

## **Review of the Standard Health Insurance Fees**

**Prepared for the Health Insurance Commission at  
the Department of Health Regulatory Services of  
the Cayman Islands Government Ministry of Health  
and Culture**

Prepared in August 2015

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# Purpose

Morneau Shepell has been engaged by the Health Insurance Commission (HIC) at the Department of Health Regulatory Services of the Cayman Islands Government Ministry of Health and Culture and we are pleased to present our report on the review of the Standard Health Insurance Fees (SHIF).

This report was prepared for the HIC for the following purposes:

- to present the analysis of data obtained from a physician survey as well as the analysis of data from various other sources (such as Cayman Islands approved insurers, the Health Services Authority, the Cayman Islands Medical and Dental Society, etc...);
- to benchmark and comparatively analyze the current SHIF with rates in the regions designated by the HIC;
- to document a proposed method for the determination of fees under the SHIF;
- to provide other considerations and a commentary on the outcomes based on an implementation of a revision to the SHIF; and
- to make a recommendation with respect to the revision of the SHIF.

All figures in this report are in Cayman Islands Dollars (KYD). Where data was provided in US Dollars, an exchange conversion rate of 0.82 was assumed.

A list of common abbreviations used throughout this report can be found in Appendix 8.

# Executive Summary

## The Standard Health Insurance Fees

- The Health Insurance Law provides for a list of fees (the Standard Health Insurance Fees or SHIF) that an approved insurer shall be liable to pay under a Standard Health Insurance Contract (SHIC) for a health care benefit provided to a compulsorily insured person.
- The current SHIF details nearly 8,700 Current Procedural Terminology (CPT) codes with an accompanying fee for each code. CPT Codes provide a uniform approach to reporting medical procedures and services.
- The SHIF was originally gazetted on July 15, 2005 and the fees came into effect on August 1, 2005. Since then, CPT Code fee amounts have not been amended (although on August 9, 2013 the SHIF was revised by the deletion of CPT codes that are no longer in effect, and the addition of new and replacement CPT codes). Prior reviews of the SHIF were undertaken in 2006 and in 2011 (see our report dated January 2012).

## Survey of Physicians and Healthcare Practices/Facilities

- In an attempt to assess physician billing practices and costs associated with operating a medical practice in the Cayman Islands, a survey was undertaken.
- Since 2011, the number of physicians registered with the HIC has increased significantly.
- Approximately 45% of those surveyed use the SHIF for billing purposes and 33% apply the CIMDS schedule.
- The section of the survey that was intended to gather data to provide an understanding of the cost structure for operating a medical practice in the Cayman Islands was not well responded to; however, the data indicates the following items make up a significant component of the cost structure - clinical and administrative staff compensation, the cost of facilities, and malpractice insurance.
- According to physicians, the operating costs in the Cayman Islands are high (relative to other jurisdictions) due to the following – importation costs, staffing costs, malpractice insurance, and fewer opportunities for economies of scale.
- Some physicians felt that fees paid by the insurance companies are not adequate to sustain the viability of a medical practice. Most physicians felt that the SHIF fees should be adjusted.
- Numerous comments were provided by survey respondents including various suggestions for consideration by government. These comments seem to suggest that the government might wish to consider holding consultations on a number of issues prior to any revision to the SHIF.

## Comparison of the SHIF with other Fee Schedules

The following table shows the overall difference between the current SHIF and various other fee schedules (for example the 2015 HSA Chargemaster results in fees that are on average 3% less than the fees under the current SHIF).

Overall Excess over SHIF				
	HSA Charge Master	CIMDS	Fee Analyzer Miami Florida 50th Percentile*	Medicare
In 2011	(27%)	97%	16%	(51%)
In 2015	(3%)	70%	25%	(56%)

\* Prior to any negotiated discount

The average percentage change over 2011-2015 for the above fee schedules is as follows:

Average % Change				
	HSA Charge Master	CIMDS	Fee Analyzer Miami Florida 50th Percentile	Medicare
2011-2015	Increased by 23%	Declined by 13%	Increased by 13%	Declined by 1%

## Establishing a Design Structure for the SHIF and Recommendation of an Adjustment

- We suggest the design of the SHIF be based on the Resource Based Relative Value Scale system which assigns a Relative Value Unit to most CPT Codes. A relative value unit (or RVU) is a measure that assesses, amongst other things, the technical skill and effort to provide a particular service. We recommend adoption of the RVUs established under Medicare (which is the senior's social health insurance program funded by the US government) as the Medicare RVUs offer a level of robustness, are well founded and are transparent.
- The design of the SHIF should also reflect factors specific to the Cayman Islands such as the cost-of-living differential with other jurisdictions, the requirement for the island to remain competitive to enable continued attraction of physicians to the island, and the higher costs of delivery on the island due to fewer economies of scale.
- We recommend that the targeted fee level under the SHIF be based on a blend of the benchmark fees in the Miami region and the Miami Medicare reimbursement rates. The targeted fee level should also adjust for the factors specific to the Cayman Islands (as outlined above).

- Based on this approach, the weighted average adjustment to the SHIF results in an overall increase of 12.3% in the fees. There are various options for the implementation of a fee adjustment. These include a complete revision to the fee schedule; revising the fees by type of service (e.g. a separate fee increase for Office Consultations, for Radiology services, etc...); or revising the overall level of current fees. Phasing-in the revision may also be considered.

## Consideration in the Revisions of the SHIF

- A revision to the SHIF would impact not only the revenues of service providers that have adopted the SHIF as their billing schedule, but also the rate of reimbursement under the SHIC which in turn would impact the Standard Premium Rate (it would also impact the co-payment required under contracts of insurance which do not cover the whole cost of the service). If the SHIF were to increase in aggregate by 12.3%, we would expect that at a macro level, the overall increase in the Standard Premium Rate would likely be slightly less than 12.3%.
- Given that the HSA Chargemaster currently results in total fees that are on average 3% less than the current SHIF fee schedule, if the HSA were to adopt the SHIF schedule then this too would have an impact on the Standard Premium Rate (and in particular the premium rate under CINICO).
- There are many CPT Codes that have been either added or become inactive since the current SHIF had been gazetted. We strongly suggest that on any change to the SHIF, the HIC provide a draft of a revised SHIF to multiple providers, insurers, healthcare facilities and other relevant stakeholders, so that they may review the draft schedule and provide any comments prior to the schedule being gazetted.
- In addition to the likely adjustment in insurance premium rates, a change to the SHIF may lead to significant administrative and systems changes amongst healthcare providers and insurers. We suggest that prior to the effective date of a change to the SHIF, sufficient lead time be provided.
- On implementation of a revision to the SHIF, the HIC (or the Ministry) may wish to consider developing communication material which explains the process that led to the adjustment as well as parts of the methodology that explains the basis for the determination of fees under a new SHIF.

## Overall Recommendations

- For CPT Codes under the current SHIF, we recommend adjusting the fee levels such that in aggregate the fees increase by 12.3%. As there are various options for the revision of the SHIF, we recommend that the HIC select an option that is most suitable for the Cayman Islands healthcare system. We'd suggest that the HIC phase-in a revision to the SHIF fees either at the Category Level or at an Overall Level (for details see Option 2 or Option 3 per Section F).
- Adopt a methodology for the design of the SHIF that is based on the Medicare Resource Based Relative Value Scale system which assigns a Relative Value Unit to most CPT

Codes. A multiplier would then be applied to the RVUs to determine the fee for any CPT Code that is added to the SHIF.

- We recommend that the fee schedule be reviewed annually and such review consider adjustments for items such as revisions to CPT Codes, changes in Medicare reimbursement rates and fee levels in the comparator benchmark US region, and for factors that are relevant to the Cayman Islands (for example the change in price inflation, and other goals and objectives).
- Prior to revision of the SHIF, the HIC should “road test” the proposed adjustment with various stakeholders.

I am available, at your convenience, to provide you with any additional information and to answer any questions you may have.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read 'H. Cimring', with a large loop at the end.

Howard Cimring, FFA, FCIA  
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# Section A – Introduction

## The Standard Health Insurance Fees

The Health Insurance Law provides for a list of fees (the Standard Health Insurance Fees or SHIF) that an approved insurer shall be liable to pay under a Standard Health Insurance Contract (SHIC) for a health care benefit provided to a compulsorily insured person. The benefits provided in a Standard Health Insurance Contract are prescribed in regulation and they set the minimum package of benefits which must be provided within any health insurance contract.

Health care providers may charge the patient a fee that they consider fair and reasonable<sup>1</sup>. However, payments by an approved insurer for benefits that are prescribed under a SHIC are not required to exceed the SHIF. As insurer payments under a SHIC can be capped at the fee level in the SHIF, the SHIF invariably forms the basis for the determination of the premium under a SHIC<sup>2</sup>.

The current SHIF details nearly 8,700 Current Procedural Terminology (CPT) codes with an accompanying fee for each code. The SHIF listing also provides a descriptive term for each code (a sample extract of the current SHIF has been provided in Appendix 7). CPT Codes provide a uniform approach to reporting medical procedures and services.

The SHIF was originally gazetted on July 15, 2005 and the fees came into effect on August 1, 2005. Since then, CPT Code fee amounts have not been amended (although on August 9, 2013 the SHIF was revised by the deletion of CPT codes that are no longer in effect, and the addition of new and replacement CPT codes). Prior reviews of the SHIF were undertaken in 2006 and in 2011 (see our report dated January 2012).

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<sup>1</sup> Health care providers must file with the Health Insurance Commission the maximum fee that they would charge to provide a service. For insured benefits supplemental to those prescribed in a SHIC, an insurer shall not be liable to make a payment for an amount exceeding the fee as filed.

<sup>2</sup> In the legislation, the premium under a SHIC is referred to as a Standard Premium.



In carrying out our work and in the preparation of this report, we relied on the assistance and cooperation of many parties and we wish to express our gratitude (in no particular order) for their assistance:

- The HIC (and HIC Board) and the Ministry
- The Health Services Authority
- The Cayman Islands Insurers
- The Cayman Islands Medical and Dental Society
- The Cayman Islands physicians and healthcare facilities and providers
- The Cayman Islands Health Insurance Standing Committee

## Section B – Survey of Physicians and Healthcare Practices/Facilities

In an attempt to assess physician and healthcare practice/facility billing practices and costs associated with operating a medical practice in the Cayman Islands, a survey was undertaken amongst all the physicians<sup>3</sup> and healthcare practices/facilities registered with the HIC.

The table below summarizes the recipients to whom the survey was sent:

Healthcare Group (as registered with HIC)	Number
Physicians	139
Healthcare Practice/Facility*	67
Total	206

\* 19 Physicians were the same contact point for the Healthcare Practice/Facility

The survey opened to respondents on June 4, 2015 and was closed on June 23, 2015. All the survey data and information collected by Morneau Shepell is held in strict confidence and individual physician and practice/facility responses remain anonymous.

The survey was comprised of the following sections and we have included the response rate to each section:

#	Section	Type of Questions	Response Rate (Count / % of Surveyed Population)
1	Respondent Information	Identifies the respondent (as responding in the capacity as a physician or on behalf of a Healthcare Practice/Facility).	50 / 27% (Not all of the 50 entering the survey completed the survey)
2	Physician Information	Details on the physician's practice, their specialty, years of experience, the number of patients they serve, hours of work, and the nature of their employment.	30 / 22%
3	Fee Schedule Information	Information on the fee schedule applied by the physician and the medical practice for billing of residents of the Cayman Islands.	33 / 18%

<sup>3</sup> Note that the survey was not sent to physicians employed by the Health Services Authority (HSA). These physicians are paid wages and are not reimbursed on a fee-for-service basis. The HSA supplied us with information relating to physicians under their employment as well as the HSA Chargemaster data.

4	Healthcare Practice/Facility and Financial Information	Questions on compensation and on the expenses in the maintenance and operation of a practice/facility.	Compensation Section: 16 – 20 / 10% Financial Section: Less than 10 / 4%
5	CPT Code Billing and Additional Information	A comments section enabling survey participants to bring to attention specific CPT codes and to provide additional information.	14 – 16 / 8%

A complete summary of the responses to the survey (as well as the survey questions) has been attached as Appendix 1.

The following are some observations from the survey:

- Since 2011, the number of physicians registered with the HIC has increased significantly.

Affiliation as per registration with the HIC*	2011	2015
Non-HSA Physicians	107	139
HSA Physicians	72	115
Total	179	254

\* The table above does not include Health City.

- Half of the responding physicians (i.e. non-HSA affiliated) are employed by a medical practice (as compared to being self-employed or a partner/owner of a medical practice). This is a significant change since 2011, which indicated an equal split between the categories of physicians that are self-employed, partners/owners of a medical practice, and those employed by a medical practice.
- Consistent with the 2011 survey, 40% of the respondents have more than 25 years of experience. This could be an indicator of an aging physician population and might underscore a longer term need to recruit physicians as those currently working phase into retirement.
- While 20% of respondents appear to be working on a part-time basis (less than 30 hours per week), approximately 37% indicated average weekly work hours that exceed 50 hours per week (23% indicated average weekly work hours that exceed 60 hours per week). This may be a leading indicator of the supply (or lack thereof) of physicians on the island.
- Approximately 45% of those surveyed use the SHIF for billing purposes and 33% apply the CIMDS schedule. These figures are similar to the prior survey. Most of those in the “other” category have a fee schedule that is similar to either the SHIF or the CIMDS. In certain cases, it was indicated that the SHIF is not suitable for the physician’s area of

practice, which might imply that the SHIF codes may not be up-to-date for the type of work performed by the physician

- The average annual compensation for administrative staff is \$48,500 (\$48,000 in 2011) and for clinical staff the average is \$60,000 (\$62,000 in 2011). The average net income for physicians is \$168,200 (\$162,000 in 2011). Specialists indicate on average a higher income than general practitioners. We do though note that there is significant variation within the data and not all respondents answered the question<sup>4</sup>.
- The financial information requested in Section 4 of the survey was a critical section that was intended to provide an understanding of the cost structure for operating a medical practice in the Cayman Islands. Unfortunately the number of responses to this section was not sufficient to provide any meaningful analysis. Directionally, the data indicates that on average:
  - Clinical and administrative staff compensation makes up a large component of the cost structure.
  - The cost of facilities (e.g. rent, utilities, other office expenses, etc...) is often the second highest component of the cost structure.
  - Malpractice insurance is also indicated as a large component of the cost structure.

The above is similar to the findings in the 2011 survey.

- Section 5 allowed survey participants to provide comments and additional information. The following provides a brief summary of common responses and suggestions:
  - The operating costs in the Cayman Islands are high due to:
    - Freight and duty costs on medical equipment and supplies.
    - High costs of employment, malpractice insurance, work permits, registration and licensing fees.
    - Compliance with insurance company administration procedures, precertification requirements and billing reconciliation.
    - Few economy of scale opportunities due to a small population.
    - Keeping up to date with continuing professional development requirements.
  - Suggestions for government include:
    - Undertake a more comprehensive review of the costs and delivery of healthcare in the Cayman Islands.
    - Consider providing malpractice insurance through a government controlled insurance operation, with the goal of lowering the insurance rates and keeping the insurance dollars on the island.
    - Enhance the coverage under the SHIC, particularly for maternity related care.

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<sup>4</sup> There is data on approximately only 25 - 35 people within each category (i.e. administrative staff, clinical staff and physicians).

- Increase the utilization of local care as opposed to care being directed overseas (as well as eliminating the difference between the local and overseas co-payment).
  - Review of the sponsorship program of foreign physicians.
  - Play a more active role in the sourcing of medical supplies and review the duty on such items.
  - Recognize services provided by “mid-level” providers such as physician assistants.
  - Improve the claims submission, claims payment and patient pre-certification process with the insurers.
  - Expand the SHIF beyond CPT codes (e.g. to include other HCPCS codes).
  - Level the playing fields between all on-island medical providers.
  - Improve the ability to search for CPT codes and procedure descriptions on the HIC website.
- Comments which were emphasized include:
    - The fees paid by the insurance companies are not considered adequate to sustain the viability of a medical practice.
    - The SHIF is outdated (which results in administrative difficulties) and has not kept pace with rising costs. The SHIF should be adjusted more frequently both in the quantum of the fee and the codes listed therein.
    - The SHIF does not compensate adequately for obstetrical related services, particularly given the high cost of malpractice insurance.

# Section C – Analysis of the Standard Health Insurance Fees

The following section describes the methodology that we have adopted in our analysis of the SHIF:

## **C.1. : Derivation of the pattern of procedures performed in the Cayman Islands**

Data supplied by numerous Cayman Island insurers was obtained and we aggregated the data to determine the frequency under which each CPT Code has been utilized. A listing of the insurers that supplied data is contained in Appendix 3. The data was supplied for the calendar years 2012, 2013 and 2014. The data indicated procedures performed under 4,100 CPT Codes with an overall total frequency of 2.7 million procedures. Procedures performed off-island are excluded from this analysis.

## **C.2. : Determination of total fees generated under various existing fee schedules**

Based on the frequency of the CPT Codes derived in the step above, we compared the total fee revenue generated under various fee schedules with those generated under the SHIF.

## **C.3. : Establish the total relative value units associated with the procedures performed in the Cayman Islands**

A relative value unit (or RVU) is a measure that assesses, amongst other things, the technical skill and effort to provide a particular service. For this purpose, we have determined the RVUs by applying the scale used by the United States Medicare program<sup>5</sup>. Under Medicare, the RVUs for most CPT Codes (i.e. the measure of effort in providing each service) are divided into three components: physician work, practice expense and professional liability insurance.

The RVUs adopted by Medicare have undergone a thorough and robust process in their determination and reviews are done at least once every five years. Further, the Medicare RVUs offer a high level of transparency as they are published in the Federal Register.

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<sup>5</sup> Medicare is the senior's social health insurance program funded by the US government.

Under Medicare, most CPT Codes have an RVU and its purpose is to determine a payment rate representative of the resource costs associated with providing the service.

## C.4. : Adjust the RVUs by a multiplier to determine the reimbursement rate for physician services provided in the Cayman Islands

Under Medicare, in order to derive the payment rates under each CPT Code, the components of the RVUs are rated (or multiplied) by a set of factors that are reflective of the geographical differences in resource costs. For example, one region may have higher practice related costs than another. In our analysis we have considered the following factors particular to the Cayman Islands, in the derivation of a rating:

- The Cost-of-Living and Wages

There is a paucity of data that provides cost-of-living and income comparator data between the Cayman Islands and other jurisdictions such as the United States. According to the Cayman Islands Government Website, while the cost-of-living in the Cayman Islands is generally recognized as higher than that of the United States, this is partially offset by the absence of income and property taxes. The high cost-of-living is partly attributable to the importation of most commodities (which bear the cost of freight, insurance, and customs duty if applicable). Housing and rental costs are generally higher in the Cayman Islands as are the costs of utilities. Wages once adjusted into US dollars are generally higher in the Cayman Islands.

Despite the above, data from the World Bank<sup>6</sup> indicates the 2011 Cayman Islands purchasing power parity conversion factor for Gross Domestic Product as 0.96. The purchasing power parity conversion factor is an estimate of the number of units of a country's currency required to buy the same amounts of goods and services in the domestic market as a US dollar would buy in the United States.

- Comparability in Income

According to the survey of physicians (as outlined in Section B), the average net income for Cayman Island physicians is \$168,200 (specialists indicate on average a higher income than general practitioners). These figures may have a slight downward bias as individuals tend to under report their income in surveys. According to Medscape's Physician Compensation Report: 2015 (a report that is based on a voluntary survey that garnered responses from approximately 20,000 US physicians representing 26 specialties), the average compensation for a physician working in the South Eastern United States is \$269,000 USD (or \$220,000 KYD). For the whole of the United States, the average compensation for a primary care physician is \$195,000 USD (or \$160,000 KYD) and for a specialist approximately \$284,000 USD (or \$233,000 KYD).

If the Cayman Islands is to continue to attract physicians to the island, then the fee schedule needs to be one which reimburses at a level that is sufficiently adequate to enable the physician to earn an income comparable with other jurisdictions (once adjusted for taxes and cost-of-living differences).

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<sup>6</sup> <http://data.worldbank.org/indicator/PA.NUS.PPP>

- Structure of the Healthcare System

In many large developed economies there are government funded health insurance programs (e.g. Medicare in the United States). Under these programs, the government often determines the rate of reimbursement to health care providers for services provided under these insurance programs (in a sense, the government negotiates the price on behalf of the insured participants). Often these programs can constitute a large portion of a provider's revenue and providers adjust to this fee level in their overall revenue model. Where providers are numerous and non-government controlled<sup>7</sup> one could expect a certain level of competitiveness in the provision of services. Furthermore, multiple providers provide consumers with choice and price may be a persuasive factor in exercising this choice (albeit limited in the way healthcare is consumed). Finally, larger economies are able to achieve certain economies of scale and efficiencies in their delivery of healthcare.

Given the size of the population and the geographical location, the Cayman Islands are unlikely to be able to achieve the same economies of scale as might be possible in larger economies, nor might there be the same level of competitiveness within the private healthcare system. In addition, the island will continue to compete with other jurisdictions for attraction of human resources (presently there is some reliance on visiting physicians that are brought in to perform on-island procedures). These factors, together with the items mentioned above, invariably lead to higher costs in the delivery of healthcare services.

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<sup>7</sup> In some countries, the government is not only the funder of healthcare but also the provider of healthcare services (for example, the government may operate hospital facilities either directly or indirectly).



# Section D – Analysis of Fee Schedules

Based on the pattern of procedures performed in the Cayman Islands (as described in Section C.1.) we analyzed the difference between the SHIF and other fee schedules. Below is a list of the fee schedules used in our comparator analysis together with a brief description of the fee schedules.

## D.1. : Fee Schedules used in the Comparator Analysis and a Description of the Schedule

- The Cayman Islands Health Services Authority (HSA) Chargemaster.  
This is the fee schedule applied by the HSA.
- The fee schedule adopted by the Cayman Islands Medical and Dental Society (CIMDS).  
According to CIMDS, their fee schedule represents the 2015 Miami 80th percentile.
- The fees reimbursed under the United States Medicare program for the Miami, Florida region.  
Under Medicare, the reimbursement for physicians<sup>8</sup> varies depending on whether the service is provided inside a facility setting or in a non-facility (i.e. outside of a facility) setting. The figures presented in our report are based on services provided outside of a facility setting. Under Medicare, inpatient services are not reimbursed or classified by CPT Codes but rather by Medical Severity Diagnostic Related Groups (MS DRG). As such, there is no like-for-like comparability between the inpatient fee schedule method applied under the SHIF and that applied under Medicare.

We also note that Medicare reimbursement for facilities and laboratories vary between providers. In our comparisons to SHIF, where a Medicare CPT Code does not contain a physician reimbursement amount, we applied the national median of the Medicare reimbursement rate to a facility (or a laboratory as the case may be).

- Physician charge data for the Miami, Florida region (Geozip 331) as provided by OptumInsight's FeeAnalyzer.  
FeeAnalyzer holds actual physician charge data for specific geographic areas. Their databases are updated quarterly and the database holds 600 million charge transactions and provides a summary of various percentiles (e.g. 50<sup>th</sup>, 60<sup>th</sup>, 75<sup>th</sup> percentile) of charge data.

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<sup>8</sup> Which is based on RVUs as outlined in Section C.3.

The chart in Section D.2. presents the total difference for 2011 and 2015 between SHIF and the fee schedules described above. We have also tabled in Section D.3. the differences by major service type.

As indicated in Section D.2., there has been a narrowing of the difference between the fees of the SHIF and the HSA (e.g. in 2011 the HSA fees were in aggregate 27% less than the SHIF fees but in 2015, the HSA fees are 3% less than the SHIF). The difference between the SHIF and the CIMDS fees have also narrowed. On the contrary, the difference between the SHIF and Miami’s 50<sup>th</sup> percentile has increased. For Medicare, the differential between the SHIF has slightly increased.

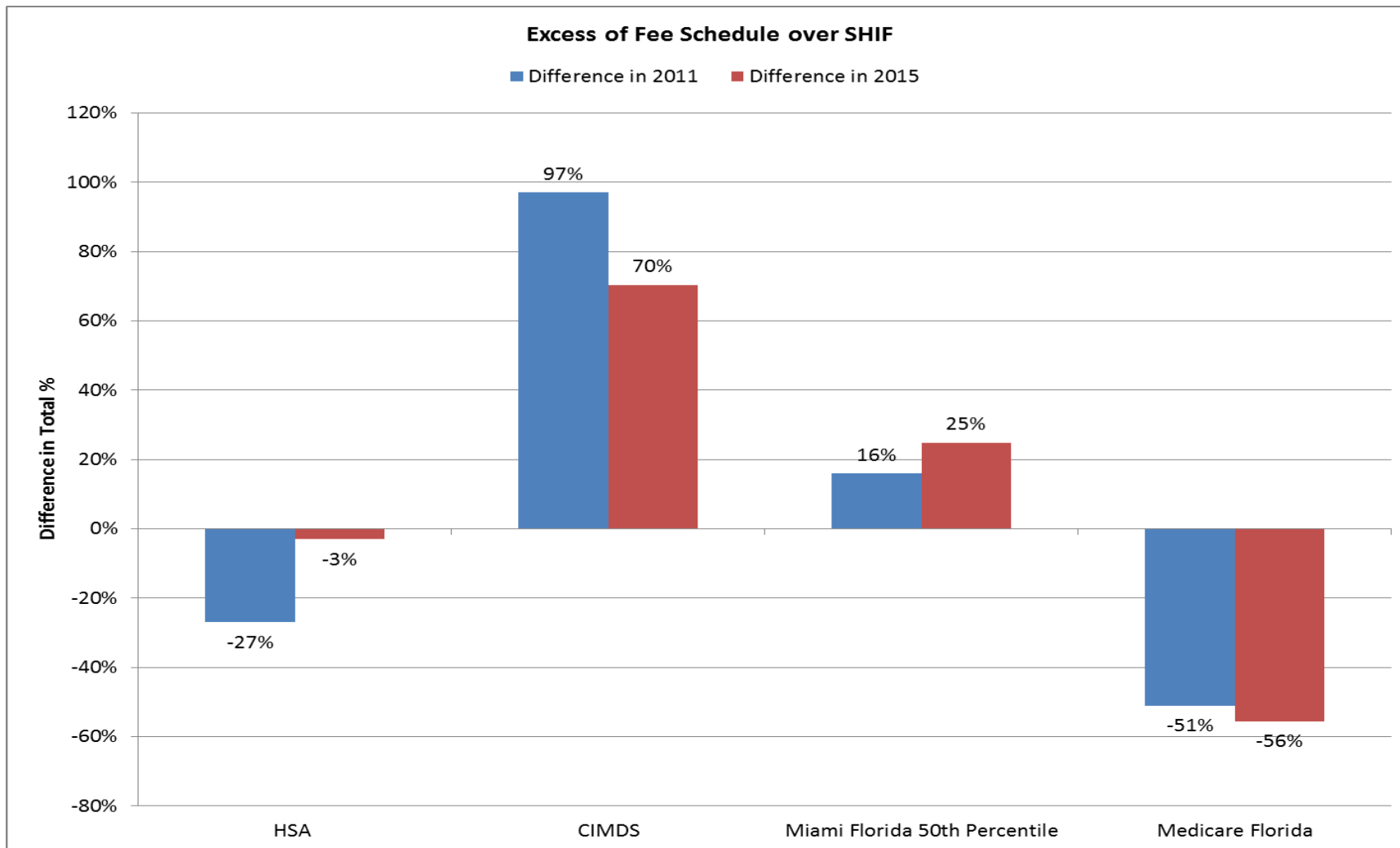
To understand these trends, we have tabled below the change in the various fees schedules since 2011:

Fee Schedule	Average % Change over 2011-2015
HSA Fee Schedule	Increased by 23.2%
CIMDS Fee Schedule	Declined by 13.0%
Miami’s 50th percentile	Increased by 13.5%
Medicare	Declined by 0.3%

The change in the Cayman Islands Consumer Price index over the period 2010-2014 was approximately 6.0%.

For a breakdown of the 2011-2015 change in fees by major service type, please see Appendix 2.

## D.2. : Chart of Comparison of Fee Schedules



### D.3. : Table of Comparison of Fee Schedules

	Distribution of Service (by \$ Value)**	Excess over SHIF*			
		HSA Charge Master	CIMDS	FeeAnalyzer Miami Florida 50 <sup>th</sup> Percentile	Medicare
<b>Type of Service</b>					
Evaluation and Management					
- Office Consults	24%	0%	98%	53%	(26%)
- Inpatient and ER Consults	9%	0%	101%	89%	(58%)
- Other	>1%	0%	67%	43%	(35%)
Medicine	16%	(4%)	51%	4%	(55%)
Pathology and Laboratory	12%	(9%)	95%	(14%)	(72%)
Radiology	17%	(7%)	44%	20%	(76%)
Surgery***					
- Obstetrics	3%	0%	65%	22%	(44%)
- Other	19%	0%	43%	2%	(68%)
<b>Overall</b>	<b>100%</b>	<b>(3%)</b>	<b>70%</b>	<b>25%</b>	<b>(56%)</b>

\* The comparison is based only on the CPT Codes that are in common.

\*\* This column indicates the weighting of the value of the service based on the total SHIF revenue under that service.

\*\*\* Not including the facility fee.

#### D.4. : Notes on the Table of Comparison

1. The Evaluation and Management (E&M) category makes up a largest portion (34%) of the value of services provided. The E&M category is predominantly consultations at a physician's office.
2. Although the HSA Chargemaster is mostly similar to SHIF (the fee for 5,740 codes are the same), for the other 900 codes that the fee schedules have in common, the HSA has a lower fee for 580 of these codes, and a higher fee for 320 of these codes.
3. The CIMDS fee schedule is significantly in excess of SHIF. By contrast, reimbursement under Medicare is significantly lower than the SHIF.
4. While the FeeAnalyzer data for Miami at the 50<sup>th</sup> percentile is overall 25% higher than the SHIF, the fee difference by type of service varies significantly. The Office and Inpatient Consults are respectively 53% and 89% higher; while the Pathology and Laboratory Services is 14% lower.

Note the fee level set by the physician is often different to the reimbursement rate that the physician actually receives. Insurance carriers and other payers will negotiate a discounted reimbursement rate and often the discount on the physician fee can be substantial (e.g. in the range of 20% to 40% depending on the service).

# Section E – Establishing a Design and Structure for SHIF

## E.1. : Design Features

While there are many factors that could come under consideration in the structural design and determination of fees under a schedule, we would suggest the following:

- The design should be robust and formulaic.  
Given the volume of CPT Codes, it is advisable that the design on which the fee schedule is structured be robust and the method for determination of the fee be formulaic. For example under the Medicare fee schedule, many CPT Codes have an assigned RVU and the fee is set as a multiple of the RVU. This method provides a significant level of robustness in that the targeted fee level is easily adjusted or updated through the multiplier and if the effort required to provide a certain service is revised, the RVU changes and hence the fee changes.
- The method should be well founded, transparent and easily understandable.  
A fee schedule that has been determined in a sound, rational and methodical way helps bring credibility to the schedule. Further, if the basis on which the fee schedule is determined is transparent and understandable, then stakeholders will have a higher level of acceptance.

The design principles of the Medicare fee schedule offers all of the advantages outlined above and it is for this reason that we suggest that the design of the SHIF be based on the same principles (and that is to say, the design be based on the Resource Based Relative Value Scale system which assigns a Relative Value Unit to each relevant CPT Code).

## E.2. : Fee Level

With an RVU based design, establishing a fee can be achieved by setting a fee multiplier that achieves the desired target fee level.

In determining the appropriate level of fee for the Cayman Islands we had outlined numerous considerations in Section C.4.; and based on these together with the comparative analysis outlined in Section D, we suggest the target fee level be established as follows:

1. Assess a Target Level of Fee against the Miami Benchmark
  - Consider the Medicare reimbursement rates and the Miami FeeAnalyzer physician fee levels (at the 50<sup>th</sup> percentile) as outlined in Table D.3.
  - Apply a discount<sup>9</sup> to the non-Medicare physician fee level to reflect the approximate reimbursement level (due to the negotiated discounts applied by insurance carriers).
  - Take a weighting of the Medicare and discounted physician fee levels to reflect the average mix of revenue received by a physician. For this item we suggest a weighting of 25%<sup>10</sup> towards Medicare and 75% towards non-Medicare revenue.
2. Apply a loading factor to reflect the overall cost differential between the Cayman Islands and the United States. For this item we suggest a loading of 20%. A loading of this magnitude would infer a fee target for Non-Medicare related revenue that that is approximately at the 70th – 75th Fee Analyzer percentiles for the Miami region.
3. Determine relative value units on the Medicare scale by applying the geographical factors (see Appendix 4) for Miami. In order to attain the fee for a CPT Code, a fee multiplier which would vary by the type of service (see Appendix 5) would be applied to the relative value units.

The result of such an approach is tabled in Section E.3. below<sup>11</sup>.

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<sup>9</sup> While the discount rate could vary from service to service and from carrier to carrier, we have applied a 25% discount to Evaluation and Management services and a 10% discount to Radiology services.

<sup>10</sup> According to Medscape's Physician Compensation Report: 2015, more than 65% of their survey respondents continue to accept Medicare patients. The 2014 Physician Survey by [www.physicianspractice.com](http://www.physicianspractice.com) indicates that approximately 75% of respondents accept Medicare patients.

<sup>11</sup> We note that the results of the analysis are highly sensitive to the approach and factors listed in items 1 through 3 above. Should the HIC desire, we would be glad to illustrate the results by applying alternative approaches or factors.

### E.3. : Determination of Proposed SHIF Fees

	Excess over SHIF*					(F) = (A) x (E)
	(A)	(B)	(C)	(D) = Weight 25% on (B) and 75% on (C)	(E) = 20% increase to (D)	
	Distribution of Service (by \$ Value)**	Average Medicare Reimbursement	Average for Miami region (after discount)	Average based on Revenue Mix	Change over current SHIF	Total Impact to System
<b>Type of Service</b>						
Evaluation and Management						
- Office Consults	24%	(26%)	15%	4%	25%	6%
- Inpatient and ER Consults	9%	(57%)	41%	17%	40%	4%
- Other	>1%	(35%)	7%	(3%)	16%	0%
Medicine	16%	(57%)	4%	(11%)	6%	1%
Pathology and Laboratory	12%	(64%)	(14%)	(26%)	(12%)	(1%)
Radiology	17%	(75%)	7%	(14%)	4%	1%
Surgery***						
- Obstetrics	3%	(44%)	22%	6%	27%	1%
- Other	19%	(68%)	2%	(16%)	1%	0%
<b>Overall</b>	<b>100%</b>	<b>(55%)</b>	<b>8%</b>	<b>(7%)</b>	<b>10.9%</b>	<b>10.9%</b>

\* The comparison is based only on the CPT Codes that are in common.

\*\* This column indicates the weighting of the value of the service based on the current total SHIF revenue under that service.

\*\*\* In a non-facility setting.



## E.4. : Notes on the Proposed SHIF Fees

1. Based on the method outlined in Section E.2., Column “E” of the table in Section E.3. indicates the total increase in the fees over the current SHIF and Column “F” indicates the overall system wide impact of the change in revenue generated over the current SHIF.
2. Where the percentage in Column E is positive, the service provider would on average experience an increase in fees and when negative, the service provider would on average experience a decline in fees.
3. The largest increases occur in the Evaluation and Management category, particularly under Office Consultations (25% increase) and Inpatient and ER Consultations (40% increase). This category has a significant weighting (33%) in the overall mix of services provided on the island and would contribute to almost all of the total increase in revenue across the system. The FeeAnalyzer data also indicates for the Evaluation and Management category a significant average increase over the 2011-2015 period (see Appendix 2). In the United States, this category of service is likely subject to the highest level of discount. We have applied a discount of 25% and a further discount would reduce the increase under this category. Appendix 6 provides a survey of the comparison of physician charges with payer reimbursements.
4. The Pathology and Laboratory category would experience an average decline in fees of 12%. This is mostly due to the Miami, Florida region indicating below average fees when compared with other high cost US regions. We suggest that the model be revised such that there would be no overall change in fees under this category.

If we were to modify the analysis to incorporate note 4. above, the proposed change in fees over the current SHIF are tabled in Section E.5. The multipliers on the RVUs for the determination of the fees are tabled in Appendix 5.

### E.5. : REVISED Determination of Proposed SHIF Fees (based on the Notes in Section E.4.)

	Excess over SHIF*					(F) = (A) x (E)
	(A)	(B)	(C)	(D) = Weight 25% on (B) and 75% on (C)	(E) = 25% increase to (D)	
Type of Service	Distribution of Service (by \$ Value)**	Average Medicare Reimbursement	Average US regions (after discount)	Average based on Revenue Mix	Change in SHIF after Cayman Island Factor	Total Impact to System
Evaluation and Management						
- Office Consults	24%	(26%)	15%	4%	25%	6%
- Inpatient and ER Consults	9%	(57%)	41%	17%	40%	4%
- Other	>1%	(35%)	7%	(3%)	16%	0%
Medicine	16%	(57%)	4%	(11%)	6%	1%
Pathology and Laboratory	12%	(64%)	(14%)	(26%)	Set to zero	0%
Radiology	17%	(75%)	7%	(14%)	4%	1%
Surgery***						
- Obstetrics	3%	(44%)	22%	6%	27%	1%
- Other	19%	(68%)	2%	(16%)	1%	0%
<b>Overall</b>	<b>100%</b>	<b>(55%)</b>	<b>8%</b>	<b>(7%)</b>	<b>12.3%</b>	<b>12.3%</b>

\* The comparison is based only on the CPT Codes that are in common.

\*\* This column indicates the weighting of the value of the service based on the current total SHIF revenue under that service.

\*\*\* In a non-facility setting.

# Section F –Implementation of a revised SHIF Pricing Model

There are various options in the adoption and implementation of the pricing model (as described in Section E.2.).

## F.1. : Revise all the SHIF Fees to the Pricing Model

While the results presented in Table E.5. are in summary form (by category of service), the pricing model would result in a change at the individual CPT Code level that could be either positive or negative. The following table indicates the number of codes for which the SHIF fee would change significantly:

Number of Codes where...	SHIF Fee Increases by 20% or more	SHIF Fee Declines by 20% or more
Evaluation and Management		
- Office Consults	16	-
- Inpatient and ER Consults	17	1
- Other	5	-
Medicine	199	169
Pathology and Laboratory	177	534
Radiology	176	60
Surgery	1,382	910
<b>Total</b>	<b>1,972</b>	<b>1,674</b>

Given that the change in SHIF fee for certain CPT codes can be large, it may be preferable to phase-in the change in the SHIF fee over a number of years.

## F.2. : Revise the current SHIF Fees at the Category Level

It may be preferable (and possibly less problematic) to adjust the SHIF fee in each category by applying a single percentage (as per column E in table E.5.) rather than making pricing adjustments at the individual CPT Code level. Once again, the change in the SHIF fee for each category could be phased-in over a number of years.

This option also allows the fees for a certain category to change by a target percentage level (should there be, for example, a strategic objective to modify the SHIF in a particular category).

The pricing model (as outlined in Section E.2.) can, at the individual CPT Code level, be applied for the pricing of any new CPT Codes that may in the future be added to the SHIF.

### **F.3. : Revise the overall level of current SHIF Fees**

Rather than adjusting the fee level by category of service (as described in F.2.), it may be more desirable (and significantly less complex) to adjust all the current SHIF fees by 12.3% (which is the overall result indicated in Table E.5.). As with all the options, the change in overall level of the SHIF fee could be phased-in over a number of years.

The pricing model (as outlined in Section E.2.) can, be applied for the pricing of any new CPT Codes that may in the future be added to the SHIF.

### **F.4. : Revise the SHIF Fee only when the fee Increases**

A variation of F.1., would be to adopt the pricing model but only revise the SHIF where the pricing model produces a fee that exceeds the current SHIF. If this method were adopted, the total impact to the system would result in an average increase in fees of 18.0% rather than the 12.3% as presently tabled.

### **F.5. : Revise only select CPT Codes**

Rather than revising all the CPT codes, the HIC may wish to consider revising only select CPT codes. The selection of codes for revision could be based on various criteria (e.g. only Obstetric codes may be selected; or only the significantly used codes may be selected<sup>12</sup>, etc...). The selection of codes could depend on the objectives of the HIC.

In adopting and implementing a revision to the SHIF, we have tabled below a subjective “score” which assesses each of the above approaches on a number of criteria:

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<sup>12</sup> Only 100 CPT Codes constitute approximately 70% of total billing revenue, and 150 CPT Codes constitute approximately 75% of total billing revenue.

	Criteria				
	Targeted Strategy / Flexibility	New SHIF Fee Only Increases?	Simplicity / Explainable	Adherence to Pricing Model	Phase-In Length
1. Revise all the SHIF Fees to the Pricing Model	xxx	xxx	xx	✓✓✓	✓✓✓
2. Revise the current SHIF Fees at the Category Level	✓	✓✓✓	✓	x	✓✓
3. Revise the overall level of current SHIF Fees	xxx	✓✓✓	✓✓✓	xxx	✓
4. Revise the SHIF Fee only when the fee Increases	✓✓	✓✓✓ (but expensive)	✓✓	✓	✓✓
5. Revise only select CPT codes	✓✓✓	Depends on Method	xxx	✓	✓✓

Key: ✓ = "Positive" ; x = "Negative"

We welcome the opportunity to discuss further with the HIC the above options.

## Section G – Other Considerations in the Revision of SHIF

In this section we outline certain considerations that accompany a review of the SHIF.

- A revision to the SHIF would impact not only the revenues of service providers that have adopted the SHIF as their billing schedule (which according to our survey is approximately 45% for those that responded), but also the rate of reimbursement under the Standard Health Insurance Contract (SHIC) which in turn would impact the Standard Premium Rate (it would also impact the co-payment required under contracts of insurance which do not cover the whole cost of the service).

On the assumption that the distribution of services as outlined in Section E.5. remains constant and the SHIF is adjusted based on the scenario as tabled in that Section, at a macro level the overall increase in the Standard Premium Rate would be likely slightly less than 12.3%. The reason for this is that certain SHIC benefits are capped at a maximum amount and claims beyond the maximum cap (despite being on the higher SHIF rate) would have no effect on the reimbursement paid by an insurer.

We also note that the current HSA Chargemaster presently results in total fees that are on average 3% less than the current SHIF fee schedule. If the HSA were to adopt the SHIF schedule then this too would have an impact on the Standard Premium Rate (in particular the premium rate under CINICO which we understand requires members to make use of the HSA as a preferred provider).

- There are many CPT Codes that have been either added (approximately 440<sup>13</sup>) or become inactive (approximately 420) since the current SHIF had been gazetted. In an update of the SHIF, it is recommended that the listing of CPT Codes be adjusted accordingly. Note that certain of the codes being added are replacements for codes that have been deleted. Codes that are being replaced will be priced according to the model outlined in Section E.2. This will likely produce a fee that differs from the current SHIF fee. We strongly suggest that the HIC provide a draft of a revised SHIF to multiple providers, insurers, healthcare facilities and other relevant stakeholders, so that they may review the draft schedule and provide any comments prior to the schedule being gazetted.

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<sup>13</sup> Plus an additional 1,000 codes if the modifiers are included.

- It had been noted in our 2012 report that the current SHIF does not currently contain an Anaesthesia fee schedule. The HSA Chargemaster includes a fee for almost all of the available Anaesthesia CPT Codes. When compared with Medicare, the HSA has a different methodology for anaesthesia charges. For example, whereas under Medicare the fee is determined through a combination of base units and time intervals of 15 minutes, the HSA's fees are billed per procedure with additional fees beyond an hour (measured in 30 minute intervals). The Medicare billing methodology is more complex than the HSA, and we'd suggest that should the HIC wish to include the Anaesthesia CPT Codes within the SHIF, it be based on the HSA Anaesthesia Chargemaster and billing methodology.
- We also note that the current SHIF does not distinguish between a fee rate for Primary Care providers and Specialists. The reimbursement under Medicare also makes no such distinction. We would suggest that it remain the prerogative of the Specialist to determine a fee schedule that is commensurate with their specialty and that this remain outside the purview of the SHIF (i.e. as is presently the case, a provider is not constrained to the SHIF and is able to determine a fee schedule as they see appropriate).
- A change to the SHIF may lead to significant administrative and systems changes amongst healthcare providers and insurers, including the likely adjustment to insurance premium rates. We suggest that prior to the effective date of a change to the SHIF, sufficient lead time be provided.
- On implementation of a revision to the SHIF, the HIC (or the Ministry) may wish to consider developing communication material which explains the process that has led to the adjustment as well as parts of the methodology that explain the basis for the determination of fees under a new SHIF.
- At present the SHIF does not consider separately the fee whether the physician performs the procedure inside, or outside, of a facility. Under Medicare, the reimbursement for many services would vary depending on the setting in which the service is performed. In addition, it is common (for example, in the United States) for inpatient billings to be based on Diagnostic Related Groups rather than on individual CPT Codes. Although beyond the scope of the project, and possibly as a future consideration, the HIC may wish to review whether a DRG based system is desirable for inclusion in SHIF and whether there should be a separate fee scale for physicians and facilities. We would suggest that such a review would likely be in collaboration with the HSA.
- While our proposed adjustment to the fee level of the SHIF has focused on determining a methodology and fee target, we have not considered any other factors that might be included in the adjustment of the SHIF. For example, the SHIF may be used as a policy instrument to possibly attract a certain specialty to

the island or to achieve any other goals or policies that have been established by the regulator.

- As a final thought, any increase in health insurance premiums should be considered within the context of the current economic environment as it could present affordability challenges to employers, the self-employed, the unemployed, and retired persons. Although we believe that the fee level adjustments that are outlined in Section E, can be “absorbed” by the system (particularly if they are phased-in), there is a slight risk that an increase in premiums could give rise to more people opting out of health insurance by letting their policies lapse or by not paying their premiums (despite health insurance being compulsory). The financial risk of being uninsured is great and we suggest that the HIC monitor for such activity.



## Section H - Recommendations

We recommend the following:

- For the CPT Codes under the current SHIF, we recommend adjusting the SHIF fee levels as outlined Section E. In aggregate, this would result in a 12.3% increase in the SHIF fees. There are various options for the implementation of a revision of the SHIF (which are outlined in Section F) and we recommend that the HIC select an option that is most suitable for the Cayman Islands healthcare system<sup>14</sup>. We'd suggest that the HIC phase-in the revision to the SHIF fees either at the Category Level or at an Overall Level (i.e. Option 2 or Option 3 per Section F).
- Adopt a methodology for the design of the SHIF that is based on the Medicare Resource Based Relative Value Scale system which assigns a Relative Value Unit to each relevant CPT Code. A multiplier (as listed in Appendix 5) would then be applied to the RVU to determine the fee for any CPT Code that is added to the SHIF.
- We recommend that the fee schedule be reviewed annually and should consider adjustments for the following:
  - CPT Codes that are added or removed
  - RVUs that might be adjusted (this is likely to occur on an infrequent basis)
  - Changes to the rates of reimbursement under Medicare
  - Changes in the fee levels in the comparator benchmark US region
  - Any factors that are relevant to the Cayman Islands (for example, changes in price inflation or other goals and objectives).
- We recommend the HIC (or the Ministry) consider developing communication material which explains the adjustment to the SHIF and the methodology on which the new SHIF is based.
- Prior to revision of the SHIF, the HIC should “road test” the proposed adjustment with various stakeholders. If necessary, stakeholder feedback could be

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<sup>14</sup> We note that in the survey of Physicians and Healthcare Practices/Facilities, numerous comments were provided by survey respondents including various suggestions for consideration by government. These comments seem to suggest that the government might wish to consider holding consultations on a number of issues prior to any revision to the SHIF.

incorporated into the final determination of the adjustment. This process is likely to increase stakeholder buy-in to the proposed adjustment.

- We suggest that prior to the effective date of a change to the SHIF, sufficient lead time be provided to all stakeholders.

# Appendix 1 – Summary of Survey Results

## Physician and Practice Information

In this section, the survey participants were asked questions regarding physician practice, physician specialty, the number of patients served per physician, and the nature of physician employment.

Describe your role:	Response (%)	Response Count
<ul style="list-style-type: none"> <li>General Practitioner</li> </ul>	37.7	11
<ul style="list-style-type: none"> <li>Specialist</li> </ul>	62.3	19
<b>Total</b>	100.0	30

How many years have you been in practice?	Response (%)	Response Count
<ul style="list-style-type: none"> <li>0 - 4 years</li> </ul>	3.3	1
<ul style="list-style-type: none"> <li>5 - 9 years</li> </ul>	-	-
<ul style="list-style-type: none"> <li>10 - 14 years</li> </ul>	26.7	8
<ul style="list-style-type: none"> <li>15 - 19 years</li> </ul>	20.0	6
<ul style="list-style-type: none"> <li>20 - 24 years</li> </ul>	10.0	3
<ul style="list-style-type: none"> <li>25+ years</li> </ul>	40.0	12
<b>Total</b>	100.0	30

Approximately how many patients in a typical week do you serve in the Cayman Islands?	Response (%)	Response Count
<ul style="list-style-type: none"> <li>0 - 50 patients per week</li> </ul>	43.4	13
<ul style="list-style-type: none"> <li>51 - 100 patients per week</li> </ul>	40.0	12
<ul style="list-style-type: none"> <li>101 - 150 patients per week</li> </ul>	13.3	4
<ul style="list-style-type: none"> <li>151 - 200 patients per week</li> </ul>	3.3	1
<b>Total</b>	100.0	30

On average, how many hours do you work per week in the Cayman Islands?	Response (%)	Response Count
• 0 - 9 hours per week	3.3	1
• 10 - 19 hours per week	6.7	2
• 20 - 29 hours per week	10.0	3
• 30 - 39 hours per week	6.7	2
• 40 - 49 hours per week	36.7	11
• 50 - 59 hours per week	13.3	4
• 60+ hours per week	23.3	7
<b>Total</b>	<b>100.0</b>	<b>30</b>

Which of the following best describes your situation?	Response (%)	Response Count
• Self-employed	20.0	6
• Partner in, or owner of, a medical practice	30.0	9
• Employed by a medical practice	50.0	15
• Other	-	-
<b>Total</b>	<b>100.0</b>	<b>30</b>

Which of the following best describes your Cayman Islands practice?	Response (%)	Response Count
• Multi-specialty group	20.0	6
• Single specialty group	36.7	11
• Sole practitioner	43.3	13
<b>Total</b>	<b>100.0</b>	<b>30</b>

## Fee Schedule Information

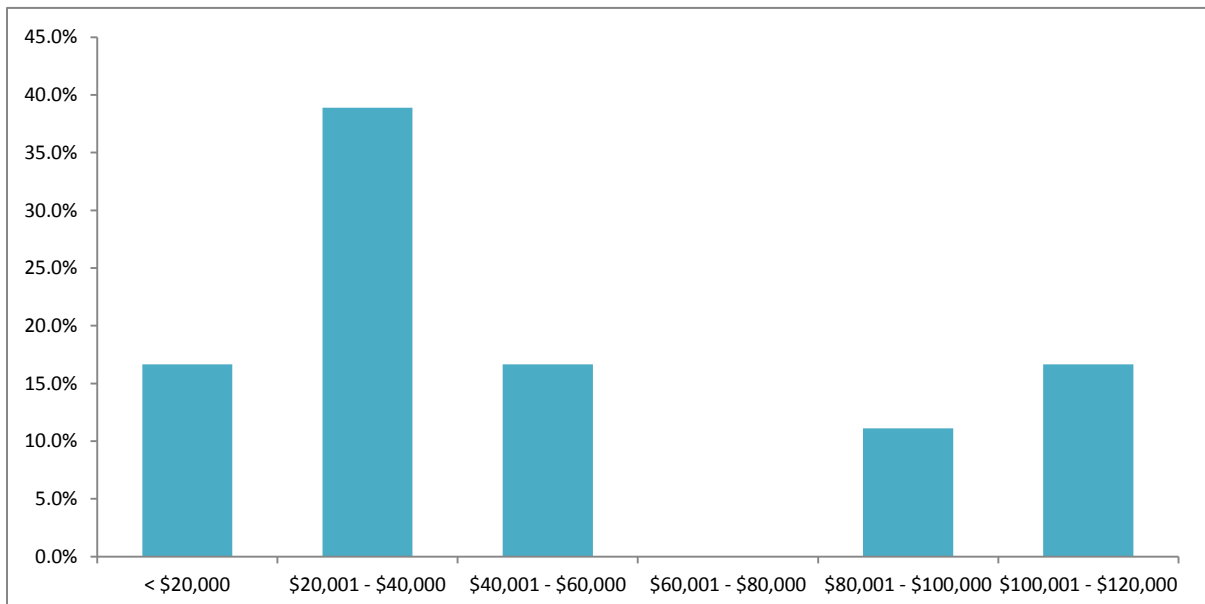
In this section, the survey participants were asked to identify the fee schedule used for billing.

What fee schedule do you apply for billing purposes (when billing residents of the Cayman Islands)?	Response (%)	Response Count
<ul style="list-style-type: none"> <li>The Standard Health Insurance Fee (SHIF) Schedule</li> </ul>	45.5	15
<ul style="list-style-type: none"> <li>The Cayman Islands Medical and Dental Society (CIMDS) Schedule</li> </ul>	33.3	11
<ul style="list-style-type: none"> <li>Other</li> </ul>	21.2	7
<b>Total</b>	100.0	33

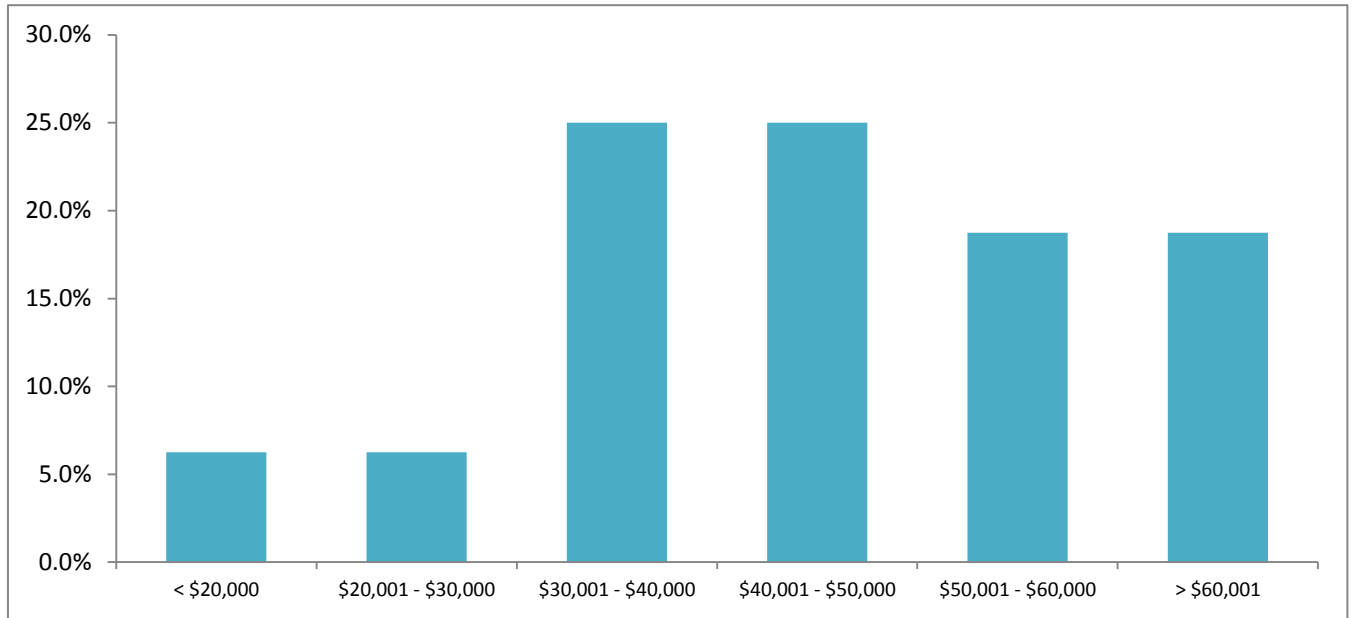
## Financial Information

In this section, survey participants provided information regarding employee headcount and compensation, and on the expenses in the maintenance and operation of physician practice/facility.

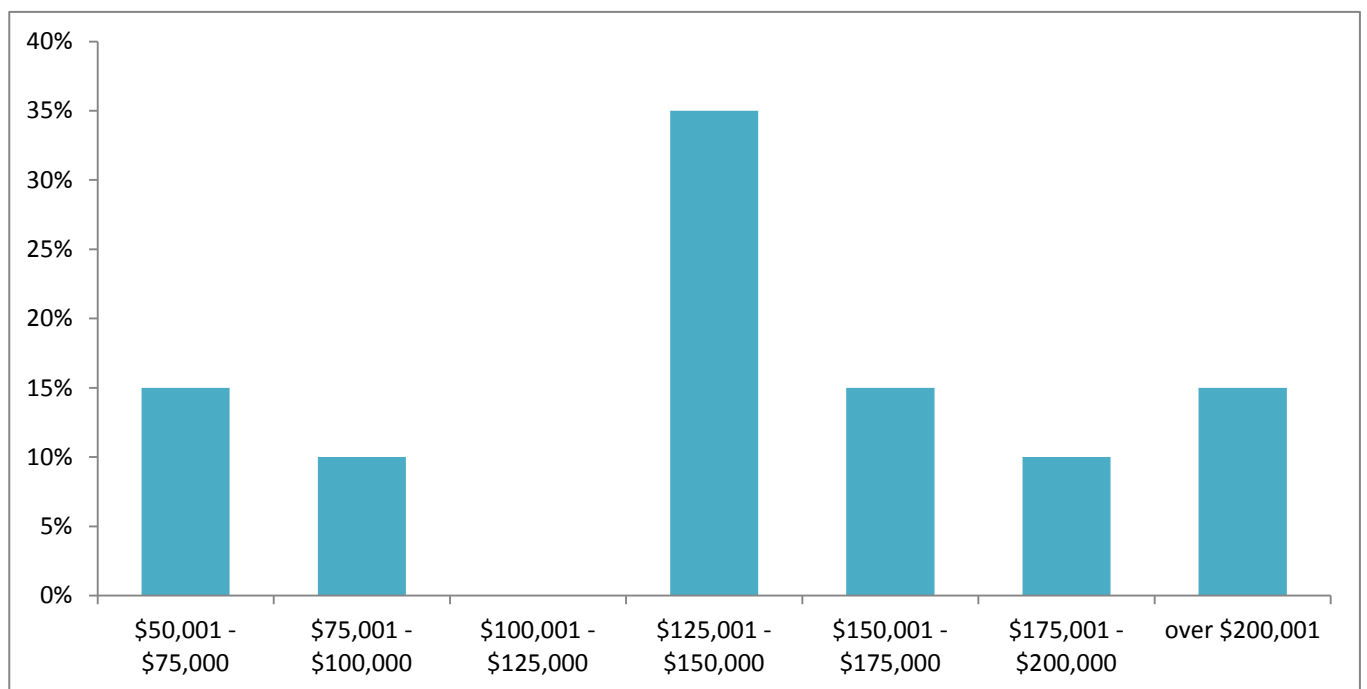
Administrative Staff - Average Annual Compensation	Response (%)	Response Count
<ul style="list-style-type: none"> <li>&lt; \$20,000</li> </ul>	16.7	3
<ul style="list-style-type: none"> <li>\$20,001 - \$40,000</li> </ul>	38.8	7
<ul style="list-style-type: none"> <li>\$40,001 - \$60,000</li> </ul>	16.7	3
<ul style="list-style-type: none"> <li>\$60,001 - \$80,000</li> </ul>	-	-
<ul style="list-style-type: none"> <li>\$80,001 - \$100,000</li> </ul>	11.1	2
<ul style="list-style-type: none"> <li>\$100,001 - \$120,000</li> </ul>	16.7	3
<b>Total</b>	100.0	18



Clinical Staff - Average Annual Compensation	Response (%)	Response Count
• < \$20,000	6.3	1
• \$20,001 - \$30,000	6.3	1
• \$30,001 - \$40,000	25.0	4
• \$40,001 - \$50,000	25.0	4
• \$50,001 - \$60,000	18.8	3
• > \$60,001	18.8	3
<b>Total</b>	<b>100.0</b>	<b>16</b>

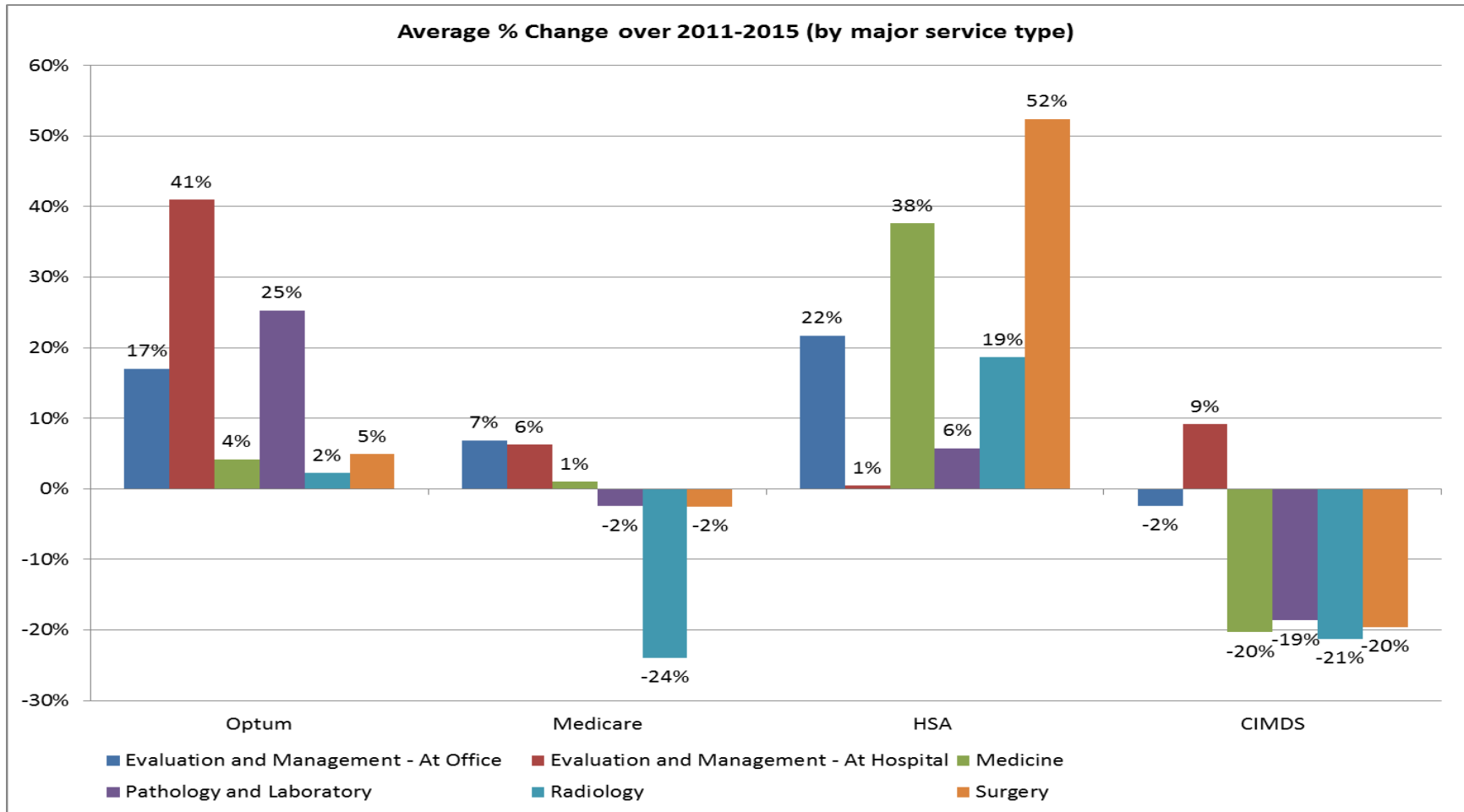


Physician(s) - Average Annual Compensation	Response (%)	Response Count
• \$50,001 - \$75,000	15.0	3
• \$75,001 - \$100,000	10.0	2
• \$100,001 - \$125,000	-	-
• \$125,001 - \$150,000	35.0	7
• \$150,001 - \$175,000	15.0	3
• \$175,001 - \$200,000	10.0	2
• over \$200,001	15.0	3
<b>Total</b>	<b>100.0</b>	<b>20</b>



Information provided on operating expenses as a percentage of the total revenue	Response Count
2013 Total Responses	Less than 5
2014 Total Responses	Less than 10

# Appendix 2 – Change in Fee Schedules over 2011-2015





## Appendix 3 – List of Data Suppliers

The following insurance companies supplied data which was used in our analysis:

- AETNA
- BAF
- British Caymanian (BritCay)
- Cayman First Insurance Company Limited
- CayMed Plus
- Cayman Islands National Insurance Company Ltd (CINICO)
- Fidelity Guardian General

The Pan-American Life Insurance Company made every effort to supply data but was unable to supply the data within the requested timeframe. We were also supplied data from the Health Services Authority (HSA).

## Appendix 4 – Medicare Geographical Cost Indexes

State	Region	Work Factor	Practice Factor	Malpractice Factor
Florida	Miami	1.000	1.033	2.490

# Appendix 5 – Multiplier to Relative Value Units to Derive the Fee

The multipliers that were applied to the Relative Value Units to derive the fee schedule on which the proposed SHIF is based (as tabled in Section E.5.) are as follows:

	RVU Multiplier (in KYD)
<b>Type of Service</b>	
Evaluation and Management	
- Office Consults	\$49.82
- Inpatient and ER Consults	\$96.53
- Other	\$52.05
Medicine	\$71.81
Pathology and Laboratory*	\$82.49
Radiology	\$123.80
Surgery	\$86.42
<b>Overall</b>	<b>\$73.35</b>

\* Where the RVU is not present under the CPT Code, a multiplier of 281% is applied to the national median of the Medicare reimbursement rate

## Example Illustrating the Derivation of the Fee

If RVUs (once adjusted for the geographical loadings for the benchmark US region) under a CPT Code are 2.3 units comprised as follows:

- Work Component = 1.0 unit,
- Practice Component = 0.9 units, and the
- Malpractice Component = 0.4 units;

Then the fee for the CPT Code (if it is under the Office Consult Type of Service) would equal  $\$49.82 \times 2.3 = \$114.60$

## Appendix 6 – Survey of Office Consultation Charges and Carrier Payments

CPT Code	Description of Code	Typical Physician Charge* (in \$USD)	What Payers Pay** (in \$USD)	Percentage Reimbursed
99201	Office Outpatient New 10 Minutes	\$140.69	\$66.10	47%
99202	Office Outpatient New 20 Minutes	\$175.35	\$80.20	46%
99203	Office Outpatient New 30 Minutes	\$228.37	\$100.30	44%
99204	Office Outpatient New 45 Minutes	\$326.24	\$131.20	40%
99205	Office Outpatient New 60 Minutes	\$440.42	\$149.70	34%
99211	Office Outpatient Established 5 Minutes	\$75.94	\$41.80	55%
99212	Office Outpatient Established 10 Minutes	\$107.92	\$50.30	47%
99213	Office Outpatient Established 15 Minutes	\$137.9	\$76.30	55%
99214	Office Outpatient Established 25 Minutes	\$199.85	\$94.00	47%
99215	Office Outpatient Established 40 Minutes	\$319.76	\$117.40	37%

\* FeeAnalyzer Miami Florida, 50th Percentile

\*\* Source: 2014 Fee Schedule Survey - [www.physicianspractice.com](http://www.physicianspractice.com)

## Appendix 7 – Sample Extract from the Current SHIF

CPT Code	Description of Code	Fee
99201	Office or other outpatient visit for the evaluation and management of a new patient, which requires these three key components: a problem focused history; a problem focused examination; and straightforward medical decision making.	\$75.03
99202	Office or other outpatient visit for the evaluation and management of a new patient, which requires these three key components: an expanded problem focused history; an expanded problem focused examination; and straightforward medical decision making.	\$86.93
99203	Office or other outpatient visit for the evaluation and management of a new patient, which requires these three key components: a detailed history; a detailed examination; and medical decision making of low complexity.	\$119.33
99204	Office or other outpatient visit for the evaluation and management of a new patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of moderate complexity.	\$157.94
99205	Office or other outpatient visit for the evaluation and management of a new patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of high complexity.	\$207.38
99211	Office or other outpatient visit for the evaluation and management of an established patient, that may not require the presence of a physician. Usually, the presenting problem(s) are minimal.	\$36.97
99212	Office or other outpatient visit for the evaluation and management of an established patient, which requires at least two of these three key components: a problem focused history; a problem focused examination; straightforward medical decision making.	\$56.87
99213	Office or other outpatient visit for the evaluation and management of an established patient, which requires at least two of these three key components: an expanded problem focused history; an expanded problem focused examination; medical decision making.	\$74.01
99214	Office or other outpatient visit for the evaluation and management of an established patient, which requires at least two of these three key components: a detailed history; a detailed examination; medical decision making of moderate complexity.	\$101.53
99215	Office or other outpatient visit for the evaluation and management of an established patient, which requires at least two of these three key components: a comprehensive history; a comprehensive examination; medical decision making of high complexity.	\$156.37

## Appendix 8 – List of Common Abbreviations used in the Report

Abbreviation	Description
CIMDS	Cayman Islands Medical and Dental Society
CINICO	Cayman Islands National Insurance Company Ltd
CPT	Current Procedural Terminology
DRG	Diagnostic Related Groups
E&M	Evaluation and Management
HIC	Cayman Islands Health Insurance Commission
HSA	Cayman Islands Health Services Authority
KYD	Cayman Islands Dollar
Ministry	Cayman Islands Government Ministry of Health and Culture
RVU	Relative Value Unit
SHIC	Standard Health Insurance Contract
SHIF	Standard Health Insurance Fees
US	United States
USD	United States Dollar



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