmes.
Pharmaceuticals	Improve the health of the general public through the supply of affordable quality pharmaceuticals.	Between 2002 - 2012, 90% of pharmaceutical services delivered with a 90% customer satisfaction approval.	<ol style="list-style-type: none"> 1. Improved procurement, inventory management and distribution system. 2. Improved stakeholder/customer relations. 3. Improved dissemination of information to health professionals and members of the public. 4. Improved quality assurance programme for all pharmaceutical and related products developed. 5. Establish research, educational and service partnerships locally, regionally and internationally.
Disaster Management	Enhance capacity for disaster management and reduce health sector vulnerability to disasters.	Between 2002 - 2012, strengthen the system for the comprehensive management of disasters in the health sector.	<ol style="list-style-type: none"> 1. Integrated programme capable of addressing multi-hazard disasters and emergencies that is fully integrated into the National Disaster Management System to respond to disasters.

Appendix II SUMMARY OF OBJECTIVES

Institutional Health Services

Overall Goal: Appropriate services developed, improved and maintained within a health promotion framework.

Priority Areas	Strategic Goals	Key Health Indicators	Expected Results
Hospital Services - Queen Elizabeth Hospital	Provision of acute, secondary and tertiary care services strengthened and enhanced.	Between 2002 - 2012, overall patient satisfaction increased from 77% to 90%.	<ol style="list-style-type: none"> 1. Improved management of the hospital. 2. Improved alliances with key stakeholder. 3. Improved supportive environments. 4. Improved financial system at the QEH. 5. Improved management of information systems. 6. Strengthened engineering and maintenance functions. 7. Strengthened clinical services and management functions. 8. Improved clinical services environment. 9. Improved patient satisfaction. 10. Expanded and strengthened support services. 11. Improved delivery of pre-hospital care.

Appendix II SUMMARY OF OBJECTIVES

Family Health

Overall Goal: Health and quality of life of the population improved.

Priority Areas	Strategic Goals	Key Health Indicators	Expected Results
Reproductive Health	Quality of life for men, women and children improved.	By 2010: <ul style="list-style-type: none"> Reduce infant mortality rate below 10 per 1000 live births; Maintain present 0% maternal mortality rate; 	<ol style="list-style-type: none"> Strengthened ante/intra/post-natal services. Strengthened Neonatal Care services. Strengthened breast-feeding programme Improved family planning clinical services. Improved infant and pre-schooler health programme.
Women's Health	Improved quality of life for women.	<ul style="list-style-type: none"> Decrease incidence of low birth weight babies; Morbidity and Mortality associated with cancers and STIs in men and women reduced by 20%. 	<ol style="list-style-type: none"> Strengthened screening services for cancer; Sexually Transmitted Infections (STIs) and other diseases affecting women's health.
Men's Health	Improved quality of life for men.	Current morbidity and mortality associated with cancers and STIs in men reduced.	<ol style="list-style-type: none"> Improved men's health programme.
Adolescent Health	Improved adolescent well-being.	Between 2003 - 2012, 80% of adolescents participating in community and school health programmes.	<ol style="list-style-type: none"> Improved health education programme in schools. Strengthened health promotion initiatives in primary and secondary schools. Strengthened client-oriented health services for adolescents. Improved infant and pre-schooler health programme.
Oral Health	Oral health of children under 6 years, persons with disabilities and the elderly improved.	Between 2002 - 2012, the Decay, Missing Filled Teeth (DMFT) index in children, persons 65 years and over reduced by 50%.	<ol style="list-style-type: none"> Oral Health policy finalised and implemented. Strengthened National Oral Health Programme. Improved information systems network for the national surveillance of the oral health situation.
Rehabilitation	Comprehensive rehabilitation services established throughout the health care system, with emphasis on equity and access.	By 2012, 80% of persons receiving appropriate rehabilitative care.	<ol style="list-style-type: none"> Strengthened rehabilitation programmes Improved accessibility to rehabilitation services. Improved analysis and utilisation of information within the rehabilitation system.
Health of the Elderly	Quality of life for older persons improved.	Between 2002 - 2012, 80% of older persons having access to appropriate services.	<ol style="list-style-type: none"> Improved equity and access to health services for older persons. Improved quality of care programmes for nursing homes, senior citizens homes, Geriatric and District Hospitals.

Appendix II SUMMARY OF OBJECTIVES

Food, Nutrition and Physical Activity

Overall Goal: Nutritional and Physical Status of the population improved.

Priority Areas	Strategic Goals	Key Health Indicators	Expected Results
Food and Nutrition	Nutritional standards promoted, developed and maintained.	Between 2002 - 2012, reduction of BMI age specific by 5%.	<ol style="list-style-type: none"> 1. Improved nutrition education programmes 2. Enhanced nutrition education programme in relation to the dietary management of Chronic Non-communicable Diseases (CNCDs). 3. Enhanced monitoring of over-nutrition and under nutrition in the age groups 0 - 5. 4. Improved food security measures. 5. Improved monitoring systems for food service departments. 6. Enhanced nutrition promotion programmes.
Physical Activity	Physical fitness standards promoted, developed and maintained.	Increase from 47% to 67% number of persons supplementing daily activities with exercise.	<ol style="list-style-type: none"> 1. Strengthened physical activity programmes.

Chronic Non-communicable Diseases

Overall Goal: Morbidity and Mortality due to Chronic Non-communicable diseases reduced.

Priority Areas	Strategic Goals	Key Health Indicators	Expected Results
	Reduce the incidence and prevalence of the CNCDs.	Between 2002 - 2012, morbidity and mortality in persons forty years and over due to high blood pressure, diabetes, cardiovascular disease reduced by 10%.	<ol style="list-style-type: none"> 1. Reduced incidence of diabetes and occurrence of complications. 2. Improved supportive environments.

HIV/AIDS

Overall Goal: Incidence of transmission of HIV reduced.

Priority Areas	Strategic Goals	Key Health Indicators	Expected Results
	A national multi-sectoral programme that reduces the incidence and impact of HIV/AIDS.	Between 2002 - 2012, 50% reduction in the mortality rate and 50% reduction in the HIV incidence rate.	<ol style="list-style-type: none"> 1. Improved clinical management of HIV/AIDS. 2. Improved care and support for the HIV/AIDS community. 3. Improved Information Systems. 4. Reduction in the incidence of HIV infection and the prevalence of the associated stigma and discrimination.

Appendix II SUMMARY OF OBJECTIVES

Communicable Diseases

Overall Goal: Morbidity and Mortality due to Communicable Diseases reduced.

Priority Areas	Strategic Goals	Key Health Indicators	Expected Results
	Reduce the morbidity and mortality due to existing, new and re-emerging communicable diseases.	Between 2002 - 2012, reduce incidence and prevalence rates for communicable diseases by 30%.	<ol style="list-style-type: none"> 1. Strengthened immunisation control programme and management capacity. 2. Strengthened supportive environments. 3. Strengthened clinical management of vector borne diseases.

Mental Health

Overall Goal: Mental health of the population improved and maintained.

Priority Areas	Strategic Goals	Key Health Indicators	Expected Results
	Mental health program strengthened.	Between 2002 - 2012, establishment of appropriate community-based programmes and services to fulfil the needs of deinstitutionalisation and prevention of mental disorders.	<ol style="list-style-type: none"> 1. Improved management of the Mental Health Services. 2. Strengthened Mental Health promotion strategies. 3. Improved clinical services. 4. Strengthened Mental Health programme capacity for evidence based decision making.
Substance Abuse	The use and abuse of legal and illegal substances among all age groups reduced.	Between 2002 - 2012, prevention, treatment and rehabilitation services developed.	<ol style="list-style-type: none"> 1. Enhanced education programmes about legal and illegal substances. 2. Enhanced treatment and rehabilitation services.

Appendix II SUMMARY OF OBJECTIVES

Health and the Environment

Overall Goal: Environmental health risks reduced.

Priority Areas	Strategic Goals	Key Health Indicators	Expected Results
	Improve and maintain quality of life through an integrated environmental health management system.	Between 2002 - 2012, reduce 80% of environmental health risks.	<ol style="list-style-type: none"> 1. Improved solid waste management system. 2. Improved near-shore water quality. 3. Improved provision of wholesome food to the consumer. 4. Reduced environmental risks within communities. 5. Strengthened Integrated Vector Control Programme. 6. Improved international health surveillance systems. 7. Strengthened environmental health services. 8. Improved monitoring and evaluation mechanisms for air, noise and water pollution.

Human Resource Management

Overall Goal: Appropriate human resources available to support the health system.

Priority Areas	Strategic Goals	Key Health Indicators	Expected Results
	Improve the capacity of the health system to train, manage and measure the competency of health professionals.	Between 2002 - 2012, improved quality health services delivered within the health system.	<ol style="list-style-type: none"> 1. Strengthened capacity of the health system to respond effectively and efficiently to training needs. 2. Improved policies, plans and procedures for the management of human resources. 3. Improved alliances with NGOs, communities and private sector. 4. Improved supportive environment.

List of Abbreviations

ACTI	IBRD
Association of Caribbean Tertiary Institutions	International Bank for Reconstruction and Development
AIDS	IDB
Acquired Immune Deficiency Syndrome	Inter-American Development Bank
AZT	IEC
Zidovudine	Information Education and Communication
BAMP	kcalories
Barbados Association of Medical Practitioners	Kilo Calories
BAPT	MCH
Barbados Association of Physical Therapists	Maternal and Child Health
BARNOD	MESA
Barbados National Organisation of the Disabled	Men's Educational Support Association
BARP	MMR
Barbados Association of Retired Persons	Mumps, Measles, Rubella
BCC	MOH
Barbados Community College	Ministry of Health
BDF	NAB
Barbados Defence Force	National Assistance Board
BFS	NCSA
Barbados Fire Service	National Council on Substance Abuse
BHTA	NGO
Barbados Hotel and Tourism Association	Non-governmental Organisation
BL&P	NOW
Barbados Light and Power Co. Ltd.	National Organisation of Women
BMI	PAHO
Body Mass Index	Pan American Health Organization
BNSI	PAREDOS
Barbados National Standards Institution	Parent Education for Development in Barbados
BWA	PDIU
Barbados Water Authority	Project Design and Implementation Unit
CAREC	Ministry of Health
Caribbean Epidemiology Centre	PLWHA
CNO	People Living With HIV/AIDS
Chief Nursing Officer	QEH
CNCD	Queen Elizabeth Hospital
Chronic Non-Communicable Diseases	RABDAT
CQI	Regional Advisory Body on Drugs and Therapeutics
Continuous Quality Improvement	RAS
DOTS	Rapid Assessment Survey
Directly Observed Treatment Short Course	RBPF
DPT	Royal Barbados Police Force
Diphtheria, Pertussis, Tetanus	SMOH
GAIA	Senior Medical Officer of Health
Grantley Adams International Airport	STIs
GDP	Sexually Transmitted Infections
Gross Domestic Product	UNICEF
HAART	United Nations Children's Fund
Highly Active Anti-retroviral Therapy	UNDP
HACCP	United Nations Development Programme
Hazard Analysis Critical Control Point	UWI
HiB	University of the West Indies
Haemophilus Influenza Bacteria	WHO
HIV	World Health Organization
Human Immuno-Virus	

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