



ANTIGUA AND BARBUDA HEALTH SYSTEMS AND PRIVATE SECTOR ASSESSMENT 2011

May 2012

This publication was produced for review by the United States Agency for International Development. It was prepared by Sara Sulzbach, Slavea Chankova, Lisa Tarantino, Rich Feeley, Kylie Ingerson, Carol Narcisse, and Anneke Wilson for the Strengthening Health Outcomes through the Private Sector and Health Systems 20/20 Projects.









Health Systems 20/20 Mission

The Health Systems 20/20 **cooperative agreement,** funded by the U.S. Agency for International Development (USAID) for the period 2006-2012, helps USAID-supported countries address health system barriers to the use of life-saving priority health services. Health Systems 20/20 works to strengthen health systems through integrated approaches to improving financing, governance, and operations, and building sustainable capacity of local institutions.

SHOPS Mission

The Strengthening Health Outcomes through the Private Sector (SHOPS) Project is a five-year **cooperative agreement** (2009-2014) with a mandate to increase the role of the private sector in the sustainable provision and use of quality family planning, HIV/AIDS, and other health information, products, and services.

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Submitted to: Kendra Phillips

Health Team Leader

USAID/ Barbados and the Eastern Caribbean

Maggie Farrell

Population and Reproductive Health/Service Delivery Improvement

Bureau for Global Health

United States Agency for International Development

Scott Stewart, AOT Health Systems Division

Office of Health, Infectious Disease and Nutrition

Bureau for Global Health

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Abt Associates Inc. | 4550 Montgomery Avenue | Suite 800 North Bethesda, Maryland 20814 | P: 301.347.5000 | F: 301.913.9061 www.healthsystems2020.org | www.abtassociates.com

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DISCLAIMER

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ACRONYMS

ADR Adverse Drug Reactions

AHMC American Hospital Management Company

ANC Antenatal Care

ART Antiretroviral Therapy

ARV Antiretrovirals

BCC Behavior Change Communication

CARICOM Caribbean Community

CBH Central Board of Health

CBMP Caribbean Broadcast Media Partnership

CHAA Caribbean HIV/AIDS Alliance

CMO Chief Medical Officer

CMS Central Medical Stores

CNCDs Chronic Non-Communicable Diseases

CRDTL Caribbean Regional Drug Testing Lab

CSO Civil Society Organization

CSR Corporate Social Responsibility

DPS Director of Pharmaceutical Services

EC\$ Eastern Caribbean Dollar

EPHF Essential Public Health Functions

GDP Gross Domestic Product

Global Fund Global Fund to Fight AIDS, Tuberculosis and Malaria

HID Health Information DivisionHIS Health Information System

HR Human Resources

HRH Human Resources for HealthHSA Health Systems Assessment

I-TECH International Training and Education Center for Health

JCI Joint Commission International

Latin America & Caribbean

M&E Monitoring and Evaluation

MBS Medical Benefits Scheme

MOH Ministry of Health

MSJMC Mount St. John's Medical Centre

NAP National AIDS Program

NCDs Non-Communicable Diseases
NGO Nongovernmental Organization

NHA National Health Accounts

OECS Organization of Eastern Caribbean States

OECS/PPS Organization of Eastern Caribbean States Pharmaceutical Procurement Service

PAHO Pan American Health Organization

PANCAP Pan Caribbean Partnership Against HIV/AIDS

PEPFAR U.S. President's Emergency Plan for AIDS Relief

PHC Primary Health Care

PLHIV People Living With HIV/AIDS

PMTCT Prevention of Mother-to-Child Transmission

PS Permanent Secretary

PSA Private Sector Assessment

RHIS Routine Health Information System

SHOPS Strengthening Health Outcomes through the Private Sector

STIs Sexually Transmitted Infections

UNAIDS Joint United Nations Program(me) on HIV/AIDS

UNGASS UN General Assembly Special Session on HIV/AIDS

UNICEF United Nations Children's Fund

USAID/EC United States Agency for International Development/Barbados and the Eastern

Caribbean

USG United States Government
UWI University of the West Indies

VCT Voluntary Counseling and Testing

WHO World Health Organization

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- Government: Ministry of Health, Ministry of Finance
- Mount St. John Medical Centre
- Health center staff
- Trade and labor unions
- The Nurses' Association
- The Medical Association
- Nongovernmental and civil society organizations
- Doctors in private practice
- Private pharmacies
- Private insurance companies
- Private health care businesses
- Medical training institutions

This assessment report was prepared collaboratively by the members of the assessment team. Kylie Ingerson drafted the country overview; Lisa Tarantino drafted the Governance chapter; Rich Feely drafted the Health Financing chapter; Carol Narcisse drafted the Human Resources for Health chapter; Slavea Chankova drafted the Service Delivery and Health Information Systems chapters; Anneke Wilson and Kylie Ingerson drafted the Pharmaceutical Management chapter; and Sara Sulzbach drafted the Private Sector chapter.

FOREWORD

In 2009, the United States Government (USG) supported a process to develop the United States-Caribbean Regional HIV and AIDS Partnership Framework 2010–2014 (Partnership Framework) together with 12 Caribbean countries: Antigua and Barbuda, the Bahamas, Barbados, Belize, Dominica, Grenada, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago. Development of the framework involved participation from ministries of health, national AIDS programs, regional organizations such as the Pan Caribbean Partnership Against HIV and AIDS (PANCAP) and the Organization of Eastern Caribbean States (OECS), and nongovernmental and private sector stakeholders. The Partnership Framework is aligned with national strategic plans and the PANCAP Caribbean Strategic Framework.

A major goal of the Partnership Framework is to move the region toward greater sustainability of HIV/AIDS programs. Obtaining results in this area will be challenging, given that most country governments currently provide limited national budget resources to their own HIV/AIDS programs, relying to a large degree on external aid. Although there are six USG agencies supporting implementation of the Partnership Framework, United States Agency for International Development/Barbados and the Eastern Caribbean (USAID/EC) provides support for health systems strengthening, with particular emphasis on health financing and private sector engagement. Both these efforts are closely linked to sustaining the HIV response in the region.

As a part of the Partnership Framework, USAID/EC asked the Health Systems 20/20 and the Strengthening Health Outcomes through the Private Sector (SHOPS) projects to conduct integrated health system and private sector assessments in Antigua and Barbuda, Dominica, Grenada, St. Kitts and Nevis, St. Lucia and St. Vincent and the Grenadines. The aim of the assessments is to document existing strengths and weaknesses affecting health systems performance and to identify opportunities for technical assistance to address these gaps. Improving country capacity to effectively lead, finance, manage, and sustain the delivery of quality health services, including HIV prevention, care, and treatment, underpins the efforts of USAID/EC and its implementing partners.

As the USAID global flagship project on engaging the private sector, SHOPS has a mandate to identify opportunities to strengthen private sector contributions to health and to facilitate private sector involvement based on individual country assessment findings. As USAID's global flagship health systems strengthening project, Health Systems 20/20 identifies opportunities for improving health financing systems, ensuring the sustainability of funding for the HIV/AIDS response, and strengthening financial tracking and management procedures in the region. The integrated health system and private sector assessment approach employed by Health Systems 20/20 and SHOPS seeks to pinpoint areas where the private sector can be leveraged to strengthen health systems, sustain national HIV responses, and contribute to improved health outcomes. The two projects collaborated closely to implement the assessments.

The assessment methodology is a rapid, integrated approach, covering six health systems building blocks: governance, health financing, service delivery, human resources for health, management of pharmaceuticals and medical supplies, and health information systems. Special emphasis is placed on the current and potential role of the private sector within each building block. An extensive literature review is conducted for each country; in-country interviews with key stakeholders are used to validate

and augment data found in secondary sources. The assessments are guided by an intensive stakeholder engagement process. Following the preparation of a draft assessment report, preliminary findings and recommendations are validated and prioritized at in-country stakeholder workshops. Stakeholders interviewed and engaged throughout the assessment process include government representatives, development partners, nongovernmental organizations, professional associations, health workers in the public and private sector, civil society organizations, and private businesses including private insurance companies.

The assessments have been conducted in cooperation with the Pan American Health Organization, the USG Health Resources and Services Administration, the International Training and Education Center for Health, and the Caribbean HIV/AIDS Regional Training Network. Representatives of these organizations joined assessment teams, contributed to the assessment reports, and have assisted with identifying opportunities for technical assistance. Health Systems 20/20 and SHOPS wish to express gratitude to these organizations, to ministries of health in participating countries, and to all in-country stakeholders for their intensive engagement and contributions to the assessments.

EXECUTIVE SUMMARY

PURPOSE OF THE ASSESSMENT

Antigua and Barbuda is one of 12 Caribbean countries joining efforts with the United States Government to sustain its HIV response, as exemplified by the United States-Caribbean Regional HIV and AIDS Partnership Framework 2010–2014 (Partnership Framework). To support the Partnership Framework, the United States Agency for International Development/Barbados and the Eastern Caribbean (USAID/EC) asked the Health Systems 20/20 and Strengthening Health Outcomes through the Private Sector (SHOPS) projects to conduct an integrated health systems and private sector assessment to identify priorities for technical assistance. Additional partners in this effort include the Pan American Health Organization (PAHO), the International Training and Education Center for Health (I-TECH), and the Caribbean HIV/AIDS Regional Training Network. The assessment seeks to improve the capacity of Antigua and Barbuda to effectively lead, finance, manage, and sustain the delivery of quality health services, including HIV prevention, care, and treatment. Inherent in the country's capacity to fulfill these roles is better understanding and catalyzing private sector contributions to health. Although the functioning of the broader health system was the focus of the assessment, particular attention was paid to sustaining the country's HIV response.

COUNTRY OVERVIEW

Considered an upper middle-income country by the World Bank, Antigua and Barbuda has the second lowest poverty level among English-speaking Caribbean nations. Even so, nearly 15 percent of the population is considered poor, living on less than EC\$19 (US\$7) per day. As a nation known as the "Land of Sea and Sun," whose economy is heavily reliant upon tourism, the fact that the sector is in steep decline due to the global financial crisis is a major concern. Tourism accounts for nearly 60 percent of gross domestic product (GDP) and 40 percent of investment in the country. With agricultural production focused on domestic markets and a limited manufacturing sector, economic growth in the medium term will remain dependent on tourism. As a result, the country's real GDP growth was estimated at -4.1 percent in 2010, with national debt increasing from 90 percent to 115 percent of GDP between 2008 and 2010 (Central Intelligence Agency 2011).

With the exception of HIV/AIDS, Antigua and Barbuda's health system is not dependent on external aid. The country has a well-functioning primary health care (PHC) system and the population enjoys relatively good access to health care services. However, with the increased capacity to provide secondary and tertiary care via the new public hospital – Mount St. John's Medical Centre (MSJMC) – and the increased demand for such care due to the rise in chronic non-communicable diseases (CNCDs), the health system is becoming overburdened. These developments, coupled with the fact that the country is fast becoming ineligible for donor funding due to its upper middle-income status, reinforce the need to comprehensively assess health system performance – including both public and private aspects – to identify challenges and offer suggestions for promoting greater efficiencies and strengthening the system.

METHODOLOGY

Health systems and private sector experts from SHOPS and Heath Systems 20/20, as well as I-TECH and PAHO, conducted an integrated rapid assessment of Antigua and Barbuda's health system according to the building blocks of the World Health Organization (WHO) health systems strengthening framework: governance, health financing, service delivery, human resources for health, management of

pharmaceuticals and medical supplies, and health information systems. Examination of the current and potential role of the private sector in the health system was incorporated into this approach. In an effort to promote efficiency, an extensive review of the literature pertaining to the health system, and HIV/AIDS services in particular, was conducted prior to the team's arrival in Antigua and Barbuda. Existing information was then validated and expanded upon through facility site visits and interviews with a wide spectrum of key stakeholders representing the public, nonprofit, and for-profit sectors, and spanning the health system areas.

KEY FINDINGS AND RECOMMENDATIONS

Selected findings and recommendations for strengthening the health system for each of the WHO health systems areas are presented below. Full findings and recommendations (presented as short term and long term) are presented in separate chapters for each health system area, as well as in summary chapters on private sector contributions to health and cross-cutting recommendations.

Governance

Effective governance of a health system ensures that rules for policy development, programs, and practices for the provision of care are implemented to achieve health sector objectives. The governance chapter of this assessment looked at state actors, health service providers, beneficiaries of services, and regional entities to understand the way that they interact to guide health service delivery. In the case of Antigua, the Ministry of Health (MOH) is currently responsible for the financing, regulation, management, and delivery of all public health care services on-island; the Barbuda Council manages its respective health services. Notable gaps exist in the legislation and policy that govern the health sector, particularly in the regulation of medical practices and pharmaceuticals. A developed system of enforcing regulation and ensuring quality in the health sector is also lacking, especially for the private sector. The relationship and lines of authority between the MOH and the MSJMC, as well as between the MOH and the Central Board of Health, require clarification and consensus among key parties.

Key findings and recommendations in the area of health governance are as follows:

Findings

- The public health system functions and operates according to government health priorities.
- There is insufficient development and implementation of strategic health plans.
- Significant gaps exist in legislation and regulation of the health sector.
- Informal cooperation between the public and private health sectors exists but could be strengthened.

- Secure technical assistance to address bottlenecks in creating, updating, and/or finalizing legislation and regulations, prioritizing the Public Health Act, the Pharmacy Act, and the Medical Practitioners Act.
- Normalize relations between the public and private health sectors. Develop and implement a public-private partnership strategy for the health sector.
- Develop a regular process of strategic planning, and create a health sector strategy, incorporating the HIV/AIDS service delivery plan.
- Establish a policy and planning unit within the Ministry of Health.

Health Financing

Financing of the health system – specifically mobilization, pooling, and allocation of funds to cover the health needs of the population – is a critical element to ensuring access to quality health care. In terms of resource mobilization, Antiguan law provides for a Medical Benefits Scheme (MBS) – funded by a payroll tax of 7 percent – that provides a substantial and dedicated revenue source targeted at secondary care and non-communicable diseases. However, the assessment team found gaps in government financing of MBS. Limited external (donor) funding for health is available and is primarily directed toward HIV/AIDS services. Understanding costs associated with delivering health services is crucial to planning, and this was noted as an area of weakness for Antigua and Barbuda. Given the lack of National Health Accounts, expenditure data were also limited. Approximately 15,000 residents have private health insurance, largely provided through employers. The government has expressed interest in adopting a national health insurance system. Although this currently seems ambitious given the pressing financing challenges that emerged through this assessment, preliminary steps can be taken to lay the ground work for such a scheme.

Key findings and recommendations in the area of health financing are as follows:

Findings

- Historically adequate funding and services in the PHC system are threatened by high demand for PHC services at MSIMC.
- MSJMC is underfunded.
- MBS lays a foundation for a social health insurance system but more data and funding are needed to implement a comprehensive system.
- There is high-level interest in the establishment of a national health insurance scheme to promote higher quality and greater costeffectiveness of health services, initially at the secondary level.

- Conduct a National Health Accounts estimation, including a household survey, to better understand health expenditures, including the proportion financed privately.
- Determine the actual costs of MSJMC to deliver all the services it is required to offer.
- Reevaluate user fees and consider economic incentives to improve service delivery efficiencies.
- Consider costing the defined basic package of services.
- Develop a feasibility study for a national health insurance scheme, including a timeline of necessary steps.

Service Delivery

Service delivery systems should aim to ensure access, quality, safety, and continuity of care. Antigua and Barbuda has a sufficient number of health facilities, both public and private, distributed evenly across the country. There is adequate availability and access to PHC, and most types of specialized health services are available in-country at MSJMC and at a number of modern private clinics. Immunization and antenatal care coverage are universal and 99 percent of deliveries occur in hospitals. The key gaps in the service delivery system are in the areas of quality assurance and efficiency of service provision.

Key findings and recommendations in the area of service delivery are as follows:

Findings

- Antigua and Barbuda enjoys a well-functioning PHC system.
- The number and distribution of facilities is adequate.
- Gaps in the patient referral process are evident, as indicated by informal referrals and limited follow-up between levels of care within the public sector and uneven referral practices between MSJMC and the private sector.
- Quality assurance of health services is uneven.
- Efficiency of service delivery is not optimal, as exemplified by an over-reliance on MSJMS for minor health issues and centralized HIV/AIDS treatment.

- Establish and enforce a referral system between levels of care in the public health sector – this may require expanding access (e.g., hours of operation) at PHC clinics.
- Enforce a referral process between the public and private sectors.
- Strengthen quality assurance practices by developing and implementing national treatment guidelines.
- MOH should implement and enforce quality oversight function over MSJMC through amending the management contract.
- Address the provision of primary health services at MSJMC to ensure that expansion of secondary health care does not interfere with availability of essential PHC delivery.
- Pursue the integration of ambulatory HIV/AIDS care into PHC system.

Human Resources for Health

Human resources for health (HRH) impacts the availability, costs, and quality of health service delivery. Although evidence collected through the assessment suggests a sufficient number of clinical care providers, significant personnel gaps and challenges exist. This is especially true in the complement of physician specialists, nurses with public health training, and family nurse practitioners. The legislative framework for registration and regulation of the health workforce is antiquated and a comprehensive HRH plan is not in place. The government of Antigua and Barbuda should consider development of such a plan to ensure that an evidence-based approach is taken to achieve optimal results in health service delivery.

Key findings and recommendations in the area of human resources for health are as follows:

Findings

- Supply and deployment of health care workers is uneven, with the greatest deficit in specialists.
- The MOH engages in only limited HRH planning, and management and processes to utilize data for decision-making are largely lacking. This is because the Establishment Department manages public workers.
- Only a few practitioners provide HIV/AIDS treatment on the island, posing a risk to sustainable service delivery.

- Build HRH planning capacity at MOH by developing a Human Resources Unit and maintaining a Human Resources Information System
- Address policy issues related to Establishment Department authority over health workers
- Implement a comprehensive HRH plan and strategy.
- Develop and implement partnership strategies (regionally and between the public and private sectors) to meet the need for specialists (e.g., pharmacists).
- Operationalize plans to train additional health workers about HIV prevention, testing, and treatment.

Management of Pharmaceuticals and Medical Supplies

Consistent access to essential, high-quality medical products and technologies is a critical component of a well-functioning health system. To adequately address public health needs, pharmaceuticals must be available and affordable. Effective pharmaceutical management is also important to containing costs associated with procurement and distribution. Antigua and Barbuda participates in the Organization of Eastern Caribbean States Pharmaceutical Procurement Service (OECS/PPS) to ensure access to and reduce the cost of medicines and to provide for some regulation and oversight of procurement. Although the use of OECS/PPS is a clear strength of the procurement and distribution system, the country faces many challenges to effective and efficient management of pharmaceuticals and other medical products. Chief among these challenges are the weak enforcement of the Pharmacy Act, minimal regulation of the private sector, cash flow constraints, limited management capacity, and the lack of standardized procurement systems to improve efficiencies.

Key findings and recommendations in the area of pharmaceutical and medical supplies management are as follows:

Findings

- Consumer access to essential pharmaceuticals on the island is adequate.
- Enforcement of the Pharmacy Act is impeded by a lack of regulations.
- Public sector procurement is done via three agencies, with limited/ineffective coordination and resulting inefficiencies.
- Monitoring and regulation of drugs is inadequate, especially in the private sector.
- Forecasting is hindered by poor information management systems and a lack of data for decision-making.
- Rational drug use and pharmacovigilence practices are limited and not prioritized.

- Prioritize the establishment of regulations for the Pharmacy Act.
- Consider options for streamlining public sector procurement of medicines and supplies (e.g., through a single entity).
- Build pharmaceutical management capacity, especially in the area of forecasting.
- Revise the Pharmaceutical Act and develop a National Medicines Policy to strengthen quality control of drugs.
- Implement strategies that promote rational drug use.
- Reinforce the existing pharmacovigilence system and encourage/incentivize active participation of the private sector.

Health Information Systems

A health information system (HIS) is essential for generating information to improve health care management decisions at all levels of the health system. HIS strengthening was identified as a priority area by key stakeholders as well as in the National Business Plan for Health 2008–2010. Despite this prioritization, little progress has been made in recent years (e.g., no strategy, action plan, or policies have been developed).

Key findings and recommendations in the area of health information systems are as follows:

Findings

- An adequate routine data collection and reporting process exists in the public PHC system.
- The public sector surveillance system functions well.
- Important gaps exist in central-level data collection, including routine data from MSJMC not being collected; private facilities not being part of the data system; and the existence of separate data collection and processing systems for different types of HIV/AIDS data.
- Physical resources for HIS are relatively adequate, although some computers and software systems are lacking. Capacity building of personnel is needed to improve the functioning of this system.

- MOH should develop a national strategy for health information systems, including strengthening statistical capacity in health.
- Identify MOH training needs on health systems data analysis, quality, and usage and prepare a follow-through plan.
- Prepare and publish an annual report on health outcomes and service utilization to inform dialogue on implementation moving forward.
- Establish routine reporting of utilization data from MSJMC to the Health Information Division.
- Streamline data collection on HIV/AIDS, and ideally integrate this into an overall HIS.
- Explore strategies to incentivize private sector reporting, especially for communicable diseases such as HIV/AIDS.

Private Sector Contributions to Health

Despite its potential to contribute to public health goals, the private health sector tends to be overlooked. Similar to other countries in the region, Antigua and Barbuda is simultaneously facing domestic budgetary constraints, growth in CNCDs, and declining donor support for HIV/AIDS. Given these trends, the government of Antigua and Barbuda may wish to consider more actively engaging the private sector to help address the country's health needs. Viewing the health system holistically — including both public and private sector elements — can help to identify ways in which the sectors might complement each other to improve overall health impact. The assessment attempted to document the current size, scope, and role of the private sector, with a view toward identifying strategies to maximize collaboration between the sectors to address identified health systems gaps.

The private health sector in Antigua and Barbuda appears to be growing, based on the recent increase in private medical/surgical practices on the island. Antigua and Barbuda has a sizable private health sector, including numerous private physician offices, labs, and pharmacies. The recent development of the private sector belies the fact that it is largely unregulated, a point of concern for both public and private sector stakeholders. The lack of government oversight of the private sector in the areas of service delivery, continuing medical education, and pharmaceuticals has largely resulted in a parallel system, as opposed to the private sector delivery of health services being integrated into the overall health system.

Despite the apparent separation of the sectors, some informal cooperation exists, and private practitioners interviewed for this assessment signaled a willingness to improve communication and collaboration with public sector counterparts in the interest of improved patient care. However, true partnership can only be achieved if the public sector shares this intent to improve relations and better engage the private health sector.

Key findings and recommendations to promote private sector engagement are as follows:

Findings

- There has been steady growth in the private health sector in Antigua and Barbuda.
- Dual practice in both the public and private health sectors appears to be common, but guidance on such practice does not exist.
- Formal interaction between the public and private health sectors appears limited and less than optimal.
- There is little regulation or oversight of the private health sector by the MOH.
- The private health sector has expertise and resources that the public sector could utilize to improve service delivery.

- Conduct a rapid survey of private sector providers and facilities to inform a central registry of resources.
- Improve coordination between the public and private sectors – use professional associations and councils as a starting place, and focus on specific areas of mutual interest (such as dual practice). Eventually establish a formal forum supporting communication and cooperation.
- Clarify and enforce guidelines on dual practice between sectors.
- Formalize and enforce the referral process and communication between private providers and MSIMC.
- Foster public-private collaboration on identifying key health indicators to report.
- Conduct a rapid household survey (as part of a National Health Accounts) to quantify private health expenditures.

CROSS-CUTTING RECOMMENDATIONS

Although recommendations specific to each component of the health system were developed in response to noted gaps and challenges, a specific objective of this assessment was to synthesize information from each building block to inform cross-cutting recommendations to address the most pressing health systems needs in Antigua and Barbuda. The team proposes the following set of recommendations, clustered around four central themes, as a first step toward strengthening the health system and sustaining the HIV response. The key themes are the following:

- Invest in financial analysis (costing) to inform strategic planning
- Prioritize updates and passage of key legislation and gazette (officially document) regulations to enforce enacted laws
- Improve access, efficiency, and quality at all levels of care
- Pursue opportunities to engage the private sector as a partner.

TABLE 0.1: CROSS-CUTTING FINDINGS AND RECOMMENDATIONS

	Findings	Recommendations
I.	Invest in financial analysis (costing) to	inform strategic planning
•	The MOH is in urgent need of detailed health services cost data to make informed funding decisions in the short term as well as to develop a long-term plan for funding MSJMC while preserving primary health services. Without such planning, there is a risk that MSJMC may go bankrupt, or the management contractor may exit. Primary care may suffer because of the pressing demands of secondary and tertiary care	 Determine the estimated costs of operating MSJMC, with specific costing of certain high-tech services such as MRIs. Develop a financial and service plan that balances reasonably expected health care resources and commitments. Consider expected high-tech medical expenses within the context of this plan and protect primary care services and purchases of essential drugs. Develop a regular process of strategic planning, and create a health sector strategy. Integrate the
	patients, as is already happening with HIV and cholesterol tests. I	HIV/AIDS strategy into the broader health sector plan. Cost the basic package of services.
		, G
2.	Prioritize updates and passage of enacted laws	f key legislation and gazette regulations to enforce
•	A scarcity of financial and human resources at the MOH, and the need to rely on the legal department of the Ministry of Justice to assist with the legislative process, have resulted in lack of movement on critical legislation and	 Secure technical assistance to address bottlenecks in finalizing legislation and gazetting regulations. Priorities include passage of the Pharmacy Amendment Act, revising the Public Health Act, and developing regulations for the Medical Practitioners Act.
	regulations.	 Review and develop legislation and policies to lay

the ground work for a national health insurance scheme. (This is a long-term recommendation.)

¹ These tests were unavailable due to a lack of reagents at the time of the assessment.

3. Improve access, efficiency, and quality of care at all levels of care

- There is overreliance on MSJMC's Emergency Department for minor health issues.
- There is no systematic quality improvement process at the PHC level.
- MSJMC tracks some performance indicators, but there is currently no oversight by MOH.
- There is limited follow-up of referrals between levels of care in the public sector and strained relations and communication between private and public sector providers.
- Establish and enforce a referral system from community clinics to MSJMC, which could reduce reliance on MSJMC for primary care.
- Consider extending clinic hours at selected public health facilities.
- Implement an enforceable referral policy to ensure that patients use the appropriate primary care facilities. Combine this and the above two steps with public education on health services access and quality at the PHC level.
- Explore the feasibility of adjusting fees for nonreferred ambulatory patients at MSJMC.
- Pursue integration of ambulatory HIV/AIDS care into the primary health care system. Decentralization would require an initial investment in staff training (medical officers and pharmacists) but would be cost-efficient in the long term. This should be guided by a cost analysis as well as by input from HIVpositive clients. Efforts should be made to address stigma and discrimination concerns.

4. Pursue opportunities to engage the private sector as a partner

- The private sector is growing in Antigua and Barbuda.
- The private sector is an untapped resource that could help address identified gaps in the health system.
- Private sector specialists could be contracted out to help fill human resources gaps and provide specialty care to patients at MSIMC.
- The Medical Council and the Medical Association could serve as an entry for greater engagement and collaboration between private and public sectors.

- Normalize coordination between public and private sectors.
- Document and acknowledge private sector contribution in the health sector.
- Involve the private sector in MOH operations.
 Convene heads of associations, boards, and councils, which could provide a good foundation for engaging private stakeholders.
- The MOH could formalize an arrangement with the private sector (e.g., contracting, leasing) to make use of medical equipment, which could defray its future recurring costs of depreciation and maintenance of hospital equipment.
- Engage private providers to provide input and help guide long overdue legislation and regulations pertaining to the private health sector. Priorities include gazetting regulations for the Pharmacy Act and developing regulations for the Medical Practitioners Act.
- Formalize the referral process between private providers and MSJMC. Ensure continuity (and quality) of individual patient care, as well as optimal use of specialized health resources available incountry.

RECOMMENDATIONS SPECIFIC TO MOUNT ST. JOHN'S MEDICAL CENTRE

The commissioning of MSJMC was a significant achievement for Antigua and Barbuda. However, considerable challenges related to financing and effectively managing and ensuring the quality of services at MSJMC, some of which are highlighted above, remain. The assessment team recommends the following revisions to the current MSJMC statute, operating procedures, and management contract with American Hospital Management Company. Please see Chapter 10: Discussions and Cross-cutting Recommendations for more details.

Although ultimately the MSJMC Act should be amended, given the length of time this might require, the assessment team recommends amending the management contract in the near term, while pursuing permanent changes to the legislation over the long term. Critical modifications include the following:

- The government should require annual public financial reporting by the hospital, with audited
 accounts to be published within six months of the end of the hospital's fiscal year. MOH should
 also require reporting of key hospital performance indicators to MOH on a periodic basis,
 relating to volume and types of services provided.
- MOH should enter into a direct contract with MSJMC for any services performed by MSJMC on behalf of the primary care system.
- Any new investments by MSJMC (such as the proposed radiation therapy unit) should be subjected to a Certificate of Need review and licensing by the MOH, to prevent MSJMC from increasing secondary/tertiary care obligations without conforming such investments to Antigua's health care strategy and ability to pay for such services.

CONCLUSION

The findings and recommendations presented in this report are intended to serve as a basis for dialogue among key stakeholders – representing both the public and private sectors – on the way forward toward strengthening the Antiguan and Barbudan health system. As reflected by the Partnership Framework, USAID recognizes that country-led efforts to strengthen national health systems and HIV responses are most likely to be sustained over the long term. To this end, the SHOPS and Health Systems 20/20 projects, subsequent to the drafting of this report, convened a wide spectrum of stakeholders in February 2012 to validate the results and findings of this assessment. During the workshop, participants developed a plan of action to begin to address critical health systems gaps and sustain the HIV response in Antigua and Barbuda. The assessment team will use the results of the prioritization to identify areas of technical assistance for USAID.

I. ASSESSMENT METHODOLOGY

1.1 FRAMEWORK FOR THE HEALTH SYSTEMS AND PRIVATE SECTOR ASSESSMENT APPROACH

Health Systems 20/20 and Strengthening Health Outcomes through the Private Sector (SHOPS), in collaboration with the Ministry of Health (MOH), used a combination of the Health Systems Assessment (HSA) and Private Sector Assessment (PSA) approaches to undertake a rapid assessment of the Antigua and Barbuda health system. The HSA approach was adapted from USAID's Health Systems Assessment Approach: A How-To Manual (Islam 2007), which has been used in 23 countries. The HSA approach is based on the World Health Organization's (WHO) health systems framework of six building blocks (WHO 2007). The standard PSA approach has been used in 20 countries and SHOPS is currently developing a how-to guide for future assessments.

The integrated approach used in Antigua and Barbuda covered the six health systems building blocks: governance, health financing, service delivery, human resources for health, management of pharmaceuticals and medical supplies, and health information systems. Special emphasis was placed on the current and potential role of the private sector within and across each health system building block. In addition, the ability of the health system to support the HIV response was examined throughout each dimension.

The objectives of the assessment were the following:

- Understand key constraints in the health systems and prioritize areas needing attention
- Identify opportunities for technical assistance to strengthen the health system and private sector engagement to sustain the HIV response
- Promote collaboration across public and private sectors
- Provide a road map for local, regional, and international partners to coordinate technical assistance.

1.2 HEALTH SYSTEM AND PRIVATE SECTOR ASSESSMENT (HS/PSA) PROCESS

1.2.1 PHASE I: PREPARE FOR THE ASSESSMENT

During the preparation phase, the assessment team worked with the MOH and the National AIDS Program (NAP) to build consensus on the scope, methodological approach, data requirements, expected results, and timing of the assessment. Recognizing the importance of building strong partnerships among the government, donors, private sector, and nongovernmental and community organizations, team members held a pre-assessment workshop in conjunction with the MOH to meet with stakeholders. The objectives of the workshop were to (1) explain the methodology to be used, (2) identify key issues for further investigation during data collection, and (3) clarify expectations for the assessment.

A team of technical specialists in each of the six building blocks as well as private sector engagement was assembled. Emphasis was placed upon priority areas that were identified in the stakeholder meetings. In Antigua and Barbuda, these priority areas included health financing, governance, human resources for health, health information systems, and private sector engagement. The team of seven consisted of representatives from Health Systems 20/20, SHOPS, the International Training and Education Center for Health (I-TECH), and the Pan American Health Organization (PAHO).

1.2.2 PHASE 2: CONDUCT THE ASSESSMENT

Much of the health systems and private sector data were collected through a review of published and unpublished materials made available to the team by the MOH and development partners and obtained online. Team members produced a literature review for each of the health systems building blocks to develop an initial understanding of the system and identify information gaps. Semi-structured interview guides were developed for each building block based on the noted information gaps, standard PSA interview guides, and the indicators outlined in the HSA approach. A local logistics coordinator was employed to assist in identifying informants and arranging interviews.

Key stakeholders in both the public and private sector were engaged to provide input and validate preliminary findings gathered from secondary sources. Informants also provided additional key documents and referred the team to other important stakeholders. During the one-week data collection period, the in-country assessment team interviewed more than 50 stakeholders. Interviewees included representatives of government, professional associations, health training institutions, nongovernmental organizations (NGOs), private businesses, health providers, pharmacists, and many professionals from the MOH. Site visits included public hospitals and health centers, private providers' offices, private labs, and private pharmacies. Responses were recorded by the interviewers and examined for identification of common themes across stakeholders while in-country. The team presented a preliminary overview of the emerging findings and recommendations to the MOH prior to the team's departure.

1.2.3 PHASE 3: ANALYZE DATA AND PREPARE THE DRAFT REPORT

Following in-country data collection, the assessment team transcribed the responses of the stakeholders and reviewed the additional documents collected. The lead for each building block and the private sector lead drafted a summary of the findings and recommendations for their respective areas. The team lead, together with input from the rest of the team, identified key findings and cross-cutting issues and further developed recommendations. A final draft was submitted to the MOH for review and approval.

1.2.4 PHASE 4: DISCUSS FINDINGS WITH LOCAL STAKEHOLDERS

The assessment team used the findings in this draft report to conduct a workshop at which the MOH and key local stakeholders discussed and validated assessment findings and prioritized the recommendations. Special emphasis was placed on recommendations for overall health systems strengthening and engaging the private sector. The assessment team will use the results of the prioritization to identify areas of technical assistance for USAID.

2. COUNTRY BACKGROUND AND HEALTH SYSTEM PROFILE

This chapter provides an introduction to Antigua and Barbuda, presenting information that will help readers understand the context in which the health system operates. Topics covered in this chapter include political organization of the country, political and economic environment, demographic and health overview, and a snapshot of the key stakeholders in Antigua and Barbuda's health system.

2.1 OVERVIEW

The Caribbean nation of Antigua and Barbuda consists of three islands, Antigua, Barbuda, and the uninhabited island of Redonda, located in the eastern arc of the Leeward Islands of the Lesser Antilles. The 280 square km island of Antigua and 161 square km island of Barbuda are known for their natural harbors and beaches. Antigua is divided into six administrative regions called parishes. Barbuda and Redonda are dependencies, the former having its own administrative division. Figure 2.1 indicates that neighboring islands include St. Kitts and Nevis to the west, Guadeloupe to the south, and St. Martin to the northwest.

FIGURE 2.1: ANTIGUA AND BARBUDA IN RELATION TO OTHER CARIBBEAN ISLANDS



With an estimated gross domestic product (GDP) per capita of EC\$44,500 (US\$16,500), Antigua and Barbuda is considered an upper middle-income country. However, given the recent global economic downturn and the fact that the nation relies on tourism for nearly 60 percent of its GDP, real growth has declined by an average of 6.5 percent in the last two years and national debt has increased significantly (Central Intelligence Agency 2011).

2.2 **DEMOGRAPHIC TRENDS**

Census data from 2011 suggest that the resident population of Antigua and Barbuda was roughly 86,295, which suggest a 15-percent increase over 2001 (Government of Antigua and Barbuda 2012). Nearly 98 percent of the population currently inhabits the island of Antigua (Central Intelligence Agency 2011). Estimates from 2011 suggest that the proportion of the population between 0 and 14 years of age is 25.8 percent, with approximately 6.8 percent over age 65. Roughly 30 percent of the population lives in the capital city of St. John, with an estimated annual urbanization rate of 1.4 percent (Central Intelligence Agency 2011). See details of the Antigua and Barbuda demographic trends compared with regional averages in Table 2.1 below.

TABLE 2.1: DEMOGRAPHIC INDICATORS IN ANTIGUA AND BARBUDA COMPARED WITH LATIN AMERICA & CARIBBEAN REGIONAL AVERAGE

Indicator	Antigua and Barbuda	Year of Data	LAC Average	Year of Data
Population, total	86,295	2011	19,520,385	2009
Rural population (% of total)	70.0	2009	36.95	2008
Urban population (% of total)	30.0	2009	63.05	2008
Population ages 0–14 (% of total)	25.8	2011	28.09	2009
Population ages 65 and above (% of total)	6.8	2011	6.77	2009

Source: Government of Antigua and Barbuda (2012), World Bank (2011), Central Intelligence Agency (2011)

2.2.1 CAUSES OF MORBIDITY AND MORTALITY

Morbidity and mortality indicators in Antigua and Barbuda are largely improving. Life expectancy at birth has increased from 71.9 years in 2005 to 72.2 years in 2008. Available data from 1999 show an infant mortality rate of 21.1 per 1000 live births. This rate decreased to 17.6 in 2001 and 10.9 in 2006. A sudden spike in infant mortality rates was seen in 2007 (21.0 per 1000 live births) and little analysis has been done to identify potential causes. According to a recent PAHO assessment, extreme prematurity is the main contributor to infant mortality throughought the country (PAHO 2008). Despite year-to-year fluctuations, under-five mortality has been reduced significantly from 24.1 per 1000 live births in 1999 to 11.7 in 2006. Similar to findings for infant mortality rates, a sudden spike was noted in 2007, with little analysis to ascertain causality.

The PAHO assessment noted above suggests that there have been zero reported cases of maternal deaths since 2004. Data from the Health Information Unit of the MOH suggest that crude birth rates have declined from 17.8 per 1000 population in 2001 to 15.0 in 2007. Total fertility rates have seen a decline from 65.8 per 1000 population to 53.5 over the same timeframe. Crude death rates have remained rather constant, averaging 5.9 per 1000 people (PAHO 2008). (See Table 2.2).

TABLE 2.2: ANTIGUA AND BARBUDA: SELECTED HEALTH INDICATORS, 2001-2007

	2001	2002	2003	2004	2005	2006	2007
Crude birth rate	17.8	15.3	15.6	15.7	14.7	14.2	15.0
Total fertility rate	65.8	56.9	57.9	57.7	54.8	52.9	53.5
Crude death rate	6.0	5.7	5.7	6.4	6.0	5.8	5.9

Source: PAHO (2008)

As indicated by Table 2.3, the current burden of disease in Antigua and Barbuda is dominated by chronic non-communicable diseases (CNCDs).

TABLE 2.3: LEADING CAUSES OF DEATH IN ANTIGUA AND BARBUDA, 2001-2005

Cause of Death	20	01	20	02	20	03	20	2004 200		05
	Rank	#	Rank	#	Rank	#	Rank	#	Rank	#
Heart disease	I	83	2	68	I	106	8	89	I	90
Malignant neoplasm	2	70	I	77	2	73	I	103	2	67
Diabetes mellitus	3	50	3	52	3	62	3	59	3	47
Hypertensive diseases	4	44	4	38	4	35	5	34	4	42
Accidental and intentional injuries	5	38	6	25	7	18	6	30	6	30
Cerebrovascular diseases	6	37	5	37	5	34	4	54	5	4
Diseases of the respiratory systems	7	25	8	22	6	28	9	16	7	28
Ćertain conditions originating in the perinatal period	8	19	9	18	8	12	7	18	N/A	12
Septicemia	9	18	10	9	N/A	8	10	10	П	13
HIV/AIDS	10	14	10	9	N/A	4	N/A	6	8	18
Other diseases of the digestive system	П	13	7	24	8	12	7	18	8	18

Source: PAHO (2008)

2.2.2 MIGRATION

Although the number of immigrants living in Antigua and Barbuda increased from 1990 to 2000 by 25 percent (United Nations 2006), the country struggles to keep an adequate number of health workers. Some of this can be explained by the active recruitment of Caribbean health workers by facilities in the United States and Canada. This outward migration of Antiguans is believed to be one of the largest contributing factors affecting the supply of human resources for health (HRH) in the public sector. Currently, efforts are being made to compensate for these shortages via recruitment of health professional through an inter-Caribbean cooperative initiative, including agreements with the government of Cuba (PAHO 2008). However, shortages of health professionals, especially nurses, persist and allegedly resulted in a perception of substandard and decreased access to care (Kairi Consultants Ltd. 2007).

2.2.3 HIV/AIDS

The Caribbean region has the highest incidence of HIV/AIDS in the Americas and the second highest regional prevalence in the world behind sub-Saharan Africa. Regional prevalence rates range from 0.4 percent in St. Kitts and Nevis to 3.0 percent in the Bahamas. According to NAP, a total of 904 cases of HIV have been reported since 1985. Given widespread stigma and discrimination and the lack of reporting requirements among private sector labs, it can be safely assumed that actual prevalence rates are higher. Per Table 2.4, estimates of overall prevalence have steadily increased over the past six years, from 0.8 percent in 2005 to roughly 1.4 percent in 2011 (National AIDS Program of Antigua and Barbuda 2011). Data suggest that the majority of cases reported to the NAP were among persons

between 15 and 49 years of age; some evidence suggests that youth, men who have sex with men, and female sex workers are most at risk of contracting HIV (UNAIDS 2009).

1.36 1.39 1.5 1.26 1.21 1.06 0.9 0.8 1 Prevalence % 0.5 0 2005 2006 2007 2008 2009 2010 2011

TABLE 2.4: HIV/AIDS PREVALENCE IN ANTIGUA AND BARBUDA, 2005-2011

Source: National AIDS Program of Antigua and Barbuda (2011)

Antenatal care (ANC) clinics routinely screen for HIV and, as such, persons attending these clinics are the only population that is regularly monitored. HIV screening tests revealed a sero-prevalence rate of 0.9 percent among pregnant women in 1998. Data from voluntary counseling and testing (VCT) revealed that prevalence rates in 2007–2009 were 1.6 percent, 0.2 percent, and 0.1 percent, respectively (UNAIDS 2009) (see Table 2.5).

TABLE 2.5: NUMBER OF PREGNANT WOMEN TESTED FOR HIV AT ANC CLINICS

	2007	2008	2009
Number Tested	186	1112	989
Number Positive	3	2	I
Percent Positive	1.60	0.17	0.10

Source: UNAIDS (2009)

In 2010, AIDS was the eighth leading cause of death in Antigua and Barbuda. Since the inception of free antiretroviral therapy (ART) in 2004, the death rate among HIV-positive individuals with access to care and treatment who properly adhere to therapeutic protocols has slowly decreased (UNAIDS 2009). For more detailed information, refer to Annex A: HIV/AIDS in Antigua and Barbuda.

2.3 POLITICAL AND MACROECONOMIC ENVIRONMENT

Antigua and Barbuda is a democratic state with a legislature comprised of a Senate and House of Representatives. The chief of state is Queen Elizabeth II represented by Governor General Dame Louise Lake-Tack (Central Intelligence Agency 2011). The nation is divided into six administrative parishes and 17 electoral constituencies, including one for Barbuda, overseen by a cabinet of 12 ministers. The cabinet is appointed by the governor general on advice from the prime minister who is elected through a process that takes place every five years (PAHO 2001). Since March 2004, Antigua and Barbuda has been led by Prime Minister Winston Baldwin Spencer. Spencer is a member of the United Progressive Party, a coalition of three parties composed of the Antigua Caribbean Liberation Movement, the Progressive Labor Movement, and the United National Democratic Party. Other leading political parties include the Antigua Labor Party and Barbuda People's Movement (Central Intelligence Agency 2011).

The country is a member of two important regional bodies: the Caribbean Community and the Organization of Eastern Caribbean States. These entities play a vital role in developing policy, including health, and are often the recipients of resources and technical assistance on behalf of its member countries in the region.

The economy was severely impacted by the global financial crisis that emerged in 2008. Public debt-to-GDP increased from 90 percent in 2008 to over 115 percent in 2010 (A.M. Best Corporation 2010). According to recent estimates, Antigua and Barbuda experienced a real GDP growth rate of -4.1 percent in 2010 and has an 11-percent unemployment rate (Central Intelligence Agency 2011). Much of the impact is due to the collapse of its largest financial institution and heavy reliance on a tourism sector that is in steep decline. Tourism continues to account for nearly 60 percent of GDP and 40 percent of investment in the country. With agricultural production focused on domestic markets and a limited manufacturing sector, economic growth in the medium term will remain dependent on tourism (Central Intelligence Agency 2011)

2.3.1 INCOME DISTRIBUTION, POVERTY, AND INEQUALITY

Antigua and Barbuda is considered an upper middle-income country by the World Bank and has the second-lowest poverty level among English-speaking Caribbean nations, behind Barbados. A joint Living Conditions and Household Budget Survey (2005–06) combined qualitative and quantitative methodologies to assess the extent and location of poverty in Antigua and Barbuda. The assessment found that approximately 3.7 percent of the population was living below the indigent line of EC\$6.78 per day (US\$2.51). An additional 14.6 percent were classified as poor and living on less than EC\$18.90 per day (US\$7). The country was dropped from the 2010 Human Development Index due to a lack of internationally compiled and verifiable data (United Nations Development Program 2010).

Among the districts, Barbuda has the lowest poverty level at 10.5 percent (2007 estimates). This is thought to be the result of recent economic activity, including government services and increased tourism. Poverty levels in the two districts of St. John's City (22.3 percent) and St. Philip (25.9 percent) exceed the national average (Kairi Consultants Ltd. 2007).

In 2005, the Gini coefficient, which is a measurement of inequality based on a 0–1 scale (with a coefficient closer to 1 reflecting greater inequality), was estimated at 0.50. This is considered relatively high by any standard, is above the regional average of 0.38, and is the third worst behind Haiti and St. Vincent and the Grenadines. Analysis suggests that this is primarily the result of government policies that promote inequitable tax collection combined with expenditure consumption that greatly favors the richest quintile of the population (Kairi Consultants Ltd. 2007). (See Table 2.6).

TABLE 2.6: ECONOMIC INDICATORS IN ANTIGUA AND BARBUDA COMPARED WITH LATIN AMERICA & CARIBBEAN REGIONAL AVERAGE

Health System Indicator	Antigua and Barbuda	Year of Data	LAC Average	Year of Data
GDP per capita (constant 2000 US\$)	12,047	2008	4,823	2009
GDP growth (annual %)	-4.1	2010	-2.0	2009
Per capita total expenditure on health (US\$)	653.00	2008	787.54	2009
Private expenditure on health as % of total expenditure on health	30.90	2008	43.36	2008
Out-of-pocket expenditure as % of private expenditure on health	87.20	2008	68.78	2009
Gini coefficient	0.50	2005/6	0.38	2007

Source: Kairi Consultants Ltd. (2007), World Bank (2011)

2.4 HEALTH SYSTEM OVERVIEW

The health sector in Antigua and Barbuda is characterized by a mix of public and private sector actors, but is dominated by the public sector provision of services. Public health services in Antigua and Barbuda are organized according to the British Westminster model and are spearheaded by a minister and member of the cabinet. The public sector is divided into six geographic medical districts, which are overseen by a government-appointed district medical officer. The MOH is responsible for the financing, regulation, policy, guidance, human resources management, and delivery of all public health care services. The Central Board of Health (CBH) overseas the management of public health issues such as food safety, sanitation, and some public health education campaigns. The Barbuda Council manages health services in Barbuda (Central Intelligence Agency 2011).

Like most countries of the world, the contributions of the private sector are not as well-known as those of the public sector. In 2001, PAHO estimated that the private sector was growing rapidly and consisted of a 21-bed acute care institution, four private laboratories, at least 10 pharmacies, an orthopedic center, two group practices, and 10 physicians in solely private practice. At that time, all private services were centralized in the capital and were viewed as providing "back-up" services to support the public sector in times of need, including drug stock-outs or equipment failure (PAHO 2001). Estimates in 2011 suggest that the private sector includes the aforementioned plus an additional private lab and numerous private practitioners and nursing home facilities.

The government maintains a commitment to providing health care for all citizens, as represented by the implementation of a Medical Benefits Scheme (MBS) that offers financial assistance toward the cost of medical services and pharmaceuticals for those suffering from certain chronic disease. The scheme is funded by a 3.5 percent personal contribution deducted from earnings and a matched donation by employers. However, the country lacks a formal national health sector strategy, and the annual planning process is seemingly based on predetermined budget allocations derived from historical expenditures and current budget coffers. Moreover, the health system is currently challenged with multiple priorities. The recent opening of Mount St. John's Medical Centre (MSJMC) has been viewed as a major

contribution to ensuring quality health care for all citizens. This new facility absorbs a large percentage of the population's health care needs and a large percentage of the very tightly constrained national health care budget. Primary health care is at the foundation of the national health care system, and efforts are currently underway to repair and upgrade five new clinics in 2011 in order to alleviate service delivery constraints at MSJMC (Spencer 2011).

In terms of financing, the MOH, via allocations from the Ministry of Finance, provides the main revenue streams for the operation of public health services. In 2008, government spending made up 69 percent of total health expenditures, while private spending made up 31 percent. External donor funding did not make a significant contribution to funding in 2008. Out-of-pocket expenditures made up 27 percent of total health expenditures and 87 percent of private expenditures. The government spent an estimated EC\$700,000 (US\$259,000) on HIV programming in 2008 (UNAIDS 2009).

2.5 DONOR CONTRIBUTIONS

The health system is only minimally dependent on donor funding, with HIV/AIDS programming receiving the bulk of funds in recent years. Some of the development partners working in Antigua and Barbuda do so through regional mechanisms, such as through the United Nations Development Program based in Barbados. Historically, member states of the European Community active in Antigua and Barbuda include France, the United Kingdom, and Germany. A 2002 publication suggests that the United Kingdom Department for International Development provided Antigua and Barbuda with EC\$5.398 million (US\$2 million) to build four health clinics. German Technical Cooperation (GTZ) provided technical assistance in health-related technical and vocational training. It also provided unspecified technical assistance to the Caribbean Community's (CARICOM's) Caribbean Health Institute (European Community 2002). The government of Japan has provided scholarships to Antiguans to receive training in nursing management (Lovell 2010). PAHO continues to provide technical assistance and financial support to facilitate health systems strengthening efforts.

NAP of Antigua and Barbuda was allocated EC\$703,751(US\$260,649) in 2009 via funding from the government of Antigua and Barbuda and the Organization of Eastern Caribbean States (OECS) Global Fund Project. The international donor contributions for HIV/AIDS programming was EC\$440,318 (US\$163,000). Though actual expenditures are not itemized, this represents approximately 63 percent of all spending on HIV. A Round 3 grant from the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund) provided financial support to roll out education programs and workshops that included a wide cross-section of stakeholders, until funding ended in February 2011. The loss of grant funding has had significant impacts on testing and outreach services. The Round 9 grant to the Pan Caribbean Partnership Against HIV/AIDS (PANCAP) supports first- and second-line antiretrovirals (ARVs) for up to five years with an expectation of increased government contributions. It does not include a budget for prevention activities. Brazil has an agreement with OECS/Pharmaceutical Procurement Service (PPS) to provide free first-line ARVs through 2013 with shipment costs picked up by the United Nations Children's Fund (UNICEF).

Table 2.7 outlines foreign assistance in terms of technical support and monetary contributions to the health sector in recent years.

TABLE 2.7: DONOR CONTRIBUTIONS TO HEALTH SECTOR DEVELOPMENT IN ANTIGUA AND BARBUDA

Donor	Technical Support	Year of Estimate	Monetary Contributions (US\$)
USAID	Investment programs (no direct assistance to health sector)	2008	\$1.6 million
PAHO	Training, research, and equipment	2008	\$41,500
Caribbean Epidemiology Centre	Training and research	2008	NA
Caribbean Research Council	Research	2008	NA
Global Fund	Grant to scale up HIV prevention, care, and treament	2008	\$130,501

Source: PAHO (2008)

3. GOVERNANCE

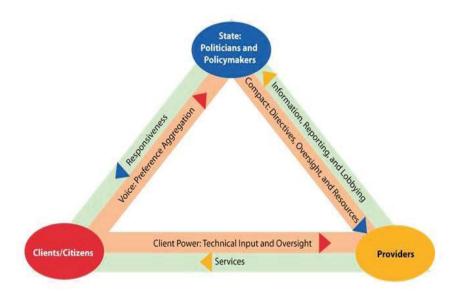
Key Findings

- The public health system seems to function and to operate according to government health priorities (maternal and child health, public health and sanitation, etc.)
- There are serious gaps in planning as evidenced by lack of strategic plan for the health sector and extremely limited human resources for health (HRH) planning. Recent health plans, such as the business plan, were not implemented, so follow-through is also an issue.
- There are significant gaps in legislation and regulation of the health sector. Key legislation is not
 in place or updated to regulate a changing health sector, including pharmaceuticals, public health,
 mental health, dual public and private practice, midwifery, nursing, and continuing education for
 physicians.
- Informal cooperation between the public and private sectors exists, but this relationship could be improved for greater consistency and health impact.

Effective governance of a health system can ensure that rules for policy development, programs, and practices for the provision of care are formulated and implemented to achieve health sector objectives. According to the conceptual framework guiding this assessment (see Figure 3.1), health governance involves three primary sets of actors:

- 1. State Actors: Public sector officials are central to governing the system and include the health ministry, health and social insurance agencies, and public pharmaceutical procurement and distribution entities. Other public sector actors beyond the health sector can play a key role, such as parliamentary health committees, the Ministry of Finance, various oversight and accountability entities, and the judicial system.
- 2. **Health Service Providers**: This group typically consists of a mix of public, private, and voluntary sector providers such as faith-based organizations. The provider category also includes organizations that support service provision: insurance agencies, the pharmaceutical industry, and equipment manufacturers and suppliers. Health service providers are often represented by professional associations.
- 3. **Beneficiaries, Service Users, and the General Public**: This group can be represented informally or formally (e.g., NGOs, patient groups) and be stratified by services and/or type of patient.

FIGURE 3.1: PRIMARY ACTORS IN HEALTH GOVERNANCE



Source: Brinkerhoff (2008)

In the case of Antigua and Barbuda, the actors outlined above are supplemented by regional entities, which provide guidance and support for governance of the health sector. Some donors and international organizations provide policy formulation support and some service delivery support, yet these actors have little influence on the overall performance of the health sector. This is particularly true in the case of HIV/AIDS.

This assessment of governance and leadership speaks to how well these actors are able to carry out the activities that support the other essential components of the health care system. Criteria include Voice and Accountability, Political Stability, Government Effectiveness, Rule of Law, Regulatory Quality, and Control of Corruption.

3.1 OVERVIEW OF GOVERNANCE IN ANTIGUA AND BARBUDA

As a former British colony that became an independent state within the British Commonwealth of Nations in 1981, Antigua and Barbuda is still a relatively young nation. It is politically stable and enjoys cooperative relationships with other countries in the region.

Antigua and Barbuda is part of the Eastern Caribbean Currency Union. The Eastern Caribbean dollar is legal tender and is pegged to the U.S. dollar. Public sector debt is high at approximately 115 percent of GDP and the government has adopted a fiscal austerity plan in 2010 and 2011 to combat its growth.

A review of World Bank governance indicators reveals that Antigua and Barbuda has made some progress in Rule of Law and Control of Corruption between 1998 and 2009. In terms of Voice and Accountability and Political Stability, there has been slippage of progress made between 1998 and 2004. Government Effectiveness has steadily declined over this timeframe as well (World Bank 2011). The governance indicators used in Table 3.1 "reflect the statistical compilation of responses on the quality of governance given by a large number of enterprises, citizens, and expert survey respondents in industrial

and developing countries, as compiled by a number of survey institutes, think tanks, NGOs, and international organizations" (World Bank 2011). The data for Antigua and Barbuda are presented with regional and economic group comparisons. Although these indicators are for overall governance in a country, they can be viewed as relevant to the health sector.

TABLE 3.1 WORLD BANK WORLDWIDE GOVERNANCE INDICATORS FOR ANTIGUA AND BARBUDA (2009)

Governance Module	Antigua and Barbuda	Regional Comparator (Average Value)	Income Group Comparison – Upper Middle
Voice and Accountability –	0.51	0.23	0.24
Point Estimate			
Political Stability –	0.75	-0.12	0.27
Point Estimate			
Government Effectiveness – Point	0.49	-0.10	0.13
Estimate			
Rule of Law – Point Estimate	0.98	-0.34	0.07
Regulatory Quality –	0.63	-0.11	0.05
Point Estimate			
Control of Corruption – Point	1.36	-0.10	0.04
Estimate			

Source: World Bank (2011)

3.2 GOVERNANCE IN THE HEALTH SECTOR

The MOH is responsible for the financing, regulation, policy, guidance, human resources management, and delivery of all public health care services. The provision of health care is spearheaded by a minister and member of the cabinet. The Barbuda Council manages health services on that island.

There are some notable gaps in the legislation and policy that governs the health sector, particularly in the regulation of medical practices and pharmaceuticals. This can in part be attributed to the relative youth of the country and the fact that it is a common law legal system based on the British model. Table 3.2 describes the policies and legislation governing the health sector and their status.

According to a 1997 health policy statement, the government is committed to providing universal health care to the population. There seems to be a popular view among the populace that the provision of health care is the government's responsibility and that this health care should be free, accessible, and of good quality. However, resources pose a constraint to offering universal free access to health services, especially in light of the shifting burden of disease toward CNCDs and the associated treatment costs.

3.2.1 MINISTRY OF HEALTH STRUCTURE

The MOH is governed by a number of key positions:

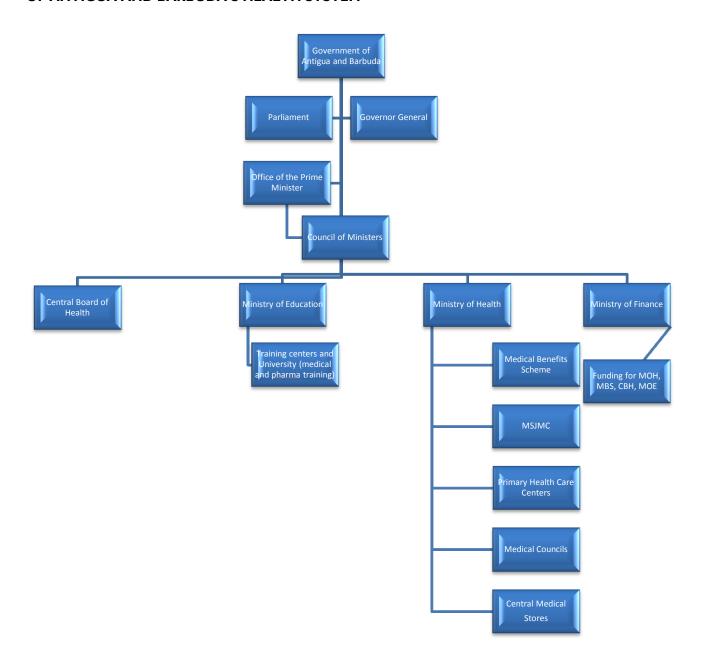
- Minister of Health: The minister oversees the Medical General Division, MSJMC, Holberton
 Hospital, the Health Information Division, National Emergency Medical Services, Central Stores
 and Procurement Services, and the CBH (responsible for environmental health services, water
 management, food safety, and sanitation). In general, the minister's primary responsibility is
 implementing the nation's Essential Public Health Functions (EPHF).
- Permanent Secretary (PS): The PS is responsible for the administration of the public health care system, including oversight of human resources. There has been frequent turnover in this position in recent years, which serves to undermine the effectiveness of the position.
- Chief Medical Officer (CMO). The CMO serves as the chief technical advisor to the MOH and is
 charged with coordinating health services delivered in the country's hospitals and health centers,
 including oversight over private health care delivery. The CMO sits on the board of the MSJMC
 as well as on the various professional councils.
- AIDS Secretariat/National AIDS Program: The national response to HIV is under the direction of
 the CMO and the PS in the MOH through the functioning of the AIDS secretariat. The AIDS
 secretariat is headed by the AIDS program manager and serves as the coordinating body for all
 HIV/AIDS efforts. The NAP works closely with other government ministries, people living with
 HIV/AIDS, and civil society to implement HIV/AIDS strategies and programs. It also serves as
 the focal point for the collection and dissemination of information about HIV/AIDS, other
 sexually transmitted infections (STIs), and related issues (PAHO 2008).

There is no specific MOH department or other public institution in the country with the mandate or capacity to oversee or conduct program monitoring and evaluation (M&E) according to international standards, such as WHO methodological guidelines.

Although the CBH functionally reports to the MOH, there is no law or act mandating the roles and functions of the CBH vis-à-vis the MOH. The CBH, according to the Public Health Act, is meant to be governed by a board; however, this board did not exist at the time of the writing of this report.

Figure 3.2 below depicts the governance structure of the health sector.

FIGURE 3.2: MINISTRIES AND GOVERNMENT ENTITIES INVOLVED IN THE GOVERNANCE OF ANTIGUA AND BARBUDA'S HEALTH SYSTEM



3.3 POLICY, LEGISLATION, AND REGULATORY FRAMEWORKS

3.3.1 NATIONAL HEALTH SECTOR STRATEGY

Although Antigua and Barbuda is committed to providing health care for all citizens, a national health sector strategy, with goals and milestones and financial projections, does not exist. The most recent health sector business plan, which extended through 2010, acknowledges that "(n)o national strategic direction has been documented and circulated as a guide for the operation and management of the health sector. However, most disciplines have plans and policies, which guide their area of responsibility" (Antigua and Barbuda MOH 2007).

Both the process of creating a national health sector strategy and its use would benefit the health sector a great deal. The absence of an overarching guiding document reflecting stakeholder input contributes to the disjointed and weak annual planning process, which seems to involve predetermined budget allocations based on historical expenditures, as opposed to cost and utilization data. A UN General Assembly Special Session on HIV/AIDS (UNGASS) report in 2010 noted that one of the major challenges in the country's HIV response was "an out-dated National Strategic Plan for HIV/AIDS," which was developed in 2001 for the period 2002–2005 (UNAIDS 2009). The creation of a planning unit within the MOH charged with strategic planning in the health sector as a whole, and HIV/AIDS specifically, would improve the effectiveness of the health system.

3.3.2 POLICY AND REGULATORY ENVIRONMENT

The MOH is the main regulatory body for the health system and is responsible for providing data and information for setting national health policy, as well as the monitoring, planning, and management of the health system. The MOH is challenged by a scarcity of resources, including financial and human resources. For example, the government would like to create a new strategic plan but is constrained by limited human resource personnel. This can also be said of the need for regulations to govern the Pharmacy Act and the Medical Practitioners Act. Without a legal department in the MOH, the ministry relies on the legal department of the Ministry of Justice to assist with drafting laws and amendments and submitting them for approval. The limited resources and conflicting priorities at the Ministry of Justice is a contributing factor to the lack of updated and complete regulations and policies in the health sector.

3.3.3 EXISTING LEGISLATION

National planning is led by the Ministry of Planning, which is charged with identifying strategies for human resource and infrastructure development. Responsibility for creating and managing national social policy is split between the MOH and the Ministry of Labor and Home Affairs. The MOH is specifically tasked with formulating health programs based on national health policy (PAHO 2001) and the PS is the overarching champion of the MOH legislative agenda. Regional bodies, including CARICOM, PANCAP, and PAHO, also impact the formulation of policies at the national level. A framework of legislation developed to govern the health sector is outlined in Table 3.2. Note that acts and regulations must be "gazetted" before they can be enforced.

TABLE 3.2: LEGISLATION AND POLICIES GOVERNING THE HEALTH SECTOR

Title	Description	Status
Allied Health Professionals Act	Governs health care workers who are not nurses, doctors, dentists, or pharmacists.	Not yet drafted, although the need is recognized and championed by the CMO.
Food Safety Act	Governs regulations to ensure food safety.	Work is ongoing to draft this act and ensure that is it in line with CARICOM requirements. Chief health inspector is championing this update as is an Ad Hoc Committee on Food Safety.
Private Medical Facilities Law	This law is being drafted.	This law is in draft form, has been championed by the CMO, legal affairs has been consulted, and it is nearly ready for enactment.
Pharmacy Amendment Act (2011)	Widens the functions of the Pharmacy Council and forces registration of licensed pharmacies and wholesale pharmaceutical businesses. The legislation also requires that premises designated for the storing of medications are up to national standards.	Passed Upper House of Parliament, April 2011. Not fully enacted.
Medical Benefits Act (2010)	Establishes the Medical Benefits Board consisting of government, business, and health sector representatives, and the management and operations of the Medical Benefits Scheme, including rates of contribution, benefits, and beneficiaries.	Fully enacted with regulations gazetted.
Medical Practitioners Act (2009)	Provides for the registration, licensing, and regulation of the practice of medicine in Antigua and Barbuda. Establishes the Medical Council and its functions, which include enforcing licensing and a code of ethics. Establishes a Disciplinary Committee.	This law has been enacted, and regulations are now being written.
Mount St. John's Medical Centre Act (2009)	Establishes MSJMC Board to be responsible for the administration, management, and organization of the hospital in an efficient manner, and for connected purposes.	Enacted 2009.
Medical Act	Governs dentists and opticians.	Outdated and in need of updating.
Health Policy for Antigua and Barbuda (1997)	Created in 1997 as an update to a 1984 policy document. States government commitment to the universal provision of health services as a right to all residents and citizens, and to the creation of further policies and legislation to support this very brief document. Prioritizes community involvement, health information systems, and health promotion.	Intended to govern a five-year period (through 2001), but never updated. Still considered valid. PAHO has pledged to assist with the creation of a health sector strategic plan to replace this document.

National Business Plan for Health (2008–2010)	Detailed plan for health sector improvement, including the establishment of a health information system strategy and improved HRH planning. Most activities described were	PAHO has pledged to provide technical support for a health sector strategic plan to replace this document.
Pharmacy Act (1995)	not acted upon. Establishes the Pharmacy Council, Register of Pharmacists, and the licensing of pharmacies. Some aspects of the act have been amended.	Regulations have been written but not yet gazetted by legal department of the Ministry of Justice.
The Constitution of Antigua and Barbuda (1981)	Provides the foundation for the structure of government and policymaking processes. There is no language in the constitution regarding government provision of health care.	Signed/enacted in 1981.
The Caribbean Regional Drug Testing Laboratory Act (1979)	Establishes Antigua and Barbuda's participation in a Regional Drug Testing Laboratory, with the power of law.	Signed/enacted by 14 governments (including Antigua and Barbuda) in 1979.
International Health Regulation Act	Is bringing public health regulations in line with international guidelines.	Chief Health Inspector working with PAHO support to draft thi act.
The Misuse of Drugs Act (1975)	Outlines controlled drugs and their classification and subsequently provide guidance and associated penalties for the production, supply, and possession of controlled substances.	Enacted.
Midwifery Act (1959)	Establishes a midwifery board and registry. Obliges parents to seek professional assistance in deliveries and obliges midwives to offer support when requested. This act is very outdated, with low fees for memberships and references to Holberton Hospital that are no longer relevant.	Needs to be amended/updated, but there are apparently no current initiatives to do so.
Mental Treatment Act (1957)	Governs all treatment of mentally ill patients in the country.	Updated act has been drafted ar is on the 2012 agenda of the Parliamentary Council for consideration and approval.
Nursing Act	Governs the nursing profession.	Needs updating and new regulations. Nursing Council is championing this act.
The Public Health Act (1957)	Extremely detailed law, which establishes the Central Board of Health and the role of the state in protecting public health, with a focus on disease prevention and sanitation. Does not mention Ministry of Health.	This law is extremely outdated and requires updating. A circulal has been prepared for the cabin to work on this act.
The Antibiotics and Therapeutic Substances Act (1951)	Outlines provisions for the preparation, sale, distribution, and importation of antibiotics and therapeutic substances.	Enacted and being enforced by the Pharmacy Council.

In addition to the above laws, the country has committed to a number of international agreements and accords that guide the provision of health services. These include the Caribbean Cooperation for Health III, the Caribbean Charter for Health Promotion, and the Alma Ata Declaration.

3.3.4 ENFORCEMENT OF REGULATION

Antigua and Barbuda does not have a developed system of enforcing regulation and ensuring quality in the health sector. This is a particular concern in the area of pharmaceutical management, as there is no regular inspection of drugs entering the country. Public health and sanitation seems to be well regulated and generally in accordance with international standards, including regular training and education on food safety and other public health and disease prevention messages. This is logical given the importance of tourism to the economy. Private facilities are not governed by national health standards or regulations. However, private providers interviewed by the assessment team signaled a willingness to comply with regulations should they be established.

Individual private health care providers are regulated through the professional councils, which establish requirements for licensure and develop and enforce codes of conduct and disciplinary actions in the case of substandard performance. There are no existing standards, regulations, or legislation for private health facilities. Enforcement functions are handled by the Medical Council, Disciplinary Committee, Nursing Council, Midwifery Board, and Pharmacy Council.

3.3.5 OVERSIGHT OF MOUNT ST. JOHN'S MEDICAL CENTRE

The Mount St. John's Medical Centre Act outlines the role of the board of MSJMC. There is some overlap between this act and the authority granted to the American Hospital Management Company (AHMC) in the management contract, and this contributes to a sporadically strained relationship between the MOH and AHMC. The Mount St. John's Medical Centre Management Services Contract between MSJMC and AHMC governs the management of MSJMC. The contract was signed in 2009 and is valid through 2014. The management contract stipulates the responsibilities of both parties and the payment terms. The management company receives fees and is eligible, as an incentive, for a 5-percent increase after the first two years of the contract, provided that the hospital is profitable and year-on-year profits increase by at least 5 percent. Regarding licensing, the agreement states that "each party agrees to take all steps necessary to keep Mount St. John's Medical Centre fully licensed and certified." Both parties have expressed frustration with the management structure. The MOH, for example, occasionally seeks to exercise greater control, as it historically had greater direct management authority than mandated in the legislation and agreements.

The potential benefits of the management contract at MSJMC have not been fully realized. While managers wanted to have the pick of staff in opening the new hospital, the government insisted that the facility take most of the public employees from Holburton Hospital. The managers have the ability to hire new workers on contract, and have done so, but the full efficiency of private sector personnel management has not been achieved.

The contract does not define a basic package of services that the hospital should offer, nor does it specify quality standards aside from a somewhat vague reference to an "international model of clinical procedures." There is also a stipulation that the management should make efforts to achieve Joint Commission International (JCI) standards, although there is no timeline for achieving JCI accreditation. The contract does not require the collection or reporting of health information to the board of directors by hospital management. It bodes poorly for the oversight of the hospital that at the time of this assessment, no audited financial statements were available for review.

3.4 CITIZEN VOICE, RESPONSIVENESS, AND TRANSPARENCY

This section will provide an overview of how citizens and civil society interact with all levels of government, and how the government responds to citizen demands and requests. In addition, the ability of civil society and citizens to act as credible partners with government in improving health services will be explored. Transparency is a key issue for this section, as government willingness to make key documents available to the general public and address specific questions is an indicator of its commitment to good governance.

3.4.1 CIVIL SOCIETY PARTICIPATION

Civil society, including provider groups, NGOs, and the media, provide a watchdog function over health providers and institutions in the way they deliver services, equity, access, and quality. There are a number of faith-based organizations and civil society organizations (CSOs) in Antigua that provide needed health education and supportive services, particularly for vulnerable groups such as youth and the indigent. It is difficult to assess the exact number of civil society groups in the country. Because there is no formal requirement that nonprofit organizations register in order to raise funds or operate in the country, few bother to do so. According to the recently established Volunteers United, an umbrella group of volunteer organizations, there are currently about 40 active organizations. There may be as many as 100 NGOs, although the number of currently active organizations is likely much lower. Although these groups appear to offer valuable services, their activities are not systematically coordinated with government services and messages, nor do they coordinate activities with each other. Capacity of these groups is limited, as most are mainly volunteer driven, do not have a permanent office or staff, and have low capacity for fundraising. There is no government office charged with working with the nongovernment sector in health, although informal communication on health education seems to exist.

3.4.2 ADVOCACY

The public and other key stakeholders have a somewhat limited capacity and opportunity to advocate for health issues and participate effectively with public officials in the establishment of policies and plans for health services. Government health sector goals are unevenly communicated to the public, which is a common challenge in many health systems. In addition, as in many countries, civil society, technical experts, and health services consumers are not highly organized, thus they have limited opportunity to use, analyze, and provide feedback to government on health sector goals.

3.4.3 HEALTH PROVIDER ORGANIZATIONS

Provider associations are grouped by specialty and vary in size as well as in services to members. The most active associations are the Medical Association (of Physicians) and the Nursing Association. There is also a Pharmacy Association and a Dentist Association. Associations play an active role in advocating for policy change, when necessary, and providing information and updates to members. Association members sit on the various councils that oversee professional licensing, continuing medical education, and discipline of medical professionals.

3.4.4 **MEDIA**

Relative to the size of the population, there is a large number of print and radio media outlets, in addition to several locally produced television stations. Media regularly report on health care issues and display a relatively high level of technical ability to report on the sector. There are perceptions that some publications may report in a manner that places one political party in a more favorable light than another.

3.4.5 GOVERNMENT RESPONSIVENESS

The government periodically solicits input from the public and concerned stakeholders, such as provider groups, CSOs, and commercial sector leaders. However, national government health data, budgets, and goals are not readily available to the public. Although data are not widely available, the media are actively engaged by the government for sharing health education and health policy updates and information.

3.5 SERVICE DELIVERY

The organization and financing of health services appears to be functioning at the primary level, although there are problems with continuity of supply at some centers. A notable constraint to the sustainable functioning of the system is the hours of operation of the health centers, which close in the late afternoon, and availability of physicians at these centers. Some public sector physicians reportedly do not keep the length of hours they are required to, which impedes access. There is no requirement for referrals for care at MSJMC, and the facility is perceived to be of good quality and free. Thus, there is overuse of the hospital by those who could receive care at one of the health centers. In 2010, there were 30,000 emergency visits to MSJMC, an extraordinarily high number in a country of this population size.

Technical oversight of public health center performance appears to be functioning, with regular reporting and the engagement of the Community Nurses Organization. The nurses' organization submits a useful annual report to the PS with epidemiological information, and information about human resource needs, constraints, and other challenges. There is a need for greater follow-up and supportive supervision when problems are identified. For example, a recent chart audit found that most patients with diabetes and hypertension attending Antiguan health centers did not have their condition under control. It was found that the practices outlined in the revised clinical guidelines were not carried out at the recommended levels. It was expected that the introduction and proper use of these protocols will make a positive difference. No follow-up survey was conducted to ensure that this was the case.

3.6 STATE OF PUBLIC-PRIVATE ENGAGEMENT

The private commercial health sector is growing and provides specialist and some generalist services for those with private insurance or willingness to pay out-of-pocket. The private sector has some resources that the government occasionally utilizes in lieu of sending patients off-island for services. For example, patients are sometimes sent to private providers for services temporarily unavailable at MSJMC, such as MRI and cholesterol tests. Better coordination with the private health sector could increase access to key health services in a more systematic manner than currently exists. This could potentially result in a cost saving for services that would otherwise be obtained off-island. See Chapter 9 for further information on public-private engagement.

3.7 INFORMATION AND REPORTING

At the primary health care level, public sector providers supply accurate and relevant financial, surveillance, and program data to the government for the sufficient monitoring of those dimensions of the health system. There are significant gaps in reporting, however, as secondary and tertiary care information is not regularly reported or used by the government. As noted earlier, MSJMC does not provide routine data to the MOH, nor do private health providers. Public sector providers appear to occasionally use evidence on program results, patient satisfaction, and other health-related information to lobby government officials for policy, program, and/or procedural changes. There is a notable gap in financial information on health sector performance and the use of program and financial data for planning. There does not seem to be analysis of the cost-effectiveness of interventions and expectations of disease burdens in budget planning.

3.8 DIRECTIVES, OVERSIGHT, AND RESOURCES

Government provides overall direction to the health system. Currently there are some gaps in legislation, policies, and regulations that need to be addressed. Government officials do not have access to reliable research and evaluation studies. The existing health information system (HIS) can be used to formulate laws, policies, strategies, and operational plans, regulations, procedures, and standards for the health sector. They are informed by some regional studies and advice on best practices. Neighboring country laws and regulations are a good resource as well. Procedures exist for reporting, investigating, and adjudicating misallocation or misuse of resources. Applicable regulations and laws are enforced by the Ministry of Justice.

3.9 DONOR INVOLVEMENT

Donor funding accounts for a very small percentage of total health spending in Antigua and Barbuda. Recent donor funding has been concentrated on policy support and HIV/AIDS programming. In addition, international organizations and regional entities such as UN agencies and PAHO provide technical advice to the MOH.

3.10 REGIONAL ACTORS

There are a number of regional actors that have a supportive function for the Antigua and Barbuda health sector. PAHO is a resource to the government for health policy, M&E, and other guidelines related to the health sector. Caribbean Network of People Living with HIV/AIDS was a Round 4 Global Fund recipient. PANCAP helps inform the government's response to the epidemic. The Pan Caribbean Business Coalition is the regional private business sector response to HIV, although they are not active in Antigua and Barbuda. The Caribbean HIV/AIDS Regional Training Institute provides training to countries in the region on HIV/AIDS prevention and treatment. Regional branches of international NGOs work with those marginalized by stigma and discrimination. For example, the Caribbean HIV/AIDS Alliance (CHAA) recently received a new tranche of funding from the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) and will be redoubling its efforts in Antigua and Barbuda.

3.11 RECOMMENDATIONS

3.11.1 SHORT-TERM RECOMMENDATIONS

Improve the physical work environment for MOH. The government should prioritize establishing workable office facilities for the MOH, to enable longer working hours and reliable Internet access for the staff located there.

Seek technical support for regulation formulation. Priorities would be regulation in support of the Medical Practitioners Act, Pharmacy Act, the Public Health Act, and the Medical Benefits Act. PAHO would be a potential source of expertise, possibly by seconding a legal analyst to the MOH for a finite period to draft regulations.

Establish a health steering committee composed of public and private sector stakeholders to develop priorities for the health sector. Facilitate meetings with public and private sector actors to develop an action plan for cooperation. The goal of the steering committee is to depoliticize some of the difficult decisions that need to be made in the health sector, build political will, increase accountability, and mobilize greater resources by tasking non-MOH actors with some duties.

3.11.2 LONG-TERM RECOMMENDATIONS

Formalize a private sector supply of services when the public sector is unavailable. There should be a registry of private sector services and assets, particularly diagnostic equipment, at the MOH. Formal contracting mechanisms can be developed to allow public sector patients to access services that should be provided by Antigua and Barbuda on the islands, as opposed to going abroad, when available. Going hand-in-hand with this greater cooperation would be provision of import tariff waivers for private medical companies importing equipment that is not currently available in the public sector.

Develop a regular process of strategic planning, and create a health sector strategy, including the plan for HIV/AIDS service delivery. Antigua and Barbuda could seek technical support to establish a Strategic Planning Unit charged with developing a sustainable planning process within the MOH, potentially using the resources of a health steering committee. The technical support could focus on the collection, analysis, and reporting of health sector information for the purpose of planning and policy decision-making.

4. HEALTH FINANCING

Key Findings

- The primary health care system has historically been adequately funded and effective, but this is threatened by inappropriate demand and inadequate funding for MSIMC.
- A 7-percent payroll tax is committed to health care through the MBS.
- Approximately 15–20 percent of the population has private insurance.
- MSJMC is seriously underfunded: the government has in the past faced challenges in meeting obligations to MBS; MBS is unwilling to negotiate a higher level of financial support to MSJMC, and the amount that the government pays in capitation to MSJMC appears to be insufficient.
- MBS provides important elements of a social health insurance system. To establish such an insurance system, Antigua and Barbuda needs a better understanding of costs and of current flows of out-of-pocket and private health insurance payments and consistent contributions to MBS.

This chapter presents an overview of health financing in Antigua and Barbuda. WHO defines health financing as the "function of a health system concerned with the mobilization, accumulation and allocation of money to cover the health needs of the people, individually and collectively, in the health system." It states that the "purpose of health financing is to make funding available, as well as to set the right financial incentives to providers, to ensure that all individuals have access to effective public health and personal health care" (Islam 2007). Health financing includes three interrelated tasks: revenue collection (fund generation), pooling of funds leading to allocation, and purchasing of services. The sections of the chapter below will discuss each in detail.

4.1 HEALTH FINANCING TRENDS

The most recent available data suggest that total health care spending in Antigua and Barbuda is about 5 percent of GDP. As a percentage of GDP, health expenditures appear somewhat lower than in the other islands of the Eastern Caribbean, even though Antigua has the highest per capita income of any of its sister nation states. Public health spending was 10.2 percent of total government health spending in 2009, fluctuating between 3.5 percent and 4.5 percent of GDP over the last decade. This translates to about EC\$972 (US\$360) per capita in public health spending and over EC\$1,350 (US\$500) per capita in total health spending. Government spending made up nearly 75 percent of total health expenditures while private spending made up 25 percent in 2009 (World Bank 2011). The government spent EC\$700,000 (US\$259,000) on HIV programming while donors provided EC\$440,318 (US\$163,081) in 2009. See Box 4.1 below for an explanation of the Medical Benefits Scheme, the primary method used by the government to pay for health care.

Primary health care is available for free to all citizens in Antigua and Barbuda. For most citizens, hospital services are free or low cost, with the MBS making monthly negotiated payments to MSJMC on behalf of its members. Private health insurance policies are available in the market. WHO data from 2008 indicate that 87 percent of private expenditure is out-of-pocket, suggesting a very low level of private insurance. Because most health insurance provides indemnity payments after a patient incurs user fees, this may understate the extent to which medical costs are covered by insurance.

In the health sector as a whole, costly secondary services, such as dialysis, appear to be crowding out primary care services, such as HIV testing or cholesterol management. The number of patients on routine dialysis has increased from five when Holburton Hospital closed to more than 40 today. This number will continue to increase, unless dialysis capacity is constrained, given the age structure on the island and burden of disease. The MRI machine at MSIMC is used for only two or three patients per day. This is likely due to a high associated fee not directly subsidized by the government or MBS and the

Box 4.1: Medical Benefits Scheme

The MBS is a government-run program that provides financial assistance and medical supplies to qualified residents of Antigua and Barbuda suffering from a predetermined list of chronic disease, namely, asthma, cancer, cardiovascular diseases, certified lunacy, diabetes, glaucoma, hypertension, leprosy, and sickle cell anemia. The scheme is funded by a 3.5percent contribution deducted from earnings of insured personnel and a matched donation by employers. Selfemployed contribute 5 percent of earnings to the scheme. Every beneficiary is required to register with the MBS by presenting an original birth certificate or passport along with his/her Social Security card. Non-contributors must also present a certificate from a medical practitioner certifying that they suffer from one of the listed diseases. In 1998, the act was amended to expand the scope to include providing financial assistance toward the following activities:

- The cost of medical benefits to such class of persons in such circumstances and subject to such conditions as may be prescribed by regulation
- The construction and maintenance of hospitals and other medical and health care facilities approved by the cabinet
- The supply of medical, surgical, and dental supplies and laboratory equipment to hospitals and other medical and health care clinics and centers
- The management and administration of hospitals and health care facilities.

Source: MBS official website accessed in May, 2011. (http://mbs.gov.ag/information/benefits.php)

existence of a second machine in the private sector.

Costs of off-island care are sometimes covered by the government of Antigua and Barbuda, typically funded through MBS. Requests for financial support for off-island care are routinely directed to the CMO, who has the authority to approve or disapprove requests. In recent years the annual budget to support those seeking care outside of Antigua and Barbuda was EC\$3 million (approximately US\$1.1 million). However, given the economic situation in 2011, the budget was reduced to EC\$500,000 (approximately US\$185,000) in 2011. As of May 2011, the budget had been depleted, and the CMO planned to request an additional allocation so that some assistance would be available for the remainder of the year.

4.2 RESOURCE MOBILIZATION

The reality of health care financing in Antigua and Barbuda is not encouraging. There is no current set of National Health Accounts (NHA), so it is difficult to determine just how much is actually spent on health in the country, be it public or private expenditures. Interviews suggest that few Antiguans forego primary care or services at MSJMC because of cost. Labor unions express general satisfaction with the access to MSJMC provided through the MBS, but there are no estimates of the distribution of health

expenditures across income groups or the extent of catastrophic health expenditures. WHO reports levels of public and private health spending for Antigua, but no interviewed official recalled a household health expenditure survey from which aggregate private health expenditures could be estimated. No official accounts have been published by the MBS for several years, so there is no way to determine the actual amount collected and disbursed from the payroll tax or any shortfall in MBS collections.² Unlike most countries with a similar scheme, collection of health care payroll taxes is not coordinated with collection of Social Security contributions or income tax.

Moreover, Antigua and Barbuda's finances are under supervision by the International Monetary Fund. Monies budgeted are not disbursed if revenue collections do not meet targets. For example, the ministry budget includes a negotiated contribution of EC\$3.1 million (approximately US\$1.15 million) per month to cover the costs of free care at MSJMC, but the government is paying only EC\$2 million (US\$740,740) per month. The aggregate shortfall in payments is at least EC\$13 million (US\$4.8 million). The planned contribution was based on expenditures at Holburton Hospital at the time that MSJMC opened in 2009. It is unlikely that this amount is adequate to cover the operating costs of the new and expanded facility, nor the added costs of extra services now available at MSJMC.

4.2.1 INTERNAL SOURCES

4.2.1.1 GOVERNMENT

The annual budget of the MOH is EC\$96.8 million (US\$35.9 million) for 2011. This is down from EC\$116.5 million (US\$43.15 million) in the revised 2010 budget, but 4 percent above 2009 expenditures of EC\$92.5 million (US\$34.26 million). Some of the environmental health budget is used for solid waste collection and disposal, and there are minor appropriations for social affairs. Funds in the budget have traditionally been adequate, with some support from the MBS, to provide free and accessible primary care for the entire population.

4.2.1.2 MEDICAL BENEFITS SCHEME

A very positive feature of the health finance landscape is that Antiguan law provides for an MBS – a dedicated payroll tax for health of 7 percent (3.5 percent paid by the employer, 3.5 percent paid by the employee) for employees aged 16–60, and 5 percent (2.5 percent employer, 2.5 percent employee) for those aged 60–70. All employed persons, including the self-employed, are required to pay into the fund. The self-employed contribute 5 percent of earnings. The law and regulations do not appear to cap the amount of salary subject to these assessments. Revenue should be fairly elastic with economic growth as formal sector employment expands. These funds are not included in the MOH budget, although they are used to support purchases of essential drugs and maintenance of some community health facilities.

The fund extends benefits to enrolled workers and to children under 16, students 16–21, and the disabled. The MBS appears to provide a substantial and dedicated revenue source targeted at secondary care and CNCDs. Listed diseases for which the fund provides drugs include hypertension, diabetes, cardiovascular disease, sickle cell, cancer, leprosy, glaucoma, Parkinson's, epilepsy, and "certified lunacy." It is worth noting that HIV/AIDS is not included on the list of diseases for which drugs are available. Benefits are payable to recognized hospitals, including private hospitals, in Antigua, and for overseas care not available on-island at rates determined by the minister of health. A maximum amount can be set for overseas payments for a beneficiary.

² MBS officials think they collect about 70 percent of the contributions owed from the private sector.

It appears that the MBS is underpaying for the cost of services received by its beneficiaries at MSJMC. Although the hospital estimates these patients cost about EC\$3 million (US\$1.1 million) per month, at the time of the assessment in May 2011, MBS was paying only EC\$575,000 (US\$212,963) per month. The ability of MBS to pay full cost is constrained for a number of reasons, including gaps in government financing.

4.2.2 EXTERNAL SOURCES

The health system is minimally dependent on donor funding. PAHO provides technical assistance to Antigua and Barbuda to support the health system and priority health areas, anchored by a representative stationed on the island. The assessment team identified outside funding only in the HIV/AIDS program. Plateaus in foreign aid budgets will not have a major adverse effect on Antigua. The costs of necessary HIV/AIDS care should be manageable within national health resources.

4.2.3 HIV/AIDS FINANCING

ARVs for AIDS patients are currently obtained through the Eastern Caribbean cooperative purchasing arrangement using Global Fund monies and distributed through a single point of service at MSJMC. Currently, 123 patients are receiving ARVs. The government is looking to make ART and HIV/AIDS care available at multiple locations. Such improved access, as well as new protocols for starting ART, would expand the number of patients requiring ARVs. Even if the number tripled to include the full number of HIV patients currently registered (about 400), drugs should be available for a cost of about EC\$810 (US\$300) per patient per year, or about EC\$324,000 (US\$120,000). This is much less than is currently spent on the 40 dialysis patients at MSJMC, or the salaries of the redundant laundry workers transferred to the Fiennes Institute. If HIV were added to the list of chronic diseases for which the MBS provides drugs, Antigua could easily afford to purchase ARVs via the OECS/PPS. This, of course, is contingent upon all parties, including the government, paying their MBS contributions. (See Box 4.2.)

Box 4.2: Mount St. John's Medical Center

With the construction of MSJMC, the on-island inpatient facility, the country has completed the large investment necessary to provide good quality hospital care, including some tertiary services. Despite the popularity of the center's services and relatively free access for Antiguans, 2010 occupancy was only 43 percent. However, admissions amounted to approximately 9 percent of the population that year. The government pays a fixed-peradmission subsidy for MSJMC. The publicly owned, privately managed hospital also charges fees, and the adequacy of government payments is in dispute.

No audited financial statements are currently available at MSJMC, so it is difficult to determine the amount collected from insured Antiguans and tourists. MSJMC managers estimate that insured patients are 10–20 percent of the total during tourist season and less than 10 percent the rest of the year. Although a schedule of modest user fees is posted in the hospital, it is not clear if these are actually collected for all beneficiaries of the MBS. All children and pensioners are specifically exempted from any charges. The MSJMC facility is attractive for a number of reasons, resulting in the hospital outpatient department seeing many patients that could be treated in primary care facilities. The emergency department recorded almost 30,000 visits in 2010, while the total number of primary care visits in ministry clinics was only 90,000. Patients are supposed to be referred from public primary care facilities, but many self-refer. The hospital and government have so far been unwilling to impose user fees approximating cost on self-referred patients as a means of reducing this burden, and overuse of MSJMC for routine primary care continues.

MSJMC is run under a management contract, which potentially provides the benefits of private hospital management in a modern facility that is obligated to meet public commitments for accessible hospital care. This comes at a cost of US\$774,000 per year for the management services provided (three senior managers). There are additional incentives if MSJMC should operate at a profit, which it almost certainly is not doing at the moment, at least on a standard accrual accounting basis, including depreciation. The fee is not necessarily excessive if hospital management is actually delivered to a high international standard. However, the management contract is rather vague about the standards of performance to which the hospital manager will be held accountable.

The potential benefits of the management contract at MSJMC have not been fully realized. The full efficiency of private sector personnel management has not been achieved. Because of the funding shortfalls described above, MSJMC has not been able to fund any depreciation, giving a poor prognosis for the continuation of its current level of service.

In some cases, savings achieved at MSJMC are offset by unnecessary costs elsewhere in the health system. MSJMC uses a contract linen service, but laundry workers from Holburton Hospital were reassigned to the Fiennes Institute, where the need is for nursing and activities staff. The Fiennes Institute's budget increased by 50 percent with the staffing transfer. However, the level of service remained essentially the same. As a result, this home for the elderly has 1.65 staff per bed, and a cost of nearly EC\$135 (US\$50) per patient day, higher than charges in private sector care homes that must also cover the cost of their facilities.

MSJMC is investigating the possibility of building a cancer treatment facility, which would include radiation therapy, on its campus, but it is hard to see where the money will come from to provide public or MBS patients with these additional services. The government is also considering a new diagnostic center at the Holburton Hospital site. However, neither an estimate of the capital and operating costs for such a facility, nor a comparison to the cost of selective service expansion at MSJMC in order to reduce any backlogs have been undertaken. With inpatient occupancy below 50 percent, and the excessive level of outpatient care that could be redirected to primary care facilities, it should be possible for MSJMC to find room for any truly critical diagnostic services. Initiatives like the diagnostic center and the cancer radiation facility are apparently not being examined in light of the nation's capacity to finance health care.

4.3 RISK POOLING

4.3.1 PRIVATE HEALTH INSURANCE

Approximately 15,000 residents have private health insurance, usually through their employers, and pay monthly premiums of EC\$160 (US\$59) per person, up to EC\$430 (US\$159) per family. Companies that provide health insurance to their employees are usually either multinationals or companies run by Antiguans that have worked in countries with health insurance. Through this mechanism, over 15 percent of the population would appear to have effective risk pooling for major private sector medical expenses, with health insurers collecting about EC\$29 million (US\$10.74 million) in premiums.

4.3.2 POTENTIAL FOR NATIONAL HEALTH INSURANCE

Although the government has expressed interest in adopting a national health insurance system, the status of such a development is unclear. A regional health insurance scheme has been proposed, with actuaries providing some estimates of the required premiums. However, health officials in many Caribbean countries, including Antigua and Barbuda, have voiced concerns about the feasibility of such a scheme and about the timeline for implementation. The MBS provides a proven method of collecting payroll contributions, and may serve as a foundation for national health insurance in the future. If the MBS was fully funded based on current obligations for public employees, it might be possible to extend insurance coverage to Antiguans outside the MBS scheme with little or no funding beyond the MBS and existing public health budgets.

4.4 RECOMMENDATIONS

The day-to-day exigencies of running the MOH, combined with inadequate financial information, have made it difficult for Antigua and Barbuda to develop an affordable health care strategy that takes into account the burden of disease with the ongoing demographic and epidemiologic transition, the existing base of facilities and professional manpower, or realistically available funding streams.

With this information, the ministry could prioritize expenditures within the envelope of available funding. In the absence of such planning, the health care system is in jeopardy of continually confronting crises, with serious consequences. MSJMC may go bankrupt, or the management contractor may exit, leaving the ministry ill prepared to pick up the slack. Primary care may suffer because of the pressing demands of secondary and tertiary care patients, as is already happening with HIV and cholesterol tests.³

4.4.1 SHORT-TERM RECOMMENDATIONS

To sustain good primary care performance and address the chronic diseases of aging, a financial analysis combined with a revised health care strategy is clearly necessary. In the short run, the government should undertake the following:

Construct a set of NHA that show the full amount of funding flowing into the Antigua and Barbudan health care system from various sources, including MBS, health insurance, and private payments. A key aspect of this will be **conducting a rapid and limited household health expenditure survey** to quantify the amount and distribution of private health expenditure, including health insurance premiums and benefit payment, as well as out-of-pocket payments.

³ These tests were unavailable due to a lack of reagents at the time of our visit.

Determine the necessary cost of running MSJMC, with specific costing of certain high-tech services such as MRIs. Such an analysis should include the necessary cost of equipment maintenance and replacement as the facility ages. (Hospital management probably has most of the necessary data, which should be reviewed by an independent economist or accountant working for the government.)

Determine the likely funding available from the annual budget over the next several years (given economic projections), as well as likely collections by the MBS.

Develop a financial and service plan that balances reasonably expected health care resources and commitments. Consider all new high-tech medical expenses within the context of this plan. Protect primary care services and purchases of essential drugs.

4.4.2 LONG-TERM RECOMMENDATIONS

Prioritize payment of government contributions to the MBS. Amend the MBS Act to add HIV to the list of covered chronic diseases; this could be phased in as Global Fund funding, through PANCAP, is phased out.

Explore opportunities for cost savings within the existing health care system. Potential projects include "right sizing" of staffing at Fiennes Institute, with a shift in staff to more effective patient services and a collection of pension and Social Security payments to offset the cost of care at Fiennes. Efforts might also be made to combine the collection of MBS payroll taxes with income taxes and/or Social Security payments or using a private insurance company to process MBS claims under a competitive "third party administrator" contract. The latter might include using services of an overseas referral manager to screen requests for support of offshore medical treatment, monitor and negotiate fees of offshore providers, and maintain data on cost, diagnosis, and treatment providers.

Candidate projects might include those listed below. These are offered not as a criticism of current management, but to show that, even though the system is generally underfunded, there are opportunities to realize savings within the current structure.

Reevaluate user fees and consider economic incentives for more efficient service utilization, especially at MSJMC. As noted elsewhere, there is a need to formalize the referral process between primary and secondary/tertiary care to reduce the burden on MSJMC. Imposing, and enforcing, user fees for nonemergency use of MSJMC by those not referred by a primary care facility or physician may be one way to achieve this. This is of course predicated on improving access to primary health care on the island, which should be a first step. For more discussion, refer to the Recommendations section of Chapter 5: Service Delivery.

Address provision of primary health services at MSJMC. Because of the importance of the public health laboratory functions performed at MSJMC, the MOH should sign a separate performance-based contract with MSJMC, which defines the tests that must be performed for public health and primary care purposes. The contract would be adequately funded from the primary care budget and require MSJMC to make these tests available at all times. This would prevent the phenomenon the assessment team observed, where pressing financial needs at the hospital resulted in a failure to provide essential public health tests.

5. SERVICE DELIVERY

Key Findings

- The primary health care system is functioning well, particularly for infectious diseases and maternal and child health.
- There is an adequate number of facilities, distributed evenly across the country (both public and private), including a new hospital and specialized tertiary care.
- Quality assurance of health services is uneven. Quality is tracked internally at MSJMC, without MOH oversight, and there is no systematic quality improvement process at the primary level.
- Efficiency of service delivery is not optimal, as exemplified by an over-reliance on MSJMC for minor health issues and centralized HIV/AIDS treatment.
- Gaps in the patient referral process exist: there are informal referrals and limited follow-up between levels of care within the public sector and limited/strained referrals between the public and private sectors.

This chapter assesses health service delivery in Antigua and Barbuda. Health service delivery is the most visible aspect of the health system because it is often where the users interface with the health system. Service delivery in the health sector is defined as how inputs and services are organized and managed. A well-functioning service delivery component of the health system ensures access, quality, safety, and continuity of care (WHO 2007).

5.1 ORGANIZATION OF SERVICE DELIVERY

The vision of the MOH is to provide integrated and cost-effective health care services for all. The public sector service delivery system is built on the principles of primary health care, endorsed by the government as "essential health care based on practical, scientifically sound and socially accepted methods and technology" for health promotion and prevention of illness (Ministry of Health of Antigua and Barbuda 2007).

This vision is reflected in an established network of public PHC facilities, which are evenly distributed across the county and adequately staffed by medical officers, nursing, and auxiliary staff. The public sector health centers hold specialized clinics on a weekly basis or more frequently for the management of diabetes, hypertension, psychiatric disorders, prenatal services, child health, and family planning. The PHC system is particularly strong in the areas of maternal and child health care and infectious diseases, as evidenced by the nearly universal immunization, antenatal, and postnatal coverage and the low mortality from infectious diseases. MSJMC provides an increasing number of specialized services. A significant private health care sector provides a complement to public health services in dental, outpatient, inpatient, specialized, and diagnostic services. It is difficult to adequately assess the size and

role of the private health sector in Antigua and Barbuda as there is no formal registration required for private health care facilities. While most facilities are registered businesses, many providers appear to operate on an informal basis, particularly those doctors with part-time public health facility positions. Table 5.1 provides a summary of health service providers in both the public and private sector. For more details on private health providers refer to Chapter 9: Private Sector Contributions to Health.

Some large employers (e.g., hotels) have a nurse on site or a doctor on contract who provides health services to employees. However, such programs account for a small share of service delivery as workers are often reluctant to see these "in-house" providers for confidentiality reasons. NGOs and community groups involved in health primarily conduct health education activities; an exception is Planned Parenthood, which provides a substantial share of family planning services in the country, filling a gap in such services in the public sector. Supply of contraceptives in the public sector has been very limited and most women are referred to the Planned Parenthood office in St. John's, where client-centered counseling and a full range of contraceptive methods are available at highly subsidized prices. The heavy reliance by the public sector on Planned Parenthood for affordable family planning services poses a potential sustainability issue. It is unclear how family planning coverage in the country will be affected in the event of future funding interruptions of the NGO.

TABLE 5.1: SUMMARY OF HEALTH SERVICE PROVIDERS IN ANTIGUA AND BARBUDA

Public Sector			
Health Facility	Staff	Services Provided	
Mount St. John's	About 500 staff	Primary health care	
Medical Centre	185 beds	Advanced critical care (including dialysis, oncology)	
		Surgery: six operating theaters	
		Emergency department	
		Diagnostics (including MRI, EKG, mammography)	
		National laboratory	
		Pharmacy	
		STI and HIV blood screening	
		VCT	
Holberton Hospital		Autopsy department	
		Abandoned children care center	
Fiennes Institute	114 staff total	Long-term/institutional geriatric care	
	69 beds		
Claireview Mental	About 55 medical, nursing,	Psychiatric services	
Hospital	and ward staff plus auxiliary		
	and management/		
	administrative staff		
F:-be beeleb	150 beds About 100 staff total across	A	
Eight health centers4	all clinics, including	Ambulatory services (including some chronic disease:	
	resident medical officer and	management)	
		ANC, prenatal care, and child health services (incl. immunization)	
	district medical officer (in five main clinics only),	Family planning services	
	environmental health	Pharmacy (in five main health centers only)	
	officers/public health	Community psychiatric services	
	Officer 3/ public ficator	Community payernautic scrinces	

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⁴ Includes Hannah Thomas Hospital in Barbuda, which has eight beds but operates primarily as an outpatient facility.

	inspectors, family nurse	Dental care
	practitioners, public health	Nutrition
	nurses, district nurse	VCT
17 satellite clinics ⁵	midwives, community	Primary health care services (health promotion,
	nutrition officers, and clinic	preventive services, curative, some rehabilitation
	aides	services)

Private Sector

Type of Facility	Number and Capacity	Services Provided
Private medical/surgical facilities	4 facilities; staffing varies according to facility	Inpatient care (ranging from 2 to 20 beds) Minor/major surgery Obstetrics and gynecology Diagnostics (including ultrasound, x-ray, CT scan, MRI, EKG, digital mammography) Pharmacy Ambulatory services
Private nursing homes	Approximately 10 homes; staffing varies by facility; some have registered nurses, family nurse practitioners, and nurse aids, in addition to auxiliary staff	Long-term/institutional geriatric care
Private physician practices (individual/small outpatient practices)	Between 20 and 646	General family medicine Dental care Gynecology Pediatrics STI diagnosis and treatment HIV testing HIV/AIDS outpatient care ⁷
Private laboratories	5 labs; staffing varies by facility	Laboratory diagnostics (including STI and HIV blood screening)
Private pharmacies	Approximately 20 pharmacies; staffing varies	Retail sales of pharmaceuticals and medical supplies
Planned Parenthood	I clinic; 5 full-time staff and I part-time OB/GYN doctor	Sexual and reproductive health services, including family planning (oral and injectable contraceptives, condoms, emergency contraceptives, intrauterine device), pregnancy tests, pap smear tests, and VCT. Sales of contraceptives at highly subsidized prices.

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⁵ There are three health centers and one clinic equipped to provide certain secondary care services that would normally be handled at the hospital.

⁶ Yellow pages listed 20 physicians, eight specialists; Medical Association reported 64 members in private practice.

⁷ Provided by a single practitioner.

5.2 PRIORITY SERVICE AREAS

As the country continues to develop and the burden of disease in Antigua and Barbuda shifts away from communicable diseases, the emerging health concerns are now CNCDs, health education/promotion, HIV/AIDS, and mental health.

5.2.1 NONCOMMUNICABLE DISEASES

CNCDs now represent the leading causes of death on the island – most notably heart disease, cancer, and diabetes. As mentioned in Chapter 4, due to the rise in non-communicable diseases (NCDs) on the island, demand for services like dialysis has increased dramatically in recent years, to the point where 40 patients now receive dialysis regularly. Costly secondary services, including dialysis, appear to be crowding out primary care services such as HIV testing or cholesterol management.

5.2.2 HEALTH EDUCATION AND PROMOTION

Health education and promotion activities, including community outreach, are conducted by the Community Nursing Services, the MOH Health Information Division (HID), MSIMC, MBS, the Medical Association, private companies (through Corporate Social Responsibility [CSR] programs) and a large number of NGOs. The activities cover a wide range of health topics including reproductive health, HIV/AIDS, cancer, eye and dental health, and priority NCDs (such as diabetes and cardiovascular diseases). Although coordination between the public and private NGO sectors in some of these areas appears to work well (e.g., in HIV/AIDS), many initiatives are planned without coordination with others conducting similar activities. A 2010 assessment of EPHF conducted by PAHO sought to identify strengths and weaknesses of the country's public health system in an effort to develop and sustain a more effective and efficient approach to public health. The report, which looks at 11 essential functions of the health system, noted a weakness in national planning and coordination of information education and social communication to promote health (Michael 2010). This assessment team, for example, found that the MBS designs and conducts screening and prevention programs for obesity, diabetes, and cholesterol,8 but does not jointly plan such activities with MOH health education, NGOs, or CSR programs focusing on these topics. This lack of coordination limits the potential of awareness and Behavior Change Communication (BCC) activities for impact in a cost-efficient manner.

The increasing burden of CNCDs urgently calls for greater prioritization of health education and BCC by the MOH and for a focus on approaches in line with best practices. This is supported by EPHF findings that suggest that MOH prioritization or health promotion is only slightly above average. The focus of the HID within the MOH appears to be on producing brochures and columns for local newsprint publications on epidemiologic trends and prevention of diseases tracked by the MOH surveillance system (such as gastroenteritis or dengue); a glaring gap is the lack of a comprehensive BCC strategy targeting the CNCDs that pose the greatest burden and cost to the public health system.

5.2.3 HIV/AIDS

HIV/AIDS services are provided through a vertical program approach managed by the AIDS secretariat – a unit at the MOH that serves as the focal point for HIV/AIDS in the country. HIV testing is routine in ANCs, but provider-initiated counseling and testing protocols are not currently integrated in PHC. Outreach programs for VCT are conducted by the AIDS secretariat, NGOs, and some employers who

⁸ The scheme has a medical officer specifically appointed for such programs, and collaborates with international organizations to design its BCC campaigns (e.g., the University of Florida assisted MBS with the *Take Charge of Your Diabetes* campaign).

sponsor VCT days on-site encouraging staff to get tested, using rapid tests. HIV/AIDS treatment is highly centralized and available from a single provider – the private office of the clinical care coordinator, contracted by the Ministry of Health. ARVs are only accessible at the MSJMC pharmacy. The AIDS secretariat conducts activities targeting marginalized at-risk groups and appears to be coordinating well with NGOs and CSR programs related to HIV/AIDS. The recent closure of the CHAA office has left an important gap in prevention and outreach services, given that the current Global Fund funding from Round 9 does not include a budget for prevention activities. The assessment team learned, however, that USAID funding for CHAA's activities in Antigua and Barbuda resumed as of June 2011 and the office has since reopened.

5.2.4 MENTAL HEALTH SERVICES

Mental health services are provided at the Claireview Psychiatric Hospital and at PHC facilities. PHC facilities offer the services through psychiatric clinic hours held seven or eight times a month in each of the five main public clinics. A private facility provides rehabilitation care for addictions. A lack of social support programs for patients discharged by Claireview Hospital appears to result in inefficient service delivery and quality of care unaligned with international best practices. Although a social health worker has recently been appointed at the hospital, there are no government-led initiatives to support the process. As a result, many patients who can live independently with follow-up treatment available at the PHC level either remain or return to the hospital for a long-term stay. This has the added impact of diminishing the patients' quality of life compared to the alternative of social integration.

5.3 ACCESS, COVERAGE, AND UTILIZATION

There is no defined basic benefit package of health services that are covered by the government either incountry or abroad. Services in the public PHC clinics and most drugs prescribed at this level are free for all patients, although there are occasional shortages of some drugs in public sector pharmacies. For more details, refer to Chapter 7: Management of Pharmaceuticals and Medical Supplies. The MBS has a defined benefits package (see Box 5.1) but routinely pays for drugs and services outside of the package (e.g., all drugs dispensed at public clinic pharmacies and treatment off-island). MSJMC does not strictly enforce payments for services not covered by the MBS for its MBS cardholder patients. HIV/AIDS services in the public sector

are free, including VCT, prevention of mother-to-child transmission (PMTCT), and care and treatment, including ARVs,

Box 5.1: The Medical Benefits Scheme: Beneficiaries and Services Covered

The Medical Benefits Scheme has two groups of beneficiaries:

- Group I: Persons who have paid contributions for 26 weeks in any calendar year or in any period of 12 months, children under 16, and "persons who are permanently incapable of work by virtue of age."
- Group II: Persons certified by a medical practitioner to be suffering from any of the following chronic diseases: asthma, cancer, cardiovascular diseases, certified lunacy, diabetes, glaucoma, hypertension, Parkinson's disease, epilepsy, and sickle cell anemia.

The MBS package of services covers all inpatient and outpatient care, including drugs, x-rays, laboratory tests, electro-cardiograms, and other diagnostic services provided at MSJMC or at public clinics and MBS pharmacies. In cases where drugs or services for Group II patients are not available at public facilities (e.g., due to shortage of lab reagents or broken equipment), such patients are eligible for reimbursement from MBS for obtaining these drugs/services in the private sector, at the rate charged for such services in MSJMC.

Source: MBS official website, accessed May 2011 (http://mbs.gov.ag/information/benefits.php)

for residents and citizens of Antigua and Barbuda. Patients with psychiatric conditions receive free

treatment in the public sector under the MBS.9

Private health providers are widely used and serve all segments of the population. Although recent data on the proportion of patients who seek care in the private sector are not available, data from 2006 showed that 39 percent of patients first sought care from a private doctor or dentist (Kairi Consultants Ltd 2007). Specialists and inpatient care providers tend to be used more by wealthier segments of the population as well as tourists and those with private health insurance.

Some specialized treatment services in cardiology, oncology, neurology, and other clinical areas are not available in-country. Patients who need such services can apply for financial assistance from the government to receive treatment abroad. Government-paid treatment abroad is organized by the office of the CMO, which pays providers directly and arranges and pays for patients' travel. The decision on which patients to sponsor for treatment abroad and how much of their expenditures to cover is highly discretionary, and based on a review of the patient's financial situation (ability to pay out-of-pocket), urgency of the condition, and availability of funds for off-island treatment in the budget.

The free services and medicines in the public PHC sector, the low¹⁰ and sporadically enforced fees at MSJMC for MBS cardholders, and the broad coverage of MBS have so far ensured adequate access to affordable essential care for most of the population and a broad range of specialized care in the public sector. However, as discussed further in Chapter 4, the current model of free service provision in the public sector is rapidly becoming financially unsustainable.

5.4 EFFICIENCY OF SERVICE DELIVERY

An essential ingredient for efficient service delivery in the public sector is a functioning referral system between the primary and higher levels of care, which ensures that the primary level provides a gatekeeping function toward hospital services that are either unnecessary or can be provided at the primary level. This, however, is a key missing piece in the organization of the country's health service delivery system.

Although referrals from PHC to MSJMC are required for nonemergency care, they are not enforced in practice; as a result, patients routinely seek care at the hospital for minor conditions that can be treated at health clinics. For example, there were nearly 30,000 visits to the Emergency Department of MSJMC in 2010, which equates to about one visit for every three residents and is equal to one-third of the total visits in public clinics. Main reasons for this pattern of self-referral to the hospital are outlined below.

- The opening hours of public clinics are inconvenient given that they close at 4:30 p.m., allowing only early morning visits for patients who work full-time hours.
- Although PHC clinics may be open, often no doctor is on the premises and/or supplies may be inadequate to deliver some services.
- Quality of care is perceived to be better at MSIMC.
- There is unrestricted free or low-cost access to ambulatory hospital services for those who
 choose to self-refer.

⁹ New mental health patients are immediately assigned a temporary MBS number at first contact with the public health system, to ensure that they can receive free medication.

¹⁰ For example, the MSJMC fee for an MBS cardholder for a lab or ultrasound test is EC\$20, and the fee for inpatient surgery/endoscopy is EC\$100, which is a significant cost given average salaries in the country.

Because public clinics do not preschedule appointments, patients at clinics may have a long wait to see a physician. Conversely, a physician may come to the clinic at a time when there are few or no patients and thus leave for his/her private practice where time may be seen as being more efficiently spent. Neither situation is efficient and both discourage access.

As mentioned earlier, the lack of a functioning social integration program for mental health patients results in over-reliance on long-term institutional psychiatric care, which is an inefficient use of health sector resources. Fiennes Institute, with its excessive amount of ancillary (non-health) staff inherited from Holburton Hospital, is another example of inefficiency.

5.5 QUALITY ASSURANCE

The quality of health care services is determined by a combination of factors including adequacy of infrastructure, drugs, and supplies in health facilities; availability of trained health workers who receive regular skills updates and adequate supervision; and procedures for producing, enforcing, and monitoring use of up-to-date clinical standards. Quality assurance standards and processes must be in place for all of these factors.

5.5.1 HEALTH FACILITY INFRASTRUCTURE AND SUPPLIES

Public health facilities infrastructure varies by facility. MSJMC has an impressive set of diagnostic and treatment equipment. The facility itself appears to have a low occupancy rate (43 percent), which indicates overcapacity in some service areas. Although infrastructure is adequate in most clinics, some, particularly in rural areas, await much-needed repairs. Shortages of supplies and materials in public clinics are frequent (e.g., disinfectants, syringes, supplies for glucose measurement), and there are occasional stock-outs of lab supplies and certain drugs at MSJMC. Stock-outs of HIV test reagents and some ARVs also occur, which often means patients on ARVs have to switch to another drug when the one they are prescribed is not available. This has potentially serious implications, including the development of drug resistance. These shortages are attributed to a combination of budget limitations and supply-chain bottlenecks. For more information, refer to Chapter 7: Management of Pharmaceuticals and Medical Supplies. There have been suggestions to redistrict the community clinics' catchment areas and close some facilities to ensure that more resources per clinic are available, especially in light of the worsening government budget situation.

Budget shortages at Claireview Psychiatric Hospital result in poor quality of care due to lack of essential supplies, crumbling infrastructure, and lack of necessary facilities such as separate higher security quarters for patients who have committed crimes and are being detained for treatment.

There are no facility standards, requirements, or guidelines that must be met in order to open or run private for-profit or nonprofit facilities. The private sector is often challenged to acquire equipment, as all equipment and most supplies, parts, reagents, and even service agents must be imported, often at a high cost. There is no medical equipment lease financing available in the country, a common financing vehicle for private providers in larger countries. There are no government- or donor-sponsored incentives (such as reduced import tariffs for medical supplies or equipment) to offset these challenges.

5.5.2 CLINICAL PRACTICE GUIDELINES AND STANDARDS

There are no national treatment guidelines, with the exception of PMTCT. The lack of evidence-based treatment protocols is a key constraint that needs to be addressed before several related important problems in service delivery can be tackled, including updated training of health workers on the latest international clinical standards, developing and enforcing a quality monitoring and supervision system, and strengthening pharmaceuticals supply and management, which is also affected by the lack of treatment standards. For more information on treatment guidelines, refer to Refer to Chapter 7: Management of Pharmaceuticals and Medical Supplies. There is a structured protocol for monitoring and surveillance of communicable diseases, but capacity for rapid laboratory testing of suspected cases is limited (PAHO 2008).

5.5.3 QUALITY ASSURANCE PROCESS

Quality assurance for health services is one of the areas with the most substantial gaps. Among the activities included in the 2008–2010 business plan is the establishment of a quality assurance system networked with all levels of care and health providers. At the time of this assessment, this system was not in place and was not being developed. There are no existing standards, regulations, or legislation related to quality of care for public or private health facilities of any type. The EPHF further suggests that Antigua and Barbuda had below average scoring in the areas of defining standards and evaluations to improve quality of care, improving user satisfaction with services, and possessing available technical assistance to strengthen service quality (Michael 2010).

Government regulations require that medical practitioners, in both public and private practice, have the appropriate degree for the services they provide. The Medical Council licenses and registers physicians. Licenses are given every three years, and doctors must apply for renewal. Doctors must have a certain number of continuing education points to get relicensed. There is a formal Medical Disciplinary Committee made up of MOH and medical association representatives that handles egregious cases of malpractice and may serve to fine or revoke the license of a member.

A notable gap is the lack of a systematic or formal process for quality monitoring and improvement at the primary care level: there is an unstructured process of observation by supervisory staff that relies on their knowledge of and experience with practice standards and protocols. There are no monitoring tools or structured processes for review of quality of care. Supportive supervision process of health workers in public clinics is also lacking. There are no facility or staff supervision guidelines or checklists. There is also no specific focal point at the MOH tasked with creating or managing in-service training programs.

While quality of care at public clinics, particularly for CNCDs, is frequently mentioned as needing improvement, there is lack of a strategy for continuous improvement and monitoring of quality in this area. For example, before introducing the Clinical Guidelines for the Management of Diabetes and Hypertension in Primary Care in the Caribbean in 2009, MOH conducted a health chart audit for community clinics' patients with diabetes and hypertension to assess whether patient data were captured adequately and monitoring and follow-up were appropriate. The results revealed that most patients did not have their condition under control. This prompted MOH to convene a committee to plan for addressing the identified gaps and the intention was to do annual follow-up of progress. However, there has not been a follow-up audit (or a similar activity) to assess to what extent quality of

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¹¹ Standardized clinical guidelines for care and treatment of HIV/AIDS and for PMTCT are in place and will be updated in the upcoming regional meeting organized by OECS HIV/AIDS Project Unit (which will be attended by the clinical care coordinator).

care had improved. Similarly, a drug utilization review found that about 30 percent of MBS drugs were prescribed or dispensed inappropriately, but no follow-up training or monitoring was conducted.

A quality improvement process oriented toward the JCI accreditation standards is in progress at MCJMC and followed up on at monthly internal meetings of the hospital management. This process includes a comprehensive list of improvements that are implemented in stages as resources permit. While quality of care is monitored internally at MSJMC, there is no oversight of the quality assurance process by MOH to ensure that services are provided adequately. A notable gap is the lack of quality of care indicators in the contract agreement between MOH and the management company of MSJMC.

5.5.4 PATIENT REFERRALS

Quality of individual patient care requires a functioning cross-referral process that includes follow-up of (I) patients referred by the primary level for specialized/inpatient treatment and (2) patients who are referred back to the primary level for follow-on care after hospital discharge. This is currently lacking in Antigua and Barbuda.

Formal discharge summaries that refer a patient from MSJMC to the community clinics are not routinely used. MSJMC reports an initiative of individual follow-up of patients discharged from the Emergency Department to check that they continue with follow-on care at the PHC, and the center has started a dialogue with the public clinics on how to ensure that discharged patients continue treatment at the primary level. While these are positive developments, a functioning referral system cannot be in place without addressing two important gaps in the system. These gaps are as follows:

- Lack of integrated patient information system within the public sector to support the crossreferral process. Although public clinics keep individual patient files on site that are updated at each visit, it is the patient's responsibility to ensure that his/her file is updated with case management information for care obtained in another facility.
- Limited oversight functions of MOH with regards to monitoring and enforcing quality of care standards at MSIMC (which would include providing discharge summaries for all patients).

Referrals between the private and public sectors are insufficiently practiced and, in most cases, are self-referrals by patient. Formalizing and strengthening the referral process between private providers and MSJMC would be particularly important to ensure continuity and quality of patient care as well as optimal use of specialized health resources available in-country, such as services not available at MSJMC but provided at some private clinics. This more formalized and consistent process may save costs by more thoroughly seeking to acquire care for patients in-country before sending them overseas.

5.6 RECOMMENDATIONS

5.6.1 SHORT-TERM RECOMMENDATIONS

Establish and enforce a referral system from primary health clinics to MSJMC. This should be accompanied by an introduction of incentives that discourage self-referral to MSJMC for minor health issues (such as enforcement of fees for non-referred ambulatory patients).

Formalize and enforce the referral process between private providers and MSJMC. This is particularly important to ensure continuity and quality of individual patient care, as well as optimal use of specialized health resources available in-country.

Institute and enforce an oversight function by MOH of the quality of services at MSJMC. A formal process for monitoring MSJMC service quality by MOH is important to ensure accountability for public funds spent for services at the hospital, not just in terms of the amount of services purchased but also in terms of the quality of these services. Select indicators on quality of care should be routinely reported by MSJMC to the MOH, and should also be made publicly available to address citizens' concerns with occasional gaps in quality of some services (e.g., due to stock-outs of lab supplies) and put such gaps in the context of the overall quality-of-care track record of the hospital. Because MSJMC already has an established internal system for monitoring service quality, such a requirement will not impose a significant additional burden on hospital management. Implementing this recommendation would require adding a clause in the existing MSJMC management contract.

Consider expanding hours of operation of primary health clinics (e.g., two shifts or extended hours in select clinics). To test uptake of services and overall effectiveness of this recommendation, this could initially be piloted in one or two clinics based on higher patient load, location, and cost/ease of change in working hours there (e.g., due to staff availability). Another option would be to consider late hours on alternate week days among clinics in adjacent areas. Given concerns raised by MOH officials about crime, arrangements should be made to ensure the safety and security of health staff working at night. The MOH might want to consider hiring contractors to staff the evening shifts.

Pursue integration of ambulatory HIV/AIDS care into the primary health care system. Integration of HIV/AIDS services, largely though decentralizing these services, was suggested by several stakeholders interviewed during this assessment. This can be achieved by making such services available in a few public clinics with a resident medical officer and an MBS pharmacy on-site. Such a model would require an initial investment in staff training (medical officers and pharmacists) but would be cost-efficient in the long term. However, this option should not be considered without first exploring and adequately addressing potential issues with breach of patient confidentiality in public clinics and MBS pharmacies that would provide HIV/AIDS treatment. A starting point could be an anonymous survey of patients receiving treatment at the office of the clinical care coordinator to assess these patients' attitude toward the proposal to decentralize HIV/AIDS services. Another early step would be a costing of HIV/AIDS services.

5.6.2 LONG-TERM RECOMMENDATIONS

Strengthen quality assurance practices in the public sector through the introduction of National Treatment Guidelines. The first step would be to develop National Treatment Guidelines, ideally working from existing guidelines in the region. It would be important to establish an official policy for periodic revision of clinical guidelines, which should stipulate by whom, how often, and how guidelines should be reviewed. It should also address how the updated version will be rolled out to health workers.

Design and roll out a quality assurance process for PHC clinics. This should include design of a supportive supervision process for PHC health workers, which would include guidelines and forms. The next step would include the design and roll-out of facility quality assurance guidelines, including checklists and manuals that can be adapted for both public and private sector facilities. Antigua can build on materials already developed by PAHO or other countries in the region and convene a working group to adapt these materials to local needs and develop a plan for roll-out and training.

Strengthen MOH capacity and leadership role in health promotion and education. With the onset of CNCDs and the burden they place on the health system, the importance of health education and disease prevention cannot be emphasized enough. To fulfill this objective, the MOH should establish

and staff a Health Education Unit. Given constrained budgets, if a unit is not feasible, appointing an individual within the MOH to lead these efforts would be a step in the right direction. The Health Education Unit/Officer could serve to ensure that health education/promotion is integrated into strategic health plans and mobilize technical assistance from relevant sources.

6. HUMAN RESOURCES FOR HEALTH

Key Findings

- Antigua and Barbuda has an uneven supply and deployment of HRH. Among categories such
 as general medical practitioners, registered nurses, registered nurse-midwives, and
 pharmacists there appear to be adequate numbers. However, specialists are needed in both
 primary and secondary/tertiary health care.
- HRH planning and management within the MOH is limited, due in part to the structure in place for managing government workers more broadly.
- There is no process for the integrated use of data to inform decision-making and limited institutional capacity in the MOH for HRH planning to address staff recruitment, retention, deployment, development and training, and staff evaluation and promotion.
- The fact that there is a single health provider offering HIV treatment on the island poses a major risk for the sustainability of HIV/AIDS services.

HRH impact the costs and quality of health service delivery and, ultimately, the health outcomes in a country. As such, an examination of the HRH situation is a critical component of a comprehensive health systems assessment. This chapter seeks to determine the status of HRH in Antigua and Barbuda and to make actionable recommendations for improvement. For the purposes of this analysis, the team uses the WHO definition of the health workforce, which comprises "all people engaged in actions whose primary intent is to enhance health" (Islam 2007.). This includes those who promote and preserve health as well as those who diagnose and treat diseases, manage health services and support workers, and those who educate health workers. The assessment addresses such factors as numbers and distribution of health personnel; the status of HRH policy, planning, and management; and leadership, education, and training.

6.1 HUMAN RESOURCES FOR HEALTH PROFILE OF ANTIGUA AND BARBUDA

In the health system profile for Antigua and Barbuda (2008), PAHO notes that:

"In general, clinical care standards in the public health sector have improved with the increased number of doctors in the public sector and improved infrastructure. Health care in the private sector has improved significantly with the return of highly trained and entrepreneurial national medical professionals." (PAHO 2008)

This trend of improvement is critical to sustain the good level of PHC that Antigua and Barbuda has achieved and to improve secondary and tertiary care services.

This assessment found that there are generally sufficient numbers of clinical workers, especially general practitioners and registered nurses, a sufficient number of pharmacists, and a cadre for community health promotion. However, there are still significant personnel gaps and challenges.

Though current data on the ratio of health personnel per population by category were not available, key informants interviewed as part of this assessment reported shortages in the complement of nurses with public health training as well as family nurse practitioners; medical specialists such as neurologists and oncologists; and categories of personnel such as dental surgeons, anesthetists, nutritionist/dieticians, epidemiologists, medical technologists, radiographers, environmental health, and mental health professionals including psychiatrists, psychiatric nurses, and occupational therapists.

A technical cooperation agreement exists with the government of Cuba to facilitate recruitment of health professionals to address some gaps. However, such recruitment is taking place in the absence of a specific HRH plan. A comprehensive HRH needs analysis and plan would enable a rationalized process for human resources recruitment, deployment, training and development.

6.2 HUMAN RESOURCES FOR HEALTH POLICIES

The legislative framework for registration and regulation of the health workforce of Antigua and Barbuda dates back to 1938. The government has taken steps to modernize this framework through such pieces of legislation as the Pharmacy Act (1995) and the Medical Practitioners Act (2009). These steps are incomplete in a number of instances, as the accompanying regulations for key pieces of legislation have not yet been brought into force through gazetting. For details on health legislation, refer to Chapter 3: Governance.

A national health policy document speaks briefly to issues pertaining to health promotion, accessibility of quality care, organization and management, infrastructure development, human resources development, environment, and legislation. This assessment found that a much more detailed and comprehensive plan inclusive of an explicit HRH policy and plan is urgently needed, but the MOH faces the significant challenge of weak institutional capacity for developing such a policy and plan.

There is some foundation on which to build. There are existing documents that could assist in the development of a comprehensive plan, including the current sectoral plans, targets, and goals that are set out in a MOH business plan. The National Business Plan for Health 2008–2010 was put together in response to a 2007 mandate from the cabinet.

Basic sector- and division-specific plans are developed as part of the annual national budget exercise and are published in the annual Estimates of Expenditure. The estimates for 2010 include a narrative and matrices with some specific goals for the budget year for each of the divisions under the MOH. In relation to HRH, these goals address recruitment of specialist staff at institutions such as the Claireview Psychiatric Hospital and the Environmental Health Division. There are also goals for in-service training to improve the quality of care and retention of staff in areas such as community nursing, as well as goals for increases in remuneration.

Although the business plan contained goals related to improving the planning and management of HRH and increasing access to trained professionals in a number of service areas, including HIV treatment, care, and support, these goals were not met and there is little evidence of actions taken to further these objectives.

6.3 HUMAN RESOURCE MANAGEMENT

The management of HRH in Antigua and Barbuda is primarily driven by civil service considerations and not by an evidence-based determination of what is needed to achieve optimal results in health delivery. As noted earlier, the MOH has responsibility for public health care in Antigua and Barbuda. HRH matters are, for the most part, determined by the Establishment Division of the Ministry of Finance,

which has overall responsibility for hiring and deployment of public sector workers, and by the PS of the MOH on the advice of senior technical staff and heads of departments. Ultimate decisions concerning hiring and deployment of staff rest with the Ministry of Finance.

The EPHF found that human resource training and development are weak in Antigua and Barbuda. The areas of improving the quality of the health workforce and training existing professionals to ensure culturally appropriate delivery of services scored especially low.

In addition, the current assessment noted the following findings:

- A clear, objective process for hiring has not been established in the MOH.
- There are two categories of personnel established and non-established with some anomalies
 in terms and conditions of employment.
- There is no overall, comprehensive health policy with related the HRH policy and plan.
- Health personnel are subject to transfer where, when, and as needed within the public service with limited forewarning, succession planning, or considerations for skills/knowledge transfer.

6.3.1 DEPLOYMENT

The business plan indicates that health services are available within a 3.2 km radius of every major community in Antigua and Barbuda. This coverage is enabled by eight health centers and 18 health clinics and MSJMC in Antigua, Hannah Thomas facility in Barbuda, and the 100-bed geriatric Fiennes Institute. There are also four private facilities with less than 25 beds each (Ministry of Health of Antigua and Barbuda 2007).

Primary health clinics have personnel providing services in maternal and child health, general health, community mental health, dental care, diabetic and hypertension screening and care, communicable disease control and surveillance, and home visitations. The human resource cadre includes a resident medical officer and district medical officer, environmental health officers, family nurse practitioners, public health nurses, district nurse midwives, and clinic aides. Some clinics also offer pharmacy services.

Deployment of personnel across the primary and tertiary care services was a matter of contention among a number of persons interviewed for this assessment. The challenges identified include the transfer of personnel to fill gaps in the wider public sector, issues related to established versus non-established workers, and the nature of the redeployment of Holburton staff that were not absorbed by MSJMC. This redeployment was reported to have been without considerations of adequacy of existing staff complement and/or gaps in needed skill sets. As a result, while staff-to-patient/client ratios may be high, the quality of care in some instances has not improved.

Nursing and auxiliary staff are among the established and non-established personnel employed in the health services. This assessment found that there are concerns with respect to the following:

- Employment procedures for established and non-established personnel within the MOH:
 Respondents suggested that the hiring process differed considerably between the two groups
 and observed a general lack of transparency in overall hiring practices. A lack of competitive
 recruiting practices, especially among non-established personnel, was also observed.
- The overall lack of clarity in the contractual status of personnel at MSJMC: Nurses, for example, have dual contracts with the government and the hospital. As such, they are unclear about the expectation inherent in being seconded with the entitlements of being public sector employees

but within the confines of the personnel terms and conditions of employment present in the privately managed facility.

6.4 MIGRATION, ATTRITION, RETIREMENT

In general the Caribbean region has a high rate of outward migration of skilled professionals – particularly nurses and medical doctors. Although information is limited, there is some indication that Antigua and Barbuda fares better than other Caribbean countries in retaining and even recruiting nurses – often from other Caribbean nations. In a country of this size, each professional holds an important role, thus small attrition changes can impact the sector. For instance, in early 2011 a community nurse passed away – she was the only one in the cadre with psychiatric care training, and she was covering the entire country with her outpatient care services. At the time of the assessment she had not yet been replaced.

6.5 HUMAN RESOURCE DEVELOPMENT

6.5.1 PRESERVICE TRAINING

No comprehensive, national HRH training plan has been developed. However, pre-service training is available at the Antigua State College, which offers University of the West Indies (UWI)-accredited degree courses. The college has a School of Nursing providing training up to the nurse-midwife level. Advanced nursing training, such as the two-year Bachelors of Science degree in Public Health Nursing, is typically pursued in Jamaica. The college also has a School of Pharmacology. At present the pharmacology program is suspended pending adequate numbers of registered students. An enrollment target of 12 has not been met for the current academic year (nine students were registered) and as a result the course did not commence.

The American University of Antigua and Barbuda, an offshore training institution, also offers health degree programs. Its College of Medicine, which opened in 2003, prepares students for the United States Medical Licensing Examination. The university is required to offer a small number of scholarships to Antiguan students; however, few are enrolled.

For pre-service training, government scholarships are awarded based on a priority list of studies, including in the areas of public health, management, health statistics, epidemiology, and other pertinent fields. However, current budgetary constraints are impacting the number of scholarships available.

For medical doctors and other specialized practitioners, training is typically obtained abroad at the UWI or in OECD countries, primarily in the United States, Canada, or the United Kingdom.

6.5.2 IN-SERVICE TRAINING

Some in-service training is done but is limited in key areas such as HIV treatment and care and mental health services.

In relation to mental health, a 2009 report indicates that:

"Apart from the psychiatrist, no other category of mental health worker benefited from refresher training in areas related to psychiatry/mental health. The resident psychiatrist, who is also the Medical Superintendent of the Mental Hospital, had at least two days of refresher training in the rational use of psychotropic drugs and on child and adolescent psychiatry. There were no training activities related to the application of psychosocial skills or behavioral interventions" (WHO 2009).

In 2005, a care and treatment manual and a procedure manual were developed by the AIDS secretariat – MOH to ensure that all groups providing care and treatment to PLHIV used a standardized protocol. However, with the MOH's care and treatment response generally being confined to one physician, the extent of training of primary health providers has been limited. With support from the Global Fund, the clinical care coordinator has been spearheading training of doctors since 2005 in preparation for the decentralization of treatment.

6.6 QUALITY ASSURANCE

Job descriptions are developed and, according to stakeholders interviewed, are routinely provided to all public sector health personnel. Interviews with active nursing personnel, however, indicated that this was not always the case. Supervisory personnel in the primary health service appear to be insufficient. Public health nurses primarily serve as supervisors in the field. Of the 12 established positions, only four are currently filled. As a result, senior nurse midwives, district nurse midwives, and clinic nurses are appointed to act as supervisors. Performance evaluations appear to be ad hoc. It was reported that both the instruments and process are currently under review.

6.7 RECOMMENDATIONS

6.7.1 SHORT-TERM RECOMMENDATIONS

Undertake a comprehensive HRH audit to establish information on the actual complement of health workers by category and level of qualifications/training in both the public and private sectors. This should be a relatively straightforward task, and is important given the dearth of information on health workers in the country. Collection of this information will enable analysis of the ratios of cadres of health workers per population and can help inform planning to ensure an adequate supply into the future. In late 2011, PAHO conducted an assessment of HRH, which may provide the needed information, although the report has not yet been made public.

Develop a comprehensive HRH policy and implementation plan and strategy, taking into account existing HRH plans in OECS/CARICOM and existing regional HRH goals and how these may be applied in the Antigua and Barbuda context. Technical support from the PAHO HIV and AIDS Caribbean Office may be available to support this recommendation.

Develop and implement partnership strategies to meet needs for specialists on-island. As a small nation, Antigua and Barbuda may not have the fiscal space and economies of scale to be able to support the costs of full-time specialists in a wide range of areas. There are, however, opportunities to create strategic partnerships to meet the manpower needs in health. The ministry should seek to develop and implement partnerships with local medical and allied specialists in private practice and regional (OECS, CARICOM) partnerships for medical and nursing staff. Deploying Cuban health professionals is another option to explore while being mindful of potential language issues. In addition, partnerships with nonprofit and corporate entities, including the media, can strengthen the health promotion efforts of the MOH.

6.7.2 LONG-TERM RECOMMENDATIONS

Strengthen HRH planning capacity of the MOH: It will be important for the sustainability of subsequent plans and strategies that an individual/unit is established to lead this important function and that sufficient funding be allocated to support this position/unit. One of the key tasks of this position will be to establish and maintain a Human Resources Information System to better track health personnel in

both the public and private sectors. In addition, this position can formalize the process for HRH recruitment, hiring, transfer, and promotion in consultation with the Ministry of Finance and the Establishment Division.

Build leadership and management capacity at the MOH. Leadership seminars, training, technical exchanges, and other options may be available to assist the upper management of the MOH to build their leadership and management skills.

Increase complement of supervisory staff within the MOH in order to support quality assurance practices and mechanisms in primary health services. This would include the development and regular updates of appraisal instruments and a mandated schedule of performance appraisals.

Strengthen training institutions. Antigua and Barbuda has important, on-island training institutions for nursing and pharmacy personnel. These should be strengthened. In particular, appropriate capacity building of the pharmacy school is recommended to ensure adequate student enrollment and capacity to sustain a viable program.

7. MANAGEMENT OF PHARMACEUTICALS AND MEDICAL SUPPLIES

Key Findings

- Although outdated, a legal framework to guide the pharmaceutical sector exists. However, the Pharmacy Act lacks the regulations required for successful policy enforcement.
- Procurement of medicines and medical products is done via three agencies in the public sector and multiple private sector pharmacies. Efforts to coordinate procurements are limited and ineffective, resulting in system inefficiencies.
- Monitoring and regulation of facilities and pharmaceuticals are inadequate, especially in the private sector.
- On the whole, information management and data for decision-making are inadequate and have serious implications for proper forecasting of need.
- Rational drug use is not prioritized and is exacerbated by a general lack of standard treatment protocols.
- Pharmacovigilence practices are limited and inconsistent in both sectors.
- Continuing education opportunities are limited and not required to maintain licensure.

Access to essential, high-quality medical products and technologies is a critical component of a well-functioning health system. To adequately address public health needs, pharmaceuticals must be available and affordable, and effective pharmaceutical management is key to containing costs associated with procurement and distribution of drugs and medical supplies. This chapter explores the pharmaceutical landscape in Antigua and Barbuda with an emphasis on ensuring the availability and appropriate use of safe, effective medicines and medical products.

7.1 OVERVIEW

The escalating costs of medicines and the increased burden of NCDs in Antigua and Barbuda have motivated the government to look for more efficient procurement, management, and distribution systems for medicines to ensure everyone has access. Finding lower priced medicines challenges a country with a small population because of limited economies of scale. To increase efficiency, Antigua and Barbuda participates in the OECS/PPS. The PPS has assisted all OECS countries in reducing the cost of medicines and provides for some regulation and oversight of procurements. It also plays a critical role in ensuring access to medicines in the public and, to some extent, the private sectors.

Although the use of pooled procurement is a clear strength of the pharmaceutical procurement and distribution system, the country faces many challenges to effective and efficient management of pharmaceuticals and other medical products. Chief among these challenges are the weak enforcement of the Pharmacy Act and standardized procurement systems to improve efficiencies. The latter has resulted in a system in which pharmaceutical procurement and distribution is independently being carried out by

the MOH via Central Medical Stores (CMS), MSJMC, the MBS, and private pharmacies to varying degrees.

A Pharmacy Council has been charged with monitoring and registering public and private pharmacies in Antigua and Barbuda. This effort has been hindered by the lack of regulations to enforce activities and collect registration fees. Recent estimates suggest that medicines are currently being imported and distributed by 10 wholesalers. In the public sector, pharmaceuticals are available at two hospital pharmacies, district health centers/clinics, and six pharmacies run by MBS. The number of registered private pharmacies was not available. According to a 2009 publication, a total of 70 pharmacists are registered with the Pharmacy Council (Abbott and Bannenberg 2009).

7.2 POLICY FRAMEWORK

Existing legislation consists of the Pharmacy Act (1995), the Misuse of Drugs Act (1975), and the Antibiotics and Therapeutic Substances Act (1951). The Pharmacy Act established a Pharmacy Council to regulate the practice of pharmacy and the sale of drugs, and to make provisions for the registration and oversight of pharmacies and pharmacists. The Pharmacy Council currently consists of seven persons: two representing the Pharmacy Society, one from the Medical Association, one representative from civil society, the registrar, one nominee from the Pharmacy School, and the director of Pharmacy. As an extension of the council, the Pharmacy Act also established a board of inspectorates consisting of the Director of Pharmaceutical Services (DPS) and two pharmacists. Inspectors are employed on a part-time basis and reports of completed inspections are submitted to MOH and MBS. A national medicines policy does not yet exist for Antigua and Barbuda.

7.3 REGULATORY SYSTEM

In general, pharmaceutical regulation is very weak in Antigua and Barbuda. Regulations pertaining to the Pharmacy Act have been drafted and are awaiting final approval from the Ministry of Justice. Until these regulations are gazetted, enforcement of the act is seriously impeded. For example, the council created under the Pharmacy Act currently reports to the minister of health and is supposed to make recommendations for the licensure of pharmacists, wholesalers, and retail pharmacies. In reality, licensing documents are not issued because fees cannot be collected without the associated regulations in place.

Moreover, the Pharmacy Council's mandate is aimed at the regulation of the practice and not the actual medicines. The country lacks a National Drug Regulatory Authority charged with regulating medicines, including their registration, market authorization, and post-market surveillance. Although the DPS works closely with customs to vet the importation of pharmaceuticals, the country does not have any formal regulations or mechanisms in place to prevent and control the illicit trafficking of pharmaceuticals via the internet (Organization of American States 2006). Medicines procured through the OECS/PPS have come via prequalified suppliers and random sample testing prior to importation. OECS/PPS performs post-market surveillance on a limited basis and makes an effort to do more surveillance on newer suppliers. However, the lack of guidelines pertaining to the importation of medicines means that the private sector is left to self-regulate its imported products or purchases from local distributors. Most informants who procure medicines in the private sector took this responsibility seriously and avoided purchasing from unknown or questionable suppliers. Most respondents also expressed concern about the ease of bringing medicines into the country.

Antigua and Barbuda itself does not have a quality control lab in-country. Outside of OECS/PPS, medicines are tested when there are reports of adverse drug reactions (ADR) or product complaints

but not periodically to maintain quality. These are usually sent to the Caribbean Regional Drug Testing Lab (CRDTL) in Jamaica. The CRDTL is the regional lab used by many CARICOM countries, and informants reported some difficulties with delays in testing due to volume at CRDTL and with quality issues. The average lead time was 108 days in 2010 (OECS/PPS 2011). Funding limitations hinder the use of more testing post-market.

7.3.1 LICENSING AND REGISTRATION

Procedures for registration and licensing of pharmacies are outlined in the Pharmacy Act; the Pharmacy Council is tasked with overseeing the process. The process was characterized as straightforward by respondents and includes an application and inspection of storage, sanitation, sterility, pharmacy apparatus, and general service capacity. Registration must be completed annually in order to practice. The estimated time required for inspection and receiving a business license was approximately 14–21 days. The business license is reviewed every three months by the national revenue service. While ongoing inspections are supposed to take place, the Pharmacy Council's limited human resources (HR) capacity impacts the number of annual inspections performed.

Pharmacists are required to register with the Pharmacy Council, at which point they are given a unique registration number. The average time for completing a pharmaceutical registration is approximately one month. There were no perceived obstacles to registering as a pharmacist with the council. There are no links between licensing and continued education or renewal requirements to practice pharmacy. In order to address these gaps, regulations are being drafted to address these deficiencies.

7.3.2 PHARMACOVIGILENCE

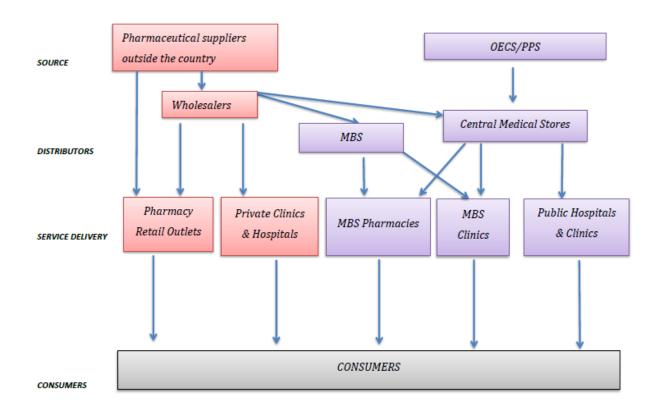
Pharmacovigilance is the science and activities relating to the detection, assessment, understanding, and prevention of adverse effects or any other drug-related problem. Essentially, it is necessary to detect, assess, understand, and prevent ADR. Antigua and Barbuda participates in the OECS's pharmacovigilance mechanism, which is a spontaneous reporting system. As such, health care professionals are encouraged to complete the ADR form distributed by PPS to identify and address any drug-related problems. In reality, reporting of ADR to ensure patient safety is loosely structured and inconsistent at best. The MOH monitors patient complaints and relies upon the expertise of the Pharmacy Council to advise on an appropriate response. The DPS at CMS is also charged with monitoring and addressing reported ADR for patients receiving medicines and supplies within their pharmacies.

Many respondents, in both the public and private sectors, stated that they regularly track advisories from the U.S. Food and Drug Administration and other regional and international sources. In the event of a recall, private distributors and pharmacies are able to utilize their electronic information system to provide rapid data on affected batch numbers. For example, a distributor can rapidly identify where the drugs from an affected batch have been distributed and quickly advise the pharmacies to pull these supplies from the shelves. As an additional precautionary measure, some respondents collect contact information from general consumers who come to distribution sites to buy in bulk. This facilitates rapid communication with all patrons in the event that a specific medication or medical supply is recalled.

7.4 MEDICINES AND MEDICAL PRODUCTS SUPPLY

Figure 7.1 provides an overview of the supply of medicines and medical products in the public and private sectors.

FIGURE 7.1: SUPPLY OF PHARMACEUTICALS AND MEDICAL PRODUCTS IN THE PUBLIC AND PRIVATE SECTORS



7.4.1 PUBLIC SECTOR PROCUREMENT, STORAGE, AND DISTRIBUTION

Central Medical Stores

Pharmaceuticals in Antigua and Barbuda's public sector are centrally procured by CMS, the MBS, and MSJMC. Both CMS and MBS then distribute medicines and products through a pull system in the public sector. Like other OECS countries participating in the PPS, roughly 90 percent of pharmaceuticals procured in the public sector are done so through this mechanism. Regional procurement is done on a quarterly basis, at which point CMS sends a forecasting form to all public facilities requesting quarterly projections of need. The individual requests are collected and consolidated before being submitted to OECS/PPS. Purchases outside of the cartel are infrequent but do happen. Most often, these purchases occur for specialized drugs outside of the OECS/PPS Formulary or when the OECS/PPS suppliers delay delivery. OECS/PPS has a formal competitive bid process that includes sample testing. Funding is not

available for CMS to procure outside of PPS. A special request to the MOH and additional approval from the MBS board are required to purchase anything outside of the PPS Formulary. The OECS/PPS has greatly reduced the cost of procuring drugs. However, late payments to suppliers of OECS/PPS threaten the systems and Antigua's supplies. OECS countries, including Antigua, have often been late in replenishing their accounts with the OECS/PPS. Payment lead time for Antigua and Barbuda increased by nearly 35 percent between 2008 and 2010 (OECS/PPS 2011). Since suppliers view PPS as one unit, late payments from any country can be used to withhold an order to any of the OECS countries, regardless of that country's account balance. Another negative consequence is that several of the more reputable, prequalified suppliers are increasingly declining to submit tenders for new bids and, as such, are reducing competition and impeding access to new markets (OECS/PPS 2011). Budgetary constraints limit the funds available up front to put out bids, and OECS/PPS is developing a reputation for late payments. Higher end suppliers are not as willing to take the risk on such small tenders. The lower end suppliers do not have the same reputation for quality products and, given that post-market testing is limited, there is concern that suppliers can send lower quality goods after the qualifying sample test. In addition to delayed delivery of supplies, the quality of drugs is threatened by tardy payments. Respondents also indicated that there were serious concerns with back orders. Suppliers are getting paid for orders but are not able to provide the products because they are overextended. Certain suppliers are overbidding on tenders and are unable to keep up with the commitments. To compensate, these countries then try to send shipments that were supplied by an outside source that was not vetted by OECS/PPS, thereby leading to obvious quality control issues.

Though limited and relegated to certain types of pharmaceuticals, stock-outs exist. When they occur, CMS has the capacity to trade with other OECS countries engaged in the PPS. Some stock-outs are reportedly due to the fact that certain companies send short-dated pharmaceuticals. If known in advance, these pharmaceuticals will be accepted via air freight because the importation process is relatively quick. Sea freight is much more difficult to accommodate, given the bureaucracy involved in clearing materials from the Port Authority. The latter has resulted in pharmaceuticals being left at the port for up to four months. The most common stock-out at CMS is ARVs. This has resulted in patients at MSJMC being prescribed second-line drugs before they are clinically required. However, it was suggested that the stock-out might also be attributed to the fact that projections and requests for procurement are sent to CMS long after quarterly deadlines have passed. If the ARV order is not submitted in a timely manner, then it is unlikely that the required ARVs will be produced and available as needed, as they are not pre-manufactured and readily available for shipment.

Medical Benefits Scheme

Procurement in the public sector is also carried out via the MBS. For the formally employed population, membership in the MBS is mandatory and is financed through tax deductions. MBS carries out procurements for medications required to address nine NCDs, namely, hypertension, diabetes, cardiovascular disease, sickle cell anemia, cancer, leprosy, glaucoma, certified lunacy, and asthma. A policy is currently being finalized to remove leprosy and add epilepsy and Parkinson's disease. For these nine diseases, the MBS procurement officer estimates needs based on estimated usage patterns and develops tender documents to submit to the Tenders Board. The Tenders Board reviews and submits to a vetted list of approximately 21 distributors. Any new supplier must apply to the Tenders Board and be properly vetted before bidding on a tender. The Tenders Board, which is an arm of government without pharmacists, then creates a subcommittee of health professionals, both public and private, to evaluate the bids. According to public sector respondents, a supplier is subsequently selected based on such factors as reliability, cost, ethical practices, suitable generics, track record, and therapeutic index. However, it should be noted that private sector respondents felt that cost was the primary priority, making it difficult for local distributors to compete with the global market. One method of rectifying this

discrepancy might be to increase transparency around the selection process or engage local pharmaceutical distributors in dialogue about methods of strengthening tender documents. Once the vendor is selected, MBS distributes the pharmaceuticals to MSJMC, satellite clinics, Fiennes Institute, the prison, and Claireview Psychiatric Hospital, which then provide them to patients at no cost.

Stock-outs exist within MBS but are oftentimes accommodated by a public-private partnership of sorts. If a medication is on the formulary and not currently available in any of the MBS pharmacies, a patient can be reimbursed for costs associated with procuring it in the private sector. A patient first needs to get a stamp from MBS indicating that the prescribed medication is not available in any of the MBS pharmacies. After obtaining the stamp, a patient can get a prescription filled in a private pharmacy and be reimbursed at 100 percent of the cost. The maximum reimbursable amount is 10 days' dosage, because it is assumed that any medication can be obtained by MBS within 10 days of a reported stock-out. This is also because private pharmacies buy in small quantities, so if a drug is not available at MBS, the government aims to ensure that as many people get a short supply of the essential medicine as possible.

MSIMC

PPS and CMS formulary drugs are provided to MSJMC at no cost. The remaining drugs on MSJMC's formulary, which include 189 additional items not listed on the PPS Formulary, are purchased using hospital funds from user fees and capitation payments. The hospital procures these additional drugs on the private market, generally through a local distribution agent. While MSJMC seeks multiple quotes from trusted suppliers, they do not utilize an open tender system of any kind.

7.4.2 INVENTORY MANAGEMENT

Inventory management in public sector facilities ranges from a paper-based system at CMS to the use of a basic accounting software package at MBS that has tracking and inventory monitoring capabilities but lacks a forecasting function. The paper-based system at CMS involves pulling bin cards and entering data manually into a spreadsheet for tracking. Forecasts are generally made from historical consumption data. According to the 2010 OECS/PPS Annual Report, Antigua and Barbuda's record keeping demonstrated acceptable levels of inventory management (OECS/PPS 2011). OECS/PPS continues to prioritize developing and rolling out an electronic inventory management system that is consistent throughout the six PPS countries. A 2010 attempt on the part of Management Sciences for Health to install Orion software at Member States' CMS was ultimately discontinued because it failed to meet OECS information technology requirements (OECS/PPS 2011). OECS/PPS has been exploring other options for an integrated and computerized pharmaceutical inventory management system but none have been successful to date.

Private and public pharmaceutical agencies all utilize stock level audits, examine physical stock, and examine paper-based information to forecast needs. The public sector undertakes an audit once per quarter while some private sector entities do so monthly. Increases in the frequency and efficiency of audits are warranted and could have a positive impact on accurate forecasting of needs.

7.4.3 ARV PROCUREMENT

The Round 9 Global Fund grant to PANCAP supports first- and second-line ARVs for up to five years with an expectation of increased government contributions. Funding for ARVs was extended under Global Fund Round 9 and, as such, CMS feels they have about 12–18 months of funding security. According to CMS, the government is "weaning" them off dependence on Global Fund ARVs and there is a need to identify other sources of funding for the regimens. Brazil has an agreement with OECS/PPS to provide free first-line ARVs through 2013 with shipment costs picked up by UNICEF.

7.4.4 PRIVATE SECTOR PROCUREMENT, STORAGE, AND DISTRIBUTION

The private sector in Antigua and Barbuda procures the majority of their medicines and medical products directly from manufacturers and local distributors. All private pharmacists interviewed stated they only work with "reputable" distributors and/or drug manufacturers that are WHO prequalified, but they do not follow any guidelines from the MOH. The private pharmacies import very few generics and expressed a great deal of hesitancy in purchasing pharmaceuticals manufactured in India, as there is a general sense of mistrust and limited post-market surveillance to ensure quality.

Storage at both the private pharmacies and medical facility are unregulated, so procedures are at the discretion of management. Managers of the private facilities interviewed managed their stock electronically; several through a fairly comprehensive inventory management system via Counterpoint software. The software provides information on stocks, tracks supplies, and includes identifying information and expiry dates. The system also helps track drugs with short dates. In addition to the electronic stock management practices, the systems is aided by pharmacists at distribution sites who audit stock from one pharmaceutical supplier each week and the whole warehouse at the end of each year.

7.5 ACCESS

The government of Antigua and Barbuda makes medicines available for free, or for a nominal fee, through public pharmacies. The government policy provides for free access for persons under 16 years old and over 60 years old. Although a policy exists where fees can be collected by the pharmacist, it's worthy to note that no pharmacy collects over EC\$100 (US\$37) per day. While a defined fee structure exists, it is seemingly clear that they are not consistently collected and costs are not recovered.

There is no price control of pharmaceuticals. The Consumer Affairs Department is responsible for price control of goods and services.

ARVs are available free of charge and can only be accessed from the MSJMC pharmacy. The drug cannot be accessed from the private sector or other public facilities. In an effort to facilitate better access, the government is conducting ongoing talks to decentralize the distribution of ARVs via other public pharmacies. At the time of this assessment decentralized distribution had not yet come to fruition and would require training of pharmacy personnel before being implemented.

7.6 RATIONAL USE

Respondents indicated that treatment protocols are developed regionally within the OECS. A single, national Essential Medicines List does not exist in Antigua and Barbuda, so there is no official document tying national priorities and health problems to pharmaceutical needs. An informal Essential Medicines List, which is a combination of the OECS/PPS Formulary and a list formulated within the department, exists in the MBS. CMS is guided by the seventh OECS Medicines Formulary. This suggests that no efforts are needed to modify the list for country-specific needs. There is also no National Medicines Policy, so the country relies on OECS directives and guidelines to plan for pharmaceutical needs. In order to promote rational use, the formulary provides tools that providers can use, such as standard treatment guidelines and information on drug interactions. Beyond these tools, there does not appear to be a great deal of rational drug use promotion.

With the exception of PMTCT guidelines, no other treatments have national guidelines to align treatment protocols and prescribing practices. Practitioners follow CARICOM's guidelines for HIV/AIDS

treatment. With the formulary and OECS/PPS mechanism in place, rational selection and procurement are also in place. As previously indicated, issues with the procurement of ARVs have resulted in the inappropriate use of second-line treatments.

A National Pharmacy and Therapeutic Committee composed of the medical superintendent, chief pharmacist, a medical specialist, the director of nursing, and four consultants meets to analyze drug usage patterns and review the formulary. Although the committee reviews the formulary, a lack of relevant policies prevents the committee from having any regulatory authority. Moreover, limited data flowing to the committee from points of service impact the committee's analysis and forecasting. There is also no policy in place to regulate prescribing practices or promote the use of generic pharmaceuticals.

7.7 GOVERNMENT FINANCING

Total expenditures on medicines and medical supplies per annum are unknown. Much of the difficulty in quantifying the overall public expenditure is due to the fact that three agencies handle drug procurement and distribution in the public sector. Total expenditures in the private sector are also unknown. While data exist for some pharmacies in both sectors, there is no consolidated data collected on total expenditures. Estimated expenditures at MBS in 2011 was EC\$21,043,503.12 (approximately US\$7.8 million.) Although this is an increase from an actual expenditure of EC\$13,796,000 (US\$5.1 million) in 2010, the budget for next fiscal year is set to decrease to approximately EC\$20 million (US\$7.4 million). Respondents suggested that the decrease is due to several factors, most notably, increased availability of generic brands, reduced costs associated with greater availability of combination therapies, and decreased costs associated with greater competition in the tender process.

The budget for purchasing pharmaceuticals and medical supplies was EC\$2.5 million (US\$925,925) in 2009 and subsequently decreased to EC\$2.1 million (US\$777,777) in 2010 and 2011. Actual expenditures have declined from EC\$2,488,870 (USD\$921,803) in 2009 to EC\$1,826,152 (US\$676,353) in 2010. Expenditures saw a further decline in 2011 to EC\$1,692,467 (US\$626,840).

7.8 RECOMMENDATIONS

7.8.1 SHORT-TERM RECOMMENDATIONS

Prioritize the gazetting of regulations for the Pharmacy Act to ensure full implementation and enforcement of the legislation. Legislation is only as strong as the policies in place to regulate it. A Pharmacy Act exists in Antigua and Barbuda and accompanying regulations have been drafted. However, these regulations cannot be enforced until they have been reviewed and formally gazetted. Until the regulations are gazetted, limited oversight is provided by an overextended Pharmacy Council that lacks a mechanism to perform the most basic of functions (e.g., collecting registration fees). Moreover, the Pharmacy Council's mandate is aimed more at the regulation of the practice of pharmacy and not the actual medicines. As such, there are currently no national regulations or enforcement mechanisms in place to address medicines, such as registration, market authorization, or post-market surveillance. Given the obvious implications, a formal, gazetted document that addresses both practice and products in the public and private sector is essential. To this end, efforts could be made to engage private pharmacists to provide input and champion the effort.

Streamline public sector procurement of medicines and supplies. Procurement of pharmaceuticals in the public sector is currently carried out by three separate agencies. Efforts have been made to coordinate procurement requests to OECS/PPS, with CMS taking the lead. However,

poor forecasting, late requests, and other issues have resulted in stock-outs and, in some cases, required alternative treatment methods to be used. Efforts should be made to better streamline public sector procurement in an effort to ensure a well-coordinated, cost-effective, and efficient procurement system. One potential activity could include exploring the possibility of merging MBS and CMS to coordinate and rationalize procurements to PPS while simultaneously promoting greater cost-effectiveness.

Prioritize the promotion of rational drug use. At the time of this assessment, promotion of rational drug use was not identified as a priority within the national health system. This is despite the fact that it would help ensure that patients receive medications appropriate for their clinical needs, in doses to meet individual requirements, for the correct period of time and at the lowest cost to the patient and provider. Potential opportunities to strengthen rational drug usage include the following:

- Incorporate training on rational drug use into pre-service and in-service training requirements for all cadre of health personnel, including those from the private sector
- Adapt the regional Essential Medicines List for the Antiguan and Barbudan context to decrease cost and increase rational drug use
- Encourage relevant associations (Pharmacy Association, Medical Association) to initiate a public campaign on rational drug use.

Reinforce the existing pharmacovigilance system and encourage the active participation of the private sector. Sound pharmacovigilance practices are required to detect, assess, understand, and prevent adverse effects and other drug-related problems. While Antigua and Barbuda participates in the OECS's pharmacovigilance mechanism, reporting is extremely inconsistent. Some respondents claimed that limited reporting was due to the lack of ADR claims made by patients. In response to this, efforts to reinforce the existing pharmacovigilance system should include increasing efforts to consistently distribute PPS ADR forms and building capacity to identify and track ADR at the national level. Opportunities to incentivize reporting into the system by private sector pharmacists should also be explored.

7.8.2 LONG-TERM RECOMMENDATIONS

Revise the Pharmaceutical Act and develop a National Medicines Policy. Stakeholders recognize the deficiencies in the current legislation, specifically the lack of formal regulation. Prioritizing revision of the Pharmacy Act and gazetting of associated regulations provides an opportunity to also produce a National Medicines Policy. The process of creating a National Medicines Policy would allow the MOH to engage relevant stakeholders and discuss how to control the quality (e.g., requiring WHO pre-certified producers only) and cost of drugs in both the public and private sectors. Consistent dialogue between the sectors should be actively encouraged.

Build capacity for pharmaceutical management. The current process for inventory management among public sector providers of pharmaceuticals is inefficient and leads to poor forecasting of need. Implementing a national electronic inventory management system and providing technical assistance to build sufficient capacity to use the system would dramatically improve current inefficiencies. The private sector and PPS are both viable sources of technical assistance.

8. HEALTH INFORMATION SYSTEMS

Key Findings

- A routine data collection and reporting process in the public primary health care system exists.
- The public sector has a well-functioning surveillance system.
- There are important gaps in data collected at the central level (HID), including
 routine data from MSJMC not being collected by MOH, private facilities not part of
 the system, separate data collection and processing systems existing for different
 types of HIV/AIDS data, lack of data on household health expenditures and cost of
 health services, and incomplete data on public sector health expenditures.
- Adequate physical resources exist for health information systems in the public sector (staff and information technology at central level, integrated information system at MSIMC), but there is room for HR capacity building.
- There is a need for strengthening the efficiency of data management and the analysis, interpretation, and publication of data at the central level.
- Data at the central level, especially for planning, budgeting, and quality improvement are rarely used.

A health information system is defined as a "set of components and procedures organized with the objective of generating information that will improve health care management decisions at all levels of the health system" (Islam 2007.). The HIS typically serves four functions: (I) data generation, (2) data compilation, (3) data analysis and synthesis, and (4) data communication and use (WHO 2008). The HIS collects data from the health sector and other relevant sectors; seeks to analyze the data and ensure their overall quality, relevance, and timeliness; and converts the data into information for health-related decision-making. The functioning of the HIS at the national level provides a strong indicator of the overall health systems functioning. The following section provides an overview of the key structures, findings, and recommendations relevant to the Antigua and Barbuda HIS.

8.1 OVERVIEW

Participants in the launch meeting for this assessment in March 2011 listed HIS as one of the main health system areas that need strengthening. Although HIS strengthening was identified as a priority area in the National Business Plan for Health 2008–2010, no strategy, action plan, or policies had been developed toward this goal at the time of the assessment. The key HIS issues identified by the 2008–2010 business plan included the following:

- Absence of a health information policy document governing the procedures for data flow and coverage from data entry point to data dissemination
- Absence of legislation on data collection, processing, and dissemination, and for the protection and respect of confidentiality of information

- Negligible computerized linkages between health care providers
- Inadequate training of staff in data collection
- Inefficient allocation and utilization of trained staff (in terms of workload and qualifications)
- Limited compliance with international standards.

The assessment found that these issues remained, and identified several other important gaps in the HIS, some of which can be addressed relatively quickly.

8.2 PROCESSES FOR DATA COLLECTION, MANAGEMENT, AND ANALYSIS

The processes for data collection, management, and analysis within a health system generally fall in one of two categories: a routine HIS, or a system for program M&E.

8.2.1 ROUTINE HEALTH INFORMATION SYSTEM

The routine health information system (RHIS) of Antigua and Barbuda is managed by the HID of the MOH, which is responsible for collecting, analyzing, and disseminating public health information. The HID receives and processes several types of health data, including the following:

- **Disease surveillance data**. There is active surveillance of vaccine-preventable and other communicable and infectious diseases. Disease surveillance is the responsibility of a national nurse epidemiologist attached to the Medical Division at MOH, who collects and compiles surveillance reports on a weekly basis and forwards the reports to HID. The country report is submitted weekly to the Caribbean Epidemiology Center.
- Service utilization data from public community clinics. A set of standard monthly reports are submitted to the HID by eight community clinic districts that compile the reports from a number of clinics in their zone. The reports cover prenatal and postnatal care, child health (including immunization), and adult health (including anemia and obesity screening, chronic diseases, and cancer). The HID does not enter these reports in any electronic database or produce a routine report based on these data. Data are aggregated manually and on an adhoc basis for select indicators.
- HIV/AIDS data. HIV data are fragmented: data on VCT visits and HIV-positive cases identified
 are collected by the AIDS secretariat from all public VCT sites, the MSJMC lab, outreach events,
 and some NGO providers (such as Planned Parenthood). Data on HIV/AIDS treatment
 indicators are collected by the HID directly from the clinical care coordinator's records, and the
 AIDS secretariat only receives aggregated reports from the HID.
- **Births and deaths.** Birth and death databases are maintained in an electronic format at the HID. The division receives copies of all birth and death certificates, and enters the data in its database. The causes of death are coded according to ICD-10. The HID staff notes that AIDS deaths are underreported due to stigma and attempts to investigate suspect cases to ensure that cause of death is accurately reported. An issue with proper recording of neonatal deaths on the death certificates was also mentioned by previous assessments (PAHO 2008).

Some public facilities or programs have internal patient or integrated information systems. For example, MSJMC is in the process of rolling out an integrated electronic information system across all departments, which includes individual patient records, the tracking of quality of care indicators (such as

patient waiting time), and service utilization and financial reporting functions.¹² A computerized HIS developed with PAHO support was rolled out at the Claireview Psychiatric Hospital at the time of the assessment, providing data on incidence of mental diseases and other indicators to the HID. The AIDS secretariat has a paper-based system of tracking the number of VCT visits and HIV-positive cases identified.

Private facilities have their own internal information systems, with the four larger clinics keeping more sophisticated computerized integrated systems. They do not, however, share information with HID.

The Statistics Division at the Ministry of Planning, which is in charge of compiling national statistics on key indicators, receives some data from the HID (e.g., on causes of death, number of births and deaths) that are used for calculation of life expectancy and population growth rates. However, the format and quality of the data are often of limited utility (e.g., some reports or datasets are submitted in Word format, or data do not allow for disaggregation by geography, gender, and other factors).

The assessment found several important gaps in the RHIS that affect the completeness and quality of the data and the efficiency of the data management process. These gaps include the following:

- No reporting of service utilization or health outcomes data from MSJMC into the RHIS of MOH. Although MSJMC submits surveillance reports, the facility does not provide any other routine statistical reports to MOH. Detailed utilization and other data are collected at MSJMC and used for management decision-making. However, the MOH does not require that the hospital report such data routinely to the HID using any standard reporting procedures.¹³
- Exclusion of most private providers from the RHIS. Private facilities are not required to provide any utilization or disease surveillance reports to the RHIS of the MOH. They are not subject to mandatory reporting of HIV cases. The omission of private health facilities from the RHIS reflects the exclusion of the private sector from the national statistics in general: there is no enforcement or a targeted incentive process to encourage statistical reporting by the private sector in general. The growing number of private providers in the country means that the data collected by HID are not covering a substantial portion of health care services. Of particular concern are notifiable STIs, including HIV; many patients prefer to seek diagnosis and care for STIs from private providers (where confidentiality is perceived to be better than in the public sector), so a substantial portion of STI cases likely do not make it into the official surveillance system.
- Lack of a process for routine supportive supervision and quality control at the community
 clinics. This likely affects the quality of the data collected at the clinics, although this is one area
 that the assessment team did not investigate in detail due to limited time. Many of those
 interviewed were of the opinion that confidentiality of patient records is an issue at community
 clinics and there is a need to establish procedures and train staff to ensure confidentiality of
 patient information.
- Lack of a process for routine electronic data entry of the data from the community clinics collected at HID. This reflects inefficiency in data management at this unit and points to an urgent need for capacity building and technical assistance.

¹³ The HID makes informal and ad-hoc requests to MSJMC for certain utilization data (e.g., number of patients on dialysis).

¹² At the time of this assessment, some departments were already using the system, while others were at various points of introducing it following a three-stage roll-out and testing process.

- No process for routine analysis and reporting of the community clinic data compiled at HID. This reflects lack of demand by MOH leadership for routine health information reports.
- Lack of formal referral process. As discussed in Chapter 5, the referral process within the public sector is not formally enforced (which results in, among other issues, a lack of exchange of patient records among facilities), and there is no formal referral process between the public and private sectors.

As discussed further in Chapter 7, the Pharmaceutical Management Information System is inadequate, and data for decision-making in this area are lacking.

8.3 PROGRAM MONITORING AND EVALUATION

There is no specific MOH department or other public institution in the country with the mandate or capacity to oversee or conduct program M&E according to international standards, such as WHO methodological guidelines. Although some ad-hoc assessments related to specific MOH interventions or specific health system problems have been initiated, these were typically one-time (e.g., baseline) assessments only; the team did not find evidence of any follow-up monitoring or evaluation of solutions that may have been implemented in response to specific problems.¹⁴

Lack of data on cost of services that could support budgeting for health services was another notable gap identified by the assessment. No data on the cost of health services are collected by MOH or by the MBS, which limits both institutions' ability to allocate adequate resources and prioritize coverage of cost-efficient services when funding is limited. The management of MSJMC reported that data on cost of services were available from the hospital's HIS and used by managers to advocate for a more realistic budget allocation from MBS and the national budget. However, such data were not made available routinely to the MOH or the MBS, and it did not appear that either the MOH or MBS had ever formally requested such data from MSJMC.

As already discussed in Chapter 4, no data exist on out-of-pocket health expenditures by the population. Population-based surveys (which would be the source of such data) are conducted rarely, due to budgetary limitations at the Statistics Division. In addition, no complete data exist on total public health expenditure or their distribution (i.e., where the money goes).

8.4 RESOURCES FOR GENERATING AND USING HEALTH INFORMATION

Overall, the public sector has adequate physical resources for HIS. The HID has a staff of five in its data analysis section, overseen by a statistician/data manager. Each of these staff members has a computer, and the division is well-supplied with additional supporting resources such as information and communication technology (e.g., laptops, printers), Internet connection, transport, and administrative staff. There are no notable shortages of staff to collect and compile HIS data, nor is there a lack of related supplies (reporting forms) at public health facilities.

¹⁴ For example, as mentioned in Chapter 5 of the HS/PSA, before introducing the Clinical Guidelines for Diabetes and Hypertension in 2009, MOH conducted a patients' chart audit at community clinics; however, there has not been a follow-up audit (or a similar activity) to assess to what extent quality of care has improved. Similarly, a drug utilization review found that about 30 percent of MBS drugs were prescribed or dispensed inappropriately, but no follow-up training or monitoring was conducted.

However, inadequate training of staff in data collection and analysis has been identified as a key HIS issue, resulting in data quality issues (PAHO 2008; UNAIDS 2009; Ministry of Health of Antigua and Barbuda 2007). As noted by PAHO (2008): "A national strategy for strengthening statistical capacity in health is one of the greatest challenges for the health sector, a point not missed by the major actors and stakeholders in the sector." However, three years later, there is no evidence that such a strategy has been developed, and it remains on the list of our priority recommendations for HR in the health sector. The lack of a degree training program in statistics is one factor that constrains the availability of trained data analysts and statisticians. Prioritizing scholarships for overseas training in this area (as part of an HR strategy) should be considered. Another issue that poses a significant challenge for the availability of trained HIS staff is the nonstrategic transfer of employees in establishment posts (e.g., the M&E officer of the AIDS secretariat was transferred suddenly to another institution after receiving specialized M&E training and was never replaced).

Previous assessments of HIV/AIDS services have found that gaps in staff skills result in breaches of confidentiality of HIV status and lack of confidential and uniform records and client registers for HIV/AIDS patients (UNAIDS 2009). There was no evidence that targeted in-service training to address these issues has been implemented.

8.5 OUTPUTS

A major gap in the HIS is the lack of key HIS products, most importantly, an annual report of the MOH¹⁵ and a health statistics profile or a similar publication by the Statistics Division.¹⁶ The absence of these HIS outputs directly translates into two major issues related to governance of the health system:

- Decision-making at MOH on programs, policy, and budgets is not based on evidence. This
 makes the allocation of resources unresponsive to actual population needs (e.g., what types and
 amount of services are required in a given facility).
- Routine standard reports on health sector performance are not available to the public, which limits the ability of CSOs and the population at large to effectively participate in the dialogue on health care. However, there are no restrictions on the public's access to available health data HID compiles customized data reports (e.g., number of patients on dialysis) in response to adhoc requests it receives from the media, researchers, or other organizations; the issue is the lack of readily available and published routine data summaries at HID, and the gaps in the data HID collects routinely (MSIMC and private sector data).

The HIS products that were available at the time of this assessment included the following:

- **Printed series produced by HID.** As mentioned in Chapter 5, the primary HIS products of the HID are brochures and columns for local newsprint publications on epidemiologic trends and prevention of diseases tracked by the MOH surveillance system (such as gastroenteritis or dengue). The division's statistical outlook publication (the *Health View* brochure series) is meant to be of interest to health providers, but its contents (e.g., total number of cases of notifiable diseases) are unlikely to make it a useful resource or an incentive factor to improve quality of reporting for the community clinics producing the data.
- The Census. The Population and Housing Census was being conducted on schedule (May–June 2011) at the time of this assessment. The Statistics Division of the Ministry of Planning was

¹⁵ The last annual report from the CMO was published three or four years ago.

¹⁶ The last statistical yearbook was published by the Statistics Division 15 years ago.

leading the process, with some technical assistance from the United Nations for the more complex analyses. There was significant coverage in the press, as well as visible public information campaigns encouraging participation.

An important cross-cutting issue identified in this assessment is the overall lack of evidence-based planning or decision-making at MOH. There were relatively few cases identified in which HIS data were used adequately by MOH, and in some key areas data were not used. For example, health budgets submitted to the Ministry of Finance are not accompanied by any analysis of workload or cost data that would make the case for an increased allocation.

Data from the RHIS do not appear to be in demand for routine management purposes at any level of the system (which in turn reduces incentives for quality of reporting). An exception is MSJMC where comprehensive data reports are reviewed monthly to identify problems and to guide decisions.

8.6 RECOMMENDATIONS

The key recommendations that emerged from the findings of this assessment include several short-term activities that can be implemented more or less immediately or over the course of a year and several long-term activities that would require more time to implement comprehensively but should also be initiated promptly.

8.6.1 SHORT-TERM RECOMMENDATIONS

Establish routine reporting of utilization data from MSJMC to HID. This would require a simple communication by HID to the hospital on the type of data that the hospital should provide on a monthly basis (as all other public health facilities already do). A meeting between HID and the hospital managers in charge of data collection should address the following topics:

- Review of the of the type of data (indicators) that are already routinely collected by the hospital and are thus easily available in compiled reports
- Identification of any gaps in the type of data that HID collects on service utilization (e.g., by comparison with what is collected from other public facilities, and/or by discussing what other indicators could be relevant for HID's national health sector reports and for MOH decisionmaking)
- Discussion of the rationale and need for MSJMC to add (or not) the indicators identified in the preceding step to the list of data already being collected at the hospital
- Mapping out of the process, persons responsible, and frequency of the reports to be submitted by MSIMC to HID
- A "test" round of reporting to be planned and a follow-up meeting conducted to identify
 anything that may need to be modified in the initial reporting plans. Both the "test" and the
 meeting should be prescheduled at the beginning to ensure timely progress.

Seek technical assistance for computerizing data entry of routine reports at the HID and at the AIDS secretariat's office. The solution could be an easy-to-build and use database (e.g., in Excel or Access format) that can be implemented relatively quickly and include training of HID and AIDS secretariat staff to use and maintain the databases.

Identify training needs across the health system on data analysis, data quality, and information usage, and prepare a plan for securing technical assistance for training (e.g.,

from PAHO, USAID). This planning process should be a collaborative activity among HID, MOH staff in key positions that require use of data for decision-making, and the Statistics Division staff in charge of health statistics. HIS areas that emerged in this assessment as priorities for capacity building include the following:

- Statistical, analytic, and information presentation capacity for health sector data
- MOH capacity in the area of effectively using data for evidence-based decision-making (for senior leadership and technical leads).

Prepare and publish an annual MOH report on health outcomes and service utilization.

This comprehensive report will be a showcase for HID, and will highlight the power of data and inform the dialogue on the health sector among government decision makers, civil society, and the public at large. Consider seeking technical assistance for the completion of the first such report (that will help establish a report template and may assist with capacity building for specific, more complex analyses). The HID should take the lead, and collaboration with the Statistics Division (particularly for more complex statistical analyses) should be considered. Examples of such reports from other countries in the region could be considered in the initial preparatory stage.

8.6.2 LONG-TERM RECOMMENDATIONS

Initiate the development of a national strategy for strengthening statistical capacity in health. This should be part of the MOH's overall HR strategy for the public sector and/or the MOH strategic plan. Prioritizing scholarships for overseas training in this area is essential and should be advocated with appropriate government and donor (e.g., PAHO) agencies.

Develop and implement a plan for systematic routine health information dissemination.

This plan will build on existing initiatives already implemented by HID and should take into consideration the short-term activities outlined above. One specific recommendation is to improve the functionality of the MOH website and regularly post current data, reports, and other information products.

Establish routine private sector data collection. To generate interest and support from private providers in data sharing, consider the following steps:

- Initiate a public-private dialogue on data usage and data needs.
- Highlight the value of complete (public and private) health sector data for efficient service and resource coordination across both sectors (e.g., select a few service delivery categories and collect utilization and service cost data from both sectors to showcase how such information can be used for effective and evidence-based decision-making).
- Ensure that the reporting burden for private providers is minimized by involving them in the process of developing the reporting forms and procedures they would use.

9. PRIVATE SECTOR CONTRIBUTIONS TO HEALTH

Key Findings

- The private health sector in Antigua and Barbuda is steadily growing.
- There is little or no formal interaction between the public and private health sectors.
- There is minimal regulation or oversight of the private health sector.
- The private health sector has resources and expertise available for the public sector to

This chapter synthesizes data on the private sector in Antigua and Barbuda, incorporating information presented in previous chapters supplemented by additional information to provide a comprehensive description of the sector. The chapter begins by describing the policy and business environment in which the private health sector operates, including the government's capacity to provide stewardship of this sector. Next, the scope, size, and breadth of the private health sector and its human resources is presented, including a discussion of linkages with the public health system. Private health financing and the private sector role in the supply chain are also reviewed. The chapter concludes with recommendations on how to better coordinate and integrate the private health sector into the overall health sector, harnessing the private sector's resources to complement public health priorities.

9.1 OVERVIEW

The private health sector in Antigua and Barbuda appears to be growing, based on the recent increase in private medical/surgical practices on the island. Considering the population size, and compared to other OECS countries, Antigua and Barbuda has a sizable private health sector, including private physician offices, labs, and pharmacies. Physicians that staff private medical/surgical clinics are more likely to be specialists and practice solely in the private sector, whereas those that have private physician offices are often general practitioners who also work in the public sector.

The recent development of the private sector belies the fact that it is largely unregulated, a point of concern for both public and private sector stakeholders. The lack of government oversight of the private sector in the areas of service delivery, continuing medical education, and pharmaceuticals has largely resulted in a parallel system, as opposed to the private sector being an integral part of the overall health system.

Despite the apparent separation of the sectors, some informal cooperation exists, and private practitioners expressed a willingness to improve communication and collaboration with public sector counterparts in the interest of improved patient care. However, true partnership can only be achieved if the public sector shares this intent to improve relations and better engage the private health sector.

9.2 BUSINESS AND POLICY ENVIRONMENT

The establishment and functioning of private health facilities are largely a function of the overall business climate, as well as government regulations at both the facility and individual level.

9.2.1 BUSINESS ENVIRONMENT FOR PRIVATE COMMERCIAL HEALTH PROVIDERS

The business environment for private commercial health providers is relatively friendly in Antigua and Barbuda. The country ranks high on the *Doing Business* report, ranking number 64 out of 183 countries (International Finance Corporation 2010). Although opening a new business is fairly easy, paying taxes is a relative challenge (earning the country a ranking of 132 out of the 183 countries in the quality of its business environment), as businesses on average pay 56 payments a year and nearly 42 percent of income goes to taxes.

Private practitioners reported varying experiences with regard to accessing credit from local banks to establish or improve their health facility. Overall there appear to be challenges in accessing loans for private health practices on-island, in some cases causing provider owners to self-finance or use creative means to finance their private practices. The main disadvantage that practitioners in Antigua and Barbuda face in terms of access to finance is the complete lack of medical equipment leasing, thus requiring practices to seek alternative financing for such capital investments. Some bank financing for the private health sector does exist, although, as is true for most small businesses, medical practices are challenged to access it. There are no tax incentives or other government incentives for private health providers in Antigua and Barbuda.

9.2.2 REGULATIONS FOR OPERATING PRIVATE HEALTH FACILITIES

As noted in Chapter 3, opening a private facility does not require any special government permissions or facility licensure. Moreover, at present there are no standards, regulations, or legislation governing the operation of private health facilities. In response to this gap, Antigua has drafted a Private Medical Facilities law based on legislation enacted in Guyana. Although this legislation is a positive first step to addressing the lack of oversight of private health practice in Antigua, it is currently in draft form and plans for formalizing this law are unclear.

9.2.3 REGULATIONS FOR PRIVATE PRACTICE

As individual health practitioners, private health providers fall under the Medical Practitioners Act, which was enacted in 2009. This act provides for the registration, licensing, and regulation of the practice of medicine in Antigua and Barbuda. It also established the Medical Council, which is tasked with enforcing licensing of health workers and a code of ethics for medical practice. The Medical Council consists of seven members, two of whom are private sector representatives. Although there is a Disciplinary Committee as part of the Medical Council, systematic enforcement has been uneven. At the time of assessment, a timeline for development and passage of regulations guiding enforcement of the Medical Practitioners legislation was not available.

9.2.4 ROLE OF PRIVATE HEALTH SECTOR IN GOVERNANCE

The extent to which private health providers have a voice in governance of the health sector is an important indicator of collaboration, and involvement in medical councils and professional associations is one way to exercise such a voice. It is worth noting that private practice physicians play a key role in both the Medical Council and the Medical Association in Antigua and Barbuda. The current chair of the

Medical Council owns a private medical/surgical clinic on the outskirts of St. John's. The Medical Association, which serves as a professional membership body for physicians on the island, is currently headed by a private practice physician. According to association records, there are 64 physicians solely in private practice on the island, although the assessment team was not able to verify this information, given the lack of a central registry within the MOH.

9.3 PRIVATE HEALTH SERVICE DELIVERY

An important aspect of this assessment was to assess the current and potential contributions of the private sector to health. The extent to which the private health sector is engaged in service delivery is a key element of measuring private sector involvement. However, information on private service delivery was somewhat difficult to obtain, given that no central registry of private health facilities exists in Antigua and Barbuda. Information presented in this section primarily reflects interviews with private sector stakeholders, as well as information obtained from yellow page listings.

The majority of private facilities are registered businesses, although there appear to be informal (part-time) private practices that are not registered. Table 9.1 presents information on various private health sector actors in Antigua and Barbuda. Given the lack of available data on private health businesses, and the variation in estimates between individual stakeholders and phone book listings, ranges are provided. Documenting the private health sector in more detail is one area for possible future technical assistance.

TABLE 9.1: OVERVIEW OF PRIVATE HEALTH SERVICE DELIVERY IN ANTIGUA AND BARBUDA

Facility	Capacity and Staffing	Services		
Adelin Medical Centre	Staff – N/A 20 beds	Inpatient care Surgical procedures Obstetrics and gynecology, including deliveries		
Medical Surgical Associates	3–4 physicians Beds – N/A	Surgical procedures, including general, laparoscopic, bariatric, vascular, trauma, and breast		
Belmont Clinic	I full-time physician, specialists on call; 7 beds	Diagnostics and radiology (ultrasound, x-ray, CT scan, digital mammography, MRI, EKG) Surgical procedures (2 operating theaters) Inpatient care Pharmacy on-site		
Winter Medical Centre	Approximately 5 physicians; Beds – N/A	General surgery Otolaryngology Urology Obstetrics and gynecology, including deliveries Breast cancer screening (mammography)		
Private laboratories	5 labs; staffing varies by facility	Laboratory diagnostics (incl. STI and HIV blood screening)		
Private pharmacies	Approximately 20 pharmacies; staffing varies	Retail sales of pharmaceuticals and medical supplies		
Private physician practices (individual/small outpatient	Between 20 and 64 practices ¹⁷	General family medicine Dental care Gynecology		

¹⁷ Yellow pages listed 20 physicians, eight specialists; Medical Association reported 64 members in private practice.

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practices)		Pediatrics STI diagnosis and treatment HIV testing HIV/AIDS outpatient care ¹⁸
Planned Parenthood	I clinic 5 full-time staff and I part-time OB/GYN doctor	Sexual and reproductive health services, including family planning (oral and injectable contraceptives, condoms, emergency contraceptives, intrauterine device), pregnancy tests, pap smear tests, and VCT; sales of contraceptives at highly subsidized prices
Caribbean HIV/AIDS Alliance	N/A	HIV outreach services and testing to high-risk populations

As evidenced by Table 9.1, the private health sector in Antigua and Barbuda includes private health facilities (with surgical capabilities), private health practices (consultation), private labs, private pharmacies, and nonprofit organizations such as Planned Parenthood and Caribbean HIV/AIDS Alliance¹⁹ that provide education, outreach, and health services, particularly related to sexual and reproductive health. The assessment team identified four private health facilities that provide surgical procedures and visited three of the four facilities. Despite numerous attempts, the team was not able to reach Adelin Medical Centre. Several stakeholders indicated that the facility may be experiencing some financial difficulty, but it was not possible to confirm this with representatives of the facility. As of 2007, more than 7 percent of births occurred at Adelin Medical Centre, and for many years it was reported as the only private medical center on the twin islands (PAHO 2008). Although a recent UNGASS report indicated there were four private labs in operation, at the time of writing, a fifth private lab had opened its doors and is currently in operation. The number of pharmacies – estimated at 20 – has reportedly remained fairly stable in recent years, with only one or two closures in recent memory.

9.3.1 UTILIZATION OF PRIVATE HEALTH SERVICES

In the absence of a population-based Demographic and Health Survey, data on health care seeking in the private health sector is lacking. However, a recent Country Poverty Assessment conducted in 2007 does offer some information on utilization of private health services. Table 9.2 provides data on where residents first sought care for a medical need, broken down by type of facility. Over 40 percent of respondents initially sought care in a private facility, with the majority going to private clinics. This was most notable for the top two wealth quintiles, although even among the poorer respondents, approximately one-quarter sought medical treatment from a private provider (Kairi Consultants Limited 2007).

¹⁸ Provided by a single practitioner

¹⁹ At the time of the assessment, Caribbean HIV/AIDS Alliance was not in operation, as previous project funding had ended. However, it is our understanding that funding from USAID/Barbados and the Eastern Caribbean reopened the local Caribbean HIV/AIDS Alliance office in June 2011.

TABLE 9.2: FIRST-PLACE MEDICAL ATTENTION SOUGHT IN ANTIGUA AND BARBUDA, BY WEALTH QUINTILE

Place First Visit Was Made	Per Capita Consumption Quintiles					All Antigua
	Poorest	II %	III	IV %	Richest	and Barbuda %
			%			
Public hospital	24.2	30.9	27.7	17.7	17.6	22.2
Private hospital	3.4	0.0	2.5	1.6	0.0	1.3
Community health clinic	47.6	34.2	40.1	35.0	21.3	33.3
Private doctor/dentist	24.8	28.6	20.7	42.4	57.9	39.1
Out-of-state hospital	0.0	0.0	0.0	0.0	1.7	0.5
Pharmacy	0.0	0.0	3.2	0.0	0.0	0.5
Not stated/other	0.0	6.3	5.8	3.3	1.5	3.1
Total	100	100	100	100	100	100

Source: Kairi Consultants Limited (2007).

While informative, these data should be considered with caution, given that they are somewhat dated and key changes (such as the establishment of MSJMC and free care in public primary facilities for all ages) have occurred since the survey was conducted.

Information gathered during the assessment indicated that the profile of clients at private facilities is concentrated among wealthier residents, those with private health insurance, and tourists. However, most private practitioners noted that they serve a cross-section of patients and not strictly the wealthy. As discussed below, there are reasons why less wealthy clients may seek services in the private sector, even with the advent of the new public hospital.

9.3.2 LINKAGES/REFERRALS BETWEEN PUBLIC AND PRIVATE HEALTH FACILITIES

A previous report noted that Antiguans have personal choice of health care providers, further pointing to anecdotal evidence of mobility of clients between private and public providers for medical care. Choice of provider was determined by the need for a second opinion and/or the availability and cost of services (PAHO 2001). Based on interviews with a broad spectrum of stakeholders, this assessment also found evidence of client mobility between the sectors, underscoring the importance of effective communication and cooperation between public and private health providers. There were numerous reports of patients seeking care from private providers due to unavailability of services, procedures, or supplies at MSJMC. For example, patients needing an MRI could get this from a private clinic given that the MRI at MSJMC was not functional until May 2011, and since cholesterol reagents were not available

at MSJMC at the time of the assessment, many patients were directed to private clinics for the test. Some patients expressed dissatisfaction with the costs charged by private facilities, or with the limited or nonexistent reimbursement from MBS. Other challenges reported were related to physician communication and referrals between private physicians and MSJMC physicians. For example, a patient may go to a private clinic to have diagnostic tests, and when the problem is diagnosed, may decide that the cost of the procedure is too high in the private clinic and ask to be referred to MSJMC. In some instances, the patient may face difficulty getting admitted, or the admitting physician may not "trust" the diagnosis of the private physician, insisting that diagnostic tests be re-administered, thus delaying treatment, perhaps unnecessarily. In other cases, MSJMC patients who might benefit from specialist care or consultation from a private physician have either not received such care or received it only after a lengthy delay, causing negative repercussions.

9.4 HEALTH INFORMATION

Related to patient referrals is the issue of reporting health information. Private health practices have various systems for storing information about their patients, with the larger clinics keeping more sophisticated electronic patient data systems. As previously noted, private providers are not required by law to report incidence of communicable diseases, including HIV, nor any other information on service provision. Although some private labs reportedly do provide data to the MOH, for example, on positive HIV test results, compliance is not uniform given the lack of a legislative mandate. (See Box 9.1)

BOX 9.1: Private Contributions to the HIV Response in Antigua and Barbuda

HIV Prevention and Testing

HIV testing is offered at eight public health facilities across the island, as well as at the Planned Parenthood clinic and through various community outreach events, including the regional HIV testing day, which occurs each year in June.

In recent years the local affiliate of CHAA has been a significant partner to the NAP, particularly in efforts to reach out to high-risk populations and encourage HIV testing and follow-up. CHAA/Antigua employs "animators" – trained peer educators/counselors – who provide community outreach in the form of education and HIV counseling and testing to the most-at-risk populations, especially immigrants and sex workers. CHAA provides tents for community HIV outreach events organized by the NAP, including testing days and targeted outreach in response to recent concentrated outbreaks. The nonprofit also contributes condoms to protect most-at-risk populations against contracting HIV.

As part of a regional public-private partnership between ministries of health, Scotiabank, and the Caribbean Broadcast Media Partnership (CBMP), the NAP has collaborated with the local Scotiabank branch to organize testing days on Antigua and Barbuda since 2008, and was poised to launch the fourth event at the time of this assessment. Scotiabank opens up its branch for HIV testing and counseling, and senior staff are present and visible throughout the testing days, to project acceptance and encouragement for all to know their status. Bank staff volunteer throughout the day and Scotiabank helps to promote the event, along with support from CBMP, in the form of radio ads. Local media also give free time to the NAP to air both TV and radio spots promoting the events. The previous record for number of HIV tests during a single event was 235, and the partnership was aiming to surpass this in 2011.

HIV Workplace Policies

Despite the fact that a recent report cited the existence of an HIV workplace policy in Antigua and Barbuda, dating back to 2001, the assessment team was not able to secure a copy of this policy (PAHO 2008). The prevailing view among respondents is that the majority of workplaces do not have an HIV policy or program, nor is there any enforcement of such. During a meeting with several trade unions, a relatively new discrimination policy (which includes HIV/AIDS) developed by one of the unions was circulated. This is a positive development, but it is not clear the extent to which the policy has been adopted and, furthermore, whether the government of Antigua would be able to enforce such a policy. The assessment team learned of an International Labor Organization consultation planned for May/June of 2011 with the stated intent of developing a new workplace policy covering HIV/AIDS, in collaboration with the Ministry of Labor. As a recent update to this initial meeting, a technical working group was formed to develop an HIV workplace policy for Antigua, and a follow-up meeting has been scheduled for September 2011.

HIV Treatment

Most HIV treatment, including ART, is provided by a single private health practitioner, Dr. Prince Ramsey, who also serves as the clinical care coordinator for the AIDS secretariat. The clinical care coordinator position was originally created and funded by a Global Fund grant in 2005, but is now supported by the MOH. While some HIV patients receive treatment from their private physician for care, most who seek care and treatment do so at the private office of Dr. Ramsey. ARVs are purchased from the pharmacy at MSJMC. Antigua has considered decentralization of HIV treatment in the past (e.g., providing care and treatment in the six public health clinics), but all of the necessary training has yet to happen.

The latest UNGASS report, which is prepared by the AIDS secretariat, stated "screening of blood and blood products for HIV and other STI is carried out at the public and private laboratories and reports are submitted to the AIDS Secretariat on a regular basis" (UNAIDS 2009). However, a recent Daily Observer article suggested disagreement between the AIDS secretariat and Dr. Ramsey as to whether or not private labs are reporting data on HIV-positive cases. The official position of the AIDS secretariat is that two of the now five private labs onisland do report positive cases to the National AIDS Program. Two of the remaining private labs have refused to provide such information, noting that there is no legal requirement to do so. The fifth lab has only recently opened, and it is not yet known what this lab's policy will be. There appears to be some openness on the part of this subsector to report HIV test data to the NAP, with one technician stating "(i)f there is any [government] program, we would be willing to get on board with that" (Benjamin 2011). Such a position suggests there may be room to bring the public and private sector stakeholders together to openly discuss the importance of inclusive reporting of HIV cases, and next to agree upon a strategy to implement this collective process. As an example of the willingness of this subsector to contribute to public health goals in Antigua, private labs recently participated in World Blood Donor Day (June 14, 2011), which aims to create wider awareness of the importance of voluntary blood donation and encourage more people to become regular blood donors. Private labs were open to the public on June 13, 2011 (World Health Organization, 2011).

Another informal partnership with the private sector involves private pharmacies. NAP refers HIV-positive clients to two private pharmacies for drugs to treat opportunistic infections (not ARVs) using coded prescriptions to ensure confidentiality. The pharmacies then submit monthly invoices to NAP for reimbursement.

9.5 HUMAN RESOURCES IN THE PRIVATE SECTOR

Much as there is no existing registry of private health facilities in the country, up-to-date information on private practitioners is also nonexistent. Through stakeholder interviews with private sector informants, the assessment team was able to piece together the following information about private health practitioners in Antigua and Barbuda:

TABLE 9.3 HUMAN RESOURCES IN THE PRIVATE SECTOR

HRH Cadre	Number
Private surgeons	Less than 10
Private general practitioners (private doctors' offices)	Up to 60
Private pharmacists	Approximately 30
Private nurses	No data

9.5.1 DUAL PRACTICE

Information emerging through stakeholder interviews suggests that dual practice (i.e., practicing in both the public and private sectors) is common in Antigua and Barbuda. The practitioners most likely to engage in dual practice are those who work part time in a public health facility and part time in a private doctor's office. However, reportedly no legislation or guidelines informing dual practice exist in Antigua. One prevailing view from the general public is that long delays in the Emergency Room at MSJMC are the result of hospital doctors beginning their days in their private practice and therefore not arriving at the hospital until later in the day.

In some other Caribbean countries, private physicians, oftentimes specialists, have privileges to see patients in the public hospital. This is a good use of on-island resources, particularly if the private physician has a specialty not available among the full-time staff at the hospital. In the case of Antigua and Barbuda, it was difficult to come to a conclusion regarding the ability of private surgeons to gain privileges at MSJMC. Although the official statement from MSJMC is that any private physician can apply and get privileges to see patients admitted to the hospital as long as the physician agrees to perform rounds for their patients, some private physicians suggested that this policy is not uniformly enforced, and in fact reported they had been denied privileges. Ideally, MSJMC would allow private physicians full privileges, while setting reasonable parameters.

9.6 PRIVATE SECTOR ROLE IN SUPPLY CHAIN

9.6.1 GOVERNMENT REGULATION OF THE PRIVATE PHARMACEUTICAL SECTOR

As noted in Chapter 7, pharmaceutical regulation is relatively weak in Antigua and Barbuda. Until regulations pertaining to the Pharmacy Act are gazetted, enforcement of the act is seriously impeded. For example, in effect there is no licensing of pharmacists, wholesalers, or retail pharmacies without these regulations in place. In addition, although the MOH verifies/checks that a specific type of drug is licensed, there is no formal procedure for assuring the quality of drugs imported through the private market. This raises questions about the safety of private provision of medicines, a concern shared by public and private sector stakeholders alike.

9.6.2 PRIVATE SECTOR PROCUREMENT

The lack of guidelines on the importation of medicines means that the private sector is left to self-regulate its imported products or purchases from local distributors. Most informants who procure

medicines in the private sector took this responsibility seriously and avoided purchasing from unknown or questionable suppliers. Many respondents also expressed concern about the ease of bringing medicines into the country. Individual procurement is generally more expensive, and these costs are typically passed on to the client.

Use of electronic inventory management systems is common among private pharmacies. Storage of drugs at private pharmacies and clinics are not regulated, so procedures are at the discretion of management. Some private facilities interviewed utilize a comprehensive management software system/program known as Counterpoint. The software provides information on stocks, tracking supplies, identifying information, and expiry dates, and helps track drugs with short shelf lives. Use of electronic information systems aids in forecasting of drugs and as a result helps contain costs.

Certain drugs are not procured by or dispensed from private pharmacies. In fact, ARVs can only be obtained from the MSJMC pharmacy. Interestingly, MBS originally considered the option of dispensing covered drugs through private pharmacies and then reimbursing beneficiaries, as has been the practice in other countries. However, this never took effect and instead MBS opted to open and operate its own pharmacies.

9.6.3 PUBLIC-PRIVATE COOPERATION

When MBS pharmacies experience stock-outs, through an informal agreement with private pharmacies MBS beneficiaries can be reimbursed for costs associated with procuring the drug in the private sector. To be reimbursable, the drug must be on the formulary and the client needs to get a stamp from MBS indicating that the prescribed medication is not available in any of the MBS pharmacies. After the client obtains the stamp, he/she can fill the prescription in a private pharmacy and be reimbursed at 100 percent of the cost. The maximum reimbursable amount is 10 day's dosage, because it is assumed that any medication can be obtained by MBS within 10 days of a reported stock-out. This is also because private pharmacies buy in small quantities, so if a drug is not available at MBS, the government wants to ensure that as many people get a short supply of the essential medicine as possible.

9.7 PRIVATE FINANCING FOR HEALTH

9.7.1 PRIVATE EXPENDITURES ON HEALTH

As noted in Chapter 4, data on health expenditure are limited, and this is particularly true for private expenditure. According to the most recent available data, in 2009 government spending made up nearly 75 percent of total health expenditures while private spending comprised the remaining 25 percent. ²⁰ WHO data from 2008 indicate that 87 percent of private expenditure in Antigua is out-of-pocket, suggesting a relatively low level of private insurance.

9.7.2 PRIVATE HEALTH INSURANCE

It is estimated that 15,000 residents have private health insurance, usually through their employers, paying monthly premiums ranging from EC\$160 (US\$59) per person to EC\$430 (US\$159) per family. Companies that provide health insurance to their employees are usually multinationals, or companies run by Antiguans that have worked in countries with health insurance. Through this mechanism, over 15

²⁰ World Health Organization National Health Accounts data supplemented by national data at http://data.worldbank.org/indicator/SH.XPD.PUBL (accessed September 1, 2011)

percent of the population would appear to have effective risk pooling for major private sector medical expenses, with health insurers collecting about EC\$29 million (US\$10.7 million) in premiums.

Among the companies interviewed during the assessment, many offered private health insurance benefits to their employees, although most policies excluded HIV/AIDS services. One exception was Scotiabank, which has a strong reputation in the region for nondiscriminatory practices related to HIV/AIDS. According to one source, whereas five years ago formal sector workers were less interested in health insurance, now they are requesting it in collective bargaining, and companies would rather provide insurance coverage voluntarily and not include it in collective bargaining agreements. Reportedly poor conditions at the now-defunct Holberton Hospital may have driven this interest in private health insurance, which by and large covers services delivered by private physicians. While it would seem that the opening of MSJMC might alleviate this interest, respondents had mixed opinions as to whether this is the case.

9.7.3 INDUSTRY PERSPECTIVE

A discussion with several trade unions revealed that approximately 50 percent of the workforce is unionized, with at least 15,000 members in the two largest unions (Antigua and Barbuda Workers Union and the Antigua Trade and Labor Union). The unions' biggest health concern is occupation health and safety. From the point of view of the workers, they seem relatively happy with the health care system and view it as essentially free, thus it does not seem likely there will be pressure for national health insurance from this group.

9.8 RECOMMENDATIONS

9.8.1 SHORT-TERM RECOMMENDATIONS

"Map" the private sector to serve as a baseline. This assessment provides an initial inventory of private sector facilities and providers. Technical assistance could be provided by the SHOPS project to develop a simple database, which contains: (1) name of facility, (2) staffing, (3) services offered, (4) location, (5) hours, and (6) contact information.

Normalize coordination between public and private sectors. Both sides, public and private alike, would like better communication and more interaction between the sectors. The following actions could help institutionalize public-private interactions:

- Document and acknowledge private sector contribution in the health sector. This report can start the process of documenting and formalizing collaborative activities, even if informal.
- Start involving the private sector in MOH operations. Set a goal (e.g., once per month) to
 identify opportunities to invite private sector participation and act upon these goals. The CMO
 signaled plans to convene heads of associations and councils; this would provide a good
 foundation for engaging private stakeholders.
- Mobilize private sector champions to promote current policy proposals. The Pharmacy Act
 presents an ideal opportunity to involve the private sector and to tap into its expertise. One
 consideration is to invite the Caribbean Association of Pharmacists in Antigua and Barbuda to
 facilitate a participatory discussion between public and private sector stakeholders and
 consumers. A Caribbean Association of Pharmacists consultant could also help bring regional
 and international best practices to the discussion. Private pharmacists could be enlisted to help
 the MOH build support to fast-track the Pharmacy Act.

Clarify and enforce guidelines on dual practice in the public and private sectors. There is no clear guidance on terms and conditions for dual practice, which has resulted in individual interpretations and missed opportunities to leverage specialist health services on-island. SHOPS proposes assisting the MOH to establish clear and transparent guidelines and can serve as a third party to facilitate negotiation between the public and private sectors.

Establish, in stages, the terms and conditions for private provider use of public facilities. The MOH and private sector need to reach an agreement on terms for hospital privileges that are fair to both parties.

Formalize the referral process between private providers and MSJMC. This is particularly important to ensure continuity (and thus quality) of individual patient care, as well as optimal use of specialized health resources available in-country (such as services not available at MSJMC but provided at some private clinics). (See also service delivery recommendations.)

9.8.2 LONG-TERM RECOMMENDATIONS

Work with the private sector to agree on health indicators to report. Private sector providers indicated they would be willing to report to the MOH on key health indicators, and case reporting of positive HIV tests is of particular importance. The SHOPS project proposes convening a small group of MOH officials and private sector providers to agree on a short list of key health indicators and an easy and quick reporting format. (See also HIS recommendations.)

Conduct a rapid household health expenditure survey to quantify the amount and distribution of private health expenditure, including health insurance premiums and benefit payments. This could be conducted as part of an NHA exercise, which would show the full amount of funding flowing into the Antiguan health care system from various sources, including MBS, health insurance, and private payments – both at MSIMC and in private facilities. (See also health financing recommendations.)

Explore establishing standard rates for copayments per health procedure through MBS, and then include private facilities in this arrangement.

Tap one of the private insurance companies on-island under a competitive "third-party administrator" contract to process claims for the MBS.

Gauge interest in a regional network of private practitioners, and if interest substantiates it, help establish such a network. Informal relationships (e.g., between an Antiguan private surgical practice and Tapion private hospital in St. Lucia) already exist, but there may be a benefit to formalizing and expanding these networks.

10. DISCUSSION AND CROSS-CUTTING RECOMMENDATIONS

Specific findings within each of the six building blocks are important to address individually. However, there are a number of cross-cutting, interrelated issues that are impeding the functioning of the health system and its ability to offer sustainable, quality health services. Addressing these challenges holistically will result in positive and sustained impact and will contribute to a more effective health system in the long term. These issues and related recommendations for action are summarized below.

In developing cross-cutting recommendations to strengthen the health system and ensure sustainability of the HIV response, the team focused on the objectives of improved access, improved quality, and increased financial sustainability. Overall, achieving these objectives will require a renewed focus on sustainable resource allocation and quality, which will include undertaking the following:

- Investing in financial analysis (costing) to inform strategic planning
- Prioritizing updates and passage of key legislation and gazetting of regulations to enforce enacted laws
- Improving access, efficiency, and quality at all levels of care
- Pursuing opportunities to engage the private sector as a partner.

The findings behind these cross-cutting themes and corresponding recommendations are presented in Table 10.1.

TABLE 10.1: CONSOLIDATED FINDINGS AND CROSS-CUTTING RECOMMENDATIONS

Findings	Recommendations
Invest in financial analysis (costing) to inform s	strategic planning
The MOH is in urgent need of detailed health services cost data to make informed funding decisions in the short term as well as to develop a long-term plan for funding MSJMC while preserving primary health services. Improved cost data will enable the MOH to prioritize health expenditures within the envelope of available funding. In the absence of such planning, the health care system is at risk of being in continual crisis, with serious consequences. MSJMC may go bankrupt, or the management contractor may exit, leaving the MOH ill-prepared to pick up the slack. Primary care may suffer because of the pressing demands of	Determine the estimated costs of operating MSJMC, with specific costing of certain high-tech services such as MRIs. Such an analysis should include the necessary cost of equipment maintenance and replacement as the facility ages. Determine the likely funding available from the annual budget over the next several years, given economic projections and likely collections by the MBS. Based on this, develop a financial and service plan that balances reasonably expected health care resources and commitments. Consider all new high-tech medical expenses within the context of this plan (e.g., expansion of renal dialysis, expanded cancer care) and protect primary care services and purchases of essential drugs.

Findings

secondary and tertiary care patients, as is already happening with HIV and cholesterol tests.²¹

To sustain good primary care performance and address the chronic diseases that are increasingly burdening the country, a financial analysis combined with a revised health care strategy is necessary.

Recommendations

Develop a regular process of strategic planning, and create a health sector strategy, including a plan for HIV/AIDS service delivery. Antigua and Barbuda could seek technical support to establish a sustainable planning process within the MOH, potentially using the resources of a health steering committee. The contents of this report could be utilized to inform the national strategic plan. Although there may be advantages to developing a separate HIV/AIDS plan, the assessment team recommends integrating the HIV/AIDS strategy into the broader health sector plan.

Prioritize updates and passage of key legislation and gazette regulations to enforce enacted laws

The MOH is challenged by a scarcity of resources, including financial and human resources. Moreover, the MOH must rely on the legal department of the Ministry of Justice to assist with drafting laws and amendments and submitting them for approval. These factors combined have resulted in lack of movement on critical legislation and regulations, as is evident in Table 3.2.

Secure technical assistance to address bottlenecks in finalizing legislation and gazetting regulations. Priorities include passage of the Pharmacy Amendment Act, developing regulations for the Medical Practitioners Act, and amending the Medical Benefits Scheme Act. Councils and professional associations could serve as a resource in supporting these efforts. PAHO could be a potential source of expertise, through seconding a legal analyst to the MOH for a finite period to draft regulations.

Improve efficiency and quality of care at all levels of care

Antigua and Barbuda has a sufficient number of health facilities (both public and private), distributed evenly across the country. There is adequate availability and access to primary health care, and most types of specialized health services are available in-country at MSJMC, as well as at a number of modern private clinics. However, the assessment team found gaps in terms of the efficiency of service delivery and quality assurance. Less-than-optimal efficiency is exemplified by an over- reliance on MSIMC for minor health issues, as evidenced by 30,000 visits (nearly one visit for every three residents, and equal to one-third of all PHC visits) to the Emergency Department of MSJMC in 2010. Also, HIV/AIDS treatment is provided by a single provider. In terms of quality assurance, there is no systematic quality improvement process at the primary health care level. And although MSJMC tracks some performance indicators, there is currently no oversight by MOH. Finally, patient referrals are marked by limited follow-up between levels of care in the public sector and strained relations and

Establish and enforce a referral system from community clinics to MSJMC, which could reduce reliance on MSJMC for primary care. Consider extending clinic hours at select public health facilities. Implement an enforceable referral policy to ensure that patients use the appropriate primary care facilities. Explore the feasibility/acceptability of introducing fees for non-referred ambulatory patients at MSJMC.

Pursue integration of ambulatory HIV/AIDS care into the primary health care system. Decentralizing these services is necessary to ensure the sustainability of HIV/AIDS care into the future, given declining external aid, while also expanding the human resource pool capable of responding to the epidemic, which is currently the sole responsibility of one individual. Decentralization would require an initial investment in staff training (medical officers and pharmacists) but would be cost-efficient in the long term. This should be guided by input from HIV-positive clients, and efforts should be made to address stigma and discrimination concerns.

²¹ These tests were unavailable due to a lack of reagents at the time of the assessment.

Findings	Recommendations
communication between private and public sector providers.	

Pursue opportunities to engage the private sector as a partner

There are many indications that the private sector is growing in Antigua and Barbuda, as evidenced in particular by the increase in private surgical clinics in recent years. The MOH should consider this growth a positive development and view the private sector as an untapped resource that could help address identified gaps in the health system.

The private sector has a number of specialists who could be contracted out to help fill human resources gaps and provide specialty care to patients at MSJMC. Currently such collaboration appears to be constrained, but interviewed private physicians signalled willingness to pursue such an arrangement.

Private providers currently hold leadership roles on the Medical Council and the Medical Association. Both entities could serve as an entry point for greater engagement and collaboration with the public sector. Normalize coordination between public and private sectors. Both sectors, public and private alike, would like better communication and more interaction between the sectors. The following actions could help institutionalize public-private interactions:

- Document and acknowledge private sector contribution in the health sector.
- Involve the private sector in MOH operations.
 MOH plans to convene heads of associations and councils, which could provide a good foundation for engaging private stakeholders.

Given that state-of-the-art medical equipment is available in the private sector, and the health system depends upon this equipment at times, the MOH could formalize an arrangement with the private sector (e.g., contracting, leasing) that could defray its future recurring costs of depreciation and maintenance of hospital equipment.

Engage private providers to provide input and help guide long-overdue legislation and regulations pertaining to the private health sector. Priorities include gazetting regulations for the Pharmacy Act and developing regulations for the Medical Practitioners Act.

Formalize the referral process between private providers and MSJMC. This is particularly important to ensure continuity (and quality) of individual patient care, as well as optimal use of specialized health resources available in-country (such as services not available at MSJMC but provided at some private clinics).

^{*}See Box 10 below for further recommendations related to MSJMC.

Although we recognize that the government of Antigua and Barbuda has a strong interest in national health insurance, pursuing this objective is not recommended now given the concerns presented in this report. If the recommendations outlined in this chapter are implemented, they could serve as a foundation for developing a national health insurance program. Specifically, to financially stabilize the system the government must pay what it owes to MBS. Then it will be possible to determine what it would cost to cover individuals not currently in the MBS system. In order to fully expand MBS into national health insurance, the MOH/government would need to explore options for means-testing to ensure coverage of the poor. However, we believe that consideration of national health insurance is not realistic in the near term.

The findings and recommendations presented in this report are intended to serve as a basis for dialogue between key stakeholders – representing both the public and private sectors – on the way forward toward strengthening the Antiguan and Barbudan health system. As reflected by the United States-Caribbean Regional HIV and AIDS Partnership Framework 2010–2014, USAID recognizes that country-led efforts to strengthen national health systems and HIV responses are most likely to be sustained over the long term. To this end, the SHOPS and Health Systems 20/20 projects convened a wide spectrum of stakeholders to validate the results and findings of this assessment and, more importantly, to develop a plan of action to address critical health systems gaps and sustain the HIV response in Antigua and Barbuda. See Annex C for the Workshop Report on Health Systems and Private Sector Assessment (March 2012).

USAID funding for technical assistance is available to support health financing activities, as well as efforts to engage the private sector to strengthen the health system and sustain the HIV response. PAHO, a partner in this assessment, is another key source of technical assistance for Antigua and Barbuda, particularly in the areas of policy and regulatory environment and pharmaceutical management. PANCAP may also be able to provide support for strategic health planning. Other U.S. government agencies and their implementing partners also support health systems strengthening efforts, including HRH, lab strengthening, health information systems, and stigma and discrimination issues, and may serve as additional resources for Antigua and Barbuda.

Box 10.1: Recommendations to Improve Operations and Integration of Mount St. John's Medical Centre into the Health System

Establishing the modern and well-equipped MSJMC was a significant achievement for Antigua and Barbuda and a welcome addition to the country's health system. However, as noted throughout the report, there are considerable challenges related to financing and effectively managing and ensuring the quality of services at MSJMC.

The current MSJMC statute, operating procedures, and management contract with AHMC require revision. In this process it will be important to safeguard the benefits of private management of MSJMC. The most immediate needs are for the MOH to fully fund the current capitation agreement and for MBS to receive payroll taxes in full and in turn meet its current obligations to MSJMC. In the longer term, the level of MBS payments to MSJMC needs to be reassessed. As discussed in Chapter 5 and above, efforts should be taken to divert primary care cases to PHC facilities and away from MSJMC, and to charge user fees for non-referred, nonemergency patients who seek care at MSJMC. To strengthen the relationship between MSJMC and the national health system, the following actions should be taken:

In recognition of oversight gaps in the MSJMC Act as well as in the AHMC contract, several key modifications are strongly recommended. Although ultimately the act should be amended, given the length of time this might require, the assessment team recommends amending the management contract in the near term, while pursuing permanent changes to the legislation over the longer term. Critical modifications include the following:

- a. Require annual public financial reporting by the hospital, with audited accounts to be published within six months of the end of the hospital's fiscal year. The accounts should specifically include depreciation allowances and indicate the extent to which such depreciation is funded or used for other purposes.
- Require reporting of key hospital performance indicators to MOH on a periodic basis. At a minimum, this would include
 - i. Admissions and number of inpatient days by age, sex, insurance category, and diagnosis;
 - ii. Total number and type of outpatient visits, with specific totals for high-cost services (such as dialysis); and
 - iii. Outpatient statistics on the number of non-referred, nonemergency visits and the number for which user fees are collected.

MOH should enter into a direct contract with MSJMC for any services performed by MSJMC on behalf of the primary care system. In particular, this contract should dictate the following:

- c. Obligate MSJMC to perform public health laboratory tests
- d. Provide for direct payment to MSIMC by the MOH for these tests at agreed rates
- e. Set minimum response times for such tests
- f. Make payment conditional upon performance of tests within the contract
- g. Require MSJMC to establish a separate bank account and set of accounts for public health laboratory services

Any new investments by MSJMC (such as the proposed radiation therapy unit) should be subjected to a *Certificate* of Need review and licensing by the MOH. This is to prevent MSJMC from increasing secondary/tertiary care obligations without conforming such investments to Antigua's health care strategy and ability to pay for such services.

ANNEX A: HIV/AIDS IN ANTIGUA AND BARBUDA

WHAT IS THE PROBLEM?

The Caribbean region has the highest incidence of HIV/AIDS in the Americas and the second-highest prevalence in the world behind sub-Saharan Africa. Adult prevalence rates range from 0.4 percent in St. Kitts and Nevis to 3.0 percent in the Bahamas. A total of 904 cases of HIV have been reported in Antigua and Barbuda since 1985. Given the lack of reporting requirements among private sector labs, it can be safely assumed that actual prevalence rate is higher. Estimates of overall prevalence have steadily increased over the past six years from 0.8 percent in 2005 to roughly 1.4 percent in 2011. Data suggest that the majority of cases are among persons between 15 and 49 years of age. To address this issue, the Ministry of Health (MOH) in Antigua and Barbuda has established the National HIV/AIDS Program (NAP) with a functioning secretariat, spearheaded by the AIDS program manager, to facilitate a coordinated response to the epidemic.

WHO LEADS THE RESPONSE?

The **AIDS secretariat** within the MOH is the coordinating body for all HIV/AIDS efforts and serves as the focal point for the collection and dissemination of information about HIV, AIDS, and other sexually transmitted infections (STIs). It is tasked with working with government ministries, people living with HIV/AIDS (PLHIV), and civil society to implement national HIV/AIDS strategies and programs. The National Strategic Plan for HIV/AIDS was developed and enacted in 2011. An up-to-date strategic plan supports the country's HIV response by ensuring that the national response is efficient, effective, and in line with national health priorities.

WHO SUPPORTS THE RESPONSE?

Though not systematically organized, numerous *faith-based* and *civil society organizations* work with NAP to provide HIV/AIDS-related health education and support services; many target vulnerable populations like youth and the indigent. The Health, Hope and HIV Network is a support group for PLHIV that works on education promotion. The Caribbean HIV/AIDS Alliance (CHAA)/Antigua has historically supported outreach efforts, including education and voluntary counseling and testing (VCT), to the most-at-risk populations. USAID funding for CHAA lapsed in early 2011 and the organization was forced to close its St. John's office temporarily. Despite some setbacks, relationships among key implementers have been strengthened in recent years, leading to perceived improvement in HIV/AIDS advocacy efforts.

Public-private partnerships to address HIV/AIDS exist, including one between the MOH, Scotiabank, and the Caribbean Broadcast Media Partnership to organize annual testing days in Antigua and Barbuda. Another informal partnership with the private sector involves two private pharmacies. NAP refers HIV-positive clients to these pharmacies for drugs to treat opportunistic infections (not antiretrovirals [ARVs]) using coded prescriptions to ensure confidentiality. The pharmacies then submit monthly invoices to NAP for reimbursement.

WHO FUNDS THE RESPONSE?

A Round 3 grant from the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund) provided financial support to roll out education programs and workshops that included a wide cross-section of stakeholders. It supported the purchasing of nutritional supplements for nursing infants, testing kits, outreach programs, prevention of mother-to-child transmission efforts, and a Patient Monitoring System to monitor treatment. This funding ended in February 2011 and had a significant impact on testing and outreach services. The Round 9 grant to the Pan Caribbean Partnership against HIV/AIDS supports first-and second-line ARVs for up to five years with an expectation of increased government contributions. It does not include a budget for prevention activities. The Organization of Eastern Caribbean States (OECS) Round 10 proposal was not approved, but efforts are currently underway to improve and resubmit. Brazil has an agreement with OECS Pharmaceutical Procurement Service (PPS) to provide free first-line ARVs through 2013 with shipment costs picked up by UNICEF.

WHERE ARE HIV/AIDS COUNSELING AND TESTING SERVICES PROVIDED?

HIV testing is offered at eight public health facilities, Planned Parenthood, and through various community outreach events, including the annual regional HIV testing day. Outreach programs for VCT are conducted by the AIDS secretariat, nongovernmental organizations, and some employers who sponsor VCT days. The **private sector** also contributes to the response: private practitioners provide HIV testing and outpatient services; private laboratories provide testing services, including STI and HIV blood screening; and private pharmacies make medications needed to treat opportunistic infections readily available.

WHO TREATS HIV/AIDS?

HIV/AIDS treatment, including antiretroviral therapy (ART), is provided by a single private health practitioner who also serves as the clinical care coordinator for the MOH. HIV-positive individuals who seek care and treatment do so at private doctors' offices, the majority being treated by Dr. Ramsey. ARVs are only available from the pharmacy at Mount St. John's Medical Centre.

HOW ARE HIVIAIDS DATA GATHERED AND SHARED?

HIV/AIDS data collection is fragmented and incomplete. The AIDS secretariat gathers data on VCT and HIV-positive cases from all public VCT sites, outreach events, and some NGO providers like Planned Parenthood. Data on HIV treatment indicators are collected from the clinical coordinator and aggregated for the MOH by the Health Information Division. There is no health information policy governing the procedures for data collection, processing, and dissemination of findings. The lack of policy and regulation has resulted in inadequate monitoring and evaluation and irregular reporting, especially by private sector providers who have no obligation to do so. However, there seems to be openness on the part of private labs to report positive tests, if given a reasonable structure in which to provide this information.

HOW CAN THE HIV/AIDS RESPONSE BE STRENGTHENED?

Several interventions can be implemented in an effort to improve the HIV response in Antigua and Barbuda. The assessment team recommends the following actions, in order of importance:

- Following the newly enacted HIV/AIDS strategic plan, Antigua should undertake two related exercises:
 - Conduct a costing of the HIV/AIDS program, to determine the funding required to provide prevention and treatment services in light of withdrawn Global Fund support.
 - o Develop an HIV epidemiological summary based on available data.

- Consider decentralizing HIV/AIDS services and integrating the HIV/AIDS strategy into a broader health plan. Efforts should include:
 - Integrating services into the public primary health care facilities and creating linkages between private providers and the public health system
 - o **In-service training** for both public and private health providers on prevention care and treatment
 - Establishment of a referral and reporting system.
- Initiate a dialogue among the MOH, AIDS secretariat, and private labs to discuss voluntary reporting. The short-term goal would be to reach consensus on reporting of positive cases from all sectors into a single database. In the long term, legislation could be drafted to provide greater leverage to ensure such reporting occurs. Efforts should be made by the MOH to address private sector concerns, as well as to provide regular feedback on private provision of HIV testing.
- **Develop a succession plan for the clinical care coordinator.** One of the risks in the governance and management of service delivery is the reliance on one individual who provides all HIV treatment, including ART, and serves as the clinical care coordinator for the MOH. The plan should include building the capacity, with training, of other health providers to offer this type of care.

ANNEX B: VALIDATION AND PRIORITIZATION WORKSHOP SUMMARY

I. EXECUTIVE SUMMARY

The Ministry of Health of Antigua and Barbuda along with the USAID-funded Health Systems 20/20 and Strengthening Health Outcomes through the Private Sector (SHOPS) projects hosted a workshop on February 23 and 24, 2012, to discuss the recently conducted Antigua and Barbuda Health Systems and Private Sector Assessment. Objectives of the workshop included discussing assessment findings, prioritizing recommendations to strengthen the health system, and creating action plans to move recommendations forward. The purpose of the workshop was to bring together key health sector stakeholders, including both public and private sector actors, to validate and prioritize the report findings, inform revisions to the draft report, prioritize technical assistance that the United States Agency for International Development (USAID) and other partners may provide to the country, and agree on next steps that key stakeholders in the country may take to further strengthen the health system. See Annex A for the workshop agenda.

The Antigua and Barbuda Health Systems and Private Sector Assessment was conducted in April and May 2011 and included an analysis of the strengths, weaknesses, opportunities and threats inherent in the health system, according to the six World Health Organization (WHO) health system building blocks: governance, health financing, service delivery, human resources for health, health information systems, and the management of pharmaceuticals and medical supplies. The assessment team was aided by the Ministry of Health (MOH) and included team members from USAID's Health Systems 20/20 project, the SHOPS project, and the Pan American Health Organization (PAHO).

The draft Antigua and Barbuda Health Systems and Private Sector Assessment Report ("the Assessment Report") outlined the key cross-cutting findings and recommendations, clustered around four central themes, as a first step toward strengthening the health system and sustaining the HIV response. The following are the key themes:

- Investing in financial analysis (costing) to inform strategic planning
- Prioritizing updates and passage of key legislation and develop regulations to enforce enacted laws
- Improving access, efficiency, and quality at all levels of care
- Pursuing opportunities to engage the private sector as a partner.

See Annex B for the presentation of the report findings and recommendations presented at the workshop.

Thirty-six participants, representing key stakeholders in the public and private health sectors, as well as regional and bilateral development partners, participated in the workshop. See Annex C for the list of participants.

By and large, the participants agreed with the assessment findings but had some important contributions and updates to add. Participants subsequently broke into groups determined by interest, knowledge, and field of work to identify five priority recommendations for implementation:

- Develop a financial and service plan that balances reasonably expected health care
 resources and commitments. Consider expected high-tech medical expenses within the context
 of this plan and protect primary care services and purchases of essential drugs. Also consider
 costing hospital and other services and assessing expenses with a National Health Accounts
 (NHA).
- 2. **Develop a regular process of strategic planning** and create a health sector strategy, including a plan for HIV/AIDS service delivery. Integrate the HIV/AIDS strategy into the broader health sector plan.
- Secure technical assistance to address bottlenecks in finalizing legislation and regulations. Priorities include passage of the Pharmacy Amendment Act and developing regulations for the Medical Practitioners Act.
- 4. Establish an enforceable referral system from community clinics to Mount St. John's Medical Centre (MSJMC) (which could reduce reliance on MSJMC for primary care) and between MSJMC and private sector health care providers. Explore quality and access improvement at the primary health care (PHC) level to encourage patients to go there first for services.
- 5. **Normalize coordination between public and private sectors.** This recommendation encompasses a number of activities. Document and acknowledge private sector contribution in the health sector. This may entail a survey of private sector resources and a partial or full NHA activity.

The group created action steps that could be forged into a road map for implementing the top five priorities, including identifying champions, sources of (hoped for or planned) external support, resources, and next steps.

After the workshop, the participants agreed that the next steps would be the following: (1) the assessment team will incorporate results of the workshop into finalized assessment report, (2) the report will be vetted once more by the MOH before dissemination, (3) the assessment team will create a report of the proceeds of the workshop and disseminate, and (4) the MOH and donors will communicate on needed support for implementation of priority recommendations.

2. BACKGROUND

Antigua and Barbuda is one of 12 Caribbean countries joining efforts with the United States Government in the U.S.-Caribbean Regional HIV and AIDS Partnership Framework 2010–2014. USAID is working through two projects, Health Systems 20/20 and SHOPS, to provide a variety of health systems strengthening technical assistance to countries in the eastern Caribbean as part of this Partnership Framework. To identify priorities for this technical assistance, the two projects conducted integrated health systems and private sector assessments in the six Organization of Eastern Caribbean States (OECS) countries. Additional partners in this effort included PAHO, the International Training and Education Center for Health (I-TECH), and the Caribbean HIV/AIDS Regional Training Network (CHART).

The assessment in Antigua and Barbuda was a first step toward improving its capacity to effectively lead, finance, manage, and sustain the delivery of quality health services. Inherent in the country's capacity to carry out these roles is understanding and catalyzing private sector contributions to health. Although the functioning of the broader health system was the focus of the assessment, particular attention was paid to sustaining the country's HIV response. The assessment process allowed the government of Antigua and Barbuda, USAID, and other health partners to understand the key constraints in the health system and prioritize areas that need greater attention. The assessment also creates a road map for local, regional, and international partners, both public and private, to coordinate technical assistance.

The assessment process had four phases. The initial step was a meeting in March 2011 to engage stakeholders and reach consensus on the topics that would require the most attention during the assessment. An extensive literature review was also conducted. The second phase involved collecting primary data during which an assessment team interviewed over 50 stakeholders and visited health facilities on both islands during one week in May 2011. Following this, the assessment team drafted a report. The final stage, which is represented in this workshop report, is the validation and prioritization of the report findings.

3. WORKSHOP OBJECTIVES

The results of this workshop will inform revisions to the draft report, the prioritization of technical assistance that USAID and other partners may provide in the region, and next steps that key stakeholders in the country may take to further strengthen their health system. See Annex A for the workshop agenda. Specifically, the objectives of the workshop were to accomplish the following:

- Discuss and obtain stakeholder feedback on the key findings and recommendations from the Antigua and Barbuda Health Systems and Private Sector Assessment 2011.
- Use stakeholder-determined and agreed-upon criteria to prioritize assessment recommendations for implementation.
- Reach consensus on next steps to address critical system gaps through implementing the
 prioritized recommendations, including further clarifying the role of the private health sector.

4. OPENING REMARKS AND PARTICIPANTS

Permanent Secretary of Health Edson Joseph opened the meeting by reflecting upon the current state of health and the health system. He also relayed his vision for the future, including collaboration with the private sector and USAID. Carol Narcisse and Lisa Tarantino welcomed participants, discussed the objectives for the workshop, and encouraged active and respectful participation. Thirty-six participants, representing both the public and private health sectors, as well as regional and bilateral development partners, participated in the workshop. See Annex B for a complete list of participants.

5. ASSESSMENT FINDINGS AND RECOMMENDATIONS

Following the welcome, Lisa Tarantino, representing the SHOPS project, highlighted the key findings and recommendations presented in the report. The presentation discussed the findings and recommendations for topics across all six of the WHO health systems building blocks, including health governance, health financing, service delivery, human resources for health, health information systems, and the management of pharmaceuticals and medical supplies. Within each topic, findings related to the private sector's role were also discussed. Participants asked questions to clarify the findings and recommendations. See Annex C for the full presentation.

5.1 DISCUSSION OF FINDINGS AND RECOMMENDATIONS

Following Ms. Tarantino's presentation, participants were asked to consider the report's key findings and recommendations. Participants formed small groups based on their interests and specialties. The small groups focused on the six building blocks listed above. Groups were also asked to reflect on the findings and recommendations addressing the private sector as they related to their selected building block as well as the cross-cutting recommendations. The groups used both a written summary of the findings and recommendations and the report itself as references to verify if findings matched their experience. They were also asked to add any points that they felt should have been included. The groups considered if the recommendations addressed the key findings presented, if there were any concerns about the recommendations, and if there were any recommendations that were missing. Participants reported that the findings were generally accurate and made some suggestions for strengthening each module. The participants broadly agreed with the recommendations proposed and added or further specified some recommendations. See below for the group's feedback.

5.2 COMMENTS ON ASSESSMENT FINDINGS AND RECOMMENDATIONS²²

Participants generally agreed with assessment findings and recommendations. Table A below summarizes the workshop participants' comments on the findings and recommendations in the draft assessment report, organized by the six health system building blocks.

Table A: Comments on Findings and Recommendations

- New information/updates since the assessment field work was conducted:
 - PAHO intends to fund a consultant to assist the government to create a health sector strategic plan by the end of 2012.
 - PAHO is providing support to update/revise the Mental Health Act,
 Tobacco Control regulations, Care and Treatment Policy for HIV, Policy on the Aging, and International Health Act.
 - A National Plan for HIV/AIDS has been developed and adopted.
 - HIV Care and Treatment Policy needs updating (according to PAHO) and protocols for rapid testing, treatment, and advocacy need to be developed for people living with HIV (PLHIV).
- Additions/comments on findings:
 - Report should reference WHO International Health Regulations and Antigua and Barbuda's pressing need to comply with these standards.
 - Midwifery and nursing laws and regulations need to be prioritized.
- Additions/comments on recommendations:
 - Leadership and management skills among senior MOH staff need further discussion as they are perceived to need more strengthening. A corresponding recommendation for the MOH to seek technical support in management and leadership training was suggested.
 - Agreement that technical assistance is needed to help draft or revise legislation and regulations. In addition, the report should recommend that someone at MOH be assigned to prioritize and push through legal issues, establish a policy and planning department, and help establish compliance and quality departments.
 - A recommendation should be added to update legislation dealing with overall governance of the health system including clarifying roles, authority, etc. Currently, there is no updated overarching law about relative authorities and relative powers.
 - o It is suggested that the government engage in creating memorandums of understanding to guide the management of public and private collaboration.

 $^{^{22}}$ Note that these comments include feedback from the PAHO representative submitted in writing to the assessment team subsequent to the workshop.

- New information/updates since the assessment field work was conducted:
 - PAHO will provide support to Antigua and Barbuda for the implementation and use of National Health Financing information by (I) supporting the establishment of an inter-institutional task force for NHA, (2) training a task force on the NHA methodology, and (3) assisting in the development of the NHA report and its publication.
- Specific comments on the report:
 - The assessment team should define what "successfully" running MSJMC means.
 - The assessment team should consider changing "re-evaluate user-fees" to "modify user fees" and consider international best practices.
 - A specific package of services has been costed at the hospital level using the historical data from Holburton Hospital.
 - The working group fully endorsed the recommendation for an NHA estimation.
 - There is a need to develop budgeting capacity within the MOH.
- The grouped discussed whether a national health insurance scheme would supplement current MSJMC funding or be a new/different mechanism to fund the hospital services.
- New information/updates since the assessment field work was conducted:
 - PAHO conducted assessment on Human Resources for Health (HRH), which recommends the establishment of a Human Resources (HR) Unit.
 PAHO will work with the MOH to create HR plans and policies to improve PHC and support the MOH to establish a basic set of indicators on HRH.
- This PAHO report is not yet public but MOH officials have a copy.
- Comments/edits on findings:
 - There is a problem of retaining quality skilled people they get moved around by the current HR management system, which necessitates costly retraining.
 - The team recognized the need for clear guidelines for interactions between private/public sectors, including regulation of private health care providers and conflict of interest laws for dual public-private sector practice.
- Comments/edits on recommendations:
 - Participants stressed their endorsement of the recommendation for an HRH unit in MOH, and thus provide autonomy for HRH management instead of relying on the Establishment Department for HR management. Greater efficiency could be achieved if the MOH has a greater role and utilizes improved HR hiring, training, and deploying practices.
 - An assessment of human resources needs to be conducted, including investigating reallocations that need to be made, other skills sets needed, roles that should be eliminated based on current health care needs, and service delivery structure.
 - In addition to health education and training on counseling and treating HIV, there are other training and continuing education needs for health professionals.

- Improved efficiency and quality of care needed for the private sector need quality unit in MOH (to oversee both public and private sectors)
- Strengthening of communication, specifically health education not limited to HIV specific
- Discussion on referrals:
 - There is a need to develop a patient number/identifier, used with an electronic system to track patients.
 - o Issue regarding the return of patient referral slips back to PHC provider.
 - There was debate as to whether there is an operational, formalized referral system from Health Centers to MSIMC.
- New information/updates since the assessment field work was conducted:
 - PAHO is providing support to assess and strengthen the capacity for partnership approach to care, treatment, and advocacy for PLHIV.
 - During 2012–2013 PAHO will provide support to Antigua and Barbuda to conduct an assessment of the PHC system and an implementation plan.
 - Scale-up of provider initiated counseling and testing will be supported by PAHO. Also, PAHO will support public-private sector consultation to develop formal partnerships for advocacy, care, treatment, and management of PLHIV and sexually transmitted infections.
- There was general agreement with the assessment report recommendation of considering extending of hours of PHC centers in order to alleviate the burden on MSJMC and increase access to PHC at the local level. The hours should be extended to cover the peak hours of 6–8 p.m. Perhaps doctors could be privately contracted to work those hours? Should have doctors until 12 p.m. at satellite health clinics and from 4–8 p.m. at the health care clinic.
 - The decision to extend hours should be evidence-based. What is the specific purpose of extended hours? What services will be offered in those extended hours?
 - Extended hours may support reduced access to PHC services at the MSJMC and should be coupled with a communication strategy for the public.

- New information/updates since the assessment field work was conducted:
 - PAHO is providing support to Antigua and Barbuda to develop and implement an integrated Health Information System (HIS), including development of an HIS plan and initiating implementation of the plan.
 - PAHO is offering support in the development and preparation of a Chief Medical Officer (CMO) annual report.
- Comments/edits on findings:
 - Data collection may be adequate but reporting mechanism process needs improvement, which would be a key foundation to a future national insurance scheme. There is a need to bring all sources – including private sector, Medical Benefits Scheme (MBS), Social Security, and MSJMC – into the reporting system.
 - Sustained political will would be important to improve the HIS.
- Comments/edits on recommendations:
 - Emphasize a need for alignment with international standards (e.g., for coding).
 - Amend language that "Physical resources for HIS are adequate, but capacity building of the Health Information Division is needed to improve the functioning of this department," to reflect that physical resources (such as computers) are indeed limited and that capacity building needs are broad and extend beyond the Health Information Division in the MOH to the HIS.
 - The discussion group emphasized the need for standardization of data collection.
 - Develop a process to collect regular Medical Benefits and Social Security data and other data from MSIMC.
 - Strengthen data quality of HIV/AIDS-related information, using improved technology and capacity building.
 - An HIS management system needs to be developed to assist the health care system be more responsive to emerging health care needs.
 - Stronger incentives for doctors to report should be implemented.
 - Legislation is needed to support the HIS and should be coordinated with other priority legislation.
- Comments/edits to findings:
 - By 2014, all pharmacists in the region will be required to have at least a Bachelor of Science in Pharmacy to practice. Antigua and Barbuda is challenged in that most pharmacists here do not have that degree.
- Comments/edits to recommendations:
 - There is an urgent need to update the Pharmacy Act and develop regulations.
 - MBS and others should coordinate better purchasing for improved inventory management and reduced waste.

Role of the Private Sector

- There was debate as to whether the referral system from MSJMC to private providers is functioning as well as it could. Some patients come to private providers without a referral, which may have been misplaced or not provided in the first place.
- Comments/edits to recommendations:
 - A rapid assessment of the private sector should be conducted.
 - The creation of a central registry of private services should be made available.
 - It should be made mandatory that private doctors/institutions report into
 HIS using standardized form/format provided by MOH.

6. PRIORITIZATION OF RECOMMENDATIONS

6.1 PRIORITIZATION CRITERIA

After agreeing on additions and changes to the findings and recommendations, the participants formed a plenary session to develop criteria for prioritizing recommendations. The group agreed that priorities would be based on whether the recommendations were (I) impactful – potential for broad impact on the system; (2) feasible – there is financial, human, and other required resources to implement the recommendation; (3) important – the risk to the system if the recommendation is not acted upon. See Table B for the complete list of criteria used by participants to prioritize the assessment recommendations.

Table B: Criteria for Prioritizing Recommendations

Criteria for Prio	Key Components Key Components
Prioritization Impact	Breadth of impact across services/ target services/ across populations/ on
Impact	■ Breadth of Marce are being structures/
Feasibility	target services carross populations on target populations Available human and technical resources
Feasibility	■ Ease orpgomplexitybotymplementation ■ Available human and technical
Important	resources didnesses critical gaps and bottlenecks Politica Risks in bidies is not addressed
Risk Importance	Addresses कि कि कि अपनिकार प्राप्त कर कि अपनिकार कि अ
Affordability	bottlenecks Total funding required Risk if need is not addressed Likelihood of mobilizing total funds from government and donor sources
Risk	Risk of failure or underachievement
	ion: Meets international compliance requirements
Affordability	 Total funding required Likelihood of mobilizing total funds
	from government and donor sources

6.2 HEALTH SECTOR STRENGTHENING PRIORITIES

When it came time to prioritize the recommendations, six groups of participants by and large independently agreed on the following priorities.

Top 5 Priority Recommendations:

- I. **Develop a financial and service plan** that balances reasonably expected health care resources and commitments. Consider expected high-tech medical expenses within the context of this plan and protect primary care services and purchases of essential drugs. Costing the hospital and other services and assessing expenses with an NHA should also be considered.
- 2. **Develop a regular process of strategic planning** and create a health sector strategy, including a plan for HIV/AIDS service delivery. Integrate the HIV/AIDS strategy into the broader health sector plan.
- 3. Secure technical assistance to address bottlenecks in finalizing legislation and regulations. Priorities include passage of the Pharmacy Amendment Act and developing regulations for the Medical Practitioners Act.
- 4. **Establish an enforceable referral system** from community clinics to MSJMC (which could reduce reliance on MSJMC for primary care) and between MSJMC and private sector health care providers. Explore quality and access improvements at the PHC level to encourage patients to go there first for services.
- 5. **Normalize coordination between public and private sectors**. This recommendation encompasses a number of activities, including documenting and acknowledging private sector contribution in the health sector. This may entail a survey of private sector resources and a partial or full NHA activity.

Other issues that were discussed but not included in the top five priorities were the following:

- Management capacity at the MOH should be strengthened, including training in management and health sector governance.
- A health management information system should be developed. Investments should be made in HIS resources (technology) and training in using technology as well as data analysis and reporting to support use of data/evidence for decision-making in the health sector. The private sector should be included in data reporting.
- An HRH assessment should be conducted. Capacity to develop an HRH strategy/plan should be built, ideally with support associated with the established of a human resources department at the MOH.
- Efforts should be made to increase the integration of HIV services into the PHC system and coordinate with the nongovernmental organization sector for outreach, prevention, and education.
- Consider user fees, including an assessment of costs to clients and international practices.
- Establish a quality oversight unit within the MOH. Address quality and establish medical guidelines.

The following table gives an overview of the working group discussions on the action steps that could be forged into a road map for implementing the top five priorities, including identifying champions, sources of external support, resources, and next steps.

I. Develop a financial and service plan that balances reasonably expected health care resources and commitments.

Consider expected high-tech medical expenses within the context of this plan and protect primary care services and purchases of essential drugs. Consider both costing hospital and other services and assessing expenses with an NHA.

What ongoing initiatives support this priority area? (e.g., MOH, PAHO, others)	What action steps have already been proposed?	Who will "own" (lead or be the champion) the next steps?	What resources are needed? What external resources could be mobilized?
 Basket of health services already exists – covered under the MBS Discussions for the implementation of national health insurance PAHO has indicated willingness to support an NHA with technical assistance USAID regional initiative for NHAs initiating in May 	 Revise basket of health services and cost them Introduce a "sin" tax Provide cost benefit analysis Redirect more focus on prevention strategies Establish a policy and planning unit in the MOH 	Permanent Secretary (PS), CMO	 Technical assistance to cost services Technical assistance to conduct NHA estimation Capacity building among current human resources

What additional concrete, next steps are needed?

- MOH to reach out to USAID to support costing activities
- MOH, PAHO, and USAID to coordinate to conduct NHA
- Conduct costing of MSJMC services and HIV/AIDS services MOH and MSJMC support will be essential
- Greater cooperation/collaboration between public and private sector
- Set up inter-institutional task force that specifically addresses health system finance issues (actively involve economic planning and policy unit)
- Increase user fees for high-tech diagnostic procedures at MSJMC
- Advocate for government to meet its financial obligations with MBS

2. Develop a regular process of strategic planning and create a health sector strategy, including a plan for HIV/AIDS service delivery. Integrate the HIV/AIDS strategy into the broader health sector plan.

What ongoing initiatives support this priority area? (e.g., MOH, PAHO, others)	What action steps have already been proposed?	Who will "own" (lead or be the champion) the next steps?	What resources are needed? What external resources could be mobilized?
 MOH has developed a strategic plan proposal for submission to PAHO PAHO has provided support in the development of specific strategic plan for the areas of HIS, mental health, aging, tobacco control PANCAP has completed HIV strategic plan final draft PAHO has indicated that it will provide technical support to the development of a strategic plan in 2012 	 Need political buy-in but also active stakeholder involvement Involve external stakeholders outside of MOH and hold meetings every 3 years to assess progress and renew the plan Establish a policy and planning unit within the MOH 	CMO, PS, Health Information Division	 Additional technical support from PEPFAR Human resources for technical training and support to help institutionalize the process Technological resources to facilitate the process: computers, network access, etc. Budget for policy and planning unit within the MOH

What additional concrete next steps are needed?

- Establish an effective planning unit to coordinate execution of a strategic plan
- Develop a public communication strategy, including a dedicated information desk to keep public informed of process: surveys, town hall meetings, etc.
- Identify unified national health priorities from political leadership
- Involve external stakeholders in the process: UNAID, PAHO, PANCAP, PEPFAR, OECS Secretariat, CARICOM
- Evaluate current programs through indicators and qualitative research to inform the strategic planning process

3. Secure technical assistance to address bottlenecks in finalizing legislation and regulations. Priorities include passage of the Pharmacy Amendment Act and developing regulations for the Medical Practitioners Act.

What ongoing initiatives support this priority area? (e.g., MOH, PAHO, others)	What action steps have already been proposed?	Who will "own" (lead or be the champion) the next steps?	What resources are needed? What external resources could be mobilized?
Pharmacy Amendment Act - J	priority		
	 Circulate amendment to all stakeholders through different mechanisms (e.g., email, consultative meetings, etc.) with sufficient time to formulate feedback MOH integrates comments (reconcile meeting) Circulate final proposal to all stakeholders Finalize amended Public Health Act Send to minister for signature Send to cabinet for sign-off Secure parliament's approval 	Pharmacy council	Resources for: Outside legal expert to draft Consultative meetings to bring on board MOH stakeholders
Medical Practitioners Act - pri	· · · · · ·		
	Develop regulations	Medical council	
Additional acts to be prioritize Safety Act (draft to be reviewed) What additional concrete next step			t, Allied Health Professional Act, Food
Newly approved acts and regu			
 MOH needs to implement them as well as inform and engage consumers and providers on the changes in health system 	Implementers Conduct focus group discussions with relevant public and private stakeholders to assess needed resources (e.g. systems, tools, training) to support implementation Use provider feedback to draft roll-out plan and to help implement new guidelines. Initial meeting (short) to inform and identify plan to roll out new guidelines Widespread dissemination	Need to identify champion	Resources for: • Expert to synthesize new acts for different target audiences • Produce and disseminate copies of guidelines • Consultative meetings to bring on board all stakeholders

 Consultative meetings to discuss how and when to implement In-service training Follow-up to monitor progress 		
Consumers/general public	Need to identify	Resources for:
 Use value-added tax public campaign as model to raise consumer awareness on key policy reforms Translate policies into user-friendly language Use multiple vehicles to reach population (radio, call-in programs, press conferences) Carry out PR campaigns to keep population updated on policy reforms and achievements 	champion	 Expert to synthesize new acts for consumers Funds to carry out PR campaign

4. Establish an enforceable referral system from community clinics to MSJMC (which could reduce reliance on MSJMC for primary care) and between MSJMC and private sector health care providers. Explore quality and access improvement at the PHC level to encourage patients to go there first for services.

What ongoing initiatives support this priority area?	What action steps have already been proposed?	Who will "own" the next steps?	What resources are needed? External resources?
	 Expanded hours of operation of PHC clinics Increased role of public health education/ social media 	MOH, MBS, MSJMC	Technical assistance in key areas: management and training, information technology procurement and maintenance, financial systems, research
VAVIDAGE AND INC.			

What additional concrete short-term next steps should be undertaken?

- Conduct data-driven assessment that examines and addresses the issues of extending hours of operation (what specific services will be provided, staff resources, etc.)
- Establish electronic network patient identifier system
- Form quality assurance unit that provides continued assessment and tracking
- MOH should implement and enforce quality oversight function over MSJMC through amending the management contract.
- Improve education, information sharing, and public awareness of the referral process

5. Normalize coordination between public and private sectors. This recommendation encompasses a number of activities. Document and acknowledge private sector contribution in the health sector. This may entail a survey of private sector resources and a partial or full NHA activity.

What ongoing initiatives already support this priority area? (e.g., MOH, PAHO, others)	What action steps have already been proposed?	Who will "own" (lead or champion) the next steps?	What resources are needed? What external resources could be mobilized?
	 MOH must facilitate the process of bringing different sectors to work collaboratively Possible reform of laws and regulations (create a form contractual relationship) Formalize and standardize referral process 	Multi-sectorial committee (to be established)	 Legal framework Technical assistance PAHO, USAID, and others

What additional concrete next steps are needed?

- Document and acknowledge private sector contribution in the health sector. (This report can start the process of documenting and formalizing collaborative activities, even if informal.)
- Start involving the private sector in MOH operations. Set a goal (e.g., once per month) to identify opportunities to invite private sector participation and act upon these goals. The CMO signaled plans to convene heads of associations and councils. This would provide a good foundation for engaging private stakeholders.
- Mobilize private sector champions to promote current policy proposals.
- Engage private providers to provide input and help guide long overdue legislation and regulations.

7. CONCLUSION AND NEXT STEPS

After the presentation of action steps by each group, Health Systems 20/20 and SHOPS thanked participants for their engagement in the validation and prioritization process. Health Systems 20/20 and SHOPS will use results of the workshop to revise the assessment report. The final report with priority recommendations highlighted will be shared with USAID's implementing partners in the region, many of whom were also present at the workshop, as well as other U.S. government agencies working in the region, PAHO, the OECS, and UNAIDS, to further align technical assistance with the country's needs.

Permanent Secretary Edson Joseph closed the workshop, thanking participants for their enthusiasm and USAID for creating the opportunity to discuss priorities.

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