

Ensuring Quality Health Care and a Healthy Population



To help the public service spend wisely

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EXECUTIVE SUMMARY

Health spending in the Cayman Islands accounts for nearly 10 per cent of Gross Domestic Product, split almost evenly between the public and private sectors. The Government's health-related expenditures of \$138 million accounted for more than 18 per cent of total government spending in 2015-2016. The large amounts of money involved, and the need for residents to have ready access to affordable, high-quality health care, underline the importance of providing the Legislative Assembly as well as providing residents with assurance that value for money is being achieved. This audit examined the Government's oversight and regulation of the Cayman Islands health system.

The Ministry of Health (the Ministry) is responsible for the regulation and oversight of all health services. Its main objective is to ensure a healthy population and quality health care to the people of the Cayman Islands. Accordingly, the objective of this audit was to determine whether the Government's roles and responsibilities in achieving these aims are defined and communicated clearly and managed effectively. The audit examined the manner in which the Government has established and communicated its roles, responsibilities, policies, and strategies in the health system; its authority and capacity to deliver on its related accountabilities; its means for promoting and monitoring compliance with the legislative framework; the performance management and reporting framework it has implemented; and, finally, the extent to which the results and outcomes of the health system are consistent with any performance expectations established by the Government and with relevant international standards.

The audit found that the Government's roles and responsibilities are mostly set out and communicated through the legislative framework it has put in place. Despite some gaps, the health system's legislative framework provides the Government with a firm basis for the authority required to execute its roles and responsibilities.

A major leadership initiative of the Government involved the 2012 development of *The National Health Policy and Strategic Plan for the Cayman Islands 2012-2017* (NHPP) to serve as "an instrument for providing direction and coherence to the many stakeholders involved..." However, we found that the Government had subsequently failed to develop the operational plan that was required to implement the NHPP.

More generally, the audit found that the Government's ability to execute its health-related roles and responsibilities is impaired by weaknesses in two-way communication with its private sector partners and by shortages in capacity. There are resourcing shortages at the Ministry level (where they were identified as one of the major factors leading to delays in implementing the NHPP), within the Department of Health Regulatory Services (where the enforcement of compliance with the *Health Insurance Law* and *Regulations* has suffered despite innovative initiatives that have sought to compensate for a shortage of staff), and within the Health Services Authority (HSA).

The audit identified weaknesses in the Health Practice Commission's practices and policies for registering and licensing health care practitioners and inspecting and certifying health care facilities, exposing patients to unnecessary risks. Monthly reports from the Department of Health Regulatory Services do not provide the Ministry with the information it would need to systematically track and analyse the extent of compliance with key requirements of the health practice and *Health Insurance Law* and *Regulations*, information the Ministry could use to help guide decisions and take corrective action.

The Government has not put in place a performance management and reporting framework for the health system. It has not established and communicated realistic performance expectations or reporting systems to obtain regular and reliable performance information that it could use to inform decisions aimed at improving the quality of care, delivering better health outcomes, and achieving better value for money. In other words, without a performance management and reporting framework, government officials and Members of the Legislative Assembly cannot make properly informed decisions about how to use health care resources or how to deliver health care in the Cayman Islands.

Even without a performance management and reporting framework, however, some performancerelated information is available from a variety of sources. Using available data, the audit compared the performance of the Cayman Islands health system with relevant international standards and experience. The audit identified opportunities in the Cayman Islands to improve the quality of care. We also noted that the CayHealth programme, launched on a pilot basis in 2010, is an example of leading practice in managing chronic disease, although it is limited to a relatively small segment of the population.

Health outcomes in the Cayman Islands appear to compare well with health outcomes in other jurisdictions. However, the Cayman Islands population includes a high proportion of expatriate residents (non-Caymanians) who mostly live in the Cayman Islands during the healthiest years of their lives; they also have to undergo medical examinations before being granted work permits and resident status. This means that a portion of the health statistics available, which reflect averages for the whole population and across all age groups, may conceal important information about the relative health status of Caymanian and non-Caymanian residents. Data from the 2010 census about the incidence of some diagnosed illnesses shows, for example, that the incidence of heart conditions is nearly six times greater among the Caymanian population, and that of diabetes is three times higher.

Available data shows that there are more physicians, dentists and hospital beds per capita in the Cayman Islands than in Canada, the United States, the United Kingdom, the Bahamas or Barbados. But the number of nurses per capita in the Cayman Islands, while higher than in either the Bahamas or Barbados, is much lower than in the United States, Canada or the United Kingdom. Relatively little information is available on the extent to which patients are satisfied with their encounters with the health system. Within the public sector, the HSA is actively seeking reliable information on patient satisfaction with its services.

We concluded that there are shortcomings in the Government's management of some of its roles and responsibilities, to the extent that they may compromise the achievement of its stated aims of ensuring quality health care for the people of the Cayman Islands and a healthy population. The Government does not have the resources or the information required to manage the health system effectively, and neither the Legislative Assembly nor the public can be confident that high quality health care is being delivered, or that value for money is being achieved.

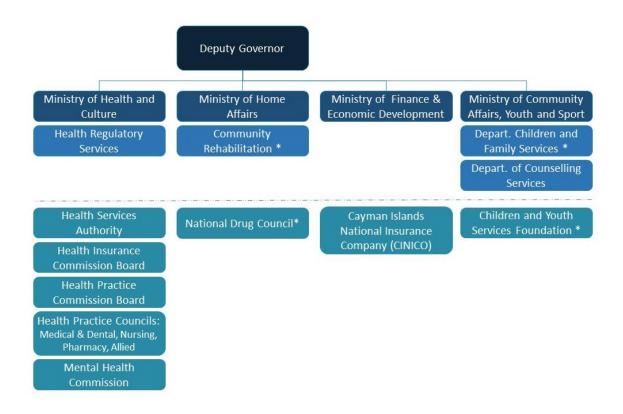
The assistance and cooperation we received from government and private sector officials and health care practitioners in all phases of the audit is gratefully acknowledged. Without their help, the audit could not have been completed.

INTRODUCTION

THE CAYMAN ISLANDS HEALTH SYSTEM

- The preamble to the *Constitution Order (2009)* asserts that the people of the Cayman Islands "affirm their intention to be a country that provides a comprehensive health care system." According to the World Health Organization (WHO), health is a state of complete physical, mental and social wellbeing, and not merely the absence of disease or infirmity. A health system comprises all activities that have the primary purpose of promoting, restoring, and maintaining health.
- 2. In its *National Health Policy and Strategic Plan for the Cayman Islands 2012-2017* (NHPP), the Government has used these broad WHO definitions of "health" and "health systems." In line with these definitions, there are four ministries that, in whole or in part, are actively involved in the Cayman Islands health system: the Ministry of Health, the Ministry of Home Affairs, the Ministry of Community Affairs and the Ministry of Finance, as shown in Exhibit 1 below.
- 3. The exhibit includes two sub-categories of health services: those that are exclusively clinical, and those that are a mix of clinical and social services. Health care-related services (such as those under the Ministry of Home Affairs and the Ministry of Community Affairs) include a mix of clinical and social services in residential and outpatient settings. Because it is difficult to separate out the clinical components (for example, nursing, mental health and addictions counselling) and the social service components, we have identified the relevant entities with an asterisk in Exhibit 1.

Exhibit 1 – Government ministries with role in Health System



- 4. Whilst the Government apparently accepted the WHO definitions of "health" and "health services" for the *National Health Policy and Strategic Plan for the Cayman Islands 2012-2017* (NHPP), the Government's management of the health system focuses on the entities that fall under the Ministry of Health and the Ministry of Finance (specifically CINICO), as well as the entities that are not identified with an asterisk in Exhibit 1. For the most part, our performance audit also focused on those entities.
- 5. The Cayman Islands health system is a complex hybrid that incorporates both private and public delivery of services. Providers in the private sector include two hospitals (the Chrissie Tomlinson Memorial Hospital and Health City Cayman Islands) and many general and specialist practices. The Health Services Authority (HSA) is the main public sector provider of health services. It delivers primary and secondary health care as well as public health programmes. The HSA has 124 beds at the Cayman Islands Hospital in George Town and 18 beds at the Faith Hospital on Cayman Brac. It provides primary health care at district health centres in Grand Cayman and a health centre in Little Cayman. In addition, dental, eye care and pharmacy services are provided at the Health Service Complex in Grand Cayman.
- 6. Exhibit 2 shows that the Government's health system expenditures accounted for 18.3 per cent of total Cayman Islands Government expenditures in 2014-2015, up from 16.6 per cent in 2010-2011.

The exhibit shows also that over this period private health expenditures have grown by 37 per cent while government expenditures have risen by 16 per cent.

Year	Government health expenditures	Total Government expenditures	Govt./Total (%)	Private health expenditures
2010-2011	118,436	8,436 715,311		95,717
2011-2012	124,719 717,054 17.4 100,919		100,919	
2012-2013	131,599	763,491	17.2	105,026
2013-2014	133,951	753,216	17.8	113,951
2014-2015	137,851	751,516	18.3	131,225

Exhibit 2: Health System Expenditures (CI\$000s)

Source: Government financial accounts (unaudited)

- 7. It should be noted that the Government's health system expenditures as shown in Exhibit 2 include expenditures required to manage and regulate the health system as a whole. Direct spending on health care in the Cayman Islands is a mixed private and public system, with some direct public funding for certain health services to specific patient populations. The publicly funded parts of the health care delivery system, such as public health, school health services, ambulance services, district health centres and health care for indigents, are delivered mainly through HSA. All other direct care services, whether delivered by HSA or a private health care provider, are paid for through health insurance and from private means.
- Health insurance is mandatory for all residents in the Cayman Islands and is provided by one of eight approved private insurance companies or the Cayman Islands National Insurance Company (CINICO). CINICO is a government-owned insurance company established in 2004 to provide health insurance coverage for civil servants (employees and pensioners), seafarers, veterans and other residents.
- 9. The health system is governed by a legislative framework that comprises a large number of laws and regulations for different aspects of the system. These include, but are not limited to, the *Health Services Authority Law*, the *Mental Health Law*, *Health Services (Fees) Law* and *Regulations, Health*

Insurance Law and *Regulations, Health Practice Law* and *Regulations, Public Health Law* and *Regulations,* and a number of medical negligence and liability laws.

- 10. Within the Government, the Ministry of Health and Culture has responsibility for the oversight and regulation of all health services, whether provided by the public or private sectors. As part of this, the Ministry is responsible for establishing and keeping up to date the legislative framework, as well as overseeing the work of the Department of Health Regulatory Services (DHRS) and the Mental Health Commission. The Mental Health Commission was established in 2014 to monitor the application of the *Mental Health Law (2013)*.
- 11. DHRS was established in 2008 to monitor and regulate the health insurance and health care industries in the Cayman Islands. It also assists the public in resolving disputes over the provision of health insurance and health care services. Within DHRS, the Health Insurance Commission (HIC) is responsible for ensuring that the provision of health insurance is well regulated. The HIC assesses and monitors premium rates for the Standard Health Insurance Contract, administers the Segregated Insurance Fund, monitors the conduct of approved insurers, resolves complaints, and advises the Minister generally on any matter relating to health insurance. The Health Practice Commission (HPC) is responsible for inspecting and certifying health care facilities and for registering and licensing health professionals through the Commission's four professional councils:
 - the Medical and Dental Council;
 - the Nursing and Midwifery Council;
 - the Pharmacy Council; and
 - the Council for Professions Allied with Medicine.
- 12. Health services are delivered to a diverse and rapidly growing population. Data from the most recent census show that of a total population of 55,036 in 2010, almost 44 per cent were non-Caymanian. The data show also that the total population in 2010 had grown by 30,979 or by 78 per cent since the previous census in 1999. By the end of 2015 the population had increased to an estimated 60,413 a 10 per cent growth since 2010.
- 13. A more comprehensive view of the health system can be found in our public interest report, *The Cayman Islands Health System*, issued in January 2017.

WHY WE CARRIED OUT THIS AUDIT

14. We carried out this audit because health-related expenditures by the Cayman Islands Government are large (\$138 million in 2014-2015) and growing. Ready access to affordable, high-quality health care is a matter of significant concern to all residents. It is therefore important that the Legislative Assembly and residents have assurance that these large amounts of money are spent with due regard to economy, efficiency and effectiveness.

- 15. Further, developments in recent years have underlined the importance of managing the health system actively and purposefully if the Government is to make progress toward its stated health aims: ensuring quality health care for the people of the Cayman Islands, and a healthy population. These developments include, for example:
 - rapid changes in the health care industry, as well as changes in the demographic and health profiles of the population—for example, a growing incidence of chronic non-communicable diseases;
 - HSA's allowance for bad debts, which had reached approximately \$95 million by June 2016;
 - the Government's granting of significant financial and other concessions to Health City Cayman Islands (HCCI) to support a new medical tourism industry. This industry is seen, in practice, to increasingly compete for local patients with other private sector providers (who do not benefit to the same extent from such concessions), raising concerns from some local practitioners; and
 - the core government's large and growing unfunded liability (some \$1.2 billion in 2013-2014) arising from its health care obligations to eligible retired civil servants.

ABOUT THE AUDIT

- 16. In planning the audit, we identified the following potential audit issues when we reviewed how the Government fulfills its responsibilities for delivering health care programmes and services and managing the health system:
 - ensuring quality health care and a healthy population;
 - meeting the needs of vulnerable patient populations;
 - encouraging an effective, high value health system marketplace; and
 - ensuring long-term sustainability of the health system.
- 17. We also found that there was no current, complete and readily accessible description of the full extent of the health system, embracing all types of health care, including services that fall within the public sector as well as those that are private.
- 18. We therefore decided to produce two health-system related reports at this time.
 - a <u>public interest report</u> ("*The Cayman Islands Health System*") that sets out the key elements of the health system and how they operate and interact to deliver services, produce health outcomes, and affect the health status of the population; and
 - this <u>performance audit report</u> that sets out the results of our audit of the first of the audit issues identified—ensuring quality health care and a healthy population.
- 19. The objective of this performance audit was to determine whether the Government had clearly defined, communicated, and effectively and efficiently managed its roles and responsibilities for ensuring quality health care to the people of the Cayman Islands and ensuring a healthy population.
- 20. To achieve this objective, the audit examined:
 - the way the Government has established and communicated its roles, responsibilities, policies and strategies for the health system;
 - its authority and capacity to deliver on its accountabilities;
 - its means for promoting and monitoring compliance with the legislative framework;
 - the performance management and reporting framework it has put in place; and,
 - the extent to which health system results and outcomes are consistent with any performance expectations established by the Government and with relevant international standards for all aspects of health care.

- 21. In carrying out this work, we interviewed key officials in the private and public sectors, carried out a survey of medical and dental practitioners (see Appendix 3), reviewed a range of documents, and analyzed data drawn from a variety of sources.
- 22. We gratefully acknowledge the cooperation and assistance we received from government officials as well as health care professionals and executives in the public and private sectors in all phases of our audit work. More information about the audit, including the criteria, approach and methodology used may be found in Appendix 1.

THE GOVERNMENT'S ROLES, RESPONSIBILITIES, POLICIES AND STRATEGIES

- 23. The Government, and more specifically the Ministry of Health, has assumed responsibility for the oversight and regulation of the entire Cayman Islands health system. Given its significant commitment of resources, the importance of health services to all residents, and the fact that the health system involves public as well as private providers of health care and health insurance services, we expected to find that the Government would have clearly articulated and communicated to all stakeholders its roles and responsibilities, including the policies and strategies required to execute them.
- 24. The 2015-2016 Annual Budget Statement for the Ministry of Health indicates that the Ministry "will ensure a healthy population through the development and implementation of strategic policies and legislation." It goes on to state that the Ministry is committed to ensuring "quality health care for the people of the Cayman Islands" while continuing to embrace its guiding principle of "improved health and well-being for all."
- 25. There is no legislation that expressly empowers the Ministry of Health or defines the scope of its obligations with respect to the health system. However, under its prerogative powers, the Government is clearly in a position to assume such roles and responsibilities, to devise such policies and strategies, and to take such actions as it deems necessary to provide the "comprehensive health care system" envisioned by the Constitution.

THE GOVERNMENT'S ROLES WITH RESPECT TO THE HEALTH SYSTEM ARE EVIDENCED IN PRACTICE; ITS RESPONSIBILITIES ARE LARGELY SET OUT AND COMMUNICATED IN THE LEGISLATIVE FRAMEWORK

- 26. Though not explicitly articulated or communicated, the Government's roles with respect to the health system are evidenced by what the Government does in practice.
 - Governance and leadership. In 2012 the Ministry of Health released a *National Health Policy and Strategic Plan for the Cayman Islands 2012-2017* (NHPP). This was designed to outline the Government's vision, values, strategic directions and objectives for its health care initiatives. Among other things, it was intended to help the Government's private sector health partners align their efforts with the national health objectives. In addition, the Government has established a legislative framework for the health system. It is the Ministry of Health that has asserted its responsibility for the oversight and regulation of the health system, including ensuring that relevant laws and regulations are in place and are kept up to date. Under the direction of the

Ministry, the Department of Health Regulatory Services supervises the regulation of the health insurance and health services industries.

- **Direct delivery of health services.** HSA provides public health programming and operates hospitals, health centres and other facilities that provide a range of health services, including dental, eye care and pharmacy services.
- Employment benefits, financial assistance to some residents and healthcare entities. Examples of financial assistance include paying the health insurance premiums of seamen and veterans. The Government also pays for health services incurred by the medically indigent, uninsured children, and uninsured pregnant women. The Government pays the premiums of government employees and pensioners as employment benefits. It also provides a variety of financial concessions (for example, forgone customs duties) to Health City Cayman Islands and some other private sector healthcare providers, and provides equity injections to HSA and CINICO. We found that the Government's responsibilities for health services are mainly, though not explicitly, set out and communicated in the legislative framework. These responsibilities have evolved as that framework has been developed and updated. Among other things, the many laws and regulations in place make clear the Government's responsibilities in regulating all health insurance and health practice and in directly delivering health services and public health programming.

THE GOVERNMENT HAS FAILED TO IMPLEMENT FULLY THE NATIONAL HEALTH POLICY AND STRATEGIC PLAN FOR THE CAYMAN ISLANDS 2012-2017

- 27. The development of the NHPP was a major effort, led by the Ministry of Health with guidance from the Pan-American Health Organization. A large number of stakeholders participated, representing the public and private sectors as well as non-governmental organisations.
- 28. The NHPP was an ambitious undertaking. It was the first time that the Government had an overarching policy to outline its vision, goals and objectives for health care initiatives, as well as to serve as "an instrument for providing direction and coherence to the many stakeholders involved..." The vision is "Health and Well-being for all in the Cayman Islands." The nine value statements to guide efforts in realising the vision are designed to, among other things, demonstrate "commitment towards equitable, accessible, affordable and sustainable high-quality care based on evidence." The NHPP notes that this "should be accomplished with continuous performance monitoring, provided in a caring and compassionate manner with the patient at its centre." Based on an analysis of strengths, weaknesses, opportunities and threats, the NHPP identified 9 strategic directions and 19 supporting objectives to be pursued in the five-year period 2012-2017.
- 29. Given the scope, magnitude and intentions of the NHPP's development, we found that the Government has not taken reasonable action to implement it. The NHPP noted that going forward

would require the development of a costed operational plan. Four years later, and a year before the NHPP expires, operational plans are still in draft form. The NHPP also indicated that monitoring and evaluation were important to achieving its expected results and that a comprehensive monitoring and evaluation plan would need to be developed for the NHPP and for the operational plans through which it was to be actioned. We found that a monitoring and evaluation plan has not been developed.

- 30. Ministry officials told us that it has proved difficult to implement the NHPP in the face of several competing and more immediate priorities, coupled with a shortage of resources within the Ministry as well as a change of government in 2013. Ministry officials did note that the NHPP was often referred to whilst developing the Ministry's annual work plans. Officials noted as well that the Government's budgetary process and structure, with its focus on outputs rather than outcomes, does not easily lend itself to implementing the NHPP.
- 31. Our analysis of the NHPP shows that there is some disconnect between the very ambitious vision and values and the nine strategic directions with their supporting objectives: the strategic directions and objectives do not specifically address ways to deliver on the vision and values or to produce meaningful and measurable health outcomes. Nevertheless, implementing the NHPP would result in some important steps towards improving the health system. Not proceeding with implementation means that these steps will not be taken or, at best, that they will be delayed to some uncertain time in the future. In the meantime, it is not clear that the NHPP provides useful direction or coherence to the public and private sector stakeholders involved.
- 32. We were informed by the Ministry that its intention is to review the NHPP in 2017 in order to update it and to prepare implementation plans for the updated policy at that time. In the meantime, in collaboration with the Mental Health Commission, and with the assistance of the Pan-American Health Organization, the Ministry began work on the development of a National Mental Health Policy in 2015. This work had not been completed when we concluded this audit.
- 33. Several private sector practitioners we interviewed indicated that they were not clear about the Government's roles, responsibilities, policies or strategies for the health system. They were aware of the major effort some years ago to develop the NHPP but not of any subsequent developments or outcomes. Most believed that there was not enough communication or consultation between the Ministry of Health and the private sector, and that the Ministry had little information on what is happening in the private sector.

Recommendation 1: The Government should update *The National Health Policy and Strategic Plan for the Cayman Islands,* including developing the operational plan necessary for its implementation and the monitoring and evaluation plan required to track progress and results.

THE GOVERNMENT'S AUTHORITY AND CAPACITY TO EXECUTE ITS ROLES AND RESPONSIBILITIES

34. The Government has committed to "ensuring quality health care for the people of the Cayman Islands" and "(ensuring) a healthy population." We expected, therefore, that it would have clear and effective authority to take the actions required to achieve these aims. In addition to authority, we expected that the Government would have the capacity (for example, the necessary organisational structures, facilities, information and resources) to pursue its aims effectively.

WITH SOME EXCEPTIONS, THE GOVERNMENT HAS A FIRM BASIS FOR THE AUTHORITY REQUIRED TO EXECUTE ITS ROLES AND RESPONSIBILITIES IN REGARD TO HEALTH SYSTEMS

- 35. As noted earlier, it is the Government's prerogative powers that provide its authority for the oversight and regulation of the health system. The Government's authority is more specifically exercised through the health system-related framework of laws and regulations that the Ministry is responsible for developing and keeping up to date. The coverage and currency of the legislative framework, therefore, are important factors in assessing the scope of the Government's authority to oversee and regulate the health system.
- 36. We identified some constraints on the Government's authority that exist where laws and regulations are recognized as out of date or not in place. The *Pharmacy Law (1979)* is an example of a law that is widely seen to be seriously out of date, and in the meantime there are likely risks to patients. For example, we noted an instance of a prescribed drug issued with no information in English on the label. A revised pharmacy law was approved by the Legislative Assembly in 1991 but is not in force. Another revised pharmacy law has since been drafted and government officials expressed hope that it will be approved in the near future.
- 37. Examples drawn to our attention of laws or regulations that are needed but that are not yet in place included legislation regarding the nursing profession and practice, blood banks, and human tissue transplants. ¹We noted that the draft operational plans for implementing the NHPP included plans for early action on developing a law review schedule that would allow for systematic review and updating of the legislative framework.

¹ Amendments to the Health Practice Law schedule for Nursing and Midwifery Council and associated regulations were approved on 13 December 2016 and gazetted on 16 December 2016.

- 38. We also researched the nature and extent of health-related legislation in other jurisdictions in order to identify legislation commonly found in developed countries that might be relevant in the Cayman Islands context but is largely absent or incomplete. The following areas stood out in this regard:
 - regulation aimed at influencing people to make healthier choices that help combat the growing burden of chronic, non-communicable diseases;
 - regulation of medical devices and aids;
 - regulation of clinical research involving human subjects; and
 - regulation of patient privacy.
- 39. We noted that a Bill for a law to provide for the protection of personal data, including personal medical and mental health records, was passed but was awaiting enactment at the time we completed the audit.

Recommendation 2: The Government should proceed with a law review for the systematic updating of the health system legislative framework.

THE GOVERNMENT'S ABILITY TO EXECUTE ITS ROLES AND RESPONSIBILITIES IS IMPAIRED BY LIMITED INFORMATION AND SHORTAGES OF CAPACITY

- 40. In addition to assessing the Government's authority with respect to the health system, we assessed the Government's capacity for exercising that authority in pursuing the aims of ensuring quality health care and a healthy population.
- 41. We found that organisational structures required to execute the Government's roles and responsibilities are in place. For the most part, so are health care facilities, although most of the HSA staff we interviewed expressed concerns about shortages of physical space.
- 42. Government officials as well as private practitioners we interviewed identified weaknesses in twoway communication between the Government and its private sector partners. Weaknesses described to us included a lack of clear communication by the Government about its policies and strategies and the role that the private health sector can play in pursuing national goals. We found that there is only a minimal regular flow of information about such matters as quality of care, accessibility or health outcomes from the private sector to the Government. Most private practitioners we interviewed indicated that they would be prepared to provide such information if asked to do so.
- 43. Poor two-way communication and the limited information available to the Government on the private delivery of health services compromise the Government's ability to carry out its roles and responsibilities effectively as regards the private sector especially in terms of governance and leadership. Indeed, there are questions about the extent to which the private sector fully recognises and acknowledges the leadership role that the Ministry of Health has in the Cayman Islands health

system, and the extent to which the Ministry has exercised this leadership role. We noted that the Ministry has neither defined nor communicated what it means by "quality health care" or "a healthy population." Nor has it put in place reporting requirements or communicated its expectations to either private or public providers with respect to such matters as accessibility, quality of care and health outcomes. These matters are assessed in more detail below.

Recommendation 3: The Government should strengthen its relationships with private health care providers and the two-way communication required for it to develop an effective health care system.

- 44. In relation to the Government's capacity for exercising its authority and effectively carrying out its roles and responsibilities, the most common concern expressed by public as well as private sector executives and professionals we interviewed was about perceived serious capacity shortages in the Ministry, in the Department of Health Regulatory Services (DHRS) and in HSA.
- 45. The Ministry staff we interviewed pointed to priority changes and capacity shortages as the main factor in delaying the implementation of the NHPP, especially when faced with a series of pressing, and more short-term, requirements. The fact that such urgent requirements can be expected to continue in the future could have challenges for the Ministry's stated intention to review and update the NHPP in 2017 and then move on to finalise implementation plans. Our interviews of officials looking to the Ministry for decisions, assistance, or guidance showed that they had concerns about the Ministry's responsiveness.
- 46. Our findings were much the same with respect to staff shortages at the Department of Health Regulatory Services – especially in the case of the Health Insurance Commission (HIC). When HIC became operational in 2004 it had three inspectors. Twelve years later it still has three inspectors even though its workload has increased significantly. For example, the number of persons insured rose from 39,531 in November 2005 to 59,025 in July 2016. To help compensate for a shortage of staff, the HIC has pursued several initiatives. These include:
 - encouraging health care facilities and practitioners to provide HIC with information about uninsured patients (with the patient's approval);
 - working with the Department of Commerce and Investment to ensure that applications for Trade and Business Licences are accompanied by validated information about health insurance; and
 - discussing with the Immigration Department the possible use of a certificate of compliance which would require all employers to provide proof of health insurance when filing applications for work permits.
- 47. Nevertheless, the reality is that enforcement of compliance with the *Health Insurance Law* and *Regulations* has suffered, and the risk of some employees and their dependents being uninsured has increased. This has also increased financial risks for the Government should it have to absorb the

costs of possible catastrophic health incidents involving uninsured persons. Private sector providers and some government officials told us that stronger regulation of employers and of health insurance companies is required. They believed that if HIC had more resources it could do more, including stronger enforcement, faster resolution of complaints and investigations of insurance terminations, and more education of health insurance stakeholders. We note as well that the most frequent concerns among respondents to our survey of medical and dental practitioners were related to health insurance (see Appendix 3).

- 48. In the HSA, the executives and professional staff also expressed concerns about the available level of staff support. Over a period when the Cayman Islands population has doubled, the number of staff in public health programming has not changed. HSA managers also pointed out that they faced difficulties in recruiting physicians—and especially specialist physicians—given that the compensation they could offer was low compared with what physicians could earn in other jurisdictions or in the Cayman Islands private health sector.
- 49. The Mental Health Commission Law (2013) charged the newly established Mental Health Commission with a long list of duties and functions including, for example, hearing and determining appeals; conducting reviews; providing policy advice to the Minister and other agencies; obtaining and compiling statistics; overseeing and delivering training; and providing information to the public. The Ministry of Health has appointed a member of its own staff as a part-time secretary to the Commission; but more than two years after the Commission was established, it has no full-time staff to carry out its work.

Recommendation 4: The Government should assess whether it has the capacity required to execute the roles and responsibilities it has assumed for the Cayman Islands health system, and take appropriate corrective action.

COMPLIANCE WITH HEALTH-RELATED LAWS AND REGULATIONS

50. The complexity of the health system and the fact that it is governed by many pieces of legislation mean that compliance with key elements of the legal and regulatory framework is important, even if it is difficult to monitor and enforce. We expected that the Government would have identified on a priority basis those elements of the legislative framework that require compliance and would have implemented means to promote and enforce it. We also expected that the Government would monitor results to ensure that it has reasonable assurance of compliance and has the ability to make evidence-based decisions relating to compliance.

THE GOVERNMENT'S PRIORITIES FOR COMPLIANCE ARE EVIDENCED BY ITS ORGANISATIONAL STRUCTURES AND RESOURCE ALLOCATIONS

- 51. We found that the Government's priorities with respect to compliance are evident in the organisational structures it has established and the resources it has allocated. The Government has provided a legislative basis for, and has established, the Health Practice Commission (HPC) and the Health Insurance Commission (HIC) to promote and monitor compliance with the *Health Practice Law* and *Regulations* and the *Health Insurance Law* and *Regulations* respectively. The fact that these laws and regulations have direct impacts on patient privacy and safety, the quality of health care, and access to health care and its affordability confirms the importance of ensuring compliance with them.
- 52. The Health Practice Commission (HPC) inspects and certifies health care facilities using National Standards Inspection Checklists and, through the four professional councils, registers and licenses healthcare practitioners. HPC can withhold certification of facilities or the registration of practitioners in some cases to promote compliance, but the law does not provide it with the authority to impose fines as a means of enforcing compliance. Instead, fines may be imposed against practitioners or facilities only by the courts upon summary conviction.
- 53. Complaints and disputes relating to or arising from health care practitioners or facilities are generally brought to the attention of the Councils for resolution. Those that cannot be resolved at the Council level may go to HPC or, ultimately, to the Health Appeals Tribunal. We found that although HPC does not compile any systematic data on compliance, officials are generally satisfied with the level of compliance achieved. We were told that some practitioners or facilities have to be reminded about the importance of compliance from time to time, but that the vast majority are compliant with the law and regulations.

NOT ALL QUALIFIED PRACTITIONERS ARE REGISTERED AND NOT ALL FACILITIES THAT PROVIDE HEALTH SERVICES ARE INSPECTED AND CERTIFIED, EXPOSING PATIENTS TO RISKS

54. We identified situations arising from practices and policies for registering and licensing health practitioners that may result in unnecessary risks to patients. Health care facilities are defined in the law as "premises at which health services are provided by a registered practitioner." We found that in the Government-funded mental health and substance abuse treatment centres (The Counselling Centre and the Caribbean Haven Residential Centre), practitioners who are qualified counsellors, psychologists and therapists are providing health services. These practitioners, however, are not registered. We were told that there are two possible reasons for this. First, registration fees may be waived for practitioners who are government employees and the Councils do not include practitioners on their registers unless fees are collected. Second, to be fully registered as a health care practitioner in the Cayman Islands, a practitioner must be eligible to be licensed and registered in one of seven approved jurisdictions. Some Caymanian practitioners who are trained in the U.S.A. may not be able to obtain the practicum hours there that would be required to obtain full registration in the U.S.A. Such practitioners may apply to the Health Practice Commission for

provisional registration until they complete sufficient practicum hours in the Cayman Islands, at which point they will be eligible for full registration. In such cases, therefore, there can be delays in achieving full registration as health care practitioners in the Cayman Islands.

- 55. The result is that these two facilities fail to meet the definition of health care facilities under the law. The risk that this poses is two-fold: first, the facilities are not being inspected and certified for an appropriate health care environment; and second, the practitioners who work in them are not subject to the same requirements as other registered health care practitioners.
- 56. We also found that the several residential homes for seniors and for adults and children with disabilities are not being inspected and certified as health care facilities. These facilities include the Pines, the Golden Age Home, Sunrise Cottage, Hillside House, Kirkconnell Community Centre, and Maple House. In the case of The Pines retirement home, registered practitioners on staff are providing health services, but the facility itself has not been inspected or certified even though it apparently meets the definition of a "health care facility" under the law . Again, this means a risk that the facility may fail to provide an appropriate health care environment. We were told that while the HPC can inspect and certify nursing homes that need to have a physician on staff, it does not have a category (with associated standards) for a retirement home such as The Pines, which is not required to have a physician on staff.

Recommendation 5: The Government should review policies and practices for the registration of practitioners and the inspection of health care facilities. It should take steps to ensure that that all qualified practitioners are appropriately registered and regulated and that all facilities at which health care services are provided by qualified practitioners are appropriately inspected and certified.

- 57. The Health Insurance Commission (HIC) promotes and enforces compliance with the *Health Insurance Law* and *Regulations*, using a variety of methods. These include monitoring the conduct of approved insurers, educating and informing the public, investigating and settling disputes, resolving complaints, imposing administrative fines in some cases of non-compliance and, as described earlier in this report, pursuing innovative ways to help ensure compliance in the face of a shortage of inspection resources.
- 58. Among the challenges that need to be addressed, according to *The National Health Policy and Strategic Plan for the Cayman Islands 2012-17* (NHPP) was that "the enforcement of the health insurance law is not optimal." The interviews and survey we carried out confirmed that there are widespread concerns among government officials, as well as public and private health care providers, about perceived abuses of the *Health Insurance Law* and *Regulations* by employers as well as insurers. However, neither the NHPP nor the draft implementation plan that has since been developed provides further detail regarding this matter or suggests that any action is planned to strengthen enforcement.

MONTHLY REPORTS TO THE MINISTRY FROM THE DEPARTMENT OF HEALTH REGULATORY SERVICES INCLUDE LITTLE INFORMATION ON COMPLIANCE

- 59. Although anecdotes of lack of compliance were related to us, we found that, as in the case of compliance with the *Health Practice Law* and *Regulations*, there is no systematic data being provided to the Ministry of Health to indicate the nature and extent of non-compliance or (and perhaps more important) the trends in non-compliance over time.
- 60. The Department of Health Regulatory Services provides a monthly report to the Ministry of Health that summarises the initiatives, achievements and challenges of the Health Insurance Commission and the Health Practice Commission. The section dealing with achievements reports mainly indicators of activity and workload. For HIC, the monthly reports since August 2014 have included a table that provides, for some activity indicators, the number of cases received, resolved, or referred during the month, as well as the number of cases received in the month that are still active at the end of the month. Among the statistics reported in this table that have at least some bearing on compliance are the number of complaints, the number of policy terminations and, since May 2015, the number of notifications received from health care facilities and practitioners of patients presenting without health insurance coverage.
- 61. The reporting of policy terminations started in mid-2014. Before that, they had been included within a broader category of "complaints." The average number of policy terminations per month has been 193 over the period since their reporting started, but the actual number each month has varied widely without showing any clear trend. The number identified specifically as complaints has averaged less than 10 per month since mid-2014. From the perspective of compliance, the nature and resolution of complaints made and, in the case of policy terminations, the reasons for the terminations, and the results of any HIC investigations, would in our view be of greater interest than just the numbers. However, no such information is included in the monthly reports to the Ministry.
- 62. The number of notifications received each month by HIC from health care facilities and practitioners of patients presenting without health insurance coverage has also varied widely, ranging from zero to more than 80 and again with no clear trend since reporting began in mid-2015. Some of the monthly reports have included information on the number of health insurance-related prosecutions before the courts, usually fewer than 10 in any one month. It should be noted, however, that these do not necessarily represent new prosecutions each month, as many of the prosecutions remain before the courts month after month, and sometimes for several years, before they are decided.
- 63. The *Health Insurance Law* and *Regulations* provide that HIC can levy fines in some circumstances of non-compliance. Information on fines imposed by HIC (or by the courts) is not reported to the Ministry. At our request, the HIC compiled information which shows that in the past two years it has imposed administrative fines of \$1,000 in nine cases of employers failing to effect and continue health insurance and in one case a procedural fine of \$5,000 on an approved insurer for failing to

report to HIC certain information that is required by regulation. The information compiled by HIC shows that since January 2015 the courts have concluded nine cases where employers were charged with health insurance offences and have imposed fines – ranging from \$500 to \$5,000—in seven of those cases. As of August 2016, a further three cases were pending.

- 64. What appears to be a relatively small number of fines imposed by either HIC or the courts must be interpreted in the light of the fact that HIC does not have the resources to go into the field and carry out inspections of employers. Instead, it can only act when possible cases of lack of compliance are brought to its attention by other means. In any event, several officials and practitioners we interviewed believed that neither the administrative fines imposed by HIC, nor the fines imposed by the courts, are sufficiently punitive to encourage compliance.
- 65. Overall, the monthly reports to the Ministry from the Department of Health Regulatory Services do not contain enough appropriate information to allow the Ministry, even if it had the capacity, to systematically track and analyze the extent of compliance with key requirements of the *Health Practice Law* and *Health Insurance Law* and *Regulations*. If it were available, such information could be used to help guide decisions and take corrective actions in a timely manner. As a result, while the Government has identified those elements of the legislative framework governing the health system that require compliance on a priority basis, and has implemented means to promote and enforce it, the lack of relevant information means that the Government is not in a position to have reasonable assurance of compliance.

Recommendation 6: The Ministry of Health should receive regular reports on the nature and extent of compliance with the *Health Practice Law* and *Health Insurance Law* and *Regulations* to ensure that it has the information it needs to take appropriate corrective action as necessary.

A PERFORMANCE MANAGEMENT AND REPORTING FRAMEWORK FOR THE HEALTH SYSTEM

- 66. The Cayman Islands Government 2015-16 Annual Budget Statement for the Ministry of Health states that the Ministry is committed to "ensuring quality health care for the people of the Cayman Islands" and that it "will ensure a healthy population." To this end, as described earlier in this report, the Ministry of Health has the responsibility for oversight and regulation of all health care services, including services provided by the private as well as the public sector.
- 67. Effective oversight and regulation, and the informed decision-making that these responsibilities entail require that realistic performance expectations be established and communicated, and that regular and reliable information on the actual performance of the health system in meeting those expectations is available. To be effective, the Government must use performance information to inform decisions aimed at improving the quality of care and ultimately delivering better health outcomes—and better value for money—for all residents.

- 68. In view of the substantial expenditures involved, and the significance of the health system to all residents, we expected that the Government would have put in place a performance management and reporting framework. Such a framework would provide a sound foundation for carrying out the responsibilities the Government has assumed and the corresponding accountability it owes to the Legislative Assembly and the public.
- 69. Our research of practices in other jurisdictions showed that performance management and reporting frameworks for health systems are being implemented and used to inform decision making. While improvements are still needed, those jurisdictions have made considerable progress in developing indicators and reporting performance for population health, primary care and acute hospital care. Gaps remain in such areas as mental health, financial protection, health system access and patient experience.

THE PERFORMANCE OF THE CAYMAN ISLANDS HEALTH SYSTEM IS NOT KNOWN AND ACCOUNTABILITY TO THE LEGISLATIVE ASSEMBLY AND THE PUBLIC CANNOT BE RENDERED

- 70. We found that the Government has not put in place a performance management and reporting framework. It has not articulated or communicated its expectations in terms of targets or objectives for dimensions such as the quality of care, health outcomes, or access to care. The Ministry of Health has publicly identified its commitment to ensuring quality health care and a healthy population, but these objectives are far too general to serve as useful performance expectations that can serve as a basis for action by those facilities and practitioners that are in a position to influence results.
- 71. Some health statistics—mostly relating to public health—are required to be reported by all facilities and providers. HSA's Public Health Unit tracks communicable diseases, including sexually transmitted infections, diarrhoeal diseases, mosquito-borne illnesses and vaccine preventable diseases. However, the Ministry of Health does not receive a regular flow of information relating to all health services delivered by private as well as public sector components of the health system. Such information, were it available, would allow for monitoring the health system's performance, identifying trends, making decisions, establishing priorities, policies, strategies and action plans, and rendering accountability to the public and to the Legislative Assembly. Ultimately, a regular flow of performance information is a prerequisite for establishing realistic performance expectations and ensuring that they can be updated as required.
- 72. In addition to the information that has to be reported to the Public Health Unit by all facilities and practitioners, a variety of performance-related information is captured within the health system— mostly in the case of the public sector. The core health information collection systems in the public sector include HSA's CERNER system and CINICO's claims system. These systems host the bulk of available information relating to patient transactions, expenditures, population health outcomes and statistics. Although some of this information is available to the Ministry of Health, it is not being

collected or used as a planned component of a coherent performance management and reporting system. And, except in the case of public health surveillance, relatively little performance-related information is sought from, or provided by, the private sector.

- 73. We examined the possibility that the Government's annual budgetary cycle, involving Budget, Ownership and Purchase Agreements, might provide a possible starting point for implementing a performance management and reporting system. The manner in which the budget documents are structured makes this difficult, if not impossible. For the most part, they deal with activities, and only rarely with outputs. There is little in them that touch on health system outcomes. Moreover, the budget documents cannot include the private sector, although that sector forms an important part of the health system.
- 74. The Government's *National Health Policy and Strategic Plan for the Cayman Islands 2012-17* (NHPP) includes a list of values to guide efforts in realising its vision of "Health and Well-being for all in the Cayman Islands". Several of the value statements suggest a need for government access to systematic and reliable information on performance to ensure that its commitments are met and to demonstrate accountability. These statements include, for example:
 - *"We will provide equitable and universal health services and programmes in a just and nondiscriminatory way accessible to all*
 - We believe that healthcare in the Cayman Islands should be affordable, sustainable and efficient
 - We will ensure that services are of high quality, safe and dependable."
- 75. The values espoused by the NHPP go on to note, "We will be accountable for health interventions, ensuring that interventions are based on sound evidence, geared towards measurable outcomes, with on-going assessments and evaluations." However, there is no follow-through in the strategic directions and objectives set out in the NHPP to take action on the values statements that relate to the performance of the health system as well as the need for measuring and reporting that performance. The NHPP indicates that monitoring and evaluation would be key functions in achieving its expected results and that a comprehensive monitoring and evaluation plan would be developed once the action plans for each strategic direction are in place. But as reported earlier, these action plans have yet to be finalised.

Recommendation 7: The Government should put in place a performance management and reporting framework for the Cayman Islands health system to inform decision making and provide accountability to the Legislative Assembly and the public.

CONSISTENCY OF HEALTH SYSTEM RESULTS AND OUTCOMES WITH RELEVANT INTERNATIONAL STANDARDS AND EXPERIENCE

- 76. We found a large measure of consistency in international leading practice when it comes to monitoring the performance of health systems. The frameworks used generally focus on three main dimensions:
 - the quality of care and associated health outcomes;
 - access to care and patient experience; and
 - health expenditures and financing.
- 77. Although the Government has neither articulated its performance expectations for the health system nor arranged to receive a regular flow of information that would allow for an assessment of performance, we found that some performance-related data is available from a variety of sources. As part of this audit, we examined data available in relation to the performance dimensions set out above to determine whether the performance of the Cayman Islands health system, to the extent that it can be identified, is consistent with relevant international standards and experience. Of necessity, this analysis focused largely on the public sector component of the health system.
- 78. As the Cayman Islands has the highest quality of life and the highest gross domestic product (GDP) per capita among all the Caribbean nations, we expected that its health system would support good health results and that useful comparisons could be made with some wealthy OECD nations with close relationships or in close proximity to the Cayman Islands (the United States of America, the United Kingdom and Canada). Several factors, however, also place the Cayman Islands as a "Small Island Developing State". The development of such states tends to be held back by high cost of communications, energy, and transportation; irregular volumes of international transport; limited resources; disproportionately expensive public administration and infrastructure due to their small size; and little opportunity to create economies of scale. Among Small Island Developing States, we identified Bermuda, Barbados, Bahamas, Jamaica², Turks and Caicos, and the British Virgin Islands as reasonable comparators.

THE CAYHEALTH PROGRAMME IS AN EXAMPLE OF LEADING PRACTICE IN CHRONIC DISEASE MANAGEMENT, BUT HAS YET TO BE EXTENDED BEYOND THE MEDICALLY INDIGENT POPULATION

² While Jamaica is a much larger country, the expat community is approximately 50% Jamaican and a large number of patients are sent there for health care services.

QUALITY OF CARE AND HEALTH OUTCOMES

- 79. We expected that high-quality health care in the Cayman Islands would be supported by the use of leading-practice care standards and guidelines. In assessing information available on the quality of care we sought to answer the following questions:
 - Is the primary care system following leading chronic disease management practices to keep the population out of hospital and healthy in the community?
 - Are populations being screened for cancers and other chronic diseases according to leading practice guidelines?
 - Are appropriate quality and safety protocols in place for prescribing pharmaceuticals?
 - Are leading practice guidelines in place for surgical and obstetrical care?
 - Are the appropriate populations receiving their vaccinations?
- 80. Is the primary care system following leading practice chronic disease management practices? The Government's CayHealth programme was designed to ensure continuity of care by assigning a preferred primary care physician to all residents accessing care at the Health Services Authority. This is consistent with leading practice in chronic disease management which, among other things, strives to keep people healthy in the community and out of hospitals.
- 81. The CayHealth programme was launched on a pilot basis in 2010 to deal initially with just the medically indigent population (now some 1,200 patients). Reports on the status of these patients are compiled each month and show some mixed, but generally positive outcomes. Whereas the proportions of patients whose diabetes was under control or who had high blood pressure had changed little, by January 2016 encounters with general practice physicians had increased significantly, while the number of more costly visits to specialist clinics and Accident and Emergency had decreased by 40 per cent. Despite promising results and the useful body of information that it provides, the CayHealth programme has yet to be extended to other patients in the public or private systems. Expanding the benefits incurred by the CayHealth programme of better utilization of heath care resources to other patient populations should result in improved value for money.
- 82. The World Health Organization's STEPS Survey provided the Government with point-in-time information on chronic disease risk factors in 2012. The survey showed that almost 43 per cent of the population aged 25 to 64 years had three or more of the risk factors associated with smoking, dietary habits, levels of activity, body weight or blood pressure. The Government does not, however, regularly track the prevalence of key risk factors or the incidence of non-communicable chronic diseases in all residents.
- 83. There has been an increased focus on mental health in recent years. Legislation has been updated, the new Mental Health Commission is operational and steps are being taken to establish a long-term residential mental health facility. We noted a lack of published mental health care guidelines and

pathways for all care settings, though it is possible that the National Mental Health Policy (under development when we completed the audit) will include some guidelines.

Recommendation 8: The Government should evaluate the design and performance of the CayHealth programme and, as appropriate, extend it to cover a wider population.

- 84. Are populations being screened for cancers and other chronic diseases according to leading practice guidelines? Beyond the information available from the CayHealth pilot programme and some breast, cervical and colorectal cancer screenings done at HSA on a demand basis, we found no evidence to show that the population is being pro-actively and regularly screened for chronic diseases. There are few published guidelines for private or public practitioners in this regard. This does not necessarily mean that patients are not being appropriately screened it means that screening is not being regularly reported, or systematically tracked by the Government.
- 85. Are appropriate quality and safety protocols in place for prescribing pharmaceuticals? HSA has developed three specific policies relating to prescribing pharmaceuticals for acute pain in adults, for pediatrics and for antibiotic use. We were not able to identify any other policies or guidelines in place to help ensure appropriate quality and safety protocols for prescribing pharmaceuticals.
- 86. Are leading practice guidelines in place for surgical and obstetrical care? We received and reviewed two policies for specific surgical procedures and one for an obstetric ambulance call protocol. We did not, however, find any more general guidelines in place for surgical and obstetrical care.
- 87. Are the appropriate populations receiving their vaccinations? Although the Cayman Islands Childhood Vaccination Programme ensures that childhood vaccinations are free for all residents, there is no legislation to make vaccinations compulsory. The School Health Policy and the Ministry of Education, however, require evidence of vaccination before entry to school, with exceptions only on medical or religious grounds. Available data show high immunization coverage. For example, in 2015, more than 90 per cent of children up to four years old had been immunized against each of diphtheria, tetanus, pertussis, polio, haemophilus influenza, hepatitis B and chicken pox.

THE CAYMAN ISLANDS APPEARS TO PERFORM WELL IN MANY CATEGORIES OF HEALTH OUTCOMES, BUT LIMITATIONS OF AVAILABLE INFORMATION MAY OBSCURE SOME IMPORTANT DIFFERENCES

88. To the extent that we were able to obtain data relevant to making comparisons, we found that the Cayman Islands performs relatively well (and in some cases very well) in many categories of health outcomes when compared to the three OECD nations and the Small Island Developing States (SIDS) we selected for comparison purposes. These include life expectancy at birth; infant mortality rate; maternal mortality rate; and mortality rates from communicable diseases, cancers, external causes,

diabetes, ischemic heart disease and cerebrovascular diseases. It performs less well in the proportion of low birthweights, and shows more average results in the prevalence of hypertension and of type II diabetes.

- 89. In comparing the health outcomes of the Cayman Islands population with those of other jurisdictions, we found that it is of critical importance to take account of the unique nature of the Cayman Islands population. What makes the population unique is the high population of non-Caymanian expatriate residents. Most of the expatriates tend to live in the Cayman Islands only during the healthiest years of their life. Furthermore, non-Caymanians are required to undergo detailed medical evaluations to demonstrate good health before being granted work permits and resident status. The Economic and Statistics Office estimates that 43 per cent of the total population in 2015 was non-Caymanian. It is important to note that this proportion is not constant across all age groups. The three age groups that typically utilize the most health care services (ages 0-14, 15-24 and over 65) and are more likely than other age groups to suffer adverse health outcomes, are overwhelmingly Caymanian, at 75 per cent, 77 per cent and 83 per cent respectively in 2015.
- 90. What this means is that most of the health statistics that were available to us, and which reflect averages across all age groups, may conceal some important bimodal distributions insofar as the health status of Caymanian and non-Caymanian residents is concerned. For example, information from the 2012 WHO STEPS survey indicates that the rate of diabetes and hypertension in the Cayman Islands is similar to rates in the OECD and SIDS countries we used for comparison purposes. However, the Cayman Islands 2010 census data provided information about the incidence rates of some diagnosed illnesses broken out by sex and status. We found that this data shows a significantly higher rate of disease in the Caymanian population than in the non-Caymanian population. Diabetes in the Caymanian population. The incidence of heart conditions was 5.7 times higher, cancer 2.7 times and asthma 2.1 times higher in the Caymanian population.
- 91. These findings clearly indicate that health statistics (including statistics relating to the prevalence of risk factors as well as outcomes) which reflect only averages for all Cayman residents risk distorting the apparent performance of the health system and may obscure differences in outcome of potential importance for the Government in establishing policies and plans that will help meet its commitment to ensure a healthy population.

Recommendation 9: The Government should ensure that health statistics used for purposes of planning, management, and accountability distinguish between Caymanian and non-Caymanian populations.

ACCESS TO CARE AND PATIENT EXPERIENCE

- 92. Access to health care depends upon several factors, including the affordability of care; the number, geographical distribution and accessibility of practitioners and facilities; and the types of health services available. We expected that residents of the Cayman Islands would have affordable and ready access to appropriate health care, as well as positive experiences in their contacts with health care providers. In assessing access to care in this audit, we addressed issues relating to health insurance coverage and availability of health care practitioners and facilities.
- 93. Good health insurance coverage is important in helping to make health care affordable. Health insurance is compulsory in the Cayman Islands, and we found that the proportion of residents covered is quite high. The total population of the Cayman Islands at the end of 2015 was estimated as 60,413, and information available from the Health Insurance Commission shows that 57,024 persons were covered by health insurance in December 2015—a coverage rate of more than 94 per cent. Legislation mandates that employers cover half of the cost of the Standard Health Insurance Contract premiums for their employees. However, many employers (public and private sectors) go beyond that mandate and cover more of the costs, and/or have more benefits afforded to their employees. In the case of current or retired civil servants, seafarers and veterans (local care only), the Government assumes the full cost of premiums.
- 94. Residents not covered by a health insurance contract effected by an employer or the Government are required to get a contract covering themselves and their dependents, unless they are deemed uninsurable or fall into categories of residents (such as seamen, veterans and indigents) for whom the Government may (but is not required to) effect a contract of insurance. In the majority of these discretionary cases, the Government has chosen to effect insurance contracts. The most obvious exceptions are indigent people, where the Government pays directly for the health services they require; and seamen and veterans, where the Government pays directly for any overseas care.
- 95. The Government may also pay for health services required by persons who are deemed uninsurable, partially uninsurable, underinsured or who are uninsured. In these cases, the Government advances loans to cover the cost of services. Although these loans are expected to be repaid to the Government, in most cases they are not.
- 96. The affordability of health care is also influenced by such factors as the cost of health insurance premiums and the nature and extent of the coverage the contracts provide. The scope of this audit did not extend to an assessment of these factors or to comparisons between the Cayman Islands and other jurisdictions.
- 97. Exhibit 3 shows the numbers of selected key health professionals (physicians, nurses and dentists) in the Cayman Islands, and similar data for other jurisdictions. The number of physicians per 10,000 residents is significantly higher in the Cayman Islands than in the other jurisdictions included in

Exhibit 3 (though it should be noted that the data available for the Bahamas and Barbados are not as current as for the other countries). At the same time, the number of nurses per 10,000 residents, while higher than in either the Bahamas or Barbados, is much lower than in the United States, Canada or the United Kingdom. The number of dentists per capita in the Cayman Islands is higher than in any of the five comparator countries, as is the number of hospital beds.

Jurisdiction	Physicians (per 10,000)	Nurses (per 10,000)	Dentists (per 10,000)	Hospital Beds (per 1,000)
Cayman Islands (2016)	45	63	7	4
Canada (2015)	25	106	6	3
United States (2015)	26	111	6	3
United Kingdom (2015)	28	79	5	3
Bahamas (2008)	28	28	2	3
Barbados (2005)	18	48	3	not available

Exhibit 3: Availability of Selected Health Resources

- 98. We looked for any data to indicate whether patients were satisfied with their encounters with the health care system and how their level of satisfaction may be changing over time. We found that some data was being maintained by HSA but in the case of the private sector there was no data available at all.
- 99. HSA tracks the number of patient complaints (an average of a little less than four per month in 2015) arising from all encounters with medical services, as well as a patient satisfaction. The latter is scored from zero to 100 (with 100 being high satisfaction) and the scores are compared with a benchmark based on the experience of seven Miami-area hospitals. Compared with the Miami-area benchmark average score of about 75 in 2015, the HSA monthly satisfaction score ranged between 60 and 75 and the trend was slightly down over the year. Data available for the period January to July 2016 shows reduced levels of satisfaction with HSA services, with scores below 50 per cent.
- 100. In April 2016, HSA announced that it would be seeking to gain a better understanding of patient experience through telephone surveys of randomly selected patients, focusing on several dimensions of patient-centered care. Earlier efforts to obtain such information through surveys administered by emails suffered from poor response rates as well as limitations inherent in using emails for such surveys. Information from the telephone surveys was starting to become available as we were completing this audit. We found it encouraging that HSA is actively seeking more reliable information on patient satisfaction with the health care services it provides.

HEALTH EXPENDITURE AND FINANCING

- 101. Total health expenditures in the Cayman Islands were approximately \$269 million in 2014-2015, representing approximately 9.7 per cent of the Gross Domestic Product (GDP). Health expenditures have risen steadily from 2010-2011, when a total spending of \$214 million accounted for 8.5 per cent of GDP. Annual per capita health expenditures have increased by 15.5 per cent (from \$3,857 to \$4,454) over this same five-year period.
- 102. Exhibit 4 shows that a greater proportion of GDP goes towards health expenditures in the Cayman Islands than in the Bahamas, Barbados, or Jamaica. The proportion is very similar to Canada and the United Kingdom and much lower than in the United States, where 17.2 per cent of GDP was devoted to health expenditures in 2015. Exhibit 4 also shows that unlike the predominantly publicly funded health systems in Canada and the United Kingdom, the split between public and private funding in the Cayman Islands is almost 50/50 similar to the United States and the Bahamas.

Health Expenditures	Cayman Islands	Canada	United States	United Kingdom	Bahamas	Barbados	Jamaica
Total	9.7	10.7	17.2	9.8	7.3	6.7	5.9
Public	5.0	7.6	8.1	7.7	3.2	4.1	3.4
Private	4.7	3.1	9.1	2.0	4.1	2.6	2.5

Exhibit 4: Health Expenditures as % of GDP (Selected Jurisdictions, 2015)

CONCLUSION

- 103. We concluded that the Government's role in the Cayman Islands health system is evidenced in its actions. The responsibilities it has assumed are defined and communicated in the legislative framework that it has established. However, there are some shortcomings in the Government's management of those responsibilities, to an extent that compromises the achievement of its stated aims: ensuring quality health care for the people of the Cayman Islands, and a healthy population.
- 104. The basic structures, including organisations, facilities and laws and regulations are in place (with gaps in some areas). But the range and complexity of the Government's task, coupled with a lack of capacity and limited information, have made it difficult to execute its roles and responsibilities. The Government does not have the resources or the information required to manage the health system effectively.
- 105. To ensure that Government gets the full value from its efforts developing national plans and strategies, the Government now needs the necessary follow-through to ensure the (draft) costed operational plan that has been started is completed. This follow-through would help ensure that changes are implemented across all parts of the Cayman Islands health system and information is available to track progress. In the absence of regular tracking of compliance with laws and regulations and without meaningful analysis and reporting of quality measures, population-specific health outcomes and associated costs, neither the Legislative Assembly nor the public can be confident that high quality health care is being delivered or that value for money is being achieved.

16 January 2017

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APPENDIX 1 – ABOUT THE AUDIT

OBJECTIVE

1. The objective of the audit was to determine whether the Government's role and responsibilities in ensuring quality health care for the people of the Cayman Islands and a healthy population are clearly defined and communicated, and are effectively and efficiently managed.

CRITERIA

- 2. Audit criteria set out the expectations—or standards—against which an audit can assess observed performance in order to develop findings, make recommendations as appropriate, and conclude on audit objectives. The five criteria below were shared with the Ministry of Health at the conclusion of the planning phase of the audit. The Ministry agreed with the following reasonable expectations:
 - a) The Government should have established and clearly communicated its roles and responsibilities with respect to the Cayman Islands health system, including its statutory responsibilities, strategies, policies and accountabilities.
 - b) The Government should have the authority, ability and capacity to effectively execute its roles, responsibilities and associated accountabilities with respect to the health system.
 - c) The Government should have reasonable assurance of compliance with the health system legal and regulatory framework.
 - d) The Government should have implemented a performance management and reporting framework for the Cayman Islands health system, including:
 - setting out and communicating clear and realistic performance expectations, consistent with international good practice, and aligned with its role and responsibilities;
 - having access to regular, complete and reliable information on the achievement of its performance expectations;
 - monitoring the health system's performance and using performance information to drive decision-making and planning for improvements; and
 - reporting regularly to the Legislative Assembly on the performance of the Cayman Islands health system.
 - e) The results and outcomes of the Cayman Islands health system should be consistent with any performance expectations established by the Government and with relevant international standards across the continuum of care preventative, primary, acute and post-acute care in respect of:

- high quality of care and associated health outcomes;
- timely access to care and excellent patient experiences; and
- the achievement of high value, sustainable system investments and expenditures.

AUDIT SCOPE AND APPROACH

- 3. The audit focussed on the Government's overall management of the Cayman Islands health system. Where possible, we sought data relating activities, costs and results for at least the past three years.
- 4. The audit was conducted in accordance with International Standards on Assurance Engagements. The approach to the audit included:
 - obtaining the agreement of relevant government officials to the audit criteria;
 - researching processes to gain a full understanding of activities;
 - interviewing key officials and practitioners in the public and private sectors;
 - reviewing documents;
 - researching information on the management of health system in other jurisdictions;
 - carrying out a survey of medical and dental practitioners in the public and private sectors;
 - analyzing audit evidence and assessing against agreed criteria to develop findings, recommendations and a conclusion on the audit objective;
 - providing a draft report to relevant government officials for review of factual accuracy and obtaining responses to the report's recommendations (see Appendix 2);
 - presenting a final report of the audit to the Legislative Assembly.

AUDIT STAFF

5. The audit was carried out under the direction of Martin Ruben, FCPA, FCGA, Director of Performance Audit and assisted by two consultants as well as the Manager of Performance Audit and an Audit Project Leader.

APPENDIX 2 – RECOMMENDATIONS

	Recommendation	Management	Responsibility	Date of planned
		Response		implementation
1)	The Government should update The National Health Policy and Strategic Plan for the Cayman Islands, including developing the operational plan necessary for its implementation and the monitoring and evaluation plan required to track progress and results.	As noted in the OAG report, the Ministry is sometimes faced with having to deliver on changing policy priorities for the Government of the day. However, the Ministry will endeavour to complete this in the second half of 2017.	Ministry of Health (in consultation with all stakeholders)	Review – September 2017 Operational Plan – March 2018
2)	The Government should proceed with a law review for the systematic updating of the health system legislative framework.	Recommendation is noted.	Ministry of Health	June 2017
3)	The Government should strengthen its relationships with private health care providers and the two-way communication required for it to develop an effective health care system.	Recommendation is noted.	Ministry of Health, DHRS, and HSA	On-going
4)	The Government should assess whether it has the capacity required to execute the roles and responsibilities it has assumed for the Cayman Islands health system, and take appropriate corrective action.	Recommendation is noted.	Ministry of Health, DHRS, and HSA	SPS for 2018 FY
5)	The Government should review policies and practices for the registration of practitioners and the inspection of health care facilities. It should take steps to ensure that that all qualified practitioners are appropriately registered and regulated and that all facilities at which health care	Recommendation is noted. While there is a legislative / regulatory framework in place, it is often difficult to monitor and enforce due to limited resources.	Ministry of Health & DHRS	Review completed by end of July 2017

	Recommendation	Management Response	Responsibility	Date of planned implementation
	services are provided by qualified practitioners are appropriately inspected and certified.			
6)	The Ministry of Health should receive regular reports on the nature and extent of compliance with the <i>Health Practice Law</i> and <i>Health Insurance Law</i> and <i>Regulations</i> to ensure that it has the information it needs to take appropriate corrective action as necessary.	Recommendation is noted. The Ministry does receive monthly HoD reports and updates at the monthly Heath Insurance Commission meetings, however will review and discuss possible consolidation of this information for future reports.	Ministry of Health & DHRS	January 2017
7)	The Government should put in place a performance management and reporting framework for the Cayman Islands health system to inform decision making and provide accountability to the Legislative Assembly and the public.	This recommendation is noted and will be incorporated into the discussions for the review of the NHPP to ensure that metrics being tracked and reported are linked to the agreed strategic directions in the revised NHPP 2017.	Ministry of Health	To be incorporated into the review of the NHPP in the second half of 2017.
8)	The Government should evaluate the design and performance of the CayHealth programme and, as appropriate, extend it to cover a wider population.	Recommendation is noted and agreed.	HSA, Ministry of Health, CINICO (for implementation to wider population only)	Evaluation by end of March 2017.
9)	The Government should ensure that health statistics used for purposes of planning, management and accountability distinguish between Caymanian and non-Caymanian populations.	This recommendation is noted. It should be borne in mind that individuals who are currently "non- Caymanian" may become Caymanian, permanent residents, or spouses of		

Recommendation	Management Response	Responsibility	Date of planned implementation
	Caymanians. Also need to remember that the expectation is that the health care system needs to address the needs of all residents, regardless of immigration status.		

APPENDIX 3 – SURVEY OF MEDICAL AND DENTAL PRACTITIONERS

Health System Areas	Excellent	Very good	Good	Fair	Needs to improve	Don't know	Total
Financial considerations			L		•		L
Affordability	4	17	18	28	27	6	100
Insurance reimbursement process	2	5	14	15	49	15	100
Payment collection processes	0	8	14	12	49	17	100
Access to care/primary care							
Access to evening/weekend care	4	19	22	31	15	9	100
Overseas referrals	9	20	34	14	16	7	100
Public primary care	9	6	32	15	30	8	100
Private primary care	14	30	29	13	3	11	100
Acute care							
Acute care: emergency	6	23	29	20	15	7	100
Public acute care: inpatient	7	21	27	21	13	11	100
Private acute care: inpatient	7	21	27	20	7	18	100
Public acute care: outpatient	2	15	35	15	26	7	100
Private acute care: outpatient	14	19	30	12	10	15	100
Specialty care			L		•		L
Dental care	11	17	33	6	14	19	100
Mental health	1	8	29	18	20	24	100
Palliative and end-of-life	9	16	24	9	16	26	100
Home & community care	3	10	17	17	26	27	100
Long-term care (seniors)	0	8	9	17	38	28	100

* Number of respondents to each issue ranged from 77 to 84.

There are approximately 280 practitioners in the Cayman Islands. 52% or 147 started the survey, 36% or 101 completed the survey. This represents a very good response rate.

A more detailed report on the results of this survey was provided to the Chief Officer in the Ministry of Health and is available on the Office of the Auditor General website (<u>http://www.auditorgeneral.gov.ky</u>)

Topics	Number of comments
Insurance system concerns	84
Need for more/better trained health human resources	49
Standards of care to improve quality	44
Licensing standards should be same for all	41
Need for more wellness education	41
Efficiency improvements required	30
Health care costs too high	30
Shorter waitlists for access to care	27
More accountability for results and reporting	25
Equal access to public and private care	24
Greater collaboration across providers	22
Competition needs to be fair	20
(7 other topics with fewer than 20 comments each)	76
Total number of comments	513

Exhibit A2: Comments by respondents (descending order of frequency)

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Complaints

To make a complaint about one of the organisations we audit or about the OAG itself, please contact Garnet Harrison at our address, telephone or fax number or alternatively email:garnet.harrison@oag.gov.ky

Freedom of Information

For freedom of information requests please contact Garnet Harrison at our address, telephone or fax number. Or alternatively email: foi.aud@gov.ky

Media enquiries

For enquiries from journalists please contact Martin Ruben at our phone number or email: Martin.Ruben@oag.gov.ky



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