SITUATIONAL ANALYSIS

for the development of the

SAMOA HUMAN RESOURCES FOR HEALTH STRATEGY

&

SAMOA HEALTH WORKFORCE DEVELOPMENT PLAN

2020/21 – 2025/26

FINAL

January 2020

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Faafetai tele ma ia faamanuia tele le Atua.

Abbreviations

AED	Accident and Emergency Department
CS	Corporate Support
DH	District Hospital
DOM	Doctor of Medicine
EN	Enrolled Nurse
ENT	Ear, Nose and Throat
FNU	Fiji National University
FOM	Faculty of Medicine
FSM	Fiji School of Medicine
GOS	General Outpatient Services
GP	General Practitioner
HC	Health Centre
HOD	Head of Department
HOU	Head of Unit
HPES	Health Promotion, Enforcement and Surveillance
HR	Human Resource
HRH	Human Resources for Health
HRM	Human Resource Management
HSP	Health Sector Plan
HSS	Hospital Support Services
ICU	Intensive Care Unit
MIR	Medical Imaging and Radiology
MoF	Ministry of Finance
MoH	Ministry of Health
MTII	Malietoa Tanumafili II
N/A or NA	Not available
NCD	Non-communicable diseases
NGO	Non-governmental organisations
NHS	National Health Service
NUS	National University of Samoa
OAHS	Other Allied Health Services
OUM	Oceania University of Medicine
OVT	Overseas Treatment Scheme
PC	Postgraduate Certificate
PD	Postgraduate Diploma
PSSC	Pacific Secondary School Certificate
RN	Registered Nurse
SBS	Samoa Bureau of Statistics
SC	School Certificate
SDG	Sustainable Development Goal
SFHA	Samoa Family Health Association
SHRHS	Samoa Human Resources for Health
SHWDP	Samoa Health Workforce Development Plan
SNS	Senior Nurse Specialist
SPC	Secretariat of the Pacific Community
SPPRD	Strategic Planning, Policy and Research Division
SQA	Samoa Qualification Authority
SROS	Scientific Research Organisation of Samoa
SSC	Samoa School Certificate
SSLC	Samoa School Leaving Certificate
TTM	Tupua Tamasese Meaole
UPY	University Preparatory Year
WHO	World Health Organisation

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Executive Summary

1. Introduction

The vision of *A healthy Samoa* signifies the Government's aspiration to improve the health of its people through improving health services (Health Sector Plan 2019-2030). To achieve this vision, improving *'human resources for health'* (HRH) is being identified as one of the seven priorities of the health sector. Human resource management (HRM) refers to the strategic and operational practices used by an organisation to manage its human resources. It concerns the planning for, hiring, motivating and maintaining, the human resources required for the performance and achievement of an organisation's core business, values, and services. Given the significance of HRH, world leaders made a commitment in 2013 that their countries will develop and implement their HRH strategy.

This report presents a situational analysis for the development of the Samoa Human Resources for Health Strategy (SHRHS) and Samoa Health Workforce Development Plan (SHWDP), 2020/21–2025/2026. It documents the methodology and work undertaken to provide for an evidence-based SHRHS and SHWDP, which involved a desktop and literature review, participant observations, and stakeholder consultations conducted from September 2019 to January 2020.

2. Samoa health dynamics and trends

Samoa is a small island country, this presents natural challenges such as limited economic and financial resources. Samoa's population is grown, by 0.9% each year, and this increase is higher among women than men. Samoa's dependent population (those aged below 21 years and 55 years and over) amounts to 61%. Life expectancy is increasing and remains higher amongst women than men. The impact of climate change on health is inevitable, people are exposed to all sorts of health problem and risk with an expected increase in illnesses such as allergies, lung cancer, respiratory and cardiovascular diseases. Non-communicable diseases (NCDs) account for over 80% of all deaths.

The recent measles epidemic confirms declining immunisation rates, which partly contributed to a lack of public trust in the health system, and a lack of focus on primary health care over the past recent years. Competing demands and priorities across sectors meant that there is a need for consolidated effort to improve operational efficiency in the health system. Factors such as migration and disease outbreaks are often beyond the control of government and partners but will continue to impact on the health system and its human resources capacity.

The above dynamics and trends continue to shape the health system and its workforce and human resources. The workforce will need to increase to accommodate population growth. The human resources for health will need to address the burden of rising NCDs and communicable diseases on the health system, public expenditure and economy. The implications of the above population demographics on additional maternal, paediatric and child care, mental, disability and palliative care are self-evident. Samoa is recovering from the impact of the measles epidemic and will need to use the lessons learnt from this set-back experience to further improve the health system.

3. Existing health workforce in Samoa

To respond to the above health challenges and trends, a capable and quality health workforce is required. The development of such a health workforce requires a good understanding about the nature and characteristics of the existing health workforce.

- ***Occupational and professional groups*** - As of the 4th September 2019, a total of 1,348 health workers were employed by the Ministry of Health (MoH). Of this total workforce, 45% are nurses (the highest occupational group), followed by those working in the hospital support services (HSS) (23%). Only 6% are physicians/doctors. A total of 4% are working in the dental

services while 14% are in allied health services – laboratory, medical imaging and radiology (MIR), pharmaceutical services, health promotion, enforcement and surveillance (HPES) and other allied health services (OAHS). A total of 9% are working in corporate support areas.

- ***Gender distribution*** – the MoH's gender distribution is 40% males and 60% females. Females dominate nursing, laboratory services, dental services, HPES, corporate support and management. Males dominate the physician/medical doctor profession, pharmaceutical services, MIR, OAHS, and HSS areas.

- ***Age distribution*** – MoH has a young workforce with 43% at the ages of 31 years and below (19% are at the 19-25 age group). The largest number of the young workforce are nurses (57% aged 20-31) and physicians/doctors (58% aged 20-31) followed by workers in the laboratory, HPES, pharmaceutical and OAHS. A total of 9% will retire in the next 5 years, 17% will retire within the next 6-10 years and 9% are already retired. The majority of retirees are nurses. Most workers who will retire within the next 5-0 years are dental staff, followed by nurses and MIR staff. In the dental services, 10% are retirees, 10% will retire in 5 years, and 38% will retire within the next 6-10 years. Two physicians/doctors are already retirees and 11 (14%) physicians/doctors will retire within the next 6-10 years. A total of 10% nurses are retirees (aged 55 and over), 9% will retire within the next 5 years and 7% will retire within the next 6-10 years.

- ***Work experiences*** – the MoH's workforce is not only young in terms of ages but it is also young in terms of years of work experiences. A total of 54% of the total workforce have 1 or less year of experience; the majority (414 or 57%) are nurses. While 18% have 2-4, 13% have 5-7, 12% have 8-10, and only 3% have over 11, years of experience. These mean that 72% of the total workforce have less than 5 years, while 25% has 5-10 years, and only 3% has 11 or more years, of experience. Years of work experience is an indicator of the maturity level of a workforce in terms of practical experiences that are grounded in work areas, including the knowledge and skills to deal with issues and challenges as well as developmental needs of health.

- ***Salary levels*** – the average salary of the MoH workforce is SAT$25,567 per annum. The majority of workers (21%) are getting paid at 9,837 and below (per annum), most of them are HSS staff. The majority of health professions including those in corporate support (48%) are getting paid at salaries between 23,801 and 49,155 per annum. The majority of doctors/physicians are getting paid at salaries between 30,596 and 49,155, while the majority of nurses are getting paid at salaries of 23,801 to 29,989 per annum.

- ***Employment status*** – the majority (96.8%) of MoH employees are permanent (salaried) staff. Only 1.3% staff are employed on contract basis and 1.6% are employed on a part-time basis (most are retired nurses). Only five staff are project-based staff, employing on a temporary basis.

- ***Education qualifications*** – of the 1,002 MoH workers (those with available records of their qualifications), 69% hold a qualification from the undergraduate certificate level up to the Master level. Around 6% are school leavers who only completed college, secondary school or primary school levels. While 26% have no records of their qualification, most of them are working in the HSS areas. The majority (46%) of the 1,002 workers with known qualifications hold a Bachelor degree as the highest qualification they attained. A total of 165 (out of 1,002 workers) hold an undergraduate certificate or diploma the highest qualification attained. Only 4% have attained a Postgraduate Certificate or Diploma, while 3% have attained a Master Degree as the highest qualification attained.

- ***Health worker distribution by location*** – 78% of the MoH staff are located at the Upolu main TTM hospital and the MoH's main office at Motootua. Only 10% are working with the Savaii main MTII hospital including its Tuasivi administration office. Only 12% are workers in the district hospitals (DHs) and health centres (HCs).

- ***Registered medical practitioners in Samoa (public and private)*** – there were 122 total number of fully and provisional) registered medical practitioners as at September 2019. A total of 70% are working in the MoH while 30% are working in the private sector. Of the 70% with the MoH, 20% are provisionally registered House Surgeons. In September 2019, a total of 3 overseas fully registered medical practitioners and 4 overseas house surgeons were working in the MoH.

- ***Medical specialists*** – of the 115 local medical practitioners, there were 69 doctors with a medical specialisation. The majority (14%) of the medical specialists were in Obstetrics & Gynaecology, followed by General Surgery (13%) and Paediatrics (8%), Anaesthesia (6%) and General Outpatient (3%). The other specialised areas (emergency medicine, pathology, radiology, public health, cardiology, mental health and eye) had only around 1 to 2 medical specialists.

- ***Nurses and other health calibres*** – the majority (93%) of nurses in Samoa were working in the MoH. Another 4% were working with the National Kidney Foundation (NKF) and the other 3% are working as nurse academia in nursing schools (National University of Samoa (NUS) and USP – University of the South Pacific) and one at the Mapuifagalele Elderly Home. There were more dentists (76%) working in the MoH than in the private sector. However, there are more pharmacists (77%) working in the private sector than in the MoH (public sector).

4. Health workforce – supply and demand analysis

Based on the national and health district population of Samoa, the health worker density per 1,000 population of Samoa is as follows:

- ***National and sub-national health worker density***
  - Samoa's national health worker density is 4.66 health per 1,000 population.
  - The TTM hospital/MoH main office's health worker density is 8.90 per 1,000 population.
  - The MTII hospital's health worker density if 3.35 per 1,000 population.
  - The health worker density of the DHs and HCs is around 1 to 2 per 1,000 population.
  - Leulumoega DH has the lowest worker density of 0.67 per 1,000 population followed by Lufilufi HC which has a ratio of 0.94 health workers per 1,000 population.
  - The Savaii DHs and HC's health worker density is slightly higher than the Upolu DHs and HCs.

- ***Professional/occupational health worker density***
  - The nursing has the highest worker density of 3.15 nurses per 1,000 population, followed by HSS (1.58) and corporate support (0.62).
  - All other health professions (dental, laboratory, pharmaceutical and MIR) have a worker density of below 0.3.
  - The physician/medical doctor worker density in Samoa is 0.58 per 1,000 population.
  - The TTM hospital has the highest doctor density of 0.98 per 1,000 population compared to 0.14 for the MTII hospital and 0.02 to 0.03 for DHs and HCs.
  - The TTM hospital has the highest doctor density of 5.40 compared to 2.33 for the MTII hospital. The DHs and HCs have a nurse density ranging from 0.63 to 2.75 – with Leulumoega DH having the lowest nurse density.
  - The midwifery worker density in Samoa is 0.42 per 1,000 population – with 0.69 for the TTM hospital, 0.33 for the MTII hospital, and around 0.09 to 0.60 for the DHs and HCs. Leulumoega DH and Lufilufi DH have the lowest midwifery density of 0.09 midwifery per 1,000 population.
  - For the medical specialists, all medical specialists have a worker density of 0.01 to 0.06 per 1,000 population – with surgery and obstetrics and gynaecology having the highest worker density of 0.06 and 0.05 (per 1,000 population) respectively. Medical specialists may not necessarily work in their specialised areas especially those working in the private sector.
  - The professions under the allied health services including the dental services have a worker density of below 0.37 per 1,000 population. The TTM hospital has the highest density of allied health worker across the different areas of allied health services. The MTII hospital, DHs and HCs have a near to zero or zero density of allied health worker.

- ***Comfortable number required*** - the following table outlines the comfortable required number of

doctors and nurses based on the consultation feedback and workload:

	Comfortable staff numbers required	
	Doctors	**Nurses/other staff**
TTM/ Motootua		
Outpatient	7 = 1HoD, 2SR, 5R	16 = 1NM, 1SNS, 12RN, 2EN
Emergency	3 doctors per shift	
Paediatric	1HOD, 2CS, 2SR, 7R	20RN
Acute 7/ Surgical Unit	10-12 doctors	5/6 RN per shift or 25 to 30RN in total
Acute 8	1HOD, 2CS, 2SRs, 3R	5RN and 2EN per shift
ICU	1 HOD, 2SR, 2R	24 = 1NM, 1SNS, 32RN, 2AN (4RN per shift)
Anaesthesia	7 doctors (include3CS)	
Operating theatre		
Mental	1HoD, 1SR, 1R	12RN, 1AN
Obstetrics & Gynaecology	1HOD, 2CS, 2SMO/SR, 2R	60RN
Eye	3 doctors	2 additional RN
ENT	1 HoD, 2 CSs, 1R, 1HS (next 10 yrs.)	
Dental services	25 dentists	30Dental therapist, 5DentalTechnician, 5dental hygienist
Laboratory services	3 local pathologists (1 is for Savaii)	51 = 29 (day), 15 (evening) & 7 (midnight) shift
Pharmaceutical services		7/8 pharmacists.
MIR services	4 radiologists - 3TTM, 1community	
OAHS		10 physio (for each ward and for outreach services).
➢Nutrition/ dietary		3 Nutritionists for TTM, 2 for Savaii, 1 for each DH and HC
➢Biomedical		Need 4 Biomedical Engineers and 3 technicians for 2029.
➢Prosthetic/ orthotic		
➢Social services		Need 5 trained social workers
Public Health		
MTII		
Outpatient & emergency	1CS,1 SR, 2R	30RN & 10EN for clinical, 10RN & 10EN for community
Obstetrics & Gynaecology	1CS, 1SR, 2R	
Paediatrics	1CS, 1SR, 2R	
Inpatient (all wards)	1Anaesthetic, 5Surgeons	
Community	2R	
Eye	2 eye doctors	5RNs
ENT	2 ENT doctors	5RNs
Dental services	3dentists (1MTII, 2DHs & outreach)	5dental therapist/ technician
Laboratory services	1 pathologist	1Principal, 2senior, 2tech, 4assistant
MIR services	1radiologist	7radiographers
Pharmaceutical		3pharmacists
Outreach visits		
DHs/HCs		
Lufilufi HC	1 FT doctor	13 = 1 NM, 6RN, 1MW, 4EN, 1AN
Lalomanu DH	2 FT doctor	20 = 1NM, 8RN, 2MW, 4EN
Poutasi DH	2 FT doctor	20 = 1NM, 8RN, 2MW, 4EN
Saanapu HC	1 FT doctor	20 = 1NM, 8RN, 2MW, 4EN
Leulumoega DH	2 FT doctor	26 = 1 NM, 1 SNS, 10RN, 3 MW, 4EN
Faleolo HC	1 FT doctor	12 = 1NM, 5RN, 5EN, 1MW
Foailalo DH	2 FT doctor	20 = 1NM, 1SNS, 11RN, 4MW, 3EN
Safotu DH	2 FT doctor	23 = 1NM, 1SNS, 3MW, 11RN, 4EN, 3AN
Sataua DH	2 FT doctor	20 = 1NM, 1SNS, 11RN, 3MW, 3EN, 1AN
Satupaitea HC	1 FT doctor	32 = 16RN, 16EN
NM - Nurse Manager, SNS - Senior Nurse Specialist, RN - Registered Nurse, EN - Enrolled Nurse, AN - Auxiliary Nurse, MW - midwife/midwives. HS - House Surgeon, R - Registrar, SR - Senior Registrar, CS - Consultant Specialist, SMO - Senior Medical Officer, HoD - Head of Department/Unit. FT - Full time, PT - Part time.		

- ***Turnover rate*** - the annual turnover rate of health workers is around 8%. The highest turnover rates occurred in the clinical services and corporate support (24%), followed by the laboratory (16%), pharmaceutical services (16%) and MIR (165). The turnover rate of medical doctors is 8% while that of nurses is 5%.

- ***Number of vacancies*** – the 2019/2020 MoH personnel budget listed a total of 306 vacant positions in the health, with a high number of medical consultants/heads of clinical departments positions that have not been filled for over 6 months.

5. Assessment of the health workforce development in service areas

Outlined below is a summary of the issues/challenges raised during the consultations:

- The main reason for rural patients coming to the main hospital is because of the absence of a full

time doctors and other health services (pharmacy, laboratory, etc.) at the DHs/HCs.

- There is a need to reassess the working conditions and entitlements of doctors and nurses to ensure that hours actually worked by doctors and nurses are fairly and accurately compensated for.

- Paediatric needs an ICU of its own including own nursing staff - for children requiring intensive care and for children to be treated and cared separately from adult patients.

- Consider the appropriate outsourcing of services (e.g. general outpatient, general paediatric services, dispensary of certain drugs and medicine, and building maintenance) in order to lessen internal workloads, and to utilise services that are already available in the private sector.

- MoH needs a child protection policy for the safety of those children who are highly vulnerable and face health risks due to family and parental neglect.

- Staff who are trained in specialised areas need to remain with the service areas in which they were trained – in order to utilise the trainings and their skills and services are needed by the service areas.

- Consider the introduction of a health insurance system to cover for the high cost of health care and to lessen the burden of the Overseas Treatment Scheme (OVT) on the public purse and health system.

- Some staff have not had any salary adjustments following the completion of their postgraduate qualifications.

- There is a need to provide proper counselling services for doctors and nurses given their everyday exposure to patient issues, traumatising experiences, workload and burnout.

- There is a need to seriously consider the critical understaff of some clinical areas (e.g. medical unit) given the high risks involved with patient care, staff health and potential litigious liabilities.

- The high turnover of senior medical doctors in areas where there is a critical shortage of medical staff must be addressed as a matter of priority.

- There is a need to strengthen service provisions in areas such as cervical cancer screening, family planning, Pap smear testing, and palliative care which will require additional staff to manage and provide these services.

- There is a need for an open discussion of the pros and cons of an open versus closed ICU system and what will works for Samoa given its limited HR capacity, and for staff to fully understand the adoption of the existing closed system.

- All clinical units must be made obligated to produce their succession planning with a consolidated discussion of those plans at different levels of the MoH.

- There is a need to strengthening the administrative services and support provided to clinical units and staff - so that they can focus more on improving the services and to provide the needed training to staff.

- There is a lack of professional development across all health professionals. There is a need to develop and implement a professional development framework which encompasses the required standards, professional development strategies, policies and procedures across all health professionals.

- There has been a neglect of the health services in Savaii especially the MTII hospital. There is a need to recruit a Senior Medical Doctor and additional staff for the MTII hospital as a matter of

priority.

- The establishment of DHs/HCs are often based on political interests without having due consideration of issues/areas such as population numbers, location and distance, transport accessibility, and sustainable resourcing of the DHs/HCs in terms of staffing, financial and physical resources, and medical supplies and equipment.

- DHs/HCs and other service areas (e.g. OAHS) in particular required proper resourcing (with the medical supplies, equipment, staff and administrative support) so that the services are maintained and improved.

- The occupational safety and health (OHS) at the hospitals and health centres must be looked at given the health risks to staff and patients.

- MoH needs an updated organisational structure – and this will involve a job analysis and evaluation to align the organisational structure following the merge, to assess the right jobs and priority positions for the merge MoH that will enable the delivery of its corporate objectives. This will includes an assessment of whether the right people are in the right jobs.

- A review of the existing fees and charges of the health services is needed in order to ensure that appropriate fees and charges are in place for local residents and overseas visitors as well as to improve the financial capacity in terms of cost recoveries and to control the misuse of public health facilities and services by private doctors especially for immigration purposes.

- Strengthen the registration of health professionals so that specialists in the different areas (e.g. sonographer) are allowed to perform specialised services – and this will avoid patient risks and compromising the quality of the services.

- There is a need to address the high turnover in certain clinical areas of the health including the laboratory unit given its impact of the services.

- A review of all career pathways and career structure of all health professionals is needed – to support the professional development, retention, and career professional of staff as well as succession planning for all areas of health.

- Build a wider understanding of the MoH staff and stakeholders about the MoH and health sector vision and priorities requires ongoing discussions so that staff understand about the roles that they have to play and what changes they have to support and implement to achieve that vision and priorities.

- There is a need to improve information management, communication and information technology in the MoH given the impact of network issues and email breakdown on staff productivity, patient records management, communication and service delivery.

- Operational policies and procedures need to be updated and distributed to all staff for their understanding, to guide and direct staff performances, and to facilitate staff compliance with required standards and protocols.

6. Human resources for health – existing situation

Previous SHRH Strategy and Workforce Development Plan

- A 2016 review of the previous 'Ministry of Health (MoH) 2007-2015 HRH Policy & Plan of Action' indicated that most of the activities relating to pure HRH and health workforce planning areas were not implemented, such as OHS, review of scholarships for health, matching intakes in academic institutions with HRH plans and estimated workforce requirements, and assessments of skill mix,

staffing according to population ratios and utilisation of current staff.

- Implementation of the 'March 2014 National Health Service Workforce Development Plan' was limited including its proper monitoring and evaluation. Some key activities that were not yet implemented include the establishment of a workforce development committee, conducting of staff satisfaction surveys, implementation of a 'hard to recruit' strategy for priority medical specialists, providing specialised training across all clinical and allied health areas, and developing health postgraduate programs at the OUM and NUS.

- Staff awareness of the above previous HRH Strategy and Workforce Development Plan was limited including resourcing commitments for their implementation.

Key HRH issues and challenges

- There is a need for staff across all sections to understand about the need for collective ownership of the core issues affecting the health system as well as the solutions to address them – rather than the existing culture of 'wait and see for the management to address'. There is a need for shared leadership at all levels - of the key issues - and a common understanding about the priorities to address.

- The workforce is supportive of the vision and reforms of the MoH. This is important so that staff are able to contribute to the implementation of the changes required at different levels of the workforce and organisation for the implementation of the health vision. However there is a needed to address the silo and territorial mentality amongst all sections of the MoH.

- Communication from the top level of leadership/management to the middle management and operational level staff is being identified as an area needing improvement.

- There is a great need to develop the strategic understanding and ownership of key strategic issues in the health system across all sections, and including how to prioritise resources to address those key issues.

- To ensure that the available resources in-country (in the public, private and civil society sectors) are best utilised and equally distributed across the population, Samoa needs to develop a health service delivery model that can best suit its context and which guide the MoH and its sector partners in service coordination, resource sharing and utilisation, address duplication of services, and manage expectations about what the public health system can and cannot provide. Developing a health financing model/strategy must be included and articulated as part of that health service delivery model including how the overseas treatment scheme (OVT) is used and what it will cover.

- There is a need to fully utilise the resources and services already available in the private sector to assist with the shortage of staff in the hospitals. Such utilisation should be guided by the health service model proposed to develop above.

- There is potential for Samoa to tap into what can be made available regionally in terms of human resources to better assist in critical areas of human resources. This practice is being adopted by some Pacific island countries to help with the shortage of specialist manpower in country.

- The survey findings show that 'a positive working environment' and 'job satisfaction' are the two factors that motivate people the most to come to work and being at work. Most of those who responded that 'they are considering leaving the MoH within the next 2 to 12 months' are doctors, nurses and some in the allied health service areas. There is a need to address the workloads of doctors and nurses in order to address morale and retention issues.

- There is a need to address a number of significant gaps with the HRM system and capacity of the MoH. These gaps are:

- Lack of strategic capacity in HRM which result in the lack of attention given to strategic HRM issues, policies, planning, implementation, monitoring and evaluation;
- There is a need for an independent and capable HR unit staffed with qualified professionals who are able to provide free and fair advice on HR matters and to deal with critical issues of the Ministry and workforce;
- Lack of proper responses and communication from the HR management and unit on staffing matters (e.g. core service staff have to spend a lot of time away from work and services to follow up on their employment/HR matters);
- Slow progress in the processing of staffing matters (e.g. leave, entitlements and pay);
- Lack of understanding about HR issues and prevailing HR policies and procedures;
- Confusion about which HR policies and procedures that are current;
- Inconsistent application of HR policies and procedures;
- Administrative and finance staff handling HR matters which require qualified and experienced HR professionals to handle and to provide appropriate advice;
- Limited HR records keeping and information management which impact on the lack of accurate date/information for workforce statistics, planning, policy and decision making;
- A number of key positions in the MoH particularly those in the clinical areas have been vacant for a while (some for over 2 years), citing the hold-up to await the merge as the reason. There is a need to prioritise the filling of important positions in key MoH service areas;
- There is an urgent need to review, align and update the organisational structure (including job designs and descriptions with clear reporting lines) of the merged MoH; and
- Lack of recognitions and rewards given to good performances.

Prevailing policies and procedures – implications for HRH and health workforce

The prevailing policies and procedures on HRM and other related areas (e.g. finance and procurement) need a thorough assessment and review as they are impacting on efforts to attract and retain a capable health workforce that Samoa needs for its people. Some of those policies and procedures are as follows:

- Scholarship schemes need to be properly aligned to the critical priority HR needs of health rather than basing mainly on the interests of individuals at the expense of organisational needs and interests.

- Study leave policy, scholarship bond and staffing policy encourage qualified people to go on study leave and not to return to work in critical areas of health. Samoa is training people to go away which means there is a limited return in the investments made on human resource development if people on study leave do not return to the areas of their trainings - those areas that Samoa needs the most in terms of qualified people.

- The removal of the 'direct graduate placement' policy and practice by the Public Service Commission meant that sponsored students do not return to serve in critical areas and that there is no guarantee that students will return to work in areas that are mostly needed, and especially given the non-enforcement of the scholarship bond.

- Opportunities are made available but not fully utilised (e.g. OUM scholarships) – existing policies do not allow support staff to work as medical students during their third and final years. There is a need to have a local supportive system to encourage students to utilise existing study opportunities.

- Compulsory retirement policy is affecting the manpower needs in critical areas (e.g. doctors and midwiferies) and where there is an ongoing shortage of staff. The retirement policy should be reviewed to allow staff who are retired but still fit to work. There must be an emphasis on knowledge transfer and succession planning for areas where retirement will leave big workforce gaps in the near future.

- The direct promotion and reclassification of positions policy do not allow for the progression (and hence retention) of staff in specialised areas (where there is a lack of market competition) Direct

promotion in this case should be allowed provided that staff recommended for promotion have demonstrated exceptional work performance and with years of specialised experiences that are mostly needed by the health services.

- Operational control by the PSC of decisions on operational staffing matters is contributing to unnecessary delays and red tapes with the implementation of health HR policies and processing of staff requests and other staffing and HR matters.

7. Conclusion – way forward

During the course of developing the SHRHS and SHWDP 2020-2026, there will be changes made to this report at a later time.

A further discussion of this report among key stakeholders of the health sector as well as by the MoH management will take place, which will result in further changes to be made to this situational analysis report. As such, this situational analysis report is in draft and is not yet finalised.

It is important for the improvement of the health services that due consideration of key issues and challenges raised in this report are taken into serious consideration and are addressed in ongoing policy, planning and programming implementation of the MoH and its partners.

1. BACKGROUND AND CONTEXT

1.1. Introduction

The vision of *A healthy Samoa* signifies the Government's commitment towards improving the health status of its people through "an inclusive, people-centred service with emphasis on health prevention, protection, patient-care and compliance" (Health Sector Plan 2019-2030, p. 11). The seven expected outcomes that will contribute to this vision are: improved health systems, governance and administration; improved prevention, control and management of communicable and neglected tropical diseases; improved prevention, control and management of non-communicable diseases; improved sexual and reproductive health; improved maternal and; improved healthy living through health promotion and primordial prevention; and improved risk management and response to disasters, public health emergencies and climate change.

The health sector priorities for the next 10 years as identified under the 2019-2030 Health Sector Plan (HSP) are: health promotion & preventive services; communicable and neglected tropical diseases, non-communicable diseases (NCDs); maternal and child health; quality healthcare services; climate change and disasters; health information management system; and human resources for health. This last priority area, "human resources for health" (HRH) underscores the central role of human resources – that without human resources, there is no health - there is "no health without a workforce" (WHO, 2014). Without improving the human resources capacity for health, there will be limited or no realisation of the 2020-2030 HSP vision, outcomes and priority areas.

Such a realisation about the significance of human resources to health meant that Samoa needs to critically re-examine its HRH requirements including workforce development needs over the next 10 years, in alignment with the 10 years lifespan of the 2020-2030 HSP. The development of the Samoa Human Resources for Health Strategy (SHRHS) and Samoa Health Workforce Development Plan (SHWDP) for 2020–2026 signifies the ongoing commitment of the Ministry of Health (MoH) to identify and address the human resource needs of the health sector.

This report is a situation analysis, prepared to provide the background and analytical framework for the development of the 2020–2026 SHRHS & SHWDP. It outlines the work and methodological approach undertaken by an independent consultant who worked in collaboration with the MoH counterparts to arrive at the completion of the formulation of these two key strategic human resources for health and workforce development policy and planning documents. This report documents the data collection and analysis that were undertaken to provide for an evidence-based SHRHS & SHWDP. The evidence obtained from the data collection and analysis informs the 2020–2026 SHRHS & SHWDP which are being developed as two separate documents from this situational analysis report.

1.2. Human resources for health

Human resources is about the effective, efficient and ethical management and leadership of the people of an organisation. It is the people who provide that management and leadership as well as the human capital requires for the existence, survival and improvement of an organisation and its purpose, functions and services. It is the people who shape the health system – they provide and maintain the services, and drive the required changes and improvements. Systems (policies, strategies, plans, structures, procedures and guidelines) must be put into place to guide and enable the effective, efficient and ethical management and leadership as well as the development of the human resources or workforce (existing, potential and future) of an organisation. Investment in human resources for health is thus inevitable.

The centrality of human resources to service delivery and development is only being recently recognised in health. Following the 2013 world leaders' declaration on HRH (which is a renewed commitments toward universal health coverage), a Global Strategy for HRH was developed and

launched in 2016 (WHO, 2016a). This renewed focus on HRH signifies the crucial role of HR in the achievement of the Sustainable Development Goals (i.e. target 3.c) – to "substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small-island developing states" (United Nations, 2019). Following this global commitment declaration by the world leaders in 2016, countries were urged to implement the 2016 Global HRH Strategy through the development and implementation of national HRH strategies. This commitment includes regular reporting to the forum of leaders on progress made (WHO, 2016b).

The situation analysis provided in this report presents the evidence-based analysis and grounded approach undertaken for the development of the 2020–2026 SHRHS & SHWDP. Limitations that can be identified from this situation analysis are attributed mainly to the lack of accurate and up-to-date baseline information made available in time for the completion of an accurate profiling and assessment of the status of human resources for health and health workforce development in Samoa. Hence the findings and analysis presented in this report are as good as the information and data that was made available for the purpose of developing the 2020–2026 SHRHS & SHWDP. The lack of quality and up-to-date information and baseline data on the health workforce is self-evident of the existing and ongoing limitations in the MoH's basic HR systems and capacities. This issue is not new, it has been raised in many assessments and reports (MoH, 2007, 2016a) including this report, but has not been given sufficient attention to address.

1.3. Methodology

The Terms of Reference for the development of the SHRHS and SHWDP, 2020-2026 is provided in the Inception Report (Aiafi-R, 2019). This Inception Report, prepared and discussed with the MoH counterparts in September 2019, outlined the methodology and approach used for the Review. In principle, the methodology included:

a) ***Briefings or inception*** – discussions with the MoH to establish a mutual understanding about the formulation process of the 2020–2026 SHRHS & SHWDP, as well as providing initial information required for the consultation process and preliminary analysis;
b) ***Desk review*** – content analysis of all relevant documents pertaining to the operation over the years and future plans for the development of the health;
c) ***Literature review*** – examining the international literature relating to human resources and workforce development for health.
d) ***Semi-structured interviews*** – one-on-one and group interviews were held with staff, key partners and stakeholders. Those consulted are listed in **Annex 4**. The participant narratives are provided in **Annex 5**.
e) ***Focused group discussions*** – discussions held with health key partners and authorities.
f) ***Survey Questionnaire*** – this questionnaire was developed and distributed to a selected sample of MOH staff to complete. Data collected from the questionnaires (see **Annex 6** & **Annex 7**) were used to further validate responses already collected from the desk review and interviews.
g) ***Participant observations*** – observations of the MoH's office and interactions with staff helped validate findings obtained from the interviews and survey. Observations assisted with the validation of staff and stakeholders' espoused views versus in-used practices and workplace realities. These were needed in order to establish a nuanced understanding about the health HRH and workforce issues, challenges and way forward.
h) ***Data analysis and reporting*** – data collected were handled with confidentiality in order to protect the identity of informants and to solicit frank responses from staff. Thematic areas were relayed to others for validation and for analysis in this Report. All information and data were carefully read, analysed, interpreted and synthesised for the purpose of this situational analysis, and in ensuring that they provide an evidence-based 2020–2026 SHRHS & SHWDP.
i) ***Validation*** – regular discussions on key points, issues and findings coming out of prior discussions with staff and stakeholders were used for subsequent discussions for validation. This report will be finalised following discussions with stakeholders and MoH management.

1.4. Samoa health context

Samoa needs its population to be healthy (mentally, physical and spiritually) and productive, able to contribute to its development outcomes. Understanding the health demographics and dynamics of Samoa's population is essential for the initiation, formulation and implementation of relevant policies, programs and services aimed at addressing the health and wellbeing of its population.

1.4.1. Population health trends and dynamics

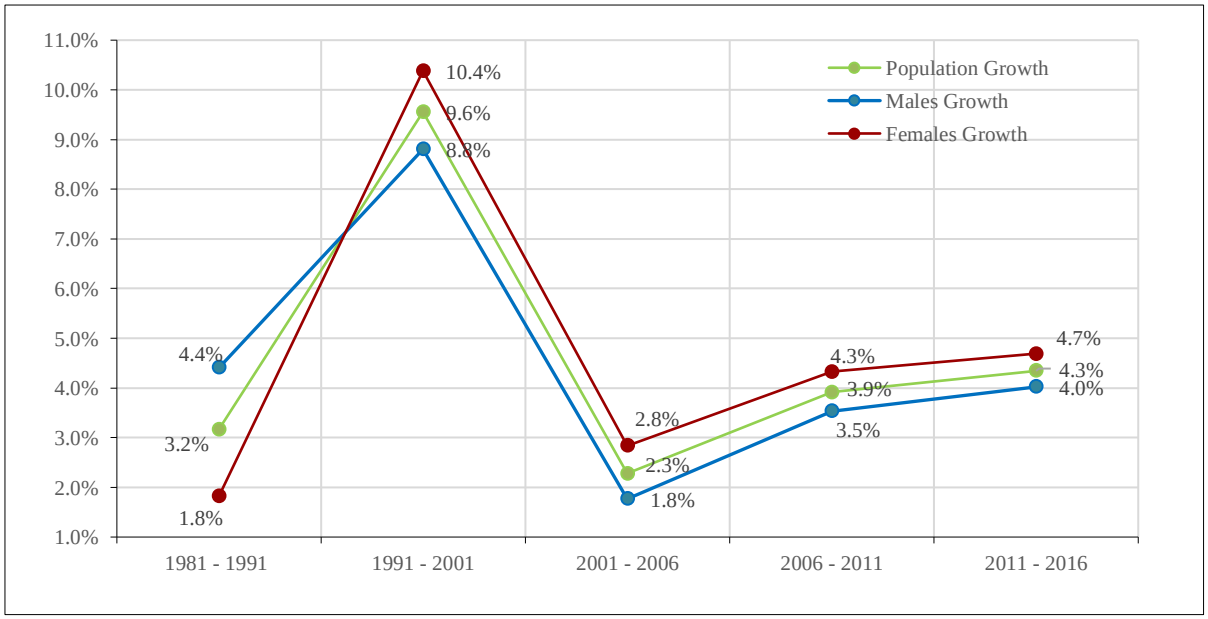
1.4.1.1. Population growth

Samoa's total population recorded at the 2016 census is **195,979** persons, with **100,892** (**51%**) males, and **95,087** (**49%**) females. Table 1 and Figure 1 depict Samoa's inter-census population growth as well as the growth in the male and female populations. The total population increased by 9.6% from 1991 to 2001 (10- year period), but grew at a lesser rate of 2.3%, 3.9% and 4.3% within a 5-year period, from 2001 to 2006, 2006 to 2011, and 2011 to 2016, respectively. Based on the 4.3% increase in 2016, the estimated annual population growth rate is 0.9%; an additional 1,632 people per year. Samoa's population is estimated to reach 239,100 by 2050, based on an estimated growth rate of 0.8% (SPC, 2018).

Table 1: Samoa population and gender growth, 1981–2016 censuses
Source: SBS (2017)

Census Year	Total Population	Population growth	Total Males	Total Females	% Males	% Females	Male growth	Female growth
1951	84,909							
1961	114,427	34.8%						
1971	146,647	28.2%						
1981	156,349	6.6%	81,027	75,322	52%	48%		
1991	161,298	3.2%	84,601	76,697	52%	48%	4.4%	1.8%
2001	176,710	9.6%	92,050	84,660	52%	48%	8.8%	10.4%
2006	180,741	2.3%	93,677	87,064	52%	48%	1.8%	2.8%
2011	187,820	3.9%	96,990	90,830	52%	48%	3.5%	4.3%
2016	195,979	4.3%	100,892	95,087	51%	49%	4.0%	4.7%

Figure 1: Samoa inter-census population and gender growth, 1981–2016 censuses
Source: SBS (2017)

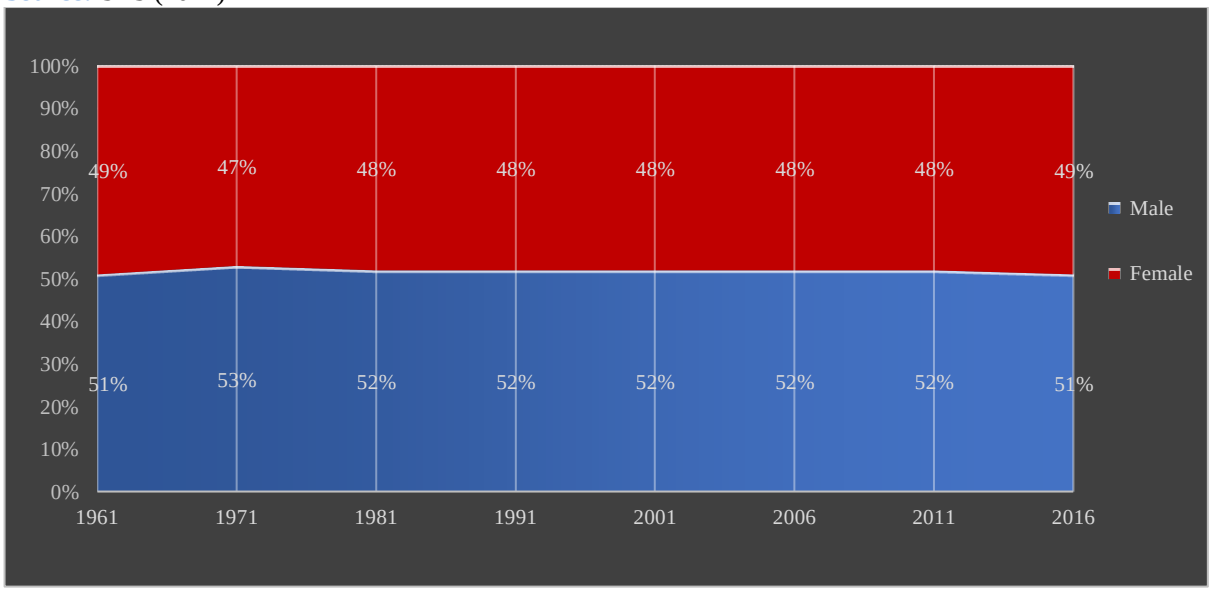


1.4.1.2. Population gender

Figure 1 gives Samoa's gender population growth, that is, the increase in the total male versus female populations from the previous census to the next census (i.e. 1981 to 2016). The significant trend to note is that the growth in the female population recorded at every census since 2001 is higher than the growth in the male population, and higher than the growth in Samoa's overall population. The only exception was the 1991 census, where the male population increased by 4.4% from the 1981 to 1991, while the female population grew by only 1.8% during the same period (see Table 2). This gives an indication that while males dominate Samoa's population landscape, the female population appeared to grow at a faster pace than the male population.

Figure 2 further shows Samoa's gender population distribution based on the eight censuses from 1961 to 2016. In 1961, 51% of the total population were men and 49% were women, a difference of 2%. In 1971, that difference (i.e. that 'male to female' ratio) rose to 4%, with men increasing to 53% and women to 47%. In 1981, the ratio decreased by 6%, with men decreasing to 52% and women to 48%. This 6% ratio remained the same in subsequent census years up to 2011. In 2016, the 'male to female' ratio decreased by 2%, with 51% of the total population were men and 49% were women. This means that in the 2016 latest census, the sex ratio at birth is 106, meaning there is 106 male births for every 100 female births. Males still dominate Samoa's gender population, with the 'male to female' ratio fluctuating between a difference of 2%, 4% and 6% over the eight censuses from 1961 to 2016.

Figure 2: Samoa population sex ratio, 1961–2016 censuses
Source: SBS (2017)



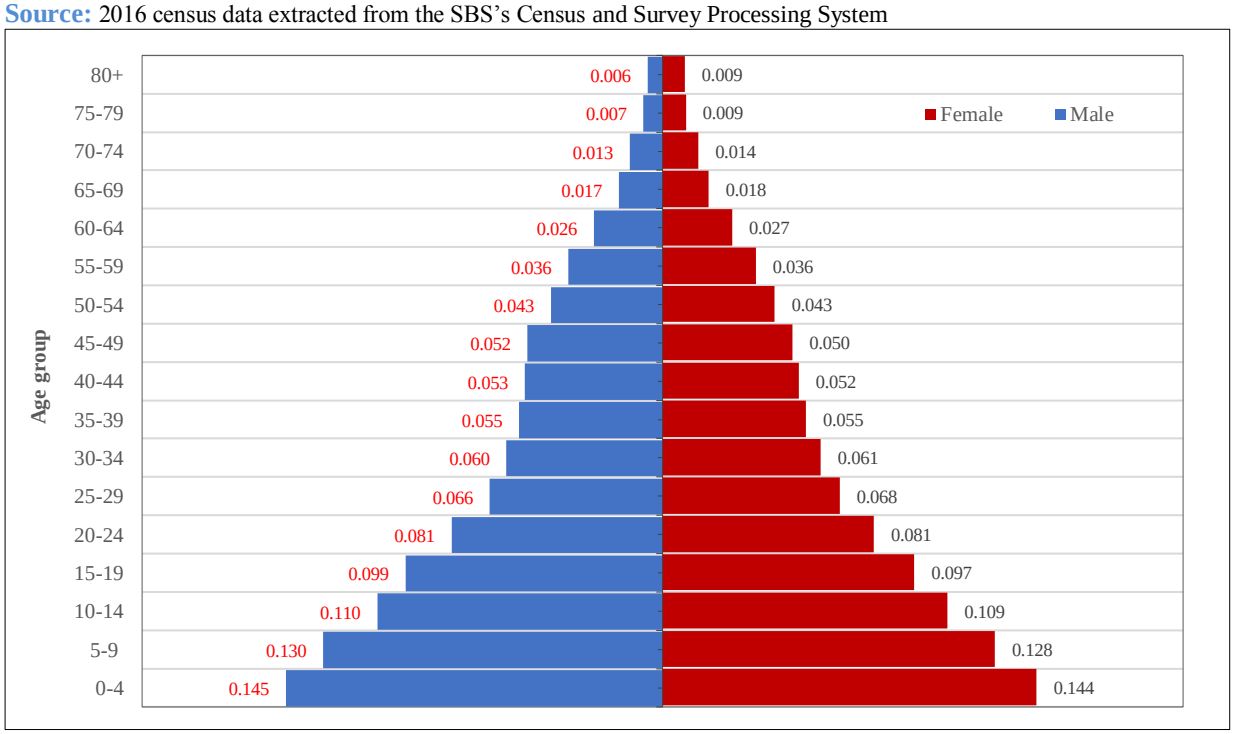
1.4.1.3. Population age

Table 2 and Figure 3 show Samoa's gender population distribution by sex ratio and by age groups as per 2016 census. Samoa's population remains relatively young with 50% of the total population below the age of 21 years old, with 38% at the age of 14 years and below. This means that half of Samoa's population are in the dependent school ages. Samoa's retired population, those at the ages of 55 years and above equates to 11% of the total population, with 8% at the ages of 60 years and above. Samoa's potential workforce (i.e. those at the working ages of 15-59 years) amounts to 54% of the total population, while those at the dependency ages of 0-14 and 60^{+} years amount to 46%. Thence the age dependency ratio is 84%, which is quite high given the large number of dependents in Samoa at the younger ages. From the youngest ages up to the ages of 64 years old, there were more males than females. This means that there are more males at the baby, school, youth, and up to the middle-aged groups. However, at the ages of 65 years and above, there were more females and males. This means that women live longer (higher life expectancy) than men at the old and retired ages of 65 years and over.

Table 2: Samoa gender population by age, 2016 census
Source: 2016 census data extracted from the SBS's Census and Survey Processing System

Age group	Total population	Male	Female	Male	Female	Ratio
0-4	28,159	14,601	13,558	14.47%	14.37%	108
5-9	25,019	13,151	11,868	13.03%	12.77%	111
10-14	21,438	11,056	10,382	10.96%	10.94%	106
15-19	18,952	9,968	8,984	9.88%	9.67%	111
20-24	15,919	8,184	7,735	8.11%	8.12%	106
25-29	13,332	6,700	6,632	6.64%	6.80%	101
30-34	11,916	6,051	5,865	6.00%	6.08%	103
35-39	10,799	5,564	5,235	5.51%	5.51%	106
40-44	10,252	5,333	4,919	5.29%	5.23%	108
45-49	9,774	5,240	4,534	5.19%	4.99%	116
50-54	8,448	4,336	4,112	4.30%	4.31%	105
55-59	7,010	3,658	3,352	3.63%	3.58%	109
60-64	5,225	2,667	2,558	2.64%	2.67%	104
65-69	3,475	1,702	1,773	1.69%	1.77%	96
70-74	2,688	1,267	1,421	1.26%	1.37%	89
75-79	1,750	746	1,004	0.74%	0.89%	74
80+	1,679	584	1,095	0.58%	0.86%	53
Not stated	144	84	60	0.08%	0.07%	140
Total	**195,979**	**100,892**	**95,087**	**100%**	**100%**	106

Figure 3: Samoa gender population's age distribution, 2016 census
Source: 2016 census data extracted from the SBS's Census and Survey Processing System



1.4.2. The health system in Samoa

1.4.2.1. Overview of the health system

The health system in Samoa is predominantly provided by the government, through the MoH, the public institution governing and directing the public health system, and also provides public health services. While the government acknowledges the role plays by non-government actors (private sector, civil society and community actors) in health, 82% of the services are funded and provided through the public health system (MoH, 2019f, p. 5). There are health services provided by private general practitioners (GPs) but are limited to general outpatient services. There are also community health services that are provided by non-government organisations (e.g. for mental services, family health planning and disability services) and by traditional health workers such as traditional birth attendants (*faatosaga*), traditional healers *(taulasea*), therapists *(fofo* Samoa) and others in the informal system. Other health services operating in the formal health system includes those provided

by some non-governmental organisations (NGOs) such as the METI (nutrition services), Samoa Family Health Association (SFHA), Goshen Mental Health Services Trust, Red Cross, Samoa Aids Foundation, and Samoa Cancer Society.

The MoH manages the existing two main public hospitals (Tupua Tamasese Meaole (TTM) in Upolu and Malietoa Tanumafili II (MTII) in Savaii), six district hospitals (3 in Upolu and 3 in Savaii) and 4 health centres (3 in Upolu and 1 in Savaii).[i] The main two public hospitals which are located in the urban areas provide most of the clinical services which are not available at the district hospitals (DHs), health centres (HCs), and private clinics which are serviced by general practitioners (GPs).

The TTM hospital has 11 clinical departments/units - general outpatient services; accident and emergency services; surgical ward (acute 7); medical ward (acute 8); paediatric services; obstetrics and gynaecology; intensive care unit (ICU); mental health services; ENT (eye, nose and throat); eye clinic; and oral and dental health services. It also provides national health services for laboratory, medical imaging and radiology, pharmaceutical, allied health (physiotherapy, prosthetics and orthotics, biomedical, nutrition, social work, and mobility services), and public health (e.g. health education, promotion and surveillance) services as well as hospital support services (kitchen for inpatient food, porters, cleaners, security, maintenance and medical records).

The MoH main office, which is also located, together with the TTM hospital at Motootua, provides national corporate support and administrative services for health through 7 main divisions – health professional development and quality assurance; registry (of healthcare professions); health information, communication and technology; policy, research and planning; sector coordination, resourcing and monitoring; finance, procurement and auditing; and human resource and administration.

The Savaii MTII hospital has the basic clinical services of a general outpatient services, accident and emergency services, and community primary health care. It has a general ward catering for inpatient services in all areas (maternity, paediatrics, medical, etc.) - there are no separate wards such as in the TTM hospital. MTII operates on a small scale services in dental, laboratory, medical imaging and radiology and pharmaceutical dispensary. Complicated patient cases are referred to the TTM hospital. Staff located the TTM hospital also travel to Savaii on a weekly or fortnightly basis to provide clinical services – particularly in specialised areas (e.g. survey, eye, gynaecology and obstetrics and pathology) that are not available at the Savaii MTII hospital.

DHs and HCs provide mainly general outpatient services. Complicated health/medical cases are referred to the main two hospitals - TTM and MTII. DHs and HCs are managed and run mainly by nurses. With the exception of the Leulumoega DH which has a daily visiting doctors, all other DHs and HCs have a visiting doctor from the main hospitals (with some private GPs) who have a 'one-day a week' scheduled clinic at each DH/HC. While called hospitals, the 6 DHs more or less operate as health centres given their small scale when compared to the TTM and MTII hospitals. The DHs are open 24 hours and 7 days a week while HCs operate only during the day (from 8am to 4pm) and only during working days (Mondays to Fridays).

The MoH receives the largest budget (of SAT$112,081,674) during the 2019-2020 financial year, followed by the Ministry of Education, Sports and Culture (which has an allocation of 109,517,345 for the same year). The National Kidney Foundation, which is another government health service entity that operates as a public body, has an annual allocation of SAT$7,030,162 - this allocation is included in the MoH budget. The MoH estimated that an indicative budget of SAT$1,225,008,094.85 is required to implement the HSH 2019-2030. This includes funding to improve DHs/HCs and

[i] The Upolu district hospitals are at Poutasi, Lalomanu and Leulumoega. The Savaii district hospitals are at Safotu, Sataua and Foailalo. The health centres (HC) are at Faleolo, Saanapu and Lufilufi (for Upolu) and Satupaitea (for Savaii). There is a HC located at Vaipouli and while it is still open up till the time of the measles outbreak, there are some talks that the Vaipouli HC will be closed. The decision whether it will close or not is not yet finalised.

implement initiatives to revive and strengthen public health and primary health care services within the broader community - as the priority focus of the 2019-2030 health sector plan.

Prior to February 2019, public health services (i.e. hospital or clinical and primary health care) were managed primarily by the National Health Service (NHS) which operated as a separate public body (from the former MoH) under the NHS Act 2006. NHS was created following a structural reform in 2006 where the former MoH was split into entities – NHS as a service delivery entity and the MoH as a policy and regulatory body for the health sector. In February 2019, the MoH (the policy and regulatory body) and the NHS (the service delivery body) were restructured and were again merged into one single entity, now operated as part of the core public service. The merged MoH's financial resources are now governed by the Public Finance Management Act and Regulations (administered by the Ministry of Finance) while human resources are governed by the Public Service Act 2004 (administered by the Public Service Commission). There is no longer an institutional separation of policy and regulatory roles and those of service delivery for health following the merge.

The 2020–2026 SHRHS and SHWDP were developed at a time where the merged MoH is still undergoing a transitional phase of amalgamating the former two entities (MoH and NHS) into one institution, but still called MoH. The alignment of structures, operating systems, policies and procedures for the merged MoH is an ongoing task yet to be completed. At the time of the consultations on the development of the SHRHS and SHWDP, staff under the old NHS and old MoH were still operating under two separate sets of human resource and staffing arrangements and conditions based on the then NHS and MoH. The ongoing application of two separate sets of HR Management (HRM) policies and procedures - MoH versus NHS staff - has led to confusion among managers and staff about which HRM policies and procedures that prevail and to adopt and apply. This has further led to the inconsistent and unfair application and treatment of staff's employment and staffing matters across various sections of the merged MoH. The merged MoH has yet to come together under one set of policies and procedures governing and directing its HRM practices.

1.4.2.2. National health trends and dynamics

The 2016 census and 2014 demographic healthy survey provide the following status, trends and dynamics about Samoa's population health:

- The mean childbearing aged for Samoan women was estimated at the 2016 census as 23 years. The overall fertility rate, while decreasing over the years, remains high at 4 children per woman in 2016. The fertility rate is lower in urban areas compared to the rural regions.

- Improved life expectancy of the Samoa's population, with an increase from 74.2 in 2001 to 74.9 in 2016 and higher among women than men.

- The 2016 census recorded a total of 7,135 persons in Samoa who have some forms of physical disability – those who cannot or had a lot of difficulty with mobility, self-care, vision, memory, hearing and communication. The numbers are higher among women (53%) than men (47%).

- Young and dependent population – Samoa's population remains relatively young with 50% (97,161 people) or half of the total population below the age of 21 years old. Samoa's population at the age of 55 years and over is 11% (21,827 people).

1.4.2.3. Key health challenges for Samoa

The health strategic challenges for Samoa are rising NCDs, increased infant and maternal mortality rates and incidences of communicable diseases (e.g. tuberculosis, STIs and measles), as well as emerging mental health and disability issues. The health system needs to be well positioned (which is not at the moment) to respond to these unfinished, ongoing and emerging challenges (MoH, 2019f). This includes a repositioning of the resourcing and leadership capacities and operating systems as

well as aligning the human resources to address those key challenges. At the outset, the human resources and workforce planning and development for health are shaped by the following key elements:

- *Samoa is a small island country* and this in itself presents natural challenges such as limited economic and financial resources as well as a limited pool of qualified people with specialised knowledge and skills in various areas and specialities of health. There are factors (migration, financial allocation, trade, disease outbreaks, etc.) that are beyond the control of the government and partners that will continue to impact on the health system and its human resources capacity.

- The *population is increasing by approximately 1,632 people or 0.9% per year* but the increase is higher among women compared to men (see section 1.4.1).[ii] HRH and health workforce development must account for Samoa's population growth in terms of HR planning, recruitment and selection, training and professional development, remuneration and working conditions, and other areas of HRM. The human resources for health will need to increase to accommodate Samoa's population growth.

- *Dependent and aging population* - Samoa's dependent population amounts to 61% (those aged below 21 years and 55 years and over). At the same time, the overall population is aging with an increasing life expectancy, and with life expectancy remains higher among women than men. These population trends demand the health and social systems to provide more and better services to care for the increased dependent population at old ages and those at younger ages (50% below 21 years). Implications for additional maternal, paediatric and child care, mental, disability and palliative care are self-evident.

- *Climate change* – climate change is impacting on the environment and health globally and this includes Samoa. Environmental degradations, pollution and extreme weather conditions (heat, cyclones, flooding, droughts, etc.) expose people to all sorts of health problem and risk (with older people and children being particularly more vulnerable) as well as excess mortality. Samoa as a small island state is highly vulnerable to climate change. There will be an expected increase in diseases and illnesses (e.g. allergies, lung cancer, respiratory and cardiovascular diseases) - putting pressure on the health system and its workforce to respond accordingly to prevent and address health problems, risks and any disease outbreaks. This includes the need to implement disaster risk reduction and preparedness measures.

- *NCDs account for over 80% of all deaths* and more than half of premature deaths in Samoa. Reducing communicable diseases and maternal mortality rates remain an unfinished business for Samoa (HSP, 2019-2030, p. 3). These ongoing challenges meant that the human resources and workforce for health need to address and respond to the burden of rising NCDs and communicable diseases on the health system, public expenditure and economy.

- The *health has the highest allocation of the government total budget* (of SAT$112,081,674 for the 2019/2020 financial year). Competing demands to address priorities in other sectors will mean that there is a need for a consolidated effort to address any deficiencies that exist and to improve operational efficiency in the health system, within existing health resources.

- *Measles epidemic* - the ongoing measles epidemic in Samoa further confirms declining immunisation rates over recent years which contributed partly to a lack of public trust in the health system and a lack of focus on primary health care over the past recent years. It also attests to the ability of the health system to respond effectively and efficiently to any disease outbreaks. Samoa will need time to recover from the impact of the measles epidemic and using the lessons learnt from this set-back experience to further improve the health system.

[ii] The HSP 2019-2030 estimates that Samoa's population will increase by 10% (19,851) over its 10 years lifespan.

2. EXISTING HEALTH WORKFORCE IN SAMOA

2.1. Defining the workforce in Samoa

According to the World Health Organisation (WHO), persons working in health, or health workers, refer to "all people engaged in actions whose primary intent is to enhance health", and are normally disaggregated according to three subgroups: "*physicians*", "*nurses/midwives*", and "*other cadres*". Other cadres refers to "*dentistry personnel, pharmaceutical personnel, laboratory health workers, environment and public health workers, community and traditional health workers*". Only three categories of *health workers* are defined here – the ***physicians***, ***nurses/midwives***, and ***other cadres*** which include all those working in a medical laboratory, pharmacy, radiology, allied health, and other health services.

In Samoa, health workers are defined as "*healthcare professional*" under the 'Healthcare Professions Registration and Standards Act 2007' and are persons registered or entitled to be registered under that Act or any of the Professional Acts as a *medical practitioner*; *dental practitioner*; *nurse or midwife*; *pharmacist*; and *allied healthcare professional*. Five categories of health workers are defined here – ***medical, dental, nurse/midwife, pharmacy*** and ***allied health***.

The allied health professions defined under the above Act and Allied Health Professions Act 2014 include: "*audiologists, chiropractors, dieticians, physiotherapists, occupational therapists, speech therapists, medical laboratory scientists, medical laboratory technicians, qualified pharmacology applied profession analysts, radiographers, acupuncturists, massage therapists as health practice for healthcare, chiropractors, podiatrists, naturopaths, traditional birth attendants and traditional healers, environmental health officers, health promotion officers, nutritionists, and qualified first aid officers, counsellors, psychologists, social workers, biomedical engineers, biomedical technicians, optometrists, optometrist technicians, orthotists, prosthetists, and pharmacologists*".

2.2. The Ministry of Health workforce

For human resource and workforce planning purposes, it is important to have a complete and accurate picture of the nature and characteristics of the existing health workforce in Samoa. Based on the payroll data obtained from the Ministry of Finance (MoF Finance One system) on the 4th of September 2019, the total number of active workers employed by the MoH as at 4th September 2019 was 1,348. This number does not include vacant positions and does not account for any health workers leaving the Ministry of Health (MoH) or the health system after the 4th of September 2019.

2.2.1. Gender distribution

Table 3 above and Figure 5 further give the gender distribution of the MoH's existing workforce; 40% are males and 60% are females. Figure 6 further shows that the nursing profession is where most females are employed while the hospital support services are where most males are employed. Females dominate nursing, laboratory services, dental services, health promotion, enforcement and surveillance (HPES), corporate support (CS) areas (e.g. policy, research, legal, information, quality assurance, finance, human resource and administration) and management. Males on the other hand dominate the medical physician/doctor profession, pharmaceutical services, medical imaging and radiology (MIR), other allied health services (OAHS), and hospital support service (HSS) areas.

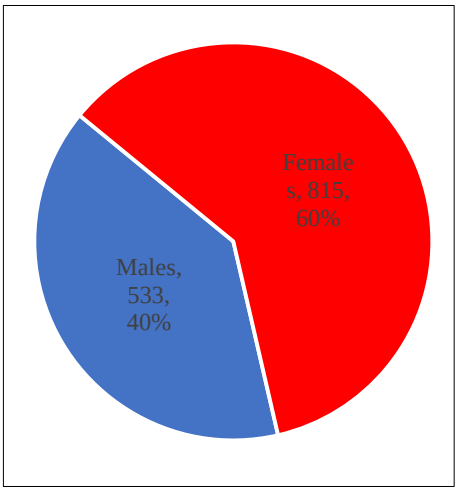
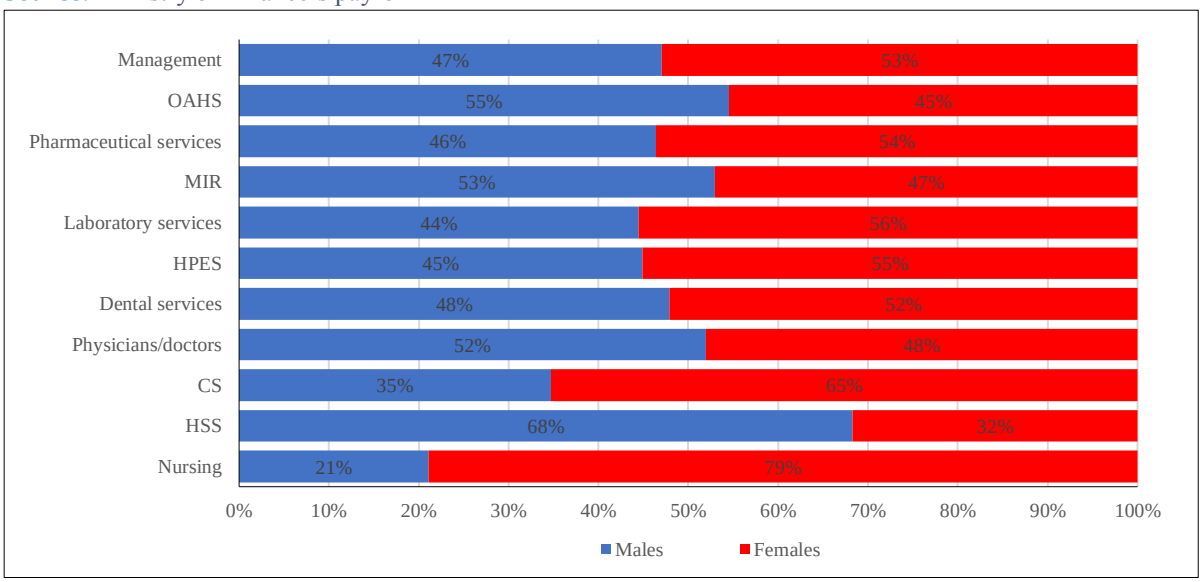


Figure 4: MoH workforce gender distribution
Source: Ministry of Finance's payroll

Figure 5: MoH workforce gender distribution by professional/occupational groups
Source: Ministry of Finance's payroll



2.2.2. Age distribution

Table 4 and Figure 7 portray the age distribution of the MoH's current workforce. The distribution shows a young workforce, where 43% of the total workforce are at the ages of 31 years and below - 19% are at the age group of 19-25 years – while 24% are at the ages of 26-31 years. In other words, the largest proportion of the workforce are employees within the aged groups of 19-31 years (43%), followed by those at the ages of 44-49 years (17%). Only 22% of the total workforce are at the middle level ages of 32-43 (i.e. those in the active and maturity working age levels).

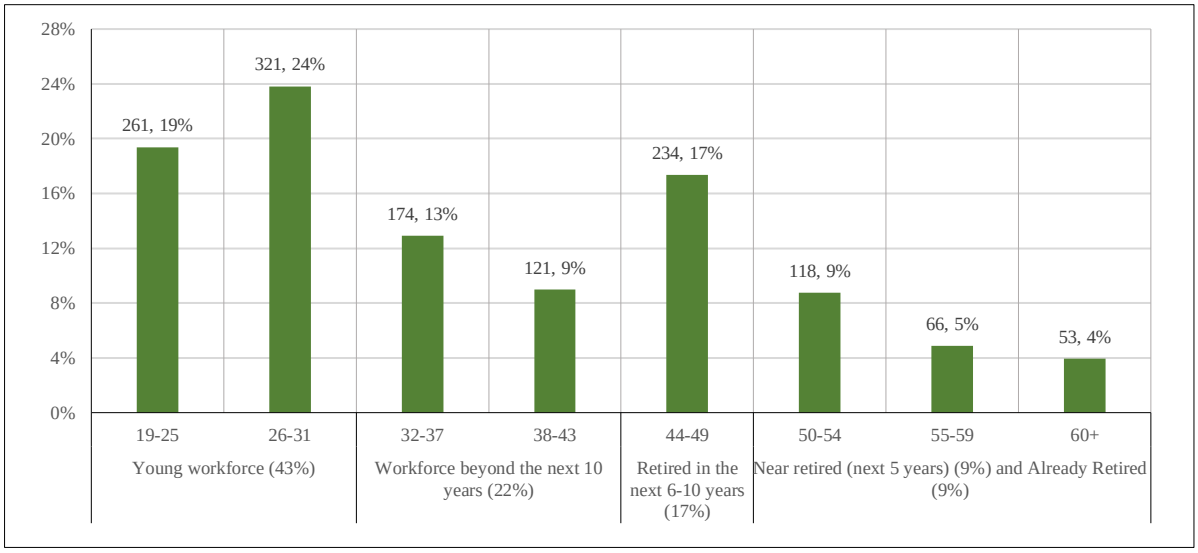
A total 17% of the workforce will be retiring in the next 6 to 10 years, while 9% will be retiring within the next 5 years. Of the total workforce, 18% in total are either near retirement (9% retiring within the next 5 years) or are already retired (9% are at the ages of 55 years and over).

Table 3: MoH workforce age distribution by professional/occupational groups
Source: Ministry of Finance's payroll

Age	**Professional/occupational groups or work areas (numbers)**											
(years)	Doctors	Nurses	Dental	Pharmacy	MIR	Laboratory	HPES	OAHS	CS	HSS	Management	**Total**
19-25	3	190	1	6	7	7	9	8	18	12	-	**261**
26-31	34	155	11	9	7	16	12	6	36	36	-	**321**
32-37	19	65	6	4	7	5	11	-	21	33	3	**174**
38-43	8	35	2	2	2	5	7	2	13	43	2	**121**
44-49	11	45	18	7	3	2	5	3	15	121	4	**234**
50-54		52	5		6	2	1	3	12	36	1	**118**
55-59	1	26	2	3	2		1	1	3	23	4	**66**
60-64	1	14	1				1	1	3	2	2	**25**
65-69		15					-	-	1	1	-	**17**
70+		9	2				-	-		-	-	**11**
Total	**77**	**606**	**48**	**31**	**34**	**37**	**47**	**24**	**122**	**307**	**16**	**1348**

Age	**Professional/occupational groups or work areas (%)**											
(years)	Doctors	Nurses	Dental	Pharmacy	MIR	Laboratory	HPES	OAHS	CS	HSS	Management	**Total**
19-25	4%	**31%**	2%	19%	21%	19%	19%	33%	15%	4%		**19%**
26-31	**44%**	**26%**	**23%**	**29%**	21%	**43%**	**26%**	**25%**	**30%**	12%		**24%**
32-37	**25%**	11%	13%	13%	21%	14%	23%		17%	11%	19%	**13%**
38-43	10%	6%	4%	6%	6%	14%	15%	8%	11%	14%	13%	**9%**
44-49	14%	7%	**38%**	23%	9%	5%	11%	13%	12%	39%	25%	**17%**
50-54		9%	10%		18%	5%	2%	13%	10%	12%	6%	**9%**
55-59	1%	4%	4%	10%	6%		2%	4%	2%	7%	25%	**5%**
60-64	1%	2%	2%				2%	4%	2%	1%	13%	**2%**
65-69		2%							1%			**1%**
70+		1%	4%									**1%**
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100%**

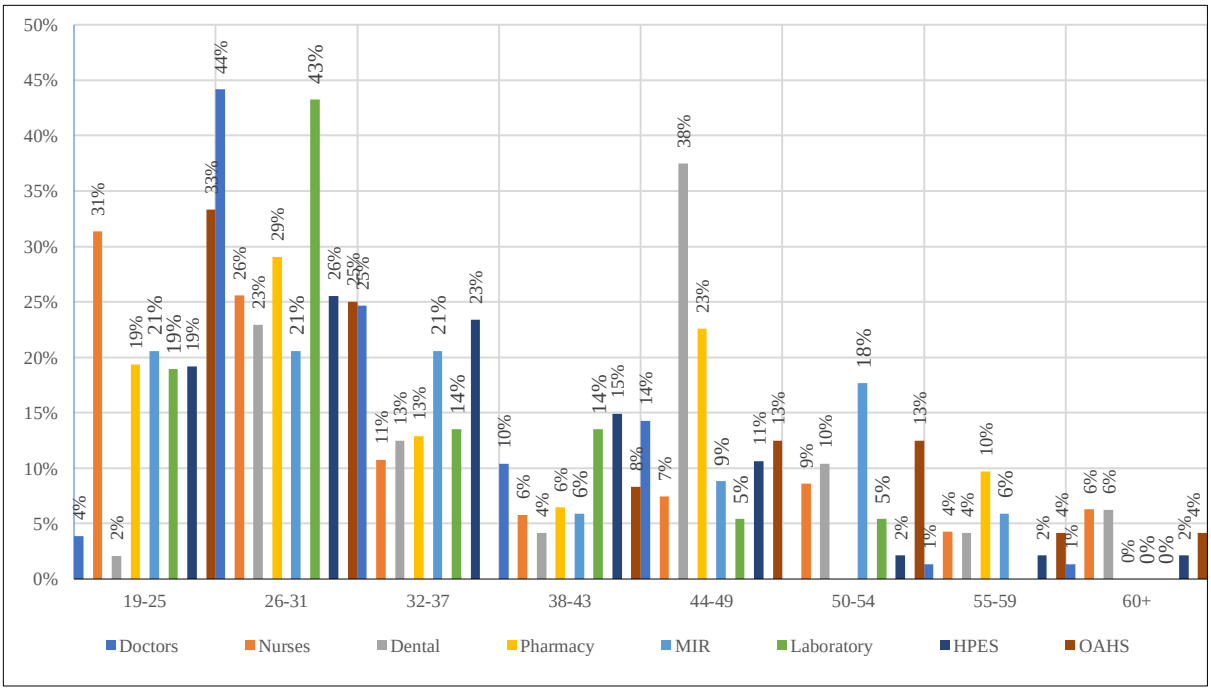
Figure 6: MoH workforce age distribution
Source: Ministry of Finance's payroll



Looking across all healthcare professions (see Table 4 and Figure 8), the largest number of the young workforce are noted in the nurses and physicians/doctors, followed by the workforce working in the laboratory, pharmacy and health promotion, enforcement and surveillance (HPES) areas. A total of 48% doctors, 57% nurses, 61% laboratory staff, 48% pharmaceutical staff, and 42% medical imaging and radiology (MIR) workers are at the ages of 31 years and below.

Figure 8 further shows that the highest number of staff who will retire within the next 6 to 10 years (i.e. aged 44-49 years) are noted in the dental services (38%) and then the pharmaceutical services (23%). The largest proportion of staff who are already retired and are still employed (55 years and over) are in the nursing, dental services, and pharmaceutical services. While MIR and then dental services and nursing have the largest number of staff who are near retirement (i.e. the 50-54 age group who will retire within the next 5 years).

Figure 7: MoH age distribution by professional/occupational groups
Source: Ministry of Finance's payroll



2.2.3.1. *Age distribution of physicians/doctors*

Figure 9 and Figure 10 give the age distribution of the current physicians/doctors (in medical, dental, MIR and pathology) at the MoH. It shows a young workforce among the physicians/doctors with 37 (or 58% of total 77 doctors) at the ages of 20-31; the majority are house surgeons (30 doctors) who are undergoing the internship program.

Two doctors are already retirees and 11 doctors will be retiring within the next 6 to 10 years; the majority (8 in total) are Consultant Specialists (inclusive of one Head of Unit (HOD/HOU). A total of 19 doctors are at the ages of 32-37 (most of them are Senior Registrars), while 8 doctors are at the ages of 38-43.

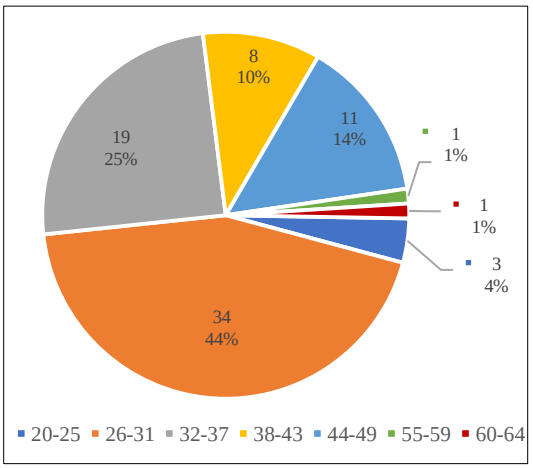
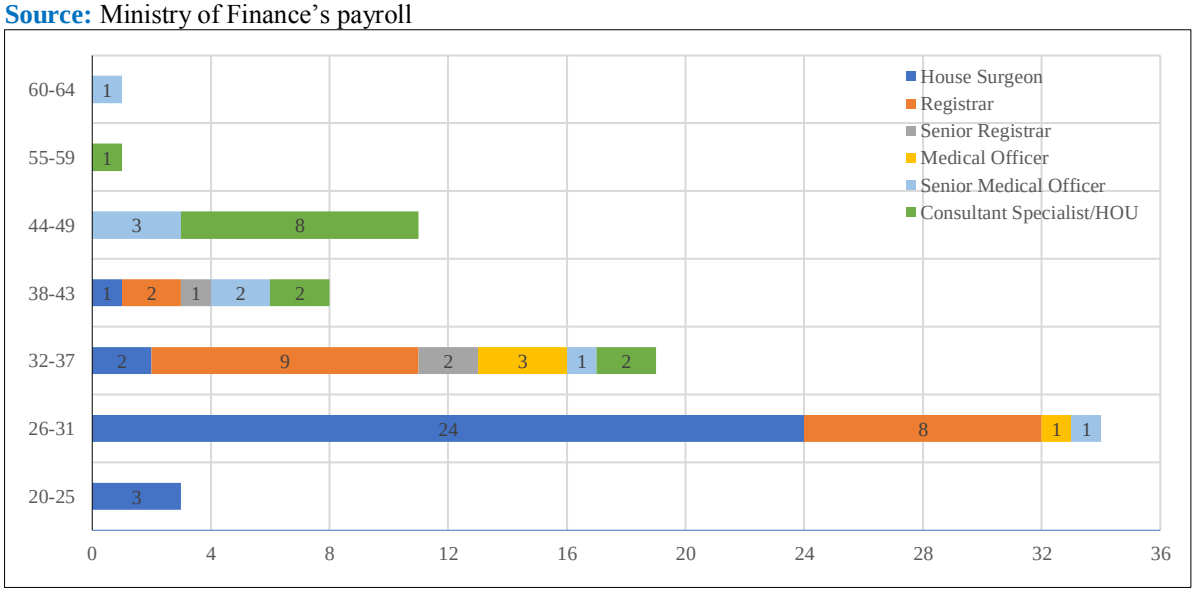


Figure 8: Age distribution of MoH doctors/physicians
Source: Ministry of Finance's payroll

Figure 9: Age distribution of MoH doctors/physicians by positions/ranks
Source: Ministry of Finance's payroll



2.2.3.2. *Age distribution of nurses*

Figure 11 gives the age distribution of the nursing profession. It shows a young nursing workforce with a total of 345 (57%) of nurses aged 19-31 years; the majority (190 or 31%) are at the ages of 19-25 years.

A total of 64 (or 10%) nurses are retirees (aged 55 and above). A total of 52 (or 9%) nurses will retire within the next 5 years while 45 (or 7%) will retire within the next 6 to 10 years.

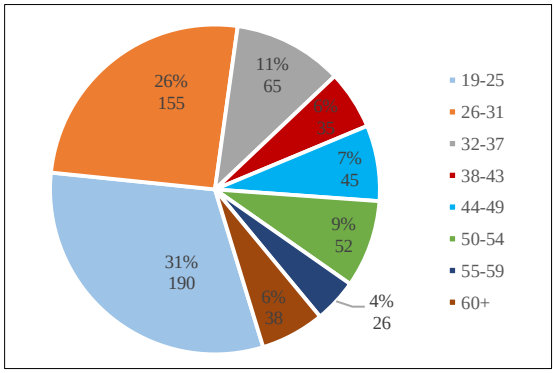
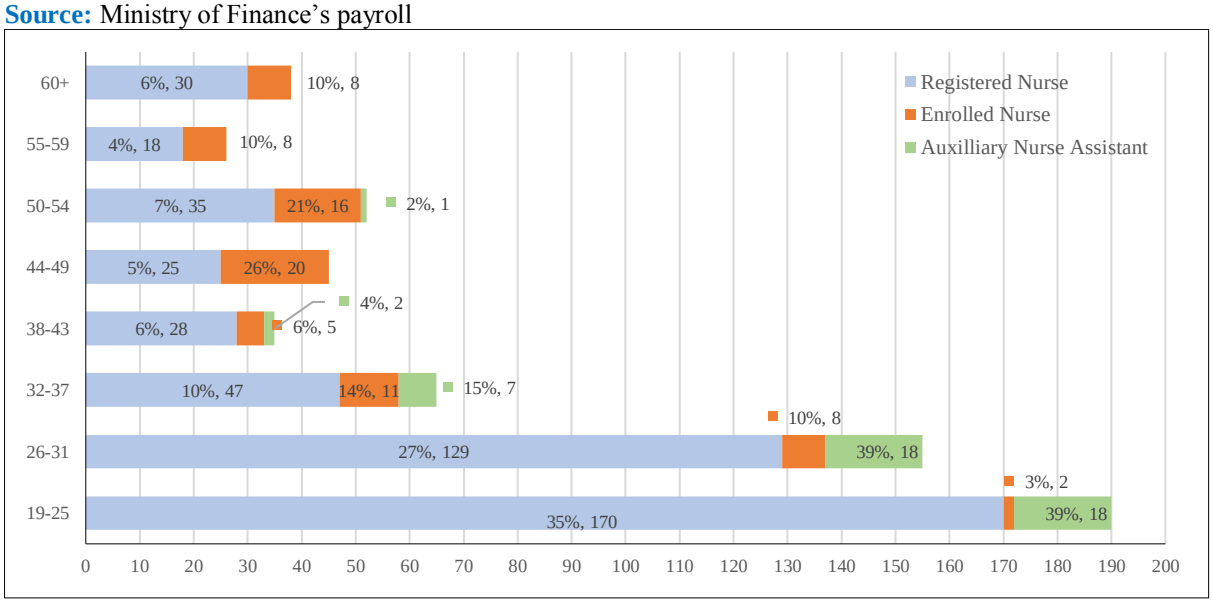


Figure 10: Age distribution of MoH nurses
Source: Ministry of Finance's payroll

Figure 12 further portrays the age distribution of nurses according to their current positions/ranks, which are registered nurses, enrolled nurses and auxiliary nurse assistants.[iii] A total of 299 (or 62%) of registered nurses are at the young ages of 19-31 - the majority (35%) of them are at the ages of 19-25 years. A total of 48 (or 10%) registered nurses are retirees (aged 55 and above) while 35 (or 7%) registered nurses will retire within the next 5 years (aged 50-54). A total of 25 (or 5%) registered nurses will retire (aged 44-49 years) within the next 6 to 10 years.

Figure 11: Age distribution of MoH doctors/physicians by positions/ranks
Source: Ministry of Finance's payroll



2.2.3.3. Age distribution of dental staff

Figure 13 depicts the age distribution of the MoH's dental staff. The existing workforce of the dental services has a much older workforce compared to the laboratory, pharmaceutical and MIR services as well as the HPES workforce (see Table 4 and Figure 8). Of the existing 48 staff, 62% are at the ages of 38 years and above - where 4% are at the ages of 38-43, while 38% aged 44-49 will retire within the next 6 to 10 years. A total of 10% (aged 50-54) will retire within the next 5 years, while 10% are already retirees.

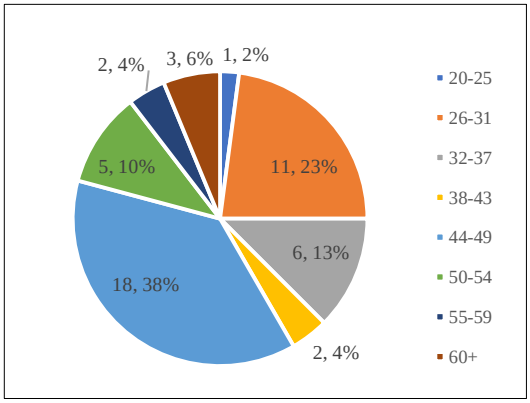
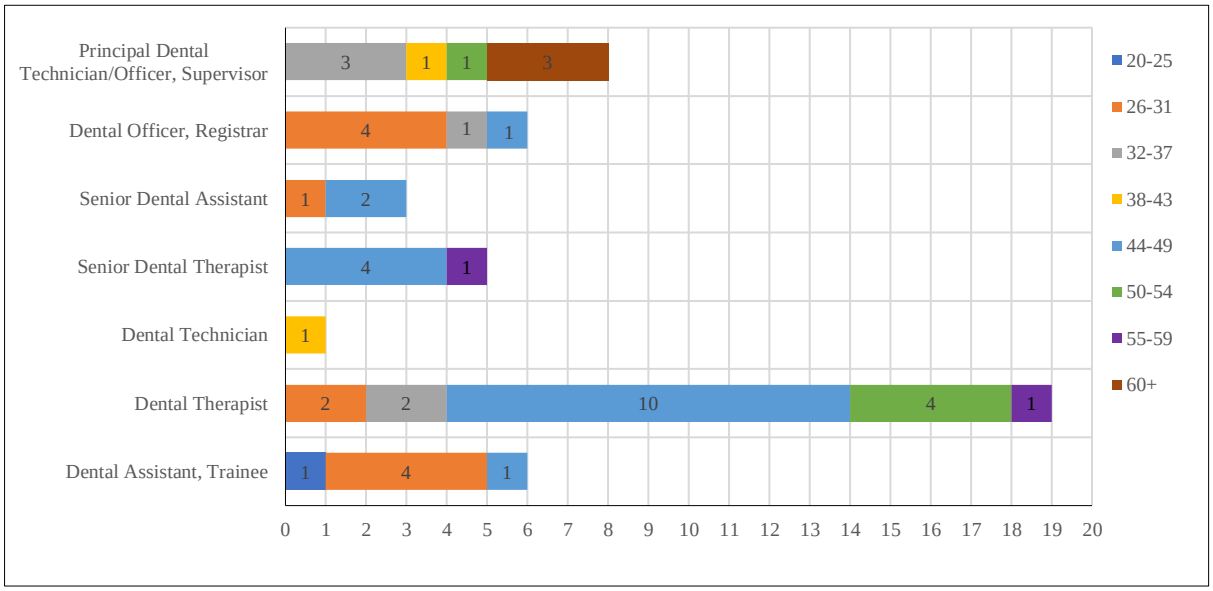


Figure 12: Age distribution of MoH dental staff
Source: Ministry of Finance's payroll

Figure 14 shows that the majority of dental staff at older ages are dental therapists (19 staff) plus 5 dental therapists at the senior level. Of this 24 dental therapists (half of the total dental staff), 2 are already retirees, while 4 will retire within the next 5 years, and 14 will retire within the next 6-10 years. Of the 8 most senior dental staff (i.e. those at the Principal Officer level), 3 are already retired, and 2 will retire within the next 5-10 years. The dental workforce, compared to all the other health professions, have a much older workforce - having the largest proportion of staff reaching retirement in the next 5 to 10 years.

[iii] Auxiliary nurse assistants are employed as nurse aids working alongside registered and enrolled nurses. They are not yet recognised officially as part of the nursing profession or under any other health professions.

Figure 13: Age distribution of MoH dental staff by positions/ranks
Source: Ministry of Finance's payroll



2.2.3.4. Age distribution of laboratory staff

Figure 15 analyses the age distribution of the existing workforce of the MoH's laboratory services. It shows a relatively young laboratory staff - with 22 staff (or 61%) of the total laboratory staff are at the ages of 20-31 - the majority (42%) are at the ages of 26-31 years.

Only 2 (or 5%) will retire within the next 5 years which is the same number of staff who will be retiring within the next 6 to 10 years.

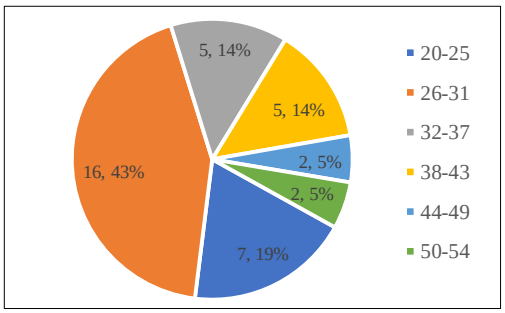
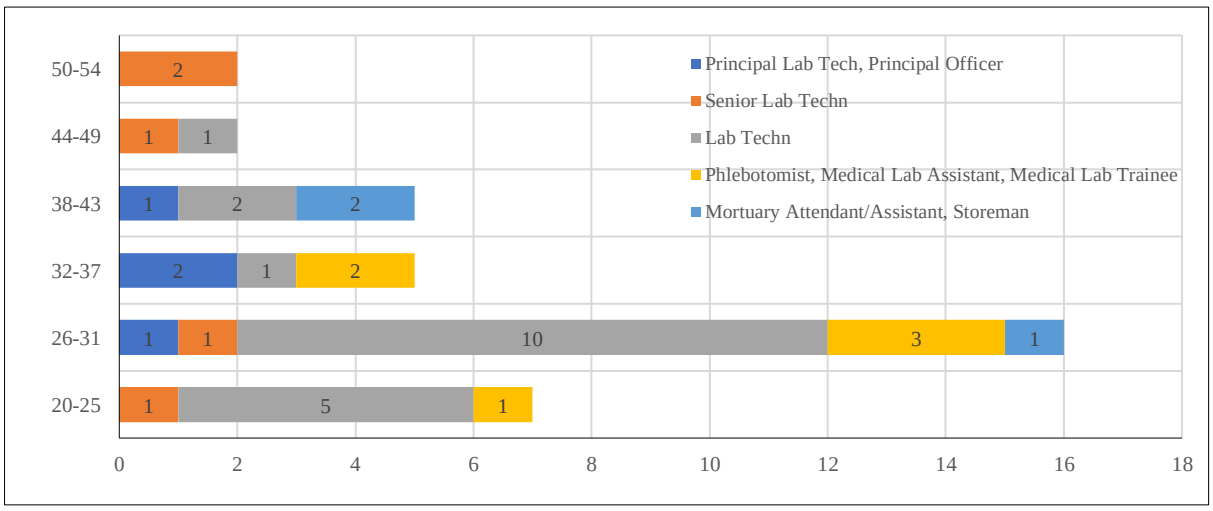


Figure 14: Age distribution of MoH laboratory staff
Source: Ministry of Finance's payroll

Figure 16 further gives the age distribution of the laboratory staff by current positions/ranks held by existing staff. The majority of laboratory staff are laboratory technicians; hence the majority of the younger staff are those working as laboratory technicians. The near retirement staff (within 5 to 10 years) are 3 senior laboratory technicians and one laboratory technician.

Figure 15: Age distribution of MoH laboratory services staff by positions/ranks
Source: Ministry of Finance's payroll



2.2.3.5. *Age distribution of medical imaging and radiology staff*

Figure 17 depicts the age distribution of the MoH's medical imaging and radiology (MIR) staff. It shows a relatively younger workforce with 42% (or 14 out of the total 34) staff who are at the ages of 20-31 years.

However there remains a high proportion (18%) of MIR staff who will be retiring within the next 5 years and a total of 2 staff who are already reaching the retirement ages (of 55 years and over) and are still working.

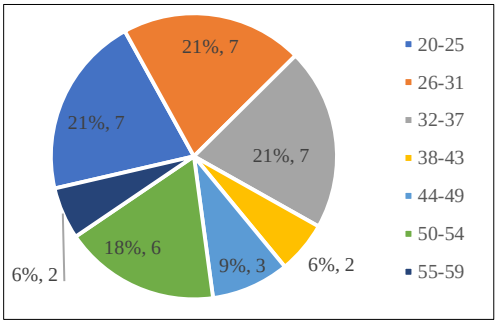
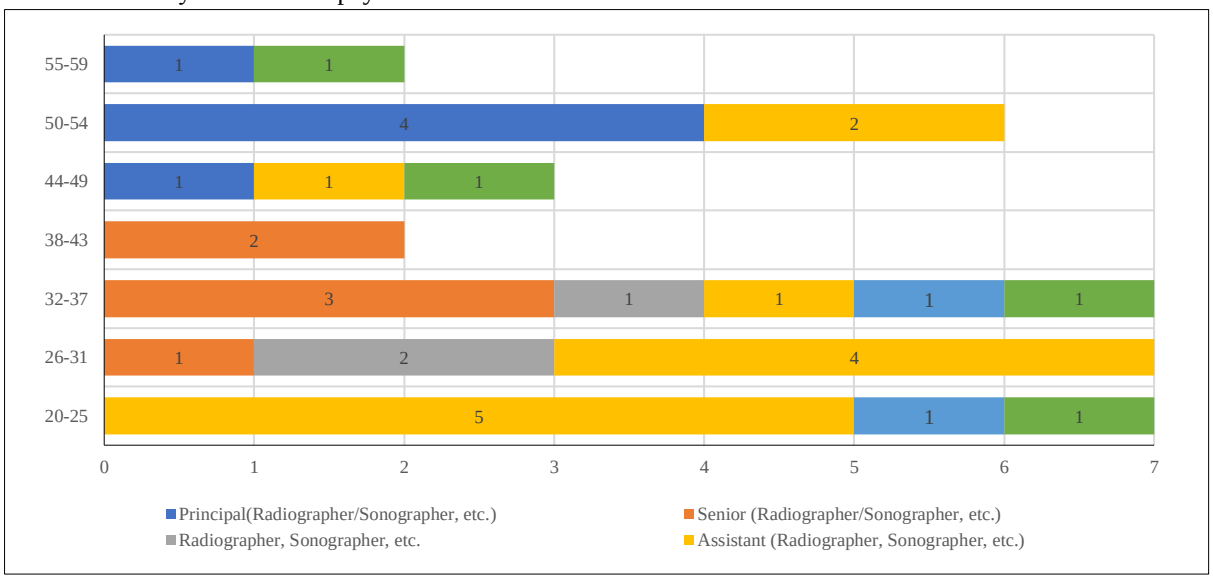


Figure 16: Age distribution of MoH medical imaging and radiology staff
Source: Ministry of Finance's payroll

Figure 18 gives the age distribution of the MIR staff by their current positions/ranks. The majority (13) of staff are those at the Assistant officer level and the majority (9 staff) of Assistant officer staff are at young working ages of 20-31 years. Of the most senior staff (i.e. those at the principal officer level), 4 out of 6 them will retire in the next 5 years while one principal officer is already retired. One principal radiographer and one assistant radiographer will retire in the next 6 to 10 years.

Figure 17: Age distribution of MoH medical imaging and radiology staff by positions/ranks
Source: Ministry of Finance's payroll



2.2.3.6. *Age distribution of pharmaceutical staff*

Figure 19 gives the age distribution of the MoH's workforce in the pharmaceutical services. It shows a relatively young workforce, with 46% of existing staff are at the ages of 20-31 years; 21% are at the ages of 20-25 years and 25% at the ages of 26-31 years. Only 39% of the workforce are at the ages of 32-43 years.

A total of 3 (or 11%) staff are retirees while 6 (or 21%) of staff will retire in the next 6 to 10 years.

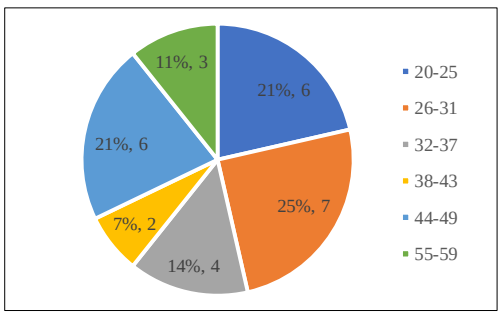
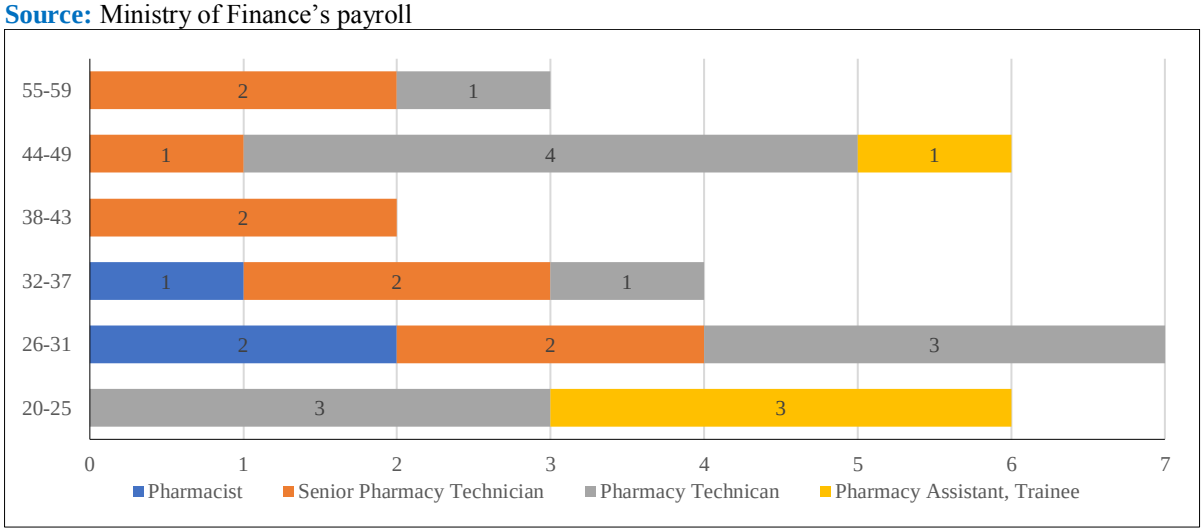


Figure 18: MoH pharmaceutical staff age distribution
Source: Ministry of Finance's payroll

Figure 20 further outlines the age distribution of pharmaceutical staff by their current positions/ranks. The majority of pharmaceutical staff are pharmacy technicians (12 or 43%) and senior pharmacy technicians (9 or 32%). Hence all the current retirees (3 of them) are pharmacy technicians - 1 at the officer level and 2 at the senior officer level. The six staff (or 21%) who will retire within the next 6 to 10 years are 5 pharmacy technicians, 1 senior pharmacy technician and 1 pharmacy assistant.

Figure 19: Age distribution of MoH pharmaceutical staff by positions/ranks
Source: Ministry of Finance's payroll



2.2.3.7. Age distribution of other allied health services staff

Figure 21 and Figure 22 give the age distribution of staff working in other allied services – environmental health, health surveillance, health promotion and enforcement, nutrition, physiotherapy, biomedical, prosthetics and orthotics, social work and others. The distribution shows a relatively young workforce across all these other allied health professions or occupational groups. However, a descending age distribution (from the young ages to the old ages) is noted in the workforce of the health promotion/enforcement, education and environment health. In the biomedical and physiotherapy areas, there are more staff at the younger ages and then at older ages than in the middle aged levels. This reflects a lack of experienced staff in the biomedical and physiotherapy areas. Two (out of 6) staff in physiotherapy, 1 in biomedical, 1 in prosthetics and orthotics, 2 in nutrition, 1 in environmental health, and 1 in health education and promotion, are either already retired, or are near retirement (retiring within the next 5 years).

Figure 20: Age distribution of MoH HPES staff by positions/ranks
Source: Ministry of Finance's payroll

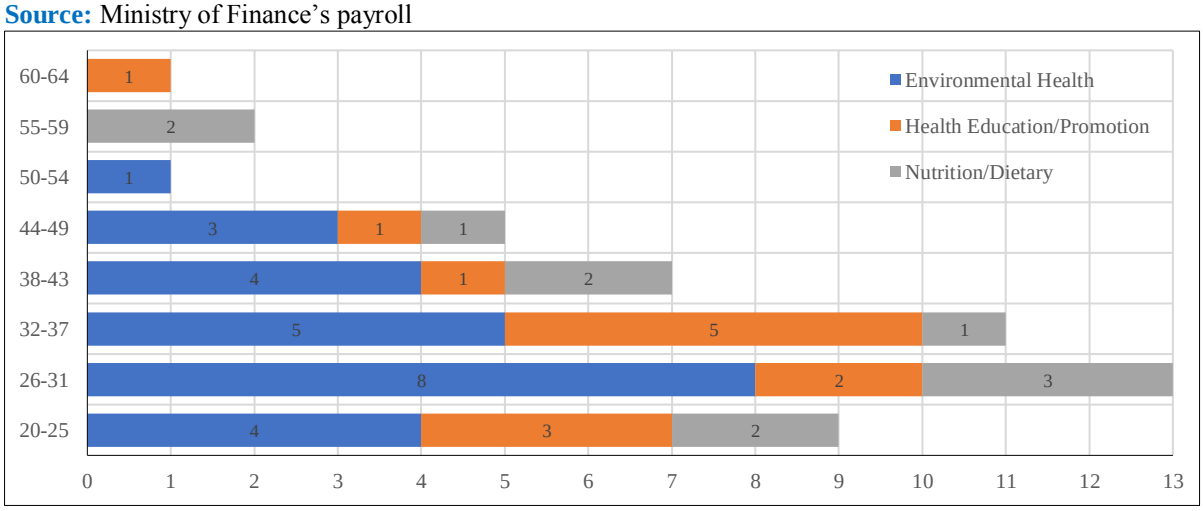
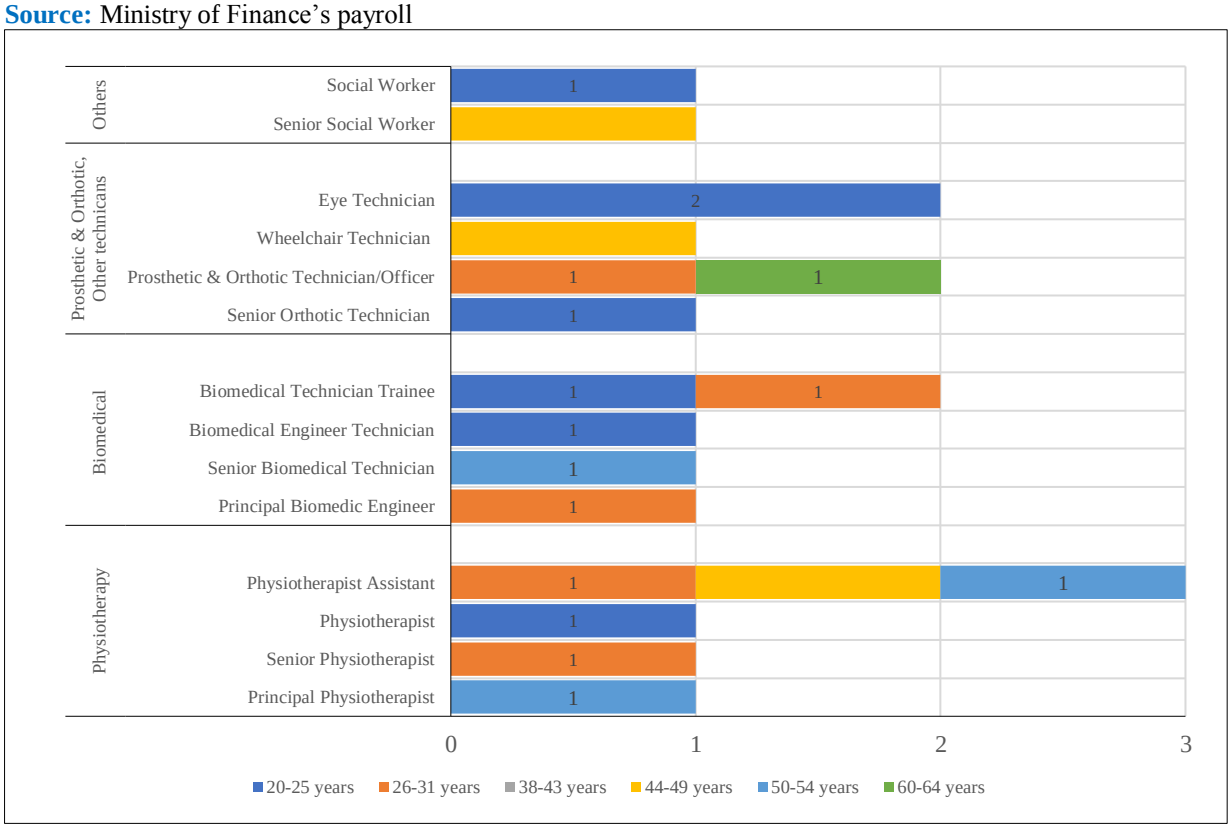


Figure 21: Age distribution of MoH's OAHS staff by professions and positions/ranks
Source: Ministry of Finance's payroll



2.2.3. Work experiences

Table 5 and Figure 23 give the capability levels of the existing workforce of the MoH according to current staff's years of experience. '. Not only that the MoH workforce has young workforce in terms of ages, it is also a young workforce in terms of years of experiences. The years of experience is an indicator of the maturity levels of a workforce in terms of practical and grounded experiences; experiences that are required to deal with issues and challenges (both current and emerging) and developmental needs (changes/reforms) and service deliveries. A quality workforce cannot be obtained mainly from having completed the prerequisite qualifications but more importantly, from having sufficient experiences that are grounded in the different areas of health.

Table 4: MoH workforce year of working experiences
Source: Ministry of Finance's payroll

	1 years & less		2 - 4 years		5 – 7 years		8 – 10 years		11 years and above		Total
	Number	%	Number	%	Number	%	Number	%	Number	%	
Nursing	414	68%	117	19%	48	8%	24	4%	4	1%	**607**
HSS	149	48%	43	14%	63	20%	51	16%	4	1%	**310**
Corporate support	47	38%	26	21%	20	16%	15	12%	15	12%	**123**
Doctors	26	34%	13	17%	15	19%	21	27%	2	3%	**77**
HPES	14	28%	12	24%	5	10%	7	14%	12	24%	**50**
Dental	15	31%	7	15%	5	10%	21	44%	-	-	**48**
Laboratory	15	42%	9	25%	3	8%	9	25%	-	-	**36**
MIR	12	35%	6	18%	4	12%	12	35%	-	-	**34**
Phar	15	54%	4	14%	8	29%	1	4%	-	-	**28**
OAHS	10	53%	5	26%	2	11%	2	11%	-	-	**19**
Management	6	38%	3	19%	2	13%	2	13%	3	19%	**16**
Total	**723**	**54%**	**245**	**18%**	**175**	**13%**	**165**	**12%**	**40**	**3%**	**1,348**

Note: MIR – Medical Imaging and Radiology. HPES – Health promotion, enforcement and surveillance. Corporate support (CS) include those in policy, research, legal, information management, quality assurance, finance, HR, administration, etc. Hospital support services include domestic assistants and those in providing services in hospital security, kitchen, porters, medical records, transport, etc.).

Figure 22: MoH workforce year of working experiences
Source: Ministry of Finance's payroll

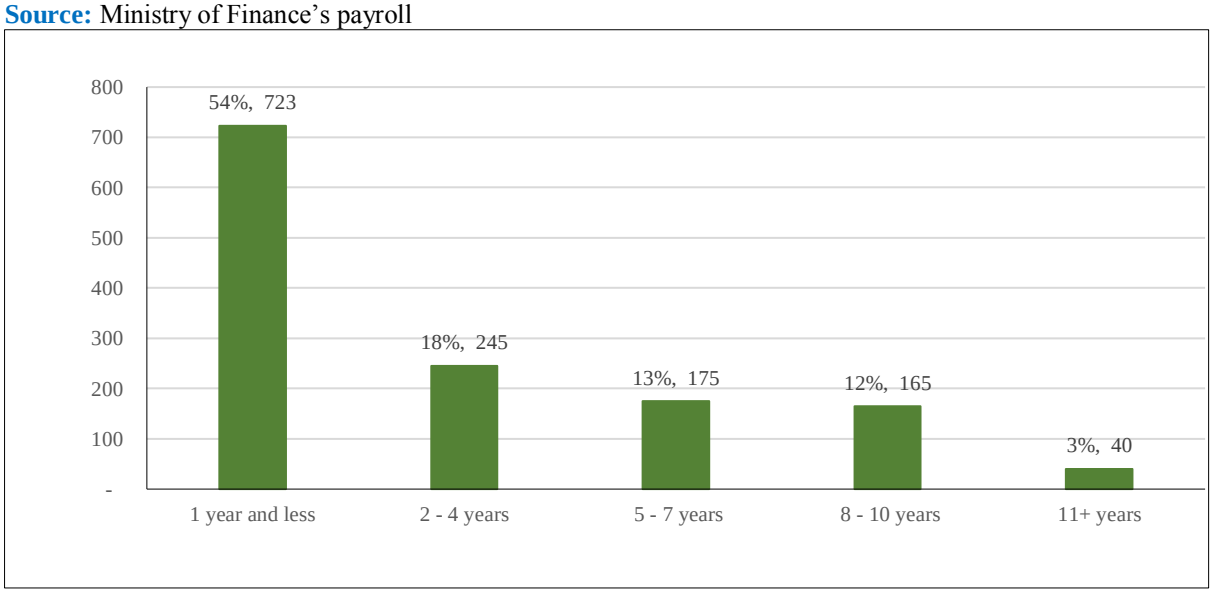
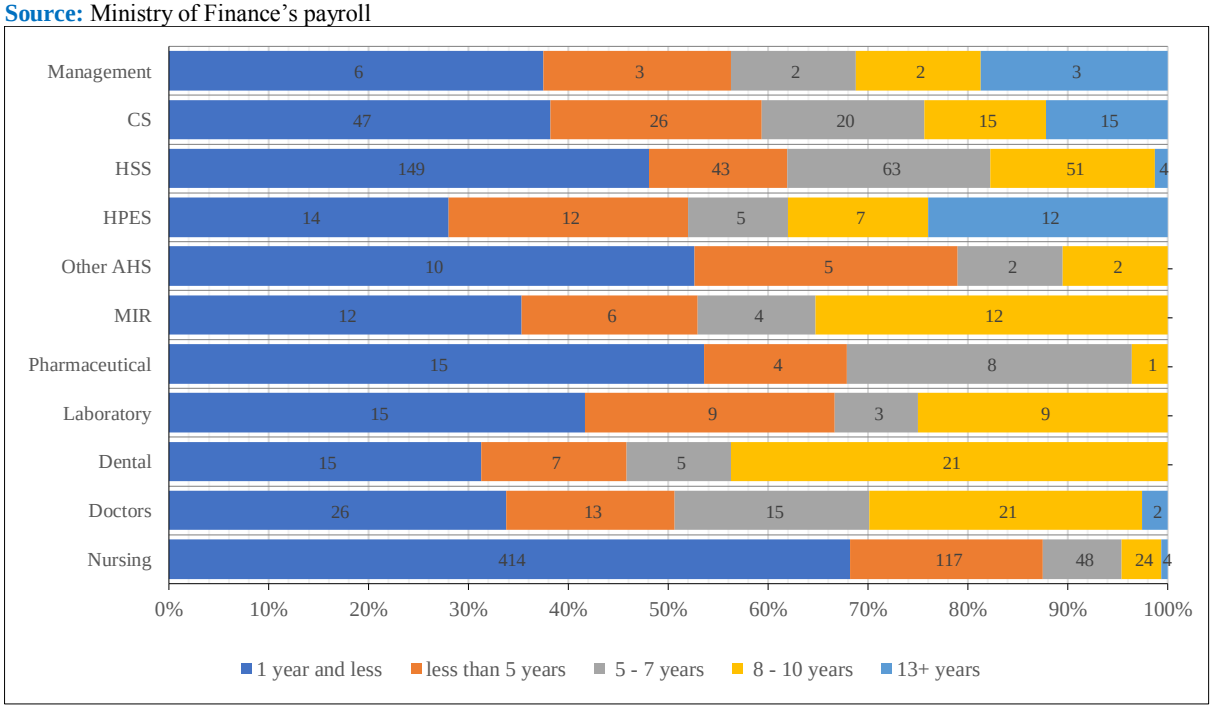


Figure 24 gives the distribution of experiences (years) across the MoH's professional or occupation groups. Only 3% of doctors/physicians have 11 years or more while 27% have 8 – 10 years, 19% have 5 - 7 years and 51% have less than 5 years, of experience. For the nursing profession, a total of 76% have less than 5 years of experience; 68% of which have 1 or less years of experience. Only 1% of nurses have 11 or more years, and 4% have 8 – 10 years, of experience. With the exception of the health promotion, enforcement and surveillance (HPES) staff, none of the staff in the health allied services (dental, laboratory, pharmaceutical, medical imaging and radiology (MIR) services has any work experiences of more than 10 years. The majority of staff with over 10 years are in the dental services, followed by the MIR services. Staff who have more years of experience are noted in the HPES, corporate support areas and executive management of the MoH. The majority of staff with 4 and less years of experience are noted in the nursing, followed by the pharmaceutical services and other allied health services – equating to more than half (or 50%) of the total number of staff who are working in those service areas.

Figure 23: MoH workforce year of working experiences by occupational groups
Source: Ministry of Finance's payroll



2.2.4. Salary levels

Table 6 gives the current salary levels of MoH staff – across the different professional or occupational groups. Of the total workforce, 21% are getting paid at 9,837 and below (per year). The majority of health professionals including those in the corporate support staff (48%) are getting paid at salaries between 23,801 and 49,155. The majority of the low paid staff are those in hospital support services (HSS) reflecting that majority of staff in the HSS are school leavers with no formal tertiary qualifications and are occupying low-skilled roles such as drivers, cleaners and cooks.

Table 5: MoH workforce salary levels
Source: Ministry of Finance's payroll

Salary (per annum)	Doctors		Nursing		Dental		Lab		Phar		MIR		HPES		OAHS		HSS		CS		Mgmt.		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
2772 - 5796			19	3%			1	3%							1	5%							21	2%
6888 - 7748			29	5%					1	3%			4	8%			79	25%	13	10%			126	9%
8400 - 9837			13	2%	1	2%	1	3%	2	7%	2	6%			5	24%	105	34%	7	6%			136	10%
10207 - 12204					3	6%	1	3%	2	7%			1	2%			53	17%	9	7%			69	5%
15490 - 13082			32	5%	3	6%	7	19%	4	14%	9	26%	3	6%	1	5%	24	8%	10	8%			93	7%
16017 - 18849			45	7%			1	3%	7	24%	2	6%	6	12%			25	8%	2	2%			88	7%
19051 - 21515			36	6%	2	4%									1	5%	6	2%	5	4%			50	4%
23801 - 26684			94	15%	19	38%	9	25%	4	14%	4	11%	12	24%	5	24%	8	3%	17	14%			172	13%
27038 - 29989	1	1%	230	38%	1	2%	1	3%	4	14%	4	11%	2	4%	2	10%	4	1%	17	14%			266	20%
30596 - 36750	21	27%	28	5%	8	16%	11	31%	2	7%	6	17%	9	18%	4	19%	4	1%	10	8%			103	8%
37676 - 49155	21	27%	49	8%	3	6%	1	3%	2	7%	3	9%	10	20%			1	0%	21	17%			111	8%
50355 - 69367	15	19%	32	5%	8	16%	3	8%			4	11%	2	4%	2	10%	1	0%	9	7%			76	6%
71449 - 93779	11	14%			2	4%			1	3%	1	3%							4	3%	8	80%	27	2%
105388 - 121870	8	10%																			2	20%	10	1%
	77		**607**		**50**		**36**		**29**		**35**		**49**		**21**		**310**		**124**		**2**		**1348**	

Figure 25 gives the salary levels of doctors and nurses working in the MoH, noting that salaries of doctors are always higher than nurses and that salaries depend on qualifications and position levels that are held by staff. The majority of doctors/physicians are getting paid at salaries between 30,596 and 49,155, while for nurses, the majority are getting paid at salaries of 23,801 to 29,989 per annum.

Figure 24: Salary levels of MoH physicians/doctors and nurses
Source: Ministry of Finance's payroll

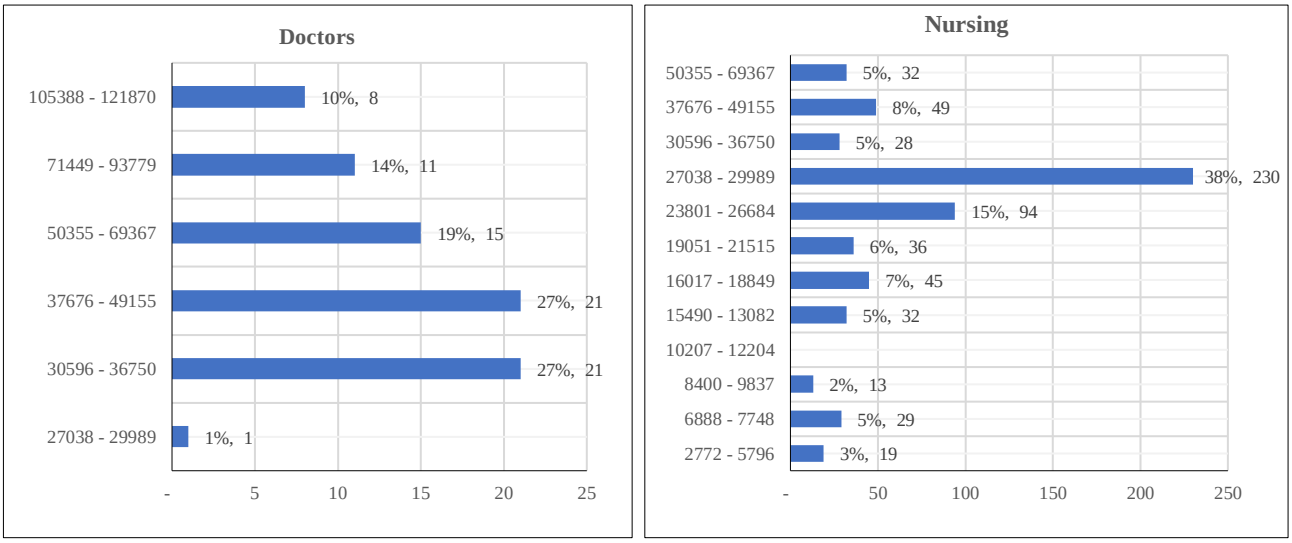
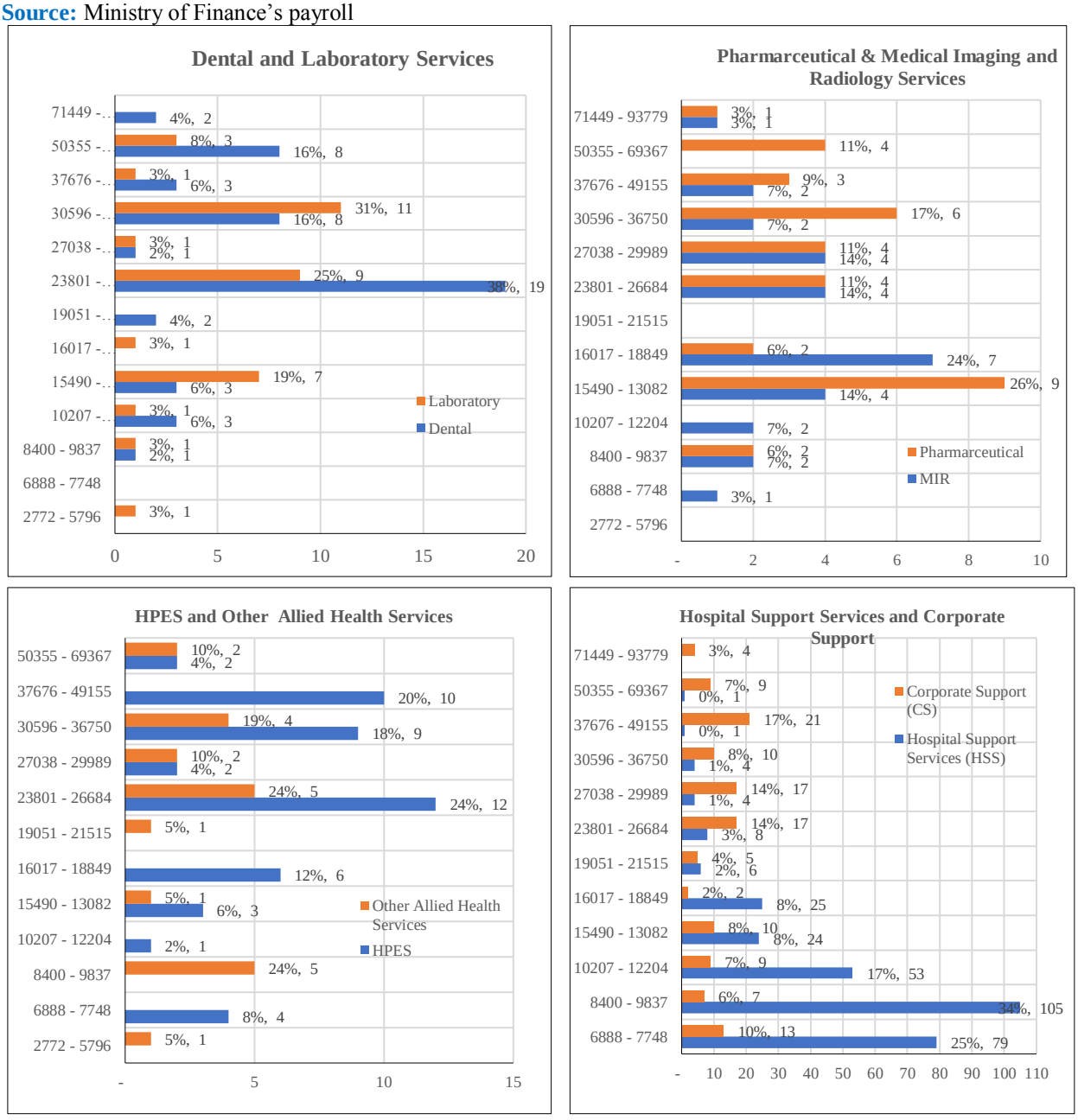


Figure 26 gives the salary levels of staff working in the allied health services (dental, laboratory, pharmaceutical services, medical imaging and radiology, health promotion, enforcement and surveillance, and other allied health services) as well as corporate support areas and hospital support services. For the dental staff, the majority are getting paid at 23,801 to 69,367. For the laboratory staff, most are getting paid at salaries between 23,801 and 26,684 and between 23,801 and 36,750. While for the pharmaceutical staff, the majority are getting paid at 15,490 to 29,989. For the MIR,

most staff are at the salary levels of between 15,490 and 69,367. For the HPES most staff are being paid salary levels between 16,017 and 49,155, while for OAHS staff, the majority of staff are receiving salaries between 23,801 and 69,367. Most staff in the corporate support areas are receiving salary levels of 23,801 to 49,155 while most HSS staff receive the low level salaries compared to all other occupational groups.

Figure 25: Salary levels of MoH's allied health services and corporate support staff
Source: Ministry of Finance's payroll



Based on the 2019/2020 personnel budget, the total wage bill of the MoH equates to 42% of the MoH's total approved budget for 2019/2020. The 42% is the percentage of the MoH total budget that is allocated to cover staff (basic) salaries. However, this 42% does not include salaries of the National Kidney Foundation's salaries and other related staffing costs such as travel, allowances, training costs, private doctors' fees, and other overhead costs. This means that the total wage bill of the public health services is much higher than the 42% of these other personnel costs are included.

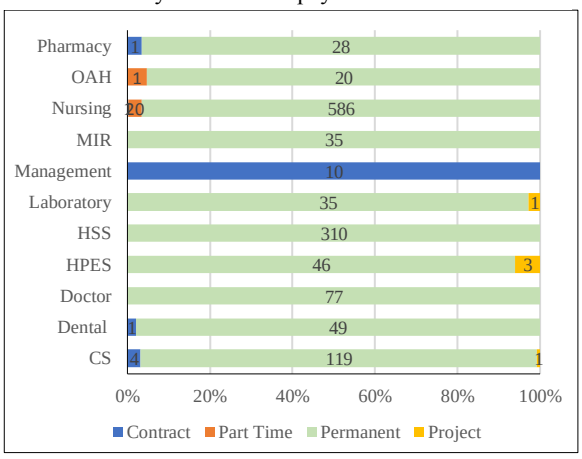
2.2.5. Employment status

Table 7 and Figure 27 portray the employment status of MoH workers. The majority (96.8%) are permanent (salaried) staff. Only 1.3% of staff are employed on contract basis, while 1.6% are on employed on a part time basis, all of the part time (except one) staff are nurses. Only 5 are employed as project-based staff; their employment status is temporary in nature subject the timeframe of a project.

Table 6: Status of MoH staff employment
Source: Ministry of Finance's payroll

	Contract	Part Time	Permanent	Project	Total
CS	4		119	1	124
Dental	1		49		50
Doctor			77		77
HPES			46	3	49
HSS			310		310
Laboratory			35	1	36
Management	10				10
MIR			35		35
Nursing	1	20	586		607
OAH		1	20		21
Pharmacy	1		28		29
Total	**17**	**21**	**1305**	**5**	**1348**
%	1.3%	1.6%	96.8%	0.4%	

Figure 26: Status of MoH staff employment
Source: Ministry of Finance's payroll



2.2.6. Educational qualifications

Table 8 and Figure 29 depict the educational qualifications of the existing MoH workforce. Information about educational qualifications of some 346 (or 26%) staff were not made available for the purpose of this exercise. The educational qualifications of a total of 1,002 MoH's employees (based on the data produced by the MoH HR section are analysed in Table 8 and Figure 29.

The majority (47% of a total of 1,002) MoH staff hold a Bachelor degree as the highest qualification attained. Only 4% has completed education studies at the postgraduate certificate or diploma level as the highest qualification attained. Only 2% have completed a Master degree as the highest qualification attained. A total of 16% have completed either a certificate or diploma qualification level. While 4% are school leavers, those who have completed education at the college or at the University Preparatory Year (UPY) level. The UPY is the equivalent of the Form 7 level.

Table 7: MoH staff educational qualifications
***Source:** Ministry of Finance's payroll*

Qualification level	Staff No.	%	
N/A	346	26%	26%
Year 8 - Year 11	9	1%	6%
SC, SSC, PSSC, SSLC	45	3%	
UPY (Form 7)	21	2%	
Certificate	105	8%	16%
Diploma	113	8%	
Bachelor/Diploma	71	5%	46%
Bachelor	549	41%	
Bachelor/Postgrad Certificate (PC)	3	0.2%	4%
Bachelor/Postgrad Diploma (PD)	52	4%	
Bachelor/Master	34	3%	3%
Total	1348	100%	100%

Figure 28: MoH staff educational qualifications
Source: Ministry of Finance's payroll

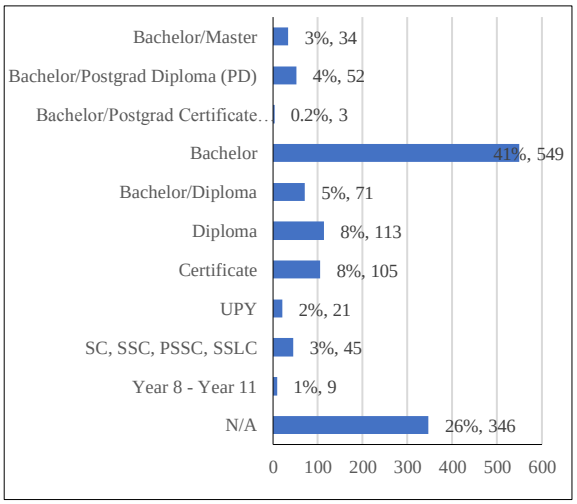


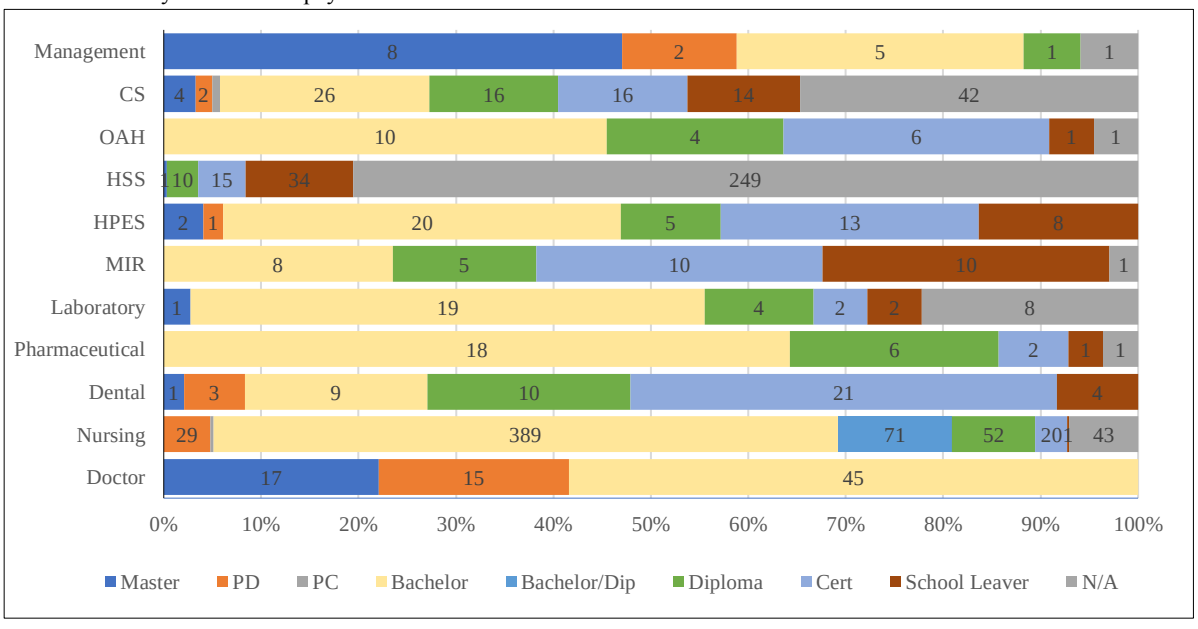
Table 9 and Figure 30 gives the educational qualifications of staff across the health professions and occupational groups. The majority of staff without any qualification records are those in the HSS. Positions or jobs in the HSS required low level skills. As such, most staff in the HSS are school leavers. For doctors/physicians, a total of 10 (or 13%) hold a master degree, while a total of 14 (or 18%) hold a postgraduate diploma.

For the nurses, 389 (64%) hold a bachelor degree while 5% have a postgraduate diploma and 0.3% have a postgraduate certificate. For the dental services, 2% hold master degree while 6% have a postgraduate diploma. Similarly, 3% (or 1 staff) in the laboratory and 4% (or 2 staff) in the HPES have a master degree. The management have the highest number of staff with a master degree.

Table 8: MoH staff educational qualifications by professions/occupational groups
Source: Ministry of Finance's payroll

	Master	PD	PC	Bachelor	Bachelor/ Diploma	Diploma	Certificate	School Leaver	N/A	Total
Doctor	17	15		45						77
Nursing		29	2	389	71	52	20	1	43	607
Dental	1	3		9		10	21	4		48
Pharmaceutical				18		6	2	1	1	28
Laboratory	1			19		4	2	2	8	36
MIR				8		5	10	10	1	34
HPES	2	1		20		5	13	8		49
HSS	1					10	15	34	249	309
OAH				10		4	6	1	1	22
CS	4	2	1	26		16	16	14	42	121
Management	8	2		5		1			1	17
Total	34	52	3	549	71	113	105	75	346	1348
	Master	**PD**	**PC**	**Bachelor**	**Bachelor/ Diploma**	**Diploma**	**Certificate**	**School Leaver**	**N/A**	**Total**
Doctors	22%	19%		58%		0%				100%
Nursing		5%	0.3%	64%	12%	9%	3%	0.2%	7%	100%
Dental	2%	6%		19%		21%	44%	8%		100%
Pharmaceutical				64%		21%	7%	4%	4%	100%
Laboratory	3%			53%		11%	6%	6%	22%	100%
MIR				24%		15%	29%	29%	3%	100%
HPES	4%	2%		41%		10%	27%	16%		100%
HSS	0.3%					3%	5%	11%	81%	100%
OAHS				45%		18%	27%	5%	5%	100%
CS	3%	2%	0.8%	21%		13%	13%	12%	35%	100%
Management	47%	12%		29%		6%			6%	100%
Total	**3%**	**4%**	**0.2%**	**41%**	**5%**	**8%**	**8%**	**6%**	**26%**	**100%**
PC – Postgraduate Certificate, PD – Postgraduate Diploma, N/A – not available										

Figure 29: MoH staff educational qualifications by professions/occupational groups
Source: Ministry of Finance's payroll



2.2.7. Occupational and professional groups

Table 3 and Figure 4 display the distribution of the MoH workforce by professional groups and work areas. Nursing is the profession with the highest number of employees, making up 45% of the MoH's total workforce. Next to the nursing are those working in hospital support services (e.g. domestic assistants, security personnel, kitchen hands and cooks, porters, medical records clerks, transport personnel including drivers, maintenance personnel and others), making up 23% of the MoH's total workforce.

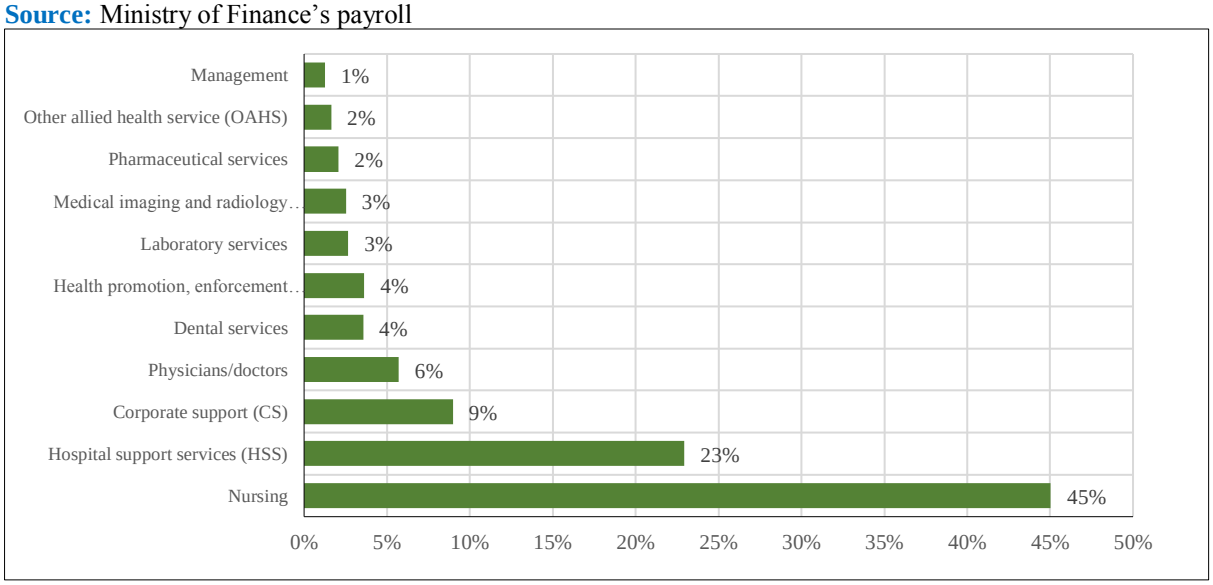
A total of 9% are professionals working in corporate support areas such as policy and planning, research, legal, information management, quality assurance, professional development, human resource management, finance and audit, sector coordination, and administration. Of the total workforce, only 6% are physicians/doctors. Also, only 4% are those working in the dental services. Approximately 14% are staff working in the laboratory services (3%), medical imaging and radiology (3%), pharmaceutical services (2%), health promotion, enforcement and surveillance (4%), and other allied health services (2%).

Table 9: MoH's professional/occupational group
Source: Ministry of Finance's payroll

MoH professional groups/ work areas	M	F	*Total*	% M	% F	% Total
Nursing	128	479	607*	21%	79%	45%
Hospital support services (HSS)	211	98	309	68%	32%	23%
Corporate support (CS)	42	79	121	35%	65%	9%
Physicians/doctors	40	37	77	52%	48%	6%
Dental services	23	25	48	48%	52%	4%
Health promotion, enforcement and surveillance (HPES)	22	27	49	45%	55%	4%
Laboratory services	16	20	36	44%	56%	3%
Medical imaging and radiology (MIR) services	18	16	34	53%	47%	3%
Pharmaceutical services	13	15	28	46%	54%	2%
Other allied health service (OAHS)	12	10	22	55%	45%	2%
Management	8	9	17	47%	53%	1%
Total	***533***	***815***	***1348***	***40%***	***60%***	***100%***

Note: Hospital support services (HSS) – include domestic assistants/cleaners, security, kitchen, porters, medical records, and transport). Corporate support (CS) – includes strategic policy and planning, research, legal, information management, finance, auditing, HR, procurement, sector coordination, administration, registrar, quality assurance and professional development – all those work areas concerning the policy, governance, regulatory, administration and corporate support of health. Other allied health service (OAHS) includes those working in physiotherapy, prosthetic and orthotics, mobility services, dietary services, social services, and biomedical services.
** This total number of the nursing profession includes a total of 46 Auxiliary Nurse Assistants who are working as Nurse Aids or Health Assistants. Their roles and definitions in the nursing profession or any other healthcare profession (e.g. OAHS) is not yet finalised and is under consideration.*

Figure 30: MoH's professional/occupational groups
Source: Ministry of Finance's payroll



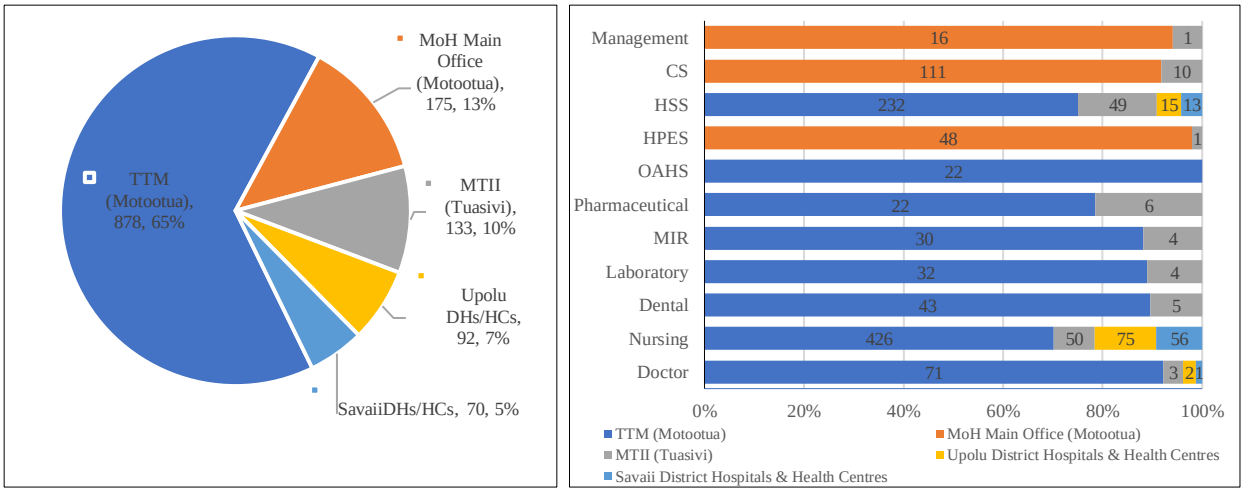
2.2.8. Health workers distribution by location

Table 10 and Figure 31 give the distribution of the MoH's workers across the two main hospitals (TTM and MTII) as well as the district hospitals (DHs) and health centres (HCs). Of the total MoH workforce, 78% are located with the TTM Hospital and the MoH main office at Motootua. Only 10% are working at the MTII hospital including the Savaii's Tuasivi administration office. While 6% are working in the Upolu DHs and HCs and another 6% in the Savaii DHs and HCs. The majority of workers in the DHs and HCs are nurses, with a few HSS staff (i.e. drivers, security personnel and domestic assistants/cleaners).

Table 10: MoH's health workers distribution by location
Source: Ministry of Finance's payroll

	TTM Hospital (Motootua)		MoH Main Office (Motootua)		MTII Hospital (Tuasivi)		Upolu DHs/HCs		Savaii DHs/HCs		Total
Doctor	71	92%			3	4%	2	3%	1	1%	**77**
Nursing	426	70%			50	8%	75	12%	56	9%	**607**
Dental Services	43	90%			5	10%					**48**
Laboratory Services	32	89%			4	11%					**36**
MIR	30	88%			4	12%					**34**
Pharmaceutical services	22	79%			6	21%					**28**
OAHS	22	100%									**22**
HPES			48	98%	1	2%					**49**
HSS	232	75%			49	16%	15	5%	13	4%	**309**
CS			111	92%	10	8%					**121**
Management			16	94%	1	6%					**17**
Total	**878**	**65%**	**175**	**13%**	**133**	**10%**	**92**	**7%**	**70**	**5%**	**1348**

Figure 31: MoH's health workers distribution by location
Source: Ministry of Finance's payroll

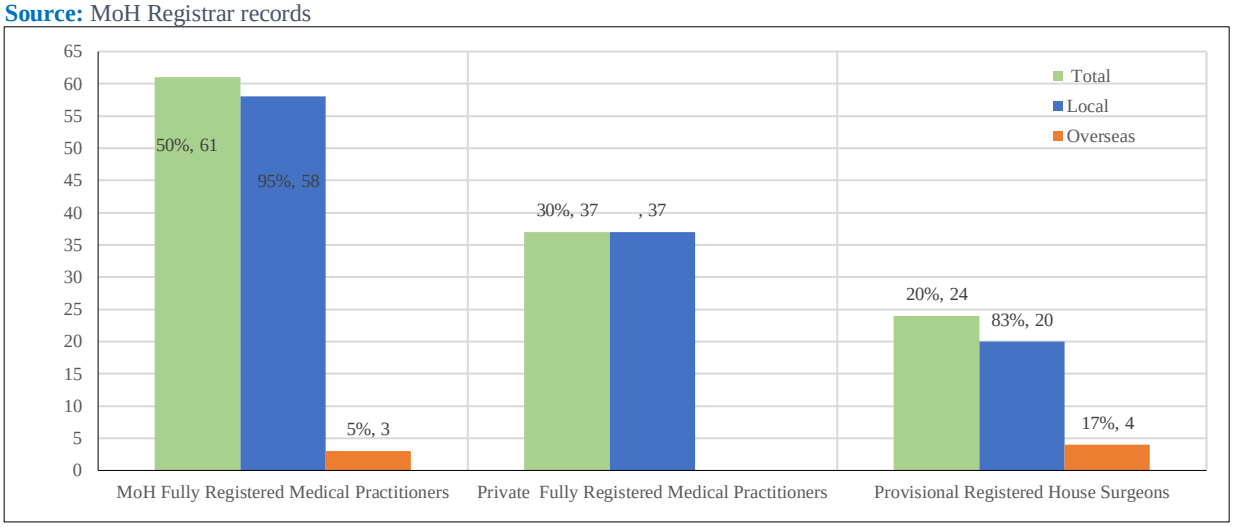


2.3. Health workers in the private sector and civil society sector

2.3.1. Registered medical practitioners in Samoa

Data/information about the total number and profile of health workers working in the private and civil society sectors are not available. The only information that was made available is the number of health professionals that were issued with practicing certificates by the MoH as at September 2019. Figure 32 gives the 122 total number of (fully and provisional) registered medical practitioners as at September 2019. Of that 122 total number of registered medical practitioners in Samoa, 61 (or 50%) fully registered medical practitioners are working in the MoH while 37 (or 30%) are working in the private sector. The other 20% (or 24) are provisionally registered House Surgeons working in the MoH. The September 2019 MoH Registry recorded a total of 3 overseas fully registered medical practitioners and 4 overseas house surgeons working in the MoH.

Figure 32: Registered Medical Practitioners, Sept 2019
Source: MoH Registrar records



2.3.1. Medical practitioners - areas of specialisation

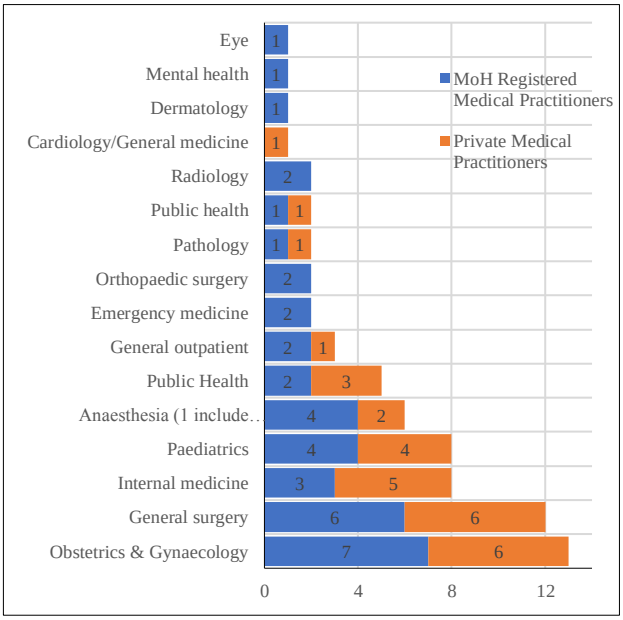
Table 11 gives the areas of specialisation of the 115 local medical practitioners (excluding the 7 overseas doctors). Figure 33 gives the areas of specialisation of the 95 registered medical practitioners (excluding the house surgeons who are undertaking their internships with the MoH and have not undertaken any specialisations). Of the 95 fully registered medical doctors, the records show a total of 69 registered medical practitioners who have undertaken a postgraduate degree in specialised areas of medicine. While 26 have not undertaken any postgraduate studies and have able to obtain only the basic medical bachelor degree and are hence operating as general practitioners.

Of the 95 local fully registered medical doctors, the obstetrics and gynaecology area has the highest number of specialised doctors equating to 13 (or 14%) doctors. Next is general surgery, where 12 (or 13%) doctors have a specialisation in that area. Areas where there are only 1 specialised doctor are the eye, mental health, dermatology and cardiology. Two doctors have undertaken attachments in radiology and are considering undertaking formal qualifications in this radiology. Similarly, 1 doctor is near completion of a postgraduate diploma in dermatology.

Table 11: Medical practitioners in Samoa, September 2019
Source: MoH Registrar records

Specialty	MoH	Private	House Surgeons	Total	% MoH + Private
Obstetrics & Gynaecology	7	6		13	14%
General surgery	6	6		12	13%
Internal medicine	3	5		8	8%
Paediatrics	4	4		8	8%
Anaesthesia (1with Intensive Care)	4	2		6	6%
Public Health	2	3		5	5%
General outpatient	2	1		3	3%
Emergency medicine	2			2	2%
Orthopaedic surgery	2			2	2%
Pathology	1	1		2	2%
Public health	1	1		2	2%
Radiology	2			2	2%
Cardiology / General medicine		1		1	1%
Dermatology	1			1	1%
Mental health	1			1	1%
Eye	1			1	1%
No speciality	19	7	20	46	28%
Total	58	37	20	115	
	96		19		

Figure 33: Medical practitioners in Samoa, Sept 2019
Source: MoH Registrar records



2.3.2. Nurses, dentists and pharmacists

Table 12 gives the total number of nurses as per information obtained from the MoH Healthcare Professional Registrar, those who have been issued with a practising certificate as at September 2019. Of some 445 nurses registered by the Registrar, 75% are working in the MoH and 4% are working in the National Kidney Foundation. While 2% are working in NGOs such as the Samoa Family Health Association, Samoa Cancer Society and Mapuifagalele Elderly Home. A few (3) are working at the local national universities. A total of 18% (or 78 nurses) are registered but no records was provided about their employment status. It is mostly likely that most or all of these nurses are working in the MoH.

	EN	RN	Total	%	
MoH	60	274	334	75%	80%
National Kidney Foundation	3	17	20	4%	
Samoa Family Health Association (SFHA)	1	6	7	2%	2%
Samoa Cancer Society		2	2	0.4%	
Mapuifagalele Elderly Home		1	1	0.2%	
National University of Samoa		2	2	0.4%	0.7%
University of the South Pacific		1	1	0.2%	
Not specify	3	75	78	18%	18%
Total	67	378	445	100%	100%

Table 12: Nurses with a practising certificate, Sept 2019
Source: MoH Registrar records

Figure 34 gives the 17 total number of qualified dentists and 13 total number of qualified pharmacists registered (with the MoH) to practice in Samoa as at September 2019. There are more dentists (13 or 76%) working in the public sector (in MoH), than in the private sector (only 3 or 18%). One (1) dentist is working in the Pesega Mormon Dental Clinic. However, for the pharmacists, the majority (77% or 10 out of 13 total pharmacists in Samoa) are in the private sector, working in private pharmacies, while only 3 (23%) are working in the public sector (with MoH).

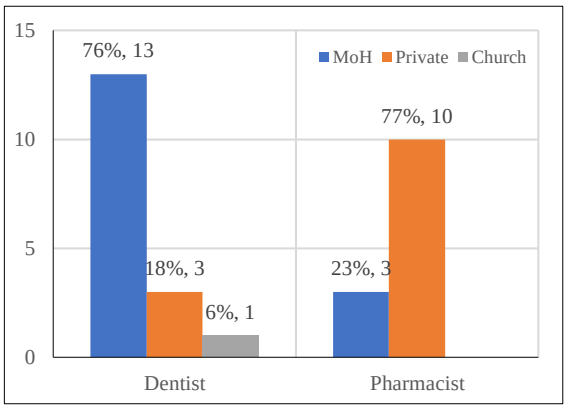


Figure 34: Registered dentists and pharmacists, Sept 2019
Source: MoH Registrar records

2.3.3. Other workers

There is no registration records of other allied health workers such as those working in laboratory, physiotherapy, biomedical and other health services. There is no other laboratory service in Samoa except the one that is operated by the MoH. There is one recently established private ultrasound services. Goshen, a NGO works closely with the MoH in the provisions of mental health services.

In the traditional or informal (village-based) sector, traditional healers (*fofo Samoa* and *taulasea*) and traditional birth attendants (*faatosaga*) play important roles in the provisions of primary health care for local people. However, given that they are not yet registered with the MoH, there are no records to enable a complete profiling of those working in the traditional setting.

3. HEALTH WORKFORCE – SUPPLY AND DEMAND ANALYSIS

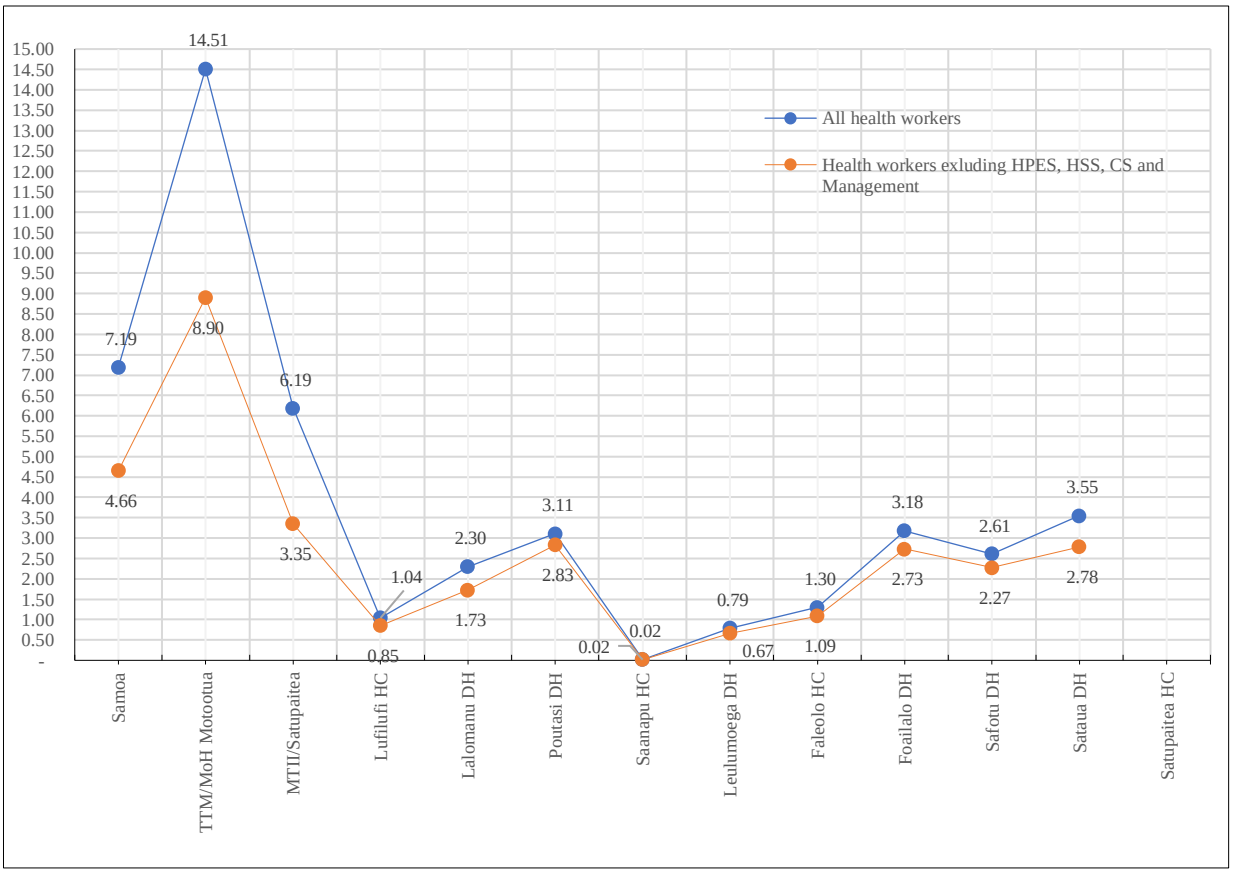
3.1. National health worker density

According to the Ministry of Finance's payroll as at 4th of September 2019, the total MoH's active health workers (including those in corporate support areas) was 1,348. Based on information made available, there were 61 health workers in the private sector and non-governmental organisations (37 of which are medical practitioners). This brings the total number of health workers in the formal setting in Samoa to 1,409 in total. This means that Samoa health worker density is 71.90 per 10,000 population or 7.19 per 1,000 population. **Annex 1A** gives the full details about the health worker density across different health professional/occupational groups.

According to the health workers standard set by the WHO, the ratio of 4.45 doctors, nurses and midwives per 1,000 population is the minimum health worker density, representing the needs for health workers to meet the Sustainable Development Goals (SDG) index threshold. Based on this global standard, Samoa's health workers density of 7.19 per 1,000 population is above the 4.45 standard set by the WHO (see Figure 35).

However, the 7.19 health workers to 1,000 population must be interpreted carefully as it includes corporate and hospital support service workers as well management staff. If these non-clinical service workers (those in the MoH management, HPES, HSS and CS) are excluded, Samoa's density is 46.59 per 10,000 or 4.66 per 1,000 population (see **Annex 1B**). This ratio includes the allied health workers (i.e. those in the dental, laboratory, MIR, pharmacy and other allied health services).

Figure 35: Health worker density per 1,000 population - hospitals and health centres
Source: Ministry of Finance payroll, MoH Registry, Census 2016



3.1.1. Sub-national health worker density

To determine the geographical distribution of health workers, there is a need to look at the health workers density based on the number of health workers per population of the residential or geographical areas covered by the existing national and district hospitals (DHs) and health centres (HCs) (see **Annex 1A** & **Annex 1B**).

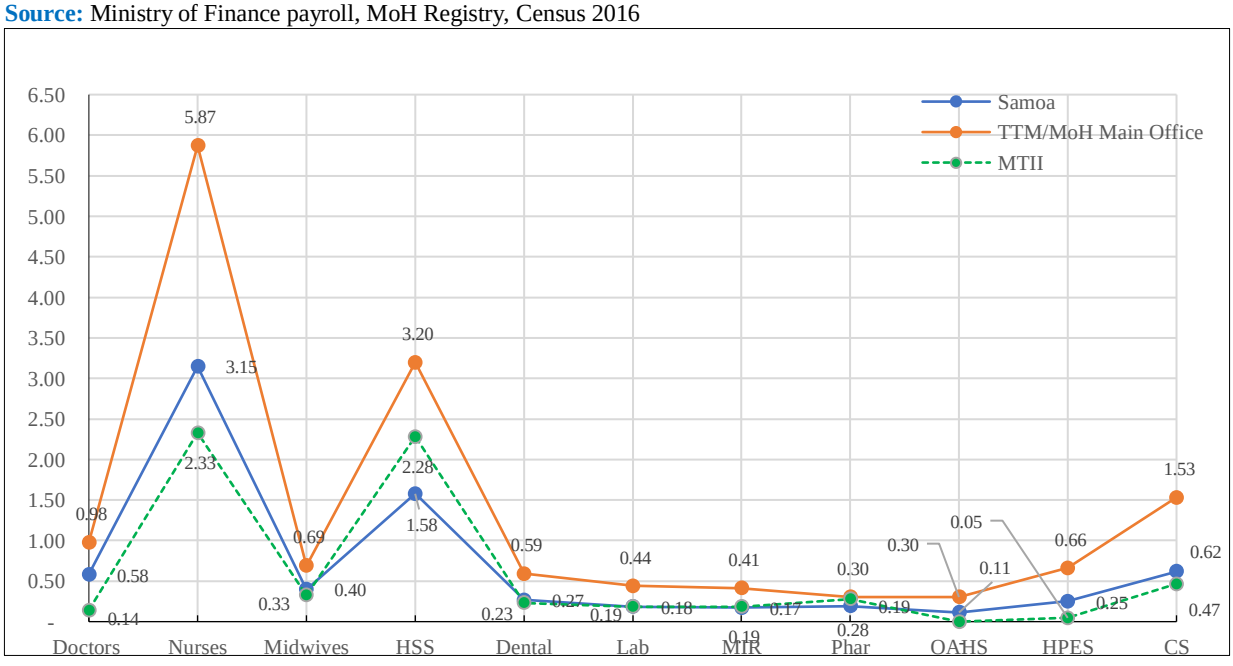
Figure 34 gives the health worker density for the TTM hospital at Motootua, MTII hospital at Tuasivi, 12 DHs in Upolu and Savaii and 4 HCs. It shows that while the **national** health worker density (i.e. Samoa as a whole) is 4.66 per 1,000 population, the health worker density for the TTM hospital/MoH Motootua main office is much higher (8.43 health workers per 1,000 population) than that for the whole of Samoa. It shows that 10,000 people in the urban areas have access to 8.43 health workers, while 10,000 people in Samoa overall have access to only **4.66** health workers - reflecting a much more TTM hospital/MoH main office concentrated health workforce and services – which is biased towards the urban based population.

The Savaii main MTII hospital has a health worker density of **3.35** health workers per 1,000 population. All DHs and HCs have a lower health worker density of around 1 to 2 per 1,000 population. The Leulumoega DH has the lowest ratio of 0.67 health workers per 1,000 population, followed by Lufilufi HC which has a ratio of 0.94 health workers per 1,000 population. The Leulumoega DH and Lufilufi HC cover a large population of people living near the Apia urban areas. The health worker density in the DHs and one HC in Savaii are higher than the DHs and HCs in Upolu.

3.1.2. Professional/occupational density

Figure 36 further gives the health worker density of the healthcare professions or occupational groups. The nursing have the highest ratio of worker per 1,000 population while the lowest ratio is noted in the areas of health promotion, enforcement and surveillance (i.e. public health workers). Interestingly, the worker density (per 1,000 population) in the corporate support (CS) and hospital support services (HSS) areas are much higher (which are 0.62 for CS and 1.58 for HSS) than in the clinical and allied health service areas (laboratory, pharmaceutical, dental, medical imaging and radiology, and other allied health services) which are all below a ratio of 1 worker per 1,000 population (see **Annex 1A**).

Figure 36: Health worker density per 1,000 population by occupational groups
Source: Ministry of Finance payroll, MoH Registry, Census 2016



3.1.3. Doctor and nurse density

Figure 37 and Figure 38 gives the doctor and nurse (with midwives included) density in Samoa. While the national nurse density is 3.04 nurses per 1,000 population in Samoa, the medical doctor density is only 0.58 doctors per 1,000 people, which means that there is only a half doctor serving a 1,000 (or 5.82 doctors per 10,000) population in Samoa. Similar to the analysis presented in section 3.1.2 above, the TTM Hospital or the MoH main office at Motootua has the highest doctor and nurse density of 5.40 nurses and 0.98 (or 1) doctor per 1,000 population (see **Annex 1A**). Figure 38 further shows that the midwife density in Samoa is 0.42 midwives per 1,000 population.

Figure 37: Doctor density in Samoa
Source: Ministry of Finance payroll, MoH Registry, Census 2016

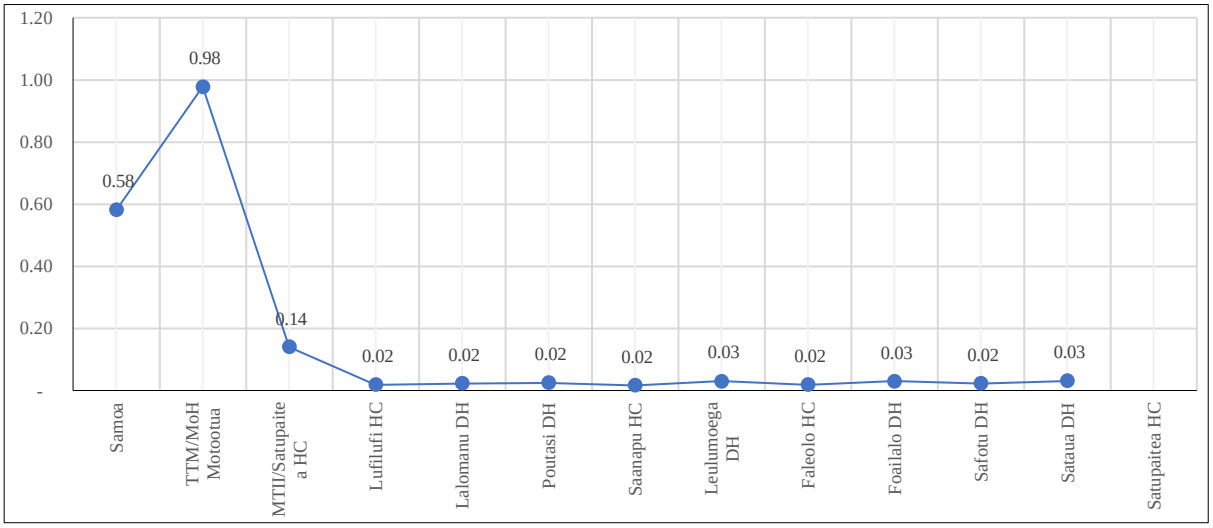
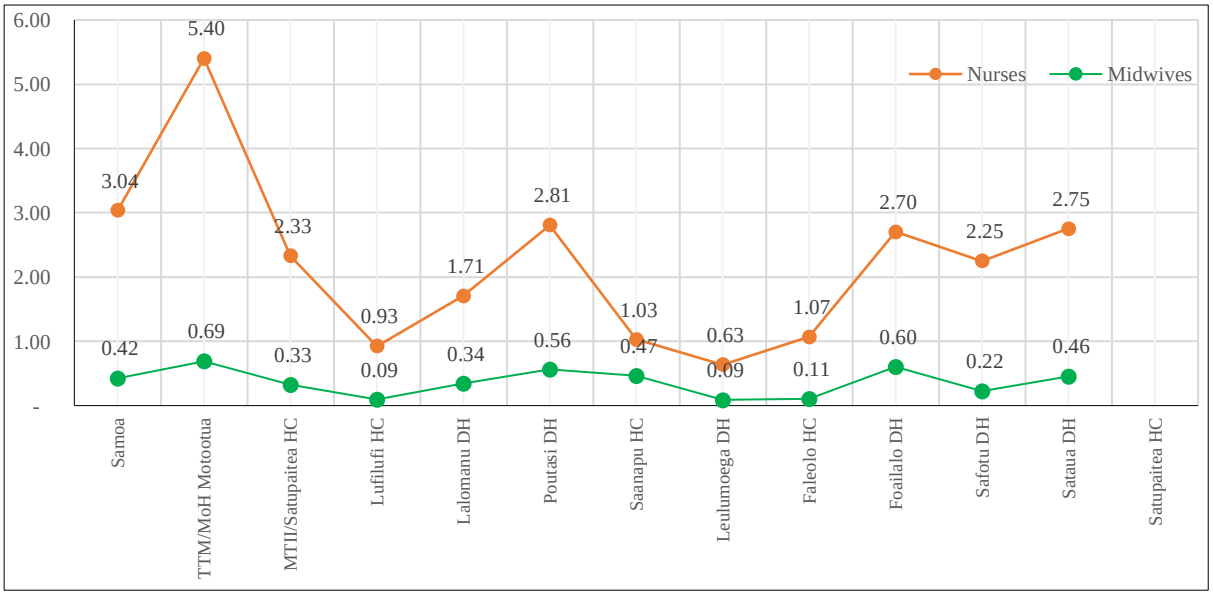


Figure 38: Nurse density in Samoa
Source: Ministry of Finance payroll, MoH Registry, Census 2016



3.1.4. Medical specialist density

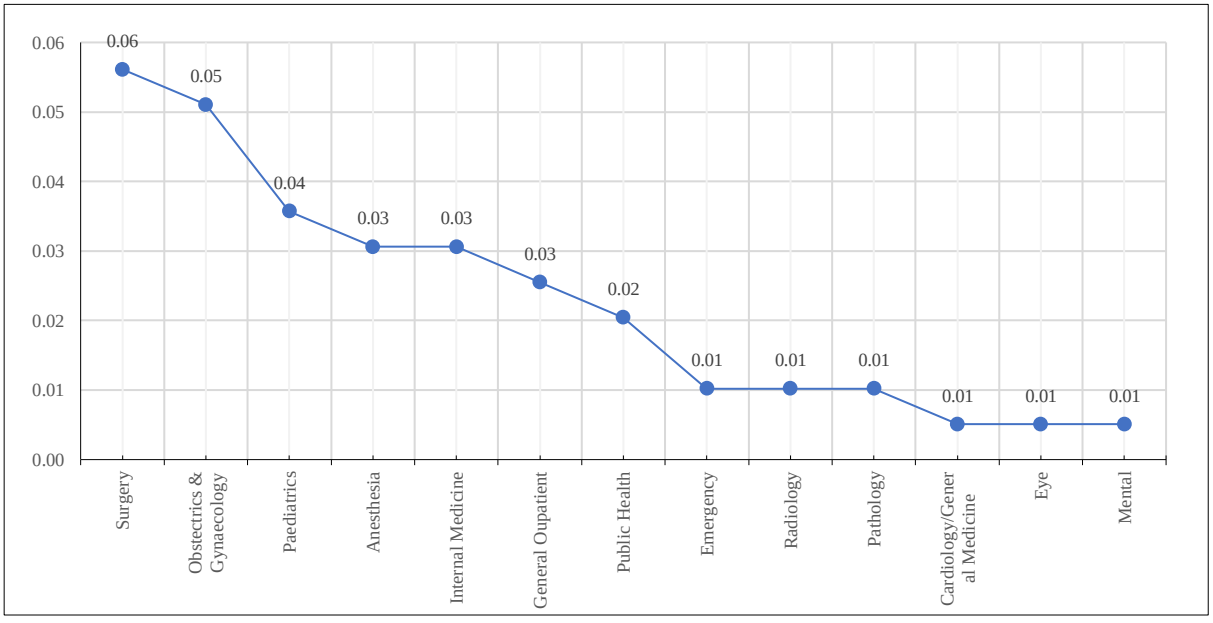
Table 13 and Figure 39 gives the ratio of medical doctor specialists per 1,000 and 10,000 population across the different areas of the medical field. Surgery and obstetrics and gynaecology have the highest ratio of 0.56 and 0.51 per 10,000 or 0.06 and 0.05 per 1,000 population respectively. However, doctors may not necessarily worked in their specialised areas (e.g. surgery, anaesthesia, and public health) as those working in the private sector generally operate as general practitioners

(GPs), unless they work under a specialised clinical unit with the main referral hospitals - such as the one doctor being contracted to work as a surgeon with the TTM. Clinical areas such as mental health, pathology, radiology, eye and others have only 1 or 2 specialised doctors servicing Samoa's total population of 195,979 people. Also, of Samoa's total population, 37% are at the ages of 14 years and below (see section 1.4.1.3). However there are only 7 paediatric doctors in Samoa or 0.36 doctors per 10,000 population of Samoa.

Table 13: Density of medical specialists in Samoa
Source: Ministry of Finance payroll, MoH Registry, Census 2016

Fully registered medical practitioners in specialised areas				Ratio (per 1,000 population)	Ratio (per 10,000 population)
Area of Specialisation	MoH	Operate as private GP	Total		
Surgery	6	5	11	0.06	0.56
Obstetrics & Gynaecology	5	5	10	0.05	0.51
Paediatrics	3	4	7	0.04	0.36
Anaesthesia	4	2	6	0.03	0.31
Internal Medicine	1	5	6	0.03	0.31
General Outpatient	4	1	5	0.03	0.26
Public Health	1	3	4	0.02	0.20
Emergency	2		2	0.01	0.10
Radiology	2		2	0.01	0.10
Pathology	1	1	2	0.01	0.10
Cardiology/General Medicine		1	1	0.01	0.05
Eye	1		1	0.01	0.05
Mental	1		1	0.01	0.05
Total	***31***	***27***	***58***	***0.30***	***2.96***
Others					
On study	3		3		
on leave	1		1		
Operate as a GP		7	7		
Academic		3	3		
MoH Management	3		3		
Resigned (recently)	5		5		
No area of specialty yet	15		15		
Total	***27***	***10***	***37***		
Grant Total	**58**	**37**	**95**		
Samoa total population is 195,979					

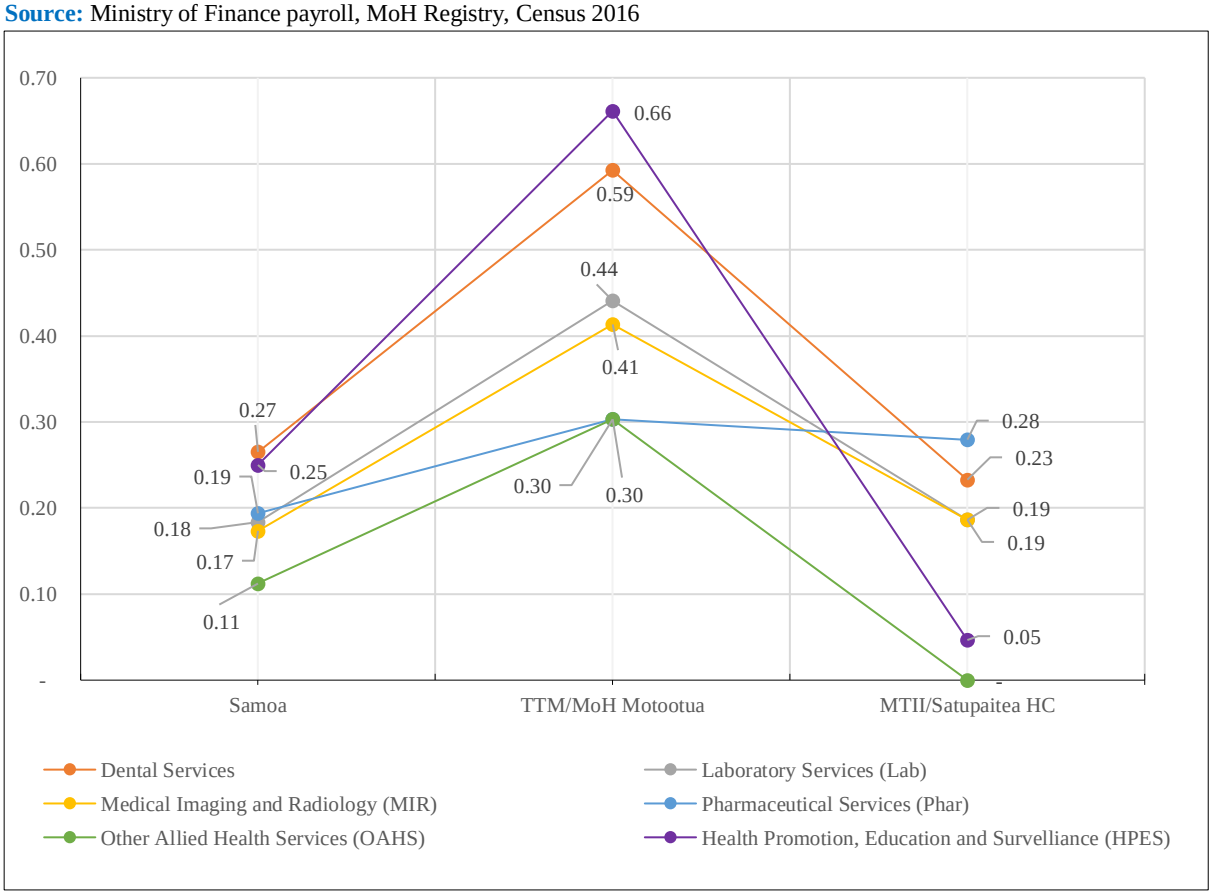
Figure 39: Density of medical specialists in Samoa
Source: Ministry of Finance payroll, MoH Registry, Census 2016



3.1.5. Allied health worker density

Figure 40 gives the allied health worker density in Samoa (national) and the two main hospitals in Motootua (TTM) and Tuasivi (MTII). There are no allocated allied health workers in the DHs and HCs. Consistent with the analysis provided in section 3.1.2 above, the TTM hospital or MoH main office in Motootua has the highest density of allied health worker across the different areas of allied health services. The MTII hospital has a near to zero density of allied health worker.

Figure 40: Allied health worker density in Samoa
Source: Ministry of Finance payroll, MoH Registry, Census 2016



3.2. Supply and demand dimensions

3.2.1. Workload

Table 14 gives the existing numbers and required numbers of health workers across each core service areas – at TTM hospital, MTII hospital, DHs and HCs. These numbers were obtained from the consultations held with staff of the MoH across all section/units and hospitals.

The numbers of outpatient/clinic consultations, examinations, tests, x-rays and ultrasounds, suspensions, orders, specimens taken and autopsies undertaken and completed are some of the indicators often used for staff workload. These are often used to assess existing and future workforce demands and gaps, areas where workforce numbers are mostly needed, and where workforce development priorities are required.

Table 14: Indicators of workload and staff numbers – existing and required
Source: Ministry of Finance payroll, MoH Registry, Census 2016

	Pop	Villages #	No. consultations, examinations, tests, specimens, x-rays, orders, dispensaries, etc.	Admissions, surgeries, deliveries, etc.	Current staff numbers		Comfortable staff numbers required	
					# of doctors	# of nurses/ other staff	Doctors	Nurses/other staff
TTM/ Motootua	72,574	99						
– Outpatient			8,547		5 = 1HOD, 1SR, 2R, 1R (on Training)	12 = 1NM, 1SNS, 8RN, 2EN	7 = 1HoD, 2SR, 5R	16 = 1NM, 1SNS, 12RN, 2EN
– Emergency			2,250		6 = 2SRs, 4R	31 = 1NM, 1SNS, 21RN, 5EN, 3AN	3 doctors per shift	
– Paediatric			2,434	284	6 = 1HoD, 1SR, 1SR (on training), 3R	23 = 1NM, 1SNS, 17RN, 3EN, 1AN	1HOD, 2CS, 2SR, 7R	20RN
– Acute 7/ Surgical Unit			482	194	7 = 1HoD, 3SMO, 1SR, 1R, 1SR on training,	18 = 1NM, 1SNS, 10RN, 3EN, 3AN	10-12 doctors	5/6 RN per shift or 25 to 30RN in total
– Acute 8				159	5 = 1SR, 3R, 1R (on training)	20 = 1NM, 1 SNS, 18RN, 3 EN, 3AN	1HOD, 2CS, 2SRs, 3R	5RN and 2EN per shift
– ICU				88		25 = 1NM, 1SNS, 21RN, 2AN (3RN per shift)	1 HOD, 2SR, 2R	24 = 1NM, 1SNS, 32RN, 2AN (4RN per shift)
– Anaesthesia			1,305		4 = 3CS (2 locals & 1 Chinese), 4Rs (1 on overseas training)		8 doctors (include 3 CS)	
– OT				2,316		23 = 1NM, 20RN, 2AN		
– Mental			168		1 MO	10 = 9RN, 1AN	1HoD, 1SR, 1R	12RN, 1AN
– Obstetrics & Gynaecology			899	481	5 = 1HoD, 1CS, 1SMO/Specialist, 2SRs	51 = 1NM, 1SNS, 31MW (6PT), 13RN, 4EN, 3AN	1HOD, 2CS, 2SMO/SR, 2R	60RN
– Eye			540		1 doctor	2 RN with eye training, 2RN (1retiree, 1junior), 1RN on training	3 doctors	2 additional RN
– ENT			699		1SMO	2 RNs	1 HoD, 2 CSs, 1R, 1HS (next 10 yrs.)	
– Dental services			4,327		11 dentists	22Dental therapist, 2DentalTechnicians, 1dental hygienist	25 dentists	30Dental therapist, 5DentalTechnician, 5dental hygienist
– Laboratory services			20,001		3 pathologies = 1 local and 2 overseas.	29 = 1 Manager, 4 scientists, 12 technicians, 7 lab assistants, 2 support staff. another 3 technicians on training	3 local pathologists (1 is for Savaii)	51 = 29 (day), 15 (evening) & 7 (midnight) shift
– Pharmaceutical services			14,984		22 staff = 3 pharmacists, rests are technicians/ assistants			7/8 pharmacists.
– MIR services			5,276		3 radiologists - 2 locals (but not fully trained) and 1 is an overseas doctor	30 staff = 10 radiographers, 16 assistants/technicians & 4admin staff	4 radiologists - 3TTM, 1community	
– Other Allied health (e.g. physiotherapy/ dietary, sessions)			272			3physio		10 physio (for each ward and for outreach services).
➢ Nutrition/ dietary						3 Nutritionists		3 Nutritionists for TTM, 2 for Savaii, 1 for each DH and HC
➢ Biomedical						2 biomedical engineers, 1 technician		Need 4 Biomedical Engineers and 3 technicians for 2029.
➢ Prosthetic/ orthotic						1prosthetic/orthotic technician, 1eye technician		
➢ Social services						2 social workers		Need 5 trained social workers
– Public Health			224			49 staff in HPES (20 with qualification in PH fields)		
MTII	13,566	36						
– Outpatient and emergency			5,075		1R, 2 HS	50 = 1PN, 1NM, 1SNS, 17RNs, 7MW, 18EN, 5AN	1CS,1 SR, 2R	30RN & 10EN for clinical, 10RN & 10EN for community
– Obstetrics & Gynaecology			361				1CS, 1SR, 2R	
– Paediatrics			131				1CS, 1SR, 2R	

– Inpatient (all wards)				381			1Anaesthetic, 5Surgeons	
– Community							2R	
– Eye							2 eye doctors	5RNs
– ENT							2 ENT doctors	5RNs
– Dental services			399		2 dentists	3dental therapist/ assistants	3dentists (1MTII, 2DHs & outreach)	5dental therapist/ technician
– Laboratory services			5,768			1Principal, 2technicians, 2assistants	1 pathologist	1Principal, 2senior, 2tech, 4assistant
– MIR services			511.5			4radiography/assistants	1radiologist	7radiographers
– Pharmaceutical						6technicians/assistants		3pharmacists
– Outreach visits			15					
DHs/HCs								
– Lufilufi HC	10,810	24	378		1 day/week of 1 doctor	9 = 1NM/MW, 5RN, 2EN, 1AN	1 FT doctor	13 = 1 NM, 6RN, 1MW, 4EN, 1AN
– Lalomanu DH	8,796	22	366		1 day/week of 1 doctor	15 = 7RN, 3 MW, 2EN, 3AN	2 FT doctor	20 = 1NM, 8RN, 2MW, 4EN
– Poutasi DH	7,126	19	521		1 day/week of 1 doctor	20 = 1NM, 1SNS, 10RN, 4MW, 2EN, 2AN	2 FT doctor	20 = 1NM, 8RN, 2MW, 4EN
– Saanapu HC	10,699	21	531		1 day/week of 1 doctor		1 FT doctor	20 = 1NM, 8RN, 2MW, 4EN
– Leulumoega DH	33,072	23	820		1 doctor	21 = 1NM, 13RN, 3MW, 4EN	2 FT doctor	26 = 1 NM, 1 SNS, 10RN, 3 MW, 4EN
– Faleolo HC	9,342	28	255		1 day/week of 1 doctor	10 = 1NM, 3RN, 5EN, 1MW	1 FT doctor	12 = 1NM, 5RN, 5EN, 1MW
– Foailalo DH	6,657	14	540		1 day/week of 1 doctor	18 = 1NM, 1SNS, 9RN, 4MW, 3EN	2 FT doctor	20 = 1NM, 1SNS, 11RN, 4MW, 3EN
– Safotu DH	8,890	24	540		1 day/week of 1 doctor	20 = 1NM, 1SNS, 2MW, 9RN, 4EN, 3AN	2 FT doctor	23 = 1NM, 1SNS, 3MW, 11RN, 4EN, 3AN
– Sataua DH	6,543	14	650		1 day/week of 1 doctor	18 = 1NM, 1SNS, 3MW, 9RN, 3EN, 1AN	2 FT doctor	20 = 1NM, 1SNS, 11RN, 3MW, 3EN, 1AN
– Satupaitea HC	7,904	14	110		1 day/week of 1 doctor	5 = 5RN, 1EN (same nursing staff of the MTII)	1 FT doctor	32 = 16RN, 16EN
Upolu	152,419	236						
Savaii	43,560	102						

NM - Nurse Manager, SNS - Senior Nurse Specialist, RN - Registered Nurse, EN - Enrolled Nurse, AN - Auxiliary Nurse, MW - midwife/midwives. HS - House Surgeon, R - Registrar, SR - Senior Registrar, CS - Consultant Specialist, SMO - Senior Medical Officer, HoD - Head of Department/Unit. FT - Full time, PT - Part time.

Source: Data obtained from the August 2018 facility utilisation reports, consultation books, interviews conducted with staff, annual report 2016/2017, submissions provided from units/sections.

3.2.2. Supply

Almost 99% of medical doctors are now locally trained for the basic degree in medicine at the National University of Samoa's (NUS) Faculty of Medicine (FOM) and Oceania University of Medicine (OUM). However, postgraduate and master studies in the medical fields are not offered locally and most local doctors have to undertake them at overseas institutions, mostly on campus. There are some postgraduate studies that being offered online depending on arrangements made with the academic institutions.

All nurses are trained at the NUS's School of Nursing including the postgraduate study for the postgraduate diploma in midwifery. Courses for other nursing specialities (acute care, primary care, etc.) and other health areas such as dental and environmental health are no longer provided at the NUS as was the case in the past years. Postgraduate studies in other specialised areas of nursing are offered overseas, often in New Zealand and in Fiji. For instance, some MoH nurses are undertaking postgraduate studies in eye at the Fiji National University (FNU). Similarly, undergraduate and postgraduate studies in most allied health areas such as physiotherapy, environmental health, and nutrition are not available at local institutions.

Discussions are underway to consider the reintroduction and continuation of course programs for environmental health and nursing specialities including at the NUS Faculty of Health Science. This

is the same for the laboratory. FOM and OUM are also considering the development of postgraduate course programs in needed specialised areas of medicine within the next 5 to 10 years.

Table 15 gives an estimated numbers of the annual intake and graduates in medicine, nursing and other health areas based on evidence provided by informants during consultations. Actual numbers were not available. Discussions with the OUM Vice Chancellor (VC) confirm that there are currently four medical students with OMU. Another 4 students are confirmed to join OUM in February 2020 and hopefully another 4 students will enrol in July 2020. Since 2015 OUM has been offering 4 scholarships each year for Samoan students to study medicine at OUM. This means that by this year (2019) the total number of OUM scholarships is 20.

However, by 2019, only 7 scholarships have been taken by local students. The entry requirement for the OUM Doctor of Medicine (DOM) is a Bachelor of Science which means that the targeted entry point are matured students who are already working upon completion of their undergraduate degrees. The OUM DOM's curriculum is that during the first two years, students are required to take the online courses (theory) while working full time. When students reach their second year of the DOM, they must resign and work full time as medical students at a hospital in order to complete the practical clinical training. According to the OUM Vice Chancellor, this last two years of a full time 'medical student' requirement has discouraged local students to take up the DOM program. Most interested students' priority is to support their family and themselves financially and are therefore not willing to resign from their existing jobs to take up the OUM DOM scholarship program. The OUM scholarship cover tuitions only, there are no other financial support made available for OUM DOM students (see **Annex 5**).

For the FOM, its annual intake has been inconsistent, but on average, the annual number of enrolled students at FOM has been around 8. Discussions with the FOM Head of the School confirmed that there are 13 students in Year 1, 9 in Year 2, 8 in Year 3, seven in Year 4, 4 in Year 5 and 7 in Year 6 (final year). There are about 1 to 2 overseas enrolled students every year. The total annual intake at both the FOM and OUM is likely to be around 12 students, with a total of 10 medical students expected to graduate each year and work as House Surgeons at the MoH.

The intakes in specialised areas of medicine and nursing and including those taking undergraduate and postgraduate studies in allied health areas has been consistently around 1 to 2 students. The expected number of those graduating and returning to Samoa each year with a degree in specialised areas of heath as well as those with undergraduate degrees in the allied health areas is around 1 to 2 each year. The postgraduate diploma in midwifery is the only postgraduate course that is offered locally, hence has the highest number of the annual postgraduate intake for the nursing field.

Table 15: Estimated number of annual intakes and graduates in health areas
Source: Ministry of Finance payroll, interviews with MoH staff and health stakeholders

Areas	Estimated number of annual intake (enrolment)	Estimated number of annual graduates
Medicine doctors – House Surgeons	12	8-10
Medical specialists		
− Internal Medicine	1-2	1
− Anaesthesia	1-2	1
− Surgery (General, Orthopaedic, ENT, Endoscope, Urology)	1-2	1
− Paediatric	1-2	1
− Obstetrics & Gynaecology	1-2	1
− General medicine	1	1
− Emergency medicine	1-2	1
− Radiology	1	1
− Pathology	1	1
− Eye		
− Cardiology		
− Intensive Care		
Dentist	1-2	1

Dental Assistants		7
Registered Nurses	100	50
Nurse Specialists		
– Midwifery	5	2-3
– Acute Care		
– Primary Health Care		
– Paediatric	2 - 3	2
– Neonatal		
– ICU		
– Emergency		
– Eye	1 - 2	1
– Operating theatre	1 - 2	1
Health Environmentalist (Public Health, Health Promotion, Enforcement and Surveillance)	3	2
Nutritionists/Dieticians	1 - 2	1
Physiotherapists	1 - 2	1
Pharmacists	1 - 2	1
Laboratory scientists	1 - 2	1
Laboratory technicians	1 - 2	1
Radiographers	1 - 2	1
Sonographers	1 - 2	1
Mammographers	1 - 2	1
Biomedical engineers/technicians	1 - 2	1
Prosthetists and Orthotists		

3.2.3. Turnover

Table 16 and Figure 41 depict the staff turnover rates at the then National Health Service (NHS) for the years of 2011 to 2018 (data not available for 2019 and the then MoH). Using this data as baseline information for the existing MoH (given that 85% of MoH staff are NHS staff), the annual turnover rate for health workers at the MoH is around 8%.

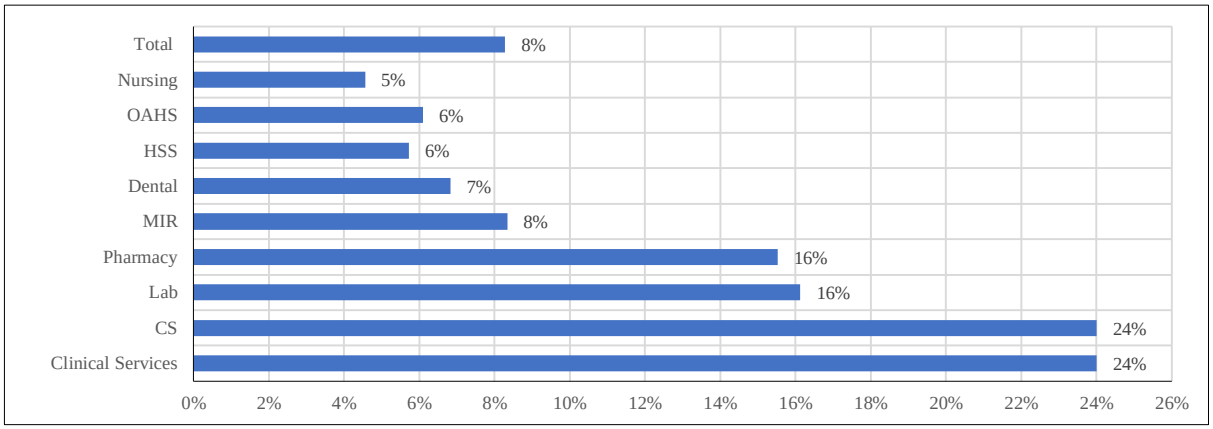
The highest turnover rates are seen in the clinical services and corporate support (CS) areas (24%) as well as in the laboratory and pharmaceutical services (16%). Competition exists in the private sector (e.g. private medical clinics and pharmacies) and other government organisations (e.g. Scientific Research Organisation of Samoa – SROS) to attract qualified people in the above services. Hence opportunities are available in the market for health workers in the medical services, pharmaceutical and laboratory services to move to other similar organisations outside the MoH.

However, for those in other MoH's health services such as in the medical imaging and radiology (MIR), dental services (e.g. for dental therapists/technicians), hospital support services (HSS) and other allied health services (OAHS), there are limited opportunities in the local labour and business market that could potentially allow for staff within those MoH's 'other health services' to move to, unless they move overseas. Hence opportunities need to be developed internally in the MoH for the career development of professional staff servicing these services.

Table 16: MoH staff turnover rates
Source: NHS Wage Easy Payroll System

	2011	2012	2013	2014	2015	2016	2017	2018	Average	No. staff	%
Clinical services	23	25	26	21	21	21	15`	12	19	81	24%
CS	15	14	14	5	19	17	16	19	15	61	24%
Laboratory	2	1		9	8	1	11	3	5	31	16%
Pharmacy	2		4	6	2	2	3	6	4	23	16%
MIR	2	1	3	3	2	4	2	3	3	30	8%
Dental	4		3	4	2	6	1	2	3	46	7%
HSS	17	18	10	15	11	5	11	10	12	212	6%
OAHS					7	5	9	9	8	123	6%
Nursing	8	16	17	22	33	22	34	20	22	472	5%
Total/Average	73	75	77	85	105	83	102	84	89	1079	8%
% (of 1079 NHS staff)	7%	7%	7%	8%	10%	8%	9%	7%	8%		

Figure 41: MoH staff turnover rates
Source: NHS Wage Easy Payroll System



According to the 2014 NHS workforce development plan, 35 total staff left the service in the last 7 years (from 2007 to 2013). There were 64 doctors (in total) at the NHS in 2014. This means and as further confirms from discussions with MoH staff that around 5 doctors resign from the service every year (on average) which equates to a turnover rate of 8%. This does not includes those who are away from the service on study leave. The turnover rate for nurses is around 5%.

3.2.4. Vacancies

The number of vacant positions and how long they have been vacant especially those in critical areas of the health can provide another indicator about the health HR/workforce needs. The MoH is still conducting a review of its organisational structure following the merge of the former MoH and NHS, and in consideration of positions that are needed to improve health services and to deliver the Ministry's corporate objectives and targets. As such, an up-to-date list of vacancies is not yet made available. Nevertheless, the list of vacant positions obtained from the MoH's 2019/2020 personnel budget (see **Annex 9**) gives some indication about existing vacancies in the MoH. Table 17 gives a summary of the total 306 vacancies listed in the MoH 2019/2020 personnel budget in July 2019.

There were 35 total vacant positions in the health medical/clinical areas – those positions that are needed to be occupied by medical doctors including dentists. The majority (14 or 10%) of those vacant positions are HoD/Medical Consultant Specialists. According to the participant narratives (see **Annex 5**), most of these HoD /Medical Consultant Specialist posts have been vacant for over 6 months to 1 year or more. The other areas of health where a lot of vacancies exist are the Nursing, HSS, Corporate Support, OAHS, laboratory services, and pharmaceutical services.

Table 17: MoH vacant positions in the 2019/2020 personnel budget
Source: MoH's 2019/2020 personnel budget

	Doctor/ Physician	Nursing	Dental	Laboratory Services	MIR	Pharmaceutical Services	HPES	HSS	OAHS	CS	Total
Management	1	1								5	**7**
HoD/Consultant Specialist	14										**14**
Senior Medical Officer	3										**3**
Medical Officer	1										**1**
Senior Registrar	2										**2**
Registrar	6										**6**
House Surgeon	3										**3**
Dentist	5										**5**
Middle Manager/ Principal Officer/ Specialist		6	2	4	2	2		3	2	10	**31**
Senior Officer			5	9	1	8	2	5	9	12	**51**
RN		6									**6**
Officer			3	2	1	3	2	11	8	3	**33**
Auxiliary Health Nurse		20									**20**
Clerk				4	3	3	3	64	4	43	**124**
Total	**35**	**33**	**10**	**19**	**7**	**16**	**7**	**83**	**23**	**73**	**306**

3.3. Assessing health workforce development in service areas

3.3.1. Tupua Tamasese Meaole (TTM) Hospital - medical clinical services

Section 3.1.3 above confirms that in Samoa, the 'doctor to population' ratio is 0.58 to 1,000 or 5.8 to 10,000 people. This is way below the WHO standard - which is 4.45 to 1,000 people (see section 3.1) or 1 to 600 people according to the MoH (see NHS, 2014, p.11). The shortage of doctors/physicians in Samoa is a well-known issue which will continue to be the case for Samoa. The MoH's vision is to revive public health which will involve ensuring that within the next 5 to 10 years, every district hospital will be staffed by a permanent full time doctor (see **Annex 5**). At the same time, the two main referral hospitals (TTM & MTII) need to be resourced continuously with general medical practitioners and specialists in all key clinical areas.

The key challenge with the achievement of that vision is how Samoa can increase the number of medical graduates as well as retaining a sufficient pool of doctors to maintain the services across all district hospitals, health centres, and clinical specialised areas at the main two hospitals. While the annual number of medical graduates has increased in recent years with the establishment of two local medical schools (FOM and OUM), the major concern for the health service is the limited number of senior doctors working in the hospitals (see section 2.2.3.1). More than half of doctors at MoH are young with less than 5 years of practical working experiences (see section 2.2.4).

Around 4 to 5 doctors leave the MoH every year (see section 3.2.3). Thus if the annual rate of medical graduates is 8 to 10 doctors, then Samoa is training 4 to 5 doctors who are then expected to leave the public health service every year. According to the NHS (2014, p. 11), a total of 35 doctors left the public service within a period of 7 years (from 2007 to 2013). While there is always hope that they will return to Samoa in the near future, anecdotal evidence shows that occasionally only 1 or 2 doctors return to Samoa and serve in the health system. Senior doctors are specialists and the medical services required senior and experienced doctors to provide specialised clinical services as well as the mentoring, coaching and teaching requirements for the incoming new and young doctors and nurses.

Further, it is difficult to argue that one area of the clinical services is overstaffed or understaffed when all areas are seen as understaffed (see sections 3.1.3 and 3.1.4). When considering the health demographics and trends of Samoa's population (high birth rates, rising NCDs and communicable diseases, and a young population of 50% below the age of 21 years) and given Samoa's vulnerability, small economy and limited pool of available resources (see sections 1.4), it is wise and common sense that Samoa focuses on the revival and strengthening of public health and primary health as a priority.

Based on the existing number of doctors in each specialised area, the priority areas for postgraduate trainings are in the areas where there is only 1 or 2 doctors who is in-country – which are mental, eye, cardiology, radiology and emergency. However, the availability of doctors that exists in Samoa to provide medical services in specialised areas depends on the utilisation levels of those available doctors to cater for the needed services and demands. For instance, while there are 11 doctors with some specialisation in the different areas of surgery, only 6 are working in the MoH while the other 5 are in the private sector. Only one private surgeon is being contracted to the MoH to assist with complicated surgical cases. Similarly, while there are 6 doctors in the internal medicine area in Samoa, only one is currently working in the TTM hospital. To assist with the high demand and workload in the main hospitals, there is a great need to utilise available private doctors in areas of high demand.

3.3.1.1. General outpatient services

At the time of the consultations in September 2019, there were five doctors working in the general outpatient services (GOS) at TTM – 1 HoD, 1 Senior Registrar and 4 Registrars. One Registrar is on overseas training for dermatology, which means only 4 full time doctors are working in the GOS.

There were 5 House Surgeons undertaking a monthly rotation with the GOS at the time. The GOS doctors are also rotated to service the hospital clinics and the DHs and HCs, which means that if two Registrars are allocated to the DHs/HCs, then only 2 Registrars are able to service the GOS. Doctors positioned in other departments are rotated to the GOS to cover for the after hour shift. In addition to the medical doctors, 10 RNs and 2 enrolled nurses were working in the GOS.

According to the 2016/2017 NHS Annual Report (NHS, 2017), the monthly number of outpatient consultations at TTM is about 8,547, which equate to 2,849 patients seen by one doctor per month or 95 patients per day. However, discussions with the GOS staff and the GOS consultations book register confirm that the number of patients seen by the GOS in an 8 hours shift can go up to 150 in total. The GOS is open from 8am to 11pm and staff work according to two shifts: 8am to 4pm and 4pm to 12am. While the GOS closes at 11pm, patients can be seen up to 12am in the morning and staff can stay up to 1am to administer any late treatment given to the patients, to await the admission of patients to the wards, and to do proper referrals for the next shift.

Discussions with staff and the survey findings highlighted the following issues for the GOS:

- Only two of the RNs are senior - the rest have less than 5 years of working experiences.
- Compare to other medical areas such as surgical and obstetrics and gynaecology, general outpatient (which requires a general medicine specialisation) at the hospitals is not an area that is attracted to many doctors to take up as a medical career.
- GOS is an area where there are limited trainings especially in specialised medical and nursing areas.
- Reducing the number of rural patients coming to the TTM GOS and for them to consult their nearest DHs/HCs has been difficult to achieve due to the absence of full time doctors and availability of other health services (pharmacy, laboratory, etc.) at the DHs/HCs.
- There is a need to relook at the working conditions and entitlements of doctors and nurses at GOS (together with other units) given that there are hours actually worked by staff but are not compensated for under existing HR practices of the MoH.
- The comfortable number of doctors and nurses required to service the GOS is 7 doctors and 16 RNs (see Table 14).

3.3.1.2. Accident and emergency department

There were 6 doctors (2 Senior Registrars and 4 Registrars) working in the accident and emergency department (AED) at the time of the consultations in September 2019 – one was assisting the Leulumoega DH at the time. There are 23 RNs and 5 ENs and 3 Auxiliary Nurse Assistants working in the AED. Only the second year House Surgeons are rotated to the AED. The AED HoD has been vacant since 2015. No one applied when the post was first advertised and the post has not been re-advertised. The low salary rate of the post (compared to that of the previous incumbent) was cited as the reason for a lack of interest for people to apply. The staff operate according to a 8 hour shift arrangement but sometimes operate on a 12 hours shift if the number of doctors and nurses fall short than the existing number. The NHS 2016/2017 Annual Report and discussions with staff show that there are around 2,250 patients seen by the AED per month.

Consultation and survey findings (see **Annexes 4 to 7**) highlighted the following issues for the AED:

- The lack of pre-hospital care and accident and emergency services contributes to the increasing number of patients coming to the AED, including patients with minor medical cases that are not considered as emergencies and thus do not warranted an emergency response.

- Only two doctors have had formal specialised training in emergency medicine. There is a need to upgrade the knowledge and skills of medical doctors and nurses in the AED service areas.

- There is a need to relook at the working conditions and entitlements of doctors and nurses at AED (together with other units) given that there are hours actually worked by staff but not compensated for under existing HR practices of the MoH.

- The comfortable number required for the AED is 3 doctors per shift (9 doctors plus 1 HoD) and 20 RNs.

3.3.1.3. Paediatric services

The TTM paediatric services provides clinical services to Samoa's population aged 12 years and below. The department consists of three units – a paediatric ward, a paediatric clinic, and a neonatal unit. There were 4 doctors (1 HoD, 2 Senior Registrar and 3 Registrars) 19 RNs, 3 ENs and 1 Auxiliary Nurse Assistant working in the Paediatric during the September 2019 visit. One Senior Registrar is on overseas training for a Master Degree and one House Surgeon was rotated to the department.

The number of patients seen by the paediatric clinic a month is approximately 2,434 (based on the NHS 2016/2017 Annual Report) which equate to 243 patients a day. The paediatric ward accommodates 40 inpatients and the neonatal unit often accommodates up to 20 patients at one time. All doctors are required to come during the day to work and then they take turn for on-call duties after hour (4pm – 8am). Nurses however work according to a 3 shift for a 24 hour schedule – 8am to 4pm, 4pm to 12am, and 12am to 8am. A total of around 7 RNs are required to work during the day shift - 4 to man the paediatric ward and 3 to cover the paediatric clinic. Around 3 to 4 nurses cover the late evening (4pm to 12am) shift and another 3 to 4 nurses to man the midnight shift (12am to 8am).

The consultation and survey findings and the Samoa National Health Services Paediatric and Child Health Workforce Development Plan (MoH, 2015) highlighted the following issues for the paediatric services:

- With a large children population in Samoa and with the limited number of doctors and nurses, there remains a high number of children yet to be provided with proper health care through primary health services. This includes proper follow ups on their medical conditions including serious cases concerning cancer, kidney rheumatic and heart problems.

- Paediatric needs an ICU of its own - for children requiring intensive care and for children to be treated and cared separately from adult patients. Neonatal patients are housed together with the ICU unit of the TTM hospital.

- The neonatal unit needs to have its own nursing staff. The unit is currently serviced by the same nursing staff of the antenatal unit.

- There is a need to look at the potential outsourcing of general paediatric services to lessen the workload of the ward for general outpatient services, and to utilise the services of paediatric services that are available in the private sector. A policy direction is needed to dictate what needs to happen for that outsourcing to become effective.

- MoH needs a child protection policy for the safety of those children who are at high health risks and are highly vulnerable due to family and parental neglect.

- Nurses who are trained in specialised areas of paediatrics need to remain with the paediatric services as their services are needed by the unit and for the better utilisation of their specialised trainings in paediatrics.

- There is a need to consider the introduction of a health insurance system for Samoa to cover for the high cost of health care and to lessen the burden of the Overseas Treatment Scheme (OVT0 on the public purse and public health system.

- Some doctors and nurses in the department have not had any salary adjustments following the completion of their postgraduate qualifications. Slow or lack of response from the HR management on other similar staffing issues (e.g. processing of staff entitlements) were raised.

- The comfortable number required for the Paediatric services (for both Upolu and Savaii) is 7 doctors per shift (9 doctors plus 1 HoD) and 20 RNs – to ensure improvement in quality and wide coverage of the services.

3.3.1.4. Surgical unit/ward - Acute 7

Surgery is a broad area and surgeons can specialise in different sub-specialities of surgery. The department runs several surgical clinics apart from operating days. During the week there are 2 orthopaedic clinics; 2 general surgical clinics; 1 endoscope clinic; 3 full operating days; emergency operations plus urgent cases everyday (including weekends and holidays); surgical clinics at MTII hospital every two weeks (plus emergency operations when needed); and a daily ENT clinic. At least 2 to 3 senior surgeons are needed to operate one major case or an emergency (MoH, 2019h). According to the 2016/2017 NHS annual report, about 194 surgeries are operated and 482 patients are seen at the surgical clinics on a monthly basis.

As at September 2019, the surgical team consisted of 7 full time doctors – 1 Consultant/Acting HoD, 5 Senior Registrars and 1 Registrar – plus the assistance of the Deputy Director General (who is a general surgeon) and 1 private orthopaedic surgeon. One of the two Senior Registrars is currently in NZ for a year attachment. While most of the doctors are responsible for general and orthopaedic surgeries, they are also being assigned sub-speciality areas of responsibility based on their trainings. Of the 8 doctors, 1 is a general surgeon, 3 are orthopaedic surgeons (private surgeon and 2 Senior Registrars (1 is on study leave), 1 is a laparoscopic surgeon, 1 is a urology surgeon, 1 is an ENT/endoscope surgeon, and 1 (junior) Registrar awaiting postgraduate training. In addition to the surgeons, there are 12 RNs, 3 ENs and 3 Auxiliary Nurse Assistants servicing the surgical ward (acute 7) and the clinics.

Acute 7 is a 40 inpatient ward. Similar to the paediatric services, all doctors are required to come during the day to work and then they take turn for on-call duties after hour (4pm – 8am). Nurses however work according to a 3 shift for a 24 hour schedule – 7am to 3pm, 3pm to 11pm, and 11pm to 7am. The current 'nurse to patient' is 3 RN per 40 patients or 3 RNs (with 1 EN) per shift - which means that 1 RN is looking after 12 patients in the ward. The allocation of nurses also takes into account the critical state of the patients, hence the most senior nurses on duty are allocated to oversee and care for the most critical patients.

The consultation and survey findings and the Surgical unit's submission (MoH, 2019h) highlighted the following key issues for the surgical unit:

- ENT is currently serviced by one Senior Registrar who is a surgeon. ENT is very big area and it needs a medical and nursing team of its own.

- In Acute 7, there are only 4 RNs with more than 10 years of experiences. The rest (i.e. 8 RNs) have below 10 years experiences. There is a limited opportunity for nurses to get exposure to trainings or nursing practices in other countries.

- A postgraduate course in acute care (which was offered previously) is no longer being provided, but it is needed to upgrade the knowledge and skills of nurses in acute care.

- Samoa needs at least 20 surgeons for its population as the ideal number. However a comfortable number is 10-12 surgeons for Upolu and 5 surgeons for Savaii. Savaii needs its own surgical and anaesthesia team.

- The comfortable number of RNs required for the surgical team is 5 to 6 RN per shift.

- There is a need to provide proper counselling service for doctors given the everyday exposure to patient issues, traumatising experiences, workload and burnout.

3.3.1.5. Medical unit/ward - Acute 8

Acute 8 is a medical unit for chronic patients aged 13 years and over. The "unit care and manage all medical patients who are not only referred as outpatients (see in the special outpatient clinics) from Mondays to Thursdays but also manage inpatients". Fridays are usually allocated for special investigative procedures for patients (e.g. gastroscopies for gastric concerns, exercise tolerance testing for ischemic heart disease, and echocardiogram for the heart) however these are on hold due to staff shortage. The staff of the unit also manage and operate the scheduled specialist outpatient clinics (MoH, 2019g).

Acute 8 has a bed capacity of 39 beds with more than 80% daily capacity. This includes the HDU with 4 bed and the general ward. According to the NHS 2016/2017 Annual Report, the number of monthly admissions to the ward is around 159 patients a month. However the number of patients is not necessarily a good indicator of the scope and workload of the unit given that the majority of patients admitted to the ward have comorbid conditions requiring critical care. As such, the number of inpatients admitted to the ward should be capped at a certain number to ensure quality care and that the health of the patients and staff are not compromised (MoH, 2019g).

In September 2019, the unit's (internal medical) team consists of 4 doctors – 1 Senior Registrar and 3 Registrars (who just joined in 2018 following the completion of the house surgeon program). In addition to the medical doctors, there are 20 RNs, 3 ENs and 3 Auxiliary Nurse Assistants working in the unit. One Registrar is undertaking a Master degree program in Fiji, expected to complete his study in 2021. There is no HoD or Internal Medical Consultant Specialist for the unit. The HoD has been vacant since 2016 and no effort has been made to fill it. The only one existing Senior Registrar is performing the dual roles of a HoD and Medical Consultant in addition to her role as a Senior Registrar.

Similar to the Acute 7 schedule, all doctors are required to come during the day to work and then take turn for on-call duties after hour (4pm – 8am). Nurses however work according to a 3 shift for a 24 hour schedule – 7am to 3pm, 3pm to 11pm, and 11pm to 7am. Given the current number nurses with the ward, the current allocation is 3 RNs and 2 ENs per shift which means that the 'nurse to patient' ratio is 1 to 12. However, for patient safety the ratio should be 1 to 8.

Discussions, survey findings and the Medical Unit's submission on its workforce development plan (MoH, 2019g) stressed the following key issues that need further attention:

- The patients with the most chronic conditions are admitted to the medical ward, however, the unit is critically understaffed in terms of experienced medical registrars.

- The special investigative procedures scheduled for Fridays are on hold due to the shortage of doctors resulting in a backlog of patients needing special investigations for definitive diagnosis. This increases the risk of patients depending heavily on visiting specialist teams.

- Due to the increased number of patients and shortage of doctors, the waiting time for the specialist outpatient clinics is more than 2 months.

- With only one senior doctor in the unit, it is compromising staff's personal health (due to overwork) and professional development because the priority is to attend to clinical work, leaving limited or no time to attend to trainings and professional development opportunities.

- The overwork of staff and having patients seen by Junior Registrars is in breach of the Samoa Medical Practitioners Code of Professional Standards 2007.

- The MoH faces the risk of potential litigious liabilities that may consider as arising from negligence but are attributed mainly to the lack of staff as well as the tiredness and burnout of existing doctors because of long hours of work.

- The unit has the highest number of senior doctors leaving every year. Overwork (long hours), fatigue/burnout, lack of supportive networks, and limited professional development opportunities (such as further studies and mentoring) are cited as contributing factors to poor staff retention.

- The comfortable number of doctors required for the unit is 2 medical consultants, 3 senior registrars and 3 registrars (in addition to the HoD). For the nursing, the comfortable number required for the effective running of the unit/ward is 5 RNs per shift.

3.3.1.6. Obstetrics and gynaecology

The main areas managed by the existing obstetrics and gynaecology services includes antenatal, labour and delivery, and postnatal. The neonatal unit while under the paediatric services is looked after by the staff of the maternity ward. According to the 2016/2017 NHS Annual Report, there are approximately 899 patients seen by the unit and 481 admissions on a month basis. There are 52 beds in the ward. During the consultations held in September 2019, staff stated that the occupancy rate for the wards is usually more than 100 and can go up to 200 patients in a month. The delivery is about 350-400 a month.

In September 2019, there were 5 doctors working in the obstetrics and gynaecology unit – 1 HoD, 2 Consultant Specialists, and 2 Senior Registrars. One doctor (in addition to the 5 current doctors) is on study leave for postgraduate study and it is hope that he will return to the unit. All doctors have some trainings in the obstetrics and gynaecology area. There are 51 nurses working in the unit – 25 full time midwives, 6 part time midwives, 13 RNs, 4 ENs and 3 Auxiliary Nurse Assistants. Similar to the other units, all doctors are required to come during the day to work and then take turn for on-call duties after hour (4pm – 8am). Nurses however work according to a 3 shift for a 24 hour schedule – 7am to 3pm, 3pm to 11pm, and 11pm to 7am.

Discussions with staff and the survey findings highlighted the following issues for the unit that need further attention:

- There is a need to expand the scope and improve the services to another level but not able to do so given limited staff and daily workload with inpatient care. Services that are limited in scope and are being offered opportunistically (but required proper facilities and clinics and additional staff to manage and provide) include breast and cervical cancer screening, family planning, Pap smear testing, and palliative care.

- The staff are interested to develop sub-specialities in the unit in areas such as open abdominal surgeries and others, but this depends on available training opportunities and sufficient staff to man and maintain the services.

- The majority of midwives are reaching the retirement age. As such, the government needs to relook at its retirement policy and succession planning to ensure that there is not a big gap and impact on the services because of this workforce issue.

- There is an uneven distribution of the workload and workforce of midwives – with most deliveries undertaken at TTM and MTII hospitals - but the majority of midwives are allocated throughout the DHs/HCs – about 2-3 nursing midwives are allocated as permanent staff at each DH/HC. There is a need to relook at the distribution of the workload and midwife staff.

- Nurses trained in specialised areas (e.g. family planning) must work in the areas in which their trainings were provided - so that the knowledge and skills from the trainings are utilised and that the service area is improved.

- The neonatal unit needs its staff who are specifically trained in neonatal. Current staff in this unit are not trained in the area.

- The comfortable number of doctors required for the unit is 3 consultants (1 is a HoD) and 6 registrars (2 are senior registrars). While one of the consultants is a HoD, the other two consultants are required to cover not only for the clinical work but also provide the needed teaching, mentoring and coaching for medical students, registrars and house surgeons.

- The comfortable number of RNs/Midwives required is 60 in total.

3.3.1.7. Intensive Care Unit

The Intensive Care Unit (ICU) provides critical care for patients with conditions in category 4 and category 5.[iv] These are patients who required non-invasive and invasive treatment. According to the doctors and nurses, the ICU is a highly specialised clinical area and as such, it needs its own trained medical team of doctors and nurses. During the visit in September 2019 there were no permanent doctors for the ICU. This means that the ICU operates as an 'open system' where the doctor responsible for the admission of a patient to the ICU also have the formal and primary responsibility for that patient and his/her treatment.

The ICU however has full time nurses who are responsible for the daily care of patients. During the September 2019 visit, there were 24 nurses in the unit – 1 Nurse Manager, 1 Senior Nurse Specialist, 21 RNs, and 2 Auxiliary Nurse Assistants. The ICU has 7 beds. According to the nurses, each patient required a minimum of 2 nurses in accordance with the nursing standards. However this standard is not being met because of the limited number of nursing staff in the unit. There are currently 3 RNs per shift but the required comfortable number should be 4 to 5 RNs per shift.

The ICU staff suggested that for better patient outcomes, the ICU should return to a 'closed' system as it was before, which was the system developed by an overseas ICU specialist, who also provided training to a specific team of local doctors and nurses in the use of that closed system. In a closed system, the ICU has its own team of permanent doctors (there were 4 before) who are based at the ICU and have the primary responsibility for the patients and their treatments. This closed system was however disestablished 4 years ago and the ICU current operates as an open system. According to the ICU staff, the evidence on patient outcomes has clearly shows that a closed system contributes to better care and clinical outcomes than an open system (as it was before). With the return to an open system, the success rate of ICU patients is decreasing. The main issue identified with the existing open system has been the lack of timely responses from the responsible doctors to attend to ICU patients compromising quality patient care at the ICU (see **Annex 5**).

However, further discussions with staff of the MoH, those at the management level, suggested that with the existing limited number of doctors, Samoa cannot afford to have a closed system that has a minimum number of 4 permanent doctors. A closed system works in developed contexts where the capacity exists to have full time doctors specifically for an ICU. In Samoa, adopting a closed system is not sustainable given the limited pool of doctors across all clinical areas. Having a team of 4

[iv] There are 5 categories used to assess the critical situation of patients. Category 5 is the most critical one and category 1 is the less critical one.

doctors who are responsible for only 7 ICU patients at the expense of other units (who are in need of doctors) is not seen as the best way of allocating the small number of available doctors in the MoH workforce and to ensure that there is a minimum number of doctor made available to serve every clinical area.

The consultation and survey findings highlighted the following issues for the ICU:

- There is an inconsistency in salaries of staff on the same levels (e.g. retirees are being paid at different salary rates – one RN's salary rate is higher than the other RNs - but are all retires performing similar roles and responsibilities.

- There are limited trainings for staff. A specialised training was provided for ICU nurses, but the training was provided once and it is no longer being offered. Also trainings that were provided by an expatriate doctor who was temporarily attached to the ICU are no longer being made available and provided to the existing staff.

- There is a need to review the existing nursing curriculum including the orientation program for new nursing graduate in order to identify areas needing improvement (e.g. lack of preceptors) in the nursing program and that students are properly trained and oriented before entering the workforce.

- There is a need to relook at the on-call system of doctors to ensure that timely responses from doctors to attend to their patients when required.

- The comfortable number required of the ICU is 4 to 5 RNs per shift.

3.3.1.8. Operating theatre

The operating theatre (OT) is another specialised area of the hospital. It has a team of nurses providing the required care for patients undergoing surgical operations performed by the surgical team. The unit has four operating tables and a recovery area. During the September 2019 visit, the OT has a nursing team of were 23 nurses – 1 Nurse Manager, 20 RNs, and 2 Auxiliary Nurse Assistants. Staff do not operate in shifts. All staff (doctors and nurses) are required to come to call during the day and are then allocated call-back duties to cover after-hours and weekends at the OT.

The consultation and survey findings highlighted the following issues for the OT:

- Most nurses in the unit are young in terms of years of experience. Of the 21 RNs, only 5 nurses are senior nurses with years of nursing experience of 5 years and over. The other 16 RNs all have 2 and under 2 years of experience.

- The OT is a specialised area requiring trained staff to properly manage and run the unit. However there are no formal trainings for the OT nursing staff. Discussions are underway with the NUS to consider the possibility of NUS providing a specialised course/training in the OT area.

3.3.1.9. Anaesthesia

Anaesthesia is another critical area of the medical field. Anaesthetists are part of a multidisciplinary teams of doctors, nurses and other health workers "providing care for patients, have a pivotal role in resuscitation of acutely unwell patients, including trauma victims". An Anaesthetist is a "specialist medical officer who provides general anaesthesia, sedation, regional anaesthesia, peri-operative care and acute pain management of patients requiring surgical and other procedures". Anaesthetic services provided at TTM include "general anaesthesia, neuraxial anaesthesia, peripheral nerve blocks, procedural sedation, pain management, and local anaesthesia for all age groups and various medical surgical conditions" (MoH, 2019a, p. 1).

Outside of the operating environment, the Anaesthetic unit receive referrals for complex post-operative or chronic pain management, assessments for high risk patients, elective surgeries, assistance for the transport of critically ill patients (in and out of the hospital) and assistances for in-hospital emergencies and resuscitations. The existing anaesthetic team comprised of 3 consultant anaesthetists (2 are local and 1 is Chinese) and 4 registrars. One of the registrar is overseas undergoing postgraduate training for 3 years. The remaining 3 existing registrars are rotated between ICU and anaesthesia on a fortnightly or monthly basis and perform first on-call duties (MoH, 2019a).

According to the World Health Assembly's standards, the required 'anaesthetist to population' ratio is 20 anaesthetists per 100,000 population - that is, 1 anaesthetist per 10,000 population. This means that Samoa should ideally have a total number of 20 anaesthetists for its 200,000 population. Also, each anaesthetist should be providing anaesthesia to 205 patients per years. In the TTM hospital, there are around 3,000 surgeries per year at the TTM hospital, equating to 1,000 surgeries per anaesthetist a year. This is 4 times more than the standard of 205 patients per anaesthetist a year. The continuous increase in injuries and NCDs present a challenge for health system that is already struggle with the burden of communicable and infectious diseases. This in addition to Samoa's population growth and aging population present challenges because of the ongoing demand for more and expanded surgical and anaesthesia services (MoH, 2019a) (also see the participant narratives in **Annex 5**)

Concerns and issues raised based on the consultation and survey findings are summarised as follows:

- The anaesthetic unit has a staff turnover issue. Over the past 10 years, 4 anaesthetists left the service for personal reasons and family migration. One anaesthetist left the service as a direct result of burnout (MoH, 2019a). There is a need to retain anaesthetists in the referral hospitals given the essential nature of their services and given the amount of time taken to have properly trained and qualified anaesthetists. [v]

- There is a need to address the staffing issues so that staff are being supported given the working environment in which staff work where staff are already overworked.

- Ongoing trainings are needed for staff to be properly trained in the area including required close supervision of staff. However there are limitations in the provisions of ongoing trainings and proper supervision because of the limited number of anaesthetists. Only two anaesthetists can provide suitable supervision at the moment.

- There is a need to develop the anaesthesia area at the MTII hospital, so that the service is made available for the population in Savaii.

- There is a succession planning for the unit but that plan has not been limited. There is a need to implement this plan so that Samoa has anaesthetists to maintain the services.

- Given its limited resources, the comfortable and realistic number of anaesthetists that Samoa should have is 8 – 4 consultants, 3 registrars and 1 intern.

3.3.1.10. ENT

The ENT is a unit recently established in the TTM hospital - since 2017. ENT services had also been provided previously by a private doctor but he passed away in 2017. The unit is currently managed and serviced by a surgeon and 2 nurses. The estimated number of patients seen by the ENT clinic a month is around 600.

[v] Specialising in anaesthesia requires the completion of a Master's Program in Anaesthesia (e.g. at the FNU) plus a one to two years clinical attachment of specialty choice in NZ. That is a total of 7 years. New anaesthetists must be supervised while working in order to have on-the-training. There is only one anaesthetists with a Master Degree in anaesthesia.

The ENT clinic operates on Mondays, Tuesdays and Fridays during normal hours (9am to 5pm). Wednesdays and Thursdays are allocated for ENT and general surgery given that the current one doctor in the ENT also works as a surgeon and is a member of the surgical team. He is a surgeon by medical profession - not a trained ENT doctor - but have undertaken short term training overseas in ENT.

There is a high demand for ENT services in Samoa. The current waiting list of the TTM ENT clinic is 200 patients a month. As well, there is a need to take the services out to the community such as ear screenings of school children in order to prevent hearing problems. However, community outreach services in ENT are not being provided due to limited staff. There is a need for audiologists to provide community services but there are no local audiologists. Plans are underway to recruit an audiology from Australia to assist in this area.

The following are the issues/challenges raised from the consultations and survey findings:

- The ENT staff need specialised trainings in ENT. While the only one doctor has had some training in ENT, the two nurses have not had any training in this area. There is no candidate in training in the area.

- The workload of the unit is increasing with the only doctor undertaking other medical duties in other units (e.g. surgery and outpatient). The unit needs additional staff who are trained in the ENT.

- There is a need to provide administrative support to the unit so that the doctor is relieved from undertaking administrative work to focus on utilisation of his skills for clinical work and to have time to provide the trainings needed by the staff. There is limited time for doctors to provide the necessary trainings for the doctors and nurses especially the new ones given his multiple duties as a medical staff.

- The comfortable number required for the ENT unit is 3 consultants (2 are Audiologists), 1 Registrar and 1 Intern. This will enable an outreach service and improve timely and quality provision of ENT services at TTM and MTII hospitals and DHs/HCs.

3.3.1.11. Eye/Ophthalmology

According to the eye unit, the WHO standard on a 'doctor to patient' ratio is 1 doctor to 100,000 people. Therefore Samoa should have a minimum of 2 or 3 doctors given its population size. For Samoa's population, the demand is 400 cataract surgeries a year. However, there is no only eye doctor for the whole of Samoa. The current eye doctor is positioned at the TTM hospital providing daily clinics for both Upolu and Savaii. There is no private eye doctor in Samoa. There was an additional doctor who was earmarked for ophthalmology (4 years training) but left recently for a theological role. There are 4 RNs working in the unit – and another one in training in Fiji. Only two of the RNs have had training in eye. The other RN is a retiree and another RN is a junior nurse with only two years' experience working in the unit.

The eye clinic operates on Mondays, Wednesdays and Fridays from 9am to 5pm and by an appointment schedule. Tuesdays and Thursdays are allocated for surgeries. The doctor is required to be on-call after hours for emergency cases. The average number of patients seen by the clinic is around 40 a day or 600 cases a month.

Issues raised based on the consultation and survey findings include:

- Inability to see all patients and hence there is a consistent rebooking of patient appointment because of the limited number of staff.

- The waiting time for appointments is about 4 weeks – for a patient who is booked to see the eye doctor.

- There is a need for short-term attachments and visiting specialities to provide the required trainings for the eye staff.

- The comfortable number required for the eye unit is 2 to 3 doctors (based on the population of Samoa) and 2 additional RNs (i.e. 6 RNs in total).

- There is a need to look at salary adjustments of nurses who have completed postgraduate trainings. On-call allowance should be considered for staff undertaking doing on-call duties in the eye unit (and other units).

3.3.1.12. Mental health

The TTM mental health unit was established following the enactment of the Mental Health Act 2017. The continuous increase in the number of mental patients in Samoa and the significance of complying with the legislative requirements mean that the services require more qualified staff to provide and manage mental health services. The additional complication for this unit is that patients are locked up and given treatment, and these practices are often against their will. Hence both the clinical and legal requirements must be complied with when dealing with mental patients.

The unit provides both outpatient and inpatient services including follow-ups on patients who are released from the unit and including mental patients at the Goshen Mental Health Services Trust. The unit manages two wards – one for patients who are not well but not sick enough to be locked up – and one for the critical patients. Patients are separated in different rooms depending on their mental conditions. Life threatening patients are held in locked rooms. Around 300 patients are seen by the unit on a month. At the time of the visit to the unit in September 2019, there were 10 inpatients seen at the unit. Another 15 patients are under the care of the Goshen Mental Health Services Trust.

The unit has only one doctor and a nursing staff of 9 RNs and 1 Auxiliary Nurse Assistant. The unit is open 24/7 hours and manages the mental health facility. Given the limited number of staff, the nursing staff operate according to a 12 hour shift which means that there are 3 RNs per shift. The staff requires both the mental strength and physical strengthen to handle mental patients and to treat them, as often patients do not want to get treatment.

Issues raised based on the consultation and survey findings are summarised as follows:

- There is a need to provide mental health services to the community but the services are limited due to the lack of mental health staff.

- Proper counselling is needed to be provided to both patients and their family member, as well as for the staff of the mental health unit.

- There is a lack of proper trainings provided to the staff of the unit. A SPEC (Safe Practice & Effective Communication) training was offered for the unit but it was offered on one occasion only. The training needs to continue but there is limited funding to enable the running of the training.

- The unit needs administrative support for the proper performance of administrative duties such as patient records, information management and management of patient appointments and follow-ups.

- The comfortable number of staff required to run the mental health services is 3 mental doctors (1 HoD, 1 Senior Registrar and 1 Registrar) and 12 Registered Nurses. This number is also required for the unit to operate according to a normal 8 hour shift schedule.

3.3.2. Malietoa Tanumafili II (MTII) Hospital

The MTII hospital is the national hospital for Savaii which has a total population of 43,560 people (SBS, 2016). The MTII community nursing covers a population of about 22,000 people while the 3 existing DHs/HCs cover the rest of the population in Savaii. There is only 1 Registrar at the MTII hospital. The other two doctors at the MTII hospitals are House Surgeons. One private doctor is being contracted by the MoH to assist with the medical services at the DHs/HCs. The MTII hospital has an established permanent Senior Medical Officer post, who is in-charge of the clinical services. However, the post has been vacant for a while, and the existing Registrar at MTII is undertaking the role of that post on an acting basis.

There are 20 RNs, 7 Midwiferies, 18 ENs and 5 Auxiliary Nurse Assistants at the MTII hospital. They work according to a 12 hours shift (cannot cater for an 8 hours shift) and are rostered to cover all clinical areas of the MTII hospital – maternity, emergency response, accident and outpatient, operating theatre, and the general ward (paediatric, surgical, ICU and isolation). The number of RNs per shift (to cover the whole hospital) is 8 for the day shift and another 8 for the night shift. Another 4 RNs are allocated to provide the community outreach programs for the MTII community population (Puapua to Gatavai villages).

The number of outpatients seen at the MTII is around 5,075 a month. The MTII hospital has a 23 beds capacity. The number of patients admitted to the general ward on a monthly basis is around 381 (see NHS Annual Report 2016/2017).

Issues raised during the consultations and from the survey findings as well as documentation from the Savaii Administration team (MoH, 2016b) are summarised as follows:

- Neglect of services for the Savaii population - only one medical registrar is allocated to cover the MTII hospital. There is a need to recruit a Senior Medical Officer to oversee the clinical services at the MTII hospital.

- MTII needs to have its own medical team as well as sufficient resources to enable the staff to perform the needed services.

- There is a need to provide trainings in Savaii so that a large number of staff at the MTII hospital and DHs/HCs can attend and access the training. Only 1 or 2 can attending the trainings at one time if the training is held in Upolu.

- Savaii needs a team of 1 consultant, 1 Senior Registrars and 2 Registrars for each of the outpatient and emergency services, obstetrics and gynaecology and paediatrics at the MTII hospital. One anaesthetist and 5 surgeons while 2 eye and 2 ENT doctors are required.

- The comfortable number of nurses required for Savaii is 60 RNs – to cater for the clinical and outreach services.

3.3.3. District Hospitals and Health Centres

The primary health care at the rural community through the DHs and HCs is provided mainly by the nursing staff. The number of nurses working in the DHs ranges from 15 (Lalomanu) to 21 (Leulumoega) while the number of nursing staff at the HCs is around 9 to 10 nurses. The number of RNs (not including the midwives) working in a DH ranges from 7 (minimum) to 12 (maximum) RNs, while for a HC, the number of RNs ranges from 6 to 7 RNs. The number of midwives working in a DH is around 3 to 4 but 1 to 2 for a HC. The Saanapu HC and Satupaitea HC do not have their standalone permanent nursing staff. Staff from the Poutasi DH and MTII hospital are allocated to respectively cover the outpatient services and clinics and outreach programs for Saanapu HC and

Satupaitea HC. The number of patients seen by a DH/HC is around 300 to 600 a month. Leulumoega has the highest number of outpatients which is around 820 per month (see Table 14).

The DHs/HCs (except the Leulumoega DH) is serviced by a doctor visiting each DH/HC one day a week. Leulumoega has a daily visiting doctor. In addition to the nursing staff, each DH/HC has one cleaner/domestic assistant, 1 security officers (except Leulumoega which has 2 security officers), and 1 to 2 drivers. The nurses also carried out the administration and cleaning work in some DH/HCs where there are no domestic assistants/cleaners.

The DHs are open 24 hours and 7 days a week, while the HCs are open during working days (Mondays to Fridays) and working hours (8am to 4pm) only. In the DHs, staff operate according to a 12 hours shift (8am to 8pm and 8pm to 8am). The number of nurses working in a shift ranges from 3 to 5 nurses and the number of nurses during the day shift is slightly higher (by 1 or 2 RNs) than those working during the night shift.

Issues that were consistently during the consultations and as per survey findings (see **Annex 7**) across the DHs/HCs are summarised as follows:

- The establishment of DHs/HCs are often based on political interests without having due consideration of issues/areas such as population numbers, location and distance, transport accessibility, and sustainable resourcing of the DHs/HCs in terms of staffing, financial and physical resources, and medical supplies and equipment.

- There is a need to look at ensuring that the DHs/HCs are properly resourced with the required medical supplies and equipment as well as staff.

- There is a need for staff at the DHs/HCs to be consistently updated with HR policies and procedures.

- There is a need to provide administrative support to the DHs/HCs so that nurses are supported in the performance of their primary care and clinical roles, and are also relieved from undertaking

- There is a need to address issues concerning the occupational health and safety (OHS) at the DHs and HCs. For instance, at one of the DH, it was noted that the nurses were hand washing patient linen. Also, at this same DH, nurses raised concerns about the late collection of health wastes at their DH at most times, resulting in wastes being left on the outside shelf for more than a week).

- Staff need trainings in primary health care as well as in other areas such as mental health, acute care and emergency response.

3.3.4. Oral and dental health services

The MoH's oral and dental health services has a total manpower of 48 staff (equating to 4% of the MoH total workforce) – 43 for the TTM and 5 for the MTII hospital. The division operate two services – clinical services, and community & preventive dental health services. The staff composition includes dentists, dental therapists, dental technicians, dental hygienists and dental assistants. During the September 2019 consultations, a total of 11 dentists are working at the TTM hospital and 2 dentists were working at the MTII hospital. Another 3 dentists are working in the private sector operating their own clinics and one dentist is working in a church-based dental service. The TTM dental services operate during normal hours but a dentist is required to be on-call to cover for any emergencies.

Issues that were consistently during the consultations and from the survey findings (see **Annex 7**) are summarised as follows:

- 62% of the total dental staff are at the age of 38 years and above - the majority of them are dental assistants. Of that 62%, 10% are already retirees, 10% will retire within the next 5 years, and 38% will retire within the next 6 to 10 years (see Section 2.2.3 above). Sufficient dental assistants must be trained starting from now to fill that gap in the next 5 to 10 years.

- There are only 2 dental technicians (all are at the ages of 38-43 years) and 2 dental hygienists, hence there is a need to train more technicians and hygienists from now on to cover for dental technicians who will be retiring within the next 10 years.

- There is a need to continue the dental nursing course that was previously offered at the NUS so that there is a pool of dental assistants/nurses to feed the required numbers who are needed to maintain the dental service and expand its outreach to the community. The absence of teaching staff is being cited as the reason for the suspension of the course.

- There is a need to review and update the existing organisational and career structure of the dental profession to bring it in alignment with other professions and to address the existing disparities in salaries between new and senior staff. The last time it was reviewed was in 2002.

- Ongoing professional development and training is needed to upskill the staff.

- Compare to other countries, the dental services are offered to local and overseas people at relatively low charges. There is a need to review the fees/charges of the dental services for cost recovery purposes and to lessen the abuse of the services by people especially those from overseas.

- The comfortable number of dentists required for Samoa is 25. The comfortable number of dental therapists is 30, 5 for dental technicians and 5 for dental hygienists. These comfortable numbers are needed in order to enable the expansion of the services to the DHs/HCs and to carry out the outreach programs in schools and village communities.

3.3.5. Medical imaging and radiology

The medical imaging and radiology (MIR) services is provided through 4 main areas - general x-ray, ultrasonography, mammography, and CTs/special investigations. The MIR operates 24 hours and 7 days a week. Staff operates according to a 12 hours shift. The majority of staff work during the day shift (8am to 8pm) because of the high number of visiting patients during the day. While only 2 staff are rotated to cover the night shift (8pm to 8am), to cater for emergency cases and inpatient services. The number of x-rays, CTs, ultrasound, mammography's and special investigations conducted by the MIR is 3,114 a month (based on the 2018/2019 actual numbers) for Upolu and around 1,000 for Savaii (MoH, 2019d).

The MIR has 3 radiology doctors and 34 other staff who are the technicians (the radiographers) and administration staff. The 34 laboratory staff equates to 3% of the MoH total workforce. The total number of staff in the MTII hospital is 4 while there are 30 staff for the TTM hospital. Of the 34 staff, only 8 are qualified radiographers – those who have obtained the bachelor degree in radiography. One senior radiographer is on training overseas. Another 6 have able to obtain a certificate/diploma while 10 assistants were recruited as from when they were school leavers. The MIR management is implementing a Samoa Qualification Authority (SQA) accredited 6-month

training program to upgrade the educational status of those staff – those who are without a formal qualification and training in MIR.

Issues identified during the consultations, survey findings, and as per MIR's submission (MoH, 2019d) are summarised as follows:

- 4 out of 6 principal radiographers (who are the qualified and most experienced staff) will retire within the next 5 years. This leaves only 2 qualified radiographer for the MIR who will also retire within the next 10 years (see section 2.2.3).

- Only two radiographers are sonographers. There is a severe short of sonographers who are needed to service the increase demands in this area and given the availability of new technological ultrasound equipment.

- There are 3 local radiologists but are not yet fully fletched radiologist in terms of having obtained the formal qualification in radiology. Opportunities must provide for staff to fully complete their radiology training.

- There is still a need to establish a clear professional development strategy and a succession planning so that there is a consistent number of qualified technicians that is fed into the health system to provide and maintain the MIR services.

- There is a need to provide continuous education to the existing staff so that they are regularly updated in the areas of MIR.

- There is a need to consider targeted scholarships for allied health professions including those of the MIR in the selection of annual scholarship awards for the health sector.

- The current charges for MIR services is relatively low. There is a need to review these charges to improve the financial capacity of the MoH in terms of cost recoveries and to control the misuse of the MIR services by private doctors for immigration purposes.

- Principal Officers in highly technical and specialised areas such as the MIR are paid at lower rates compared to those in administrative and corporate support roles. This discrepancy must be addressed.

- The MIR, together with other allied health professions have not had a review of their organisational structures and career structures for over 7 years. Existing structures do not support the career development and performance development of staff and the leadership requirement for MIR and other allied health service areas to operate properly.

- Patient safety and quality of service require a separate registration of specialists in the different areas of MIR such as only those qualified as a sonographer should be allowed to perform ultrasound cases. The current practice is that any radiographer (with or without the proper training in ultrasound) can perform an ultrasound which is exposing patients at risk and compromising the quality of the service.

- The comfortable number of staff required for the MIR is 5 radiologists – 3 for TTM, 1 for the community and 1 for MTII. The comfortable number of radiographers required is 46 (10 for ultrasound, 5 for ECG ultrasound, 20 for general radiography, 6 for CT/specials, and 5 for mammography) - for both Upolu and Savaii

3.3.6. Laboratory services

The laboratory services is another essential part of the healthcare system – approximately 70% of all diagnoses is dependent on laboratory findings. The laboratory has 7 technical sessions – reception and haematology, blood blank, haematology, serology, biochemistry, microbiology, and pathology. The laboratory also manages and operate the mortuary and the procurement of equipment and supplies for the laboratory (MoH, 2019c).

The cadres within the laboratory services are scientists, technicians, trainees and phlebotomists. The total manpower of the laboratory is 34 (equating to 3% of the MoH total workforce) - 30 at the TTM hospital and 4 at the MTII hospital. In addition, there is 1 local pathologist and 2 overseas pathologists (1 from China and 1 from New Zealand). The services of the pathologists depend on having capable laboratory scientists and technicians who are responsible for conducting the testing. There are 4 scientists, 16 technicians (three are on training overseas), 9 lab assistants, 2 mortuary staff and 2 support staff. Only 19 staff have attained a Bachelor degree with 6 having attained an ungraduated diploma/certificate (see section 2.2.7).

Scientists are those who have completed the Bachelor of Medical Laboratory Science while technicians are those with the Bachelor of Science (with Biology and Chemistry majors). The minimum requirement for the laboratory technician post is the Diploma in Medical Laboratory Science. Those with a Bachelor of Science degree are required to undertake the above in Medical Laboratory Science which is currently provided by the NZ Pacific Pathology Centre (PPC). Discussions are underway with the NUS to consider reviving the Certificate in Medical Laboratory Science course (which was suspended due to a lack of teaching staff) and for the PPC's in Medical Laboratory Science to be considered as a pathway for the NUS Bachelor of Science. This will ensure that Bachelor of Science students from the NUS will graduate with a specialisation in medical laboratory science.

The number of tests/examinations that the laboratory carries out on a monthly basis is around 20,000 (MoH, 2019c). There is an increased number of patients which means that the number of laboratory tests and diagnoses have increased - especially with the rise and increased complications in NCD patients. The laboratory operates 24 hours and 7 days a week. Staff operates according to a 12 hours shift. The majority of staff work during the day shift (8am to 8pm). A few staff are rotated to cover the night shift (8pm to 8am).

Issues identified during the consultations, survey findings, and as per submission from the laboratory division (MoH, 2019c) are summarised as follows:

- The staff turnover rate of the laboratory service is about 5 staff leaving a year or 16% of the total laboratory workforce. Staff leave for better remuneration and career development in other organisations. One scientist left recently to join the SROS.

- The existing organisation structure does not support the leadership and management requires for the laboratory to operate effectively. There are 7 technical/specialised areas but there are only 3 technicians/scientists at the Principal Officer level.

- Given the increased complications of diagnoses, there will be a need for staff to specialise in the different areas of the laboratory. However, this will be difficult to achieve given the limited number of qualified scientists and technicians in the MoH.

- There is a need to review and strengthen the career pathways and career structure of the medical laboratory professions so that there is a retention of staff to maintain the services of the lab. This includes having a formalised training and professional development as well as a succession plan for the laboratory services.

- The comfortable number required for the laboratory services in Samoa is 3 local pathologists (1 is for Savaii) and 60 laboratory scientists and technicians – for both Upolu and Savaii.

3.3.7. Pharmaceutical services

The pharmaceutical services division manages and operates the pharmacies at TTM and MTII hospitals and the warehouse. The division also manages the provisions of medical supplies to all DHs and HCs. There are three main sections under the division – dispensary (outpatient and inpatient) and manufacturing, community outreach programs. Cabinet recently approved the separation of the warehouse as a standalone division and plans are underway to recruit an Assistant CEO to manage the new warehouse division.

The calibre within the pharmaceutical services include pharmacists, pharmacy technicians, and pharmacy assistants. The total manpower of the service is 28 staff (equating to 2% of the total MoH workforce) – 3 pharmacists, 9 senior pharmacy technicians, 12 pharmacy technicians, and 4 pharmacy assistants/trainee. This is inclusive of the 6 staff for MTII (Savaii). The services is open 24 hours and 7 days. All staff come to work during the day and then a small number of staff are rotated to continue during the evening and midnight shifts. For instance, for the TTM hospital, 5 to 6 staff are rotated to continue the services from 5pm till 9pm, and then 2 other staff are rotated to cover the 9pm to 9am shift.

According to the NHS 2016/2017 annual report, around 14,984 patients (or 500 per day) have visited the pharmaceutical services or required the services of the pharmaceutical division. The majority of outpatients visiting the pharmaceutical services are pensioners, children and those with diabetics. Medicines and drugs for these groups of people are subsidised by government and are either free of charge or are being priced at low cost and can only be dispensed or provided through the MoH pharmacies.

Issues identified during the consultations and from the survey findings are summarised as follows:

- There has been a high turnover in pharmacists, mainly to work in private pharmacies. There are 10 pharmacists working in the private sector compared to only 3 in the TTM hospital. Better remuneration is cited as the reason for staff turnover.

- There is a need to consider the outsourcing of the dispensary of drugs and medicine to the private pharmacies in order to reduce the workload of the division and given the availability of the services in the private sector. This will assist the staff to have more time to service the DHs/HCs which will help reduce the number of patients travelling to the TTM hospital and urban-based pharmacies for medicine.

- There are no formal training and professional development programs for pharmaceutical staff.

- The comfortable number required of pharmacists is 7 to 8 for Upolu and 3 for Savaii – to ensure the proper running of the pharmaceutical services for inpatients, outpatients and community outreach services.

3.3.8. Health promotion, enforcement and surveillance

Two divisional areas of the MoH which have the primary role for preventive health are the health promotion and enforcement division (HPED) and the national health surveillance and international health regulations division (NHSIHR). These divisions have a major to play in primordial health prevention and public health, being the backbone of the health system of any country. The HPED's

roles focuses on the enforcement of compliance with health legislation and standards such as those governing food safety and tobacco control. It also provides health promotion, monitoring and educational services, nutrition monitoring and regulatory services, health care waste management, occupational health and safety, and burial regulatory services. The NHSIHR focuses on public health surveillance, both at the national and international levels, for both NCDs and communicable diseases (CDs). Its main purpose is to prevent and control disease outbreaks through surveillance, monitoring of port health and drinking water quality, as well as sanitation and vector control.

The roles of the two divisional staff in additional to the primary care and public health roles performed by doctors, nurses, and other health workers working at the periphery are critical to the realisation of the health sector's vision to revive and strengthen public health. Assessing the existing and required capacity to achievement that vision is needed. The total number of staff in the two divisions is 49, which equates to 4% of the MoH total workforce (see Section 2.2.1). Of this number, only 20 staff (or 41%) have some qualifications in the areas of public health or primary health care.

Issues identified during the consultations and from survey findings are summarised as follows:

- Lack of understanding across all sections about plans to revive and strengthen public health – about what roles that they have to play and what changes they have to support and implement to achieve that vision.

- There is a limited number of qualified staff to perform the health enforcement role. The MoH health promotion and enforcement role needs strengthening to go hand in hand with the decentralisation of health services and revival of public health. Savaii needs its staff to perform health promotion, enforcement and surveillance services in the island.

- There is no formalised training on public health. An environment health course was provided at the NUS but that has been suspended due to lack of teaching staff. If the plan is to revive public health and to equip all DHs/HCs with qualified staff in public health, trainings must be made available and provided to all staff working in public health.

- There is a need to ensure that the right people are recruited for the right jobs. For instance, there is a need for more nutritionists to support the move to strengthen public health. However, there are only three qualified nutritionists in the MoH. Some nutritionists are being recruited in areas not suitable to their trainings, and are therefore not fully utilising the knowledge and skills of those trained professionals.

- The lack of a proper career structure for nutritionists and the absence of established positions on the MoH organisation structure to accommodate needed staff in this area are issues impacting on the attraction and retention of qualified people in the unit, such as qualified nutritionists and public health personnel.

3.3.9. Other allied health services

"Allied health is one of the least developed areas" within the health system (NHS, 2014). Discussions with staff further raised concerns about little attention given to the development of these areas as well as staff. The definition of allied health professions under the Healthcare Professions Registration and Standards Act 2007 and Allied Health Professions Act 2014 include *"audiologists, chiropractors, dieticians, physiotherapists, occupational therapists, speech therapists, medical laboratory scientists, medical laboratory technicians, qualified pharmacology applied profession analysts, radiographers, acupuncturists, massage therapists as health practice for healthcare, chiropractors, podiatrists, naturopaths, traditional birth attendants and traditional healers, environmental health officers, health promotion officers, nutritionists, and qualified first aid officers,*

counsellors, psychologists, social workers, biomedical engineers, biomedical technicians, optometrists, optometrist technicians, orthotists, prosthetists, and pharmacologists".

In this report, the 'other allied health services' (OAHS) include all those not specifically mentioned above (due to the small numbers of existing staff in these areas). The OAHS include physiotherapy, biomedical, prosthetics and orthotics, mobility services and social services - which comprise of 2% (22 workers) of the MoH workforce (see Section 2.2.1). These OAHS are all located at the TTM hospital. There are no specific OAHS staff at MTII and DHs/HCs. OAHS have the lowest 'health worker to population' ratio compared to those in the dental, laboratory, MIR, laboratory and HPES areas (see Section 3.1).

In Samoa (or in the MoH), there are only 3 physiotherapists, 2 biomedical engineers, 1 biomedical technician, 1 prosthetic/orthotic technician, 1eye technician, and 2 social workers (see Section 2.2). The other staff in the OAHS are those at the lower level of assistants (see Section 2.2.3). MoH does not have staff in other areas such as occupational therapy, podiatry, speech and language therapy, and others. There is a qualified chiropractor working with the OAHS but left the unit because her skills and knowledge in chiropractic was not utilised due to no chiropractic service developed in the MoH.

The MoH has always had 1 or 2 physiotherapists at most times. There was a time where four physiotherapists (graduates) were recruited to the hospital, however that 5 was short-lived as 3 other physiotherapists left the service (MoH, 2019e). Poor remuneration and limited career pathways and professional development are cited as reasons for the high turnover and poor retention of physiotherapists (see **Annex 5**).

The services that is also provided by the biomedical, prosthetic/orthotic, mobility services and social services are part of the clinical services – for patient care. However, while the biomedical unit for instance is responsible for the full cycle of medical equipment, there are only 2 two engineers and 1 technician servicing a total of 1,650 medical equipment (the 'staff to equipment' ratio is 1: 413). The number of medical equipment will continuous to increase given expected increases in the number of patients, NCD cases and population growth. The complexity of equipment is further attributed to technological advancement and compliance with medical equipment standards (MoH, 2019b).

Issues identified during the consultations, survey findings, and as per submission from the OAHS division (MoH, 2019b, 2019e) are summarised as follows:

- Low remuneration levels and limited career pathways of the above mentioned OAH professions. There are no formal training and professional development programs for these OAH professions.

- Qualified staff required in these OAHS areas will need to increase given increased numbers of patients and given the need to expand and improve the services in these service areas.

- There is a need to review the existing organisation structure of OAHS to ensure availability of positions to accommodate those who are expected to graduate and return to work in these areas, to align the functional areas of the OAHS, and for clearer roles, responsibilities and lines of accountability. The absence of career pathways in these OAHS areas has resulted in graduates (in these areas) looking elsewhere for jobs because there are no funded positions on the organisational structure to accommodate their recruitment to the health services.

- The OAHS lack the resources (e.g. computers, workshop and transport) that are needed by the staff to perform their roles and services.

- For cost recovery and sustainability purposes, there is a need for the MoH to review existing fees and charges for prosthetic/orthotic and mobile device services - these services are

provided either free or charge or at very low cost but are very expensive to operate and sustain in scope and quality.

- The comfortable number of required physiotherapists for Samoa's population is 10 - there should be a physiotherapist for every ward as well as those needed to provide outpatient services and outreach programs.

- The comfortable number of required biomedical engineers and technicians is 4 engineers and 3 technicians, this is the numbers needed by the year 2029

3.3.10. Hospital support services

Hospital support services (for the purpose of this report) refer to all those services that are required to support the proper functioning of the hospitals. They are considered part of the clinical services as those services are needed for the proper care of patients. Hospital support services (HSS) – include domestic assistants/cleaners, security, kitchen, porters, medical records, and transport (including ambulance services). Hospitals and clinicians cannot function properly without the proper performance of these support service areas - hence they are critical for the proper running and operation of the hospitals.

There are 309 staff working in these services – equating to 23% of the MoH's total workforce (see Section 2.2). The HSS staff are the largest group of health workers, second to the nursing profession. Most staff working in the above HSS areas were recruited to these areas as school leavers. A few have able to obtain some diploma/certificate at the undergraduate level.

Discussions show that there is a need for more trainings and upskilling of staff working in these areas. Some are providing important services in critical health care areas (e.g. ambulance drivers, porters, and kitchen hands/cooks) and as such, they require specialised training in those areas of responsibilities. Some of the key complaints concerning the services of the hospitals (e.g. poor patient records keeping, late referrals of patients via ambulance, and poor maintenance of the hospitals) can be attributed to the lack of attention given to properly develop the HSS areas, including the training provisions required by staff.

3.3.11. Corporate support

The corporate support services include all non-core areas of the MoH. The services provided by staff working in these areas should ensure that all clinical and other core services are supported in the performances of the core functions and services of health – through policy, governance, regulatory, administrative and general support roles. This includes the coordination and facilitation of developmental and resourcing functions that are needed by MoH as an organisation and the health as a sector. Functional areas that are being grouped under the umbrella of corporate support (for the purpose of this report) include strategic policy and planning, research, legal, information management, finance, auditing, HR, procurement, sector coordination, administration, healthcare registrar, quality assurance, and professional development.

The total number of staff working in the above areas of corporate support is 121 or 9% of the MoH's total workforce (see Section 2.2.1). Only 21% of staff in these areas have an undergraduate Bachelor degree. A total of 26% are diploma/certificate holders and 12% are school leavers. There are no records about the educational background of the other 35% (see Section 2.2.7).

Issues identified during the consultations and from survey findings for the corporate support areas are summarised as follows:

- Notable duplication of functions and roles of staff in these areas following the merge of the two entities – NHS and MoH. There is a need to properly analyse these duplications and where the real need lies in terms of staff and capacity development, and where resources could be best deployed and utilised for improving the effectiveness and efficiency of the health services.

- There is a need to strengthen the roles of these areas given their importance to health policy and planning, monitoring and evaluation, quality assurance, professional development, human resource management, financial management, procurement and general administration of the health system.

- There is a lack of confidence across the staff of the MoH about the existing capacity of the HR unit.

- There is a need to improve information management, communication and information technology in the Ministry. This has come up as an area requiring urgent attention because of the impact of network issues and email breakdown on staff productivity, patient records management, communication and service delivery.

- There is a need to improve the supportive and administrative systems so that the services and resources required to support the delivery of services and to support the core staff in the performance of their roles are in place and are being provided when needed.

- Operational policies and procedures need to be updated and distributed to all staff for their understanding, to guide and direct staff performances, and to facilitate staff compliance with required standards and protocols.

4. HUMAN RESOURCES FOR HEALTH – EXISTING SITUATION

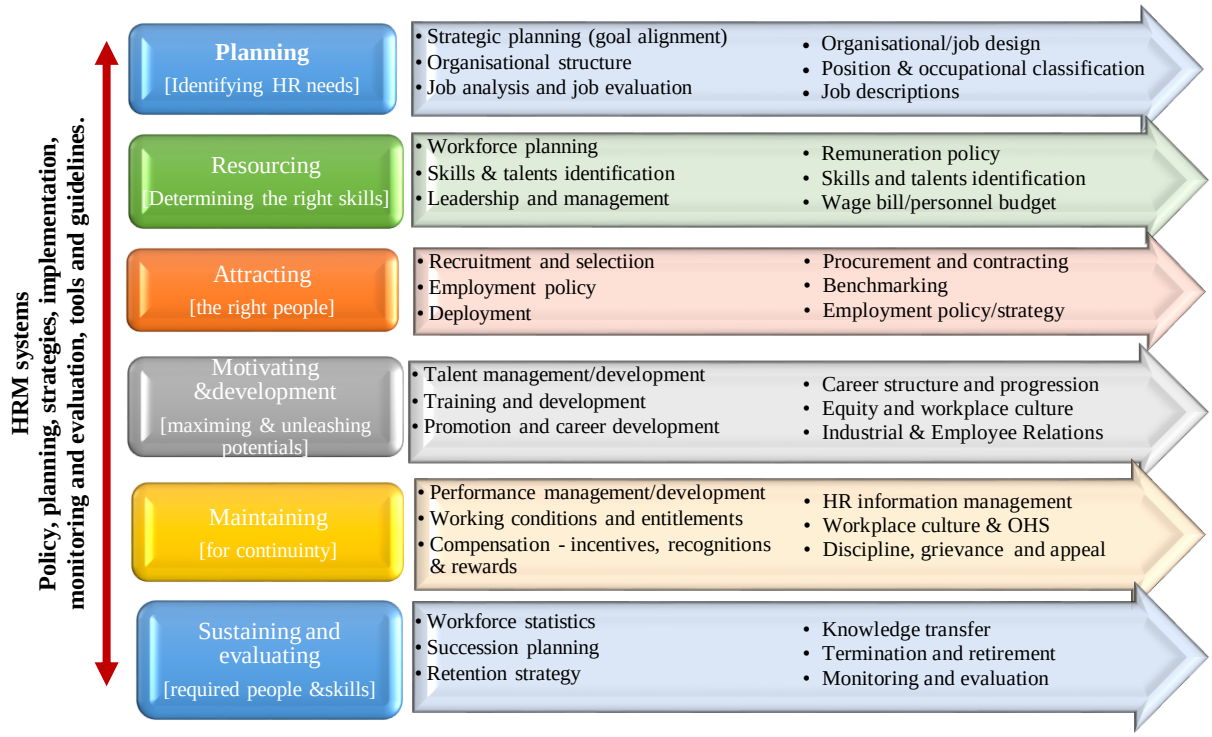
4.1. The functional role of human resource for health

The previous sections analysed the profile of the existing health workforce, presents an overview of the health workforce demands and supply dimensions in Samoa, and an assessment of the health workforce development needs. This section examines what has been undertaken in response to human resource for health (HRH) and workforce development in Samoa, and further provides and assessment of the HRM in the Ministry of Health (MoH) and health services.

Human resource management (HRM) refers to the strategic and operational practices used by an organisation to manage its human resources. They are the approaches adopted and implemented to acquire, develop, manage, motivate and sustain the commitment of an organisation's most valuable and key resource – the people – who work in and for it. It concerns the planning for, hiring, motivating and maintaining, the workforce required for the performance and achievement of the core business, values, and services, of an organisation.

Figure 42 encapsulates the key functions of HRM that an organisation needs to consider, develop and sustain. The HRM functions outline in Figure 42 should ensure that an organisation is able to identify its HR needs and able to resource the right people that it must have in order to develop and achieve its vision, mission and objectives. An organisation should be able to attract the people with the right skills and talents, motivate and develop employees' performances and potentials, maintain employees' loyalty and interest to develop the organisation, manage employee relations, ensure their safety and health, compensate those with good performances, and ensure that the needed skills and talents are sustained for the survival and development of the organisation.

Figure 42: HRM framework – HRM functions and ingredients
Source: Author's construct



An assessment of the HRM capacity in the MoH in the following sections will also make reference to the functions/purpose of HRM as per framework outline in Figure 42 above, in order to identify where the gaps are and how the 2019-2026 SHRHS and SHWDP can address those gaps.

4.2. Status of HRH policy and planning for health

4.2.1. The previous HRH Policy and Workforce Development Plan

The first entry point in looking at what has been considered and planned for HRH and health workforce development is the latest 'Ministry of Health (MoH) 2007-2015 HRH Policy & Plan of Action' and the 'March 2014 National Health Service (NHS) Workforce Development Plan'.

4.2.1.1. The 2007-2015 MoH HRH Policy and Plan of Action

This previous HRH policy and action plan provided the "principles, a framework and an Action Plan to implement workforce planning" for health. It highlighted that given the limitations in the public health system and limited pooled of available human resources in the public sector, the capacity for health will need to be drawn from "a range of providers in the NHS, private, independent, NGOs, and community, as well as from the donor and voluntary sectors".

Annex 2 summarises key strategic activities in this previous policy & action plan and the status of activity implementation based on the 2016 Review conducted by the MOH. Strategic activities include initiatives aimed at strengthening information management systems (including HR information management), accessibility of health services by vulnerable people, partnerships, support for community health workforce and civil society organisations, availability of resources and technology for staff to use (especially in rural areas), staff in-service trainings and performance management, occupational health and safety (OHS), workforce planning, pre-service training and professional development, and others.

According to the 2016 Review, most of the activities relating to pure HRH and health workforce planning areas were not implemented, such as OHS, review of scholarships for health, matching intakes in academic institutions with HRH plans and estimated workforce requirements, and assessments of skill mix, staffing according to population ratios and utilisation of current staff.

4.2.1.2. The 2013 – 2018 NHS Workforce Development Plan

This recent workforce plan considers development options and outlined an action-based approach for the development of the then NHS workforce for the period of 2013-2018 and beyond. **Annex 3** summarises the workforce plan's key actions, many of them are all aimed at increasing the supply and quality of health workers across all areas – medical, laboratory, medical imaging and radiology, pharmaceutical services, dental services, allied health and support services. The lack of any existing documentations analysing the implementation status of this workforce development plan and the findings from the consultations held with staff (see **Annex 5**) confirm that there has not been any monitoring and evaluation (M&E) of this workforce development plan.

Annex 3 further includes an overall assessment of the status of implementation of the NHS workforce for 2013-2018 based on the views of staff consulted on the development of the 2019-2026 SHRHS and SHWP. Some staff, particularly those in the clinical services were sceptical about the effective and efficient implementation of a further SHRH and workforce development plan given that most actions identified in the above 2013-2018 plan have not been properly followed through in terms of implementation. For instance, activities that were assessed as not yet been implemented include the establishment of a workforce development committee, conducting of staff satisfaction surveys, implementation of a 'hard to recruit' strategy for priority medical specialists, providing specialised training across all clinical and allied health areas, and developing health postgraduate programs at the OUM and NUS.

4.2.2. Previous policy and plans - lessons learnt

The development and implementation of the next strategy and action plan (the 2019-2026 SHRHS and SHWP) need to build upon the progress made and lessons learnt from the implementation of the

previous HRH policy and action plan. Hence it is important to identify the reasons and factors affecting the effective and efficient implementation of the previous policy and action plan.

The assessments in **Annex 2** and **Annex 3** of the above previous HRH policy and action plans suggest that while there are good initiatives that were identified and planned for to develop the health workforce, implementation those initiatives have been limited. There was no proper M&E of both plans including the identification of a lead body or unit (with dedicated staff)in the MoH and NHS to take the lead and coordinating role in the implementation and monitoring of the implementation of the previous HRH policy and workforce development action plans.

Resourcing commitments for implementation of the above policy and actions plans are not clearly articulated in the previous policy and action plans or in other plans and MoH/NHS budgets. With the absence of any clearly allocated budget/funding to implement the previous action plans, it is difficult to see whether there were resources committed to enable the implementation of workforce development initiatives outlined under the previous policies and plans of actions.

The consultations (see **Annex 5**) indicate that only 3 staff made reference to the above previous HRH strategy and workforce development plan when reflecting about HRH and workforce in the Ministry. This suggests that not many MoH staff including those in the middle management level were aware about the existence of the two documents.

4.3. Key HRH issues and challenges

4.3.1. Health service delivery model

While the revival and strengthening of public health is being highlighted as an area to prioritise within the next 10 years for the health sector, the MoH will also need to maintain the services in specialised clinical areas of the main hospitals. To ensure that the available resources in-country (in the public, private and civil society sectors) are best utilised and equally distributed across the population, Samoa needs to develop a health service delivery model that can best suit its context. The model needs to articulate broader policy statements on how the health services across different areas of clinical care will be provided – e.g. what can each health care facility can provide – in the rural, urban, private sector and civil society sectors. The model will also guide the distribution of resources based on population needs and priorities. Developing a health financing model/strategy must be included and articulated as part of that health service delivery model. This includes how the overseas treatment scheme (OVT) will be used and what it will cover. Having that health service delivery model will guide the MoH and its sector partners in service coordination, resource sharing and utilisation, address duplication of services, and manage expectations about what the public health system can and cannot provide.

4.3.2. Health workforce culture

The evidence obtained from the consultations with health workers across all area (see **Annex 4** and **Annex 5**) and the MoH staff survey (see **Annex 6** and **Annex 7**) clearly show that there is a positive re-enforcement culture among most health workers to develop the health services. However, health workers have also identified a number of areas that need further improvement in the health system. This includes a high expectation among staff for the leadership and management to address existing issues and problems. There is a need for staff across all sections to understand about the need for collective ownership of the core issues affecting the health system as well as the solutions to address them – rather than the existing culture of 'wait and see for the management to address'. There is a need for shared leadership at all levels - of the key issues - and a common understanding about the priorities to address.

The workforce is supportive of the vision and reforms of the MoH. The staff especially those at the middle management level want to be part of the development process of the reforms including the changes planned for health. This is important so that staff are able to contribute to the implementation

of the changes required at different levels of the workforce and organisation for the implementation of the health vision at the lower levels. Thus communication from the top level of leadership/management to the middle management and operational level staff is being identified as an area needing improvement (see **Annex 7**).

There is a silo and territorial mentality among almost all sections of the MoH – where each manager and his/her staff focus on the development of their own little unit as well as achieving sectional/unit performance indicators without looking at the bigger picture and issues. With that silo mentality, there is a competition for resources (especially people) across sections. There is a great need to develop the strategic understanding and ownership of key strategic issues in the health system across all sections, and including how to prioritise resources to address those key issues.

4.3.3. Shortage of staff

The evidence presented in Section 3 of this report clearly shows that the health sector falls short of the required number of human resources (when based on the local Samoa's population numbers) as well as the key skills required in critical areas of health. Given the limited pool of available qualified people in most of the specialised areas, Samoa must be innovative in how it can best utilise and maintain the skill sets that it has developed and invested in over the years. There are pull and push factors that motivate to stay in Samoa and the health sector and Samoa needs to capitalise on those factors. Feedback gathered from the discussions stressed that given its limited scale and resource-base, Samoa will it find difficult to achieve a tertiary care system similar to the standard in the bigger wealthy countries. However, Samoa has the ability and capacity to maintain a reasonably good secondary care system provided that the focus on primary care is strengthened.

There are limited resources in the public health services in some areas (e.g. general medicine, internal medicine, obstetrics and gynaecology, surgery, pharmaceutical services, and dental services) but human resources in some of those areas are not limited in Samoa if those available in the private sector are considered in totality. Samoa needs to utilise the resources and services already available in the private sector to assist with the shortage of staff in the hospitals. Such utilisation should be guided by the health service model proposed to develop under section 4.3.1 above. Every country (particularly developed contexts) has long moved towards adopting partnership models and approaches across many areas of public services given the realisation that the government cannot on its own deliver core services in an effective and efficient manner. It is the role of government (and this includes MoH) to ensure that the available capacity and resources in-country are best utilised to ensure that the people receive the best care possible.

Further there is potential for Samoa to tap into what can be made available regionally in terms of human resources to better assist in critical areas of human resources. This practice is being adopted some countries (e.g. Tonga, Tuvalu and Cook Islands) to help with the shortage of specialist manpower in country.

4.3.4. Attraction and retention and working conditions

The highest turnover rate is noted in the medical profession (in all clinical areas) and then the allied health areas (e.g. physiotherapy and laboratory scientists/technicians). Around 5 doctors leave the service each year and while working in other local health service areas can still benefit the local people, losing good physicians/doctors in critical areas is a concern. There is a need to retain a minimum number of doctors to maintain a good service at the hospitals. Retention strategies are to be considered for the retention of a minimum number of doctors and in the most critical specialised clinical areas.

Doctors/physicians, nurses and allied health workers are the ones who deal with sick people on a daily basis - to ensure that quality care services are provided on time. They are also the health workers (especially doctors) with the most complaints about long hours of work (overwork and fatigue) and other HR issues (e.g. cut in overtime payment and lack of salary adjustments in recognition of

qualification achievements) – see **Annex 5** and **Annex 7**. Their needs as key people of the organisation delivering frontline services must be serviced and properly taken take off.

The consultation and survey findings show that most medical doctors leave not because of remuneration levels, but because of their frustrations with the system. Most doctors do not feel like coming to work and being at work. They feel that their issues are not being considered and addressed - which is about providing that supportive environment for the workers. All doctors who participated in the survey (see **Annex 7**) stated that they are overworked. The discussions with them further indicated that this issue need further serious consideration, otherwise most senior doctors will leave the service. The survey finding (see **Annex 7**) show that 'a positive working environment' and 'job satisfaction' are the two factors that motivate people the most to come and being at work. Most of those who responded that 'they are considering leaving the MoH within the next 2 to 12 months' are doctors, nurses and some in the allied health service areas.

4.3.5. Limited career pathways and professional development

Discussions with staff highlighted a need to relook at the career pathways and profession development of all healthcare professions – doctors, nurses and allied health. While the medical doctor profession is the only profession that had its career salary and structure recently reviewed and approved by the NHS Board, Remuneration Tribunal and Cabinet in 2015, that approved career and salary structure has not been implemented effectively, citing differences in interpretations as the issue. With the localisation of the medical schools and plans to develop these schools further to accommodate provisions for postgraduate courses, the career structures of health professions should be revised to encourage health workers to take up courses and other professional development initiatives. The career structures must also provide incentives for the professional development and career development of health workers.

All sections consulted stated that there is not enough training and professional development provided for staff especially front line health workers and particularly the needed trainings in specialised areas of work and services. There are some local trainings provided but are provided to a few staff and are often ad hoc in their provisions. Training opportunities depend on the ability of the responsible manager to look for opportunities and to lobby for sponsorships and funding through their networks. For the doctors and nurses, their only local professional development activity is the CME (continuing medical education). There are no other formalised professional development programs (e.g. fellowships) for the different health professions. There is however potential to develop programs (e.g. fellowships and teaching careers for senior and near retired workers) for the different health professions provided that the appropriate incentives and structures are established to enable a professional development culture. This include developing the local institutions (e.g. medical schools and medical profession) and individuals so that they have the capacity to provide professional development programs.

4.3.6. HR capacity

The consultation and survey findings (see **Annex 5** and **Annex 7**) highlighted significant gaps with the HRM system and capacity of the MoH and which required further consideration for improvement. These gaps are summarised as follows:

- Lack of strategic capacity in HRM which result in the lack of attention given to strategic HRM issues, policies, planning, implementation, monitoring and evaluation;
- There is a need for an independent and capable HR unit staffed with qualified professionals who are able to provide free and fair advice on HR matters and to deal with critical issues of the Ministry and workforce;
- Lack of proper responses and communication from the HR management and unit on staffing matters (e.g. core service staff have to spend a lot of time away from work and services to follow up on their employment/HR matters);
- Slow progress in the processing of staffing matters (e.g. leave, entitlements and pay);

- Lack of understanding about HR issues and prevailing HR policies and procedures;
- Confusion about which HR policies and procedures that are current;
- Inconsistent application of HR policies and procedures;
- Administrative and finance staff handling HR matters which require qualified and experienced HR professionals to handle and to provide appropriate advice;
- Limited HR records keeping and information management which impact on the lack of accurate date/information for workforce statistics, planning, policy and decision making;
- A number of key positions in the MoH particularly those in the clinical areas have been vacant for a while (some for over 2 years), citing the hold-up to await the merge as the reason. There is a need to prioritise the filling of important positions in key MoH service areas;
- There is an urgent need to review, align and update the organisational structure (including job designs and descriptions with clear reporting lines) of the merged MoH; and
- Lack of recognitions and rewards given to good performances.

Further, based on the consultation and survey findings, a completed HRM and Manpower Audit for the MoH is provided in **Annex 8**. It identifies areas needing improvement in the MoH's HRM system (and practices) at the strategic and operational levels – based on HRM framework in Figure 42. This HRM and Manpower Audit highlights that 88% of the required HRM areas in the MoH are '***Not done too well, needs a fair bit of effort'***, and 13% are '***Done but needs improvement***'. None of the HRM areas are currently being '***done well'***. This is not necessary a fault of anyone in particular, but a reflection of the underdevelopment of HRM (both at the strategic and operational levels) in health, as well as an under-realisation and under-appreciation of the significance the role of HRM - as a key developmental contributor and functional area for business and service delivery improvement.

4.3.7. Prevailing policies and procedures - implications for HRH and health workforce

The prevailing policies and procedures on HRM and other related areas (e.g. finance and procurement) need a thorough assessment and review as they are impacting on efforts to attract and retain a capable health workforce that Samoa needs for its people. Some of those policies and procedures included the following:

- Scholarship schemes need to be properly aligned to the critical priority HR needs of health rather than basing mainly on the interests of individuals at the expense of organisational needs and interests.

- Study leave policy, scholarship bond and staffing policy encourage qualified people to go on study leave and not to return to work in critical areas of health. Samoa is training people to go away which means there is a limited return in the investments made on human resource development if people on study leave do not return to the areas of their trainings - those areas that Samoa needs the most in terms of qualified people.

- The removal of the 'direct graduate placement' policy and practice by the Public Service Commission meant that sponsored students do not return to serve in critical areas and that there is no guarantee that students will return to work in areas that are mostly needed, and especially given the non-enforcement of the scholarship bond.

- Opportunities are made available but not fully utilised (e.g. OUM scholarships) – existing policies do not allow support staff to work as medical students during their third and final years. There is a need to have a local supportive system to encourage students to utilise existing study opportunities.

- Compulsory retirement policy is affecting the manpower needs in critical areas (e.g. doctors and midwiferies) and where there is an ongoing shortage of staff. The retirement policy should be reviewed to allow staff who are retired but still fit to work. There must be an emphasis on

knowledge transfer and succession planning for areas where retirement will leave big workforce gaps in the near future.

- The direct promotion and reclassification of positions policy do not allow for the progression (and hence retention) of staff in specialised areas (where there is a lack of market competition) Direct promotion in this case should be allowed provided that staff recommended for promotion have demonstrated exceptional work performance and with years of specialised experiences that are mostly needed by the health services.

- Operational control by the PSC of decisions on operational staffing matters is contributing to unnecessary delays and red tapes with the implementation of health HR policies and processing of staff requests and other staffing and HR matters.

5. CONCLUSION

The situational analysis provided in the previous sections will provide the evidence for the formulation of the Health Strategy (SHRHS) and Samoa Health Workforce Development Plan (SHWDP) for 2020–2026. These documents, the 2020-2026 SHRHS and SHWDP are being developed separately from this situational analysis report.

During the course of developing the SHRHS and SHWDP 2020-2026, there will changes made to this report at a later time. A further discussion of this report among the key stakeholders of the health sector as well as at MoH management level will take place, which will result in further changes to be made to this situational analysis report.

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Annexes

Annex 1A: Samoa health worker density (all health workers)

	2016 census		Current workforce numbers													Ratio (per 1,000 population)											
	Population	#. villages	Doctors	Nurses+	Midwives	HSS	Dental	Lab	MIR	Phar	OAHS	HPES	CS	Mgmt	Total	Doctors	Nurses	Midwives	HSS	Dental	Lab	MIR	Phar	OAHS	HPES	CS	Mgmt	Total
Samoa	195,979	302	114	617	78	309	52	36	34	38	22	49	121	17	1,409	0.58	3.15	0.40	1.58	0.27	0.18	0.17	0.19	0.11	0.25	0.62	0.09	7.19
MoH			77	607	78	309	48	36	34	28	22	49	121	17	1,348	0.39	3.10	0.40	1.58	0.24	0.18	0.17	0.14	0.11	0.25	0.62	0.09	6.88
TTM/Main Office**	72,574	99	71	426	50	232	43	32	30	22	22	48	111	16	1,053	0.98	5.87	0.69	3.20	0.59	0.44	0.41	0.30	0.30	0.66	1.53	0.22	14.51
MTII/Satupaitea*	21,470	14	3	50	7	49	5	4	4	6		1	10	1	133	0.14	2.33	0.33	2.28	0.23	0.19	0.19	0.28	-	0.05	0.47	0.05	6.19
Lufilufi HC*	10,810	24	0.2	9	1	2									11	0.02	0.83	0.09	0.19									1.04
Lalomanu DH*	8,796	22	0.2	15	3	5									20	0.02	1.71	0.34	0.57									2.30
Poutasi DH*	7,126	19	0.2	20	4	2									22	0.02	2.81	0.56	0.28									3.11
Saanapu HC*	10,699	21	0.2												0	0.02	-	-	-									0.02
Leulumoega DH	33,072	23	1	21	3	4									26	0.03	0.63	0.09	0.12									0.79
Faleolo HC*	9,342	28	0.2	10	1	2									12	0.02	1.07	0.11	0.21									1.30
Foailalo DH*	6,657	14	0.2	18	4	3									21	0.03	2.70	0.60	0.45									3.18
Safotu DH*	8,890	24	0.2	20	2	3									23	0.02	2.25	0.22	0.34									2.61
Sataua DH*	6,543	14	0.2	18	3	5									23	0.03	2.75	0.46	0.76									3.55
Satupaitea HC*			0.2			2									2													
NKS						309									309													
Private			37				3			10					50													
NGOs/CSOs				10			1								11													
Upolu	152,419	236																										
Savaii	35,656	66																										

	2016 census		Current workforce numbers													Ratio (per 10,000 population)											
	Population	#. villages	Doctors	Nurses+	Midwives	HSS	Dental	Lab	MIR	Phar	OAHS	HPES	CS	Mgmt	Total	Doctors	Nurses	Midwives	HSS	Dental	Lab	MIR	Phar	OAHS	HPES	CS	Mgmt	Total
Samoa	195,979	302	114	617	78	309	52	36	34	38	22	49	121	17	1,409	5.82	31.48	3.98	15.77	2.65	1.84	1.73	1.94	1.12	2.50	6.17	0.87	71.90
MoH			77	607	78	309	48	36	34	28	22	49	121	17	1,348	39.29	309.73	39.80	157.67	24.49	18.37	17.35	14.29	11.23	25.00	61.74	8.67	68.78
TTM/Main Office**	72,574	99	71	426	50	232	43	32	30	22	22	48	111	16	1,053	9.78	58.70	6.89	31.97	5.92	4.41	4.13	3.03	3.03	6.61	15.29	2.20	145.09
MTII/Satupaitea*	21,470	14	3	50	7	49	5	4	4	6		1	10	1	133	0.41	6.89	0.96	6.75	0.69	0.55	0.55	0.83	-	0.14	1.38	0.14	61.95
Lufilufi HC*	10,810	24	0.2	9	1	2									11	0.03	1.24	0.14	0.28									10.36
Lalomanu DH*	8,796	22	0.2	15	3	5									20	0.03	2.07	0.41	0.69									22.96
Poutasi DH*	7,126	19	0.2	20	4	2									22	0.02	2.76	0.55	0.28									31.12
Saanapu HC*	10,699	21	0.2												0	0.02	-	-	-									0.16
Leulumoega DH	33,072	23	1	21	3	4									26	0.14	2.89	0.41	0.55									7.86
Faleolo HC*	9,342	28	0.2	10	1	2									12	0.02	1.38	0.14	0.28									13.03
Foailalo DH*	6,657	14	0.2	18	4	3									21	0.03	2.48	0.55	0.41									31.85
Safotu DH*	8,890	24	0.2	20	2	3									23	0.03	2.76	0.28	0.41									26.10
Sataua DH*	6,543	14	0.2	18	3	5									23	0.03	2.48	0.41	0.69									35.46
Satupaitea HC*			0.2			2									2	0.03			0.28									
NKS															-													
Private			37				3			10					50													
NGOs/CSOs				10			1								11													
Upolu	152,419	236																										
Savaii	43,560	66																										

Visiting doctor - one day per week equating to 20% of a doctor's time per week. ** include Apia urban community. Doctors include those in managerial roles. 0.2 times at DHs and HCs - so equate to only 2 doctors (1 for Savaii and 1 for Upolu). + include midwives. Poutasi nurses are also rotated to cover the Saanapu HC. MTII nurses are also rotated to cover the Satupaitea HC.

Annex 1B: Samoa health worker density (without non-clinical workers)

	2016 census		Current workforce numbers								Ratio per 1,000 population	
	Population	**# villages**	**Doctors**	**Nurses**	**Dental**	**Lab**	**MIR**	**Phar**	**OAHS**	**Total**	**Without HPES, HSS, CS & Mgmt**	**All health workers**
Samoa	195,979	-	114	617	52	36	34	38	22	913	4.66	7.19
MoH			77	607	48	36	34	28	22	852	4.35	6.88
TTM/Main Office**	72,574	99	71	426	43	32	30	22	22	646	8.90	14.51
MTII/Satupaitea	21,470	50	3	50	5	4	4	6		72	3.35	6.19
Lufilufi HC*	10,810	24	0.2	9						9	0.85	1.04
Lalomanu DH*	8,796	22	0.2	15						15	1.73	2.30
Poutasi DH*	7,126	19	0.2	20						20	2.83	3.11
Saanapu HC*	10,699	21	0.2							0	0.02	0.02
Leulumoega DH	33,072	23	1	21						22	0.67	0.79
Faleolo HC*	9,342	28	0.2	10						10	1.09	1.30
Foailalo DH*	6,657	14	0.2	18						18	2.73	3.18
Safotu DH*	8,890	24	0.2	20						20	2.27	2.61
Sataua DH*	6,543	14	0.2	18						18	2.78	3.55
Satupaitea HC*										-		
NKS										-		
Private			37		3			10		50		
NGOs/CSOs				10	1					11		
Upolu	152,419	236										
Savaii	43,560	102										
* visiting doctor - one day per week - equating to 20% of a doctor per week. ** include Apia urban community nursing												

Annex 2: MoH HRH Policy & Plan of Action 2007/2015 – implementation status

Strategic actions	2016 Review
Key Outcome 1.1.1: The health workforce is responsive to population demands, emerging demographic & disease patterns	
Collate & record national population demographics and health sector-wide indicators.	GPS system has not been fully utilised, need additional qualified staff in health information management, Cabinet appointed health information sector taskforce to lead health information system developments, needs to improve information sharing between MOH & NHS, trainings provided to staff.
Improve data collection and analysis by investigating options to link Patient Information System (PATIS), Community Health Nursing Information System (CHNIS) with non-NHS care providers.	Integrating the PATIS and CHNIS is impossible as these systems are totally different re platforms and software. MOH in collaboration with other sector partners are currently working on a new Information System that can capture all health information in the health sector including information in the PATIS and CHNIS.
Key Outcome 1.1.2: The health workforce meets the community, promotion/preventive, primary, secondary and tertiary health care needs of the population	
Conduct a gap analysis of health workforce against health services	HRH country profile for Samoa report as a requirement under WHO analyses the health workforce in Samoa. Information for this profile was obtained from the health sector. No. of health workers in different levels are reflected in the HRH Country Profile for Samoa 2014. HRH unit hasn't been established yet. SPPRD takes the lead in compiling information regarding HRH issues.
Assess the impact of partnerships in terms of promotion & prevention within the health sector	GPS are contracted by NHS to work at rural health hospitals and TTM outpatient after working hours. Samoa Family Health Association and NHS continue to provide antenatal and sexual reproductive health services. Orthotics and Prosthetics Workshop was built at TTM to meet the needs of those with disabilities. Partnerships amongst sector partners are strengthened through monthly public health sector meeting; annual health sector forums and Annual Bilateral Health Summit. NHS has installed TVs in different wards in the TTM new hospital for health promotion programs. Other televisions were procured under the Global Fund and district hospitals for their community health promotion and awareness programs.
Establish and formalise the appropriate levels of training & competencies for regulated health workers	Allied Health Professional Standards are in place and monitoring of implementation is the core responsibility of the Health Service Performance & Quality Assurance for Medical & Allied Health Division of MOH. Enhancing services standards for Allied Health are mandated under the newly endorsed legislation Allied Health Act 2014.
Key Outcome 1.1.3: The health workforce is organized and deployed based on population health needs and on reducing inequalities	
Assess availability and accessibility of health services for the population, including vulnerable groups	Samoa has just launched its 2nd DHS in June 2014. Results obtained from this survey will help in identification of population who are vulnerable to healthcare.
Work in partnership with multi-sectoral community based organizations, including village councils to deliver health services in rural & remote areas	Ongoing implementation of the Aiga ma Nu'u Manuia project led by the Ministry of Women, Community and Social Development, under the Health Sector Wide Approach Program for funds allocated to community based organizations that participated in the Vegetable Garden Programs and Physical Activity Programs.
Work in partnership with the MOF & PSC & Donor Agencies to ensure that budgetary provisions, incentives and resources are available to support the health sector.	Capability Plan is incorporated in the Workforce Plan of the Ministry of Health for its staff only based on the Performance Appraisal System under the leadership of the Public Service Commission.
Support community workforce and community based organizations to ensure they have adequate resources to provide the agreed level of health services.	NHS workforce is completed. MOH workforce plan development is in progress. All sector partners developed their own annual work plans to work on accordingly. MOH as leading agency continuously provide resources to those who request when necessary. NHS had finally employed qualified biomedical engineers since 2014.
Provide essential resources to enable health workers to effectively deliver safe and quality care (e.g. facilities, equipment/supplies & transport)	Health workers responsible for maintenance of equipment at NHS had been sent overseas for capacity building under Health SWAp Program. These are reviewed by health professions in accordance to their health professional services standards. Corporate Services for each sector partners is responsible for capturing information on all assets under their care and recording into their assets register. This area is generally addressed by the Samoa government with roll out of Asset Module System.
Reactivate the IT User Group ensuring that there is expertise in maintenance and development of databases, data input, and reporting formats required for human resources for health	Generation of reports requires verification at almost all levels due to system being primarily paper based. Collection of data from rural health facilities is manually done. PATIS exists at TTM and NHS. This is the reason why there is move by the health sector to invest in a new Health System. Health Sector Information Taskforce was established in 2010 and this taskforce lead the current project for e-health and development of a new health sector information system. It was formally approved by the Cabinet in October 2014 and consists of representation from MOH, NHS, MOF, AG, MCIT, NKFS and GPs.
Key Outcome 1.1.4: Strategies are implemented to ensure that the number, types and skills of the health workforce are sufficient to sustain and maintain existing and new technology.	
Identify available existing & new technologies and assess the skills	MOH/NHS/NKFS have their own qualified staff responsible for maintenance of health equipment and facilities.

required for sustaining and maintaining them	
Ensure that individuals are adequately trained and competent to use and maintain equipment	MOH capability plan is not yet developed.
Establish local standards (maintenance & equipment to ensure that equipment is regularly maintained, upgraded and replaced to maintain safety and service quality	All assets of the Ministry are registered under CSD assets register and auditing is done by internal auditor and audit office of the government. Behind schedule. OH&S Policy's development and implementation is behind schedule and will be rolled over to be realized in the new Financial year. Maintenance and upgrading of equipment is the responsibility of Corporate Service Division of all sector partners.
Key Outcome 2.1.1 Effective Strategies are in place to maximize the fit between population needs and the available workforce	
Establish an HRH database which includes health sector wide staffing/ workforce indicators as decided by stakeholders groups	The health sector is currently working to build a total new system for the health sector that will capture all information related to health including Human Resources for Health module. HRH database is in the plan for the new Health Information System as a separate module. Registrar position for health professionals established under MOH structure.
Staff development and training are linked to performance management systems	The public health sector partners, they all follow the PSC performance appraisal system. Succession plans not yet developed for MOH.
Proper coordination & supervision of overseas visiting teams and volunteers.	NHS is the coordinating body for all health visiting teams from overseas and issuing of temporary Practicing Certificates for these visiting teams is the responsibility of MOH Office of the Healthcare Professional Registrar. Orientation programs for health visiting teams from overseas on Samoa's healthcare system are the responsibility of national healthcare service providers.
Develop plans to assess skill mix and staffing according to population ratios and utilization of current staff	Need to review workforce plans
Investigate options for development of donor partnership and funding to meet strategic HRH planning priority needs	MOH as the leading agency of the health sector is coordinating the HRH Taskforce for the health sector.
Key Outcome 2.1.2 Effective strategies are in place to minimize staff distribution imbalances and to increase the size of the workforce to meet population needs.	
Facilitate opportunities to share health service resources (equipment, facilities and training opportunities) with the private/public and other health care providers.	Public health sector meeting are held on monthly basis. Meeting with private sector is on annual basis through annual health forums. MoUs between MOH and sector partners include MoUs with MWCSD, MESC, MNRE and MAFF. MOH's Corporate Plan 2013-2016. Workforce Plan is almost in completion. NHS has completed their Corporate Plan.
Ensure appropriate job classifications and structures are in place.	MOH had restructured its organizational and divisional structures in 2010 and approved by PSC in 2011.
Key Outcome 2.2.1 Workforce needs are addressed to ensure optimal workforce retention and participation	
Review the OHS legislation. Utilize and enforce the MOH OHS Manual in all health care sectors Set up a sector-wide OHS monitoring body with focal points from all health care organizations	There is no OHS policy in place and OHS legislation is not yet implemented. There is no position specifically for OHS but occupation OHS activities are implemented by the MOH's Environmental Health Section and considered in their Health Impact Assessments. Safe working environments issues are already addressed in the healthy workplace guidelines. Health and Environment Impact Assessments are conducted by Environment Health Officers to ensure the safety and security of health facilities for both the public and health workers. Pharmaceutical Warehouse is under construction with the aim of ensuring sufficient drug supplies to cater the sick population of Samoa and in times of disasters. The Health Service Performance and Quality Assurance Divisions in MOH (Nursing & Midwives and Medical & Allied Health) develop and implement Quality Assurance systems.
Establish and maintain partnership with health regulatory bodies and professional organizations	Health staffs from both public and private health sector continue to receive education opportunities funded under Health Sector Wide Approach program, the WHO fellowships programmes, and government sponsored studies at NUS (Faculty of Nursing/Faculty of Medicines/Health Science). Online distance education through Pacific Open Learning for Health Network is another avenue for health staff who are not able to do full time studies overseas.
MOH OHS monitoring body to take a high profile and lead on formulating workplace strategies and implementing actions plans which promote positive workplace cultures (including upgrading and maintaining safe physical environments)	Stakeholders were informed of OHS issues through consultations on Healthy Workplaces Guidelines. Achieved. National Healthy Workplaces Guideline was officially launched during the official opening of the Healthy Week on 6th November 2015. This guideline is distributed widely across organizations and government ministries for their awareness and implementation.
Key Outcome 2.2.2 Improve workforce supply, stability and effective management of workforce mobility	
Effectively manage current workforce supply in line with ethical migration codes	The development of a migration policy in line with SPC and Commonwealth Code of P of Practice for recruitment of health workers in the Pacific region (2007) is not yet implemented. MOH is a member of the WTO committee and submissions were completed for the consideration of the implications of WTO Service Agreement on

	migration of health workforce. However, workforce issues are discussed in public sector management meetings when need arises. Staff satisfaction and exit surveys not yet implemented. Not yet implemented.
Develop marketing strategy for educational courses that target shortages as part of the MOH long term planning role	The first Health Career Day was held on 13 November 2015 to market health professions to students to increase the number of them enrolling in health studies. Strengthening linkages with MOU partners in terms of marketing health as a profession is ongoing with development partners. For instance, scholarship under DFAT specifically for health.
Key Outcome 2.3.1 Pre-Service education and training delivers: (1) a suitably qualified and effective health workforce and (2) the skills and competencies appropriate and adaptable to country needs	
Review current Government and Donor scholarship programs for health	Bachelor of Health Science was developed and implemented at the National University of Samoa in 2012. Consultations with the scholarship committee on the priorities of the health sector were initiated in 2013. Negotiations and consultations for HRH priority needs are ongoing with the Scholarship Committee including DFAT and MFAT. Establishment of a Health Sector Scholarship Screening Committee to oversee these issues is in progress. Assessing the number of individuals who gain overseas scholarships and migrate & do not return to country of origin is not yet implemented.
Establish a national health educational plan which includes competencies and academic quality improvement frameworks that are in line with local regulatory bodies, regional and international standards and MDGs in order to strengthen national education institutions	Collaborating with the MESC and MOH to: 1) increase number of school leavers with adequate qualifications so that they can enrol in health care courses and 2) Assess adequacy of provision of undergraduate science courses is not yet being implemented. The Bachelor of Health Science is up and running at NUS. Nurses have made progress with marketing health professions – Academic institutions are also marketing the health profession within their institutions. As a results, there is a significant increase of numbers of nursing students recruiting very year. E.g. 2014-15 new recruits, 2015 – 220 new recruits (i.e. 43% increase).
Match intakes into academic institutes with HRH plans and estimated workforce requirements	Not yet implemented.
Key Outcome 2.3.2 Continuing education and training supports an effective, adaptable and motivated health workforce at all levels of care	
Develop performance management systems that are linked to continuing education and career development.	This is being done for nurses. Continuing education is ongoing under WHO fellowship and SWAp. MOH as leading agency for the health sector started screening qualified health candidates for government scholarships and WHO fellowships. Visiting Specialists are liaised with NHS and MOH when need arises. Establishment of the Health Sector Scholarship Committee is in progress.
Develop policy with regulatory bodies which state the appropriate number of training days for continuing education in line with professional licensing.	Instigating annual licensing of all regulatory bodies is ongoing. This is the core responsibilities of the Registrar for all health professionals.
Key Outcome 3.1.1 Effective strategies are in place to support sound stewardship and governance	
Develop policies and processes to strengthen leadership advocacy, good governance and succession planning within MOH and health sector.	Establishment of a HRH sector wide taskforce is in progress. Had already developed the Terms of Reference but await the endorsement of membership.
Continue to develop systems that enable professional regulatory bodies to fulfil their mandated roles following the new MOH & NHS Acts	Regulating professional bodies are governed under each health professional legislations (Pharmacy Act 2007, Medical Professional Act 2007, Dental Act 2007, and Allied Health Act 2014. Issuing of annual practicing certificates and licenses is the responsibility of the office of the Health Professionals Registrar. Health Professional Services Standards and Code of Practice are the responsibilities of the Quality Assurance Divisions under MOH (Health Service Performance Quality Assurance for Nursing and Midwifery & Medical and Allied Health divisions). Allied Health Council has recently been established and running. MOH's internal review of its core functions to ensure a more coordinated way to address HRH issues for the sector given its new roles was completed in 2011. As a result MOH divisions were reshuffled to ensure MOH HRH mandated functions are well coordinated and implemented.
Strengthen MOH to carry out its mandated role in line with the MOH Act 2006	All divisions of MOH are complied with their mandated roles under the Ministry of Health Act 2006.

MoH (2016a)

Annex 3: NHS Workforce Development Plan 2013/2018 – implementation status

Key Actions	Status
Clinical services	
1. Ongoing support and development of OUM/FOM to: • Maintain a constant flow of medical graduates. • Increase annual intake to address historical shortage and improve supply pipelines at all levels of the medical workforce. • Provide postgraduate diplomas, particularly in disciplines where major increases in workforce numbers are required (i.e. internal medicine and primary care/general practice).	There has been an increase in the number of interns/house surgeons in recent years as well as a slight increase in the number of registrars. However there remains a shortage of experienced doctors specialising in critical areas of medicine. The development of postgraduate programs with the OUM/FOM is still in the discussion and planning phase and not yet been actioned.
2. Foster ongoing professional development in all clinical services for sustaining enthusiasm and commitment to medical services.	Professional development is ongoing including the doctors Continuing Medical Education.
3. Overseas recruitment for 'hard to fill' vacancies in Priority 1 (mental health, radiology, pathology) and Priority 2 (internal medicine, emergency medicine, anaesthetics, paediatrics, ENT, general surgery/orthopaedics) - all Priority 1 positions to fill by end 2014.	A few overseas doctors (mainly from China) are working in areas such as Anaesthesia, Radiology and Pathology. This includes a NZ qualified anatomical pathologist funded by the Australian Government.
4. A robust and equitable salary model for medical staff based on agreed principles, which reduces disputes and supports concentration on workforce and service development.	A new salary model for the medical staff was approved and implemented in 2015.
5. Alternative arrangements to address funding issues for Master students at FNU – to reduce burden on the government and individuals undertaking higher training.	Not sure what has been undertaken to achieve this action.
6. Enter into discussion with NZ Government and Australasian Colleges, Health Workforce NZ, MFAT and DHBNZ to address access issues to Australasian training programs - to commence in 2015 and focusing on Priority 1 and Priority 2 medical specialists.	Not sure what has been undertaken to achieve this action.
7. Dedicated Registrar positions in Priority 1 and Priority 2 specialities to provide exposure to medical staff and to seek the development of individuals to undertake specialist training.	Not sure what has been undertaken to achieve this action.
Medical imaging	
8. A rigorous training and credentialing program for all non-registered radiography staff - credentialing of all staff to complete by end 2013.	A training for non-registered radiography staff is being established and accredited by the SQA.
9. Support applicants to undertake the 3 year undergraduate course at FNU or in NZ.	Not sure what has been undertaken to achieve this action.
10. Train a 3rd ultra-sonographer and a 3rd CT radiographer to reduce risk through illness or resignation for these modalities.	Not sure what has been undertaken to achieve this action.
Nursing and midwifery	
11. A hybrid nursing model using NZ, Australia, UK and American models – to include nursing assistants - and with training to be provided to nursing assistants.	Not sure what has been undertaken to achieve this action.
12. Midwifery numbers need to be agreed to for each facility across Samoa concentrating on addressing major shortages at TTM hospital where almost all deliveries are undertaken at TTM and MTII hospitals yet 70% of midwifery trainees are selected from outlying areas.	Not sure what has been undertaken to achieve this action.
13. Increase the number of trained nurses cognisant with a desired and affordable nursing model to allow for a gradual increase in nursing numbers.	There has been an increase in the number of nurses working in the MoH.
14. Introduce Auxiliary Nursing Assistants - with 1 Nursing Assistant per ward/shift at TTM Hospital to support the provision of robust nursing care and rehabilitation assistance.	A total of 47 nursing assistants are currently working across various clinical areas of TTM, MTII, DHs and HCs.
15. Encourage the development of nursing advanced practice in all departments by reducing some rotation of nurses and by ensuring each department always has a cohort of nurses with advanced skills in that department.	The rotation of nurses is still an ongoing practice in the Ministry.
16. Cease the rotation of experienced nurses in highly specialised areas (theatre, ICU, neonates) as it is affecting the quality of care and loss of capacity, and not utilising the specialised skills acquired by staff.	There are nurses trained in specialised areas who are not working in their specialised areas. Nurses are being rotated to cover for staff shortage in other areas.
17. Robust orientation, staff development, in-service education packages and departmental resources for nurses in all areas. Senior Nurse Specialists to be responsible for supporting capacity development, and providing clinical supervision and oversight of nursing care.	Ongoing development provided – not sure about the effectiveness of existing development packages.

18. Review the New Graduate year to ensure they are achieving optimal patient benefits from current arrangements and optimising nursing service being providing within the first year of practice.	Feedback from nursing staff indicated the need to strengthening the orientation program of nurse graduates.
19. Temporary employment of overseas nurses to fill vacancies.	There is no recruitment of overseas nurses in the hospitals and health centres.
20. Plan for nursing FTE to ensure funding availability for all new nursing graduates.	MoH is able to recruit and absorb into its workforce all new nursing graduates every year.
Medical laboratory	
21. Progressively move to a qualified workforce for scientists and technicians through programs in NZ and at the NUS Bachelor of Science (BSc).	Ongoing efforts to gradually move to a qualified laboratory workforce with training provided for scientists and technicians.
22. No further appointment of non-trained staff with the exception of specimen collection, phlebotomy and clerical positions.	This is regularly monitored.
23. Robust training programs, supervision, audit and credentialing of qualified clinical staff according to acceptable standards.	Same comment as above – credentialing is in progress.
24. A robust in-service training for all laboratory staff.	A robust in-service training is yet being developed fully.
25. Inclusion of some medical laboratory science papers in the NUS BSc.	Negotiations still underway with NUS.
26. A bridging program (BSc to BMLS) through on-line or extramural courses.	This is being undertaken with the Pacific Pathology Centre in NZ.
27. Implement a 'Lean Thinking' program for lab staff	Not sure about the progress on this.
28. Staff to continue participating in the Pacific Paramedical Training Centre annual training program.	Ongoing
29. Linkages for section heads with overseas laboratory for technical advice.	Ongoing linkages are being developed.
Pharmacy and warehouse	
30. Continue the 4 year Bachelor of Pharmacy program for staff – to meet the target of 12 pharmacists by 2016.	This target is not achieved. There are only three pharmacists working in the MoH. Some pharmacists left the NHS in the last 5 years to work in the private sector.
31. Ongoing staff development and education for staff to support new developments in pharmacy (e.g. clinical pharmacy) and to maintain staff interest and commitment.	There is ongoing staff development but often ad hoc because it depends on support from development partners. There is no local training budget for staff development.
32. Continue the 10-month residential program under the NZFPA sponsor targeting pharmacy technicians.	Not sure about the progress on this.
33. On-the-job training for pharmacy assistants and warehouse staff.	On-the-job training is provided.
Oral and dental services	
34. Continue training program for dental therapists at NUS.	There is no training program for dental therapists at NUS, but it is being offered locally by the Mormon church.
35. To improve in-country capacity, dentists to attend specialised training overseas - 1 forensic dentist, 1 in orthodontic services, 1 paedondontist, 1 public oral health specialist.	There is a lack of funded opportunities for dentist to pursue specialised areas of dental. There are no trained dentists in these specialised areas with the MoH.
36. Ongoing promotion of the dentistry profession with school leavers and young adults.	Ongoing – but not sure about progress on this action.
Allied health	
37. Recruit overseas trained graduates and local technicians with the appropriate qualification in the biomedical unit.	There are only two qualified biomedical engineering officers and one biomedical technician in the MoH.
38. Develop sub-specialisation interests in the biomedical unit in order to manage complex medical equipment.	Not yet developed
39. Achieve core staffing levels in allied health through overseas training – 5 physiotherapists, 3 podiatrists, 4 in orthotics, and 3 speech-language therapists.	Progress in developing these areas of allied health is slow.
40. Establish positions in new allied health professions to give confidence to school leavers to undertake studies in allied health disciplines.	Not yet implemented.
41. Raise the profile for new and existing allied health profess in Samoa.	Not yet implemented.
42. CSSD manager and staff to complete the Certificate in CSSD	Not yet implemented.
43. Train 1-2 local echocardiographers through local supervised while trainees undertake formal training in echocardiography overseas.	Not yet implemented.
Property	
44. Develop engineering and trades staff through ongoing training.	Not yet implemented.

45. Develop the local asset management team in best practices for building developments that incorporate models of care considerations.	Not yet implemented.
46. Overseas exposure of staff to improve highest standards of infrastructure maintenance and business continuity.	Not yet implemented.
Finance	
47. Develop senior roles in finance into creating robust business cases for health.	Not yet implemented.
48. Develop the role and contribution of finance in improving NHS financial performance.	Working in progress.
Management information system	
49. Increase in IT capacity	Not yet implemented.
50. At least one senior medical coder receives formal qualification in medical coding and takes up the role of standards and training in medical coding.	Not yet implemented.
Clinical audit and quality	
51. Ongoing development of clinical audit and staff through exposure to overseas trends in quality methodologies.	Exposure to overseas trends is limited
52. Quality audit team providing training on quality methodologies to departments.	Training on quality methodologies has not being fully developed and provided.
Internal audit	
53. Internal audit team to support closer collaboration and shared skill acquisition.	Ongoing
Human resources and administration	
54. A pro-active 'hard to recruit' strategy for Priority 1 and Priority 2 specialist positions.	Such strategy has not been developed.
55. Annual budget cycle with approved budgeted FTE for each department.	Not yet implemented
Key workforce development tools	
56. Monitoring and reporting on performance management KPIs.	There is some progress with the implementation of the PSC Performance Appraisal System and output budget.
57. Recruit a Principal Officer to drive Training and Workforce Development.	A Principal Officer Training and Development is in place but the role's focus on driving training and workforce development has been weak.
58. Establish a workforce development committee to maintain focus, drive and monitoring workforce development	Committee not yet established.
59. Implement a two-yearly staff satisfaction survey.	Not implemented.
60. A formalised policy on Career Develop and Succession Planning aligned to the Performance Management System.	Not implemented.
61. Provisions of management training programs made available.	Management training programs are being provided but ad hoc and limited in scope in terms of participants.
Critical overarching strategies	
62. Overseas undergraduate scheme to better support the meeting of workforce needs	Not implemented.
63. Staff promotions to base on demonstrated performance and capability.	Not implemented.
64. Episodic local training program leading to the registration for allied health professions including laboratory, pharmacy, physiotherapy, radiography, occupational therapy.	Not implemented.

NHS (2014)

Annex 4: List of people consulted

Names	Designation/Position	Division/Section/Unit
1. Dr Ponifasio	Deputy General Director/CEO	Management
2. Dr Robert Thomsen	Deputy General Director/CEO	Management
3. Lili Chung Sum	Nurse Manager	General outpatient services
4. Dr. Agnes Iosefa	Medical Doctor	General outpatient services
5. Dr. Pai Enosa	Medical Doctor	Accident and emergency services
6. Sieni Metuli	Nurse Manager	Accident and emergency services
7. Dr. Tito Kamu	Head of Unit	Paediatric services
8. Dr. Litara Esera	Medical Doctor	Paediatric services
9. Dr Maluapapa Siaosi??	Medical Doctor	Paediatrics
10. Kirtmalini S Dalbhanjan	Consultant Specialist	Paediatrics
11. Matagofie Alofaaga	Senior Nurse Specialist	Paediatric services
12. Telesia Lafaele	Senior Nurse Specialist	Paediatric services
13. [Name missing]	Registered Nurse	Paediatric services
14. [Name missing]	Registered Nurse	Paediatric services
15. [Name missing]	Registered Nurse	Paediatric services
16. [Name missing]	Registered Nurse	Paediatric services
17. [Name missing]	Enrolled Nurse	Paediatric services
18. [Name missing]	Enrolled Nurse	Paediatric services
19. [Name missing]	Auxiliary nurse assistant	Paediatric services
20. Dr. Monalisa Punivalu	Head of Unit	Obstetrics and Gynaecology
21. Dr Faleluafua Manatua	Medical Doctor	Obstetrics and Gynaecology
22. Robin Roache	Senior Nurse Specialist	Obstetrics and Gynaecology
23. Dr Finau Tema Amiga	Nurse Manager	Obstetrics and Gynaecology
24. Dr Fuifatu Tevaga	Consultant Specialist	Obstetrics and Gynaecology
25. Dr Manatua Iati	Medical Doctor	Obstetrics and Gynaecology
26. Dr Ulai Tapa Fidow	Consultant Specialist	Obstetrics and Gynaecology
27. Tinei Tuilafo	Senior Nurse Specialist	Medical Ward/Acute 8
28. Dr Folototo Leavai	Medical Doctor	Medical Ward/Acute 8
29. Rosanna Tofaono	Medical Doctor (on LWOP)	Medical Ward/Acute 8
30. Dr Aleki Fuimaono	Head of Unit	Surgical ward/Acute 7
31. Monica Iosefo	Registered Nurse	Surgical ward/Acute 7
32. Uga Simolo	Registered Nurse	Surgical ward/Acute 7
33. Meia Sua	Registered Nurse	Surgical ward/Acute 7
34. Fiasili Taape	Registered Nurse	Surgical ward/Acute 7
35. Naifoua Tutoatasi	Registered Nurse	Surgical ward/Acute 7
36. Joshua Peia	Registered Nurse	Surgical ward/Acute 7
37. Mauga folau Aita	Auxiliary Nurse Assistant	Surgical ward/Acute 7
38. Ioane I	Enrolled Nurse	Surgical ward/Acute 7
39. Faafou M	Registered Nurse	Surgical ward/Acute 7
40. Fetii Ulaula	Registered Nurse	Surgical ward/Acute 7
41. Mary Marzan	Registered Nurse	Surgical ward/Acute 7
42. Amato	Registered Nurse	Surgical ward/Acute 7
43. Simanu Taulapapa	Registered Nurse	Surgical ward/Acute 7
44. Teriva Figao	Registered Nurse	Surgical ward/Acute 7
45. Saumania	Registered Nurse	Surgical ward/Acute 7
46. Taapena Soloputi	Nurse Manager	Surgical ward/Acute 7
47. Katenari Posi	Senior Nurse Specialist	Surgical ward/Acute 7
48. Christina. M	Registered Nurse	Intensive Care Unit
49. Avila .I	Registered Nurse	Intensive Care Unit
50. Faaloiloia .P	Registered Nurse	Intensive Care Unit
51. Leofao A	Registered Nurse	Intensive Care Unit
52. Leata T	Registered Nurse	Intensive Care Unit
53. Mulimai	Registered Nurse	Intensive Care Unit
54. Makauta E	Registered Nurse	Intensive Care Unit
55. Matilda N	Senior Nurse Specialist	Intensive Care Unit
56. Adam Levi	Registered Nurse	Intensive Care Unit
57. Sosene L	Registered Nurse	Intensive Care Unit
58. Mikaele	Registered Nurse	Operating Theatre
59. Falelina	Registered Nurse	Operating Theatre
60. Tainefu Ah Fook	Registered Nurse	Operating Theatre
61. Dr. George Tuitama	Medical Doctor	Mental Health Services
62. Pisaina Tuuu	Registered Nurse	Mental Health Services
63. John Lokeni	Registered Nurse	Mental Health Services
64. Usugafono	Registered Nurse	Mental Health Services
65. Dr. Lusila Ah Ching	Medical Doctor	Eye Clinic
66. Carol Auvaa	Registered Nurse	Eye Clinic
67. Dr Sione Pifeleti	Medical Doctor	Ear, Nose and Throat (Government of Samoa)

68. Dr. Sale Fau	Dentist	Oral and dental health services
69. Dr. Sina Ioapo	Dentist	Oral and dental health services
70. Aharoni Viliamu	Manager	Pharmaceutical Services
71. Tuiala Tiotio	Manager	Medical Imaging & Radiology Services
72. Dr Glen Fatupaito	Radiologist	Medical Imaging & Radiology Services
73. Masina Fuimaono	Principal Radiographer	Medical Imaging & Radiology Services
74. Hinauri Leaupepe	Manager	Laboratory Services
75. Dr Ross Miller	Pathologist (NZ)	Laboratory Services
76. Dr Filipina Amosa	Pathologist	Laboratory Services
77. Rube Simeona Une	Principal Physiotherapist	Other Allied Health Services
78. Matthew Amituanai	Senior Physio	Other Allied Health Services
79. Lomitusi Manesa	Kitchen Supervisor	Hospital Support Services
80. Asomina Epenese	Manager	Other Allied Health Services
81. Pouesi Young	OAHSS	Other Allied Health Services
82. Lupe Mene	Dietician	Other Allied Health Services
83. Sagu Tuilufafage	Social Services	Other Allied Health Services
84. Vaitogi Tuese	Physio Assistant	Other Allied Health Services
85. Kerupi Ioane	Physiotherapist	Other Allied Health Services
86. Luafulu Poine	Physio Assistant	Other Allied Health Services
87. Mokesita Loia	Executive Assistant	Other Allied Health Services
88. Paneta Simona	Physio Assistant	Other Allied Health Services
89. Agnes Peter	Client Liaison officer	Other Allied Health Services
90. Timani Autagamia	Mobility Assessment Officer	Other Allied Health Services
91. Posenai Patu	Prosthetist/Orthotists	Other Allied Health Services
92. Rube Simeona Une	Principal Physiotherapist	Other Allied Health Services
93. Matthew Amituanai	Senior Physio	Other Allied Health Services
94. Sunema Talapusi	Principal Biomedical Engineer	Biomedical
95. Noel Kitto	Technical Assistant, Biomedical	Biomedical
96. Siaosi Tuigamala	Biomedical Technician	Biomedical
97. Lesa Fuatai Maiava	Assistant CEO	Nursing & Midwifery
98. Pili Aliisolia Alatimu	Manager	MTII Hospital (Tuasivi)
99. Dr Nolan Fumaatu	Medical Doctor	MTII Hospital (Tuasivi)
100. Fuaselela Iupeli	Principal Administration Officer	MTII Hospital (Tuasivi)
101. Maranatahana Sulusi	Senior Administration Officer	MTII Hospital (Tuasivi)
102. Henry Taylor	Principal Nurse Officer	MTII Hospital (Tuasivi)
103. Logomai F Telea	Senior Nurse Specialist	MTII Hospital (Tuasivi)
104. Dr Tala Vaa	Dentist	MTII Hospital (Tuasivi)
105. Faimata Taulauniu	Senior Dental Therapist	MTII Hospital (Tuasivi)
106. Naoupu Pelisasa	Dental Assistant	MTII Hospital (Tuasivi)
107. Liutao Taofasi	Senior Dental Therapist	MTII Hospital (Tuasivi)
108. Dr Emosi Ah Ching	Dentist	MTII Hospital (Tuasivi)
109. Pulufana Uelese	Radiographer	MTII Hospital (Tuasivi)
110. Faautu Ainuu	Lab Technician	MTII Hospital (Tuasivi)
111. Tania Aperaamo	Lab Technician	MTII Hospital (Tuasivi)
112. Viiga Letufuga	Radiographer	MTII Hospital (Tuasivi)
113. Meleage Tapuala	Lab Technician	MTII Hospital (Tuasivi)
114. Leilani Kamu	Principal Radiographer	MTII Hospital (Tuasivi)
115. Pai R Tuamasaga	Senior Pharmacy Technician	MTII Hospital (Tuasivi)
116. Nila Lene	NM	Lufilufi Medical Centre
117. Togataimai Sanume	RN/MW	Lufilufi Medical Centre
118. Afiafi Misi	EN	Lufilufi Medical Centre
119. Samaiafa Tulagafou	Staff Nurse	Lufilufi Medical Centre
120. Vaa Uiese	Auxiliary nurse assistant	Lufilufi Medical Centre
121. Pisimaka	Nurse Manager	Leulumoega District Hospital
122. Senetenari Fuauli	Registered Nurse/Midwife	Leulumoega District Hospital
123. Leavaai Tanoai	Registered Nurse/Midwife	Faleolo Medical Centre
124. Marina Leituala	Registered Nurse	Poutasi District Hospital/Saanapu
125. Sale Taituuga	Security	Poutasi District Hospital/Saanapu
126. Faafetai Taufao	Registered Nurse	Poutasi District Hospital/Saanapu
127. Fenumiai Leatio	Registered Nurse	Poutasi District Hospital/Saanapu
128. Selwyn SAmataga	Cleaner	Poutasi District Hospital/Saanapu
129. Fituvalu Letoa	Registered Nurse/Midwife	Lalomanu District Hospital/Saanapu Medical Centre
130. Fituvalu	Registered Nurse	Lalomanu District Hospital/Saanapu Medical Centre
131. Molesi	Registered Nurse	Lalomanu District Hospital/Saanapu Medical Centre
132. Talalelei	Registered Nurse	Lalomanu District Hospital/Saanapu Medical Centre
133. Mafalu Seiula	Registered Nurse	Safotu District Hospital
134. Niureta Maluelue	Auxiliary nurse assistant	Safotu District Hospital
135. Tapu Tugagu	Enrolled Nurse	Safotu District Hospital
136. David	Driver	Safotu District Hospital
137. Leutu Eti	Cleaner	Safotu District Hospital
138. Luisa Tevaga	Enrolled Nurse	Safotu District Hospital
139. Feolole Sonalele	Registered Nurse	Safotu District Hospital

140. Faafuine Pisalele	Registered Nurse	Safotu District Hospital
141. Telesia Afualo	Registered Nurse	Safotu District Hospital
142. Faanaoa faono	Nurse Manager	Safotu District Hospital
143. Nerisa Eteni	Registered Nurse	Sataua District Hospital
144. Gase Matoka	Registered Nurse	Sataua District Hospital
145. Aiufi Bayer	Registered Nurse/Midwife	Sataua District Hospital
146. Noema Aumalesulu	Registered Nurse	Sataua District Hospital
147. Messi Lesatele	Registered Nurse	Sataua District Hospital
148. Iuta Fiso	Ambulance Driver	Sataua District Hospital
149. Max Utumapu	Registered Nurse	Sataua District Hospital
150. Fuatai Tuese	Registered Nurse	Foailalo District Hospital
151. Faalaa Epati	Registered Nurse	Foailalo District Hospital
152. Lote Ioane	Registered Nurse	Foailalo District Hospital
153. Itulagi Pasia	Enrolled Nurse	Foailalo District Hospital
154. Josephia Letoa	Registered Nurse	Foailalo District Hospital
155. Aleluia Tupau	Registered Nurse	Foailalo District Hospital
156. Dennis Faratuo	Registered Nurse	Foailalo District Hospital
157. Afualo Lagaia	Registered Nurse	Foailalo District Hospital
158. Vaalele Tito	Driver	Foailalo District Hospital
159. Leaso Tiafu	Registered Nurse	Satupaitea Health Centre
160. Lina Pepelnia Tafau	Registered Nurse	Satupaitea Health Centre
161. Ruta Toafa	Registered Nurse	Satupaitea Health Centre
162. Lauesi Tamalii	Cleaner	Satupaitea Health Centre
163. Faamatala Asovale	Cashier	Satupaitea Health Centre
164. Pulei Opeta	Auxiliary nurse assistant	Satupaitea Health Centre
165. Lino Rita	Auxiliary nurse assistant	Satupaitea Health Centre
166. Leoa Uelese Faleao	Security	Satupaitea Health Centre
167. Valeria Matafa	Enrolled Nurse	Satupaitea Health Centre
168. Poutasi Seuseu	Principal Regulatory & Monitoring Officer	Quality Assurance & Infection Control
169. Sally Mcfall	Infection Control Officer	Quality Assurance & Infection Control
170. Lagaau Uele	Quality Assurance Officer	Quality Assurance & Infection Control
171. Lokeni Tiatia	Principal Quality Assurance Officer	Health Professional Development
172. Siatua Lo'au	Principal Officer, Professional Development	Health Professional Development
173. Faalagilagi P Dean	Principal Officer, Regulatory & Monitoring	Health Professional Development
174. Fata Paulo Pemita	Principal Sanitation Officer	Disease Surveillance, International Health Regulations
175. Tupou chan Tung	Principal Lab Technician	Disease Surveillance, International Health Regulations
176. Rosalei Tenari	Senior Disease Surveillance Officer	Disease Surveillance, International Health Regulations
177. Julieth Gafa	Disease Surveillance Officer	Disease Surveillance, International Health Regulations
178. Hionona Tapu	Senior Water Quality Office	Disease Surveillance, International Health Regulations
179. Maee Ualesi Silva	Assistant CEO	Health Promotion and Enforcement
180. Siufaga Simi	Principal Health Educator	Health Promotion and Enforcement
181. Christina Soti-Ulberg	Principal Dietitian & Nutritionist	Health Promotion and Enforcement
182. Christine Lauvao	Health Education	Health Promotion and Enforcement
183. Sinei Fili	Coordinator FCTC 2030	Health Promotion and Enforcement
184. Edward Asi Brown	Senior Environmental Officer	Health Promotion and Enforcement
185. Tomasi Sapau	Health Education & Promotion Officer	Health Promotion and Enforcement
186. Perenise Iupeli	Environmental Health Officer	Health Promotion and Enforcement
187. Angela Stanely	Environmental Health Officer	Health Promotion and Enforcement
188. Faaifo Moala	Project Coordinator Fanau Manuia	Health Promotion and Enforcement
189. Delphina Kerkslake	Legal Consultant	Legal Services/Registrar
190. Agnes Stowers	Internal Auditor	Internal Auditing
191. Elena Tusani	Senior Healthcare Registration Officer	Healthcare Registrar
192. Quandolita Reid-Enari	Assistant CEO	Strategic Policy, Planning and Research
193. Unaite Asi	Principal Research Officer	Strategic Policy, Planning and Research
194. Christian Atoa	Senior Health Policy Analyst	Strategic Policy, Planning and Research
195. Sina Faaiuga	Principal Health Planning Officer	Strategic Policy, Planning and Research
196. Gaualofa M Sa'aga	Assistant CEO	Sector Coordination, Resourcing & Monitoring
197. Fusi Masina Tietie	Principal Coordination, Monitoring & Resourcing Officer	Sector Coordination, Resourcing & Monitoring
198. Jun Ho Kim Gregory	Project Coordinator - WOCOH	Sector Coordination, Resourcing & Monitoring
199. Malienafau C Tupati	Health Advocator	Sector Coordination, Resourcing & Monitoring
200. Rumanusina Maua	Assistant CEO	Health Information Management
201. Sisavaii Tagata Papalii	Principal Information Officer	Health Information Management
202. Athena Matalavea	Senior Information Analyst	Health Information Management
203. Betty Naititi	Computer Support Officer	Health Information Management
204. Saleva Junior Afualo	Auxiliary nurse assistant	Health Information Management
205. Lenara Palepa	Manager	Health Information Technology
206. Darryl Anesi	Assistant CEO	Finance, Human Resources & Administration
207. Jane Siaosi	Principal Accountant	Finance, Human Resources & Administration
208. Orion Keresoma	Principal Human Resource/Administration Officer	Finance, Human Resources & Administration
209. Emanuele Poleti	Senior Human Resource/Administration Officer	Finance, Human Resources & Administration
210. Mose Seumalo	Principal Administration Officer	Finance, Human Resources & Administration
211. Avei Tevaga	Senior Salaries Clerk	Finance, Human Resources & Administration

212. Tala Tui	Principal Performance & Training Officer	Finance, Human Resources & Administration
213. Leleai U Vaafusuaga	Executive Assistant - Manager HR/Administration	Finance, Human Resources & Administration
214. Meki Tumama	Senior Administration Clerk	Finance, Human Resources & Administration
215. Tufulasi Nouata	Senior Salaries Clerk	Finance, Human Resources & Administration
216. Iosefo Fa'aumu	Maintenance Manager	Maintenance Services
217. Dr Viali Lameko	Vice Chancellor	Oceania School of Medicine
218. Dr Dyxon Hansell	Consultant General Surgeon & Senior Lecturer	NUS Faculty of Medicine
219. Brendon Baker	Midwife	NZ MoH
220. Eleline L Simamao	Assistant CEO	Samoa Office of the Public Service Commission

Annex 5: Participant narratives from consultations

[Removed due to the sensitivity of the information and given the need to protect informants]

Annex 6: Survey questionnaire

Government of Samoa

Ministry of Health

SURVEY QUESTIONNAIRE

for the development of the

SAMOA HUMAN RESOURCE FOR HEALTH STRATEGY & SAMOA HEALTH WORKFORCE DEVELOPMENT PLAN, 2019/20 – 2024/25

Dear Participant,

- The purpose of this survey is to gauge the perceptions and views of the Ministry of Health's employees about aspects of human resource management (HRM) and workforce planning in health.
- Your responses will assist us with information required for developing the 'Samoa Human Resource for Health Strategy' (SHRHS) & 'Samoa Health Workforce Development Plan' (SHWDP) 2019/20–2024/25.
- The information you provide will be treated with strict confidence and will be used only for the purpose of developing the SHRHS and SHWDP.
- The information will be handled and analysed by an independent Consultant/Technical Assistant (Secretariat of the Pacific Community (SPC), DFAT, NZ Aid Programme, World Bank, & WHO) who is being tasked with completing the development of the above Strategy and Workforce Plan for health.
- Please contact TA, Muliagatele Dr Potoae Roberts Aiafi on phone 7576622 or email: potzarina@yahoo.com if you have any questions or queries.
- Please submit your completed survey directly to Muliagatele Dr Potoae Roberts Aiafi via email: potzarina@yahoo.com. Alternatively, Potoae can collect hard copies of the completed survey from you.
- Please read the survey carefully before you complete each section and question.

Thank you for your input to this survey.

Section A: Respondent information

1. Position/designation: ..…….
2. Place of work/work unit: …….
3. Village/Residence: ……...
4. Date of birth: ……
5. Gender: ☐ *Male* ☐ *Female*
6. Marital status: ☐ *Single* ☐ *Married/De factor* ☐ *Divorced/Separated*
7. Status of employment: ☐ *Full Time* ☐ *Part Time* ☐ *Casual/wage worker*
8. Highest qualification attained: ……....
9. Date of initial employment in the Health Service: …….
10. Date appointed to current position: ……

Section B: Understanding of role

1. I have access to an updated job description or duty statement of my role?
   ☐ *Yes* ☐ *No* ☐ *Don't know*

2. I understand what is expected of me in terms of role and performance?
   ☐ *Yes* ☐ *No* ☐ *Don't know*

3. I understand the long-term vision of the Ministry including my contribution to that vision:
   ☐ *Strongly agreed* ☐ *Agreed* ☐ *Disagreed* ☐*Strongly Disagreed* ☐ *Neutral/Don't know*

4. I understand the ongoing and planned development reforms for health:
   ☐ *Strongly agreed* ☐ *Agreed* ☐ *Disagreed* ☐*Strongly Disagreed* ☐ *Neutral/Don't know*

5. I support those development reforms for health:
   ☐ *Strongly agreed* ☐ *Agreed* ☐ *Disagreed* ☐*Strongly Disagreed* ☐ *Neutral/Don't know*

6. Please specify below the areas that you think need improvement:
   ……
   ……
   ……

Section C: Performance and workload

1. On average, how many hours do you actually spent at work each WEEK in your current role?
   ☐ *20 – 25 hours* ☐ *25 – 30 hours* ☐ *30 – 35 hours* ☐ *35 – 40 hours* ☐ *40 – 45 hours*
   ☐ *45 – 50 hours* ☐ *50 – 55 hours* ☐ *55 – 60 hours* ☐ *60 – 65 hours* ☐ *65 – 70 hours*
   ☐ *70 – 75 hours* ☐ *75 – 80 hours* ☐ *More than 80 hours*

2. What is your perception of your current workload:
   ☐ *Happy and satisfied* ☐ *Overworked* ☐ *Under-utilised* ☐ *No response*

3. I am able to do my job to a standard that I am pleased with:
   ☐ *Strongly agreed* ☐ *Agreed* ☐ *Disagreed* ☐*Strongly Disagreed* ☐ *Neutral/Don't know*

4. Please specify below areas that you think need improvement:
   ……
   ……
   ……

Section D: Motivation and job satisfaction

1. I look forward to coming to work and being at work:
   ☐ *Strongly agreed* ☐ *Agreed* ☐ *Disagreed* ☐*Strongly Disagreed* ☐ *Neutral/Don't know*

2. I am motivated to come to work and being at work by the following factors:
   (Rank from 1 to 6 to indicate the highest to the lowest motivating factors):

   Pay/entitlements …… ☐
   Job security …… ☐
   Job satisfaction …… ☐
   Good boss …… ☐
   Career development …… ☐
   Positive working environment …… ☐

   Other factor(s) (please specify ……

3. I recommend my organisation as a good place to work:
   ☐ *Strongly agreed* ☐ *Agreed* ☐ *Disagreed* ☐*Strongly Disagreed* ☐ *Neutral/Don't know*

4. I am considering leaving my organisation within the next 2 months to 12 months:
   ☐ *Yes* ☐ *No* ☐ *Don't know*

   4a) Reason for leaving if yes (please specify): ……..

5. Please specify below areas that you think need improvement:
   ……
   ……
   ……

Section E: Supervision, management and leadership

1. How would you rate your relationship with your supervisor (Please remember that this survey is completely anonymous):
   ☐ *Poor* ☐ *Fair* ☐ *Good* ☐ *Excellent* ☐ *Don't know*

2. I have confidence in the leadership of the Ministry:
   ☐ *Strongly agreed* ☐ *Agreed* ☐ *Disagreed* ☐ *Strongly Disagreed* ☐ *Neutral/Don't know*

3. I feel empowered, supported and valued at work:
   ☐ *Strongly agreed* ☐ *Agreed* ☐ *Disagreed* ☐ *Strongly Disagreed* ☐ *Neutral/Don't know*

4. Communications from management are frequent and are clear about key decisions affecting our performance:
   ☐ *Strongly agreed* ☐ *Agreed* ☐ *Disagreed* ☐ *Strongly Disagreed* ☐ *Neutral/Don't know*

5. Please specify below areas that you think need improvement:
   ……
   ……
   ……

Section F: Training and professional development

1. I feel that I have received sufficient training relating to my role:
   ☐ *Strongly agreed* ☐ *Agreed* ☐ *Disagreed* ☐ *Strongly Disagreed* ☐ *Neutral/Don't know*

2. I am able to utilise the trainings that I attended to my work:
   ☐ *Strongly agreed* ☐ *Agreed* ☐ *Disagreed* ☐ *Strongly Disagreed* ☐ *Neutral/Don't know*

   2a) Reason for disagreeing (please specify): ……
   ……

3. List the trainings that you have attended in the last 5 - 10 years?
   ……
   ……
   ……
   ……

4. What other relevant trainings that you will like to undergo for improving the performance of your role?
   ……
   ……
   ……
   ……
   ……

5. What professional development initiatives/opportunities that you will like to have for you, colleagues, and staff – in order to improve work performances and services**?**
   ……
   ……
   ……
   ……

6. Please specify below areas that you think need improvement:
   ……
   ……
   ……

Section G: Human Resource Management

1. I am well informed of the human resource management policies and procedures governing and directing the Ministry and my employment as a staff member of the Ministry:
   ☐ *Strongly agreed* ☐ *Agreed* ☐ *Disagreed* ☐ *Strongly Disagreed* ☐ *Neutral/Don't know*

2. The existing HR policies and practices are addressing the critical HR and workforce needs of health:

☐ *Strongly agreed* ☐ *Agreed* ☐ *Disagreed* ☐*Strongly Disagreed* ☐ *Neutral/Don't know*

3. I believe that the right people are being recruited to the right jobs in the Ministry:
   ☐ *Strongly agreed* ☐ *Agreed* ☐ *Disagreed* ☐*Strongly Disagreed* ☐ *Neutral/Don't know*

4. I feel that staff are being fairly compensated and rewarded for their work and contribution:
   ☐ *Strongly agreed* ☐ *Agreed* ☐ *Disagreed* ☐*Strongly Disagreed* ☐ *Neutral/Don't know*

5. Human resource management in the Ministry is fair, transparent and in accordance with good governance principles and best practices:
   ☐ *Strongly agreed* ☐ *Agreed* ☐ *Disagreed* ☐*Strongly Disagreed* ☐ *Neutral/Don't know*

6. I have confidence in the existing HR management capacity and services of the Ministry:
   ☐ *Strongly agreed* ☐ *Agreed* ☐ *Disagreed* ☐*Strongly Disagreed* ☐ *Neutral/Don't know*

7. Please specify below areas that you think need improvement:
   ……
   ……
   ……

Section H: Workforce Development

1. Where do you see any imbalances in the existing distribution of staff:
   ……
   ……
   ……

2. What are the critical workforce issues and challenges that must be addressed within the next two, five and 10 years:
   ……
   ……
   ……

Section I: Further information

1. In this next 'Samoa Human Resource for Health Strategy' (SHRHS) & 'Samoa Health Workforce Development Plan' (SHWDP) for 2019/20–2024/25, what are the critical areas of HR and Workforce development that you like to be addressed in this Strategy and Workforce Development Plan:
   ……
   ……
   ……
   ……

2. Please specify below any other comments that you would like to add:
   ……
   ……
   ……
   ……
   ……

Thank you very much. God bless!!

Annex 7: Analysis of the survey

Section A: Respondent information

A total of 150 questionnaires were distributed. A total of 140 completed questionnaires were returned, equating to 63% females and 37% males (see Figure 1). Figure 2 gives the distribution of the survey respondents in terms of the work areas and professional/occupational groupings. The majority of those that were covered by the survey and able to respond were the nurses working at the TTM hospital. Every work area of the MoH – both in clinical and non-clinical as well as urban and rural workers were able to participate in the survey.

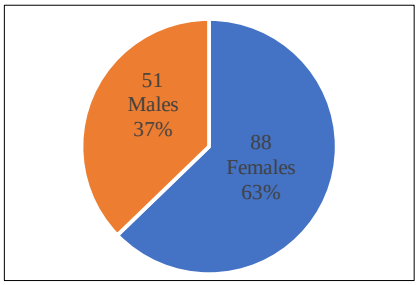
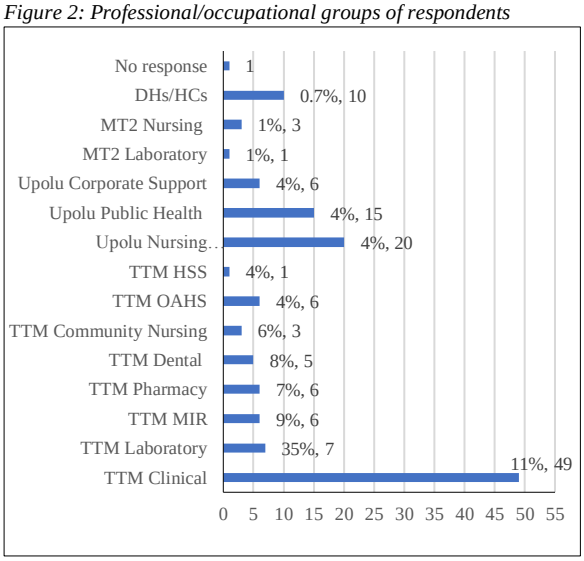
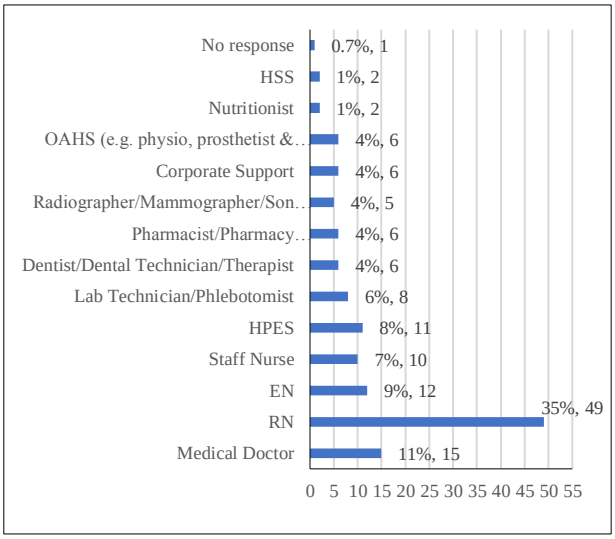


Figure 1: Gender of respondents

Figure 2: Professional/occupational groups of respondents





Section B: Understanding of role

1. I have access to an updated job description or duty statement of my role?

In response to the above question, the majority (78%) responded that they 'have access to an updated job description or duty of statement about my role'. While 16% responded that they do not have access to one and 6% responded that they do not know - meaning they do not know what a job description or duty statement is or they do not know that they are required to have one (see Figure 3).

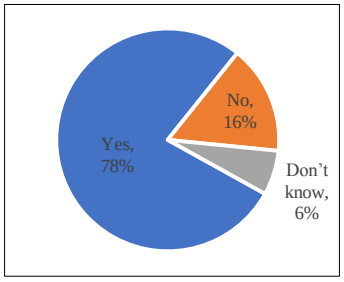


Figure 3: Access to an updated JD

2. I understand what is expected of me in terms of role and performance?

95% of the respondents stated that 'I understand what is expected of me in terms of my role and performance' (see Figure 4). Only 4% responded as 'no' – that they don't understand what is expected of them in terms of their roles and performance. While 1% responded as 'don't know' about what is expected of them about roles and work performances.

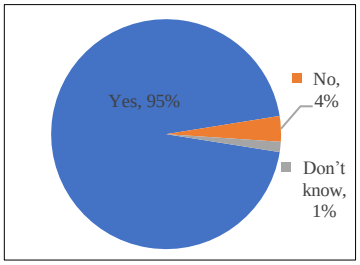


Figure 4: Understanding of role expectation

3. I understand the long-term vision of the Ministry including my contribution to that vision:

40% and 50% of respondents stated that they either strongly agreed or agreed that 'I understand the long-term vision of the Ministry including my contribution to that vision' (see Figure 5). Only 3% and 2% responded as 'strongly disagreed' and 'agreed' while 6% responded as 'neutral/don't know'.

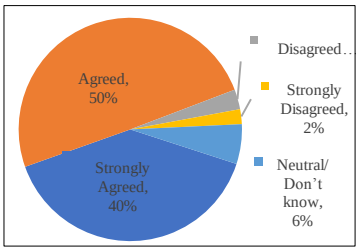


Figure 5: Understanding of MoH's vision

4. I understand the ongoing and planned development reforms for health:

25% and 50% of respondents stated that they either strongly agreed or agreed that 'I understand the ongoing and planned development reforms for health' (see Figure 6). Only 3% and 11% responded as 'strongly disagreed' and 'agreed' while 10% responded as 'neutral/don't know'.

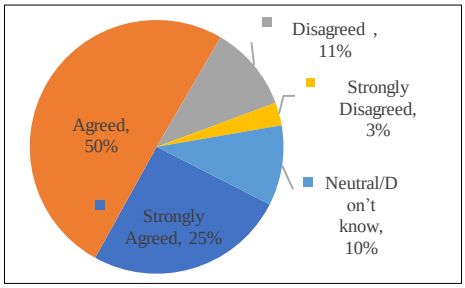


Figure 6: Understanding of health reforms

5. I support those development reforms for health:

27% and 53% of respondents stated that they either strongly agreed or agreed that 'I support those development reforms for health' (see Figure 7). Only 1% and 3% responded as 'strongly disagreed' and 'agreed' while 3% responded as 'neutral/don't know'.

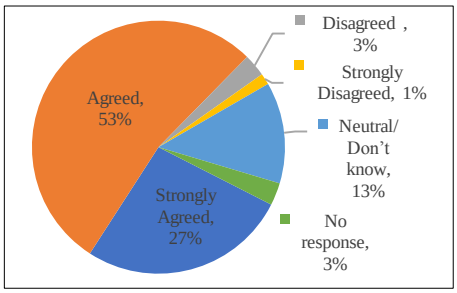


Figure 7: Supportive of health reforms

6. Please specify below the areas that you think need improvement:

Table 1 summarises the responses from the survey participants on the above question. The majority of responses stated that there is a need to improve all areas of health service delivery and this requires more resources and staff and improvement the working environment and facilities in hospital and health centres. Capacity development including training were highlighted by a lot of respondents as needed further consideration so that the staff are properly trained and continuously upskilled about their roles and services. Other areas needing improvement is the communication from senior management to middle and lower level staff, review and finalising of the MoH organisational structure following the merge (for clearer roles and responsibilities as well as line of reporting and accountability), improving work culture and ethics and strengthening HR practices in the Ministry. Improving information management and a safe work environment, good governance, leadership and management practices, and promoting a collaborative culture across all areas of the Ministry were also stated as areas needing further improvement.

Table 1: Areas needing improvement with staff's understanding of roles

Area	Improvement needed
Areas of service delivery	• All areas of health service delivery need improvement, need adequate resources (equipment used by patients, beds, patients monitoring machines, staffing, professional cleaners), district hospitals needs improvement, need materials and up-to-date technology for faster and more efficient work (budget increase for lab procurement order), address medications that are out of stock, needs enough resources for patient treatments, need improvement in triage system, emergency response and practice.
Resources and staffing	• Resources and more staff members are needed, a ICU HoD to lead the team with a complete team of doctors and nurses as was before, increase the number of workers/specialists to help improve health services, staff are overworked due to short staffed, doctors need allocated break time that patients need to be aware of.
Capacity development and training	• Need a robust training/capacity building plan, more trainings to get more skills about work, need specialist training, improve understanding about medical terms written on request form for x-ray, more develop in research and working closely with medical scholars to make it a better teaching hospital.

Governance, leadership and management	• Improve accountability and transparency, enforce the planning and developing reforms for health. Staff to be involved in health reforms for effective implementation, share information with all professionals about short and long term vision and reforms for a united MOH. Too much changes but still the same.
Communication	• Clear channel of communication, improve communication - feedback system, discussions are done only at the above level without considering the operational level, improve dissemination of information from the management to the staff.
Collaboration	• Collaboration among all sections, team work among workers especially frontline health care providers.
Roles and responsibilities	• Clear JDs which we can use when reflecting on our appraisals, a lot of people don't know their expected key deliverables and KRAs, clearer picture of what objectives are, better understanding is needed across the board to effectively work together, sharing the load - clarity on JD, JD should be revised and updated annually, need understanding of JDs.
Organisational structure and workforce planning	• Clarification of the merged structure, realign roles and re-orient staff coming in to the MoH headquarters. Duplication of roles and responsibilities, proper workforce planning.
Work culture, ethics and performance	• Attendance, attitudes and performance, safe working environment, improve nurses and doctors' performances and approaches to patient care, a friendly hospital surrounding.
Information management	• Improve medical records admission and registration of inpatients/outpatients, delayed in providing of patient records when needed, very bad filing systems at the rural areas.
Remuneration, working conditions and entitlements	• Proper pay for employers, pay according to number of hours, human resources in terms of our overtime need improvement, slack records keeping of appraisals, documents and processing of paperwork
HRM and employment matters	• Proper contracts for HOU, record keeping of employees achievements - need e-copies and not just hard copies as liable to being lost, communication between HR and employees, finance, clarify roles of the employee prior to start of employment, update leave, improve HR and administration.
Physical environment and infrastructure/asset	• Security to be strict in visiting hours and to close back doors for entrance. Cleaners need more hands to help out with cleanliness is a big matter to deal with daily. Cyber security, facilities needs updating, need air condition/cooler for proper meet storage,

Section C: Performance and workload

1. On average, how many hours do you actually spent at work each <u>WEEK</u> in your current role?

The majority (26%) of respondents stated that the number of hours they work each week are 40 and below (see Figure 8 and Table 2 below). However, a significant number of staff stated that they work over the normal 40 hours of work a week - 30% stated that they work between 45 to 65 hours while 33% responded that they worked between 65 to more than 80 hours a week. The majority of those who are overworked are doctors and nurses with some in the dental, laboratory, pharmacy, MIR (medical imaging and radiology services). All doctors have responded they worked more than 50 hours a week.

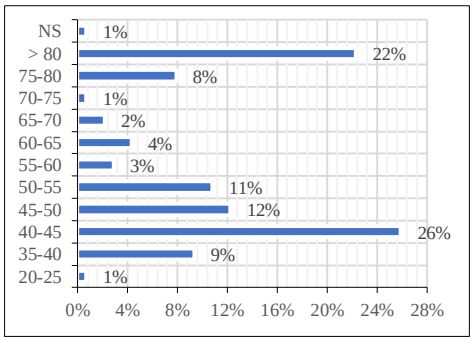


Figure 8: MoH workforce hours of work

Table 2: Hours of work by health professional/occupational groups

Hours	Doctors	Nurses	Dental, lab, pharmacy, MIR staff	OAHS	HSS	CS	NS	Total	%	
20-25		1						1	1%	
35-40		6	1	4		3		14	10%	
40-45		17	6	10		2	1	36	26%	36%
45-50		13	1	2		1		17	12%	
50-55	2	9	3	1				15	11%	
55-60		3			1			4	3%	
60-65	2	1	2		1			6	4%	30%
65-70		1	2					3	2%	
70-75			1					1	1%	
75-80	2	6	2	1				11	8%	
>80	9	13	7	1		1		31	22%	33%
NS		1						1	1%	1%
Total	15	71	25	19	2	7	1	140	100%	100%
NS – not specify										

2. What is your perception of your current workload:

The majority (48%) of respondents stated that they are 'happy and satisfied' with current workload. However 41% stated that they are 'overworked'. While 2% stated that they are 'underutilised' (see Figure 9 and Table 3 below). The majority of respondents who stated that they are 'overworked' are those working in clinical areas. All doctors (except one doctor who responded as 'happy and satisfy' stated that they are 'overworked'.

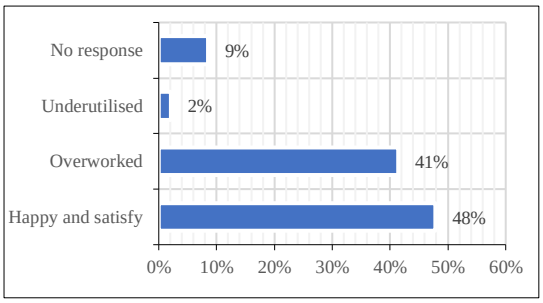


Figure 9: Supportive of health reforms

Table 3: Perception of current workload

Professional/Occupational groups	Happy and satisfy	Overworked	Underutilised	NS	Total
Doctors	1	13		1	15
Nurses	42	21	1	7	71
Dental, lab, pharmacy, MIR staff	13	10		2	25
OAHS	7	10	1	1	19
CS	2	3	1	1	7
HSS	1	1			2
NS	1				1
Total	67	58	3	12	140
%	48%	41%	2%	9%	100%

3. I am able to do my job to a standard that I am pleased with:

43% and 47% of respondents stated that they either strongly agreed or agreed that 'I am able to do my job to a standard that I am pleased with' (see Figure 10). Only 2% and 2% responded as 'strongly disagreed' and 'disagreed' while 1% responded as 'neutral/don't know'. The majority of those responded as either strongly disagreed or disagreed are the medical doctors.

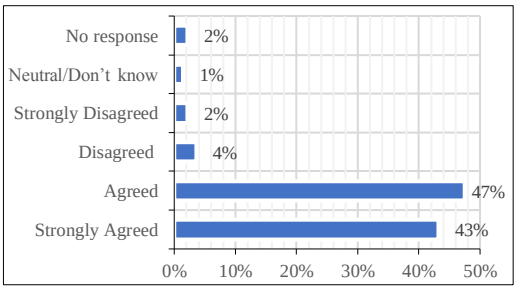


Figure 10: Please with standard of job

4. Please specify below areas that you think need improvement:

Table 4: Areas need improvement in order to improve staff performance

Area	Participant comments	No. respondents
Staffing	Need adequate staffing. At the moment only one person hold NM and SNS - short of staff, 1 RM Safotu, 1 Senior RN to eye clinic, 2 senior RNs to midwifery course including NM - CI try the best I can to over 2 posts - RM and SNS - need help because we only have junior RNs. Because of shortage of doctors in team - actual time spent on monitoring and doing clinical work to help team is 90% - not enough time to carry out HoD issues, reporting, etc. Need better working hours. Need more manpower/ doctors especially senior registrars/consultants. Ensure adequate staff to carry the team work load. Communities and district hospitals are short staff and lack of equipment. I'm satisfied with workload; however our services are underutilised (could be improved). Improve doctor-patient ratio, need enough staff (nursing, cleaners, doctors, securities) at our DH. Funding to recruit new staff. Mental health unit got not enough staff. More HR needed to cover food safety and tobacco control. More people needed. More staff as it is a 24/7 working hours service. More team members (doctors) because it's quite stressful and unhealthy being short staffed in a unit that is always busy with increasing number of patients - most critical and quite sick. More technicians and scientists are needed. Need more employees. Need more staff at the reception during busy hours. Need more structure and workforce into areas not covered for nutrition. Lack of human resources and need protected admin time/work so that I can train more doctors. Need to extend the work unit to lessen workload. Need to minimize overload in order to relieve stress. Our unit needs more water technicians) - there are many water sources and sites to be monitored but not enough staff. Paediatrics need more staff at the moment due to many measles patient being admitted. Recruit more physiotherapy and assistants. Recruit more staff members to compensate for the work overload. Support with another working	43

	colleague. There is not enough doctors, maybe add nurse practitioners to help. Understaffed (not enough technicians/scientists to do technical work). Each section/department of the lab should at least have 4 or more lab technician. Work pressure - i.e. properly trained front desk staff who can handle small queries without myself having to be constantly called to attend to minor matters. Ever increasing and demanding. Working hours sometimes call back when needed - aua le tatipiina itula faigaluega. Working as acting NM for a year and still waiting for advertisement of post that I'm not being paid for.	
Remuneration, working conditions and entitlements	Allowance for overtime is needed for lab staff, approve overtime of staff to complete their work. counselling for young doctor in regards to our call, increased number to serve the periphery instead of the main hospital, improve working conditions, overtime should update the payments to make the fair for the employees overload, performance and workload must also include in making salary adjustment not based only on certificate or diploma, protected hours of work - same as pilots and other professions - safety for employees and patients, request for risk allowance, increase for salary, need to improve my salary because it is hard work, to change from shift work to on-call - to avoid absentees (day offs), hourly time starting - i.e. 8am change to 9am, transparency on our time sheets when we hand then in as our hours are usually cut without any justification, working conditions, working hours need to reduce, compensation for long shifts (overtime)	13
More resources, working environment, infrastructure and asset management	Better security of assets and management of transitional and support structures, communities and district hospitals. Lack of equipment. Need more resources to better our health services. Need proper and hygiene care and teaching hospital. Lack of resources. We need two PCs to help our unit. We only had one PC and it's getting tired and we need to install the internet, working environment requires improvement, need more resources to do the work, working environment needs improvement. Need more resources, need x-ray equipment (digital system).	11
Capacity development and training	Need capacity building of staff, more training opportunities for Savaii employees, need more trainings for staff, need to improve our orientation program, to lessen the workload when they are permanently assign to their area of work, need to send more students to do physio trainings (professional awareness programs at NUS, colleges), training opportunities for physio staff to provide more training for us health workers, training (local and overseas), trainings, education - especially with ICU nursing staff, it has to be a recognised speciality area. Critical care trainings have to be rolled out for these nursing staff	9
Financial capacity, HR and support services	Need health insurance, supporting services, HR, Finance and salary processes need improvement, human resources unit need improvement, procurement of services (very delayed) impacting on delivery of service and care	5
Service delivery	All areas of practice need improvement to satisfy needs of patients and public services, District hospitals and wards, laboratory services, x-ray department and timely availability of test results, emergency areas need improvement.	5
Collaboration/ partnership	Encourage teamwork in the Ministry and be friendly. People need to work together as a team. Partnership with community members, committees and other organisations. Working as a team makes workload easier.	3
Work culture, ethics and performance	Be a hard working employee and be patient. Improve staff attitude, need a rotation for the nursing staff and to improve staff performance.	3
Governance, leadership and management	A little appreciation from top management of the work we do on the ground level. Good communication from higher level is needed. Need to good and clear information to every health workers. Listen and respect each other.	2
Career pathways	Pathways for postgrad/further studies - need pathways and opportunities - scholarships should be avail to health workers, physiotherapy career structure and pathways and salary scale need to be improved.	2
Information management	Improve records and patient information handling. Improve the PATIS system	2
Policy and procedures	Review and update existing protocols and guidelines (physio)	1

Section D: Motivation and job satisfaction

1. I look forward to coming to work and being at work:

50% and 35% of respondents stated that they either strongly agreed or agreed that 'I look forward to coming to work and being at work'. Only 1% and 5% responded as 'strongly disagreed' and 'disagreed' while 1% responded as 'neutral/don't know'. Those who either strongly disagreed or disagreed are mostly doctors, some nurses and one staff in the other allied health services (OAHS) (see Figure 10 and Table 5).

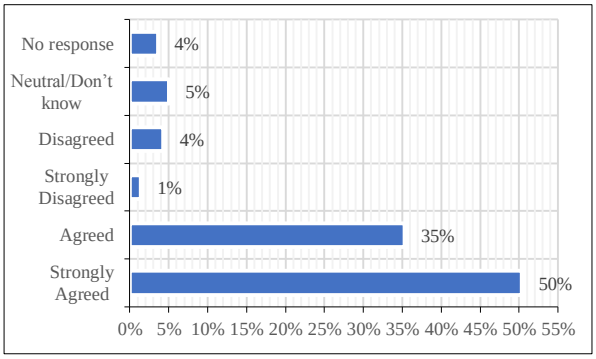


Figure 10: Look forward to coming to work and being at work

Table 5: Look forward to coming to work and being at work

	Strongly Agreed	Agreed	Disagreed	Strongly Disagreed	Neutral/ Don't know	Not specify	Total
Doctor	4	5	3	2	1		15
Nurses	41	22	3		2	3	71
Dental, lab, pharmacy, MIR staff	13	10			1	1	25
OAHS	9	7	1		2		19
HSS	1	1					2
Corporate Support	1	4			1	1	7
NS	1						1
Total	**6**	**70**	**49**	**5**	**7**	**2**	**139**

2. I am motivated to come to work and being at work by the following factors:

It is difficult to analyse the responses to this question – not all participants correctly ranked the motivating factors from 1 to 6 as instructed. A few participants understood the instruction for completing the question and ranked the factors as correctly as instructed. However some put down any number (1 to 6) in the boxes and others ticked all boxes instead of ranking. Others put 1 (or any number from 2 to 6) in all boxes. Perhaps this may result from participants lacking understanding about the instruction, participants not reading the instruction clearly, or participants not taking the question seriously. As a result of this error, the participant responses to this question is analysed by taking into account the number one factor that participants chose as their choice – the motivating factor that they chose as number 1. There is some consistency in how participants responded in terms of what they chose as their number one motivating factor.

Figure 11 gives the analysis of the respondents' choice on the number one factor that motivated them to come to work and being at work. It shows that most (58) participants chose a 'positive working environment' and 'job satisfaction' as the number one factor that motivate them to come and being at work. The second highest number of participants (24) stated that pay/entitlements is their number one motivating factor, while the third highest number of participants (23) chose having a 'good boss' as their number one motivating factor. The differences in the number of respondents for each factor (perhaps given their interrelatedness) is small and hence to some, all those factors may be equally important in motivating staff to come and being at work.

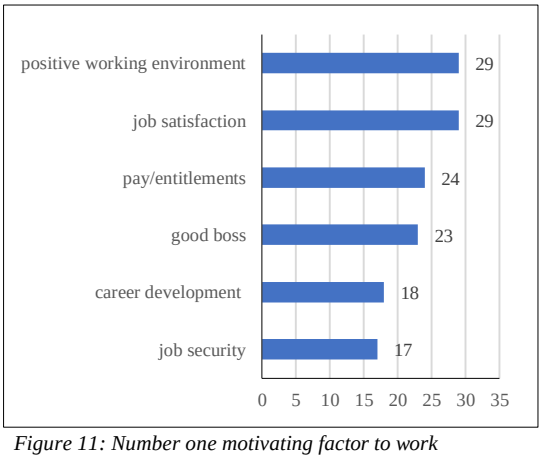


Figure 11: Number one motivating factor to work

3. I recommend my organisation as a good place to work:

38.8% and 45.3% of respondents stated that they either strongly agreed or agreed that 'I recommend my organisation as a good place to work'. Only 0.7% and 5% responded as 'strongly disagreed' and 'disagreed' while 10.1% responded as 'neutral/don't know' (see Figure 12). Those who either strongly disagreed or disagreed are mostly doctors, and a few (2) nurses, one staff in the dental service and one staff in the other allied health services (OAHS.

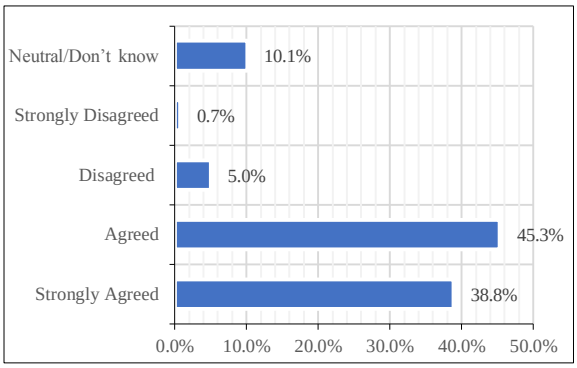


Figure 12: Recommending my organisation as a good place to work

4. I am considering leaving my organisation within the next 2 months to 12 months:

69.1% of respondents stated No to the above statement that 'I am considering leaving my organisation within the next 2 to 12 months (see Figure 13). While 14.4% stated 'yes' to that statement.

Most of those who responded yes – that they are considering leaving - are nurses, doctors and staff working in the dental laboratory, pharmacy, and radiology services.

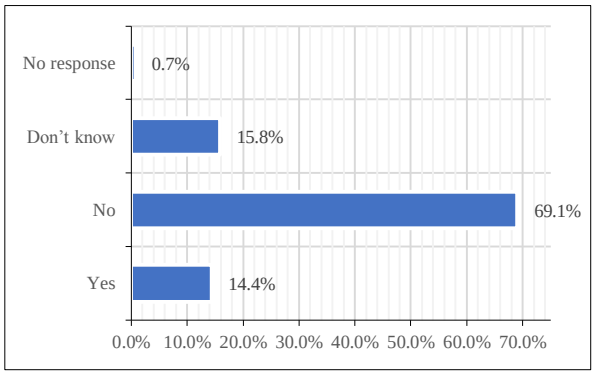


Figure 13: Considering leaving my organisation within 2-12 months

4a). Reason for leaving if yes (please specify):

Of the respondents who stated that they are considering leaving the MoH, their stated reasons for leaving are outlined as follows:

- Better incentives in other jobs.
- Better opportunities for postgraduate studies.
- Career advancement in the other field of work (outside the health sector).
- Current salary grading does not match the job description and salary grading.
- Leaving for further studies.
- Need a break and other organisations offer better conditions?
- No pathway for developing our careers.
- Need better professional development and salary.
- To take my family back home.
- Toxic working environment with the bosses.
- Want to learn more.
- Overworked and need a work-life balance.
- Current job taking a toll on personal life.
- Don't see any increase of pay since there is nowhere else to go.
- No progression since the highest position in my division is occupied unless senior colleague is retired.

5. Please specify below areas that you think need improvement:

Table 6: Areas needing improvements in motivating staff and job performance

Area	Needed improvements
Governance, leadership and management	• Boss must have good management skills to manager our workload in a good manner. • Improve leadership skills from top leaders. • Improve channel of communication from top level to operational level. • Positive attitudes from top level - to actually include us on the ground level in discussions and decision making. • Management needs to be more supportive with our working environment. • Staff divisional meetings to be done at least monthly to update current work and to be informed of management resolutions. • Transparency and communication from head to the operational level must improve. • Training and motivating and supportive boss who is straightforward and abides by our work policies can be a factor to motivate us to come to work.
Support services	• A better structured ICT focused support to link ICT with core business objectives but not as a side-line support entity. • Improve administration and IT/Medical records. • Improve the HR work in the Ministry.
Organisation structure	• Structure of division roles/responsibilities aligned to regulations
Service delivery, infrastructure/asset and physical resources	• Need to improve general outpatient, accident and emergency department • Building environment needs improvement • Equipment, air condition, freezers for meat and vegetables • Enough resources within every area of the hospital • Need enough resources and equipment to do the work
Remuneration, working conditions and entitlement	• Provide free food for after hour staff • Increased salary, more support/manpower/consultants • Good working conditions with top level, improve working conditions • Let us know about our sick leave • Come to cover shift (call back) but still pay T1.5 • Need to increase salary/wage • Need improvement of working envy and job security, too many relatives, also with pay entitlements. • Strengthen professional education program (continuous), strengthen time out gatherings (e.g. Sports, events amongst all staff of MOH) • Receiving entitlements on time. We often have to chase after our salary increments to be implemented and if so, no back pay or introspect back pay • Inconsistencies in salary adjustments amongst colleagues • Better hours and pay
Capacity building and training	• Capacity building for employees, trainings, capacity building of staff in water quality testing training • Capacity building programs, training needs, career dev, channel of communication • More workshop done in Savaii • Propose a training officer to train staff every week • Overseas training, overseas traveller • Further opportunities for studies
Career pathways	• Career development - stable structure to ensure there will always be training in years to come, career development for staff must be encouraged and enhanced to boost productivity • Career development and pay entitlements. • Professional career structure and staff salaries • Set pathways for doctors to further their studies.
Communication	• Communication including all leaders and operational level trainings for all areas, enhanced our working environment • Communication process from top management to bottom management staff, involvement of operational levels for planning of health activities before implementation • Communications up and down and across, • Good communications between employees and managers and CEO
Working environment, culture and ethics	• Discipline should improve • More social activities needed for staff to mingle and relax • Need improvement for job security, working area - need to extend, have proper consultation room

	• Working environment must be improved as keeping it clear and healthy all the times. Equipment must be clear • There is a big gap, it has to be improved. My working areas is already split. Suddenly merged again, don't know which direction to go to, even though the org structure is not well implemented. Focus to that level. • Upgrade standard/quality of the working environment in terms of prevention trainings for staff and patients • Please limit changes of areas of work - e.g. Paediatric clinic moves several times from place to place and within small places • Strengthen positive and friendly workplace/work environment, • Staff morale - there is a tendency to just expect staff to perform more and more duties. We need positive enforcers - e.g. Staff benefits - staff cafeteria, staff dinners, staff rewards, etc. • Team work to improve between doctors in different areas/specialities and nursing staff
Staffing	• More staff • Need senior staff • Staffing - medical for mental health

Section E: Supervision, management and leadership

1. How would you rate your relationship with your supervisor

Of the total 140 respondents, 31% rated their relationship with their supervisor as 'excellent', 47% rated as 'good' and 14% as 'fair' (see Figure 14). Only 4% rated as 'poor' while 3% responded as 'don't know'.

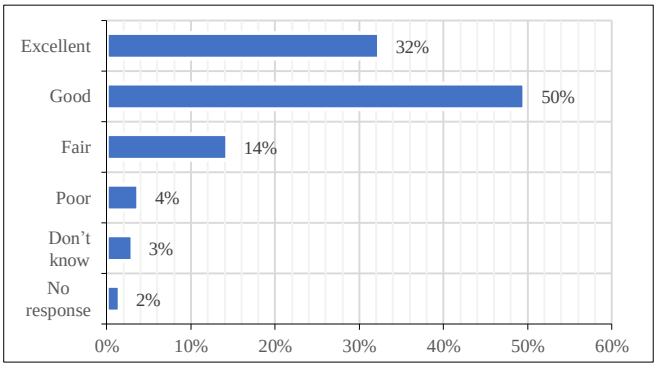


Figure 14: Relationship with supervisor

2. I have confidence in the leadership of the Ministry:

16% and 56% of the respondents stated that they either strongly agreed or agreed that 'I have confidence in the leadership of the Ministry' (see Figure 15). While 9% and 4% stated that they either strongly disagreed or disagreed with that statement that 'I have confidence in the leadership of the Ministry'. 14% responded as 'neutral/don't know'. The majority of those who strongly disagreed and disagreed are nurses and doctors with a few in the other allied health services.

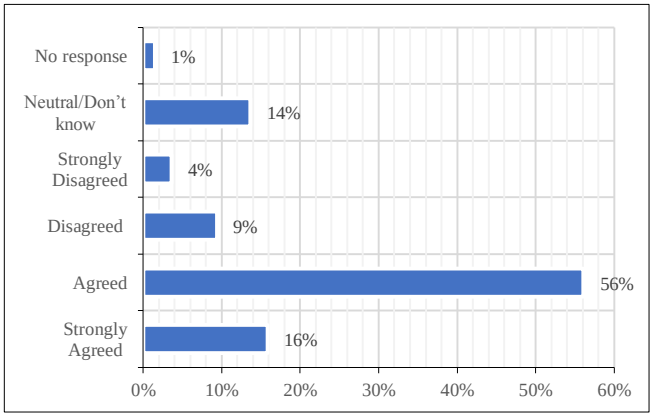


Figure 15: Confidence in the leadership of the Ministry

3. I feel empowered, supported and valued at work:

19% and 56% of the respondents stated that they either strongly agreed or agreed that 'I feel empowered, supported and valued at work' (see Figure 16). While 10% and 3% stated that they either strongly disagreed or disagreed with that statement that 'I feel empowered, supported and valued at work'. 9% responded as 'neutral/don't know'. The majority of those who strongly disagreed and disagreed are doctors, nurses, other allied health staff, and those working in the dental, laboratory, MIR, and pharmaceutical services.

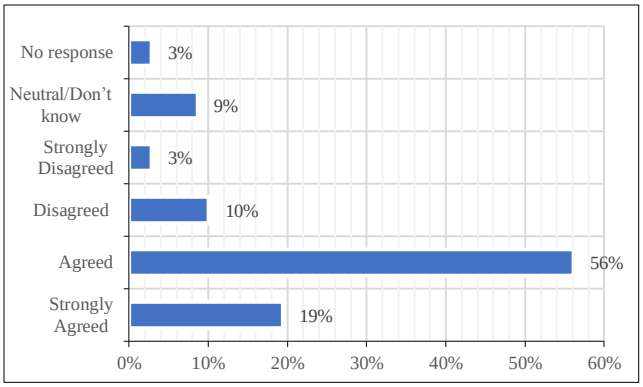


Figure 16: Feel empowered, supported and valued at work

4. Communications from management are frequent and are clear about key decisions affecting our performance:

17% and 50% of the respondents stated that they either strongly agreed or agreed that 'communications from management are frequent and are clear about key decisions affecting our performance' (see Figure 17). While 6% and 17% stated that they either strongly disagreed or disagreed with that statement that 'communications from management are frequent and are clear about key decisions affecting our performance'. 8% responded as 'neutral/don't know'. The majority of those who strongly disagreed and disagreed are nurses, other allied health staff and doctors, with a few staff working in the dental, laboratory, MIR, and pharmaceutical services.

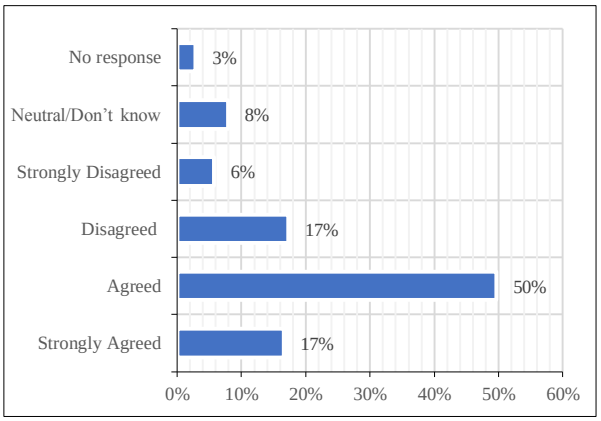


Figure 17: Frequent and clear communications from management

5. Please specify below areas that you think need improvement:

Table 7 combines areas needing improvement with communications from management about key decisions affecting staff performance. The majority of the respondents stated that improvement of communication from the leadership and management of the MoH is needed – especially on decisions about ongoing reforms, areas affecting staff performances and for staff to understand decisions and policies for their effective implementation. Strengthening communication across the Ministry is also needed.

Table 7: Areas needing improvements in supervision, management and leadership

Area	Comments	No. respondents
Leadership and management	• Better communication from management to ground level • Address issues that have been present for way too long • Clear and regular information and communication is very important • Communicate clear expectations, empower employees to do their jobs well • Communication must be more efficient and effective from those at top positions like the ceo, deputies and doctor levels • Communication process of current merge changes and health activities, very dictating but needs mutual agreement for effective implementation of service delivery • Decisions are biased (mostly), poor communication especially in last minute changes, sometimes the information that needs to be filtered down to the grassroots level does not reach where it should go. • Effective communication amongst staff, related to management decisions and changes	37

Leadership and management (cont.)	• Every strong relationship with my supervisor about team work and performance • Fair allocation and treatment of staff members • I trust management. There are occasions when we don't directly hear of upcoming changes or plans - maybe just a refined touch based between our bosses and the workforce would be great • If doubt about anything about work, ask the supervisor • Improve communication and collaborations with management and leadership • In our specific area, supervision, management and leadership is smoothly performed well, except the top level of ministry. We have been treated differently, ignore our profession, but support medical profession only • Leaders to lead by examples across all aspects • Leadership is good. The listen to our concerns and try to address it • Leadership needs to empower staff on management skills, especially the senior staff • Leadership, supervision & management to have good communication with staff • Micro managing is very common, reduce favouritism among staff by management. Honesty is not welcomed or favoured rather you are told what to do (no opportunity to think on your own), no open dialogue • More supervision required in lab materials and assets • Need a clear jd - channels of communication from head of ministry to hospital staff to unit staff not transparent and clear • Need more leadership training • Need to bring back our manager of nursing/principal position as before • Need to improve quality of leadership and that all people should be equal • No transparency with many things such as roster, etc., only 2 sonographers but our voices as my principal are not heard when decisions are made on ultrasound protocols, rosters, things that have to do with ultrasound when we are the ones doing the work every day • Notices can often ad hoc and most of the time dictations rather than allowing us to contribute to developing solutions • Planning and communication from management should be clear and involve key people who will implement and provide services • Professional employee approach, communication channel • Value staff concerns/efforts through transparency • Sometimes when we try to expand our scope with other agencies, we get into trouble for it - corner stepping boundaries • Staff mentoring • Staff meeting • Supervision after hours • Supervisors/leaders to take full responsibility • To clearly identify nursing structure in the health system • Upper echelons of management need to be clear in terms of how and what they want us to do • We need an aceo to relay the message straight to the staff	
Communication	• 2 ways communication (up and down level and professional level) should be transparent and be accountable. Operational level voices need to be heard. • Need to improve communication avoid short notice of meeting and clash of programs/workshops - cause impact on duties • Channel of communications • Communication between all levels needs to be transparent • Communication is the main problem • Communication to be regular/when required • Good working relationship and communication, team work • Improve and encourage the importance of good communication • Need good communication • Need improvement of communication in our organisation	14

HR support, organisational structure, working conditions and entitlements	• Perf Appraisal sys need to be exercised accordingly to purpose • Need to understand HR policies and procedures • Structure to match required work as in plans, policies, legislation • The merge improvement, organisational structure • Counselling of staff • Fairness in offering opportunities, workload, salary grading on job description, to employees of MoH. Bottom line equity to all professionals • Psychological support doing job • Stable pathways of working and contracts • There is no proper planning, no proper communication, lack of proper support group from our peers	9
Staffing Work culture, ethics	• We need more pharmacists to supervise us as the ones working now are overworked. • Performance and attitudes	2
Service delivery	• Emergency area • Patient need more monitoring and resources for patient care	2
Infrastructure, support services	• Internet/email communication • Some places in hospital life steps no lights for a long time. Most of the resources use by patients in caring are broken long term waiting to fix	2
All areas of the Ministry	• All areas of ministry • Health system "everything"	2

Section F: Training and professional development

1. I feel that I have received sufficient training relating to my role:

21% and 42% of the respondents stated that they either strongly agreed or agreed that 'I feel that I have received sufficient training relating to my role' (see Figure 18). While 6% and 23% stated that they either strongly disagreed or disagreed with that statement that 'I feel that I have received sufficient training relating to my role'. 4% responded as 'neutral/don't know'. The majority of those who strongly disagreed and disagreed are nurses, doctors, other allied health staff and staff working in the dental, laboratory, MIR, and pharmaceutical services.

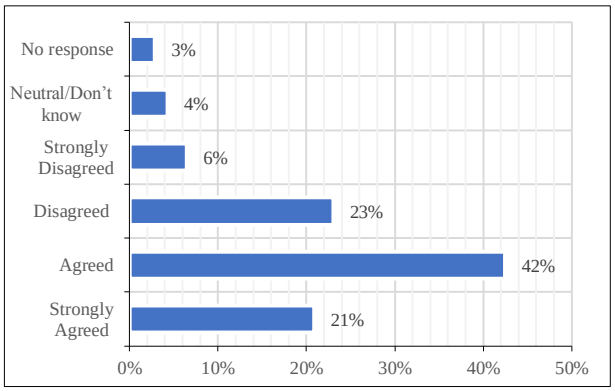


Figure 18: Received sufficient training relating to role

2. I am able to utilise the trainings that I attended to my work:

29% and 55% of the respondents stated that they either strongly agreed or agreed that 'I am able to utilise the trainings that I attended to my work' (see Figure 19). While 1% and 6% stated that they either strongly disagreed or disagreed with that statement that 'I am able to utilise the trainings that I attended to my work'. 4% responded as 'neutral/don't know'. The majority of those who strongly disagreed and disagreed are nurses with two other staff in the OAHS and HSS.

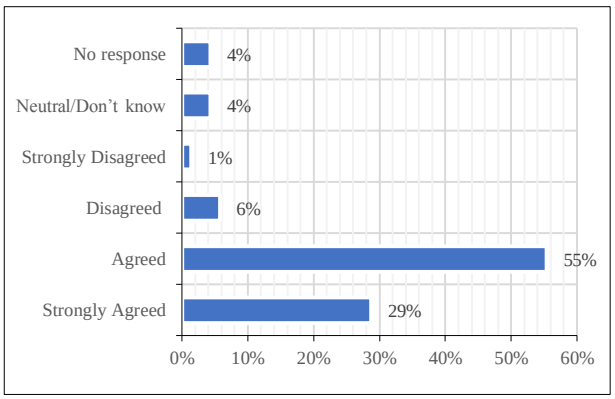


Figure 19: Able to utilisation trainings to work

2a) Reason for disagreeing (please specify):

- Favouritism
- Have never taken or underwent any leadership training, i work with the help from others
- Management does not support employees to attend overseas trainings
- Need more experiences and trainings
- Need more resources to offer other range of services
- Need special training for mental health staff - e.g. Drug and alcohol, suicide awareness, etc.
- New to the role
- No trainings provided
- There are no pathways or short term trainings avail for most doctors, no help from moh on this
- Always need learning in work life to update/keep abreast with new evidence and practical changes

3. List the trainings that you have attended in the last 5 - 10 years?

Out of the 109 participants who responded to the above questions, only 5 stated that they have not attended any training relating to their role. Participants have attended training in the following areas.

- Ultrasound training with sonographers, workshop in Radiology across borders, ultrasound workshop
- Community disability rehabilitation training, dual peer in allied health & heal service assistance training, Clun Foot Training, Training for Project Management, Ponseti Club Foot Refresher Training
- Midwifery attachment training, breastfeeding training
- Pacific Perioperative Practice Bundle (Theatre Standards) - mentorship pacific perioperative program, Pacific workshop in developing Pacific Perioperative program Bundles1 and 2
- Advance life support for adults/paediatrics, basic life support for adults/paediatrics, basic assessment related to ventilated/non ventilated pts MIMMS training
- Advance life support, primary trauma, ,major incident training (major trauma), leadership training
- APIS Training in NZ, Advanced Paediatric life support
- Attachment at Middlemore, super clinic, Study at FSM
- Postgrad dip, Leadership in mental health, RANZCP Pacific Mental Study Group
- B. Physio, ST training Ponseti Program, Major incident Medical Management and Support, Interplastic program on splinting and management, CRP
- B.Health Science (NUS), Management training (PSC), Water quality TOT training (UNICEF, Fiji)
- Baby friendly hospital training
- Basic life support training, major incident (MIMMS), leadership and management attachment (Japan, 2 months), stoma training
- Basic life support, advance life support, customer service
- Basic life support, trauma care training, mass causality training
- Basic management, GSI training, emergency resuscitation, trauma
- Basic trauma care, advanced trauma care, endoscopy - gastroscopy training, resuscitation CRP training
- Best practice food establishment inspector (POHLN course), good labelling consultation - health card consultation (moh), training on codex national work (TOT (MCIL), food handlers training for teuila food stall, seminar on good safety inspection technology and management in countries for belt and road
- BLS, paediatrics basis life support, mass casualty training (Pacific Games)
- Brain management, SDI training, emergencies resuscitation, trauma
- Breastfeed and emergencies trainings
- Samoa friends training (Emergency Medicine), Perineal workshop
- China funded trip for healthcare professionals, UNFPA funded training for pharmacy technicians
- Clinical management and leadership training, ongoing medical specialty ST workshops in Obstetrics & Gynaecology, professional dev activities
- Community health and tropical medicine, EPI training, breastfeeding training, basic life support, advanced life support
- Community resilient skills training, palliative care forum, ILGA conference, MWCSD training on child protection workshop
- Codex training, tobacco taxation
- Conference training in urology, local training and sharing of skills with multiple visiting teams visiting our hospital every year
- Cookery course at APTC, food services and food handling course training, hazard and risk training
- Counselling
- Customer service training, infection control, primary trauma care, eye training
- Customer service training, technical training

- Customer service, early warning score workshop
- Customer services, primary trauma care, friendly hospital, breastfeeding
- Drowning conference, water auditing
- Emergency in paediatrics, postgrad dip in eye care, postgrad cert in diabetes eye care, primary health promotion training
- EPI training, health promotion in preschools
- First aid
- Food safety training, tobacco enforcement training
- Funded for extra trainings at the university, accommodating qualified people to visit for further training
- Haematology and blood cell morphology, Tuberculosis TTM lab
- Haematology PPTC training (local),m microbiology SPC/AMR training
- IATA trainings for shippers. Microbiology and Haematology trainings
- IATA training provided by the SPC, blood transfusion training at the PPTC
- Improvement of communities for healthy pregnancies and children under first 5 years of life, baby friendly hospital
- Improving access to quality medicines, Japan
- Infection control, more training on assisting patient
- Innovating methods - controlling vector borne diseases, transforming health communities in Pacific, Performance Management
- Interplast training, Primary Trauma Care, SRH, Medical First Response
- Interplast trainings, clinical meetings (nursing)
- Lan quality management system and health safety
- Law enforcement on counterfeit medicine, narcotics dugs and med safe, pharmacy management, medicine supply
- Leadership in midwifery
- Leadership trainings, EPI training
- Lifestyle related diseases prevention course
- Management training for nurses/health professions, technical trainings on other people duty travels, Dip health management
- Community health nursing and public health, Echocardiogram, Primary health care/Tuberculosis
- Microbiology training, health and safety training (infection diseases), IATA training
- Midwifery training, health management and leadership, customer services training
- Rights of People with Disability, counselling, gender-based violence and sexually reproductive health
- National Health Accounts, community health management, Health in all policy, strengthening mental health policies
- Nursing symposium, attend to study BN
- Oncology trainings, Resuscitation training (local), stoma care training, childhood diseases/management
- Only do local training at workplace office started from 2017 until now. We do our presentations on work and lectures every week
- Oral health science education, it was done in Upolu.
- Orientation program
- Overseas - in mammography training, management and leadership, division seminars and presentations
- Pacific emergency maternal neonatal training for trainers
- Patient care training
- Maternal and neonatal emergency, OASIS - Obstetric Anal Injuries , Med OBGYN
- Peri-operation practice bundle- infection prevention, patient safety, attachment urology PPPB train the trainer Pohnpei
- Postgrad Cert in Health Leadership and Management
- Postgrad dip in anaesthesia, masters of medicine in anaesthesia
- Postgrad dip in eye care, health management training
- Postgrad training in nursing, leadership and management in disaster, primary trauma care, advance life support (paediatrics and adults)
- Postgrad training, attachment training
- Pre-hospital care sport medicine
- Primary health care training, EPI training, CRP training, midwifery trainings (safe motherhood)/ultrasound scan training
- Primary trauma care, Pacific sexual reproductive health, resuscitation training, perineal repair
- Professional dev - PIOA (Pacific Island Orthopaedic Association),Non-technical skills
- Promoting and supporting of baby friendly hospital initiative (breastfeeding), SRH, infection control and documentation, PH CW - Diabetic Retinopathy
- Prosthetic triaging, wheelchair training, club foot triaging, Cardio Pulmonary Resuscitation (CPR), Rehabilitation and Mobility.
- Presentation and Report writing skills
- PTC course in hospital. PLC course in hospital

- Resuscitation trainings, stoma care trainings
- Resuscitation training (basic & advance life support)
- Resuscitation training, Coeducation (midwifery), PSRH
- Resuscitation training, drugs administration training
- Singapore conference, POP training
- SPC training on AMR and basic microbiology skills
- SQA radiation protection in radiology, vulnerable groups training, customers service training, report writing training
- Stoma care. Basic life support
- Strategic planning training, health system strengthening - the key contributing to achievement of SDGs
- Tobacco free tourism, illicit trade to tobacco, food inspection and technology (china), study tour - tobacco control enforcement
- Triaging skills, basic life support, medication errors, Management and leadership
- Ultra sound trainings, surveillance, training for midwives, breastfeeding
- Upgrade for BN, Post grad Dip in Midwifery
- Workforce planning, finance one, communication training, refresher HRMIS training (leave management)
- NCD surveillance, training on lifestyle related diseases, surveillance of influenza, severe acute respiratory infection training, data for decision making (DDM1)

4. What other relevant trainings that you will like to undergo for improving the performance of your role?

- Acute care cases (emergencies)
- Advance community health, update epi training, leadership and management
- Anaesthesia conference, echo cardiology in anaesthesia/ICU, EMAC (emergency management in anaesthesia crisis
- ANC guidelines, protocols, cervical cancer policies
- Blood confusion, health and safety, leadership
- Clinical meetings and staff presentation of trips and small training that they attend
- Clinical training for pharmacy technicians, customer service training
- Computer Microsoft (access training) for collection of water quality data, refresher training on water quality testings (chemicals and physical parameters)
- Continue support exchange peri-operate training, support PIORN (association peri-operative nurses)
- Credentialing for acute care and emergency, attend/access to internet (training and lecturers)
- Credentialing in primary health care
- Critical care course/training for ICU nursing staff
- Critical care for intensive patients
- Customer service (need to upgrade), leadership and management, pharmacy management
- Data analysis and reporting, research methods, tools and sampling methodology, leadership
- DDM 2 - 4 (complete the course), other infectious disease related trainings on surveillance and monitoring systems
- Dip or postgrad dip management, health management
- EWS training
- Food safety training, equipment handling
- Food safety training and tobacco control
- Forensic care, drug and alcohol, mental health administration and management, counselling
- Health promotion training
- Hr training of situation of lwop staff for more than 5-10 days, appraisal (perf) - new system
- I only recommended previous trainings that i attended, the opportunity for my team to attend (overseas and local)
- I would like to undergo a postgrad degree in the intended field i am currently in but no pathway
- Infectious diseases (communicable diseases), sexual transmitted diseases training, microbiology in-house training
- Interpersonal communication skills, office technology & technical skills, strategic planning skills
- Lab quality management, microbiology, blood transfusion
- Leadership
- Leadership and management training, midwifery leadership and management, training by RHNZOG
- Leadership and management course, acute care
- Leadership and management, acute care training, postgrad degree in nursing
- Leadership and management, master degree in nursing, acute care and primary care training
- Leadership and professionalism
- Leadership training
- Leadership training, advanced policy analysis training, NHA training for at least 1 month, public health training, training on laws governing functions of the MoH
- Leadership/management training

- Life support training - ICU management, trauma care management, infectious diseases management
- Management role training
- Master of O&G, fellow in O&G, gynae oncology - Samoa need to administer its own chemotherapy
- Master training in radiology (wherever it may be offered), ongoing radiology scientific meetings and seminars.
- Masters in psychiatry/mental health
- Maternal child health related training, research training, auditing training, leadership and management training
- Medical - oncology attachment, budgeting, writing plans, project management
- Midwife training
- More emergencies trainings and workshop, wound care and patients care trainings
- More NZDA annual conferences
- More training - technical trainings on food safety issues, trainings on prosecution and legal procedures to assist with good legislation and tobacco legislation
- More training on customer service, public health and any training that relate to our work
- More training related to health and nursing local and overseas
- Need further studies and practical on microbiology and serology
- Need further training - postgrad training in my field - because of increasing and changing medical knowledge that will help us better treat and manage our patients
- Need more employee training, need training for senior staff, need training for medicine
- Need more training on food safety mechanism
- Need more training in vector surveillance because we need to strengthen vector surveillance in order to provide rapid and appropriate response during any outbreaks of VBD, strengthening of and enforcing of exercising legislative powers
- Need to train our health care supporters - especially cleaning our workplace, customer services, protocols, guidelines and procedures
- Needs more trainings for resuscitations on bodies, training to upgrade knowledge on caring children like cardiac and arithmetic
- Offer phlebotomist overseas training in order to be a qualified phlebotomist in Samoa
- Other relevant training to improve performance in my role, doing the epi immunization
- Other training in health
- Overseas exposure to dental clinics in developed nations
- Payment to attend NZDA events such as research presentation and introduction to new implemented technology that would further improve healthcare
- Psychiatric training on forensic services, MoH training on different levels of assessment of court cases
- Postgrad (leadership/management), ICU physio management (patient care - ventilated case) - upskill/evidence based physio practice, online postgrad training on physio related areas, refresher courses - physio management on any speciality areas
- Postgrad acute care
- Postgrad and further education
- Postgrad cert/dip in ultrasound scanning, a postgrad cert/dip in imaging science
- Postgrad studies asap - dip or master
- Postgrad, mentor
- Principals (staff) providing us training in our room during work, trainers from overseas had their time for us too, to apply it when it happen
- Procurement, medicines management, distribution, technicians trainings, lot's program, new system training, customer service training
- Mentoring and coaching
- PTC training and practices, maternal practices and observations, emergencies trainings
- PTC trainings, postgrad studies
- Quality improvement process - risk assessment and analysis
- Quality practices, self-developments, effective services, communication
- Recruiting and selection trainings
- Recruitment and selection training, managing breach of code of conduct
- Resuscitation, airway management
- School health training - on child development, mental health assessment of children, health promotion in children, nutrition and healthy diet
- Sponsored trainings or educational scholarships
- There is a lot but i have received training through the years. Maybe more on leadership, communication, nutrition knowledge in our areas
- To improve being assistants, to improve standing always on the doctors doing patient
- Train all other health workers to support our care
- Training of patient care
- Training on food safety inspection and enforcement of tobacco control within our country
- Training on primary health care, training on breastfeeding, emergency training

- Training specialised for intensive care unit
- Trainings pertaining to the histology dept., more trainings on haematology and microbiology sections
- Training on management and leadership, masters public health on NCP
- Training on the usage of medicines and how patients will benefit from them
- Triaging skills, basic life support, cross infection
- Ultrasound scan training for midwifery
- Undergo any training about my role to gain any more skills and knowledge
- Undergo more prosthetics technical work to improve/maintain knowledge and skills in fabrication of prosthetic devices, undergo refresher training in work plan in both clinical and technical work to maintain and improve the prosthetic service
- Water testing

5. What professional development initiatives/opportunities that you will like to have for you, colleagues, and staff – in order to improve work performances and services?

- A mandate for all Registrar to undergo postgrad after 2 years). Need better facilities for online classes
- A set pathway to train for postgrad and master degree, so we can become more skilled and equipped with the correct training for the safety of our patients
- Access to work email and internet, more training and workshops
- Apart from CME, more training programs is needed
- At least a diploma/bachelor to recognise all the technicians in Samoa health department are qualified
- Short courses for nurses without proper training, postgrad dip and maters in anaesthesia for junior registrars
- Clinical meetings and trainings for staff
- Clinical meetings with nurses, management and leadership team
- Transfer of knowledge within units, upgrade professional development of all professions
- Critical care training for ICU nursing
- Customer care service - improve staff attitude for all health care services
- Developing a therapeutic relationship with staff and other workers especially with patients
- Emergency, masters in primary health/emergency medicine
- Opportunities to get more skills to enable ourselves to specialise
- Training to better understand current issues, diseases, priorities, and programs to improve planning and designing of health policies that addressed gaps effectively at minimal cost
- Team building activities
- Hospital support include finances to be able to register for and attend annual or 6 monthly regional radiology
- Financial support to registrar for online journals, teaching modules, etc.
- Basic patient care needs
- Leadership and management
- In-service, more clinical meetings and presentations
- Specialised training (in certain areas of need), overseas attachments (ST) for further skills and experience
- Staff to train on primary eye care and diabetes eye care
- Training to be done locally by visiting doctor overseas
- Trainings on health education
- Mental health and emphasis on patient care,
- Proper counselling methods for different kinds of situation (appropriate language/counselling methods to be used)
- More training on tobacco control
- Need more opportunities to get professional training within Samoa and overseas
- Need more training opportunities to improve work performance and services.
- Need to have a higher qualification like a diploma/bachelor to improve my role and understanding of role
- Need higher qualification to improve knowledge in clinical and practical work in prosthetic and orthotic service
- Offer study opportunities with salary/pay in order to motivate staff performances
- More trainings in different areas of the laboratory
- Water management trainings and water quality testing training.
- Perinatal training for midwifes, refreshment for guidelines (nursing staff),
- EPI training for new graduate staff
- Postgrad Dip in Perioperative Nursing, and Acute Care nursing
- Wound management, resuscitation training
- Practical- specialized clinical trainings
- Technical training particularly on food and tobacco
- Psychological support service
- Scholarship for postgrad studies, proper pathways for certain specialities
- Specialist training in every area of nursing
- Management and budgeting
- Specialty plus subspecialty training - camas copy, urogynae, oucology, fetomaternal
- Training relevant to the areas of work - monitoring procedures, nutrition information research
- Training for physio assistant, further training opportunities for physiotherapists,

- Refresher courses/workshops/opportunities for staff
- Training for specialised area, acute care, urology, special care
- Training on practical and theoretical aspects of pharmacy practice. Rotational placements within the region to foster professional development and improve clinical knowledge

6. Please specify below areas that you think need improvement:

- All areas of service delivery
- Both clinical and public health areas
- Caring for ventilated patients
- Channel of communication to be clear and effective
- Clinical knowledge, customer service training, pharmacy practice, manufacturing and extemporaneous compounding
- Clinical skills (basics, dental education)
- Communication - filtering information from top to bottom, opportunities for oversea trainings to be carried out by those who are actually working in the field instead of utilising someone else from another field
- Communication and transparency between hr and development plans for our career pathways
- Communication skills, resources (lab equipment, funding, etc.)
- Communications from the top level to the rest of the staff
- Conduct food safety and TC trainings for new employees, more staff needed especially in areas concerning enforcement
- Enough training for every lab person
- Ent, urology, orthopaedic, general surgery
- Every with their roles, local training - can work and school locally without leaving the country but same standards as overseas
- Funding training needs and analysis
- Health system as a whole
- Hr division - we shouldn't have to spend too much time away from clinical services to attend to our financial business welfare
- Infection control
- Maintain good health service, improve personal dev of employee, providing more training for workers to improve quality of the workforce
- More education of young doctors in orthopaedic and trauma management
- More of us to go for postgrad studies, more training opportunities
- More scholars avail to get further studies done and opportunities to attend workshop trainings
- More training opportunities for staff
- Need god facilities and equipment
- Need more quality radiographers, continue our local trainings under SQA to help our local radiographers
- Need more resources and staff
- Need more resources like computer, printers and hr to strengthen the team
- Need more resources for caring sick babies in paediatric
- Need more staff specifically on food safety and tobacco control unit
- Need to improve my knowledge and experiences through courses at APTC or other opportunities
- Need to improve safety work environment, strict visiting or visitors in hospital by good security, need professional cleaners
- Planning, resources, communication
- Professional dev and training, do more on the job training
- Recognition of staff salary according to qualifications
- Rehab exercise equipment, number of physio staff to be recruited, staff salary scales
- Research updates
- Resources - we need a photocopy machine - we only have a printer, cannot scan, card room too small
- Respect the clients right, make the clients friendly, environment - not enough space for working areas
- Set doctor development structure
- Staff attitudes, improve communications
- Staff members and workplace
- Staff that deserve to go on trainings end up staying while another person gets the privileges, low staff morale due to unjust decisions
- Strengthening partnerships with communities, teamwork with other health workers
- Time management, leadership skills, communication skills
- Training and professional dev
- Trainings (local and overseas), attitude for both top-level and below workers
- Upgrade of staff in practice for every procedures relating to caring of patients
- Upgrade skills and knowledge through training. Enhance workforce
- We need to prioritise and support training. Medicine is an ever changing field and we need to keep abreast of changes. Financial support and assistance for MoH in keeping doctors well trained would ensure we are not only valid but ensures people are confident and remain in Samoa

Section G: Human Resource Management

1. I am well informed of the human resource management policies and procedures governing and directing the Ministry and my employment as a staff member of the Ministry:

8% and 45% of the respondents stated that they either strongly agreed or agreed that 'I am well informed of the human resource management policies and procedures governing and directing the Ministry and my employment as a staff member of the Ministry' (see Figure 20). While 6% and 17% stated that they either strongly disagreed or disagreed with that statement that 'I am well informed of the human resource management policies and procedures governing and directing the Ministry and my employment as a staff member of the Ministry'. 10% responded as 'neutral/don't know'. The majority of those who strongly disagreed and disagreed are nurses and doctors with a few staff working in the dental, pharmaceutical, MIR, laboratory and OAH services.

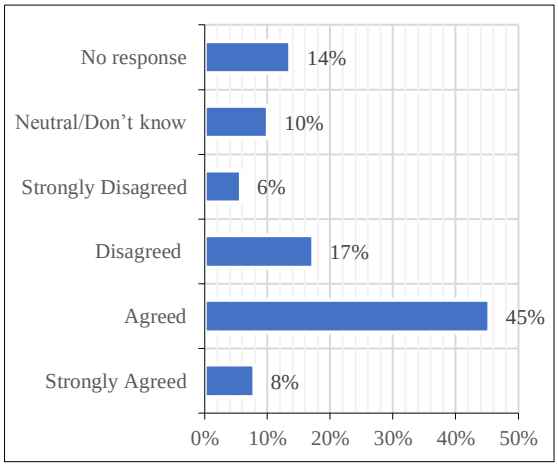


Figure 20: Well-informed about HRM policies and procedures

2. The existing HR policies and practices are addressing the critical HR and workforce needs of health:

16% and 56% of the respondents stated that they either strongly agreed or agreed that 'the existing HR policies and practices are addressing the critical HR and workforce needs of health' (see Figure 21). While 4% and 9% stated that they either strongly disagreed or disagreed with that statement that 'the existing HR policies and practices are addressing the critical HR and workforce needs of health'. 14% responded as 'neutral/don't know'. The majority of those who strongly disagreed and disagreed are doctors and then nurses, and some staff working in the dental, pharmaceutical, MIR, laboratory and OAH services.

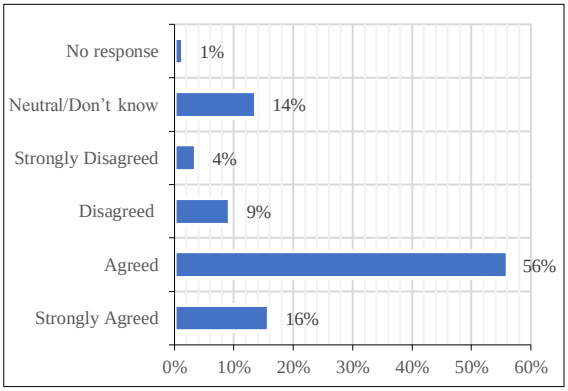


Figure 21: HR policies and practices addressing critical health HR and workforce needs

3. I believe that the right people are being recruited to the right jobs in the Ministry:

7% and 56% of the respondents stated that they either strongly agreed or agreed that 'I believe that the right people are being recruited to the right jobs in the Ministry' (see Figure 22). While 4% and 9% stated that they either strongly disagreed or disagreed with that statement that 'I believe that the right people are being recruited to the right jobs in the Ministry'. 22% responded as 'neutral/don't know'. The majority of those who strongly disagreed and disagreed are nurses, doctors and staff working in the dental, pharmaceutical, MIR, laboratory and OAH services.

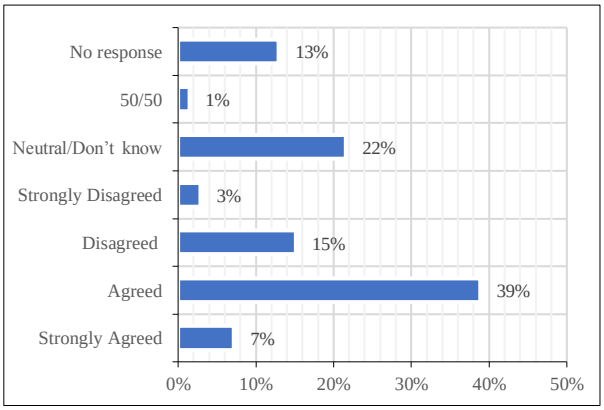


Figure 22: The right people are being recruited to the right jobs

4. I feel that staff are being fairly compensated and rewarded for their work and contribution:

11% and 32% of the respondents stated that they either strongly agreed or agreed that 'I feel that staff are being fairly compensated and rewarded for their work and contribution'. While 13% and 24% stated that they either strongly disagreed or disagreed with that statement that 'I feel that staff are being fairly compensated and rewarded for their work and contribution'. 7% responded as 'neutral/don't know'. The majority of those who strongly disagreed and disagreed are nurses, doctors and staff working in the dental, pharmaceutical, MIR, laboratory services and OAHS. Only one doctor responded as 'agreed' and two as 'neutral/don't know' while the rest responded as either strongly disagreed or disagreed.

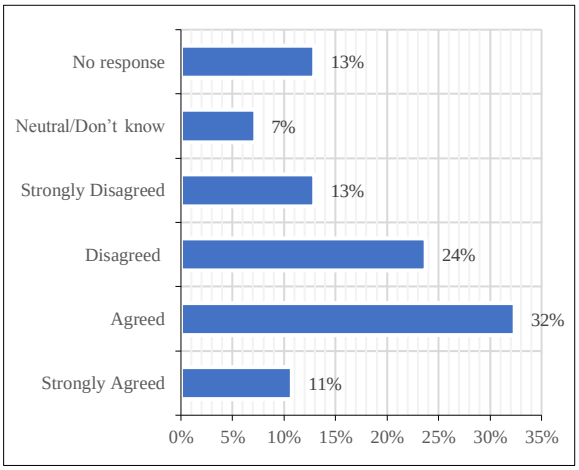


Figure 23: Fairly compensated and rewarded

5. Human resource management in the Ministry is fair, transparent and in accordance with good governance principles and best practices:

6% and 40% of the respondents stated that they either strongly agreed or agreed that 'Human resource management in the Ministry is fair, transparent and in accordance with good governance principles and best practices'. While 5% and 18% stated that they either strongly disagreed or disagreed with that statement that 'Human resource management in the Ministry is fair, transparent and in accordance with good governance principles and best practices'. 18% responded as 'neutral/don't know' and 13% had 'no response'. The majority of those who strongly disagreed and disagreed are nurses, doctors and staff working in the dental, pharmaceutical, MIR, laboratory services and OAHS. Only two doctors responded as 'agreed' and 4 as 'neutral/don't know' while the rest responded as either strongly disagreed or disagreed

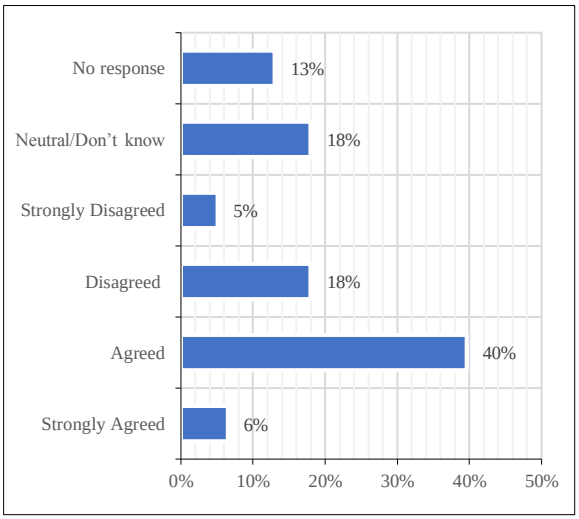


Figure 24: HRM is fair, transparent and in accordance with good governance

6. I have confidence in the existing HR management capacity and services of the Ministry:

6% and 46% of the respondents stated that they either strongly agreed or agreed that 'I have confidence in the existing HR management capacity and services of the Ministry'. While 4% and 12% stated that they either strongly disagreed or disagreed with that statement that 'I have confidence in the existing HR management capacity and services of the Ministry'. 18% responded as 'neutral/don't know' and 14% had 'no response'. The majority of those who strongly disagreed and disagreed are nurses and doctors and two other staff working in the dental, pharmaceutical, MIR, laboratory services. Only one doctor responded as 'agreed' and 4 as 'neutral/don't know' while the rest responded as either strongly disagreed or disagreed.

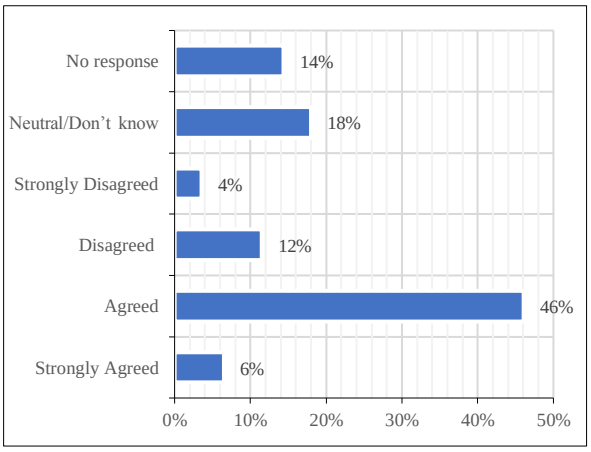


Figure 25: Confidence in the existing HR management capacity and services

7. Please specify below areas that you think need improvement:

- There is no proper guidance from HR dept.
- MoH need a qualified HR Specialist
- Need clear policies and protocols on HR policies and procedures – e.g. Staff entitlements and leave
- Improve distribution of HR policies to all employees.
- HR personnel must always give out updates in terms of policies and procedures governing the ministry especially when PSC introduces changes.
- Inform staff about policies since the merge
- Develop training and ensure equal opportunities for everyone.
- HR respond to benefits and allowance claimed. HR management is not always good at informing people about jobs they have applied for. I waited for months for an interview that took place in April/March and have yet to receive a word from HR.
- HR has long been a contentious issue for doctors. We need to feel supported and not have to worry about constantly having to personally follow up on increments, training opportunities, etc. - which has been the practice ever since I started work.
- HR must stand for MOH employees and support us in any way. They should be more flexible and friendly.
- Improve payments of staff overtime, but not deduct from lunch hour
- Conduct training on HR issues - e.g. Policies, etc.
- Communications from those people in HR must effective and efficient for the better understanding and awareness about policies and regulations
- Responsiveness of HR division to staff queries, analyse info on training and presented in perf appraisals to determine skills lacking and finding trainings (local and overseas) to address gas and present advice to management.
- Working conditions, staff salary and benefits, policies to be clearly explained to staff
- Consistent in addressing individual and group concerns
- Employees must work under their appointed positions
- Staff to follow protocols
- Transparency of information without delay to avoid unnecessary decision making and avoid pressure on staff
- Update staff about their entitlements (e.g. Leave benefits and PSC regulations)
- Need good communication and relationships for all health workers in the ministry
- Need improvement on leave entitlements. Sometimes they said that we are under PSC and sometimes they said that we are still under MOH. We are confused and there are no justification of their policies
- Need more presentations from the people to make everything clear and transparent for everyone
- Need more training and induction on policy and procedures governing our ministry especially those under the merge ministry, we need to be updated
- Policies kept changing from time to time and staff are differently treated under these policies at times. Need robust transparent and accountable system.
- Proper communication, less mistakes with timesheet hours, allowances/payments not being paid for a year now
- Recruitment/selection bias, difficult in your area - due to know local people, ned professional development similar to nurses, doctors, etc., not much priority of government over allied health including nutrition
- Right person in the right position
- Salaries and benefits for senior staff that act as principal since our principal was away for 3 years on training
- Transparency of deductions from pay, lunch and dinner breaks ae not taken at times so I don't think they should be deducted from allocation of pay and incentives and pay
- Transparency, we work more hours than expected without breaks and our hours worked get cut off, why?
- Update us about government reforms

Section H: Workforce Development

1. Where do you see any imbalances in the existing distribution of staff:

- All areas of nursing workforce
- APCC - nursing staff - too many junior staff not enough seniors, not enough porters working after hours.
- Better facilities and increase in staff members
- Biochemistry, haematology and microbiology consist of two permanent staff while other sections (serology and blood bank) consists of five staff
- Can't do much - there are not enough doctors, only a few (3 doctors) in Savaii
- Clinical services need improvement
- Difficult to answer as all clinical are short staffed. We are all in need of more manpower

- Distribution of cleaners (not enough), understaffed working sections
- Especially nursing staff (new recruits) must work in TTM for more than 3 years before move out to community)
- Entice hospital workforce
- For our dept. - there is a larger ratio of technical staff compared to doctors. These staff also need more training and the ability to attend overseas training to put them on par with overseas colleagues
- Need good communication
- Health and wellbeing of staff, implementation of skill sharing program
- Health system as a whole
- I'm not so sure about other areas - but dieticians team are short to cater for all patients in Upolu and Savaii
- Imbalances in school dental services and in rural areas in term of dental services
- In the nursing division
- Increase the workforce
- Lack of doctors while there is an increase in the population and demand for workforce, upskilling of staff needed
- Lack of enforcement officers (AusAID Health Resource Facility (HRF)) to conduct enforcement roles and cover a wide area for Samoa
- Lack of hr in planning and policy division, ICT division lacking critical/advanced it skills/knowledge, allied health professionals (limited number) whereas nursing profession is oversupplied (for instance)
- Mainly clinical vs public health but already now being secondary vs primary health care
- Match workforce roles/responsibilities and numbers to plans, policies, legislations and regional plans that government has committed to
- Medical workforce, nursing workforce
- Need group specifically for arranging patients appointments and feeding information out to patients
- Need more dental assistants, need more community outreach workers
- Need more nurse staff at our clinic
- Need more physicians - in MoH units
- Need more staff and trainings and not enough resources
- Need more staff for Savaii
- No communication, no team work, lack of support in the department
- None for mental health in last 5 years
- Not enough enforcement staff in food safety unit - also in the whole MoH
- Nursing - need more nurses, quality and committed to their roles
- Our staff sometimes try to fulfil the duty but we are looking forward for the safety of the staff also the public
- Paediatrics need support and staff
- People should be allowed to do what they enjoy and join units they know they will excel at rather than forced to certain areas
- Physio unit is currently understaffed. The service is localised at TTM.
- Poor distribution of staff in terms of training (overseas training and locally)
- Primary health care, need more staff in the HPE area instead of focusing on diseases. If we tackle and use health promotion and education then the load for inpatients/outpatients will be less
- Procurement workforce
- Reallocating of new graduates, the majority are allocated in the clinical but less to the community where health problems start
- Short staff/overwork, limited resources
- Since the lab is under-staffed, i would say the distribution of staff members is fair but we need more technicians so that each section can have at least 4-5 members
- Some units have not got enough skills, no training or sponsored studies for people to further their knowledge
- Specialist dept. For Savaii
- Top level of ministry
- Trolley boys, dishwashing sections
- Ultrasound unit is the only unit that has two full time sonographers, our workload increases yearly and with more specialised scans
- Understaffed, insufficient access to trainings to improve performance of current and any new recruits, overloaded
- Unqualified staff are more in the hr and administration that caused a lot of confusion between staff in the ministry

2. What are the critical workforce issues and challenges that must be addressed within the next two, five and 10 years:

- Kitchen - need to have the needed staff to cover for the shortages of staff
- A proper working plan and career pathways for dev of the doctors. Proper set JDs and rules that reinforce them
- Address training prof dev need/funding, reward scheme for perf appraisal system to be actioned, staff compensation
- Another doctor
- Apart from doctors, also a need for more physiotherapists and social workers
- Avail of postgrad on PHC at NUS - last intake was 2007
- By applying professional education or non-formal training to staff
- Caring ration between nurse-patient
- Compensation/benefits and entitlements to be improved, leadership not providing equal opportunities for all staff to succeed, transparent processes/system to eliminate corrupt practices by some staff management
- Doctors pay, hospital facilities (rural)
- Education, resources, wellbeing/burnout
- Encourage for more staff training on our needs
- For our unit, a proper laboratory unit must be established within the next 5 - 10 years
- Future leadership - physician administration, quality, safety, population health
- High turnover due to financial constraints (increase salary), restructure of roles and responsibilities to be clear
- Hopefully next 2-5 years we fulfil this problem of staff shortage as well as all are junior RNs
- Improve nutrition standards in schools and public area - e.g. Shops and supermarkets
- Improve the current understaffed status, train new recruits and continue ongoing trainings for current staff, carry out capacity building/moral building workshops/events.
- Increase staffing and enhance skills and training, enable opportunities for further studies
- Increased staffing and better hours
- Interpersonal conflict, communication, discrimination
- Lack of communication is the main issue in the organisation
- Lack of confidence in approaching people at work
- Lack of qualified members in the staff, need for better health and safety regulations
- Lack of seniority staff, staff shortage
- Lack resources that can be used within the hospital, dispensary (not enough supply), air condition of the hospital
- Limited resources, improve working areas/buildings and environment
- Manpower - more seniors/consultants
- Members of hr should match the amount of workload conducted within the ministry
- MoH employees need to understand hr policies
- More equipment, reagents and employers. More trainings and better communication. More finding
- More opportunities for lower staff to attend trainings and refresher course
- More trained specialists and primary healthcare physicians, pathway for trainings for doctors
- Need more hr personnel, specialist training for nurses in each area of service and to improve salaries
- Need more quality people/staff with good attitude toward their calling
- Need more staff especially for Savaii
- Need more staff in the enforcement offices
- Need more staff to do the staff, more patients coming in but not enough staff
- Need more staff to recruit, to develop nursing
- Need screening programs (e.g. Cervical & uterine), need separate facility and staffing to palliative care
- Need to review/revise nursing curriculum at nus, nursing profession - perf and activities, capacity building of staff to be competent
- New changes for safety and better health and practice
- Numbers, workforce counselling to cater for shortage and prepare them mentally for the challenges
- Nursing practice
- Ongoing trainings and good pay for staff before they retire or resign
- Overload but tend to cut pay. Fai overseas training i (employee) tend to run around e fill forms and everything
- Overworked due to lack of staff
- Performance appraisal - evaluate issues being expressed by staff, ensure performance is matched up to the expected outcome of JDs.
- Recruit more staff, trainings needed for current staff
- Recruitment of more physiotherapists and assistants to provide services to Savaii and communities. Review proposed physio structure and career pathways and staff salaries. Established working conditions and policies that are clear and transparent. Fully equipped physio unit including an indoor therapy pool.
- Retaining the quality of workforce, safer working environment

- Review and update health workforce plan - in a holistic approach - there are some areas (in allied health that needs to have ongoing scholarship and training - e.g. Physios, biomed, speech therapist, etc.)
- Selection criteria for overseas training
- Shortage of dental nurses due to no recruitment
- Shortage of most senior and experienced staff to develop junior staff recruits
- Shortage of staff and poor transport services. Vehicles always unavailable due to broken parts causes delay of such activities
- Shortage of staff in every area of work
- Should have more info just to inform the co-workers about what's going on every year
- Staff numbers, training and study opportunities
- Sustainable staffing - that there are succession plans. Training opportunities - that we will be supported by our ministry financially, etc. And that it will fight for us to continue to be the best in our fields
- Training and opportunities for nurses to upgrade knowledge on assigned working areas
- Treatment of overtime payment, hours worked, increments based on performance appraisal
- Understaffed (over-worked/it also affects the turnaround time of patients results), staff entitlements, lab career development

Section I: Further information

1. In this next 'Samoa Human Resource for Health Strategy' (SHRHS) & 'Samoa Health Workforce Development Plan' (SHWDP) for 2019/20–2024/25, what are the critical areas of HR and Workforce development that you like to be addressed in this Strategy and Workforce Development Plan:

- Training, need further staff - positive reinforcement - mentoring programs, staff benefits
- HR & Admin - adequate support and fair remuneration of staff recognising their training and education
- A clear JD and career pathway, salary and incentives, plans for increasing study opportunities
- Address welfare of doctors, clear goals and objectives
- Better/safe practice - protected hours, quality assurance, JD
- Calculating benefits for staff that have been in the service for so long
- Clear direction of merged policies and processes
- Clinical specialty training, primary health care and PH, nurse specialist training, special allied health specialities, laboratory technicians
- Communication, clarifications
- Doctor for mental health
- Every be treated the same, equal opportunities for staff and according to their perf
- Face to face talk with the staff, Friendly faces, some HR when asked about a concern or general inquiry, it is either they do not know or do not want to help.
- Fair treatments goes to all staff, communication between top level and whole of the Ministry and staff as well.
- Fair recruitment and posting of staff, more postgrad specialist training for nurses
- For nursing entry - need more criteria for selection
- Have more facilities in the hospital, need extra equipment/tools used, machines, etc.
- Honesty and work together as a team
- HR to conduct surveys/training to improve quality of the workforce
- Increase salary and establish a new structure for the PH division
- Keep up the good effort of providing good information for workers
- More emphasis on the importance on the services provided by support services such as social services, physiotherapy, etc.
- Need extra wards like paediatric, isolation, etc., need a specialist/doctors to stay over at our DH
- Need Savaii to have their own HR and services
- Not aware of the current plan so cannot comment
- Opportunities for further learning and qualifications. Salary levels based on perf and qualifications
- Please support us so that we can stay
- Poor management of HR issues in the health, no update of training, new policies by the PSC (no awareness).
- Professional employee approach - treat everyone equally, clear clarification of employment benefits, overtime - pay on time/period
- Reassessment of doctors salaries, relatively underpaid
- Recruitment of positions that have been vacant for so long
- Reflect better entitlement, to lessen migration
- Should well informative and settle their ongoing plans

- Strengthen policies for conditions of employment - work standards (professional standards), strengthen personnel systems - staff recruitment and hiring (volunteers), work environment & conditions (e.g. Employees relationship, safe workplace, career dev, job satisfaction), perf management, staff retention - staff scale/financial incentives
- The employees are aware and understand the entitlements they get
- Training and dev opportunities to be equally shared among staff (not select few), investment in activities that reduces stress to improve staff mental health status, leadership style (by management) is not supportive of staff needing direction and career development
- Treat every patient and staff equal
- Treat people and clients the same - no favouritism and conflicts of interests
- We need to fill up all vacant positions so that each personnel will concentrate on their own work
- We need to have salary for staff to be reconsidered. Every unit have different focus - so we need to have a manager that need to look at our priorities/desires.
- Wellbeing, look after workers and wellbeing first
- Working conditions, upgrade facilities/resources, increase financial support

2. Please specify below any other comments that you would like to add:

- All areas of our DH need improvement
- Better if everyone in the ministry is involved in this survey
- Better working hours, more manpower - seniors/consultants, more opportunity for postgrad training
- Doctor for mental health, contract for HOU
- Encourage of transparency towards staff
- Good environment to work
- HR and management of staff should prepare presentations every 3 months to workforce, to keep update, inform staff in relation to issues from PSC to improve health services and knowledge of people
- HR should be independent
- I am desperately asking for a rate - review for my salary at my current working position meat room. Also consider risk allowances.
- I have worked here for 13 years and I am still not sure of my rights as a worker. It seems HR or management focuses on our service delivery and no emphasis on staff well-being. Ultrasound is evolving with only 2 sonographers that has no voice on almost all ultrasound issues except for the patients. Love what I do but here to work almost every day, that can take a toll on anyone especially if have a family to go to. 2 staff have to do obstetrics, vascular, small parts and other scans. Each area is specialised in itself. Willing to work, love what I do but everyone has their breaking point.
- Lessen the gap/discrepancies between health personnel. We may all have our different titles but we are all parts to a greater purpose. Better working together etc.
- More transparent/communication improvement of HR policies and guidelines. Must kept create an enhancing working environment
- Need to focus on looking after our staff and wellbeing - then look after patients
- Network - need a proper system, enhancing the employees experience within specific areas, new leaders, new ways of appraisal employees
- Right and suitable people to the right jobs/roles - e.g. Doctor should look after and treat patients - not to put noses to the wrong hole - leave the management stuffs to the appropriate people
- Risk allowance for staff, especially with frontlines during an outbreaks, as well as some staff where the nature of their work is risky for health (e.g. Vessel clearance)
- Sponsoring education and give more training for staff to improve knowledge and understanding of field of work
- Staffing and salary and further education is key in order to help our health services improve
- Strengthen continuous development of appropriate skilled workforce, capacity of training institutions, training of community health workers. In-service training (e.g. Distance, continuous education). Strengthen linkage with private sectors/donors/health programs groups/ NGOs/community mobilisation groups.
- Treatment of staff by HR division is (sometimes) very unprofessional and unfriendly, can deter staff. HR are (at times) not responsive to queries raised by staff. Communication problems and gossip to be minimised significantly.
- We are still feeling that we are unsecure of what has been done by reforms - but we need to have special focus for own unit - we don't need demanding boss but we loving/caring boss to assist us with our work to be improved.

Annex 8: MoH HRM capacity and manpower audit

HRM Capacity and Manpower Audit							
Date: December 2019		**Organisation: Samoa Ministry of Health (MoH)**					
	Function	**Yes and done well**	**Yes, done ok - needs minor improvements**	**Done but needs improvement**	**Not done too well, needs a fair bit of effort**	**Not done at all**	**Comments**
	Links to Strategic Planning						
1	HR related outcome/s exist in strategic plan.				1		Developing the SHRHS and SHWDP is part of the MoH Strategic planning on HR
2	HR Plan is developed for the organisation.				1		
	Organisational Structures and position classification						
3	An organisational structure exists and is adhered to.				1		Organisational structure is outdated and developing one for the merged MoH is a priority. There are duplications noted in certain areas of the merged MoH.
4	The organisation structure reflects the needed jobs and roles				1		
5	The organisational structure reflects an appropriate position classification of the organisation's purpose, functions and services			1			
6	The organisation does not have unnecessary levels of horizontal and vertical differentiation			1			
7	The organisational structure facilitates multiskilling and team work.				1		
	Personnel Administration						
8	Personnel are assigned employee numbers for ease of reference.		1				An examination of the existing HR system highlighted major problems with the HR filing and record keeping. MoH need to utilise People One as an electronic HR system. Some DHs/HCs do not have personnel files of their staff. There is a need to have a system to record and monitor establishment numbers in the MoH.
9	Personnel files/records within the organisation is regularly updated.				1		
10	Flow path (protocol) exists to maintain accurate establishment numbers.				1		
11	Flow path (protocol) exists to maintain accurate personnel data.				1		
12	Confidentiality mechanisms are in place for establishment control information				1		
13	Confidentiality mechanisms are in place for personnel details and information				1		
14	Establishment control database and/or process reflects the organisational structure.				1		
	Human Resource Planning						
15	Leave data is recorded and provided to the necessary person/s on a regular basis.		1				List of employees and their qualifications provided by the H/Administration unit show that most employees did not have any records of their education qualifications and training attended.
16	Leave data provides differentiation for type of leave.		1				
17	Absenteeism data (unplanned absences) is recorded and provided to the necessary person/s on a regular basis.			1			
18	Qualifications audit conducted for the organisation					1	

	Roles and Responsibilities						
19	Job descriptions (JDs) exist and are utilised in the organisation.				1		JDs exist in some areas but not in all areas. For those that exist, they are outdated. Some staff (see Annex 7) stated they do not know what a JD is. Some doctors state they do not have JDs, other stated they do not need JDs. There are unnecessary duplication of roles under the merged MoH.
20	The job descriptions are accurate, periodically reviewed, and updated to reflect the strategic direction.				1		
21	People are aware of their roles and responsibilities as it is written in the job descriptions.			1			
22	There is no unnecessary duplication of roles.				1		
23	Supervisors understand the role of their subordinates.			1			
24	Job descriptions are reviewed when there is a change to job responsibilities etc.				1		
	Staff Development						
25	A section exists which focuses on training of staff.				1		There is a recent training needs analysis (TNA) conducted. Using that to formulate a training plan and calendar is not being done. There are limited training and professional development programs for staff. Most trainings are provided on ad hoc basis.
26	Are training needs analysis conducted?				1		
27	Are training of staff based on training needs analysis information				1		
28	Training programs exists for varying levels of the organisation.				1		
29	A training plan and/or training calendar exists for the organisation.				1		
30	Training programs are evaluated.				1		
	Staffing Systems						
31	Appropriate selection criteria exist for recruitment of officers				1		There are systems in place but need effective implementation which required an independent HR professional. There are some cases of recruitment and selection that were perceived as unfair and not transparent in their process. Induction processes are provided but on ad hoc basis.
32	The selection techniques are transparent and fair, and ethical.				1		
33	Selection process is clear and well communicated				1		
34	The interviewers are familiar with job requirements.				1		
35	Are there induction processes available?				1		
36	Does selection processes link well with training processes and procedures?				1		
37	Are training and HR functions suitably linked and do personnel in these two areas communicate often?				1		
38	Are there effective grievance processes for selections?				1		
	Managing Performance						
39	Performance appraisal system exists and the performance objectives are job-related.			1			A Performance Appraisal System is being implemented. Its effective implementation and impact on staff performance is yet to be assessed. Using information from the
40	The appraisal system emphasises performance rather than traits.			1			
41	Appraisers are adequately trained and thoroughly familiar with the officers' work.				1		
42	The appraisals are documented and reviewed with officers.				1		

43	Appraisal process is fair and facilitates two-way communication				1		Performance Appraisal System to improve HR policies, systems and practices is not yet being done.
44	Appraisal system provides information for training needs				1		
45	Are clear disciplinary processes in place?				1		
46	Are disciplinary processes managed at the right level?				1		
47	Does the organisation follow through with the disciplinary actions?				1		
	Compensation						
48	The pay system attracts employees and motivates them to achieve organisational goals.				1		No proper job evaluation undertaken. Pay rises are based on job value rather than on performance. New employees getting paid the same (or near the same) as senior employees in similar job titles.
49	The compensation structure and policies comply with EEO requirements.				1		
50	Pay rises reflect the performance of the job.				1		
51	The choice of weights and factors in job evaluation is sound and properly documented (could be controlled external to the organisation).					1	
	Succession Planning						
52	Critical positions are identified for the organisation.					1	There is some succession planning but undertaken at the individual unit/sectional level. Lack of attention given to develop talented people and successors to leadership positions.
53	Talented people are identified throughout the organisation					1	
54	Steps are taken to develop people who may potentially take up leadership positions within the organisation					1	
55	Opportunities for self-development exist.					1	
	Total	**0**	**3**	**7**	**44**	**1**	
	% of Total	**0%**	**5%**	**13%**	**80%**	**2%**	

Annex 9: MoH list of vacancies included in the 2019-2020 personnel budget

	Designation	Output	Area/Division	Level	Salary
1	Manager Internal Audit	Output 1	CS	Management	86,990
2	Manager Quality Improvement	Output 1	CS	Management	86,990
3	Manager Corporate Servces	Output 19	CS	Management	86,990
4	Financial Controller	CSU 2	CS	Management	86,990
5	Manager Hr/Administration	CSU 3	CS	Management	86,990
6	Principal Policy & Monitoring Officer	Output 1	CS	Middle management/Principal Officer/Specialist	59,433
7	Principal Internal Auditor	Output 1	CS	Middle management/Principal Officer/Specialist	48,558
8	Principal Clinical Audit & Quality Improvement	Output 1	CS	Middle management/Principal Officer/Specialist	48,558
9	Principal Research Officer	Output 3	CS	Middle management/Principal Officer/Specialist	48,558
10	Principal Projects Officer	Output 10	CS	Middle management/Principal Officer/Specialist	48,558
11	Ncd Coordinator	Output 10	CS	Middle management/Principal Officer/Specialist	48,558
12	Principal Management Accountant	CSU 2	CS	Middle management/Principal Officer/Specialist	48,558
13	Principal Payroll Officer	CSU 3	CS	Middle management/Principal Officer/Specialist	48,558
14	Principal Recruitment Officer	CSU 3	CS	Middle management/Principal Officer/Specialist	48,558
15	Assistant Executive Asst - NHS Board	Output 1	CS	Middle management/Principal Officer/Specialist	37,106
16	Senior Assets Officer	CSU 2	CS	Senior Officer	36,238
17	Senior It Technician	Output 16	CS	Senior Officer	35,370
18	Executive Assistant To Gm	Output 1	CS	Senior Officer	33,635
19	Senior Officer, Monitoring & Evaluation	Output 1	CS	Senior Officer	33,635
20	Quality Improvement Officer	Output 1	CS	Senior Officer	30,169
21	Senior Accountant - MTII	Output 16	CS	Senior Officer	30,169
22	Senior Payroll Officer	CSU 3	CS	Senior Officer	30,169
23	Training Officer	CSU 3	CS	Senior Officer	24,826
24	Assistant Finance Officer	Output 10	CS	Senior Officer	24,142
25	Component Assistant 1	Output 10	CS	Senior Officer	24,142
26	Senior Administration Officer	CSU 3	CS	Senior Officer	24,142
27	Senior Accounts Clerk	CSU 2	CS	Officer	18,473
28	Secretary To Manager Clinical Service	Output 11	CS	Senior Officer	18,473
29	Office Assistant	Output 12	CS	Clerk	18,472
30	Executive Asst - Manager Dental	Output 14	CS	Clerk	18,472
31	Audit Examiner	Output 1	CS	Officer	18,472
32	Chnis Data Manager	Output 6	CS	Officer	18,472
33	Asst Sonographer	Output 13	CS	Clerk	15,711
34	Office Assistant	Output 13	CS	Clerk	15,711
35	Secretary	Output 12	CS	Clerk	15,710
36	Senior Salaries Clerk	CSU 3	CS	Clerk	13,139
37	Accounts Clerk Payables	Output 16	CS	Clerk	11,139
38	Accounts Clerk Stores	Output 16	CS	Clerk	11,139
39	Administration Clerk MTII	Output 16	CS	Clerk	11,139
40	Accounts Clerk	CSU 2	CS	Clerk	11,139
41	Receptionist	Output 12	CS	Clerk	11,138
42	RECEPTIONIST TYPIST(Resigned)	Output 13	CS	Clerk	11,138

43	Receptionist A5/L5	Output 15	CS	Clerk	11,138
44	Receptionist A5/L5	Output 15	CS	Clerk	11,138
45	Executive Asst - Manager Infrastructure	Output 19	CS	Clerk	11,138
46	Senior Accountant Revenue	CSU 2	CS	Clerk	11,138
47	Head Cashier	CSU 2	CS	Clerk	11,138
48	Accounts Clerk	CSU 2	CS	Clerk	11,138
49	Senior Administration Clerk	CSU 3	CS	Clerk	11,138
50	Driver	CSU 2	CS	Clerk	10,898
51	Office Assistant	Output 2	CS	Clerk	9,228
52	Assets Officer	CSU 2	CS	Clerk	7,528
53	Records Clerk MTII	Output 16	CS	Clerk	7,217
54	Assistant Librarian	Output 8	CS	Clerk	7,197
55	Driver	CSU 2	CS	Clerk	7,197
56	Cashier	CSU 2	CS	Clerk	7,197
57	Cashier	CSU 2	CS	Clerk	7,197
58	Cashier	CSU 2	CS	Clerk	7,197
59	Office Assistant	Output 11	CS	Clerk	7,196
60	Office Assistant	Output 11	CS	Clerk	7,196
61	Cashier MTII	Output 16	CS	Clerk	7,196
62	Administrative Assistant Safotu Dist Hosp	Output 16	CS	Clerk	7,196
63	Administrative Assistant Sataua Dist Hosp	Output 16	CS	Clerk	7,196
64	Driver	CSU 1	CS	Clerk	7,196
65	Office Assistant Gm	CSU 2	CS	Clerk	7,196
66	Salary Assistant	CSU 3	CS	Clerk	7,196
67	Receptionist	CSU 3	CS	Clerk	7,196
68	Records Assistant	CSU 3	CS	Clerk	7,196
69	Cashier Satupaitea Health Centre (HC)	Output 16	CS	Clerk	6,756
70	Records Assistant	CSU 1	CS	Clerk	6,148
71	Data Support Officer	Output 12	CS	Clerk	-
72	Office Assistant	Output 11	CS	Clerk	
73	Office Assistant	Output 11	CS	Clerk	
74	Principal Dental Officer Phc	Output 16	Dental	middle management/Principal Officer/Specialist	50,442
75	Supervisor Dental Therapist	Output 14	Dental	middle management/Principal Officer/Specialist	36,239
76	Dental Officer	Output 14	Dental	Senior Officer	34,504
77	Dental Officer	Output 14	Dental	Senior Officer	33,635
78	Dental Officer	Output 14	Dental	Senior Officer	33,635
79	Senior Dental Tutor	Output 14	Dental	Senior Officer	30,170
80	Dental Therapist	Output 14	Dental	Senior Officer	30,170
81	Dental Therapist	Output 14	Dental	Officer	20,692
82	Dental Technician	Output 14	Dental	Officer	18,472
83	Dental Asst PHC	Output 16	Dental	Officer	17,804
84	Senior Regulatory & Monitoring Medical	Output 5	HPES	Senior Officer	41,547
85	Surveillance / Research Officer	Output 9	HPES	Officer	24,142
86	Health Physical Activity Advocators	Output 10	HPES	Officer	24,142
87	Health Educator -Comm	Output 4	HPES	Senior Officer	21,558
88	Envh Assistant	Output 4	HPES	Clerk	8,584

89	Assistant Environmental Health Officer	Output 4	HPES	Clerk	7,197
90	Assistant Environmental Health Officer	Output 9	HPES	Clerk	7,197
91	Principal Medical Records Management Officer	Output 21	HSS	middle management/Principal Officer/Specialist	64,389
92	Maintenance Manager	Output 19	HSS	middle management/Principal Officer/Specialist	48,558
93	Kitchen Supervisor	Output 18	HSS	middle management/Principal Officer/Specialist	33,635
94	Senior Security Officer	CSU 3	HSS	Senior Officer	30,568
95	Senior Transport Officer	CSU 2	HSS	Senior Officer	30,169
96	Senior Maintenance Officer - Building	Output 19	HSS	Senior Officer	27,065
97	Storeman	Output 14	HSS	Senior Officer	21,558
98	Senior Air Condition & Refrigeration Technician	Output 16	HSS	Senior Officer	21,558
99	SENIOR RECORDS CLERK (Resigned)	Output 13	HSS	Officer	16,783
100	House Supervisor	Output 18	HSS	Officer	16,247
101	Supervisor Medical Records MTII	Output 16	HSS	Officer	15,711
102	Medical Records Clerk	Output 21	HSS	Officer	15,711
103	Health Care Waste Driver	Output 16	HSS	Officer	15,710
104	Laundry Supervisor	Output 18	HSS	Officer	15,710
105	Leading Hand Technician L1	Output 19	HSS	Officer	15,432
106	Leading Hand Technician Ac & Refrigerator L1	Output 19	HSS	Officer	15,407
107	Team Leader Transport Officer	CSU 2	HSS	Officer	15,339
108	Leading Hand Technical Plumbing L1	Output 19	HSS	Officer	15,316
109	Supervisor Allied CSSD MTII	Output 16	HSS	Officer	15,192
110	SENIOR RECORDS CLERK(Resigned)	Output 13	HSS	Clerk	13,269
111	Oxygen Assistant	Output 19	HSS	Clerk	13,023
112	Incinerator Operator	Output 16	HSS	Clerk	11,139
113	CSSD Assistant	Output 18	HSS	Clerk	11,138
114	Leading Hand Plumber	Output 19	HSS	Clerk	11,138
115	Air Con & Refrigeration Technician	Output 19	HSS	Clerk	10,510
116	Assistant Technician Carpenter	Output 19	HSS	Clerk	10,161
117	Cook Special Snack	Output 18	HSS	Clerk	9,104
118	Orderly Porter	Output 18	HSS	Clerk	8,063
119	Driver	CSU 2	HSS	Clerk	7,197
120	Security Officer	CSU 3	HSS	Clerk	7,197
121	Security	Output 12	HSS	Clerk	7,196
122	XRAY FILING CLERK (Vacant)	Output 13	HSS	Clerk	7,196
123	X-Ray Domestic Assistant (Resigned)	Output 13	HSS	Clerk	7,196
124	Domestic Assistant MTII	Output 16	HSS	Clerk	7,196
125	Driver - Safotu Dist Hosp	Output 16	HSS	Clerk	7,196
126	Ambulance Driver Sataua Dist Hosp	Output 16	HSS	Clerk	7,196
127	Domestic Assistant	Output 18	HSS	Clerk	7,196
128	Domestic Assistant	Output 18	HSS	Clerk	7,196
129	Domestic Assistant	Output 18	HSS	Clerk	7,196
130	Domestic Assistant	Output 18	HSS	Clerk	7,196
131	Laundry Assistant	Output 18	HSS	Clerk	7,196
132	Domestic Assistant	Output 18	HSS	Clerk	7,196
133	Domestic Assistant	Output 18	HSS	Clerk	7,196
134	Porter	Output 18	HSS	Clerk	7,196

135	Telephone Operator	Output 21	HSS	Clerk	7,196
136	Driver	CSU 2	HSS	Clerk	7,196
137	Driver	CSU 2	HSS	Clerk	7,196
138	Driver	CSU 2	HSS	Clerk	7,196
139	Driver - Poutasi Dist Hosp	CSU 2	HSS	Clerk	7,196
140	Security	CSU 3	HSS	Clerk	7,196
141	Security	CSU 3	HSS	Clerk	7,196
142	Security Officer	CSU 3	HSS	Clerk	7,196
143	Driver	CSU 3	HSS	Clerk	7,196
144	Domestic Assistant	Output 18	HSS	Clerk	7,000
145	Domestic Asst Satupaitea HC	Output 16	HSS	Clerk	6,756
146	Security Asst Satupaitea HC	Output 16	HSS	Clerk	6,756
147	Security Asst Satupaitea HC	Output 16	HSS	Clerk	6,756
148	Health Care Waste Operator	Output 16	HSS	Clerk	-
149	Health & Safety Officer	Output 19	HSS	Clerk	-
150	Cleaner	Output 12	HSS	Clerk	-
151	Assistant Storeman	Output 15	HSS	Clerk	-
152	Ward Asst	Output 11	HSS	Clerk	
153	Ward Asst	Output 11	HSS	Clerk	
154	Medical Records Assistant	Output 11	HSS	Clerk	
155	Domestic Assistant	Output 11	HSS	Clerk	
156	Domestic Assistant	Output 11	HSS	Clerk	
157	Porter	Output 11	HSS	Clerk	
158	Kitchen	Output 11	HSS	Clerk	
159	Porter	Output 11	HSS	Clerk	
160	Porter	Output 11	HSS	Clerk	
161	Domestic Assistant	Output 11	HSS	Clerk	
162	Kitchen	Output 11	HSS	Clerk	
163	Domestic Assistant	Output 11	HSS	Clerk	
164	Porter	Output 11	HSS	Clerk	
165	Kitchen	Output 11	HSS	Clerk	
166	Kitchen Hand	Output 11	HSS	Clerk	
167	Orderly Porter	Output 11	HSS	Clerk	
168	CSSD Assistant	Output 11	HSS	Clerk	
169	Porter	Output 11	HSS	Clerk	
170	Kitchen	Output 11	HSS	Clerk	
171	Domestic Assistant	Output 11	HSS	Clerk	
172	Driver	Output 16	HSS	Clerk	
173	Telephone Operator	Output 16	HSS	Clerk	
174	Principal Officer - Quality	Output 12	Laboratory	middle management/Principal Officer/Specialist	59,433
175	Principal Blood Transfusion	Output 12	Laboratory	middle management/Principal Officer/Specialist	53,721
176	Principal Medical Laboratory Scientist	Output 16	Laboratory	middle management/Principal Officer/Specialist	53,721
177	Principal Officer - Bio-Chemistry	Output 12	Laboratory	middle management/Principal Officer/Specialist	53,406
178	Part Time Lab Tech	Output 12	Laboratory	Senior Officer	48,558
179	Principal Public Health Laboratory Technician	Output 9	Laboratory	Senior Officer	48,558
180	Charge Med Lab Scientist-Biochem	Output 12	Laboratory	Senior Officer	40,434

181	Senior Med Lab Technician-General	Output 12	Laboratory	Senior Officer	37,106
182	Medical Laboratory Scientist	Output 12	Laboratory	Senior Officer	37,106
183	Senior Med Lab Technician-General	Output 12	Laboratory	Senior Officer	35,371
184	Mortician	Output 12	Laboratory	Senior Officer	34,504
185	Senior Medical Lab Technician Histology	Output 12	Laboratory	Senior Officer	33,635
186	Medical Laboratory Technician	Output 12	Laboratory	Senior Officer	31,034
187	Senior Med Lab Technician-Haem	Output 12	Laboratory	Senior Officer	30,229
188	Medical Laboratory Technician	Output 12	Laboratory	Officer	24,142
189	Secretary/Executive Assistant	Output 16	Laboratory	Officer	18,154
190	Medical Lab Trainee	Output 12	Laboratory	Clerk	13,269
191	Laboratory Asst MTII	Output 16	Laboratory	Clerk	12,622
192	Medical Lab Trainee	Output 12	Laboratory	Clerk	11,139
193	Assistant Mortician	Output 16	Laboratory	Clerk	7,320
194	Consultant MTII Savaii	Output 16	Medical Doctor/Physician	HoD/Consultant Specialist	118,034
195	Consultant Specialist Public Health Physician Cdc	Output 9	Medical Doctor/Physician	HoD/Consultant Specialist	86,990
196	Manager Clinical Health Services	Output 11	Medical Doctor/Physician	HoD/Consultant Specialist	86,990
197	Consultant Specialist - Goped	Output 11	Medical Doctor/Physician	HoD/Consultant Specialist	86,990
198	Consultant Specialist - Obs & Gynae	Output 11	Medical Doctor/Physician	HoD/Consultant Specialist	86,990
199	Consultant Specialist Paediatrics	Output 11	Medical Doctor/Physician	HoD/Consultant Specialist	86,990
200	Consultant Specialist-Medical	Output 11	Medical Doctor/Physician	HoD/Consultant Specialist	86,990
201	Consultant Specialist - Eye Care	Output 11	Medical Doctor/Physician	HoD/Consultant Specialist	86,990
202	Head Of Goped	Output 11	Medical Doctor/Physician	HoD/Consultant Specialist	86,990
203	Consultant Specialist	Output 12	Medical Doctor/Physician	HoD/Consultant Specialist	86,990
204	Consultant Specialist(Pathology)	Output 12	Medical Doctor/Physician	HoD/Consultant Specialist	86,990
205	Manager - Primary Health Care	Output 20	Medical Doctor/Physician	Management	86,990
206	Senior Registrar Iii	Output 11	Medical Doctor/Physician	Senior Medical Officer	82,511
207	Principal Officer	Output 14	Medical Doctor/Physician	Dentist	74,644
208	Consultant Specialist - Dental	Output 14	Medical Doctor/Physician	Dentist	69,278
209	Chinese Doctor	Output 11	Medical Doctor/Physician	HoD/Consultant Specialist	62,576
210	Principal Medical Officer	Output 9	Medical Doctor/Physician	HoD/Consultant Specialist	62,515
211	Medical Officer	Output 11	Medical Doctor/Physician	Medical Officer	62,514
212	Senior Medical Officer	Output 9	Medical Doctor/Physician	Senior Medical Officer	53,721
213	Principal Dental Officer Quality Assurance	Output 14	Medical Doctor/Physician	Dentist	48,558
214	Principal Dental Officer	Output 14	Medical Doctor/Physician	Dentist	48,558
215	Registrar I	Output 11	Medical Doctor/Physician	Registrar	48,558
216	Senior Registrar Ii	Output 11	Medical Doctor/Physician	Senior Medical Officer	48,558
217	Senior Registrar I	Output 11	Medical Doctor/Physician	Senior Registrar	45,608
218	Registrar	Output 11	Medical Doctor/Physician	Registrar	42,656
219	Registrar Ii	Output 16	Medical Doctor/Physician	Registrar	41,548
220	Registrar	Output 11	Medical Doctor/Physician	Registrar	40,435
221	Senior Registrar - PHC	Output 16	Medical Doctor/Physician	Senior Registrar	40,434
222	Registrar I	Output 16	Medical Doctor/Physician	Dentist	37,106
223	House Surgeon - Returning Grads 2017/2018	Output 11	Medical Doctor/Physician	HS	37,106
224	House Surgeon I - Returning Grads 2017-2018	Output 11	Medical Doctor/Physician	HS	37,106
225	Registrar	Output 11	Medical Doctor/Physician	Registrar	36,239
226	Registrar I	Output 11	Medical Doctor/Physician	Registrar	36,238

227	Consultant - Radiologist	Output 13	Medical Doctor/Physician	HoD/Consultant Specialist	-
228	House Surgeon - Returning Grads 2017/2018	Output 11	Medical Doctor/Physician	HS	-
229	Senior Ct Scan Officer	Output 13	MIR	Senior Officer	33,635
230	Mammographer	Output 13	MIR	Officer	24,142
231	Asst Mobile Radiographer 02(Resigned)	Output 13	MIR	Clerk	15,711
232	Speech Pathologist Assistant	Output 17	MIR	Clerk	-
233	X-Ray Assistant	Output 13	MIR	Clerk	-
234	Speech Pathologist - Principal Officer	Output 17	MIR	middle management/Principal Officer/Specialist	-
235	Speech Pathologist	Output 17	MIR	middle management/Principal Officer/Specialist	-
236	Manager - Nursing	Output 17	Nursing	Management	86,990
237	Nurse Consultant Specialist - Workforce Development/Credentials	Output 17	Nursing	middle management/Principal Officer/Specialist	69,225
238	Nurse Consultant Specialist - Research & Innovation	Output 17	Nursing	middle management/Principal Officer/Specialist	69,225
239	Senior Nurse Specialist - ICU	Output 11	Nursing	middle management/Principal Officer/Specialist	52,350
240	Nurse Manager - Eye	Output 11	Nursing	middle management/Principal Officer/Specialist	49,857
241	Nurse Manager Safotu Dh	Output 16	Nursing	middle management/Principal Officer/Specialist	48,583
242	Senior Nurse Specialist-Epi	Output 16	Nursing	middle management/Principal Officer/Specialist	48,405
243	Registered Nurse - Midwifery	Output 20	Nursing	RN	39,180
244	Registered Nurse - Midwifery	Output 11	Nursing	RN	37,229
245	Registered Nurse - Philippines	Output 11	Nursing	RN	36,508
246	Registered Nurse - Philippines	Output 11	Nursing	RN	36,508
247	Registered Nurse - Midwifery	Output 11	Nursing	RN	36,508
248	Registered Nurse - Philippines	Output 11	Nursing	RN	29,070
249	Auxiliary Health Nursing Asst	Output 20	Nursing	AUX	9,104
250	Auxiliary Health Nursing Asst	Output 20	Nursing	AUX	9,104
251	Auxiliary Health Nursing Asst	Output 20	Nursing	AUX	9,104
252	Auxiliary Health Nursing Asst	Output 20	Nursing	AUX	7,197
253	Auxiliary Health Nursing Asst	Output 20	Nursing	AUX	7,197
254	Auxiliary Health Nursing Asst	Output 20	Nursing	AUX	7,197
255	Auxiliary Health Nursing Asst	Output 11	Nursing	AUX	7,196
256	Auxiliary Health Nursing Asst	Output 11	Nursing	AUX	7,196
257	Auxiliary Health Nursing Asst	Output 11	Nursing	AUX	7,196
258	Auxiliary Health Nursing Asst	Output 11	Nursing	AUX	7,196
259	Auxiliary Health Nursing Asst	Output 17	Nursing	AUX	7,196
260	Auxiliary Health Nursing Asst	Output 17	Nursing	AUX	7,196
261	Auxiliary Health Nursing Asst	Output 17	Nursing	AUX	7,196
262	Auxiliary Health Nursing Asst	Output 17	Nursing	AUX	7,196
263	Auxiliary Health Nursing Asst	Output 17	Nursing	AUX	7,196
264	Auxiliary Health Nursing Asst	Output 17	Nursing	AUX	7,196
265	Auxiliary Health Nursing Asst	Output 17	Nursing	AUX	7,196
266	Auxiliary Health Nursing Asst	Output 17	Nursing	AUX	7,196
267	Auxiliary Health Assistant/Domestic	Output 18	Nursing	AUX	7,196
268	Auxiliary Health Assistant/Domestic	Output 18	Nursing	AUX	7,196
269	Principal Mobility Device	Output 18	OAHS	middle management/Principal Officer/Specialist	48,558
270	Principal Social Worker	Output 18	OAHS	middle management/Principal Officer/Specialist	48,558
271	Snr Biomedical Tech	Output 18	OAHS	Senior Officer	40,853
272	Senior Biomed Off	Output 18	OAHS	Senior Officer	37,106

273	Senior Maintenance Officer - Engineering	Output 19	OAHS	Senior Officer	33,234
274	Senior Biomedical Engineering Officer	Output 18	OAHS	Senior Officer	31,582
275	Senior Prosthetic & Orthotic Officer	Output 18	OAHS	Senior Officer	31,582
276	Prosthetist	Output 18	OAHS	Officer	25,605
277	Social Worker	Output 18	OAHS	Officer	25,413
278	Occupational Therapist	Output 18	OAHS	Officer	22,668
279	Orthotic Splint Worker	Output 18	OAHS	Officer	19,708
280	Prosthetics Technician	Output 18	OAHS	Officer	15,711
281	Domestic Assistant	Output 18	OAHS	Clerk	9,104
282	Physio Therapy Clerk	Output 18	OAHS	Clerk	7,196
283	Dietary Clerk	Output 18	OAHS	Clerk	7,196
284	Biomedical Clerk	Output 18	OAHS	Clerk	-
285	Orthotist	Output 18	OAHS	Officer	-
286	Social Worker	Output 18	OAHS	Officer	-
287	Social Worker	Output 18	OAHS	Officer	-
288	Snr Physiotherapist TTM	Output 18	OAHS	Senior Officer	-
289	Physiotherapist TTM	Output 18	OAHS	Senior Officer	-
290	Senior Social Worker	Output 18	OAHS	Senior Officer	-
291	Senior Social Worker	Output 18	OAHS	Senior Officer	-
292	Principal Pharmacist Savaii	Output 16	Pharmaceutical Services	middle management/Principal Officer/Specialist	50,442
293	Principal Central Warehousing & Stores	Output 15	Pharmaceutical Services	middle management/Principal Officer/Specialist	48,558
294	Senior Pharmacy Officer A14/L14	Output 15	Pharmaceutical Services	Senior Officer	37,106
295	Senior Pharmacist Inpatient	Output 15	Pharmaceutical Services	Senior Officer	36,239
296	Part Time - Pharmacy Technician	Output 15	Pharmaceutical Services	Senior Officer	35,444
297	Senior Pharmacist A15/L15	Output 15	Pharmaceutical Services	Senior Officer	35,370
298	Senior Physiotherapist TTM	Output 18	Pharmaceutical Services	Senior Officer	33,635
299	Senior Pharmacist	Output 15	Pharmaceutical Services	Senior Officer	24,143
300	Pharmacist - Intern A12/L12	Output 15	Pharmaceutical Services	Senior Officer	24,143
301	Senior Pharmacy Technician A10/L10	Output 15	Pharmaceutical Services	Senior Officer	24,142
302	Trainee Pharmacy Technician A5/L5	Output 15	Pharmaceutical Services	Officer	13,269
303	Pharmacy Technician A6/L6	Output 15	Pharmaceutical Services	Officer	13,269
304	Trainee Pharmacy Technician A5/L5	Output 15	Pharmaceutical Services	Officer	11,138
305	Pharmacy Trainee	Output 15	Pharmaceutical Services	Clerk	9,228
306	Pharmacy Technician Trainee 1 - A3/L3	Output 15	Pharmaceutical Services	Clerk	9,228
307	Pharmacy Technician Trainee A3/L3	Output 15	Pharmaceutical Services	Clerk	7,196