USAID FROM THE AMERICAN PEOPLE | HRH2030 HUMAN RESOURCES FOR HEALTH IN 2030 | TAIWAN ICDF International Cooperation and Development Fund

Timor Leste. Lamalai.

Health Workforce Management and Data Systems: A Focus on Pacific Island Countries and Health Systems Resilience

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Session 1
July 13, 2021

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HRH2030 HUMAN RESOURCES FOR HEALTH IN 2030

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SESSION 1: Identifying Data and Evidence Needs to Address HRH Priorities in Pacific Island Countries

Tanjung Priok Health Center, Indonesia. Credit: Andi Gultom

USAID's HRH2030 Program

The USAID-funded Human Resources for Health in 2030 Program (HRH2030) strives to build the accessible, available, acceptable, and high-quality health workforce needed to improve health outcomes and advance universal health coverage.

https://hrh2030program.org/

Strategic, timely health workforce management decisions require complete, high-quality, accurate information for an effective pandemic response and sustaining delivery of essential health services.

HRH2030 Health Worker Life Cycle Approach

Building the future health workforce

High school graduate / youth

Medical, nursing, health professions student

Health professional graduate

Employed health professional

Employee retained in the health care sector

HEALTH FOR ALL

Available, accessible, acceptable, high-quality health workforce needed to improve health outcomes

Health workforce planning, support, monitoring, & policymaking

Optimizing the existing health workforce

EDUCATION SECTOR

HEALTH LABOR MARKET

SOURCE: HRH2030, 2018. Adapted from Sousa et al. 2013.

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PEPFAR U.S. President's Emergency Plan for AIDS Relief

What are we going to learn today?

AGENDA

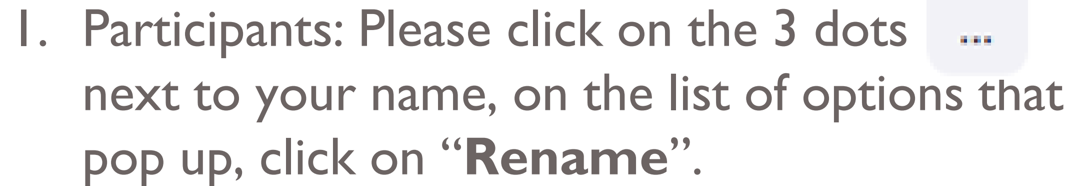
- *Opening Remarks*
- *Taiwan's Health Workforce*
- *Group photo*
- *Overview of HRH data in selected PICs*
- *Using data to take action*
- *Breakout group discussion*

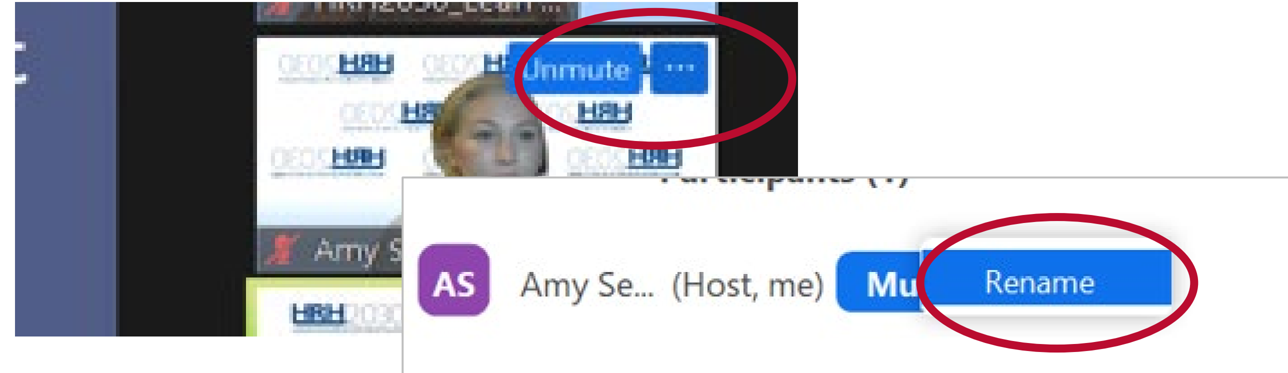
Session 1 Objectives:

- To improve understanding of the importance of and how to use data and evidence to make decisions on HRH priorities.
- To improve knowledge of NHWA and HRIS can be used improve the availability and use of quality data.
- To be able to identify HRH priorities and data challenges in responding to these priorities.

Zoom Renaming Instructions

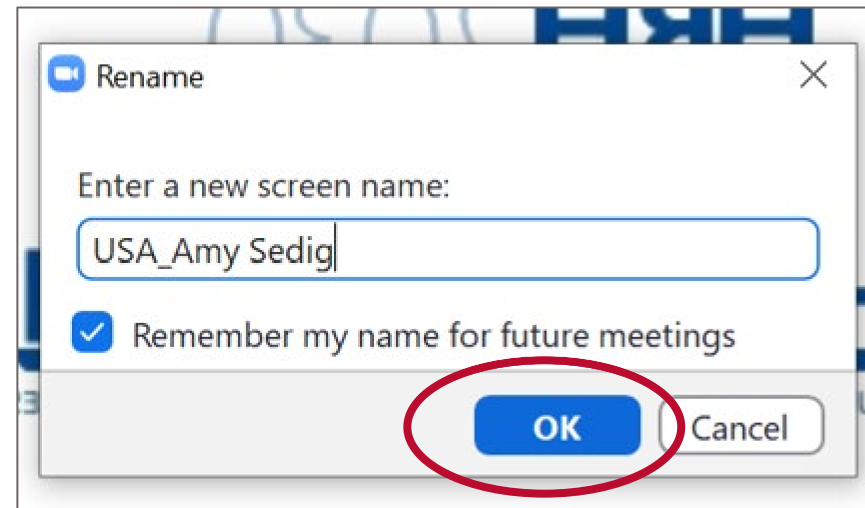
1. Participants: Please click on the 3 dots ... next to your name, on the list of options that pop up, click on "**Rename**".





2. Update to this naming convention:
   Country_Name
   for example, **USA_Amy Sedig**

3. Click "**OK**"



This will help us place you in the appropriate breakout group discussion!

ASK QUESTIONS and CONTRIBUTE to discussions by "raising your hand" in Zoom or typing in the chat – we look forward to your questions and contributions!

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Opening Remarks

Dr. Pai-Po Lee
Deputy Secretary General
TaiwanICDF

Opening Remarks

Ms. Marisol Perez
USAID/Philippines Acting Deputy Mission Director for the Pacific Islands and Mongolia

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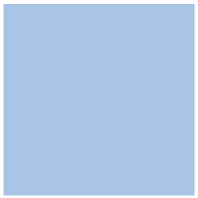
Assessing the demands and supplies of Taiwan's health workforce

Dr. Hung-Yi Chiou, Distinguished Investigator and Director, Institute of Population Health Sciences, National Health Research Institutes, R.O.C. (Taiwan)

PLEASE TURN ON YOUR CAMERA – GROUP PHOTO!



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Reviewing and analyzing available HRH data and issues in selected PICs

Rachel Deussom, HRH2030 Technical Director

Amy Sedig, HRH2030 Senior Manager

Supervision team in complete PPE to one of their supervision visits in a private facility in Leyte Province, the Philippines, December 2020.

METHODS: Secondary Data Review & Key Informant Interviews

Documents & journals

- National Health Workforce Accounts (NHWA) – data portal
- WHO Human Resources for Health Profiles
- National Health Workforce Plans (1998-2020), WHO/WPRO
- BMC HRH Journal
- HRH Global Resource Center
- Additional documents recommended by key informants

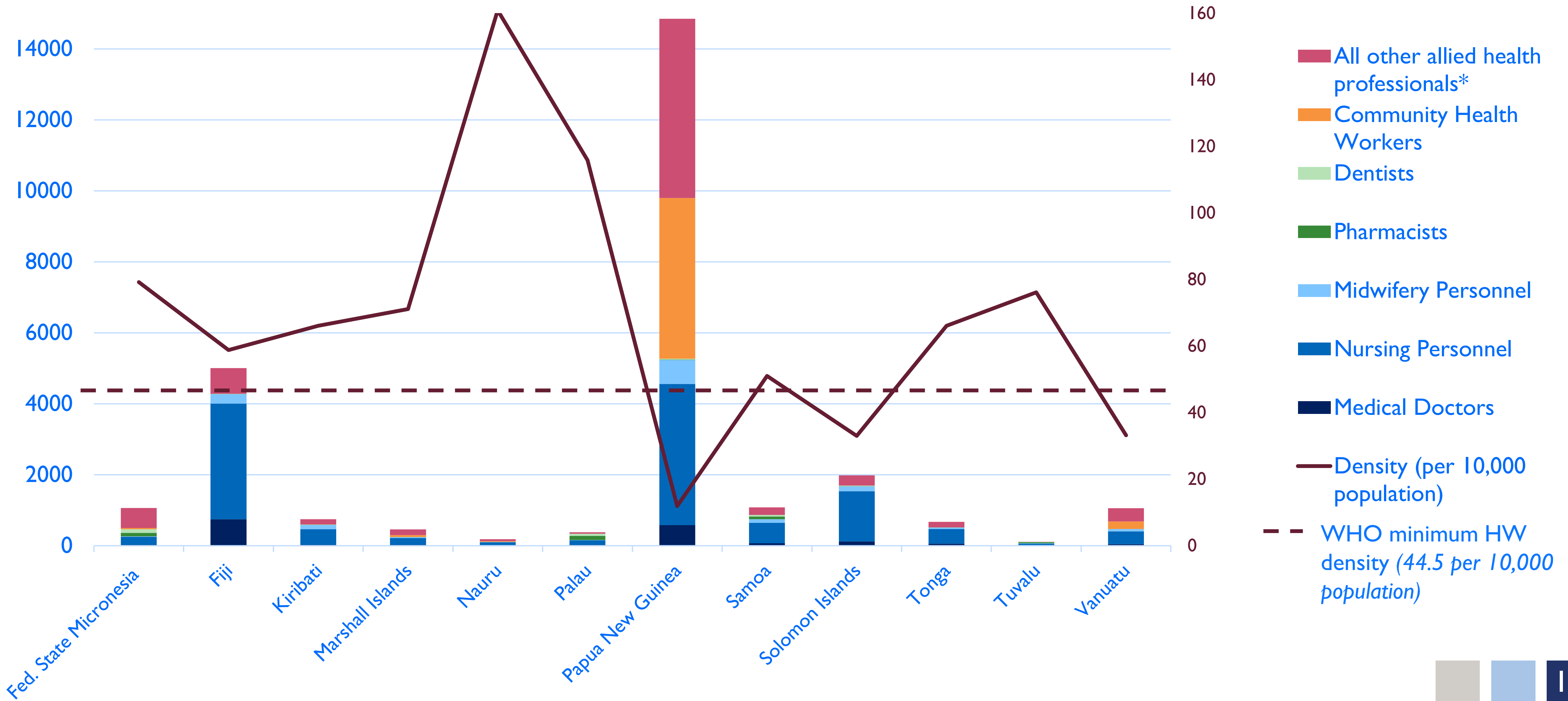
Key informants

- The Pacific Community (SPC) – stakeholders overseeing HSS, clinical services, M&E and planning
- UNICEF – Child Health
- USAID – Asia Bureau, Philippines
- World Health Organization/WPRO

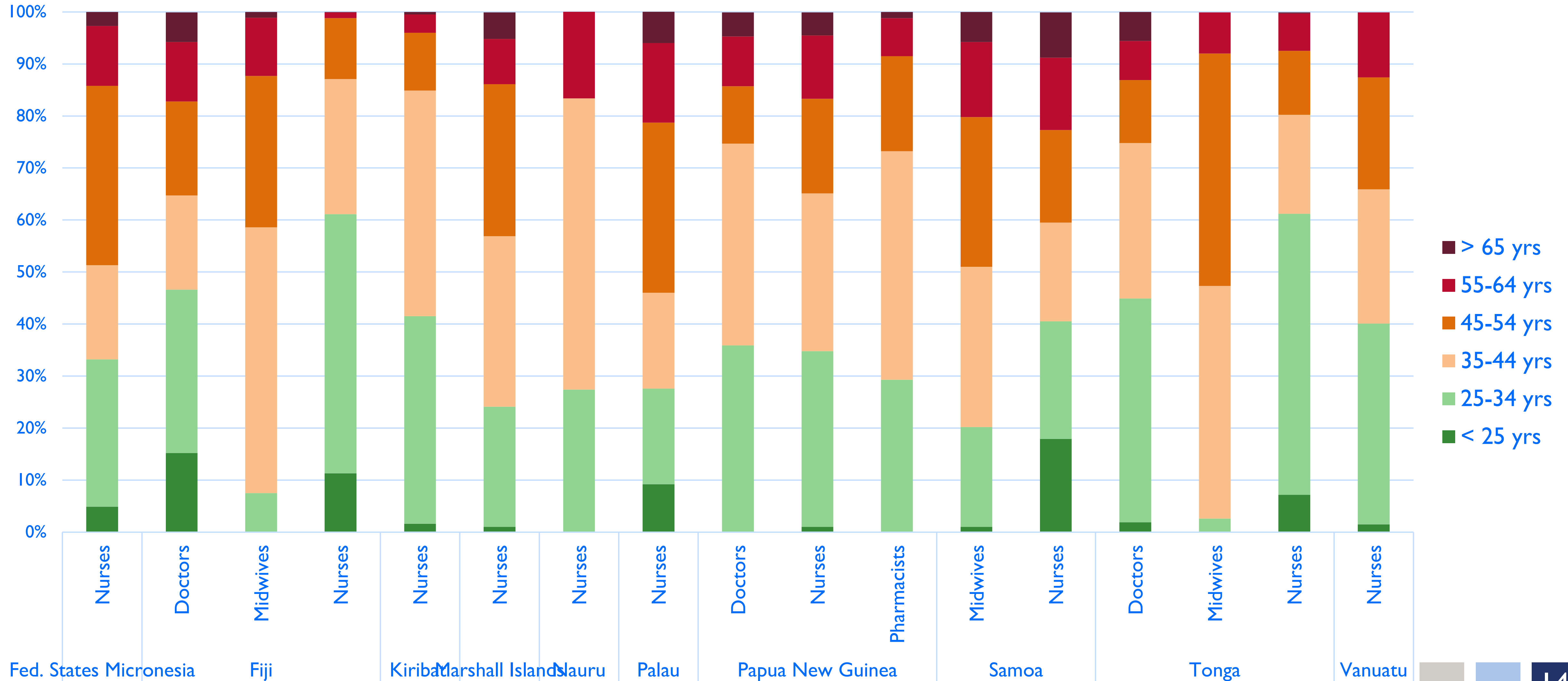
Selected PICs

- Federated States of Micronesia
- Fiji
- Kiribati
- Nauru
- Palau
- Papua New Guinea
- Republic of Marshall Islands
- Samoa
- Solomon Islands
- Tonga
- Tuvalu
- Vanuatu

Health Workers in selected PICs – Number, type and density



Health Workers in selected PICs - Age and type



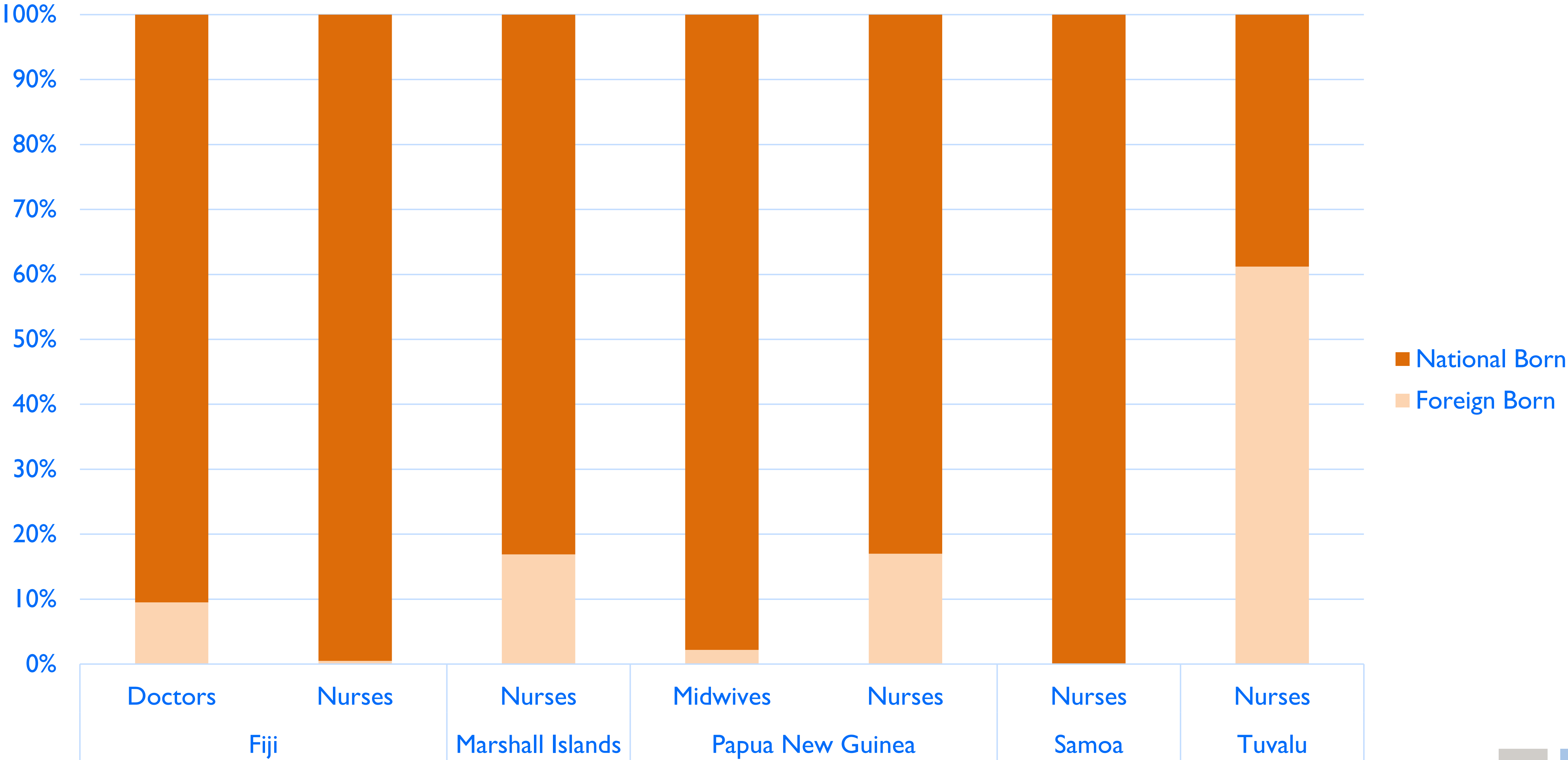
Health Workers in selected PICs - Sex and type

100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%

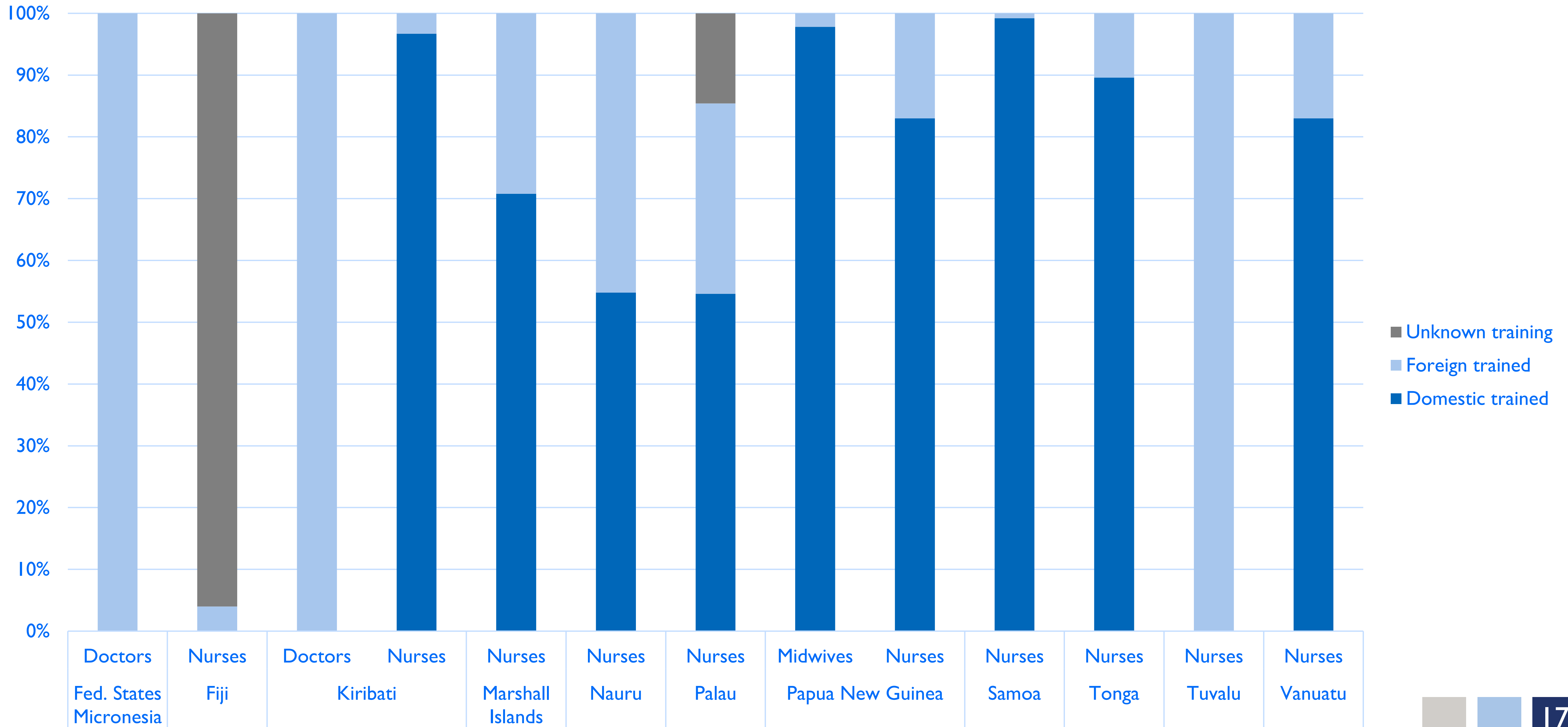
Male
Female

Country	Type
Fed. States Micronesia	Nurses
Fiji	Doctors
	Nurses
Kiribati	Nurses
Marshall Islands	Nurses
Nauru	Nurses
Palau	Nurses
Papua New Guinea	Doctors
	Midwives
	Nurses
	Pharmacists
Samoa	Doctors
	Nurses
Solomon Islands	Nurses
Tonga	Nurses
Tuvalu	Nurses
Vanuatu	Nurses

Health Workers in selected PICs - Place of birth and type



Health Workers in selected PICs - Place of training and type



Key HRH issues & themes in selected PICs

Building the Health Workforce

- Workforce shortages (relative to WHO density threshold)
- Only 2 of the twelve PICs reviewed have medical schools
- Limited resources to ensure quality of health worker skills / preparedness
- External migration → loss on investment
- Dependency on foreign workforce
- Aging workforce / attrition; compulsory retirement limits/HR policies

What HRH issues have you observed? Please share them in the chat!

Key HRH issues & themes in selected PICs

Managing the Health Workforce

- Limited capacity in management positions due to decentralization and lack of training
- Untapped potential of supportive supervision systems at the provincial and district levels to improve quality and workforce performance
- Incentives for motivation and retention rely heavily on working conditions, community engagement, professional development opportunities & career paths
- Limited HRH data availability in certain countries; NHWA reporting challenges

What HRH issues have you observed? Please share them in the chat!

Key HRH issues & themes in selected PICs

Optimizing the Health Workforce

- Opportunities to build capacity to fully implement task shifting to provide primary health care for more communities
- Limited facility-level capacity for HRH management
- Need to balance capacity development for workers at remote health facilities without reducing patient service hours (i.e., service availability)
- Opportunities for irtual learning to provide trainings, webinars, and provider consultations in the COVID-19 landscape; connectivity
- Certain PICs have applied lessons from past outbreaks to their COVID-19 response

What HRH issues have you observed? Please share them in the chat!

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Key HRH takeaways in selected Pacific Island Countries

Fiji

Build:

- **Specialized training programs:** Fiji loss of graduates to overseas **migration** due to lack of specialist training programs and low expectations for future career pathways. Development of local and regional post graduate training programs reduced attrition to one-third. Compared to 29.2% attrition of national graduates, there was attrition of only 8.5% of regional graduates. (Oman et al. 2012; Oman et al. 2009)

Manage:

- **Leadership and management capacity**: The Ministry of Health has undergone periods of **decentralization** and recentralization in the past three decades which has significantly altered management flexibility in the divisions. The sub-divisional medical officers (SDMOs) responsible for the day to management sub-division nursing stations and hospitals are not well equipped with management training. Investing in management training will improve supervision of health workers and service delivery and management of systems (supply of essential medicines). (Asante et al., 2011)
- **Unequal distribution:** There are few qualified midwives and skilled birth attendants in rural areas due to the lack of graduated midwives and the movement of midwives from the public to the private sector (as a result of **low remuneration**). (Dawson et al., 2011)
- **Community participation:** The community has played an important role in successful integrated management of childhood illness implementation. Increased community education and engagement of local leaders is needed to undertake preventative measures, such as early referral, improved sanitation and non-communicable disease risk factor control. (Dawson et al., 2011)

Optimize:

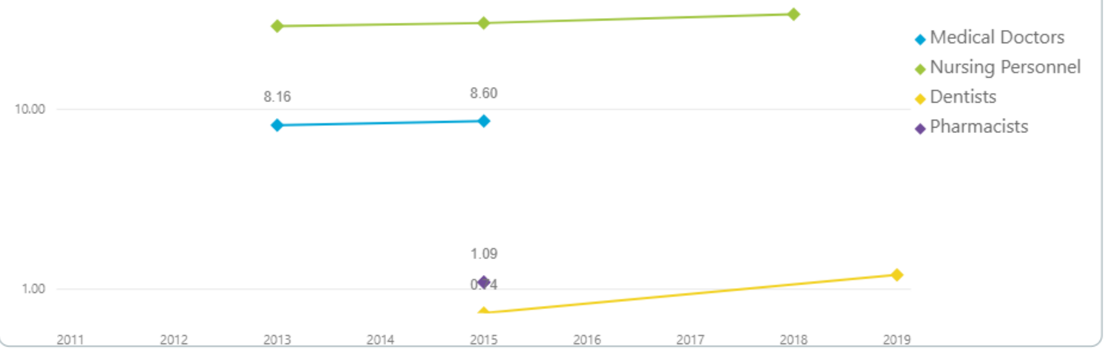
- **Quality Improvement:** Introducing **standardized processes of care** has proven to improve the capacity of health workers to identify and correct factors underlying preventable deaths. (Raman et al., 2015)

Fiji

Country: **Fiji**
Population (UNSD): **889,955 (2019)**
GNI per capita (PPP Intl $): **7,610 (2013)**
Life expectancy at birth: **69.9 (2016)**
Total expenditure on health per capita (Intl $): **364 (2014)**
Source: **https://www.who.int/countries**

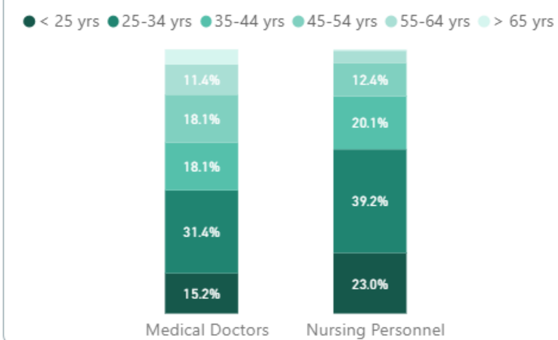
STOCK BY OCCUPATION, LATEST AVAILABLE YEAR

Occupation	Number	Density (per 10,000 pop)
Medical Doctors	747	8.60
Nursing Personnel	2,982	33.75
Dentists	107	1.20
Pharmacists	95	1.09
Total	**3,931**	**44.17**



Select Region & Country
Selected:: Fiji

- Turkmenistan
- Ukraine
- United Kingdom
- Uzbekistan
- SEAR
- WPR
- Australia
- Brunei Darussalam
- Cambodia
- China
- Cook Islands
- Fiji
- Japan
- Kiribati
- Lao People's Democratic Republic
- Malaysia
- Marshall Islands

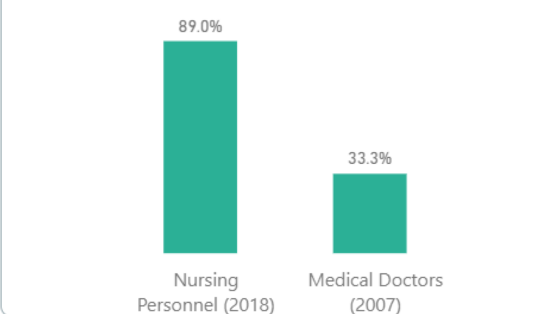


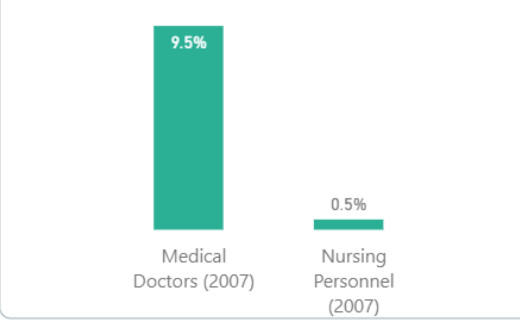
FACILITY OWNERSHIP DISTRIBUTION FOR MEDICAL DOCTORS, LATEST AVAILABLE YEAR

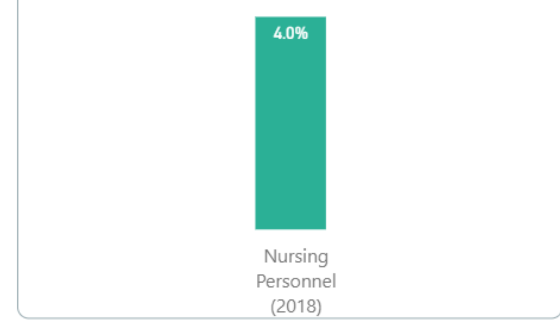
NO DATA AVAILABLE

FACILITY OWNERSHIP DISTRIBUTION FOR NURSING PERSONNEL, LATEST AVAILABLE YEAR

NO DATA AVAILABLE







Source: NHWA, 2020. For additional HRH data, please refer to this NHWA custom query, created April 7, 2021.

Nauru

Build:

- **Shortage:** Unreliability of **remuneration** leads health workers to seek employment and higher salaries in other countries.
- **Dependency on foreign workforce:** The size of the population and lack of educational programs creates a reliance on foreign workers and local workforce trained abroad (primarily Cuba, New Zealand, and larger PICs). (Henderson et al., 2008). This presents Nauru the opportunity to increase its health workforce numbers at relatively low cost and extend delivery of health services to remote areas. (Asante et al., 2012)

Manage:

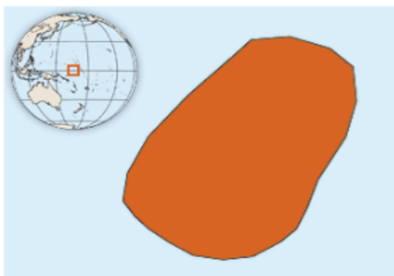
- **Distribution of health workforce (to remote underserved areas):** Growth in rural medical workforce supply was achieved through **multi-level approaches** including selecting more medical students with a rural background, combining this with rural-focused or -located education and return-of-service scholarships, workplace and rural living support and ensuring an appropriately financed rural health system. (Putri et al., 2020)
- **Retention (in remote areas):** The three most important personal and professional support strategies to attract and retain health workers in remote were reported as: working environment, living conditions and career development opportunities. (Putri et al., 2020)

Optimize:

- **Task shifting:** Most health care facilities discussed having nurses task shift to cover HRH gap issues. However, not all are fully trained for the role they fill and there is additional need for building capacity. (Key informant interview)

Nauru

Country: **Nauru**
Population (UNSD): **10,764 (2019)**
GNI per capita (PPP Intl $): **()**
Life expectancy at birth: **()**
Total expenditure on health per capita (Intl $): **512 (2014)**
Source: **https://www.who.int/countries**



Select Region & Country

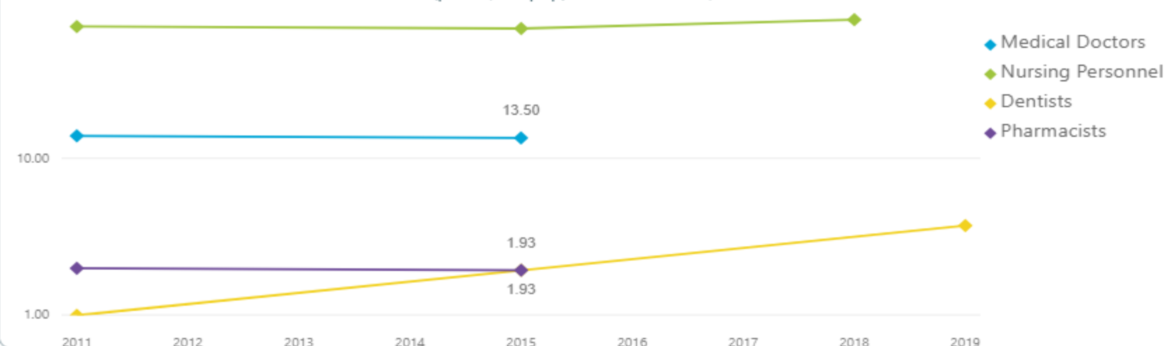
Selected:: Nauru

- Marshall Islands
- Micronesia (Federated States of)
- Mongolia
- Nauru
- New Zealand
- Niue
- Palau
- Papua New Guinea
- Philippines
- Republic of Korea
- Samoa
- Singapore
- Solomon Islands
- Tonga
- Tuvalu
- Vanuatu
- Viet Nam

STOCK BY OCCUPATION, LATEST AVAILABLE YEAR

Occupation	Number	Density (per 10,000 pop)
Medical Doctors	14	13.50
Nursing Personnel	82	76.79
Midwifery Personnel	5	5.06
Dentists	4	3.72
Pharmacists	2	1.93
Total	**107**	**99.41**

DENSITY (per 10,000 pop) BY OCCUPATION, LAST 10 YEARS



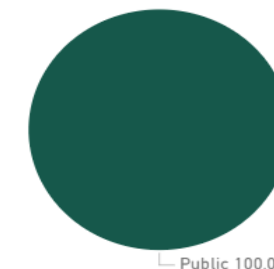
AGE DISTRIBUTION BY OCCUPATION, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

FACILITY OWNERSHIP DISTRIBUTION FOR MEDICAL DOCTORS, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

FACILITY OWNERSHIP DISTRIBUTION FOR NURSING PERSONNEL, LATEST AVAILABLE YEAR



% OF FEMALE BY OCCUPATION, LATEST AVAILABLE YEAR

% OF FOREIGN BORN BY OCCUPATION, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

% OF FOREIGN TRAINED BY OCCUPATION, LATEST AVAILABLE YEAR

Source: NHWA, 2020. For additional HRH data, please refer to this NHWA custom query, created April 7, 2021.

Palau

Build:

- **Health workforce shortage**: Palau faces a health worker shortage due to the aging workforce population: 1/5 of Ministry of Health national staff are past average retirement age with a small proportion under age 30. This composition suggests that greater attention needs to be given to recruitment of younger entrants to the health workforce. (WHO,1998)

Manage:

- **Retention**: The government retirement policy "25-year rule" shortens the working of health professional, particularly specialists with valued training and experience and removes them from providing skilled services to the population. (WHO, 1998)
- **Quality assurance**: Minimal formal training is required for cadres apart from medical officers and nurses. There is a heavy reliance on on-the job in-service training and no system in place to provide quality assurance of training criteria. (WHO, 1998)
- **Supportive supervision**: Health assistants are employed in Palau to provide health care to residents in isolated outer islands. Experience has proven that provision of regular supportive supervision improves health worker performance (maintaining efficiency and effectiveness of care) and retention (preventing high-rates of turnover). (WHO, 1998)

Optimize:

- **Workforce planning and management**: As personnel costs are the largest item of government health care expenditures, the Ministry of Health should fill the position of Health Planner to ensure health personnel implications and activities are assessed and adjustments to staffing and training commitments are made within the framework of a regularly reviewed national health workforce plan. (WHO, 1998)

Palau

Country: **Palau**
Population (UNSD): **18,001 (2019)**
GNI per capita (PPP Intl $): **14,540 (2013)**
Life expectancy at birth: **()**
Total expenditure on health per capita (Intl $): **1,429 (2014)**
Source: **https://www.who.int/countries**

Select Region & Country

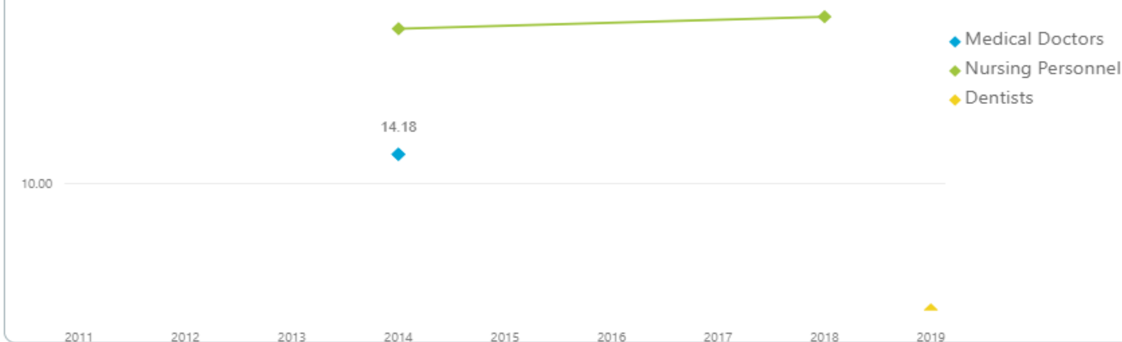
Selected:: Palau

- Fiji
- Japan
- Kiribati
- Lao People's Democratic Republic
- Malaysia
- Marshall Islands
- Micronesia (Federated States of)
- Mongolia
- Nauru
- New Zealand
- Niue
- Palau (selected)
- Papua New Guinea
- Philippines
- Republic of Korea
- Samoa
- Singapore

STOCK BY OCCUPATION, LATEST AVAILABLE YEAR

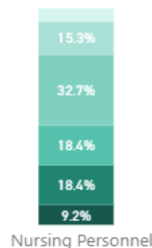
Occupation	Number	Density (per 10,000 pop)
Medical Doctors	25	14.18
Nursing Personnel	130	72.58
Midwifery Personnel	4	2.23
Dentists	4	2.22
Pharmacists	2	1.11
Total	**165**	**91.66**

DENSITY (per 10,000 pop) BY OCCUPATION, LAST 10 YEARS



AGE DISTRIBUTION BY OCCUPATION, LATEST AVAILABLE YEAR

< 25 yrs · 25-34 yrs · 35-44 yrs · 45-54 yrs · 55-64 yrs · > 65 yrs



Nursing Personnel

FACILITY OWNERSHIP DISTRIBUTION FOR MEDICAL DOCTORS, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

FACILITY OWNERSHIP DISTRIBUTION FOR NURSING PERSONNEL, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

% OF FEMALE BY OCCUPATION, LATEST AVAILABLE YEAR

Nursing Personnel (2018)

% OF FOREIGN BORN BY OCCUPATION, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

% OF FOREIGN TRAINED BY OCCUPATION, LATEST AVAILABLE YEAR

Nursing Personnel (2018)

Source: NHWA, 2020. For additional HRH data, please refer to this [NHWA custom query, created April 7, 2021](#).

Papua New Guinea

Build:

- **Invest in community providers:** PNG has a deeply embedded cadre of community level health workers that are creative and dynamic agents working alongside patients, community members, managers and policy-makers to negotiate the diverse social and political interests and changing power relations that underpin health system complexities. (George et al., 2018)

Manage:

- **Leadership and management capacity**: **Decentralization** of the health system has created disconnect and weak administration and management structures. District level health mangers and health extension officers have deficient managerial skills. To strengthen management and leadership capacity, PNG must not only focus on building the competence of individual managers but adopt a holistic approach that pays equal attention to systemic and structural issues affecting management performance. (Asante et al., 2011)
- **Motivation:** Studies show that strong links to community responsibility outweigh organizational ties. Social–cultural and individual factors influencing health worker motivation include community expectation and concern, sense of accomplishment, gender roles and family related issues and religious conviction. (Tynan et al., 2013)
- **Performance**: Work climate had a positive effect on organizational citizenship behavior and a negative effect on counterproductive work behavior. Human resource policies that improve work culture in rural health settings may improve the motivation and performance of HWs in rural settings. Strengthening **community participation** with health facilities and promotion of health literature may lead to enhanced performance of rural health workers in low resources settings. (Jayasuriya et al., 2014) (Husna et al., 2012)

Optimize:

- Unavailability of reliable and comprehensive HRH data is a significant problem. Good planning and management of the health workforce require accurate data, the development of a well-organized human resources information system is critical. (WHO, 2020)
- **Resiliency and emergency preparedness:** PNG can apply lessons learned from management of past cholera outbreaks to prepare for future emergencies and COVID-19 response. Task forces were useful to establish a clear system of leadership and accountability. Coordination of existing networks and methods for empowering local leaders and villagers was used to modify behaviors of the population. It is essential to integrate human resource planning with health emergency planning. Cholera outbreak preparedness and response was strongest when human resource and health systems functioned well before the outbreak. (Rosewell et al., 2013)

Papua New Guinea

Country: **Papua New Guinea**
Population (UNSD): **8,776,119 (2019)**
GNI per capita (PPP Intl $): **2,430 (2013)**
Life expectancy at birth: **65.9 (2016)**
Total expenditure on health per capita (Intl $): **109 (2014)**
Source: **https://www.who.int/countries**

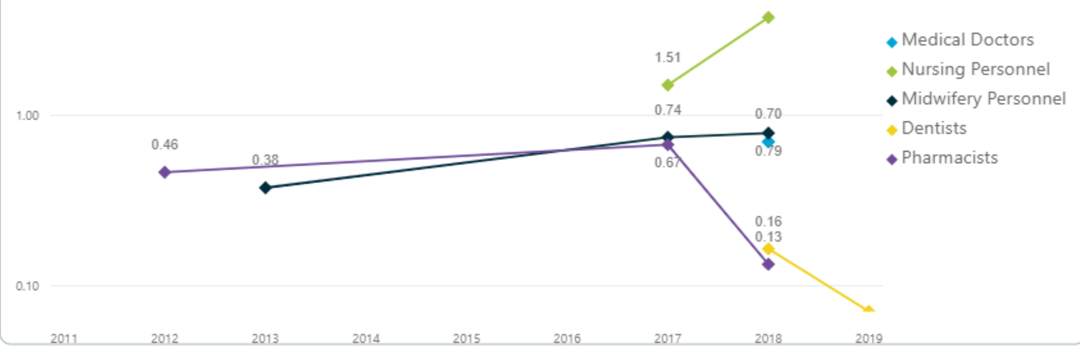
Select Region & Country

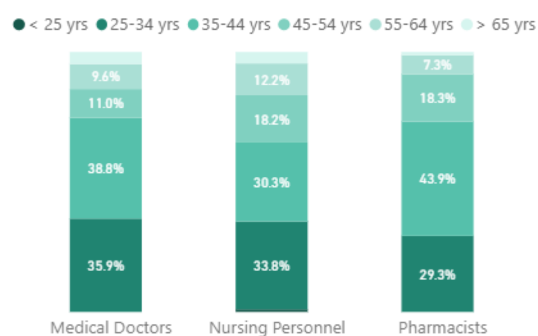
Selected:: Papua New Guinea

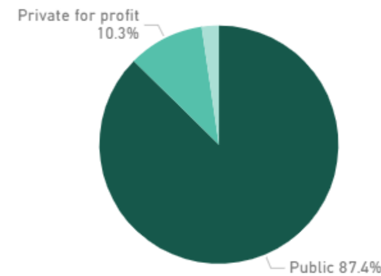
- Marshall Islands
- Micronesia (Federated States of)
- Mongolia
- Nauru
- New Zealand
- Niue
- Palau
- Papua New Guinea (selected)
- Philippines
- Republic of Korea
- Samoa
- Singapore
- Solomon Islands
- Tonga
- Tuvalu
- Vanuatu
- Viet Nam

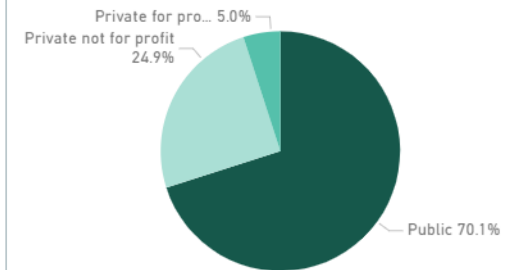
STOCK BY OCCUPATION, LATEST AVAILABLE YEAR

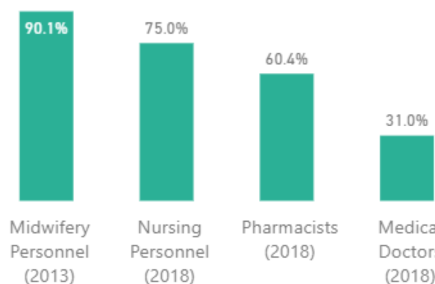
Occupation	Number	Density (per 10,000 pop)
Medical Doctors	602	0.70
Nursing Personnel	3,237	3.76
Midwifery Personnel	677	0.79
Dentists	62	0.07
Pharmacists	115	0.13
Total	**4,693**	**5.35**

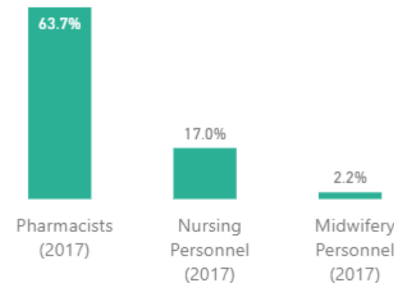


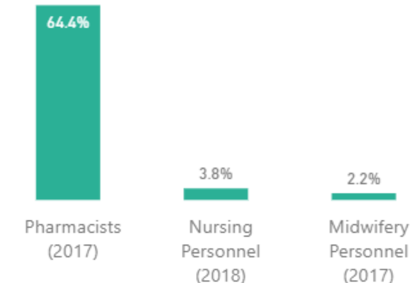












Source: NHWA, 2020. For additional HRH data, please refer to this [NHWA custom query, created April 7, 2021](#).

Republic of Marshall Islands

Build:

- **Recruitment and Training:** To address health workforce **shortages** in the outer islands, the Ministry of Health implemented an initiative to recruit and train Indigenous people as mid-level Health Assistants (HA) to provide health services to their local communities. (Keni et al., 2006)

Manage:

- **HRH planning and development:** The office responsible for the HRH management within the Ministry of Health has limited influence to provide adequate resources, infrastructure, and supplies to health workers. (WHO, 2014)
- **Attrition:** High attrition of the health workforce due to poor continuing professional education, lack of opportunities for career progression, poor planning for retirement of the aging workforce, lack of proper recruitment and retention plans, and an inadequate remuneration system. (WHO, 2014)

Optimize:

- **Management of health information**: The ability to effectively plan and manage the health workforce is challenging because health information is not organized consistently throughout the Ministry of Health system and data is not kept up-to-date. (WHO, 2014)

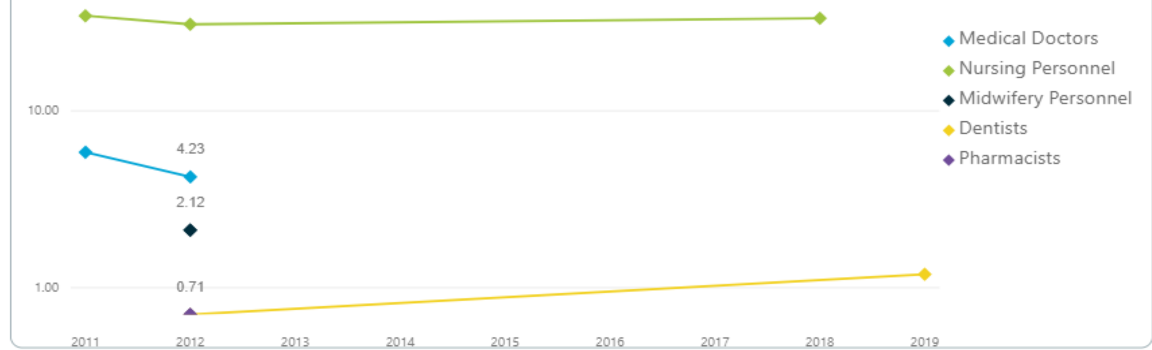
Republic of Marshall Islands

Country: **Marshall Islands**
Population (UNSD): **58,791 (2019)**
GNI per capita (PPP Intl $): **4,620 (2013)**
Life expectancy at birth: **()**
Total expenditure on health per capita (Intl $): **680 (2014)**
Source: **https://www.who.int/countries**

STOCK BY OCCUPATION, LATEST AVAILABLE YEAR

Occupation	Number	Density (per 10,000 pop)
Medical Doctors	24	4.23
Nursing Personnel	195	33.38
Midwifery Personnel	12	2.12
Dentists	7	1.19
Pharmacists	4	0.71
Total	**242**	**41.16**

DENSITY (per 10,000 pop) BY OCCUPATION, LAST 10 YEARS

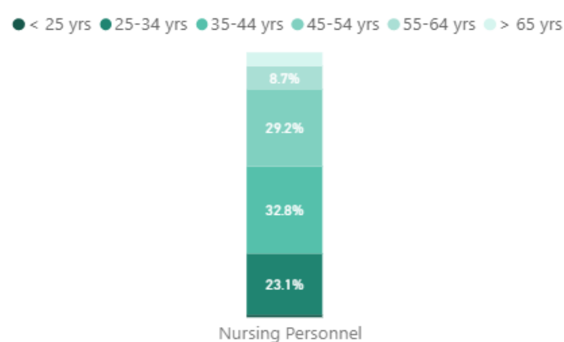


Select Region & Country

Selected:: Marshall Islands

- Fiji
- Japan
- Kiribati
- Lao People's Democratic Republic
- Malaysia
- Marshall Islands (selected)
- Micronesia (Federated States of)
- Mongolia
- Nauru
- New Zealand
- Niue
- Palau
- Papua New Guinea
- Philippines
- Republic of Korea
- Samoa
- Singapore

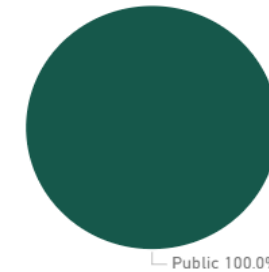
AGE DISTRIBUTION BY OCCUPATION, LATEST AVAILABLE YEAR



FACILITY OWNERSHIP DISTRIBUTION FOR MEDICAL DOCTORS, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

FACILITY OWNERSHIP DISTRIBUTION FOR NURSING PERSONNEL, LATEST AVAILABLE YEAR



% OF FEMALE BY OCCUPATION, LATEST AVAILABLE YEAR

% OF FOREIGN BORN BY OCCUPATION, LATEST AVAILABLE YEAR

% OF FOREIGN TRAINED BY OCCUPATION, LATEST AVAILABLE YEAR

Source: NHWA, 2020. For additional HRH data, please refer to this NHWA custom query, created April 7, 2021.

Tuvalu

Build:

- **Dependency on foreign workforce:** The size of the population and lack of educational programs creates a reliance on foreign workers and local workforce trained abroad (primarily Cuba, New Zealand, and larger PICs). (Henderson et al., 2008)
- The cost of the Cuban medical cooperation to PICs comes in the form of countries providing benefits and paying allowances to in-country Cuban health workers and return airfares for their students in Cuba. This has been seen by some PICs as a cheaper alternative to training doctors in other countries. (Asante et al., 2012)

Manage:

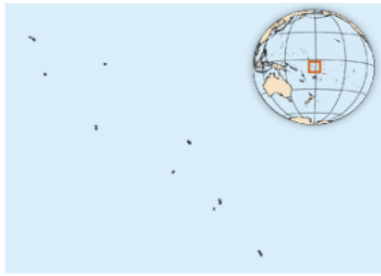
- **Retention:** Economic factors and poor **remuneration** play a significant role in the decisions of workers to remain in the health sector. Evidence shows that it is important to package financial and non-financial **incentives**. (Henderson et al., 2008)
- **Motivation**: Research findings indicate that salaries and benefits, together with working conditions, supervision and management, and education, and training opportunities are important. (Henderson et al., 2008)

Optimize:

- **Human Resource Information System**: Increasing salary packages would improve retention of clinical HRH in smaller PICs like Tuvalu. Having an HRIS would support Tuvalu to better plan and effectively distribute more compelling retention packages. (Key informant interview)

Tuvalu

Country: **Tuvalu**
Population (UNSD): **11,655 (2019)**
GNI per capita (PPP Intl $): **5,990 (2013)**
Life expectancy at birth: **()**
Total expenditure on health per capita (Intl $): **585 (2014)**
Source: **https://www.who.int/countries**



Select Region & Country

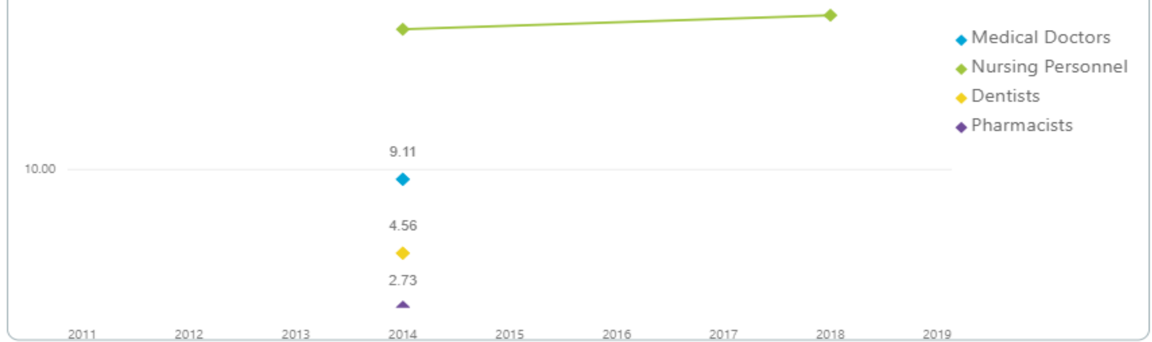
Selected:: Tuvalu

- Marshall Islands
- Micronesia (Federated States of)
- Mongolia
- Nauru
- New Zealand
- Niue
- Palau
- Papua New Guinea
- Philippines
- Republic of Korea
- Samoa
- Singapore
- Solomon Islands
- Tonga
- Tuvalu (selected)
- Vanuatu
- Viet Nam

STOCK BY OCCUPATION, LATEST AVAILABLE YEAR

Occupation	Number	Density (per 10,000 pop)
Medical Doctors	10	9.11
Nursing Personnel	49	42.59
Midwifery Personnel	10	9.69
Dentists	5	4.56
Pharmacists	3	2.73
Total	**77**	**66.93**

DENSITY (per 10,000 pop) BY OCCUPATION, LAST 10 YEARS



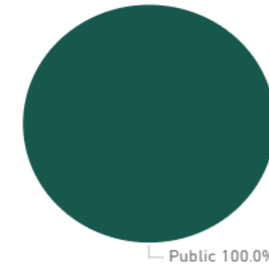
AGE DISTRIBUTION BY OCCUPATION, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

FACILITY OWNERSHIP DISTRIBUTION FOR MEDICAL DOCTORS, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

FACILITY OWNERSHIP DISTRIBUTION FOR NURSING PERSONNEL, LATEST AVAILABLE YEAR



% OF FEMALE BY OCCUPATION, LATEST AVAILABLE YEAR

% OF FOREIGN BORN BY OCCUPATION, LATEST AVAILABLE YEAR

% OF FOREIGN TRAINED BY OCCUPATION, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

Source: NHWA, 2020. For additional HRH data, please refer to this NHWA custom query, created April 7, 2021.

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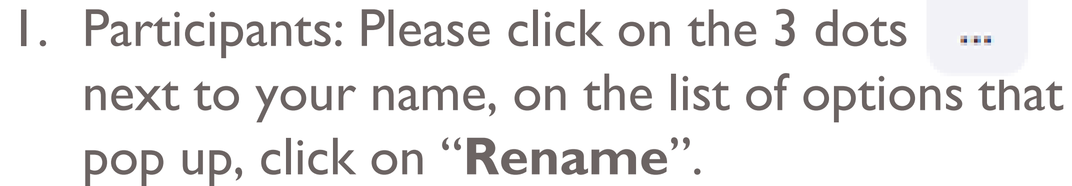
HRH2030
HUMAN RESOURCES FOR HEALTH IN 2030

TAIWAN

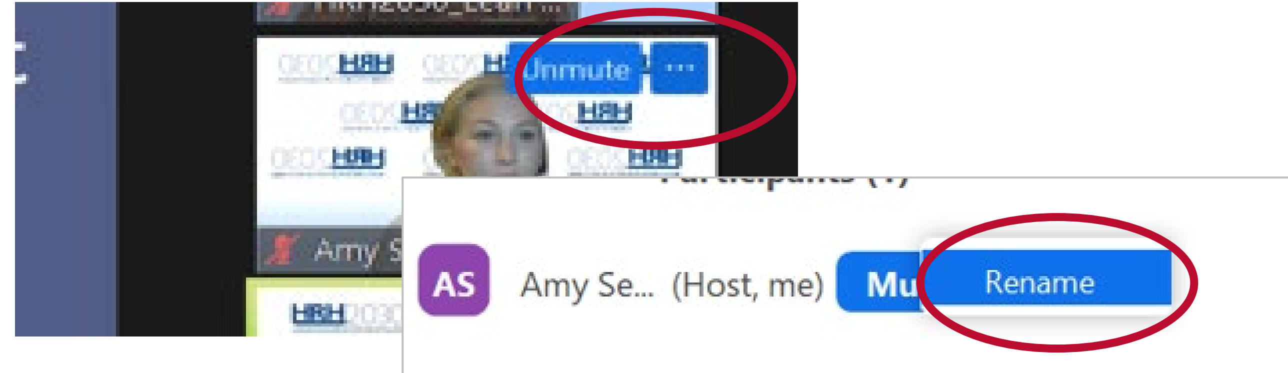
International Cooperation and Development Fund

5-minute Break

Zoom Renaming Instructions

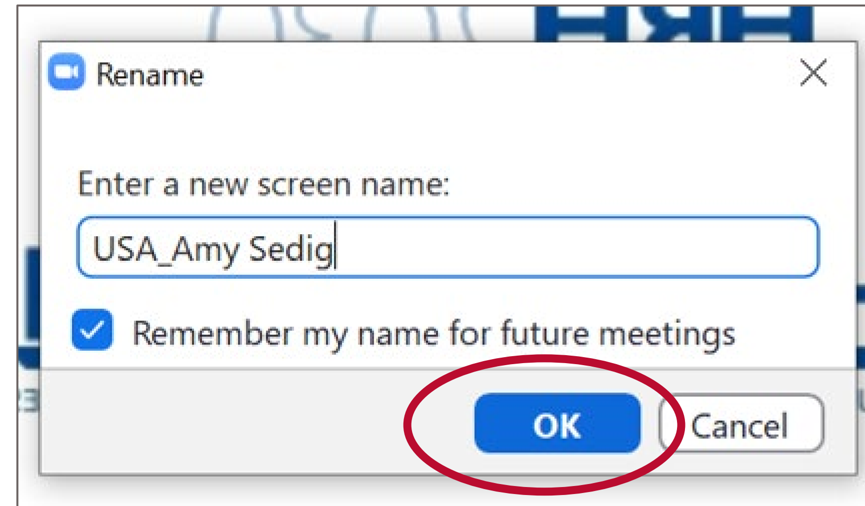


1. Participants: Please click on the 3 dots ... next to your name, on the list of options that pop up, click on "**Rename**".



2. Update to this naming convention:
   Country_Name
   for example, **USA_Amy Sedig**

3. Click "**OK**"



This will help us place you in the appropriate breakout group discussion!

ASK QUESTIONS and CONTRIBUTE to discussions by "raising your hand" in Zoom or typing in the chat – we look forward to your questions and contributions!

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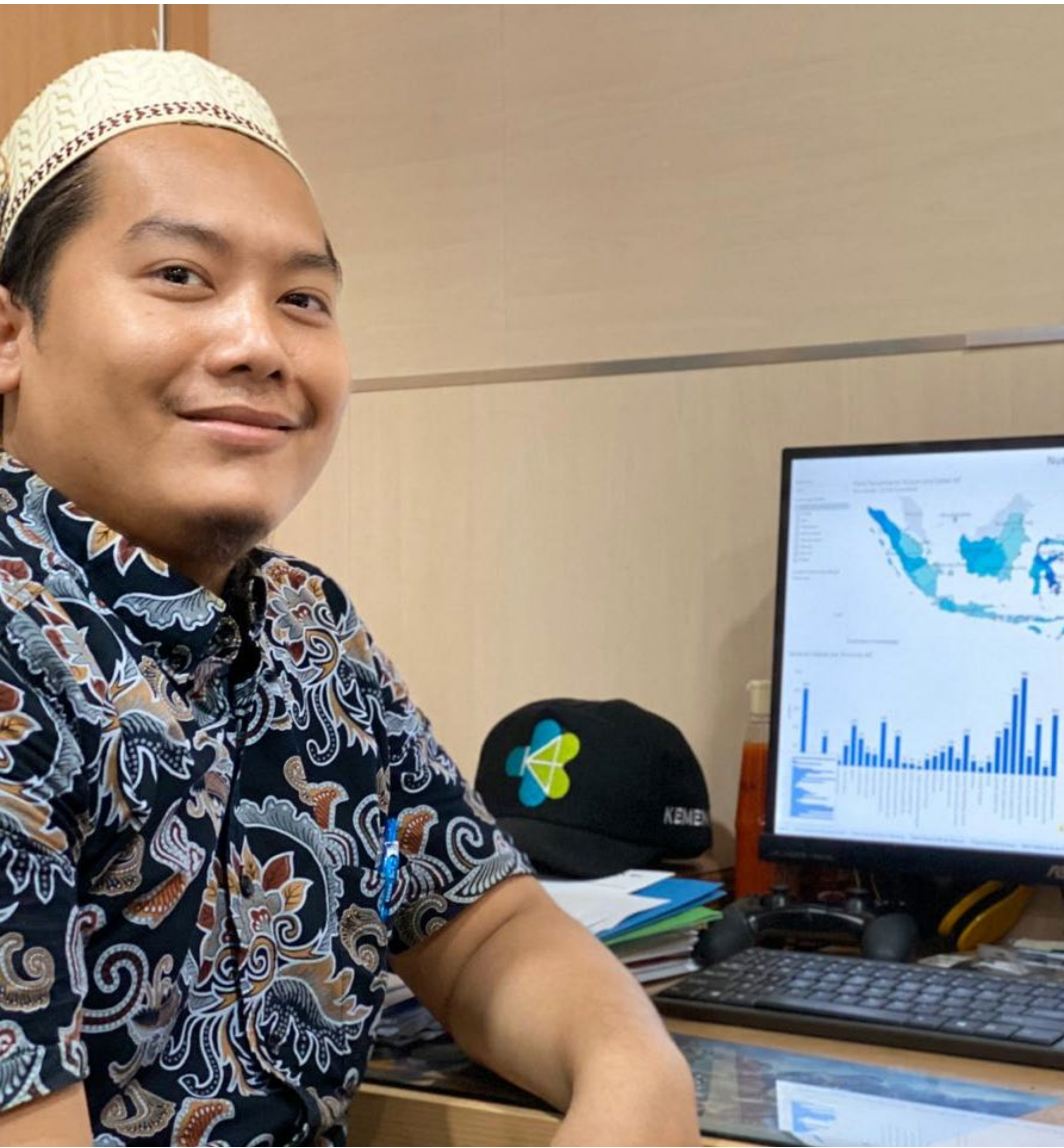
HRH2030 HUMAN RESOURCES FOR HEALTH IN 2030

TAIWAN ICDF International Cooperation and Development Fund



Understanding how to use data to take action

Leah McManus, HRH2030 Technical Advisor

Why is it important to understand how to use data to take action?

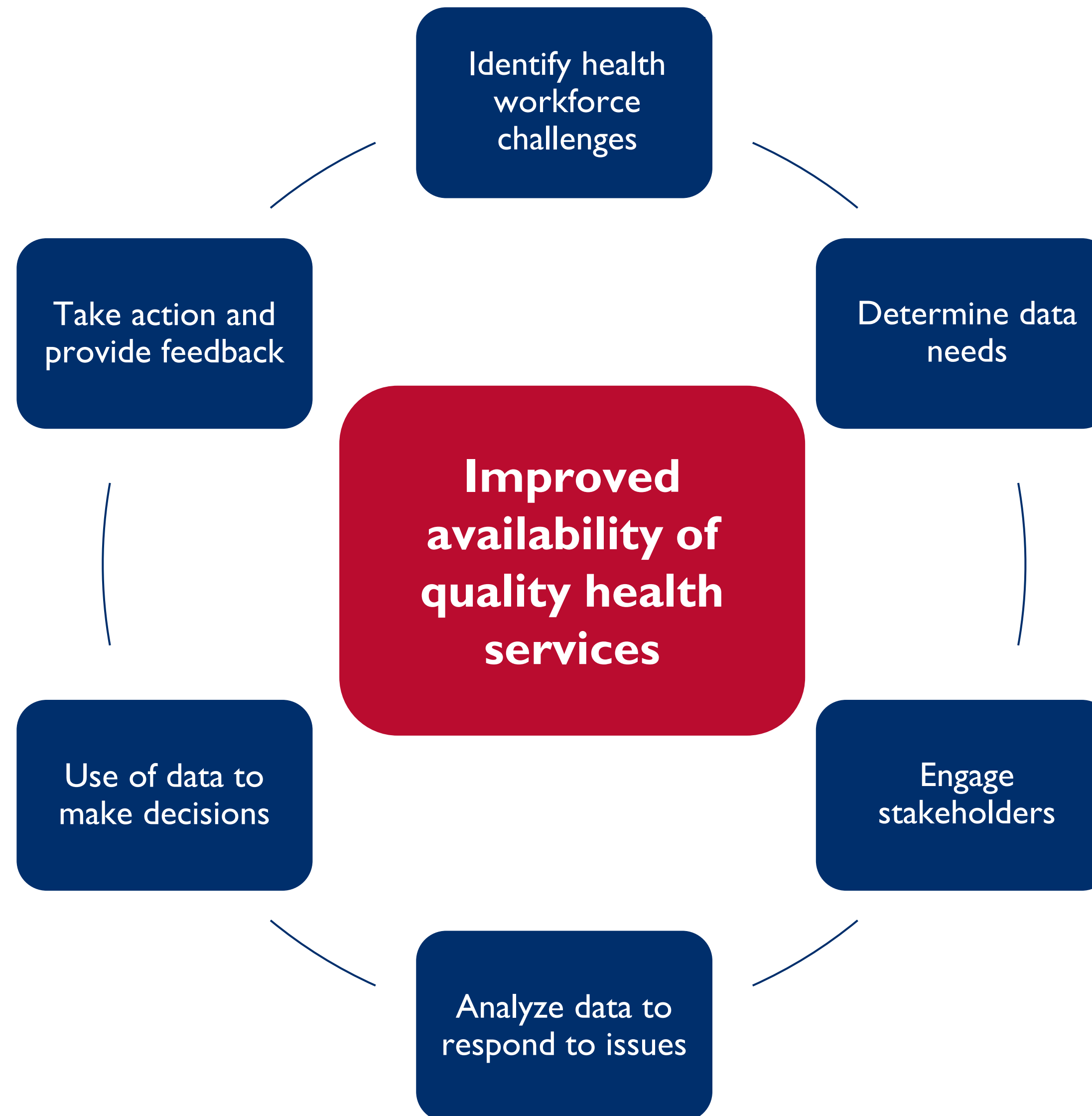
So much health workforce data is collected… but is it used?

Health workforce data collected but not used = Lost opportunities for supporting health workers and ultimately improving quality of health services

What is taking action using data?

Taking action using data can be described as **an on-going collaborative process** for making **informed** health workforce planning and management **choices** based on **appropriate analysis** of relevant data and **information**.

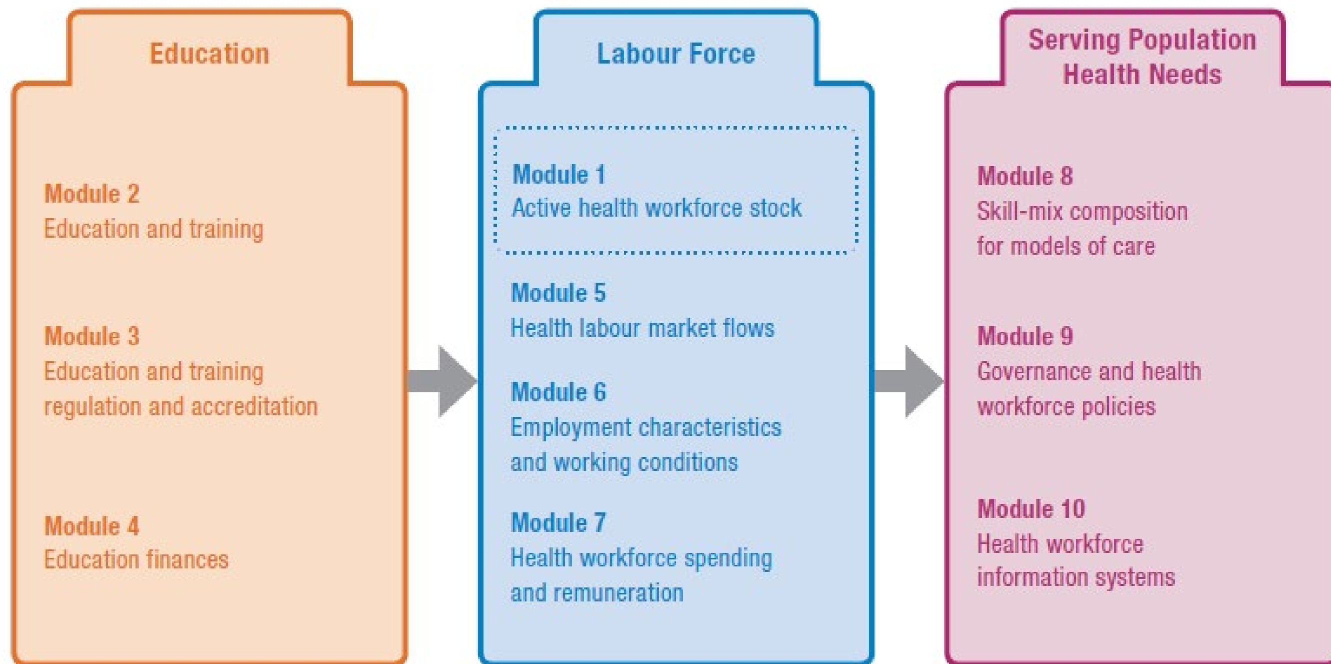
Taking Action Using Data Cycle

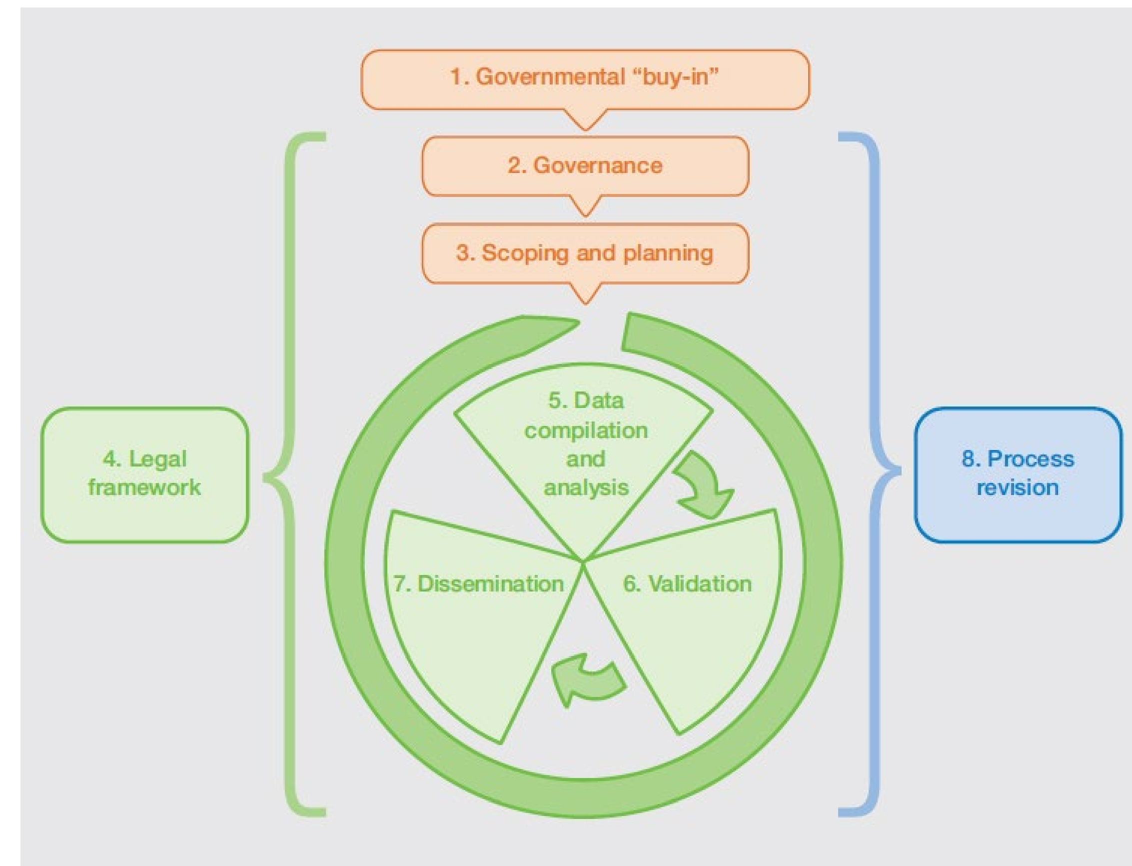


WHO's National Health Workforce Accounts

National Health Workforce Accounts (NHWA)

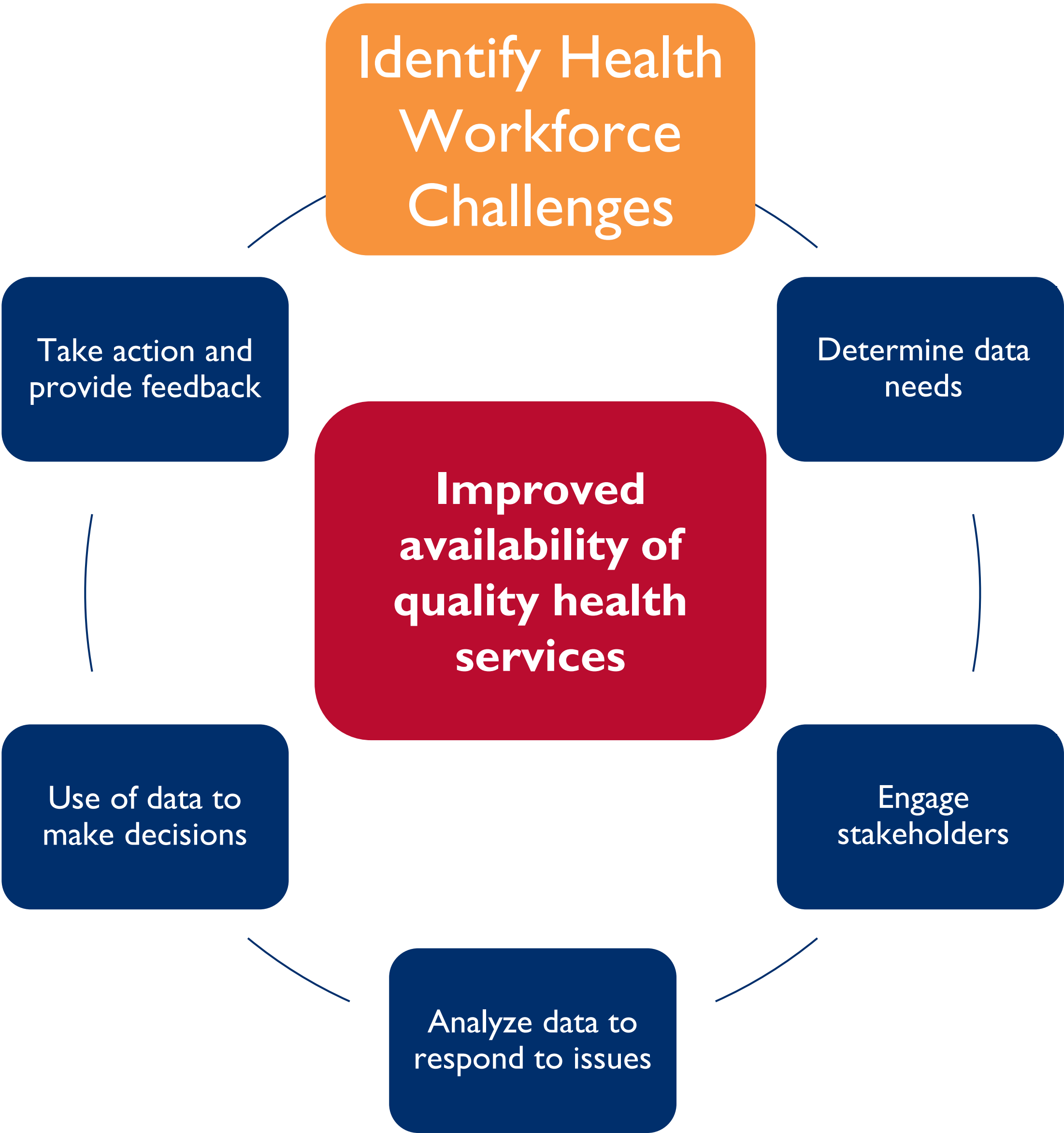
*A system for **all countries** to improve the **availability**, **quality**, and **use of data** on health workforce through monitoring indicators to support achievement of Universal Health Coverage, SDGs and other health objectives.*





What stakeholders do you need to engage for data and action?

Identify Health Workforce Challenges



To identify our health workforce challenges we should look to…

Implementation of National or Sub-National Policies

Studies or research on health trends in our country

Perspectives of health workers, policy makers and managers!

Progress on achieving Health Workforce and Health System Strategic Plans

Progress on achieving global or regional health system goals

Key HRH issues & themes in selected PICs

Building the Health Workforce

- Workforce shortages
- High rate of external migration
- Attrition due to aging of workforce and compulsory retirement limits.
- Poor remuneration
- Dependency on foreign workforce
- Limited resources to ensure quality

Managing the Health Workforce

- Limited capacity in management positions
- Provision of regular supportive supervision
- Lack of in-service training or a career pathway plans
- Lack of available data in certain countries; unable to report to NHWA

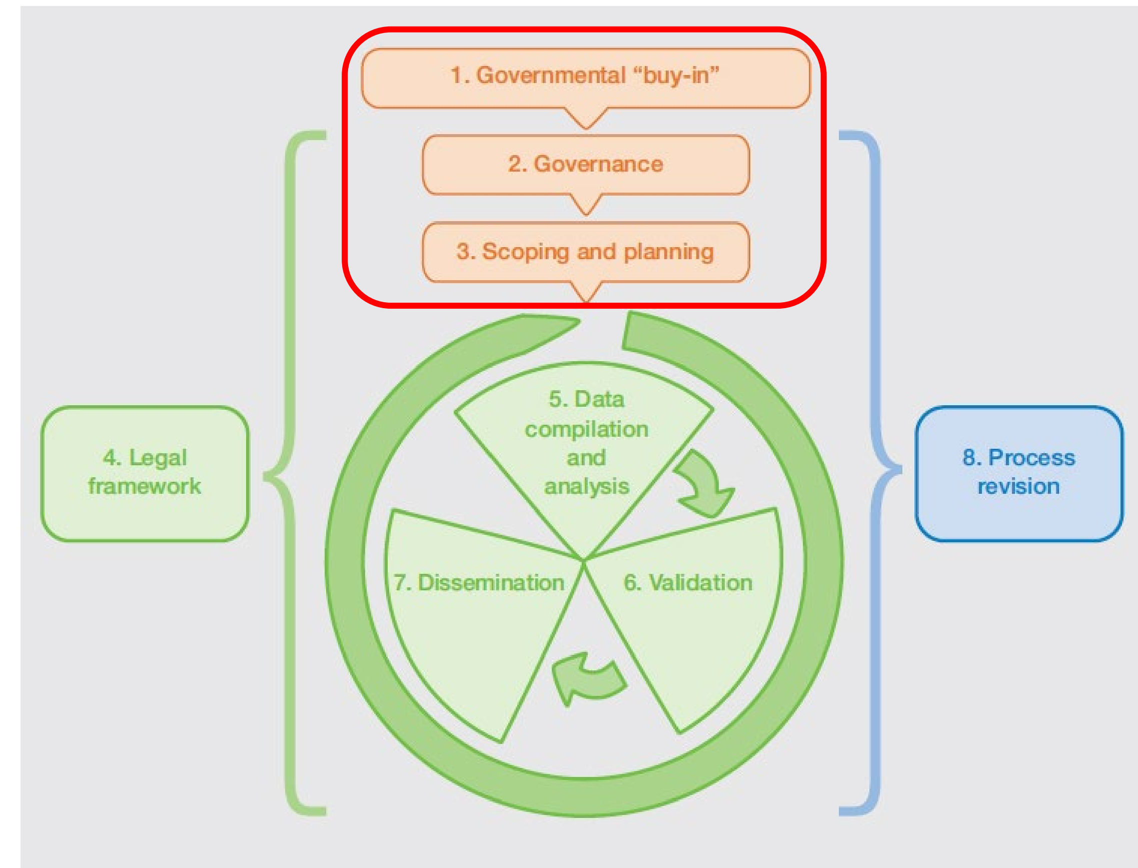
Optimizing the Health Workforce

- Unavailability of reliable and comprehensive HRH data
- Weak management of health information
- Lack of oversight on staffing plans for remote health facilities
- No standardized processes of care

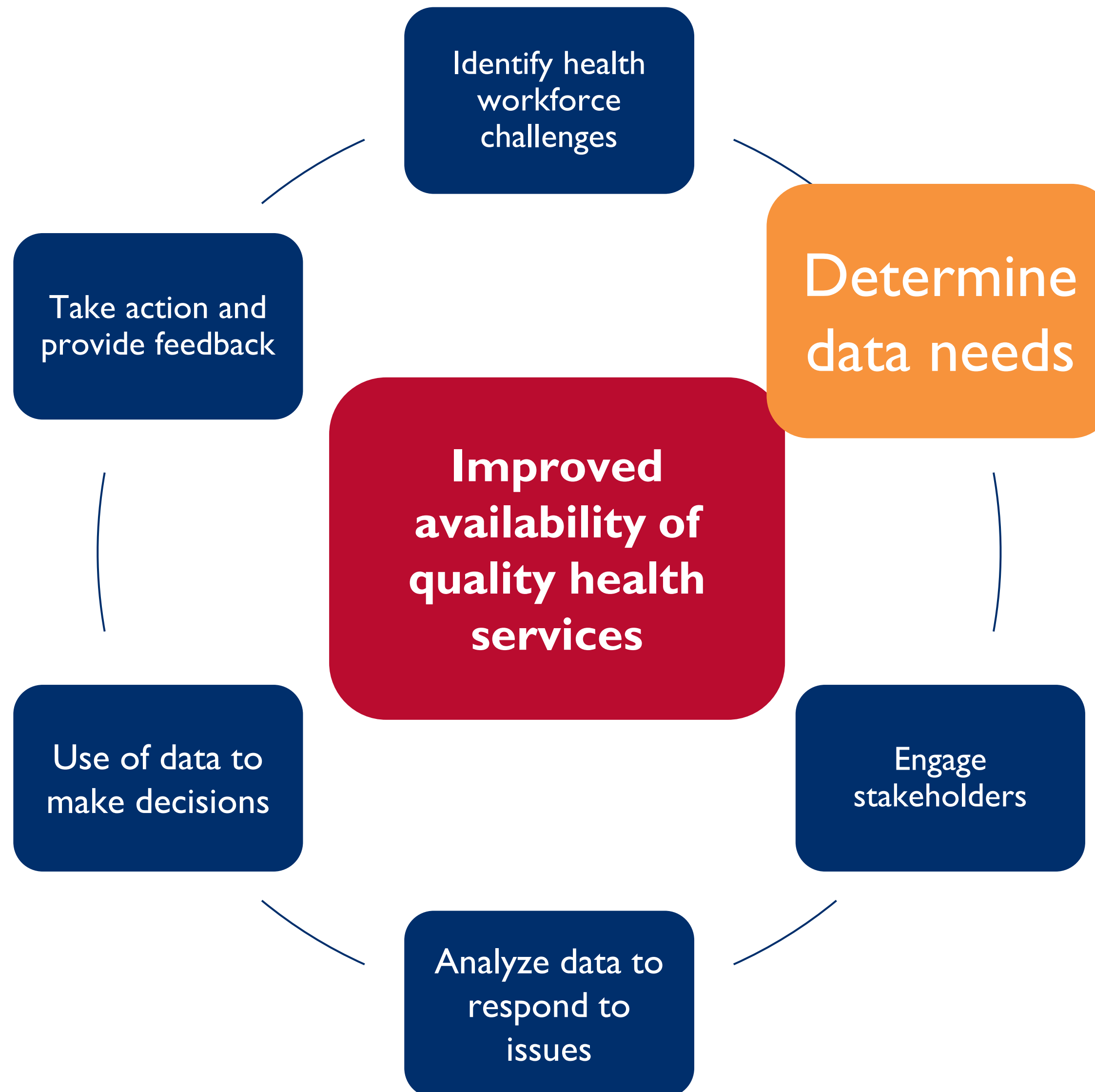
What HRH issues have you observed? What are your country's HRH strategic objectives?

How can NHWA be used to identify health workforce challenges?

- Political commitment to address HRH issues using data
- Coordination of an intersectoral health workforce agenda
- Key policy questions are agreed upon by this multistakeholder group



Determine data needs

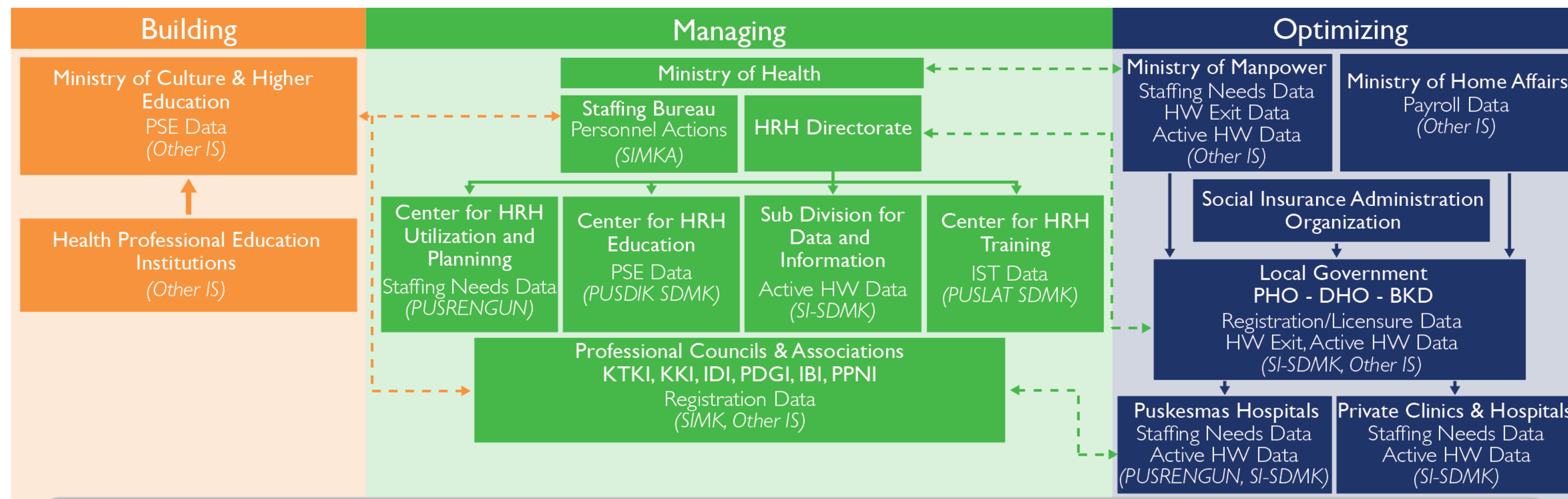


Based on the challenges we now determine our data needs and sources

Workforce data refers to the *qualitative* or *quantitative* **variables** on health workers from which health worker information and knowledge is derived.

Come from across the health labor market

Data can be routine, periodic or ad hoc

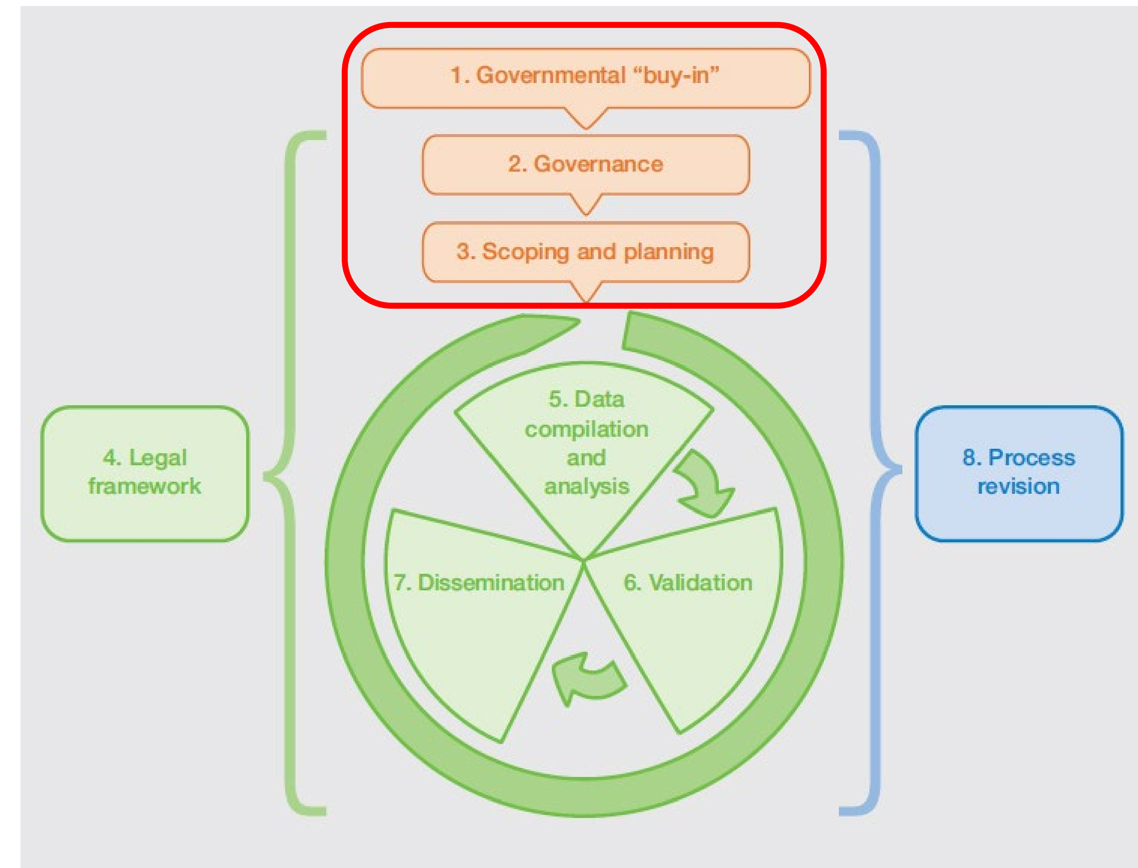


Based on your identified HRH issues, what data do you need?

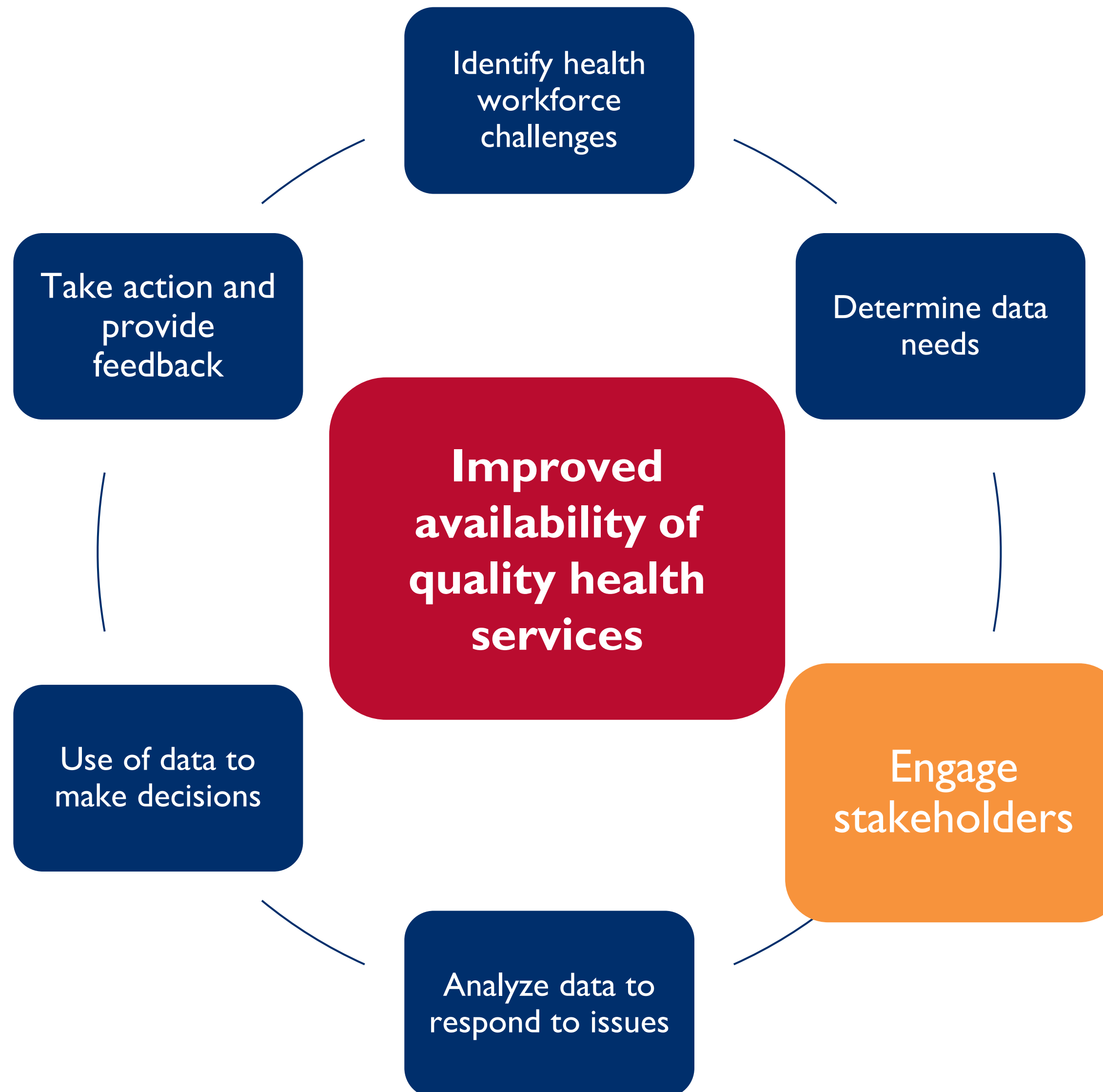
And have issues with quality that need to be addressed

How can NHWA be used to determine data needs?

- NHWA indicators are reviewed to identify key metrics to address health workforce challenges
- Identification of existing information systems
- Scoping analysis conducted to understand data availability and gaps
- Data analysis and dissemination plan developed



Engage stakeholders



A stakeholder is any person or group with a particular interest in a policy or program

Producers of Data

Users of Data

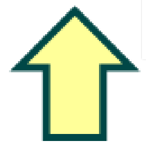
Decision Makers

Why do we engage with stakeholders?

Engage in dialogue with stakeholders to fully understand the:

- decisions they make
- information they need
- the best way to present that information
- and how data can be shared

When stakeholders are involved from the beginning…


Relevance of data

Ownership of data

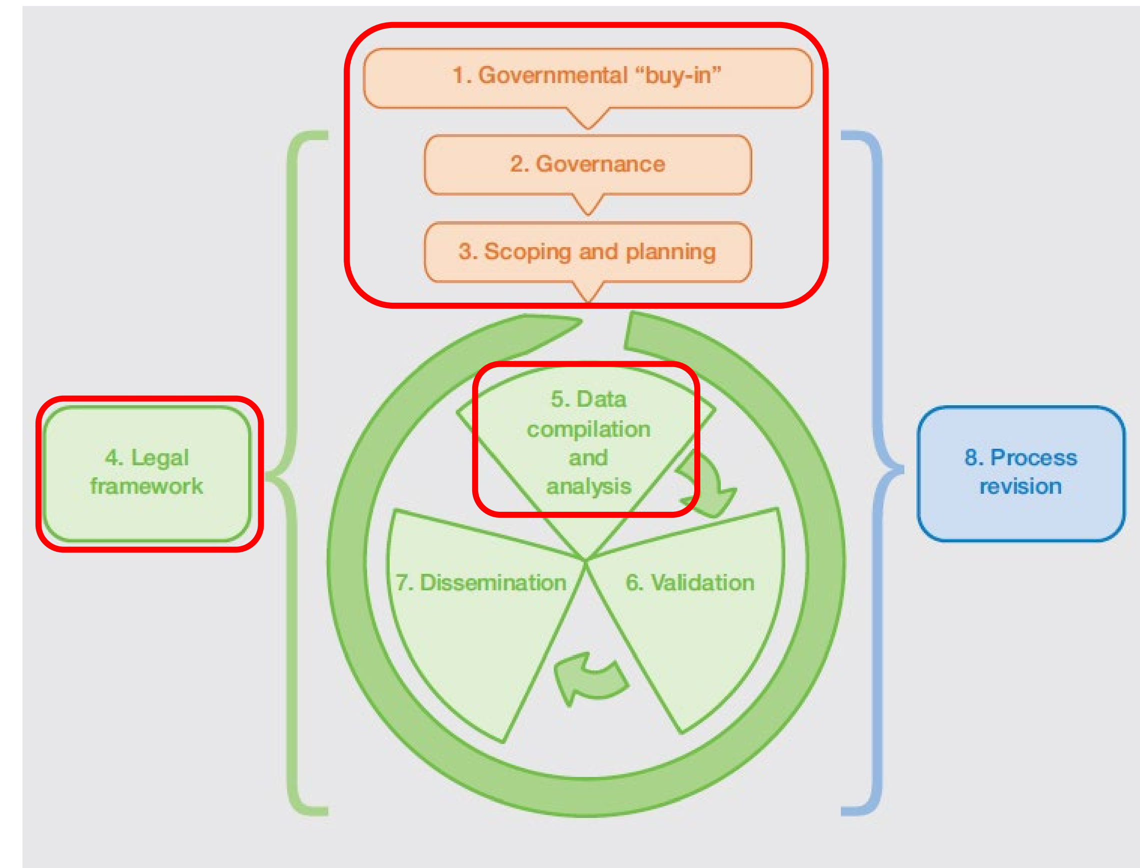
Appropriate dissemination of data

Use of data

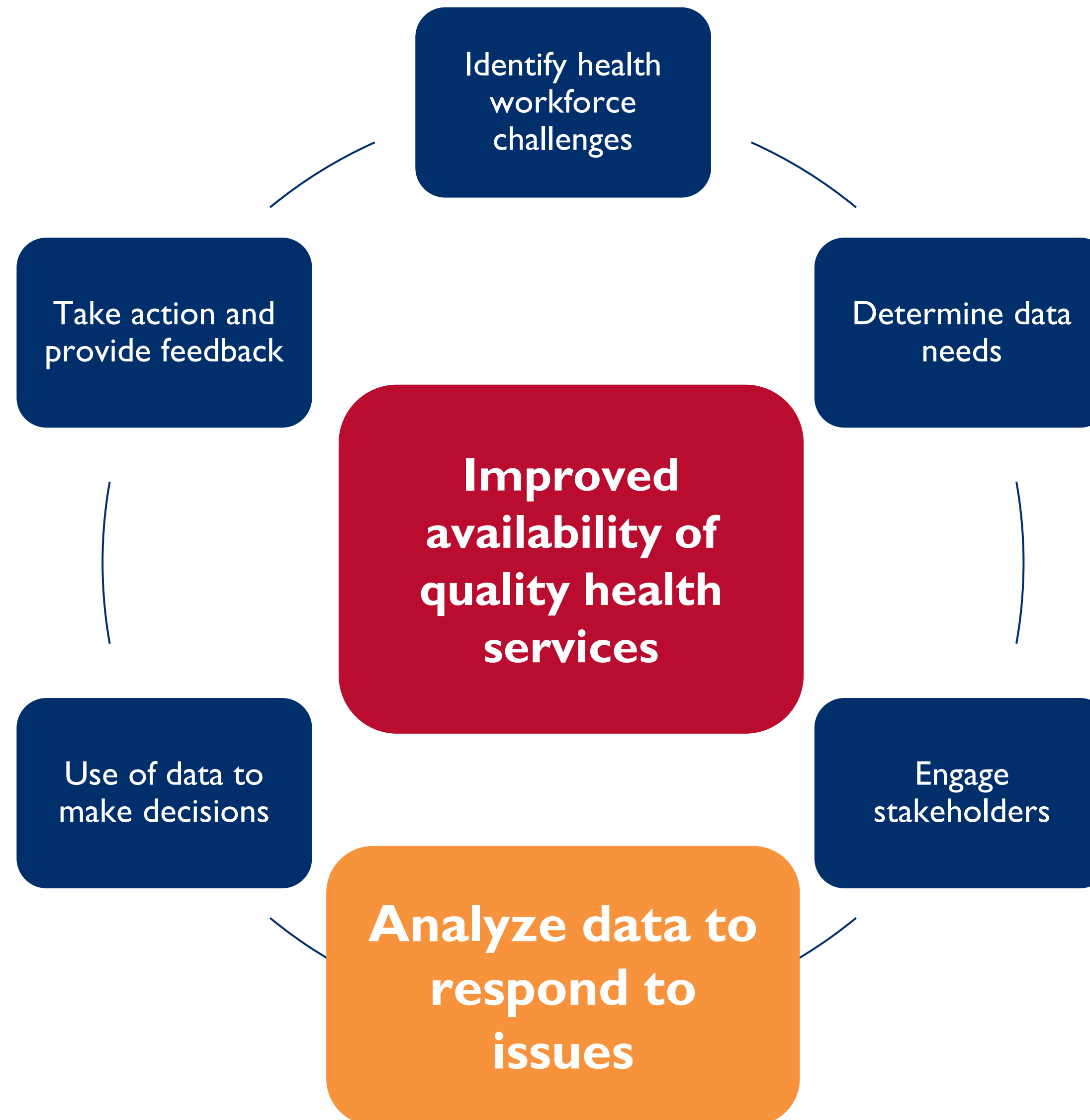
What stakeholders do you need to engage for data and action?

How can NHWA be used to engage stakeholders to collect and share data?

- Governance structure developed to facilitate the exchange of data
- Business plan developed for implementation of NHWA defining stakeholders' roles and responsibilities
- Legal authorization obtained for data extraction, exchange and dissemination
- SOP established
- Data gathered and aggregated, and new sources of data continuously defined



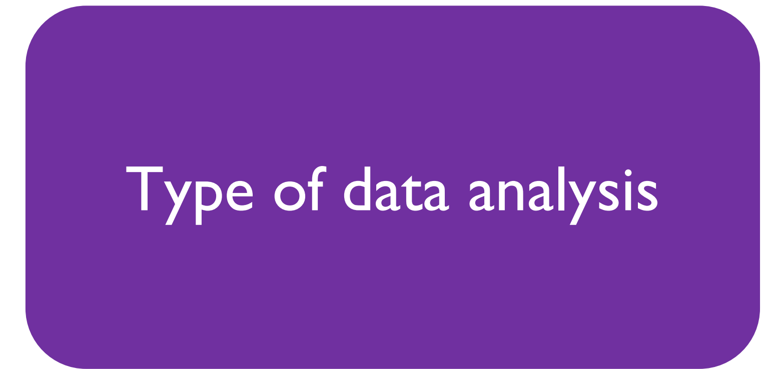
Analyzing data to respond to issues



We must now analyze our data to have the information we need to make decisions

- Turns **raw data** into **useful information**
- Provides **answers to questions** being asked
- Even the greatest amount and best quality data **mean nothing** if not properly **analyzed**—or if not analyzed at all

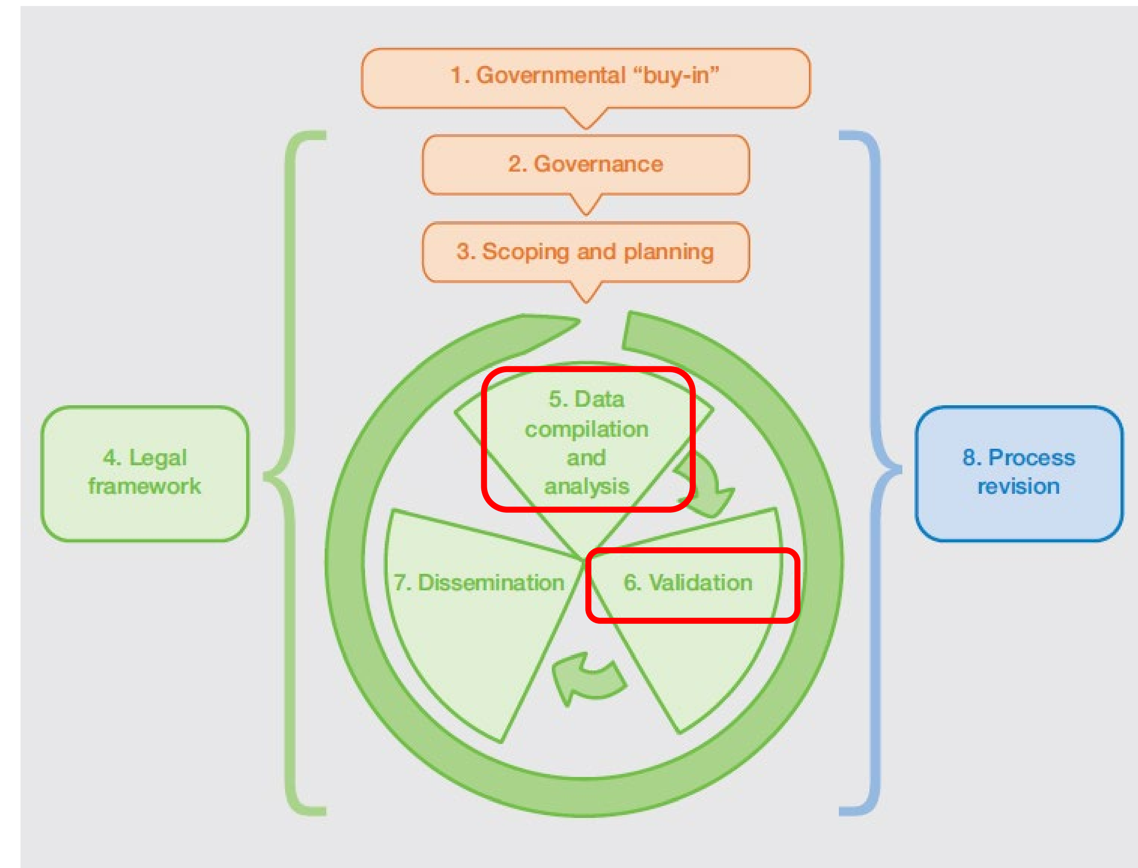
We select how we analyze our data based on…



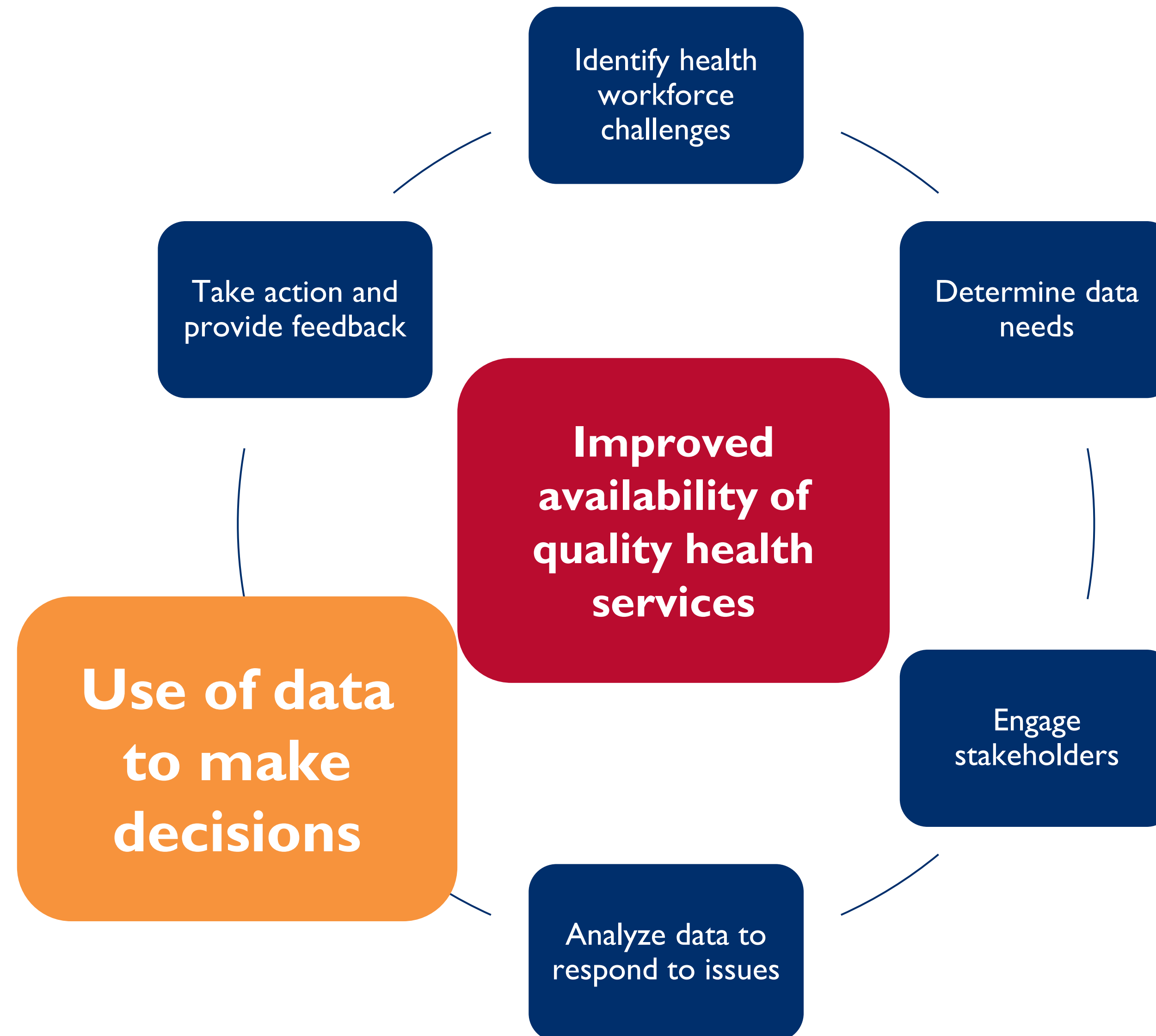
What analysis do you need to respond to your health workforce issue?

How can NHWA be used to analyze data to respond to issues?

- Data quality assessed
- Data analyzed, reviewed and validated with stakeholders
- Reports developed



Use of data to make decisions



With the analyzed data, we now need to make decisions

But to do so, we need to first address common barriers to use of data

Organizational constraints

- Structural – roads, telecommunications, internet connectivity, other infrastructure
- Organizational – lack of clarity of roles, support, ineffective flow of information, lack of coordination between training providers and INS, staff/leadership changes
- Political ideology, public opinion, power relationships

Technical constraints

- Technical skills
- Availability of information systems and technology (i.e. computers)
- Design of information system
- Definition of indicators
- Lack of data quality assurance protocols and arbitrariness of data

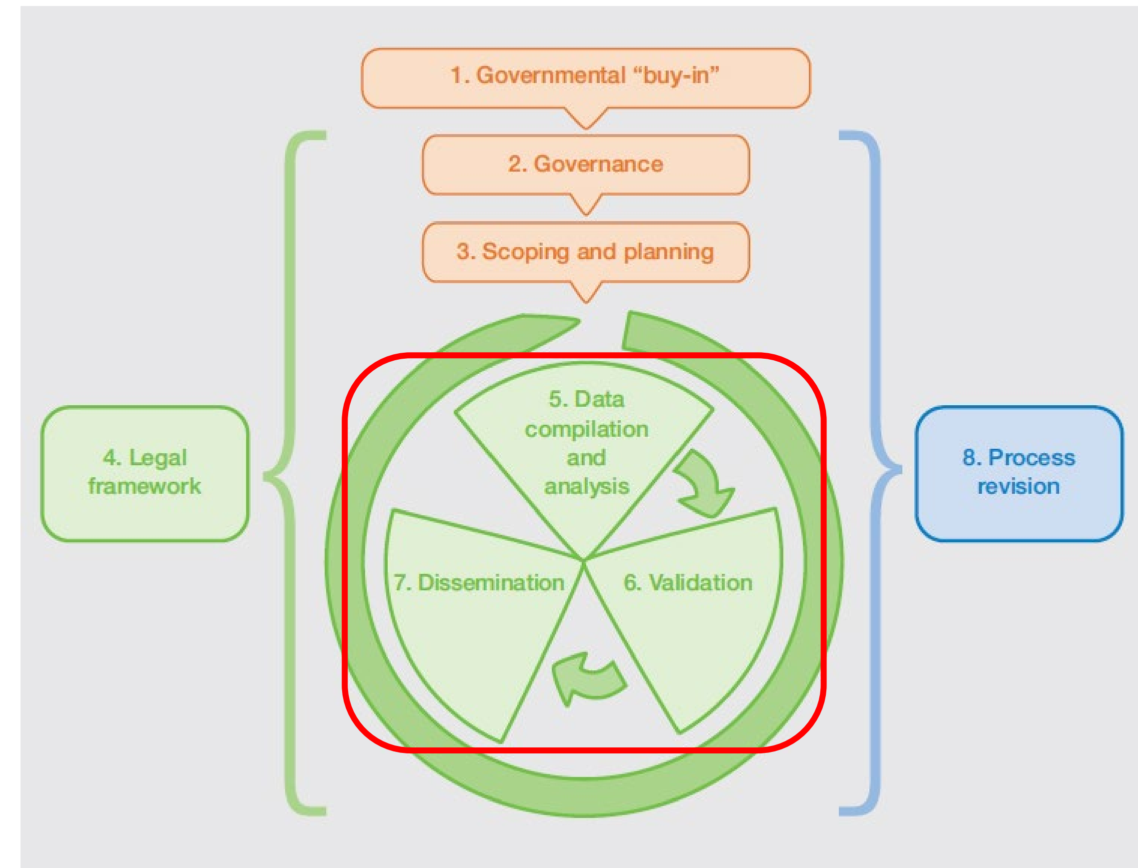
Behavioral constraints

- Decision-maker and other staff personal attitudes
- Staff motivation
- Skills and understanding on how to use data
- Lack of "data culture"
- Competing priorities

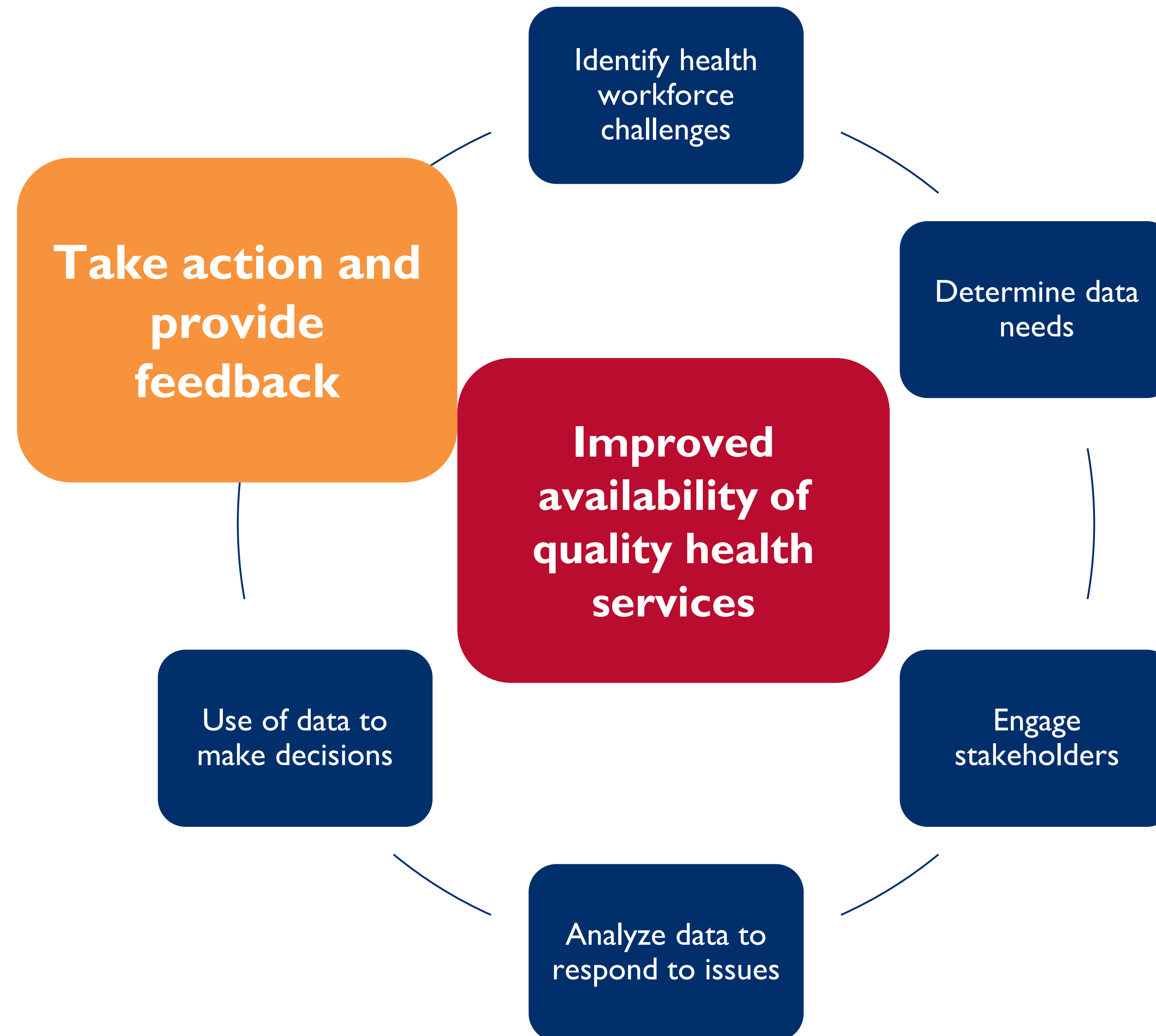
What are the challenges you have related to data in addressing HRH objectives?

How can NHWA be used to make decisions?

- Based on analysis and reports, key messages are developed and disseminated
- Collaborative decision making occurs with stakeholders from across the health labor market through the multi-sectoral group



Take Action and Provide Feedback



With these decisions, we take action

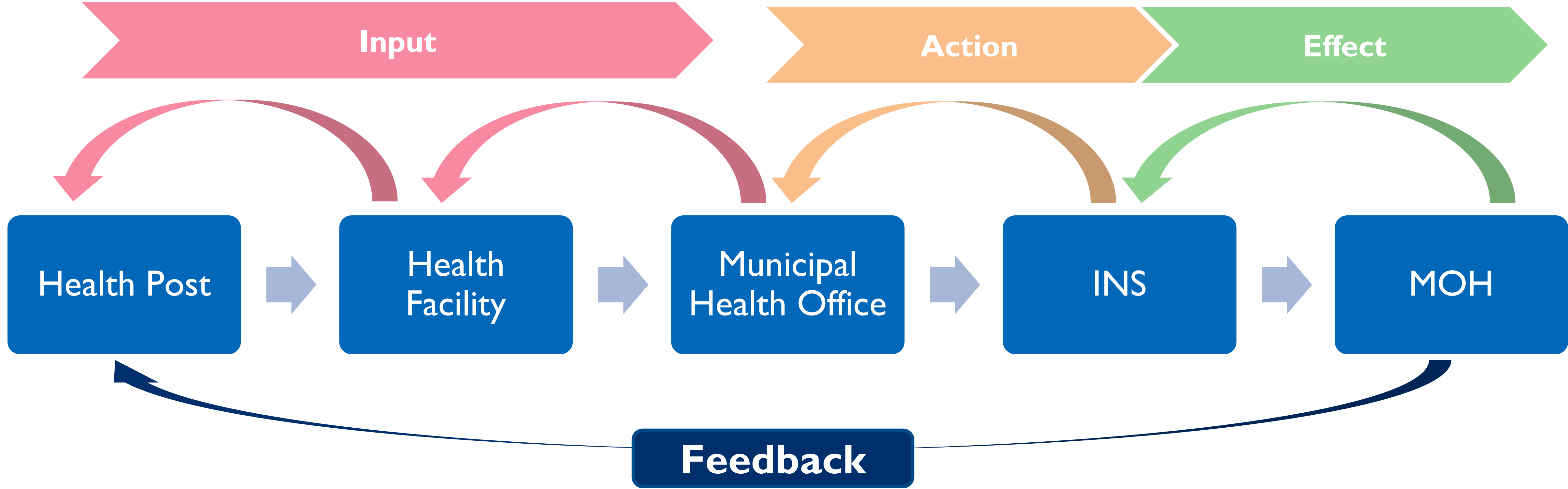
Frameworks for linking data to action can be useful guides!

Program/ Policy Question	Decision Maker (DM), Other Stakehold-ers (OS)	Indicator /Data	Data Source	Timeline (Analysis) (Decision)	Commu-nication Channel	Decision/ Action

And then we must provide feedback!

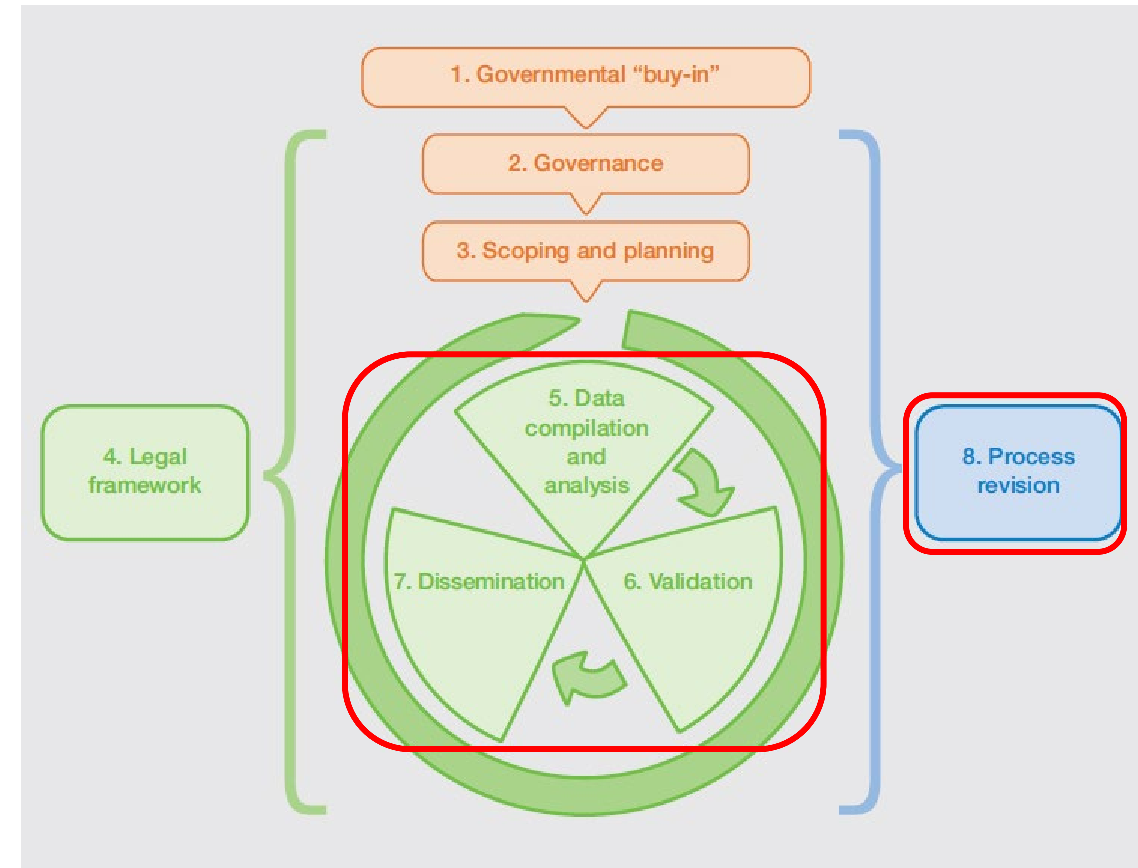
- Feedback is information about the results of analysis or use of data
- **Feedback Loop:** The use of feedback to adapt what you do or how you do it

Example: Feedback Loop for Health Workforce Training Data in Timor Leste

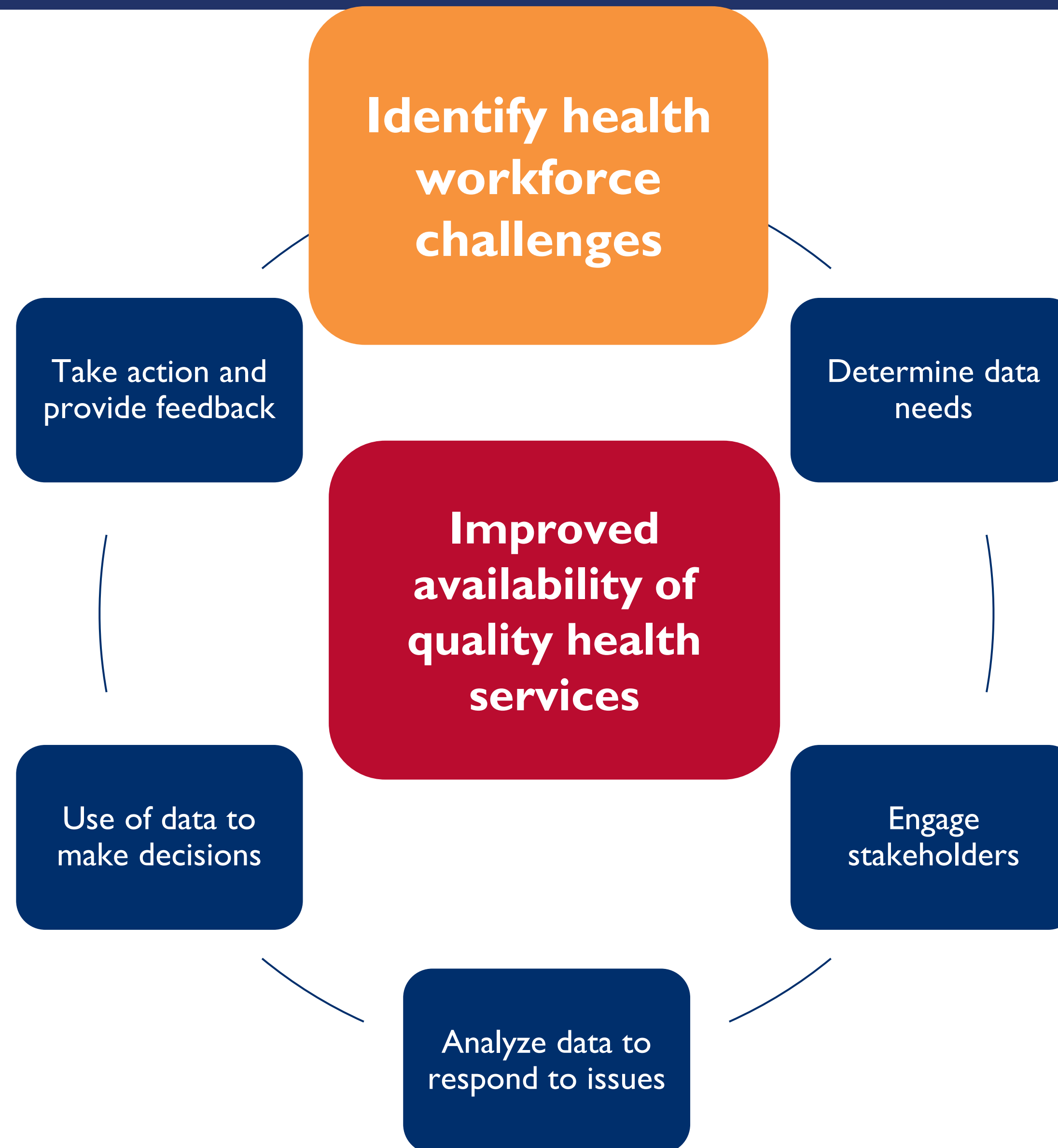


How can NHWA be used to take action and provide feedback?

- Based on decisions made, the multi-sectoral group takes collective action
- Regular reviews and evaluations are conducted on the process



….And we continuously follow the cycle to progressively address health workforce issues to improve health services



Last Point: Building Taking Action Using Data into Your Work

- PLAN   PLAN   PLAN !
- Regularly review your health workforce data – schedule time
- Reflect on your daily activities and role, identify where health workforce data should be used
- Engage in dialogue with stakeholders to fully understand the:
  - decisions they make
  - information they need
  - best way to present that information

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GROUP ACTIVITY

Group 1: Palau & Marshall Islands

Group 2: Nauru & Tuvalu

Group 3: Fiji & Vanuatu

Group 4: Papua New Guinea & Tonga

Group 5: Solomon Islands, Micronesia, Samoa

Group Activity

- Break into small groups
- Discuss with your group, using the Jamboard to take notes:
  1. What are your country's strategic objectives for the health workforce?
  2. What data do you need to help inform these objectives?
  3. What has been your experience / what are your needs for NHWA?
  4. Which stakeholders should be engaged in HRH data gathering or use?
  5. What HRH data analyses are needed?
  6. What are overall challenges related to data in addressing these strategic objectives for the health workforce?
- Report back and reflect on other countries' experiences

25 Minutes

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Group Activity

Report back

Handover ceremony in Timor-Leste with USAID, HRH2030 and the Ministry of Health. February 2021.

Next Steps Toward Session 2 – July 20th 2021

Google Drive:
- "Garden" of questions
- Training content
- Jamboard for continued comments
- Country-level survey

Session 2 AGENDA

- *Supporting health systems resilience*
- *Deep dive to improve HRH data quality*
- *Case studies*
- *Applying learnings*
- *Commitments to health workforce data strengthening and sustainability*

Session 2 Objectives:
- To increase knowledge on existing tools, approaches and investments needed to improve the availability and quality of HRH data
- To increase ability to use HRH data to support health system resilience for future emergency response

THANK YOU!

@USAIDGH @HRH2030Program @Chemonics

#HealthWorkersCount #HealthForAll

Health staff at rural health facility in Timor-Leste. Photo credit: HRH2030/Chemonics.

ANNEX I:
Additional HRH Profiles for Pacific Islands Countries

Federated States of Micronesia

Country: **Micronesia (Federated States of)**
Population (UNSD): **113,811 (2019)**
GNI per capita (PPP Intl $): **3,840 (2013)**
Life expectancy at birth: **69.6 (2016)**
Total expenditure on health per capita (Intl $): **473 (2014)**
Source: **https://www.who.int/countries**

Select Region & Country

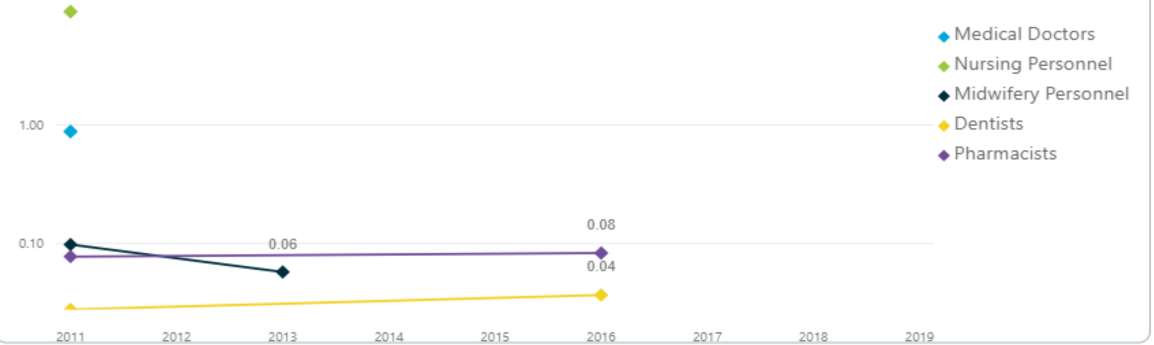
Selected:: Micronesia (Federated States of)

- ○ Fiji
- ○ Japan
- ○ Kiribati
- ○ Lao People's Democratic Republic
- ○ Malaysia
- ○ Marshall Islands
- ◉ Micronesia (Federated States of)
- ○ Mongolia
- ○ Nauru
- ○ New Zealand
- ○ Niue
- ○ Palau
- ○ Papua New Guinea
- ○ Philippines
- ○ Republic of Korea
- ○ Samoa
- ○ Singapore

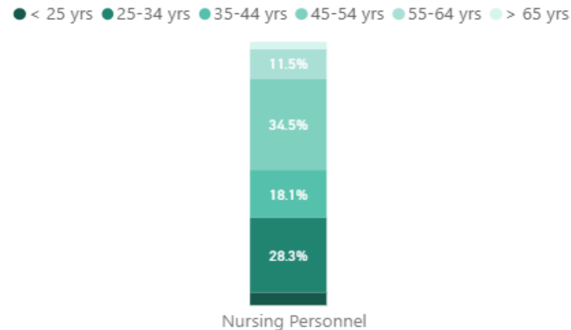
STOCK BY OCCUPATION, LATEST AVAILABLE YEAR

Occupation	Number	Density (per 10,000 pop)
Medical Doctors	20	1.94
Nursing Personnel	230	20.42
Midwifery Personnel	63	6.12
Dentists	14	1.35
Total	**327**	**29.03**

DENSITY (per 10,000 pop) BY OCCUPATION, LAST 10 YEARS



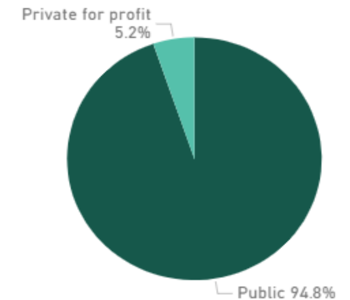
AGE DISTRIBUTION BY OCCUPATION, LATEST AVAILABLE YEAR



FACILITY OWNERSHIP DISTRIBUTION FOR MEDICAL DOCTORS, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

FACILITY OWNERSHIP DISTRIBUTION FOR NURSING PERSONNEL, LATEST AVAILABLE YEAR



% OF FEMALE BY OCCUPATION, LATEST AVAILABLE YEAR

% OF FOREIGN BORN BY OCCUPATION, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

% OF FOREIGN TRAINED BY OCCUPATION, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

Source: NHWA, 2020. For additional HRH data, please refer to this NHWA custom query, created April 7, 2021.

Federated States of Micronesia

Build:

- **Incentives (to pursue a career in healthcare):** have a family member working in healthcare, intrinsic desire to help people, available training opportunities, and personal experiences. (Withy et al., 2007)
- **Incentives (to complete training and education):** family support, financial support, personal commitment, and social support during school. (Withy et al., 2007)
- **Barriers (to pursuing a career in healthcare and completed training):** limited academic preparation, exposure and guidance, family obligations, and other careers seen as being more desirable. (Withy et al., 2007)

Manage:

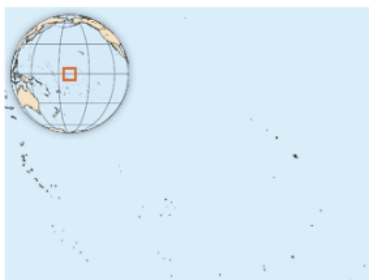
- **Training for specific settings**: Mid-level health care workers were trained locally to provide accessible and affordable services in their remote communities. The Ministry of Health developed and implemented the training to improve effectiveness of health care delivery to outer islands. (Keni et al., 2006)

Optimize:

- **Utilization of Diaspora:** A growing number of policy-makers acknowledge that medical diaspora can play a vital role in the development of their homeland's health workforce capacity. Organizations tend to have three focuses: providing healthcare services, training, and if needed humanitarian aid to their home country, through their social or professional network of migrant physicians. (Frehywot et al., 2019)

Kiribati

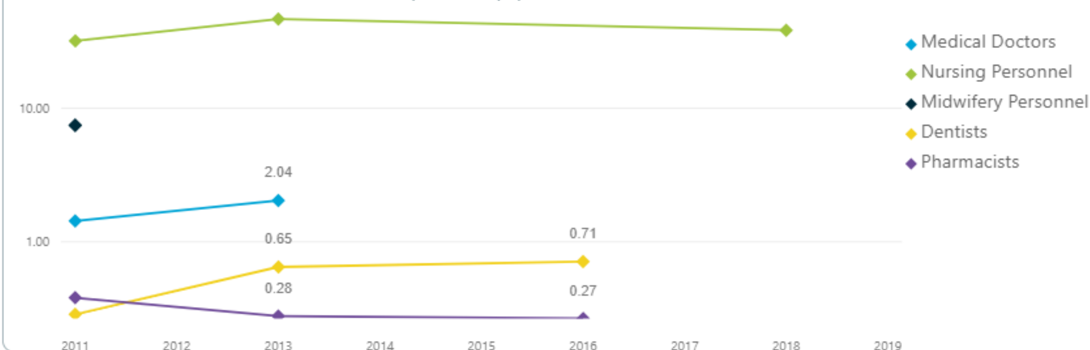
Country: **Kiribati**
Population (UNSD): **117,608 (2019)**
GNI per capita (PPP Intl $): **2,780 (2013)**
Life expectancy at birth: **66.1 (2016)**
Total expenditure on health per capita (Intl $): **184 (2014)**
Source: **https://www.who.int/countries**



STOCK BY OCCUPATION, LATEST AVAILABLE YEAR

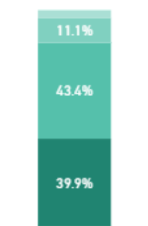
Occupation	Number	Density (per 10,000 pop)
Medical Doctors	22	2.04
Nursing Personnel	444	38.33
Midwifery Personnel	78	7.45
Dentists	8	0.71
Pharmacists	3	0.27
Total	**555**	**47.91**

DENSITY (per 10,000 pop) BY OCCUPATION, LAST 10 YEARS



AGE DISTRIBUTION BY OCCUPATION, LATEST AVAILABLE YEAR

< 25 yrs 25-34 yrs 35-44 yrs 45-54 yrs 55-64 yrs > 65 yrs



Nursing Personnel

FACILITY OWNERSHIP DISTRIBUTION FOR MEDICAL DOCTORS, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

FACILITY OWNERSHIP DISTRIBUTION FOR NURSING PERSONNEL, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

Select Region & Country

Selected:: Kiribati

- Lithuania
- Luxembourg
- Malta
- Monaco
- Montenegro
- Netherlands
- North Macedonia
- Norway
- Poland
- Portugal
- Republic of Moldova
- Romania
- Russian Federation
- San Marino
- Serbia
- Slovakia
- Slovenia

% OF FEMALE BY OCCUPATION, LATEST AVAILABLE YEAR

86.3%

Nursing Personnel (2018)

% OF FOREIGN BORN BY OCCUPATION, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

% OF FOREIGN TRAINED BY OCCUPATION, LATEST AVAILABLE YEAR

3.3%

Nursing Personnel (2018)

Source: NHWA, 2020. For additional HRH data, please refer to this NHWA custom query, created April 7, 2021.

Kiribati

Build:

- **Health workforce shortage:** While a large proportion of the workforce is young (almost half are between the ages of 30 and 39), Kiribati faces a health worker shortage of higher trained medical doctors due to an aging population. Many senior level staff are approaching the compulsory retirement age of 50. (WHO, 2014)
- **Lack of pre-service education opportunities:** Kiribati relies heavily on overseas institutions for most health personnel and in-country production remains low (WHO,1998). Kiribati has a high number of medical students in Cuba which poses the challenge of creating a rise in salary expenditure which could significantly strain already stretched government budget. (Asante et al., 2012).
- **Lack of skilled workers:** Many health workers, including nurses and medical assistants, are trained on the job by senior staff and are reliant on in-service training or distanced short courses. There are limited opportunities for upskilling or career progression. (WHO,1998; WHO, 2014).

Manage:

- **Poor performance**: Health worker productivity is low due to high workloads, lack of responsibility, and low morale and motivation. (WHO, 2014)
- **Lack of central HRH Management**: There is no HRH department within the Ministry of Health and Medical Services (MHMS). Different aspects of health workforce management are split across departments and other Ministries making it very difficult to locate and track health worker records. (WHO, 2014).

Optimize:

- **Distribution and access**: The majority of health services are concentrated on Tarawa due to the high population density, with few outreach services to the outer islands. Nurses provide many of the services across the country and are usually the only types of health workers available in the outer islands. (WHO, 2014)

Samoa

Country: Samoa
Population (UNSD): 197,093 (2019)
GNI per capita (PPP Intl $): 4,840 (2013)
Life expectancy at birth: 75.1 (2016)
Total expenditure on health per capita (Intl $): 418 (2014)
Source: https://www.who.int/countries

Select Region & Country

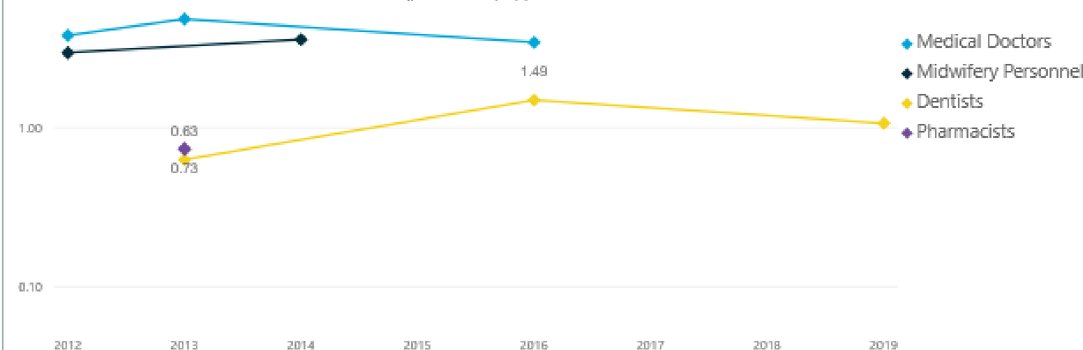
Selected:: Samoa

- Fiji
- Japan
- Kiribati
- Lao People's Democratic Republic
- Malaysia
- Marshall Islands
- Micronesia (Federated States of)
- Mongolia
- Nauru
- New Zealand
- Niue
- Palau
- Papua New Guinea
- Philippines
- Republic of Korea
- Samoa (selected)
- Singapore

STOCK BY OCCUPATION, LATEST AVAILABLE YEAR

Occupation	Year	Number	Density (per 10,000 pop)
Medical Doctors	2016	67	3
Midwifery Personnel	2014	69	3
Dentists	2019	21	1
Pharmacists	2013	14	0
Total		**171**	**8.**

DENSITY (per 10,000 pop) BY OCCUPATION, LAST 10 YEARS



AGE DISTRIBUTION BY OCCUPATION, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

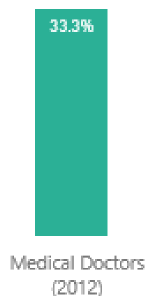
FACILITY OWNERSHIP DISTRIBUTION FOR MEDICAL DOCTORS, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

FACILITY OWNERSHIP DISTRIBUTION FOR NURSING PERSONNEL, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

% OF FEMALE BY OCCUPATION, LATEST AVAILABLE YEAR



Medical Doctors
(2012)

% OF FOREIGN BORN BY OCCUPATION, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

% OF FOREIGN TRAINED BY OCCUPATION, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

Source: NHWA, 2020. For additional HRH data, please refer to this NHWA custom query, created April 7, 2021.

Samoa

Build:

- **Attrition:** Samoa experience high attrition rates in most health professional cadres. (WHO, 1998)
- **Recruitment shortage**: Samoa's bonding scheme has been largely unsuccessful due to difficulties of enforcement. Many health professionals that had received scholarships were found to have broken their contracts. (WHO, 1998)

Manage:

- **Retention incentives (for overseas Pacific health professional graduates):** Nearly seven years after graduation from a NZ University, only 7% of respondents were working in PICs, but 40% intended to work in PICs in the future. The main factors influencing that intention were an adequate income, job availability, and good working conditions. Additional important motivators were also the wish to give something back and presence of family. (Nair et al., 2012)
- **Decentralization of management**: Staffing responsibilities and management if smaller facilities was transferred to local community management. (WHO, 1998)

Optimize:

- **Systemic health workforce planning**: All activities related to health workforce planning are coordinated by the Health Resource Planning Information Research and Development Division of the DOH. There is a department wide computer-based information system with function capabilities to strengthen health workforce planning. (WHO, 1998)
- **Virtual Learning:** New Zealand academic institutions could provide support for in-country training in Fiji and Samoa through such methods as web-based teaching (webinars), providing second opinions in difficult cases and enabling exchanges of senior health professionals in both directions. (Nair et al., 2012)

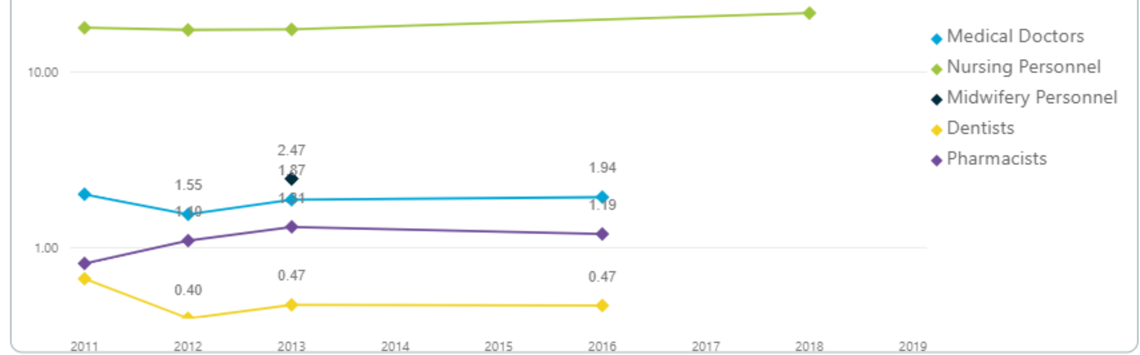
Solomon Islands

Country: **Solomon Islands**
Population (UNSD): **669,821 (2019)**
GNI per capita (PPP Intl $): **1,810 (2013)**
Life expectancy at birth: **71.1 (2016)**
Total expenditure on health per capita (Intl $): **108 (2014)**
Source: **https://www.who.int/countries**

STOCK BY OCCUPATION, LATEST AVAILABLE YEAR

Occupation	Number	Density (per 10,000 pop)
Medical Doctors	120	1.94
Nursing Personnel	1,413	21.64
Midwifery Personnel	141	2.47
Dentists	29	0.47
Pharmacists	74	1.19
Total	**1,777**	**27.22**

DENSITY (per 10,000 pop) BY OCCUPATION, LAST 10 YEARS



Select Region & Country

Selected:: Solomon Islands

- Marshall Islands
- Micronesia (Federated States of)
- Mongolia
- Nauru
- New Zealand
- Niue
- Palau
- Papua New Guinea
- Philippines
- Republic of Korea
- Samoa
- Singapore
- Solomon Islands (selected)
- Tonga
- Tuvalu
- Vanuatu
- Viet Nam

AGE DISTRIBUTION BY OCCUPATION, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

FACILITY OWNERSHIP DISTRIBUTION FOR MEDICAL DOCTORS, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

FACILITY OWNERSHIP DISTRIBUTION FOR NURSING PERSONNEL, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

% OF FEMALE BY OCCUPATION, LATEST AVAILABLE YEAR

Nursing Personnel (2018)

% OF FOREIGN BORN BY OCCUPATION, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

% OF FOREIGN TRAINED BY OCCUPATION, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

Source: NHWA, 2020. For additional HRH data, please refer to this [NHWA custom query, created April 7, 2021](#).

Solomon Islands

Build:

- **Specialized education:** The **shortage** of child health nurses is a limiting factor for improving the quality of child health services.. Current methods of training require overseas travel, or are expensive, or lack relevance, or remove nurses from their work-places and families for prolonged periods of time. Establishing a **local** post-basic child health nursing course may address these issues. (Colquhoun et al., 2012)
- **Migration:** Unreliability of remuneration leads health workers to seek employment and higher salaries in other countries. (WHO, 2014)

Manage:

- **Policy development and enforcement:** The 'wontok' system is built on the premise that loyalties to kin supersede all other loyalties. Cultural, kinship or hierarchical systems prevent the unbiased application of rules and regulations to all health workers. Policy coordination as decision making at the national level must be balanced with the role of community leaders. (Henderson et al., 2008)
- **Motivation:** Key incentives identified were education and training for midwives, establishment of male peer educator programs, **professional development and in-service training opportunities** (attending conferences, establishment of Midwifery Association). (Dawson et al., 2011; WHO, 2014)
- **Leadership and management capacity:** Management skills are reportedly weak at the provincial level. Provincial Health Director positions experience **high turnover** due to new appointees being recent clinical graduates with no **training** in public health planning or health services management. (Asante et al., 2011; Dinnen et al., 2007)

Optimize:

- **Supportive supervision:** Provincial health directors are not provided with effective management support and supervision. There are no performance management systems in place to ensure that staff are properly assessed and supported. (Asante et al., 2014)

Tonga

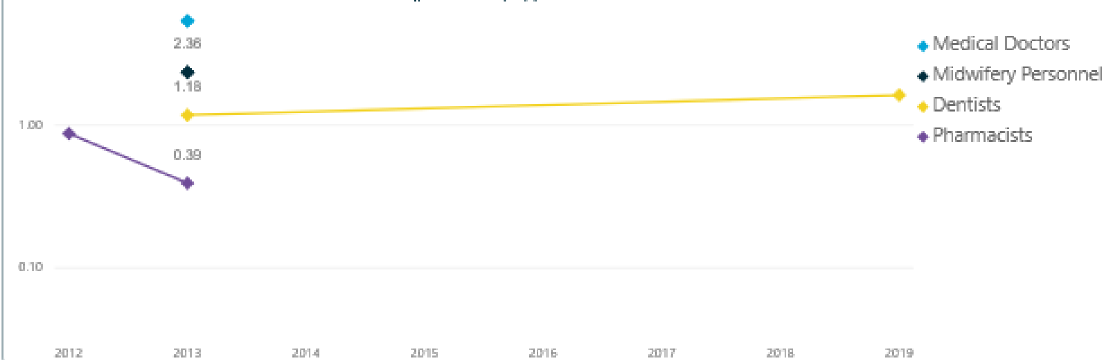
Country: Tonga
Population (UNSD): 104,497 (2019)
GNI per capita (PPP Intl $): 5,450 (2013)
Life expectancy at birth: 73.4 (2016)
Total expenditure on health per capita (Intl $): 270 (2014)
Source: https://www.who.int/countries

Select Region & Country
Selected:: Tonga
- Marshall Islands
- Micronesia (Federated States of)
- Mongolia
- Nauru
- New Zealand
- Niue
- Palau
- Papua New Guinea
- Philippines
- Republic of Korea
- Samoa
- Singapore
- Solomon Islands
- Tonga
- Tuvalu
- Vanuatu
- Viet Nam

STOCK BY OCCUPATION, LATEST AVAILABLE YEAR

Occupation	Year	Number	Density (per 10,000 pop)
Medical Doctors	2013	55	5
Midwifery Personnel	2013	24	2
Dentists	2019	17	1
Pharmacists	2013	4	0
Total		**100**	**9.**

DENSITY (per 10,000 pop) BY OCCUPATION, LAST 10 YEARS



AGE DISTRIBUTION BY OCCUPATION, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

FACILITY OWNERSHIP DISTRIBUTION FOR MEDICAL DOCTORS, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

FACILITY OWNERSHIP DISTRIBUTION FOR NURSING PERSONNEL, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

% OF FEMALE BY OCCUPATION, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

% OF FOREIGN BORN BY OCCUPATION, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

% OF FOREIGN TRAINED BY OCCUPATION, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

Source: NHWA, 2020. For additional HRH data, please refer to this NHWA custom query, created April 7, 2021.

Tonga

Build:

- **Donor led training:** Health workforce training is largely donor funded and mis-aligned to Ministry of Health requirements and long-term training plan. This inability to direct health worker production leads to reduced HRH utilization and effectiveness. (WHO, 2014)
- **Workforce shortage (of skilled heath workers):** Factors that contribute to the shortage of skilled health workers include a lack of effective planning, limited health budgets, migration of health workers, inadequate numbers of students entering and/or completing professional training, limited employment opportunities, low salaries, poor working conditions, weak support and supervision, and limited opportunities for professional development. (Henderson et al., 2008)

Manage:

- **Workforce attrition:** Tonga faces high turnover of specific cadres (mainly medical laboratory technicians) caused by external migration to New Zealand for higher remuneration. (WHO, 2014).
- **Policy Making:** A study on migrant nurses in Australia concluded that remittances contributed more to the income of migrant sending countries, than the cost of the additional human capital in nurse training. Therefore, government policies encouraging investment in strengthening their health workforce may be more effective than policies directly discouraging brain drain in contributing to national development. (Connell et al., 2004)

Optimize:

- **HRH database:** Improving the current (excel based) HRH database, by creating a dynamic, automated, and interoperable system will improve access to timely information needed to generate evidence and inform decisions and policy development. (WHO, 2014)

Vanuatu

Country: **Vanuatu**
Population (UNSD): **299,882 (2019)**
GNI per capita (PPP Intl $): **2,840 (2013)**
Life expectancy at birth: **72 (2016)**
Total expenditure on health per capita (Intl $): **150 (2014)**
Source: **https://www.who.int/countries**

Select Region & Country

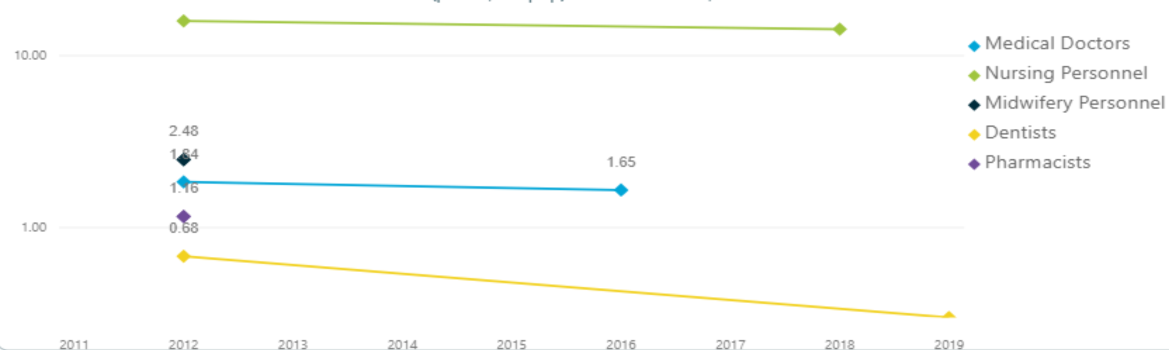
Selected:: Vanuatu

- Marshall Islands
- Micronesia (Federated States of)
- Mongolia
- Nauru
- New Zealand
- Niue
- Palau
- Papua New Guinea
- Philippines
- Republic of Korea
- Samoa
- Singapore
- Solomon Islands
- Tonga
- Tuvalu
- Vanuatu (selected)
- Viet Nam

STOCK BY OCCUPATION, LATEST AVAILABLE YEAR

Occupation	Number	Density (per 10,000 pop)
Medical Doctors	46	1.65
Nursing Personnel	417	14.25
Midwifery Personnel	62	2.48
Dentists	9	0.30
Pharmacists	29	1.16
Total	**563**	**18.77**

DENSITY (per 10,000 pop) BY OCCUPATION, LAST 10 YEARS



AGE DISTRIBUTION BY OCCUPATION, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

FACILITY OWNERSHIP DISTRIBUTION FOR MEDICAL DOCTORS, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

FACILITY OWNERSHIP DISTRIBUTION FOR NURSING PERSONNEL, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

% OF FEMALE BY OCCUPATION, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

% OF FOREIGN BORN BY OCCUPATION, LATEST AVAILABLE YEAR

NO DATA AVAILABLE

% OF FOREIGN TRAINED BY OCCUPATION, LATEST AVAILABLE YEAR

Source: NHWA, 2020. For additional HRH data, please refer to this NHWA custom query, created April 7, 2021.

Vanuatu

Build:

- **Severe shortage**: Vanuatu has the third lowest health workforce density in the Pacific region with the greatest shortages in rural areas. The main causes are aging workforce (estimated 40 health workers retiring each year) and insufficient production of graduates to replace them. (WHO, 2014)

Manage:

- **Performance:** Improving service provider **training** on youth-friendly services improved service utilization and health worker performance. (Kennedy et al., 2013)
- **Supervision/management capacity:** Clinical services at many provincial hospital pharmacies are provided by **foreign medical staff** traveling to Vanuatu for short term appointments. Interviewees gave several examples where these workers did not follow local procedures and there was no management system in place to provide feedback and enforce working standards. (Brown et al., 2012)
- **Human resource management:** Strategic health plans and health workforce development plans have not been fully implemented. Development of an effective **human resource information system** is recommended to facilitate policy implementation and strengthen HRH management. (WHO, 2014)

Optimize:

- **Time management:** Heavy **training schedules** at provincial health centers resulted in health workers reportedly attending up to nine or more work related week-long refresher workshops over a twelve-month period. Consequences included loss of service delivery - centers were closed or **short-staffed** during training activities (20% of their service provision hours). (Brown et al., 2012)
- **Equal access to care:** Study on access found that reducing poverty and making services more available and accessible to the poor may be essential for improving overall reproductive health care utilization rate in Vanuatu. (Rahman et al., 2011)

ANNEX 2: Bibliography

Bibliography

1. Asante, A.D., Negin, J., Hall, J. et al. Analysis of policy implications and challenges of the Cuban health assistance program related to human resources for health in the Pacific. Hum Resources Health 10, 10 (2012). https://doi.org/10.1186/1478-4491-10-10
2. Asante, A, Hall, J, Human Resources for Health in Maternal, Neonatal and Reproductive Health at Community Level: A review of health leadership and management capacity in Papua New Guinea, (2011) University of New south Wales, Sydney
3. Asante, A, Hall, J 2011, A review of health leadership and management capacity in Solomon Islands, University of New south Wales, Sydney https://sphcm.med.unsw.edu.au/sites/default/files/sphcm/Centres_and_Units/LM_SolomonIslands_Summary.pdf
4. Asante, A, Roberts, G and Hall, J 2011, A review of health leadership and management capacity in Fiji, Human Resources for Health Knowledge Hub, University of New south Wales, Sydney https://sphcm.med.unsw.edu.au/sites/default/files/sphcm/Centres_and_Units/LM_Fiji_Report.pdf
5. Brown A, Gilbert B. The Vanuatu medical supply system - documenting opportunities and challenges to meet the Millennium Development Goals. South Med Rev. 2012;5(1):14-21. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3471189/
6. Colquhoun, S., Ogaoga, D., Tamou, M. et al. Child health nurses in the Solomon Islands: lessons for the Pacific and other developing countries. Hum Resour Health 10, 45 (2012). https://doi.org/10.1186/1478-4491-10-45
7. Connell, J., Brown, R.P. The remittances of migrant Tongan and Samoan nurses from Australia. Hum Resour Health 2, 2 (2004). https://doi.org/10.1186/1478-4491-2-2
8. Dawson, Howes, Gray, and Kennedy 2011, Human Resources for Health in Maternal, Neonatal and Reproductive Health at Community Level: a Profile of Fiji, Human Resources for Health Knowledge Hub, University of New south Wales, Sydney
9. Dawson, Howes, Gray, Kennedy 2011, Human Resources for Health in Maternal, Neonatal and Reproductive Health at Community Level: A profile of Solomon Islands, University of New south Wales, Sydney https://sphcm.med.unsw.edu.au/sites/default/files/sphcm/Centres_and_Units/MNRH_SolomonIslands_Summary.pdf
10. Dinnen S. A comment on state-building in Solomon Islands. J Pac Hist. 2007;42:255–63.
11. Frehywot, S., Park, C. & Infanzon, A. Medical diaspora: an underused entity in low- and middle-income countries' health system development. Hum Resour Health 17, 56 (2019). https://doi.org/10.1186/s12960-019-0393-1

Bibliography

12. George, A., Campbell, J., Ghaffar, A. et al. Advancing the science behind human resources for health: highlights from the Health Policy and Systems Research Reader on Human Resources for Health. Hum Resour Health 16, 35 (2018). https://doi.org/10.1186/s12960-018-0302-z
13. Husna Razee, Maxine Whittaker, Rohan Jayasuriya, Lorraine Yap, Lee Brentnall. Listening to the rural health workers in Papua New Guinea – The social factors that influence their motivation to work, Social Science & Medicine, Volume 75, Issue 5, 2012
14. Henderson, L.N., Tulloch, J. Incentives for retaining and motivating health workers in Pacific and Asian countries. Hum Resour Health 6, 18 (2008). https://doi.org/10.1186/1478-4491-6-18
15. Jayasuriya R, Jayasinghe UW, Wang Q. Health worker performance in rural health organizations in low- and middle-income countries: do organizational factors predict non-task performance? Soc Sci Med. 2014;113:1–4.
16. Keni, B.H. Training competent and effective Primary Health Care Workers to fill a void in the outer islands health service delivery of the Marshall Islands of Micronesia. Hum Resour Health 4, 27 (2006). https://doi.org/10.1186/1478-4491-4-27
17. Kennedy, E.C., Bulu, S., Harris, J. et al. "Be kind to young people so they feel at home": a qualitative study of adolescents' and service providers' perceptions of youth-friendly sexual and reproductive health services in Vanuatu. BMC Health Serv Res 13, 455 (2013). https://doi.org/10.1186/1472-6963-13-455
18. Nair, S.M., Mishra, P.R., Norris, P.T. et al. The destination of Pacific Island health professional graduates from a New Zealand university. Hum Resour Health 10, 24 (2012). https://doi.org/10.1186/1478-4491-10-24
19. Oman, K., Rodgers, E., Usher, K. et al. Scaling up specialist training in developing countries: lessons learned from the first 12 years of regional postgraduate training in Fiji – a case study. Hum Resour Health 10, 48 (2012). https://doi.org/10.1186/1478-4491-10-48
20. Oman, K.M., Moulds, R. & Usher, K. Specialist training in Fiji: Why do graduates migrate, and why do they remain? A qualitative study. Hum Resour Health 7, 9 (2009). https://doi.org/10.1186/1478-4491-7-9
21. Putri, L.P., O'Sullivan, B.G., Russell, D.J. et al. Factors associated with increasing rural doctor supply in Asia-Pacific LMICs: a scoping review. Hum Resour Health 18, 93 (2020). https://doi.org/10.1186/s12960-020-00533-4

Bibliography

22. Raman, S, Iljadica, A, Gyaneshwar, R, Taito, R, Fong, J 2015 Improving maternal and child health systems in Fiji through a perinatal mortality audit, International Journal of Gynecology & Obstetrics
23. Rahman, M., Haque, S.E., Mostofa, M.G. et al. Wealth inequality and utilization of reproductive health services in the Republic of Vanuatu: insights from the multiple indicator cluster survey, 2007. Int J Equity Health 10, 58 (2011). https://doi.org/10.1186/1475-9276-10-58
24. Rosewell, A, Bieb, S, Clark, G, MacIntyre, R, Zwi, A, Human resources for health: lessons from the cholera outbreak in Papua New Guinea. Western Pac Surveill Response J. 2013 Jul-Sep; 4(3): 9–13.
25. Tynan, A., Vallely, A., Kelly, A. et al. Sociocultural and individual determinants for motivation of sexual and reproductive health workers in Papua New Guinea and their implications for male circumcision as an HIV prevention strategy. Hum Resour Health 11, 7 (2013). https://doi.org/10.1186/1478-4491-11-7
26. Withy, K, Aiototo, N, Berry, S, Amoa, F, Untalan, F. Maximizing Successful Pursuit of Health Careers in Micronesia: What to do? Developing Human Resources in the Pacific Vol 14. No 1. 2007. http://pacifichealthdialog.org.fj/Volume2014/No1/Original20Papers/Maximizing20Successful20Pursuit20of20Health20Careers20in.pdf
27. World Health Organization. National Heath Workforce Accounts Data Portal (NHWA, 2020) https://apps.who.int/nhwaportal/
28. World Health Organization. State of the World's Nursing 2020 Country Profiles. (SOWN, 2020) https://apps.who.int/nhwaportal/SOWN/Index
29. World Health Organization. National Health Work Plan: Republic of Kiribati (1998-2020)
30. World Health Organization. National Health Work Plan: Republic of the Marshall Islands (1998-2020)
31. World Health Organization. National Health Work Plan: Republic of Palau (1998-2020)
32. World Health Organization. National Health Work Plan: Republic of Palau (1998-2020)
33. World Health Organization. National Health Work Plan: Republic of Samoa (1998-2020)
34. World Health Organization. National Health Work Plan: Kingdom of Tonga (1998-2020)
35. World Health Organization. Regional Office for the Western Pacific (Manila : WHO Regional Office for the Western Pacific, 2014) Human Resources for Health Country Profiles: Republic of Kiribati

Bibliography

36. World Health Organization. Regional Office for the Western Pacific (Manila : WHO Regional Office for the Western Pacific, 2020) Human Resources for Health Country Profiles: Papua New Guinea
37. World Health Organization. Regional Office for the Western Pacific (Manila : WHO Regional Office for the Western Pacific, 2014) Human Resources for Health Country Profiles: Marshall Islands
38. World Health Organization. Regional Office for the Western Pacific (Manila : WHO Regional Office for the Western Pacific, 2014) Human Resources for Health Country Profiles: Solomon Islands
39. World Health Organization. Regional Office for the Western Pacific (Manila : WHO Regional Office for the Western Pacific, 2014) Human Resources for Health Country Profiles: Tonga
40. World Health Organization. Regional Office for the Western Pacific (Manila : WHO Regional Office for the Western Pacific, 2014) Human Resources for Health Country Profiles: Vanuatu