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Audit Review of Indira Gandhi Memorial Hospital Performance Audit Report



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AUDITOR GENERAL'S OFFICE

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SUMMARY AND CONCLUSION

- 1 Indira Gandhi Memorial Hospital (IGMH) is the sole state hospital located in Male City and the largest healthcare provider in the country. Its activities are based in Male City but it is mandated to provide specialist medical services at atoll and regional level through the use of mobile teams and information and communication technology (ICT). IGMH is the only healthcare service provider located in Male City which offers Government's health insurance scheme "Aasandha" to the public without charging any additional fee from the patients.
- 2 Due to the poor credit history of IGMH, their suppliers became reluctant to continue doing business with them which led to stock outages and service interruptions. To tackle the situation, on 1 January 2012, IGMH came to an agreement with State Trading Organisation Plc. (STO) to outsource the supply and management of medical consumables. Hence, "Supply, Operation and Management Agreement for Medical Consumables" (the Agreement) was signed between the two parties.
- 3 The audit examines whether procurement, storage and disbursement of medical consumables are planned and conducted effectively and economically (PART 2 below) and whether pricing of the services are determined taking into account the costs involved and whether payments are received for all the services provided (PART 3 below). Given that supply and management of medical consumables were outsourced to STO, the audit examination of PART 2 was mainly focused on whether IGMH receives the full benefit of the terms of the contract agreed with STO; measures taken reduce costs and the effectiveness of the care and maintenance policies.

KEY FINDINGS

ECONOMICAL AND EFFICIENT USE OF RESOURCES

- 4 A random sample of 20 medical consumable items were selected and a comparison of the agreed prices with STO to prices available online of the sample shows that the price of 5 items in the sample (25%) were higher by an average of MVR 25.67 than the price offered by the STO while the remaining 15 items (75%) were lower by an average of MVR 22.56 than the agreed price of STO. Initially, we requested IGMH to obtain the prices of the 20 items, which were picked from the contract made between STO and IGMH, from four different local suppliers. As we could not obtain

the prices through IGMH, we have tried other methods to get the prices for the comparison. However, due to unwillingness of local parties to provide their prices, we were unable to compare STO's prices with local suppliers.

- 5 An effective storage and stock control system has been established by STO. Their policies are designed and implemented to ensure that medical stock is protected from damage, theft, fire and expiry. It also ensures safety stock is maintained and lead time is established to ensure inventory availability.
- 6 STO has claimed MVR 3,482,410 for expired "special consumables" for the year 2014 as per Clause 6.10 of the Agreement with STO. IGMH does not properly monitor the demand for their services and had not conducted an audit on the usage of some laboratory equipment. Such an audit would be useful while planning and placing the orders for medical consumables in a manner which would ensure that wastage is minimised.
- 7 IGMH failed to settle the invoices sent by the STO as per the Agreement. From a sample of 60 invoices amounting to MVR 4,432,890, we observed that MVR 4,278,570 was paid after the credit period allowed had passed. In accordance with the agreement, this would have incurred a fine of MVR 274,584. An estimated total fine figure for the total credit purchases in 2013 and 2014 was calculated by the auditors based on the average number of late days of 258 and 135 respectively, which would have amounted to MVR 20,131,729. STO accepts payments from IGMH without collecting fines after being instructed by the Ministry of Finance and Treasury.
- 8 Based on the findings listed from paragraph four to seven, we are of the view that the agreement signed between IGMH and STO has effectively solved the issues that IGMH were facing. Thus enabling IGMH to focus on improving the standard of healthcare provided to the nation. Noticeable changes such as addressing the issue of shortage of medical consumables have since occurred. Although we were unable to collect sufficient data to come to a conclusion as to whether the prices charged by STO are competitive, the extended credit period granted to IGMH by STO and waiving of fines for late settlement in terms of receiving payments for the medical consumables they supply would not have been available from a private party to IGMH.
- 9 There is no policy on the use of generic drugs, both at entity and national level. Since the quality of the drugs imported cannot be checked due to the absence of high functional laboratories in the country, the management opts to procure branded medical consumables at a higher price.
- 10 IGMH has no written guidelines regarding the care, maintenance and sterilization of medical equipment, waste disposal and training their staff in the aforementioned areas which could lead to varying procedures while handling and maintaining equipment and the lack of uniformity in managing waste which could create health hazards within the hospital. The management is not able to



provide training to their staff as they are not being provided the budget for the said purpose. As a result, sufficient training is not provided to staff other than the induction program at the probation stage. Due to this staff may become less efficient and their performance and skills may deteriorate over time.

- 11 Staff were not given technical training while procuring new equipment which resulted in them not being aware of the planned periodic maintenance of the equipment. As a result, equipment breakdowns and malfunction could occur frequently which would interrupt the services provided.

EFFECTIVENESS OF IGMH IN GENERATING REVENUE

- 12 Pricing process was not documented prior to January 2014. As a result, we were not able to determine whether costs of services were being considered in determining the prices charged for the services provided by IGMH. As a consequence, IGMH lacks the ability to make informed decisions in determining the price to be charged to the customer and they are unaware whether the current prices charged cover the cost of providing those services.
- 13 Based on the data provided by the IGMH it was observed that the revenue generated does not cover the expenses of operating the hospital. The expenditure to revenue ratio in 2014 is 280% including the credit sales, while 2427% excluding credit sales.
- 14 From the services provided by the IGMH, a sample of 10 items were selected and the prices charged by the IGMH for these services were compared against the prices charged by two private healthcare providers for the same service. The results show that one private healthcare provider charges 50% more than the price of IGMH in 7 items and the other private healthcare provider charges 100% more than IGMH in 7 items.
- 15 Except for Aasandha Company and Amana Takaful, there were no contracts signed between IGMH and insurance service providers. Due to this we were unable to verify the terms set forth, collection periods, penalties, package limits and scope of the insurance policies.
- 16 National Social Protection Agency and Allied Insurance Company were not settling the invoices as per the criteria of 10 days, which were mentioned in the invoices, and has resulted in total outstanding receivables amounting to MVR 15,918,306 as at 14 June 2015. As the contracts were unavailable for these insurance service providers, the invoices were checked for the credit terms. Apart from them, IGMH had sent letters to few non-insurance service providers reminding them to settle their dues as well.



- 17 Aasandha Company has not settled any invoice except for the initial advance payment paid in 2012 after the contract was signed which has resulted in an overdue account balance of MVR 636,240,682¹ as at 14 June 2015. The contract between IGMH and Aasandha Company states that the invoices to be settled in 30 days after the receipt of the claims and related documents. The main reason behind Aasandha Company's failure to settle their debt towards IGMH was due to the failure of MoFT in paying the insurance premium required to operate the insurance scheme which amounted to MVR 396,535,362 and MVR 407,152,739 for 2012 and 2013 respectively. IGMH had sent letters as notification to Aasandha Company to settle their dues during 2013 and 2015. Additionally, discussions took place during 2014 between these two parties alongside MoFT to set off the premium payable to Aasandha Company by MoFT with the receivables of IGMH.
- 18 Age analysis shows that there are long overdue invoices. 36% of the invoices were outstanding for less than a year while, 51% of the invoices were overdue for one to three years and the rest outstanding for more than three years. Timely collection of dues has little significance to IGMH, as it has no authority to use it for its operations and the funds directly go to the Public Bank Account. However, for a disciplined financial management it is imperative that efforts are made as per the Public Financial Regulations to ensure timely collection of dues.
- 19 Standard Operating Procedures (SOP) have not been prepared for the services provided over the counters and handling of patients. The lack of SOPs would create chance to misuse health insurance scheme and there would be unfair treatment in providing service to the various patients; it would also lead to inconsistency in treating patients resulting in conflicts between patients and the hospital staff.
- 20 We observed that the patient registry of IGMH contains errors and duplicate patients. 3,475 entries were recorded without an ID card number which is vital for patients seeking medical service under the public health insurance program; 78 entries and another 4 entries were recorded with the ID number in either Atoll column or Island column respectively while 63 entries had same patient registered under two different hospital numbers for the same ID card.
- 21 There are no procedures or written policies to ensure that bills are paid when the patient is being cleared for discharge. We also found that it was possible for patients to walk out of the wards without paying their bills. No further actions are taken to collect payments from these patients.

¹ Outstanding from February 2009 to December 2012 = MVR 158,381,696

Outstanding from January 2013 to June 2015 = MVR 477,858,986



CONCLUSION ON VALUE FOR MONEY

- 22 The objectives of IGMH include providing medical services to the citizens while obtaining state-of-the-art resources to develop the services they provide. However, they are faced with restrictions while setting prices for the services they provide, which do not even cover the cost of providing those services. Although cost allocations are not prepared while setting prices, this practice has been implemented starting from January 2014. In addition, the failure by Aasandha Company to settle the invoices of IGMH has led to a large sum of outstanding debt which had made it impossible for IGMH to meet their financial obligations, such as payments to STO for the medical consumables they provide. Although IGMH was able to reduce the credit period needed to settle STO's invoices by more than half from 2013 to 2014.
- 23 The main purpose of preparing SOPs and guidelines for the departments and operations of IGMH was to ensure that the quality of service provided do not deteriorate and that the risk of health hazards are minimised to the lowest.
- 24 The management of IGMH has been trying to introduce and implement measures to improve the performance of the hospital but to achieve value for money they need to ensure that SOPs are finalised and implemented throughout the hospital. The management must also make it a priority to give adequate training to their staff to meet the requirements that are to be laid down in the SOPs. Furthermore, the management needs to communicate in an effective manner with all related stakeholders to work towards lowering the accounts receivables and accounts payables of the hospital.

RECOMMENDATIONS

- 25 **IGMH should monitor the stock movement of “special consumables” to minimise wastage from expired items.** Management needs to monitor usage in order to be able to request the right quantity which would enable them to keep wastage as low as possible.
- 26 **IGMH should ensure that they comply with the Supply, Operation and Management Agreement for Medical Consumables while making payments to STO.** IGMH should communicate with MoFT to eliminate payment delays which are taking place in order to ensure that invoices sent by STO are paid on a timely basis as per clause 5.3 of the agreement.
- 27 **Evaluate the possibility of introducing generic drugs to reduce costs.** The management should open dialogue with all related stakeholders about the benefits and possibility of switching to generic drugs. In order to maximize uptake of generics, government could implement (and enforce as appropriate) a mix of policies and strategies, including: legislation to allow generic substitution by dispensers; legislative structure and incentives for prescribers to prescribe by international non-proprietary name; dispensing fees that encourage use of low price generics; regressive margins and



incentives for dispensers; and consumer and professional education regarding quality and price of generics².

- 28 **Guidelines on proper care and maintenance of waste disposal should be prepared and exercised.** IGMH should prepare the guidelines in line with international best practices and give training to the staff on following these guidelines and also make sure they are strictly enforced by all staff. The government should at least consider the need for providing funds to conduct these training programs for the staff of IGMH as this indirectly impacts on a vast majority of the population.
- 29 **Regular training should be given to staff.** Technical training should be given to staff when new equipment is being purchased so that they are familiar with it and it can be used for the maximum possible time without breaking down. The management should also conduct training programs often for previously procured equipment so that the knowledge of new and existing staff is refreshed on a constant basis. Management should also arrange regular trainings to counter staff in order to maximise their efficiency and ensure their skills do not deteriorate over time.
- 30 **Sterilisation equipment should be cleaned daily.** IGMH should clean the inside of the sterilisation equipment daily and check for signs of wear and damage instead of on a weekly basis so that chances of bacteria and virus accumulating in them could be minimised.
- 31 **Cost allocation records should be prepared and updated regularly.** The management needs to allocate costs to all the services provided by the hospital. The records relating to cost allocation with detailed information regarding whether the prices cover the costs should be maintained effectively. Further, the documentary evidence of any updates to the prices of the services should be maintained properly for future references. Management should ensure that prices they set are aligned with the government's healthcare provision policies.
- 32 **Agreements should be signed between the insurance service providers and IGMH.** Agreements or terms should be set forth between the insurance service providers and IGMH which should clearly outline the terms, collection periods, scope and penalties. The management should also enforce the clauses in the agreement so that it is beneficial to both parties.
- 33 **Management should strengthen the process of collecting payments for credit invoices and take action against outstanding debtors.** IGMH should collect the payments due from debtors according to the invoiced period or the contracted credit period. In case of default payments IGMH should take action against those outstanding debtors. Management also needs to enforce stricter credit control

² WHO guideline on country pharmaceutical pricing policies, 2015



policies such as limiting the services provided on credit basis to parties who are not regularly settling their dues.

- 34 **Management should prepare Standard Operating Procedures (SOPs).** SOPs should be prepared for service provided at the counters, handling and dealing with clients or patients. Staff must be made aware of these procedures and the management must ensure that they are being followed throughout the entity with no exception in order to minimise mistakes or inconsistencies in providing services.
- 35 **IGMH should ensure the accuracy and reliability of patient database.** The patient records should be checked for errors and duplicate patients in the database. System administrators should design checks which require occasional review of new entries by senior personnel to ensure that the database is being kept error free.
- 36 **Management should strengthen the procedures for collecting payments before patients are being discharged.** Control procedures need to be established and exercised in the wards to ensure all services rendered to the patient have been billed to them and the bills are settled before patients are discharged. The management also needs to keep the records of patients who leave without settling their bills in a manner which is easily identifiable in the future.



PART 1: INTRODUCTION

The main stages of development

- 1.1 The IGMH is the sole state hospital in the capital city and the largest healthcare provider in the country. The annual budget of the IGMH for the year 2014 was MVR 600,126,865. The operations of the IGMH commenced on 15 October 1994. Its activities are based in Male City but IGMH are mandated to provide specialist medical services at atoll and regional level through the use of mobile teams and ICT.
- 1.2 As the largest healthcare provider in the country, the service provision and operations of the IGMH had always been of significant interest to the general public. With subsidised prices, IGMH has a large demand for its services from around the country. In addition to this with the introduction of the Government's health insurance scheme Aasandha on 1st January 2012, the demand for the services provided by the IGMH grew enormously.
- 1.3 The recurrent and capital expenditure of the IGMH is funded by the Government and the revenues generated by the IGMH are deposited to the State Consolidated Revenue Fund.
- 1.4 One of the key challenges that the IGMH faced in the past was to manage the procurement of medical supplies in-house as the suppliers were reluctant to enter into contract with the IGMH given the inability of the IGMH in settling the bills in a timely manner because of the tight budgetary controls imposed by the Ministry of Finance and Treasury (MoFT). This resulted in stock-outs and service interruptions within IGMH.
- 1.5 To resolve this issue, on 1st January 2012, IGMH signed an agreement with the State Trading Organization (STO) for the supply and management of medical consumables.

Scope and methodology of the AGO examination

- 1.6 The audit examined the effectiveness of operations and services provided by the IGMH while trying to meet their objectives of providing medical services to the public. The audit assessed performance against five main criteria:
 - The efficiency and effectiveness of the Agreement signed with the STO
 - The efficiency and the effectiveness of the mechanism in place for care and maintenance of medical consumables and equipment
 - The efficiency in settling creditors and collecting from debtors
 - The determination of pricing taking into account the cost of providing the services



- The effectiveness in ensuring payments are received for services provided

1.7 The audit was conducted using the International Standards of Supreme Audit Institutions (ISSAI) for Performance Audit as a guide. The audit examined:

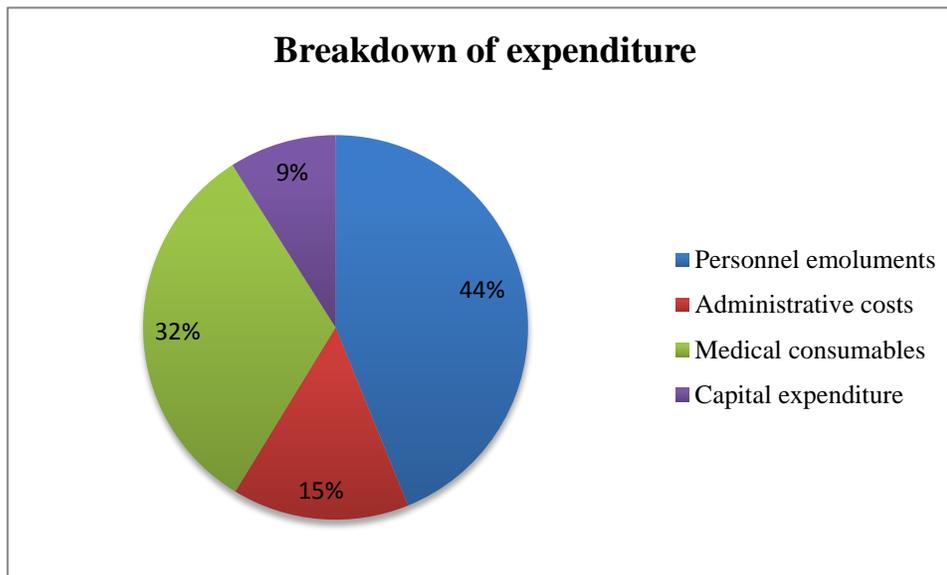
- Economical and efficient use of resources (Part 2) – Whether current procurement and storage practices ensure economical use of resources and whether there is an efficient mechanism for cleaning and maintaining medical equipment.
- Effectiveness in generating revenue (Part 3) – Whether service prices are determined taking into account its cost and payments are received for all the services provided.



PART 2: ECONOMICAL AND EFFECTIVE USE OF RESOURCES

2.1 This part examines the economical and efficient use of resources by IGMH. The total budget for the year 2013 was MVR 303,523,253 while for the year 2014, it was MVR 600,126,865. The huge variance between the two years was mainly due to additional funds of MVR 182,936,716 and MVR 50,243,119 allocated to procurement of medical consumables and fixed assets respectively in 2014 in comparison to the previous year's budget. Figure 1 illustrates the breakdown of expenses incurred in the year 2014.

Figure 1: Breakdown of expenditure



Source: General Ledger generated from SAP on 03.12.2015

2.2 Figure 1 shows that 44% (MVR 263,003,118) of the total cost was related to salaries and allowances, 15% (MVR 88,690,614) related to administrative costs, 32% (MVR 194,278,445) of the expenditure related to medical consumables while the remaining 9% (MVR 54,012,205) related to capital expenditure.

2.3 The demand for the hospital services has been increasing rapidly and thus efficient and economic use of resources is vital for the hospital to run effectively. Figure 2 shows the volume of work undertaken by the selected medical departments of IGMH for the years from 2011 to 2013.

Figure 2: Volume of work undertaken

Department	Type	2011	2012	2013
Laboratory	Tests	877,401	969,930	1,237,780
In vivo Laboratory	Tests	19,427	17,918	21,921
Radiology	Investigations	95,171	103,601	115,747
Physiotherapy	Patients	32,137	18,956	36,541
Dialysis	Patients	10,057	11,441	12,814
Out Patient Department	Patients	126,493	108,145	98,629
Casualty	Patients	157,969	160,092	186,702
In Patient Department (admissions)	Patients	14,105	13,935	13,099
Labour room	Patients	2,579	2,795	3,005
Surgeries in Operation Theatre	Patients	6,023	6,427	5,090

Source: IGMH Annual Report 2013

2.4 Figure 2 shows the increase in the demand for the services provided by IGMH over the three years ended to 2013. Laboratory tests, radiology investigations and casualty patients showed significant increases over the years. This could be explained by the fact that Aasandha insurance scheme was introduced in 2012. We were unable to present the figures for 2014 because the Annual Report for that year has not been prepared at the time of preparing this audit report.

2.5 This part of the audit examines nine areas which tests out for the economical and efficient use of resources by IGMH. However, due to unavailability of the required documents some areas were not tested during this audit. We have examined the remaining areas to achieve the following objectives:

- The efficiency in the execution and performance of the agreement between IGMH and STO
- The effectiveness of the storage and stock control system in place
- The current repayment schedule is in line with agreements or credit terms
- Measures taken to reduce costs
- The effectiveness of the mechanism in place for maintenance in line with policies and best practices and whether the staff are aware of their duties



Cost of consumables

- 2.6 In order to ensure that the prices charged by the STO are competitive, we designed audit tests to compare the prices they charge with other local and international suppliers. But due to reluctance of local suppliers to provide their prices, we were unable to move forward with making comparison of prices charged by other local suppliers against those charged by STO. However, we were able to make a price comparison of selected drugs from the data available from DrugsUpdate.com
- 2.7 The finding of this test was based on a sample of 20 items selected randomly from the list of medical consumables supplied by the STO. In order to derive a comparative figure for the price STO charges to IGMH for the medical consumables they supply, we applied the same mark-up to the prices we obtained online. Among the 20 items checked, we noticed that the price of 5 items (25%) were higher by an average of MVR 25.67 than the agreed price with STO. As for the remaining 15 items (75%), we observed that the price of these consumables were lower by an average of MVR 22.56 than the agreed price with STO.
- 2.8 The results of this finding must be taken with the limitations inherent within the test conducted. The limitations include:
- a. Agreed prices of STO are for wholesale while the prices found online are for retail
 - b. All the prices found online were restricted to one website³ from India
 - c. Prices were based on the exchange rate on 10 November 2015

Storage and stock control system established by the STO

- 2.9 As part of our audit, tests were designed to check the effectiveness of the storage and stock control system in place. Under the Agreement signed with the STO, this area was governed by the “Medical Services Operation Manual” (the Manual) which details how the day to day and functional activities of the Medical Services Department should be run. We observed that:
- a. The Manual has clear guidance on storage which includes details on handling dirt and dust removal, protecting against fire and pests, controlling storage conditions (humidity, sunlight, heat) protecting against theft, expiry and damage;
 - b. It includes details on control guidance of safety stock, inventory availability and lead time;

³ <http://www.drugsupdate.com>



- c. First Expiry First Out (FEFO) method is suggested in order to minimise the risk of stock expiring before it is used. Further, the Manual has instructed to follow certain procedures such as storing short expiry items first to facilitate accessibility, issuing products that expire first, maintaining batch numbers and expiry dates in order to identify items which has lesser lifespan;

2.10 Our examination confirmed that the aforementioned requirements in (a) and (b) are being complied with. However, we noticed instances where STO had failed to supply in accordance with FEFO method and as a result IGMH had to reject and return some items to STO.

Better planning could minimise wastage

2.11 As per Clause 6.10 of the Agreement with STO, IGMH shall indemnify STO for “special consumables” which has expired earlier than the pre-confirmed expiry date by IGMH and which have not been utilised. As IGMH does not properly monitor the demand for their services by patients, sometimes they are either faced with surplus or deficit of consumables. And in order to avoid the latter, they have had a tendency to order more than the required quantity in some instances. Another factor that causes the issue of expiry is that the IGMH has not conducted an audit on the usage of some laboratory equipment. As a result, they are not aware of the lifespan of the consumables used in equipment, which is useful while planning and placing orders in a manner which would ensure that wastage is minimised.

2.12 STO has claimed MVR 3,482,410 under the aforementioned clause for the year 2014 but due to the unavailability of documents, we were unable to determine the quantity or value of expired items for the years 2012 and 2013. Although it has to be noted that IGMH has not settled STO’s claim to date.

Late settlement of creditors

2.13 Clause 4.3 of the Agreement signed between the IGMH and the STO states that the IGMH shall settle all the invoices within 45 working days of receiving the invoice. Failure to settle the invoice within the agreed period would incur a fine of 12% per annum on the total invoice value. However, we observed that IGMH had failed to pay STO on time. A sample of 60 invoices, amounting to MVR 4,432,890 was checked for the date it was settled and we observed that a sum of MVR 4,278,570 was paid after the allowed credit period. Figure 3 shows the average days taken to settle the invoices of STO.



Figure 3: Average credit period taken to settle the invoices of STO

Year	Total credit purchases	Invoices	Sample invoice value	Average days late
2013	123,815,919	50	3,564,249	258
2014	216,959,265	10	868,641	135

Source: Total credit purchases; e-mail from IGMH

2.14 Figure 3 shows that the 50 invoices, amounting to MVR 3,564,249, tested for 2013 was settled late by an average of 258 days. A further 10 invoices, amounting to MVR 868,641, tested for 2014 was settled late by an average of 135 days. The following figure 4 shows the amount of fine that **should** have been paid to STO due to late settlement of credit invoices.

Figure 4: Estimated fine for late settlement

Year	Credit purchases	Invoices	Sample invoice value	Average days late	Fine 12%	Est. fine for credit purchases
2013	123,815,919	50	3,564,249	258	250,874	10,502,304
2014	216,959,265	10	868,641	135	23,710	9,629,425

Source: Total credit purchases; e-mail from IGMH

2.15 Figure 4 shows that the aforementioned invoices for the year 2013 would have incurred a fine of MVR 250,874 for being settled later than the allowed credit period. For the year 2014, MVR 23,710 would have been incurred as fine for late settlement.

2.16 For the total credit purchases from STO, an estimated fine figure was computed based on the average number of late days identified. As a result, we estimated that if the total credit invoices of MVR 123,815,919 were to be settled late by an average of 258 days, a fine of MVR 10,502,304⁴ **would** have been incurred for the year 2013. As for the year 2014, we estimated that if the total credit invoices of MVR 216,959,265 were to be settled late by an average of 135 days, a fine of MVR 9,629,425⁵ **would** have been incurred.

2.17 IGMH explains that this is caused by a flaw in the budgetary controls exercised by MoFT as they are unable to process payments to STO given the fact that MoFT does not release the required cash flow to them. They are also of the view that budget constraints were the key factor behind the government's decision to outsource the procurement of medical consumables to STO. As both

⁴ Estimated fine for 2013 = $123,815,919 \times 12\% \times 258 / 365 = 10,502,304$

⁵ Estimated fine for 2014 = $216,959,265 \times 12\% \times 135 / 365 = 9,629,425$



entities are controlled by the government, the STO continues to supply medical consumables to IGMH not only with a very generous credit period but also without charging any fines for it after being instructed by the MoFT.

Use of generic drugs as a measure to reduce costs

2.18 In order to find possible ways to reduce cost, the management was enquired about their view to switch to generic drugs. With the lack of a policy on using generic drugs, the management highlighted that they had no preference as to whether doctors and other healthcare providers should be subscribing only generic or branded drugs. They also believed that a regulatory body, such as Food and Drug Authority, should be implementing such policies, if any is required.

2.19 Medical Administration Department clarified that usually drugs are imported from India and Pakistan. An interview conducted with the Director General of Medical Services revealed that their perspective about generic drugs were that they could be poor in quality and less effective. They believe that there is possibility of switching some of the drugs to generic but their inability to carry out test on ingredients of the generic drug is one key factor which restricts switching to them. Moreover, they are of the view that there is no assurance in the accuracy of drugs available currently in Maldives. Hence, based on the interview we observed that the IGMH's main focus is on procuring branded medical consumables and they have not attempted to introduce generic drugs even though they have the authority to revise the list of medical and hospital consumables as per the contract made between the STO and IGMH.

2.20 Due to the unavailability of high functional laboratories, the government is not able to test the quality of the drugs imported to the country. However, when registering drugs in Maldives, they check whether the same drug is registered in reputable countries, such as Singapore, so that they will be able to rely on their expertise in the medical field.

Absence of guidelines on care, maintenance and sterilization of equipment, waste disposal and training of staff

2.21 The IGMH requires developing guidelines for smooth functioning and meeting minimum standards in various operations within the Hospital. One of the key areas that required guidelines were care and maintenance of the machinery and equipment and other hospital related tools which were used on a daily basis, and the disposal of waste. Most of the machinery and equipment within the IGMH require care and maintenance on a systematic basis, and waste would need to be collected daily. Training presents the opportunity to expand the knowledge base of the employees. It also helps them to better perform their tasks and enhance their understanding of the environment and their responsibilities.



- 2.22 However, in our audit we observed that there were no policies or guidelines for these areas. The lack of minimum requirement in maintaining machinery and equipment could lead to poor functioning and early breakdowns causing less efficiency in delivering the services. It would also cost more money for the government to replace the machinery if they were broken beyond repair due to inadequate care and poor maintenance and servicing. We also found that technical training is not given to staff while equipment is being procured which has resulted in some staff not being aware of the preventive maintenance work needed to be carried out on such equipment.
- 2.23 The enforcement of a guideline in managing the hospital waste would create a safe environment for the waste handlers, health workers and the community. A survey conducted among hospital staff on whether they are given training on cleaning, disinfection and sterilisation returned mixed results which is an indicator that there is no systematic approach to training in this area as well.
- 2.24 We also observed that training for counter staff is given only during the probation period and no other official training was given to the staff to enhance the knowledge on procedures and duties. As a result, staff may become less efficient and their performance and skills may deteriorate over time.
- 2.25 Upon further examination, we noticed that the revised training budget allocated to IGMH was MVR 43,176 for 2013 while it was nil for 2014. As a consequence, the management is: not able to address the weaknesses of employees in their workplace skills; not able to improve the current performance of employees; and not able to ensure that employees have consistent experience and background knowledge in relation to their field of work.
- 2.26 Sterilisation is the process of destroying or removing all forms of living organisms, including bacteria, viruses, fungi and spores. Carrying out sterilisation is not an easy task. It requires proper equipment and staff who are trained to use the equipment correctly and to follow procedures. Best practice instructs to clean the inside of the steriliser after use and check regularly for signs of wear and damage. We observed that there was no SOP or procedure to follow in cleaning the sterilizing equipment's which may resulting in unsystematic cleaning process over the years. When the steriliser is not cleaned in a systematic manner, it could lead to accumulation of bacteria and virus. Moreover, equipment which is brought for sterilisation may not be sterile as the steriliser may not function in the best manner due to residues⁶. Hence removal of bacteria, virus, fungi and spores using sterilisation may not be effective.

⁶ Medical Supplies and Equipment for Primary Health Care: A Practical Resource for Procurement and Management, Manjit Kaur and Sarah Hall, 2001, Durbin Plc., ECHO



PART 3: EFFECTIVENESS OF IGMH IN GENERATING REVENUE

- 3.1 The primary source of revenue to IGMH is for the services they provide to the patients. The flow of revenue can affect how the patient care is delivered and also the health of the hospital. A large proportion of the revenue projection is from the government health insurance scheme Aasandha whereby the rates are set by Aasandha Company.
- 3.2 During the year 2013 and 2014, laboratory testing generated the highest cash revenue for IGMH. Outstanding receivables amounting to MVR 661,041,074 were recorded from February 2009 to June 2015, whereby Aasandha Company owes 96% of it, i.e. MVR 636,240,682.

Figure 5: Cash revenue collected

Details	2014 (MVR)	2013 (MVR)
Laboratory testing	6,968,433	7,628,580
Total cash revenue received	24,724,892	25,663,272

Source: IGMH Revenue Report 2013, 2014

- 3.3 This was a key area in the audit to ensure the effectiveness of IGMH in generating revenue. We examined the main activities needed to ensure this objective, as follows:
- Efficiency in managing the expenditure, costs and pricing strategies.
 - Efficient and enforced collection of insurance claims.
 - Effectiveness in the controls of handling and collecting for services rendered to uninsured patients.
 - Enforcement measures in ensuring all bills are cleared while patients are being discharged.

Pricing process was not documented

- 3.4 For the purpose of evaluating whether the cost of providing the service is considered while determining the price to be charged for the service, the audit tried to examine the pricing process or methodology used within IGMH. We found that most of the services do not have pricing files and auditors could not determine if cost was considered in determining the prices to be charged for those services.
- 3.5 However, pricing files presented for evaluation were only for the services introduced after January 2014, for which costs were considered while determining the prices. As such, staff and equipment usage were considered along with the amount of consumables required to serve a patient. Standard margin was added in order to arrive at the final price. But we noticed that indirect costs such as utility expenses were not accounted for during the pricing process.



- 3.6 IGMH explains that even though the cost is considered while setting the prices, the prices set by IGMH are not always approved by Aasandha Company. In most cases the price approved by Aasandha Company is lower than the proposed price which may or may not cover the cost.
- 3.7 Due to the unavailability of such data, the hospital's management lacks the ability to make informed decisions with regard to any changes to the prices of the services they provide. They are also unaware whether the current price charged does in fact at least cover the cost of providing those services. This leaves the government without comprehensive knowledge of their real spend on healthcare.

Unfavourable expenditure to revenue efficiency ratio

- 3.8 Expenditure to revenue efficiency ratio allows determining if all the expenses are covered by the revenue generated from the entity. In our audit we observed that the prices charged by IGMH for the services they provide do not cover the cost of providing those services, hence returning an unfavourable efficiency ratio. Since the prices of IGMH is fully covered by Aasandha, combined with the fact that Aasandha Company controls the prices that can be billed under the health insurance scheme, IGMH's expenses are more than their revenue. Figure 6 shows the revenue to expenditure ratio of IGMH for 2013 and 2014.

Figure 6: Revenue to expenditure ratio

Details	With Receivables		Without Receivables	
	2014	2013	2014	2013
Total Expenditure	599,984,382	300,103,106	599,984,382	300,103,106
Total Revenue	214,002,254	212,477,918	24,724,892	25,663,272
Ratio	14:5	7:5	97:4	35:3
Percentage	280%	141%	2,427%	1,169%

Expenditure Source: General Ledger generated from SAP on 01.11.2015

Revenue Source: IGMH Revenue Report 2013, 2014

- 3.9 Figure 2 shows the expenditure to revenue ratio as for the year 2014 is unfavourable by 280%. This was calculated including credit sales. Excluding the credit sales, it is unfavourable by 2,427%. As for the year 2013, it is unfavourable by 141% including credit sales while without credit sales it is unfavourable by 1,169%. The reason for showing the credit sales separately is due to the fact that Aasandha Company has not settled the invoices sent by IGMH.



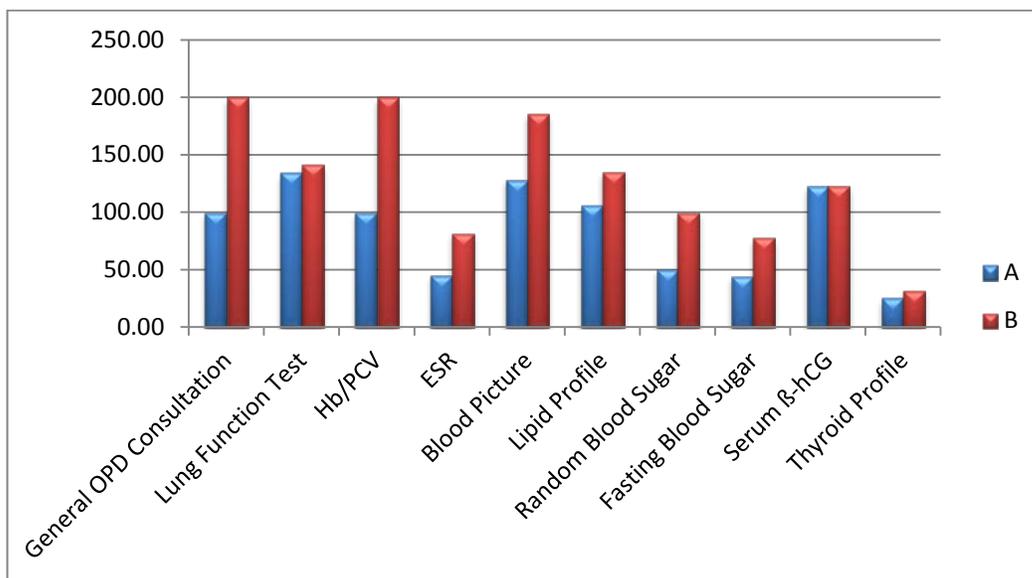
Data of the price lists are overwritten on the software

- 3.10 Aasandha insurance prices are entered into the Hospital Information Management System (HIMS) by IT staff as soon as they are revised by Aasandha Company. It was observed that IGMH do not keep documentary evidences on these price revisions made to the HIMS when the new prices are being overwritten on the system.
- 3.11 An audit trail enables to trace the sequential financial data from the system to the source documents. As a result of the lack of an audit trail, the auditors were unable to verify the previous insurance coverage limits neither from the system nor from the documentary records, given the lack of those records too.

Price comparison with other health service providers

- 3.12 Audit tests were designed to compare the difference in prices for the services provided by IGMH to that of the private healthcare service providers within the country. Due to various reasons, the private parties were not comfortable in sharing the price list with us in order to protect that information from competitors. However, one private healthcare provider did provide a list of services offered by them to us alongside their prices for our reference to conduct this study. In order to make this study more complete, we also collected prices of some common services offered by another private healthcare provider over the phone as well. Figure 7 shows the results of the study in form of the variance between the prices charged by IGMH and two other private healthcare providers in Male City.

Figure 7: Price comparison to private healthcare providers



- 3.13 Figure 7 shows that “A” charges more than 50% of the price that IGMH charges in 7 out of 10 items tested in the sample, while “B” charges more than 100% of the price that IGMH charges in 7 out of 10 items tested in the sample. But it has also to be noted that the prices charged by IGMH for the services they provide are fully covered by Aasandha, whereas the prices charged by private healthcare service providers are not fully covered, meaning the patients have to bear the additional cost by themselves.
- 3.14 This variance in the prices charged is the main factor contributing to the lower revenue generated in comparison to the cost of operating the hospital, and to the unfavourable expenditure to revenue efficiency ratio.

Agreements or terms were not set forth between IGMH and other insurance service providers

- 3.15 In order to identify the terms and conditions set forth between the insurance service providers and IGMH, this audit was designed to review the contracts made between the said parties. However, we noticed that, except in the case of Aasandha and Amana Takaful there were no contracts signed between IGMH and the insurance service providers. Therefore, none was presented to the auditors for study and evaluation. Due to this reason we were unable to determine the terms set forth, collection periods, late penalties, package limits and scope of the insurance policies.
- 3.16 The absence of a contract between both parties could lead to difficulties in settling any differences that arise between the parties and weakens the legal stronghold of the claims made against the neglecting party. It also negates the responsibility by one party to another. Furthermore, the auditors were not able to ensure that the claims are filed and collected efficiently in line and within the times set in the contract.

Deviations from terms set for efficient collection of claims

- 3.17 As a result of the absence of a contract between IGMH and some insurance service providers, we were unable to determine whether claims are being filed with those insurance service providers on a timely basis. The contract signed with Aasandha Company and Amana Takaful has specific terms and conditions on filing claims and collection.
- 3.18 A sample of 20 invoices was checked to see whether they have been filed with the insurance service provider within the timeframe of 30 days stipulated in the contracts. Figure 8 shows the results of the sample.



Figure 8: Filing claims with insurance service providers

Details	MVR
Value of sample	1,452,098
Claims filed within 30 days	352,245
Claims filed later than 30 days	1,099,853

Source: Invoices sent to insurance service providers

- 3.19 Figure 8 shows that 15 invoices out of the 20 invoices checked, amounting to MVR 1,099,853 were filed with the insurance service providers later than the recommended period of 30 days. As for the remaining 5 invoices, amounting to MVR 352,245, they were filed within the period specified in the contract.
- 3.20 For insurance service providers, excluding Aasandha Company and Amana Takaful, invoices were checked for existence of any specific terms and conditions. The invoices created by IGMH state that 10 days are given to settle those credit invoices. However, we observed that the insurance service providers were not settling the invoices within the stated period which has resulted in total outstanding receivables amounting to MVR 15,918,306.
- 3.21 As for the contract signed between Aasandha Company and IGMH, clause 6 under terms and conditions states that all the invoices should be settled no later than 30 days after receipt of the claims and related documents. However, we observed that no outstanding invoices have been settled by Aasandha Company since the contract was signed except for an initial advance payment of MVR 31,689,151 paid in 2012. Figure 8 shows the breakdown of the debts owed by insurance service providers.

Figure 9: Breakdown of outstanding debtors

Outstanding debtors	Amount (MVR)	%
Aasandha Company	636,240,682	96
National Social Protection Agency (NSPA)	13,635,067	2
Allied Insurance Company	2,283,239	1
Amana Takaful	46,862	0
Non-insurance service providers	8,835,224	1
Total	661,041,074	100

Source: "Prodoc" and "Softcare" reports generated on 14 June 2015



- 3.22 Figure 9 shows that total outstanding debt from Aasandha towards IGMH stands at 96%, which amounts to MVR 636,240,682. While NSPA shares 2% amounting to MVR 13,635,067 and Allied Insurance Company shares 1% amounting to MVR 2,283,239.
- 3.23 These amounts have been accrued over the period from 20 January 2008 to 14 June 2015. Further, examination of the receivables figure highlighted that there were other parties excluding insurance service providers sharing 1% amounting to MVR 8,835,224 which included both government and private entities. We have also observed that some of the government entities among the mentioned are no longer in existence.
- 3.24 The main reason behind Aasandha Company's failure to settle their debts towards IGMH lies beyond control of themselves since MoFT were not paying the insurance premium required to operate the insurance scheme to Aasandha Company. Figure 10 shows the amount owed by MoFT to Aasandha Company.

Figure 10: Amount owed by MoFT to Aasandha Company

Details	2012 (MVR)	2013 (MVR)	Total (MVR)
Insurance premium	909,425,000	924,618,750	1,834,043,750
Paid to Aasandha Company	512,889,638	517,466,011	1,030,355,649
Outstanding	396,535,362	407,152,739	803,688,101

Source: Aasandha Health Scheme Special Audit Report, 2015

- 3.25 Figure 10 shows that insurance premium for the years 2012 and 2013 were agreed to be MVR 909,425,000 and MVR 924,618,750 respectively. But from this amount, MoFT only paid MVR 512,889,638 and MVR 517,466,011 for 2012 and 2013 respectively. Hence, MoFT still owed MVR 396,535,362 and MVR 407,152,739 for 2012 and 2013 respectively.
- 3.26 With the previously mentioned accounts receivables of MVR 661,041,074 we have observed that the collection processes currently in place within IGMH have failed to function at all. Although it is out of Aasandha Company's hands to settle their own debt towards IGMH due to the failure of the government to pay the outstanding premium. With regards to the receivables from other parties, IGMH has not taken effective measures as per the Public Financial Regulation to pursue the collection of these debts.
- 3.27 Letters dated 28th January 2013, 30th January 2013 and 4th May 2015 were provided to the auditors which were sent as notification for Aasandha Company regarding unsettled bills. Additionally, another letter dated 1st October 2014 indicates discussions initiated by MoFT with these two parties to write-off the payables with the receivables of Aasandha Company. However, for other insurance



service providers there is no evidence of any appropriate action being taken against them, though some letters were sent to few non-insurance service providers as a notification or reminder to settle their dues.

Age analysis

- 3.28 We analysed a large sum of receivables from different parties, with the majority of it being borne by the government insurance scheme Aasandha. Since the beginning of the Aasandha insurance scheme back in 2012, this sum has been growing ever since due to the lack of settlement. Upon further analysis, we found that the previous health insurance scheme Madhana, introduced by the NSPA, also has outstanding debts since 2009.
- 3.29 An age analysis was conducted on the debtors of IGMH to categorise accounts receivable according to the length of time their invoices has been outstanding. All invoices till 31st May 2015 are included in the analysis. The results showed that there are long overdue invoices with no reasonable expectation of being settled any time soon. In the case of Aasandha Company, discussions have taken place with MoFT to set off what they owe to IGMH with the amounts owed to them from MoFT as insurance premium. During the fieldwork stage of the audit, we were told that part of the debt owed by Aasandha Company has in fact been set off by MoFT. IGMH has not been informed of the details of this arrangement, due to which the hospital has not been able to adjust their books accordingly. Figure 9 shows the age analysis of accounts receivables.

Figure 11: Age analysis of accounts receivables

Month(s)	Amount	Year(s)	Amount
0	19,629,221	1-2	196,401,347
1	18,951,806	2-3	136,671,077
2	25,411,606	3-4	61,644,146
3	21,756,204	4-5	4,170,503
4	25,446,976	5-6	6,649,182
5	36,302,331	6-7	3,596,201
6	14,397,008	7+	687,771
7	16,209,211		
8	2,858,408		
9	17,773,362		



10	32,431,410		
11	9,441,222		
Total	240,608,765	Total	409,820,227
Grand Total		650,428,992	

Source: "Prodoc" and "Softcare" reports generated on 14 June 2015

3.30 Figure 11 shows that 36% of the invoices, amounting to MVR 240,608,765 have been outstanding for the past one year and 51% of the invoices, amounting to MVR 333,072,424 have been outstanding for 1 to 3 years. While the rest of the invoices, amounting to MVR 76,747,803 has been outstanding for 3 to 7 years.

Standard Operating Procedures (SOPs) are not prepared

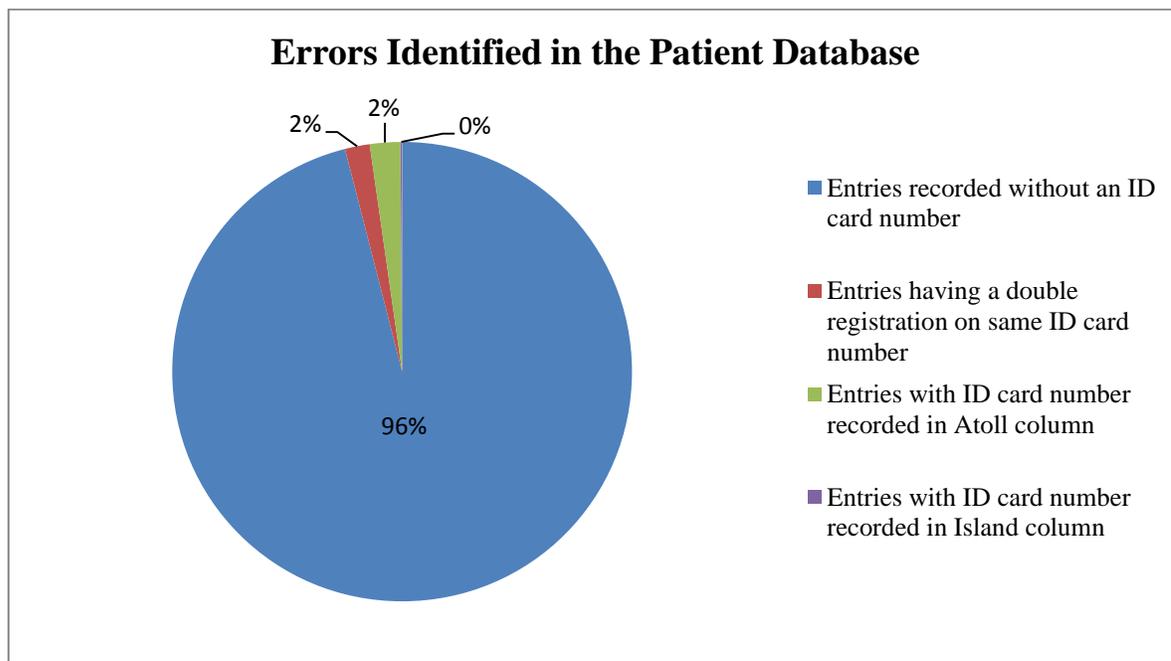
3.31 Good procedures and work instructions provide a way to communicate and apply consistent standards and practices in the organisation. It saves time and mistakes, and empowers the workforce to achieve consistent goals, address safety concerns and minimises chances for miscommunication. However, in our audit we observed that such Standard Operating Procedures (SOPs) were not made for service provided at the counters and for handling of clients or patients. This could potentially lead to misuse of insurance, inconsistency in handling patient services and mistakes in processing the transactions etc. which could result in varied service levels.

Duplicate patients are recorded in the system

3.32 ID cards, work permits and passports are used as identification of patients for the services given by IGMH. Aasandha insurance services are available only if the ID card is presented such that a person can receive the full benefit of the insurance and no misuse may arise. However, it was observed from the patients' register that there were a lot of errors and duplicate patients recorded in the system. Figure 10 shows the errors identified in the patient database.



Figure 12: Errors identified in the patient database



Source: IGMH Patient Register

3.33 Figure 12 shows that;

- 3475 patient entries were recorded without an ID card number;
- 63 patient entries have a double registration on same ID card number;
- 78 patient entries were recorded with ID number in the Atoll column;
- 4 patient entries were recorded with ID number in the Island column;

3.34 Upon further examination of the double registrations, we noticed that service transactions have been made on both registrations.

Weakness in the control procedures for settling the medical bills before patients are discharged

3.35 It is vital to have policies and controls in place to check whether the bills are raised correctly for the services rendered and to ensure that the bills are paid when the patient is being discharged. In our audit we observed that IGMH does not have such policies or written procedures to ensure that these bills are settled before the patient is discharged. Upon further inquiries it was found that it is possible for patients to walk out of the wards without settling the bills. There have also been cases where people brought in injured from accidents and old aged people brought in by helpers leave after getting medical attention without paying for the services received. It was also observed that the management is helpless to collect from those patients in such cases. Such transactions are charged to a temporary account created in the books of IGMH. From 2012 to 2014, MVR 151,2



has been charged to this account. The management explains that even though the majority of this sum derives from such patients, it also includes some invoices with large balances, which the patient agrees to clear in part payments at the time of discharge. As these cannot be identified from the system, we were unable to separate them from the aforementioned figure.

27 June 2016



Hassan Ziyath

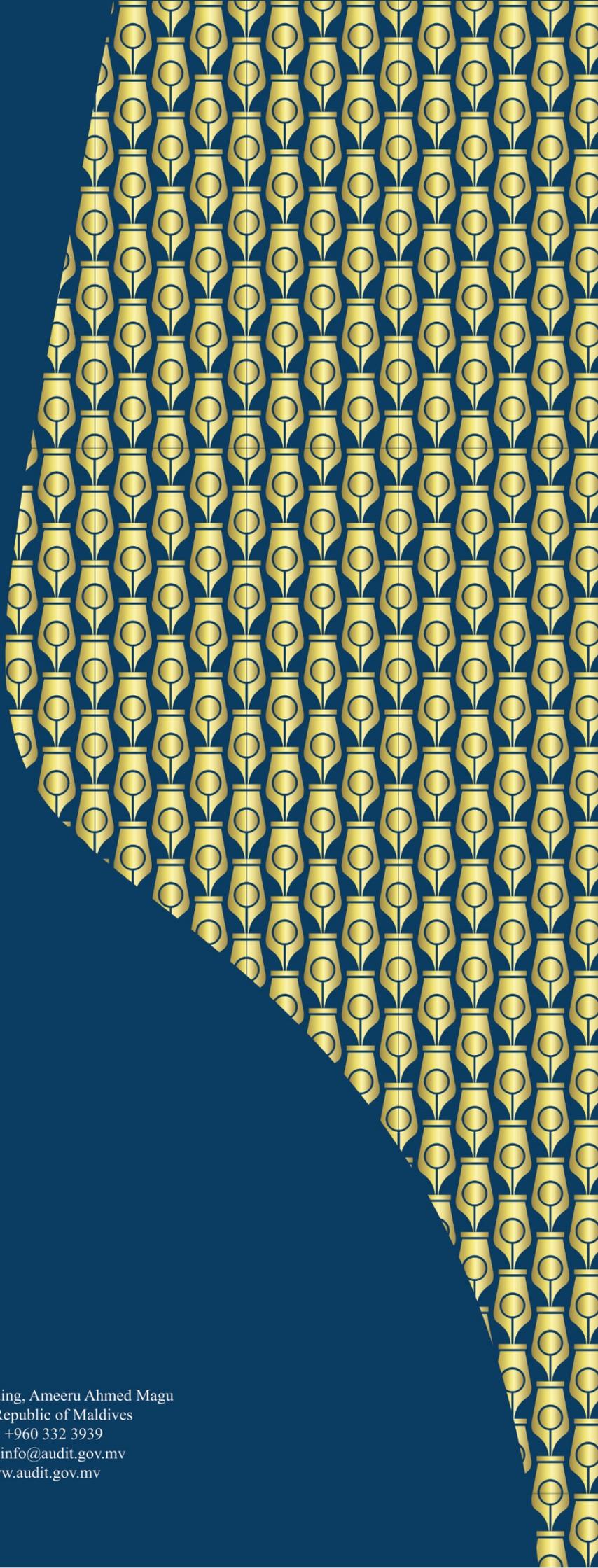
Auditor General



Appendix 1: Methodology

Method	Activity
File and document review	We reviewed key documents from 2012 to 2015 on the process and the basis for decision made in the operation of the hospital. Documents examined were drawn from IGMH and STO.
Interview with key staff	Interviewed key staff from IGMH and STO.
Comparison with international practice	We reviewed relevant reports by other Supreme Audit Institutions, including the Audit Report on Medical Waste Management (2013) and Procurement Systems in the Health Sector (2015) by the Office of the Auditor General of the Republic of Kosovo and Planning for the Better Care Fund (2014) by the UK National Audit Office.





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