Bermuda Health Council

## DIAGNOSTIC IMAGING & LABORATORY

# CONSULTATION SUMMARY

# Diagnostic Imaging & Laboratory Consultation Summary

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Bermuda Health Council

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# DIAGNOSTIC IMAGING & LABORATORY CONSULTATION SUMMARY

## 1. Background

The Bermuda Health Council (the Council) conducted a consultation project with the goal of better understanding Bermuda's Laboratory and Diagnostic Imaging sector. This review assessed various Health Service Providers' (HSP) outlook on: a) the Council's voluntary registration programme, b) health financing reform, c) sector specific attitudes on regulation, and d) wider health system concerns. This feedback will be considered during the Council's legislative review process, and may be used to inform various MOH and Council initiatives. This report presents the results of the consultation.

## 2. Diagnostic Services Overview

### REGULATION

**Facilities Regulation:** Until the 31st May 2019, the Office of the Chief Medical Officer (OCMO) registered laboratories annually. This registration process included information on: facility type, ownership, physical characteristics, staffing, accreditation, proficiency testing, equipment, testing menu, planning approval, and an environmental health inspection report.

Additionally, laboratories are legislatively required to seek accreditation by an external accrediting agency, under the International Organization for Standardization. Typically, laboratory accreditors awarded accreditation in two year periods, and the process is primarily concerned with safe operating procedures.

> ***"there is a need to understand what is happening in the system, but Bermuda lacks gate-keepers in all aspects of medicine"***

Diagnostic imaging (DI) facilities were also annually registered by the OCMO. Similarly, DI facility registration included: facility type, ownership, physical characteristics, staffing, planning approval, and an environmental health report.

The *Occupational Safety and Health Regulations* ensures employee safety by requiring DI facilities to install, inspect, test, maintain, and operate their equipment in a safe manner. Regulatory compliance generally operates on an honor system, as equipment manufactures' primarily assure safe installation, operation, and maintenance.

The Bermuda Health Council offers voluntary registration to all health facilities. This registration is not mandated by legislation, but has been designed to support health service providers by: easing health system navigation, promoting safe clinical environments, aiding in health system planning, encouraging ethical behaviors, and protecting a patient's right to care.

Current regulatory programs do not comment on: market capacity, clinical need, treatment safety and effectiveness, clinical outcomes, medical evidence base, appropriate utilization, and health system risks.

**Professionals Regulation:** Most health professionals working in laboratories or DI facilities are part of and regulated by the Council for Allied Health Professions (CAHP). Specifically, professionals operating in laboratories are medical technologist working under the supervision of the Board of Medical Laboratory Technologist, a sub-board of the CAHP. DI professionals are overseen by a similar sub-board, the Board of Diagnostic Imaging Technicians. Professionals are typically required to register, with said bodies, every two years. The relevant statutory bodies regulate the qualifications needed for a practitioner to operate in the field, the continuing education required for re-registration, and are participants in the complaint handling process of the CAHP.

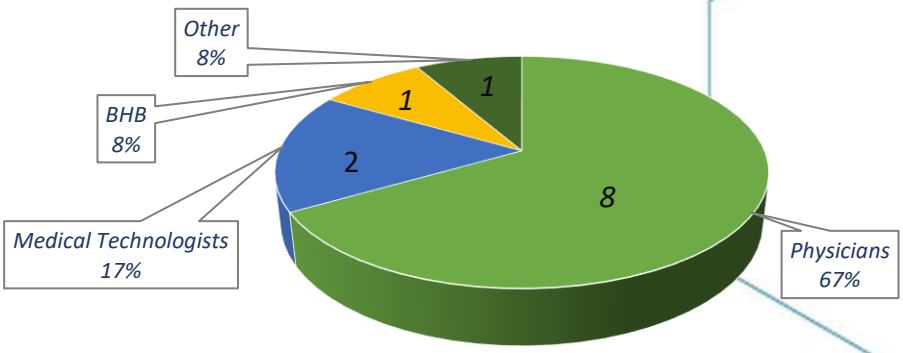
## SYNOPSIS OF FACILITIES & WORKFORCE

There are twelve clinical laboratories registered with the OCMO:

- C & S West
- Central Diagnostics
- Family Medical Services
- Hamilton Medical Centre
- Helix Genetic & Scientific Solutions
- Hope Healthcare Laboratory
- Island Health Services
- King Edward Vii Memorial Hospital
- Medilab
- Northshore Medical Laboratory
- Point Finger Road Medical Laboratory
- Premier Health & Wellness

Of the twelve, eleven facilities are privately owned. *Figure 1* illustrates clinical laboratory ownership. Additionally, transaction level data (TLD), submitted to the Health Council by health insurers, indicate that there are a substantial number of unique individual providers submitting clinical laboratory related claims. TLD, as a data source, is subject to coding errors and duplication. However, further analysis of this data indicates that there are non-laboratory facilities currently engaging in some form of laboratory or diagnostic point-of-care testing.

*Figure 1 ownership of laboratories by profession*




With the exception of the Bermuda Hospitals Board's (BHB) clinical laboratory, there are no private laboratories currently receiving coverage under the Standard Health Benefit (SHB). Private sector services are covered under supplemental insurance benefit coverage, with each insurer setting their own test reimbursement rates. It is commonly said that the island's laboratory fee schedules are set using the 50$^{th}$ percentile of the charges listed for selected United States locale. The testing list and fees can be found within a National Fee Analyzer (i.e. Optum 360, Ingenix, etc.).

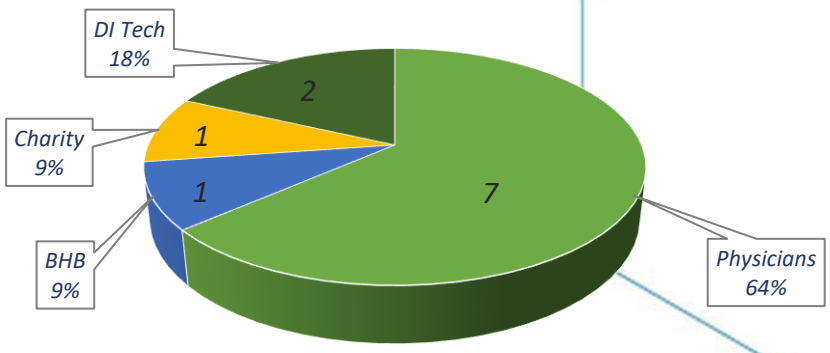
The OCMO indicates that there are nine registered DI Facilities:

- Brown Darrell Clinic
- Hamilton Medical Centre
- Premier Health & Wellness Center
- Sonoview Imaging
- The Cardiac Echo Lab
- Island Health Services
- Northshore Medical & Aesthetic Centre
- Trust 1 Diagnostic
- Ultimate Imaging

In practice, there are eleven DI facilities currently operating officially on island. Nine facilities are privately owned and operated, one facility is run as a charity, and another operated by BHB. *Figure 2* further examines the existing ownership breakdown.

TLD analysis specifies that there are a significant number of unique individual providers who have submitted claims for DI services. TLD, as a data source, is subject to coding errors and duplication. However, an analysis of providers, submitting twenty claims or more, indicate that there may be unknown or unregistered facilities providing DI services, without formal notice of such operations to government or regulatory authorities.

*Figure 2 ownership of DI facilities by profession*




Eight DI facilities receive coverage under SHB for all or part of their DI services. Eligibility and approval for SHB, the services offered, and their associated fees are set by the Minister of Health with consultation from the Bermuda Health Council. Changes are made to SHB annually, and the most current SHB information can be viewed here. Additional DI services are covered under supplemental insurance benefits, with each insurer setting their own testing reimbursement rates.

The island's laboratory and DI facilities are supported by fifty-four registered medical laboratory technologists and ninety-three registered diagnostic imaging technologists. Additionally, there are two registered pathologists, and five radiologists listed on the Bermuda Medical Council's professional register. No comments can be made on the number of active professionals, nor on the demographic make-up of this cohort.

***"the ownership issue paints all private labs (and other facilities) with a wide brush, and taints all discussions about utilization and fees"***

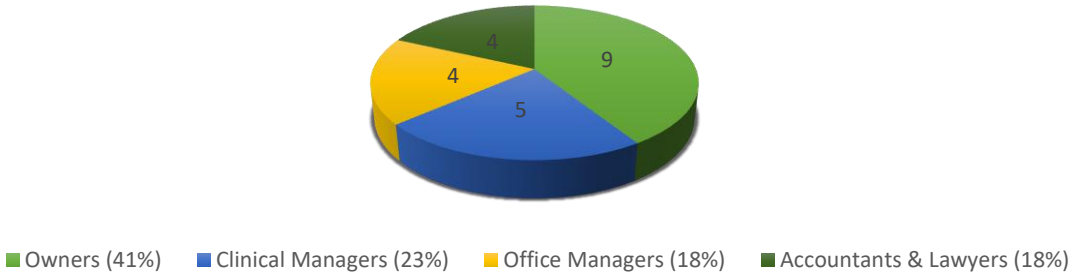
## 3. Methodology

Two members of the Council's secretariat, a Policy Analyst and the Programme Manager of Health Regulation, met with a selection of HSPs operating diagnostic imaging and laboratory facilities. These small group meetings were open to facility owners, medical directors, and all key professionals operating in the sector *(laboratory managers, diagnostic imaging technologist, etc.).* Participation was voluntary and at the discretion of the facility owner or medical director.

Eleven meetings were held in total, with six of each facility type. Twenty-two individuals participated in the consultation process which lasted for over thirteen hours. On average two provider participants were present for each meeting, and all but one meeting was held in the provider's facility. Of the twenty-two participants, thirteen were registered health professionals, with the remaining nine individuals classified as non-clinical or unregulated professionals who were associated with the facilities. Physicians made up the majority of participants, numbering eight altogether. Three medical technologists, and two diagnostic imaging technologists rounded out the clinical practitioners present. *Figure 3* further illustrates the demographic make-up of the participants.

> ***"in all my time on the island, this is the first time I have ever met with someone from the Council, and I must admit it's been surprisingly refreshing."***

*Figure 3 the consultation participants by position held in the facility*




The Council scheduled meetings after-hours to avoid service interruption, and to give HSPs time to fully communicate their concerns. During each meeting, the Programme Manager walked attendees through the agenda, and the stakeholders' input, questions, and concerns were recorded. The meeting agenda used can be viewed in *Appendix 2.* All personal or facility identifying information has been removed from this report, ensuring candid and frank feedback from each stakeholder. A complete recap of these discussions can be viewed in *Appendix 3.*

All laboratory and diagnostic imaging facilities registered with the Council were invited to attend. A list of all invited facilities can be seen in *Appendix 1.*

The following facilities were able to participate in these small group meetings, and provided the input reflected below.

- Bermuda Cancer & Health
- Bermuda Eye Institute
- Bermuda Healthcare Services
- Brown-Darrell Clinic
- C&S West
- Hamilton Medical
- Ultimate Imaging
- Helix
- Island Urology
- Northshore Medical
- Point Finger Road Medical Laboratory
- Premier Health
- Sonoview Imaging Services

## 4. Result Summary

The transcripts and notes from each meeting have been abridged in an effort to frankly and succinctly reflect the feedback of each participant. A number of important issues have emerged from the consultation process. These issues have been grouped logically under three key themes. These themes include: Quality of Services, Cost of Care, and System Waste. Direct responses from the consultation are included throughout, and are illustrated in "italic in quotes". Efforts will be made to include these themes in the development of future health system policies.

## KEY THEMES

**QUALITY OF SERVICES:** A review of the responses identified a series of quality themes present in the discussions. While varying in articulation, practitioners indicated that quality principles should drive the creation and application of health system policies and regulatory structures. However, providers stated that the patient should be at the heart of care delivery, and that those operating in the sector should be included in the decision-making process. In this context, key issues debated involved: consistency, oversight, clinical guidance, competition, education, and gate-keeping.

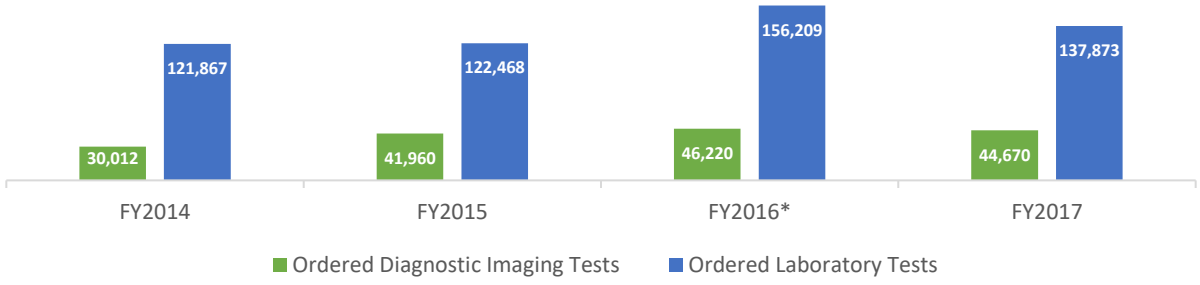
- The need for stability and **CONSISTENCY** in the health sector was expressed. While not universal, many providers indicated that the status quo had been instrumental in creating and maintaining the high levels of service present on the island. It was expressed that any restrictions in medical practice would negatively affect this quality.
- **OVERSIGHT** featured heavily in the discussions, with HSPs holding varying sentiments. Beliefs, both for and against further oversight, were strongly held with little agreement between providers. Participants reacted strongly to ideas related to: the oversight of market entry for health technologies, and limitations or verification of appropriate service utilization. Many referred to their international partnerships and accrediting agencies as quality signifiers.

While others, conversely, pointed to long known safety and systemic risks present in the island's diagnostic space.

- The lack of nationally accepted and enforced **CLINICAL GUIDELINES**, for diagnostic services, was universally identified as an immense risk to the provision of care. It was hoped that the various Statutory Bodies would prioritize the setting of such standards and best practices.
- **COMPETITION** was cited as a system strength with many providers expressing confidence in the superiority of their services due to market pressures. The thought being, patients have the right to direct their care, and move to the service that more readily fulfills their needs. It was acknowledged, however, that basic system safety should be strictly regulated, as there are significant information gaps and power distance between medical professionals and their clients.
- The high quality of services in the sector were directly attributed to the **EDUCATION** and training of the clinical professionals. Care should be taken to ensure that those standards remain high. It would aid professionals greatly to have the opportunity to learn about public health, health economics, and other system topics.
- The lack of sector **GATEKEEPING** was mentioned as a threat to all aspects of medicine. Justified clinical reasoning was cited as equal to the accuracy of the testing results. HSPs offered a number of solutions ranging from: medical subcommittees, adjudication softwares, and professional training.

**COST OF CARE:** Many of the comments in this consultation arose from the providers' experience seeking reimbursement for their services, and the frustration with "the hoops" they had to jump through. Yet, the island has no shortage of diagnostic services, and the trend of annual utilization has consistently increased, as illustrated in *Figure 4*.

*Figure 4 the total number of ordered diagnostic imaging and laboratory tests, between 01 Apr 2013 and 31 Mar 2017*




**FY2016 Utilization analysis of ordered diagnostic imaging and laboratory test are under review*

Providers expressed concern over the seemingly exponential increase in the cost of operation, and during the discussion paid special attention to factors like: incentives, expectations, utilization, and system capacity.

- It was stated that many clinical and financial issues are really problems of misaligned **INCENTIVES**. Co-pays and coverage decisions have steered clients away from cheaper care alternatives, and the rising cost pressures on HSPs have encouraged questionable self-referral practices. Providers encouraged the creation of payment schemes that induce desired outcomes and promote clinical best practices.
- Public **EXPECTATIONS** were believed to be a major factor in the increasing cost of health services. The sophistication, access, and convenience of the island's diagnostic services come at a significant cost. This cost is divided between a very small market that mandates this level of service.
- Appropriate **UTILIZATION** presented a complicated topic for discussion. All providers acknowledged that inappropriate utilization has a detrimental effects on the cost of care, and each listed several driving factors of its unchecked rise. High points were: test duplication due to lack of reciprocity with the local reference facilities, double billing for verifications, titrations and retesting, "lazy" ordering habits, inappropriate test groupings, defensive medicine, and questionable self-referral practices. Providers were, however, concerned that fee cutting would be used as a tool to lower utilization rates, instead of implementing and enforcing national clinical diagnostic guidelines.
- Unclear **SYSTEM CAPACITY** and unchecked market entry were mentioned as system cost drivers. Providers encouraged the Council to capture and provide metrics of system capacity limits. They also requested information on any potential clinical services gaps. Finally, they indicated that all providers should be provided a level playing field, but at some point there needs to be some logical barriers to entry.

**SYSTEM WASTE:** There was broad support from all participants to seriously and proactively address wasteful activities in the health system. The island's full potential is not currently being met, and changes in health policy should focus on supporting effective and efficient care delivery. Waste reduction requires emphasizing: communication, efficiency, technology, and scopes of practice.

- **COMMUNICATION** factored largely in the discussions, with a number of providers indicating that regular and open communication between stakeholders would be the most impactful improvement in reducing waste. The regulatory agencies and governmental bodies connecting with providers simply, effectively, and in a timely manner could do a lot to minimize complaints, encourage trust, and gain buy-in. HSPs also identified fragmented or siloed services as a limiting factor in achieving a more interconnected care model.

- **EFFICIENCY** requires providers to exclusively hub local assets, standardize how and why services are delivered, and reduce the complexity of system navigation. Providers expressed interest in improving coordination, and sharing resources. However, there are concerns about movement towards a more socialized system.
- The rational deployment of **TECHNOLOGY** was cited as an important tool in enhancing productivity. Certain IT assets should be seen as a national resource and should not be exclusively held. Also, providers should be encouraged to pursue innovative health technologies, while a process is needed for the disinvestment of outdated modalities.
- Without the development and monitoring of clear prescriptive **SCOPES OF PRACTICE** for both professionals and facilities, the island's health system will continue to operate sub-optimally. Providers recognized that a cultural shift is needed and that they must eliminate their defensiveness. But, they have expressed a commitment to help ensure that the "right" professional, is requesting the "right" test, at the "right" time, for the "right" patient.

## 5. Conclusion

Through this process the Council recognizes that some stakeholders would prefer not to see changes to current regulatory and financing structures, at this time. Others have differing priorities and ideals for Bermuda's health sector. However, during each meeting it was clear the majority of HSPs have a passion for the clients they serve, and a desire to provide the best care possible.

*"we can see what the Council is trying to accomplish, and believe partnership is the only way to get there"*

The collective comments were salient, and some point to serious risks existing in the health sector. The Council has a number of projects aimed at tackling several of the concerns communicated. Council projects like health financing reform will incorporate a number of key points gained from the feedback, but must move forward without delay, as the status quo carries significant risk to Bermuda's overall health and welfare. Other programs, like voluntary registration and facility regulation, are moving at a pace which may more easily accommodate the guidance provided during these small group meetings. These projects can only benefit from continued provider feedback, and the Council intends to involve DI and laboratory stakeholders in each development step.

The consultation process has exposed a number of legislative gaps, like registration eligibility and compliance enforcement. The Council will prioritize, and move towards providing the legislative options needed to address these insufficiencies. There is optimism that incremental statutory changes will reduce the need to introduce additional legislation. Where possible, the Council will be seeking market solutions to garner best practice adoption.

Finally, the Council would like to encourage stakeholders, facility owners, and health professionals to contact the Council with feedback at any time. Bermuda's health system is reliant on the professionalism and competence provided by all patient-facing practitioners. Consequently, health system solutions ought to have their genesis from the sectors frontlines.

*"support is needed in a number of areas… the Council's help in highlighting the value and quality of our services to the Bermudian public would be appreciated"*

For additional information about the Bermuda Health Council's role, and its activities in the health system, please visit our website: www.BHeC.bm, or contact us via our social media: Twitter, Facebook, & Instagram. The following reading materials are suggested by the Health Council. They outline the Council's latest efforts to improve the quality of Bermuda's health services:

- 2017/2018 Annual Report
- Exploring Alternative Payment Mechanisms
- Innovation in Hospital Financing
- Order Rates (2018 Report)
- The 2018 Health Statutory Boards Self-Assessment

Bermuda Health Council

## APPENDIX 1: Facilities Invited for Consultation

**Clinical Laboratories**

- C&S West
- Hamilton Medical Center
- Helix Genetic & Scientific Solution
- Northshore Medical Laboratory
- Point Finger Road Medical Laboratory
- Premier Health & Wellness

**Unable to (re)schedule a meet before the consultation deadline*

- *Central Diagnostics*
- *Family Medical Services*
- *Hope Healthcare Laboratory*
- *Island Health Services & Laboratory*
- *Medilab*
- *Woodbourne Medical Laboratory*

**Diagnostic Facilities**

- Bermuda Cancer and Health Centre
- Bermuda International Eye Institute
- Brown-Darrell Clinic
- Hamilton Medical Center
- Island Urology Services
- *Sonoview Imaging Services*
- Ultimate Imaging

**Unable to (re)schedule a meet before the consultation deadline*

- *Bermuda Eye Centre*
- *Cardiac Echo Lab*

Bermuda Health Council

APPENDIX 2: Meeting Agenda

# HEALTH FACILITY COLLABORATION MEETING

Held on Day/Month/Year

XX:XX p.m. - XX:XX p.m.

Laboratory or DI Facility Name

## AGENDA

1. Welcome & Introductions

2. Health Council initiatives
    a. Digitization of the voluntary registration process
    b. Health Financing Reform
        i. Funding options
        ii. Website updates
    c. Changes to the regulation of laboratories/DI facilities
        i. Scope of practice
        ii. Guidelines and standards
        iii. Inspections and accountability

3. Laboratory/DI facility sector concerns
    a. Changes to reimbursement
    b. Capacity concerns

4. Next Steps
    a. Consultation Summary

5. AOB

## APPENDIX 3: Expanded Discussion Recap

*Voluntary Registration*

The Council's representatives informed HSPs that changes were to be made to the voluntary registration process. A number of updates and modernizations were shared, and the HSPs' comments were as follows:

1. A number of HSPs were concerned with the perceived volume of regulation placed on facilities operating in Bermuda. They felt if the Council changed its voluntary registration programme, or if other regulatory agencies involved themselves further in the sector it would only duplicate services, waste money, and increase HSPs' administration cost. This sentiment was especially strong with HSPs already partnered with overseas organizations. It was suggested that increased interagency communication could reduce the seemingly superfluous regulatory activities.
2. Some expressed reservations about the type and quantity of information asked for in the past. A number of providers were concerned with their ability to adjust, administratively, to these new information requests, within the proposed registration timeframe.
3. Providers perceived the Council as anti-medical doctor and anti-medical business. To address this perception, it was stated that the Council needed to be more proactive in its dialogue with HSPs, more meaningful consultation, and not just checking a consultation box after a decision has been made.
4. The public perception of services who have chosen not to be registered with the Council was concerning to the HSPs. The public should be informed that providers who have not registered with the Council have not committed an offence, but that registration is voluntary and at the discretion of the provider.
5. HSPs were generally happy with the prospect of online Council registration. Many providers already operated in a digital only space for accreditation purposes, and believed the switch would make it easier administratively. Most saw it as an opportunity for the Council to increase its communication with other agencies (i.e. Registrar of Companies, MOH, and the Office of the Chief Medical Officer (OCMO) etc.) It is expected that the transfer of HSP data between regulatory organizations would give each agency more information while reducing the administrative burden on both the Council and HSPs.
6. A number of HSPs mentioned that they had no problem giving or receiving information from the Council through the voluntary registration programme. They mentioned their previous experience working in other highly regulated jurisdictions, and that they had an expectation of regulatory oversight. These HSPs indicated that they were willing to comply with regulations put in place that protected the patient's best interest. And, they believed the Council should provide a clearer understanding of how HSPs should operate in the system.

*Health Financing Reform*

Providers were presented with information on how health services may be paid for in the future. The project description and goals were outlined in brief, with a number of options given for comment.

7. It was suggested that Bermuda should be like other jurisdictions with standardized cost of all tests and services. Additionally, practitioners should only be paid a percentage of the reimbursement rate based on their registration level, service utilization, and patient outcomes. These changes would both: create transparency in the system and disincentise inappropriate service use.
8. Included in these reforms, should be public reporting on diagnostic order rates, for both laboratories and diagnostic imaging (DI) facilities. Information on collecting and referral rates, testing frequency and volume, population segmentation and demographics served, and a facility's scope of testing should also be publicly reported.
9. Some providers expressed that the changes proposed did nothing to address the true drivers of cost in the system: an aging population, increased lifestyle and non-communicable diseases, poor genetic diversity, and the expense associated with the island's cost of living. They believed changes like the banned upfront payments, had very little effect on the cost problem.
10. HSPs found it interesting that clinical problems were being addressed through financial incentives. There may be some merit to this idea as the system has historically paid providers even when they have not followed best clinical practices or treatment guidelines. It may be possible for HSPs to be paid a premium for having done the right thing, thus directing funds to providers who actively try to improve the health system.
11. Some pointed out that, from a financing and incentive point of view, the Enhanced Care Programme could be used as a model. However, there were some concerns about the administrative processes, and the necessary streamlining before widespread implementation.
12. Surgical reimbursement is high when performed in the hospital. A number of HSPs believed that the same procedures performed in the community, would be more cost effective and be equally as safe. They suggested growth in outpatient surgical center and diagnostic centers would reduce the burden on the public facility, and ultimately reduce healthcare costs.
13. Education and training may go a long way in helping HSPs understand health system financing and economics. However, medical professionals have limited time, and competing priorities. The island's geographic restrictions also reduce learning opportunities related to macro-economic and public health topics. The Council could do much to fill this training gap.
14. There was a sense that some health system cost is attributable to improper utilization, resulting from a patient's own negligence. Patients are seeing doctors in the late stages of their pathology. The practitioners cannot be held responsible for the treatment and

diagnostic testing needed to treat these complex chronic conditions. Patient non-compliance is a cost driver that the financing reform plan does not address. To tackle the issue, HSPs pushed for continual public education, and community based interventions as patients only access the health professions intermittently.

15. Bermuda's health system allows patients to receive some of the most convenient, advanced, and contemporary services available. But, those benefits come with a cost. Patients have an exclusively North American focus, and an expectation of unlimited access to cutting edge technologies. The Council must consider this reality when making financing decisions and Standard Health Benefit changes.
16. The Council must acknowledge that not every HSP enters the market because they have a passion to serve the island's patients. The number of tag-on services, and self-referring facilities have increased drastically in the last few years. These providers have ignored need, capacity, access, risk, and ethics to blatantly pursue financial gain. This reality is apparent in the state of certain HSP's equipment, facility, and the investments they make. Payments for services should encourage practitioners to innovate, and ensure quality.

*General Comments (from both Lab & DI)*

17. The needed increase in provider regulation should focus on patient choice and safety. Patients need to have inscribed rights, more say in their care, and the ability to direct who sees their records. The Council needs to have a position on breaches in patient confidentiality, and support HSPs dealing with these issues.
18. In general, HSPs were understanding of the Council's goals and ideals. However, a few providers specified that a profession's Statutory Body should set its best practices, guide its scope, and mandate its clinical guidelines. Providers should be the only ones to actively oversee other providers. The OCMO and the various clinical committees are doing an excellent job, and any external interference may restrict providers' ability to deliver the best care.
19. HSPs voiced their support for the Council's role as watchdog, especially with activities connected to patient complaints and queries. However, they did not believe the Council was as effective as it needed to be, due to its lack of "teeth". If the Council envisioned becoming a full-fledge enforcement and regulatory agency, additional powers are needed.

*Laboratories*

20. There was considerable apprehension about physicians' continued ability to own, operate, and self-refer to their internal office laboratories. While there was some acknowledgment that medical practitioners found quality gains through enhancements of their service provision, a majority of laboratory professionals believe this practice was inherently unethical, and promoted dishonest behaviors. They suggested limitations and caps on the

amount physicians' office laboratories should be able to claim for, and would support new regulations that would strengthen laboratory oversight. Unfortunately, this ownership issue painted all private laboratories with a wide brush, and has effectively clouded any utilization, pricing, or regulatory discussions.

21. Universally, medical technologists believed the public has a right to know that they have a choice in what test and where those test are conducted. Providers must inform the public that the reports and analysis produced on their behalf belong to them as patients.

22. HSPs expressed dissatisfaction with the lack of reciprocity between the private laboratories and the hospital. It was their belief that the hospital operated with a zero sum mentality. Private laboratories were willing to refer samples to the hospital. However, the hospital has never referred testing to a local laboratory, and would rather send samples overseas until they acquired the ability to perform the methodology. The providers reported that the hospital often duplicated test and clinicians were disregarding patient results produced in private laboratories, despite those facilities' quality standards or accreditation status.

23. The services provided by the Board of Medical Technologist and the inactivity of the association was concerning to some professionals. They spoke to a number of perceived gaps in the island's professional oversight and registration process. For example:

    a. Newly registered medical technologists should receive a robust competency evaluation, as not all qualifications are equal.

    b. A testing-to-staff ratio policy must be created, monitored, and enforced nationally to prevent avoidable adverse events.

24. Laboratory professionals also believed that all practitioners could benefit from additional guidance, oversight, training and education. Providers encouraged the Council to assist in that role, as resources are limited for the statutory bodies.

25. Many HSPs described a worrying trend of repeated reimbursement cuts to community providers, with the hospital exempt, as an SHB provider. Participants acknowledged that the hospital should receive higher reimbursement, but insisted that there must be parity in reimbursement for all laboratories. All providers are affected by operational cost, but have not received the same concessions the hospital has. The hospital's import duty waivers on equipment and reagents, and large supplier discounts due to economies of scale, have had an impact on free enterprise.

26. Some providers felt that a capped fee reimbursement model was not the way to go. The trend of increased business costs and decreased reimbursements has been happening for years. For some laboratory services, HSPs presented arguments for subsidy. While it was commonly accepted knowledge that insurers reimbursed under the 50th percentile of the various charges schedules, HSPs pointed to a number of exceptions and indicated that a higher tier may be more appropriate due to the island's cost of living.

27. Many providers questioned why further discussion on the regulation of labs is occurring, given the requirement to be externally accredited. Laboratories invested substantial resources in the accreditation process, and voiced confidence in the safety and quality of their services. Given the size of the island, its limited enforcement abilities, and difficulties maintaining updated laws, the wisdom of the Council duplicating oversight functions was challenged.

28. The lack of gate-keeping for all aspects of medicine was pointed out, with diagnostic services acutely over utilized as a result. Medical practitioners must be required to clinically justify their testing selections. HSPs shared the names of several software systems capable of adjudicating testing appropriateness. Alternatively, the Council could be tasked with convening a clinical subcommittee. The committee would review test order rates, spot trends, and preform periodic audits of test requisitions.

29. For convenience, some laboratory tests have been grouped together in panels. Many panels can and should be broken up for a more closely matched diagnostic evaluation. Providers felt clinical laziness contributed too much of the island's over utilization.

30. A few HSPs were concerned with tests that required verification by a reference lab, retesting, or additional titration. Some laboratories have claimed for those test, thus causing a double bill. Laboratory professionals, in general, regarded this practice as unethical, and costly to the health system.

31. Physicians communicated that their ordering habits were based on their clinical training, and that jurisdictional preferences played a significant role in their views on how laboratory services should be utilized. Bermuda has not created specific rubrics that would direct clinically how to best use the island's testing resources. Nebulous clinical trends like Vitamin D testing, should be focused on by the regulator, with guidance published and mandated to the medical community.

*Diagnostic Imaging*

32. Facility managers had concerns with the inspection and auditing services supplied by the MOH. Specifically, they articulated dissatisfaction with the responsiveness of the MOH and Department of Health. They also lamented the lack of coordination between the Ministry's many sections (i.e. OCMO, Department of Health, etc.) The lack of consistent facility and equipment assessments was worrying, and reinforced the "anything goes" or "wild west" description repeatedly provided by HSPs. In its current state, HSPs were uncertain the MOH could provide the proactive functions needed by the sector.

33. It was mentioned, repeatedly, that the accountability functions of DI regulation should be handled by an external overseas body, preferably an accreditor. Affiliations with institutions or associations like Lahey and American College of Radiology would also be of value. They would ensure facilities provided quality care, and are evaluated by qualified experienced inspectors. While expensive, HSPs expected to foot the bill, as a part of doing business.

34. It was pointed out that there were no real regulations on diagnostic imaging, barring: the Radiation Act, Health and Safety Act, and the Poisons Act. The island's regulatory structure could not be further reduced, as there was nothing to reduce. DI stakeholders would support regulation that guided insurer payments, and ensured facility and equipment safety.

35. Certain stakeholders stated that there was no need for regulations on equipment, because most physicians were not interested in owning DI facilities. Physicians were limited by their own risk adverse nature, and had been slow to adapt to patients' needs (walk-in services, after-hour care, etc.). There was little need to regulate the sector as DI facilities would not be wide spread in the system.

36. While there was no need to limit the importation of equipment, there was value in registering health technologies. The technology register needed to encompass every piece of equipment used to administer care. Every piece of equipment should be accounted for, and have prescribed usage. Equipment could be advocated for by practitioners, given that it followed their professions' best practices.

37. Outcomes data and statistics can be used support or deny anything. Data should be used in an appropriate context. Both sides of the data should be shown, both the justification of a service and its system utilization. HSPs said they would happily share data, if they were shown how the information was linked to a purpose they supported, and was used fairly.

38. The Council's history casts doubt on the intention of this meeting. Providers believed the Council was in league with insurers, or had nefarious political motivations. They were reluctant to have the Council play any role in the DI sector because of these unknown intentions. Specifically providers cited, the Patient Safety Act, equipment certificate of need, and the RVUs projects as lacking the adequate collaboration and consultation needed to build public trust. And, displayed a tone deafness that would have been disastrous for business and healthcare in general.

39. Many clinical and regulatory DI standards have already been created internationally. Some like, the United Kingdom's IRMER standards would be a good starting point for Bermuda. Practitioners were aware, and indicated compliance with empirical practice standards for their said specialty. However, they said an agency to crosswalk between standards developed in the United States, the United Kingdom, and Canada would be beneficial. But, the Council must be conscious of the leeway/grey areas needed for practitioners to utilize their knowledge, education, experience, and patient preferences. There was concern that there was a danger of regulating DI services too narrowly.

40. A number of HSPs had a considerable problem with facilities that self-referred. The providers said that there were ethical issues associated with referring patients for DI testing internally, especially when there were co-pays associated with the service. There were also serious safety concerns associated with DI over-testing. Ionizing radiation exposure, burns, cell destruction, cancer, and possible death were all given as possible outcomes of over utilization.

41. DI practitioners believed that the DI IT infrastructure needed to be centralized and made available to all practitioners. The Bermuda Hospital's Board has paid for much of this infrastructure, and has had the expense of up keeping it, but the infrastructure should be treated as a national resource. They should not be allowed to act selfishly as that would lower the overall quality of care on the island. Most DI services are able to interface digitally with the hospital, and share equally accredited imaging results. However, the hospital has taken an adversarial approach, and has on multiple occasions threatened, and once removed private HSPs from their network. The BHB has also refused to refer patients to community providers, even when they do not offer the service in-house.
42. DI Professionals felt that a number of pressing sector issues (service access, result turnaround times, & wait times) would not be addressed until systematic problems were discussed honestly and fixed. Issues identified were: exclusion in ownership, lack of competition in some areas, and the "club" or "old boy network" of referrals. This broken system has allowed potentially harmful activities to thrive, like the promotion of inferior DI technologies, sloppy and incomplete reporting, and the utilization of outdated communication methodologies like faxes.
43. HSPs requested support in a number of areas. They reported challenges when dealing with insurers, especially when seeking payment for new or novel procedures. The Council's help showing the value of new services would be appreciated. Also, HSPs indicated that support with procurement, and market sizing would be of interest to them. Finally, centralized equipment maintenance and servicing would be beneficial to all providers.

*Other Concerns*

During the course of the discussion a number of topic were discussed that did not readily fit into the predetermined agenda. These request and comments are bulleted below.

- Unique Patient Identifier rolled out island wide.
- Info-sessions and training on CPT Coding.
- ICD-9 to ICD-10 transition.
- Standardization of Coding, the use of all codes.
- Disease profiles on hypertension, diabetics, and asthma.
- Address access gaps for uninsured or Advance Care Pilot participants.
- Addressing "Cadillac" pricing for basic health services.
- Standardized application process for all insurers.
- Transparency in what services will be paid and for how much.
- Increased speed of insurer reimbursement.
- Effects of the Personal Information Protection Act and General Data Protection Regulation.
- Time horizon for total electronic claims, and a national Electronic Medical Records.
- Address entry barriers to Standard Health Benefit approval.
- Enforcement of professional scopes of practice.