

# Pacific Biomedical Network Meeting

## 2023 Biomedical Situational Analysis

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# Background/Introduction

- Previous Situational Analysis surveys conducted 2014 and 2019
- Additional survey conducted in 2022 to identify key challenges experienced by the biomedical workforce and identify key areas for support
- Distributed to, and received data from, 16 countries ahead of 2023 regional meeting
- Self-reported preliminary data only – for further collaboration to establish complete picture of status, identify gaps, and develop future plans of work and collaboration.

# Key Findings

## Workforce

- Increasing number of biomedical staff across the region
- Higher representation of women
- Younger workforce (<40 years)
- Higher number of those with Bachelor's Degree qualifications

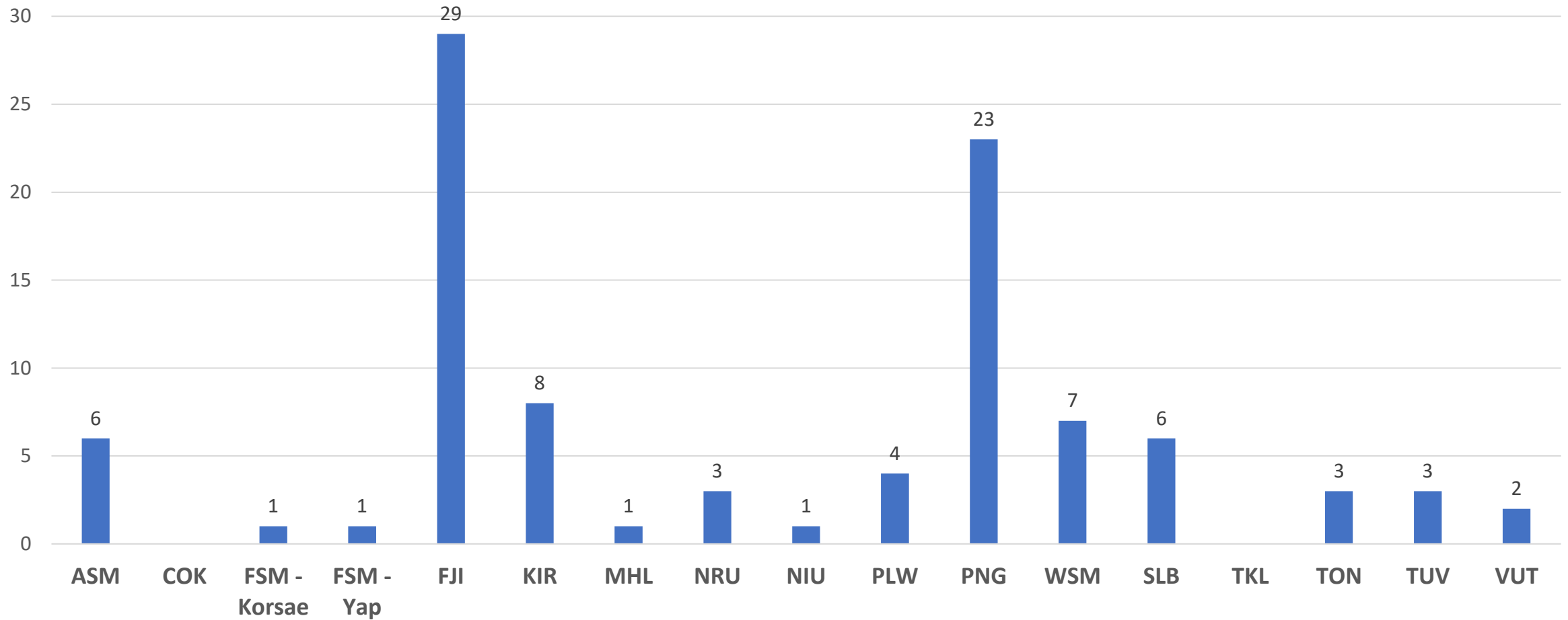
## Overall Biomedical Situation

- Overall gradual development of national policies and systems
- Dependent on availability and capacity of national staff

# Workforce

Total Reported\* Workforce by Country 2023

**Total: 98 Biomedical Staff\***



*\*Reported during collection of conference data – under development in collaboration with PICTs, currently underestimated*

# Workforce

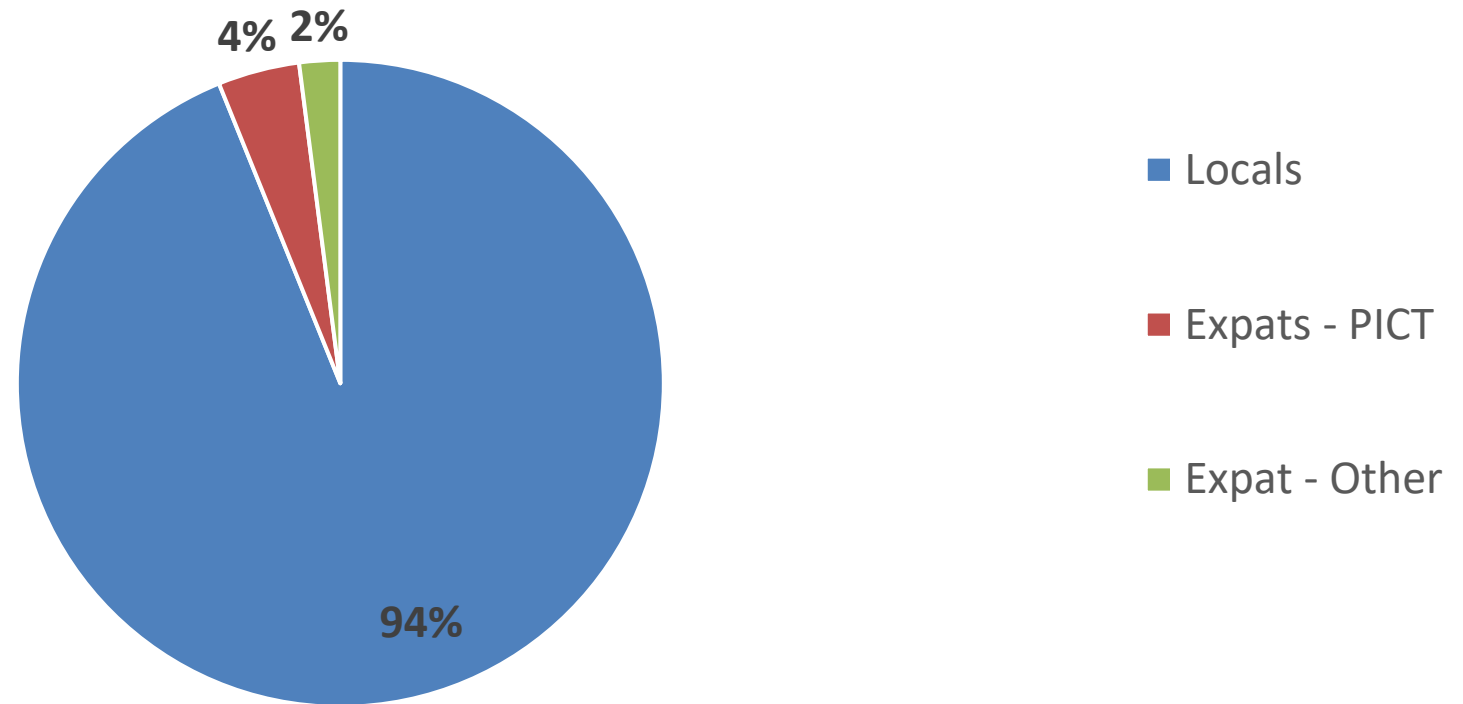
**Total 2014: 13**  
**Total 2023: 26 (100% increase)**

Workforce Comparison 2014 - 2023



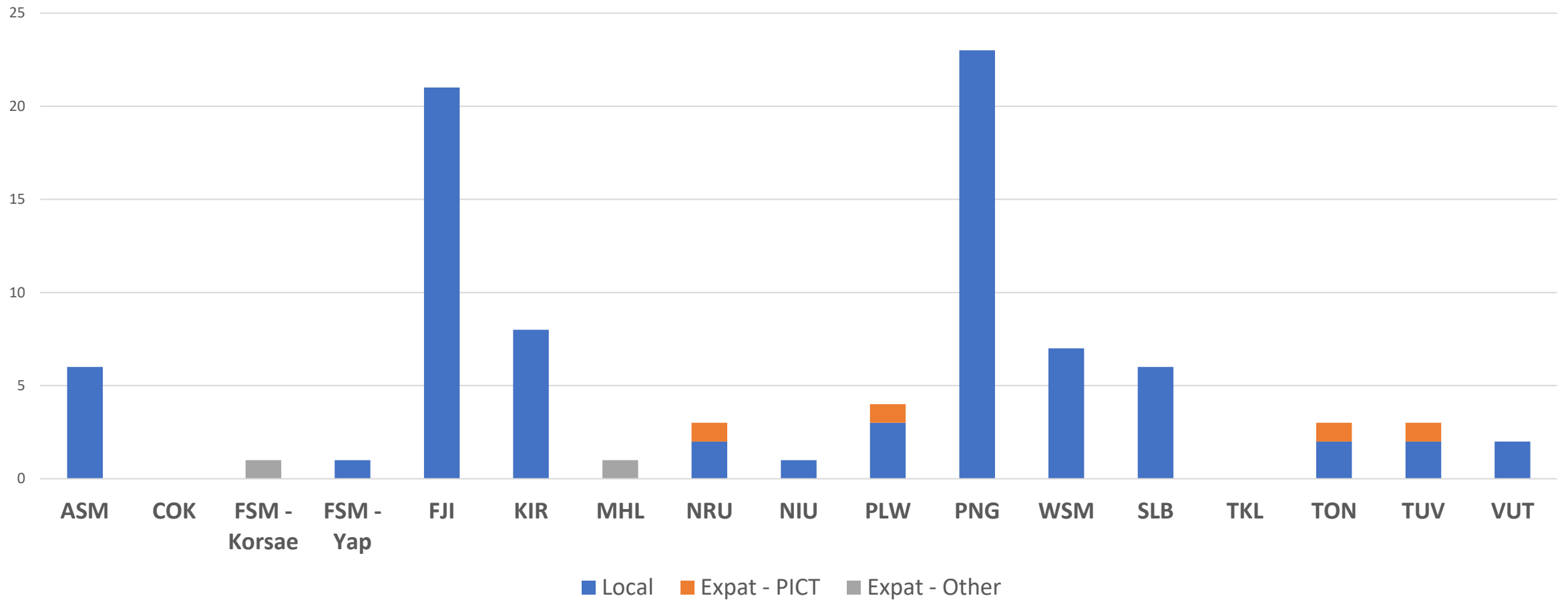
# Workforce - Nationality

Nationality of Biomedical Workforce



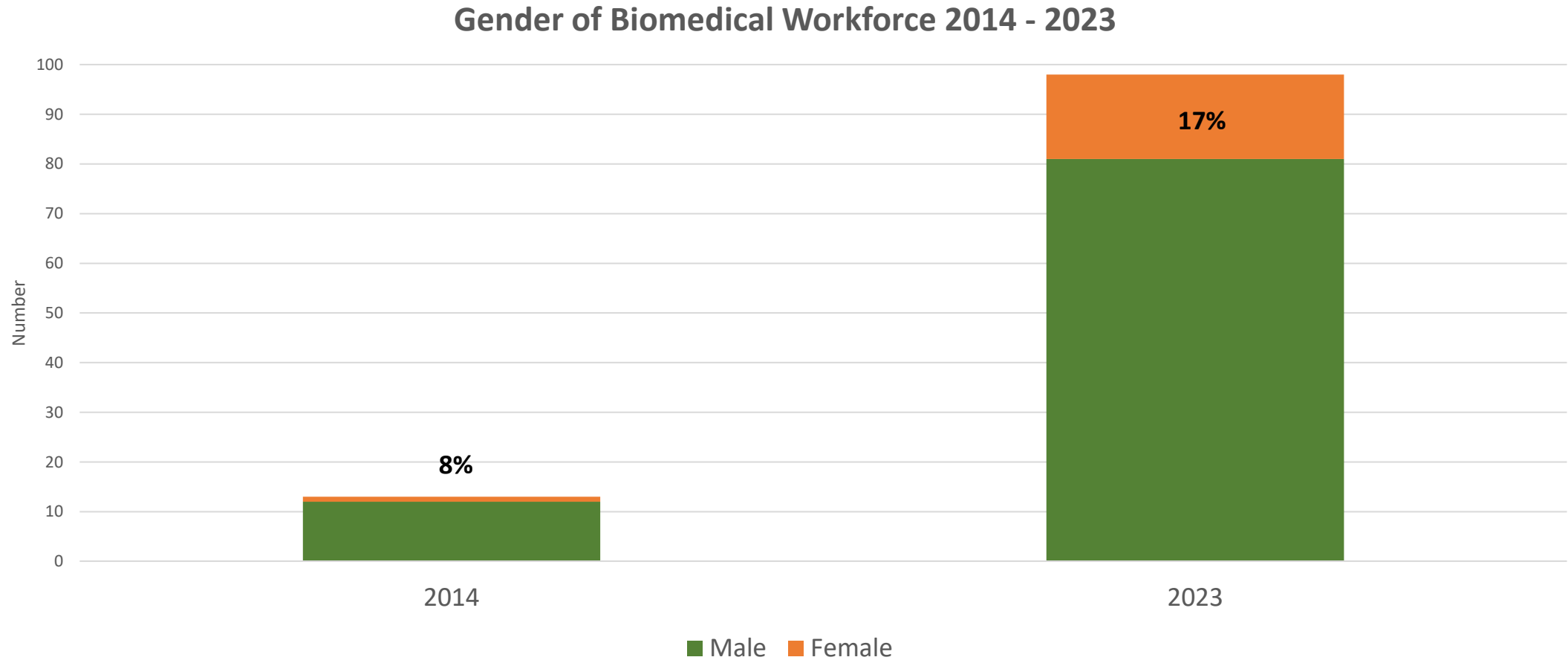
# Workforce - Nationality

Nationality of Workforce by Country 2023



# Workforce - Gender

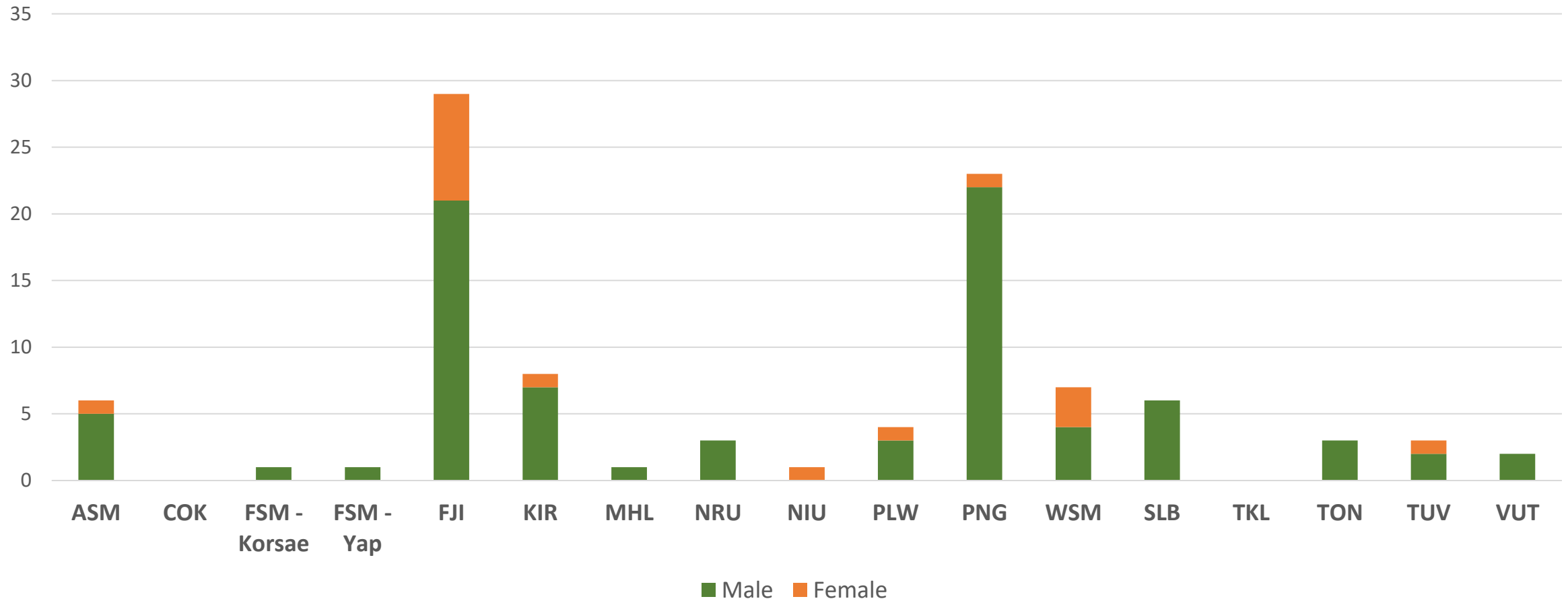
17% of workforce in 2023 is female





# Workforce - Gender

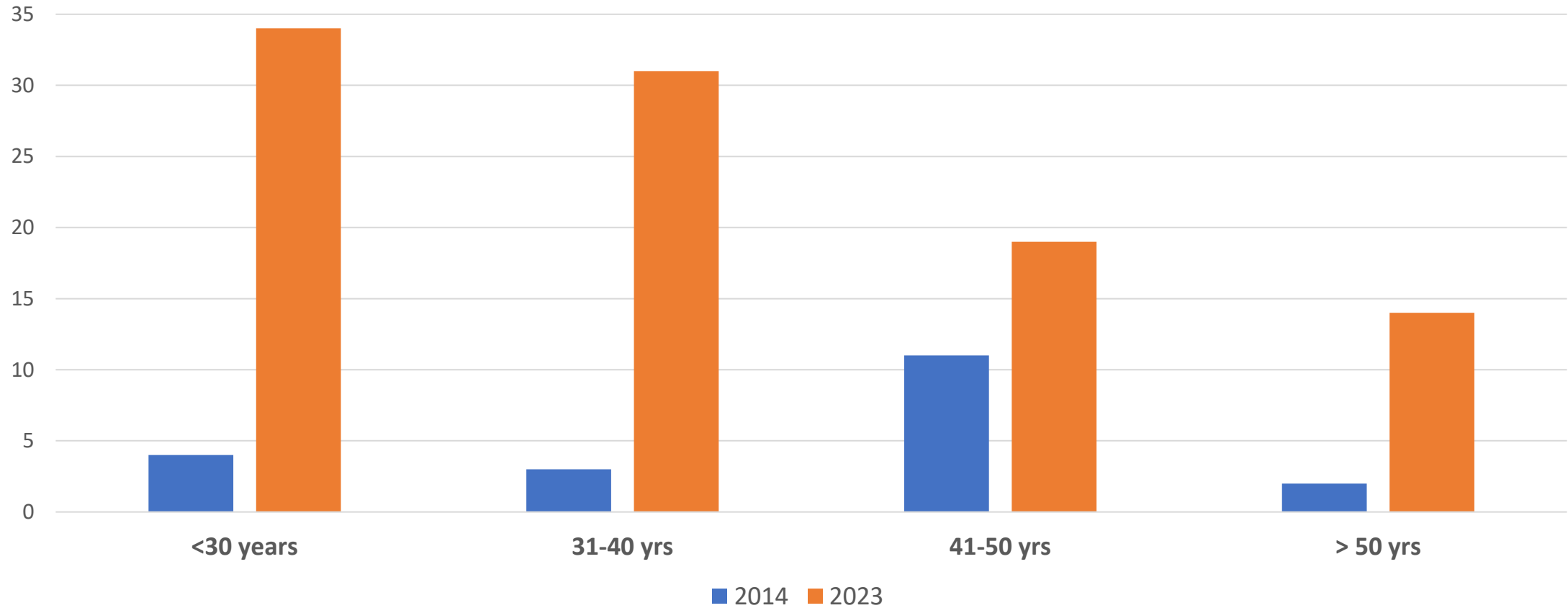
Gender of Workforce by Country 2023



# Workforce - Age

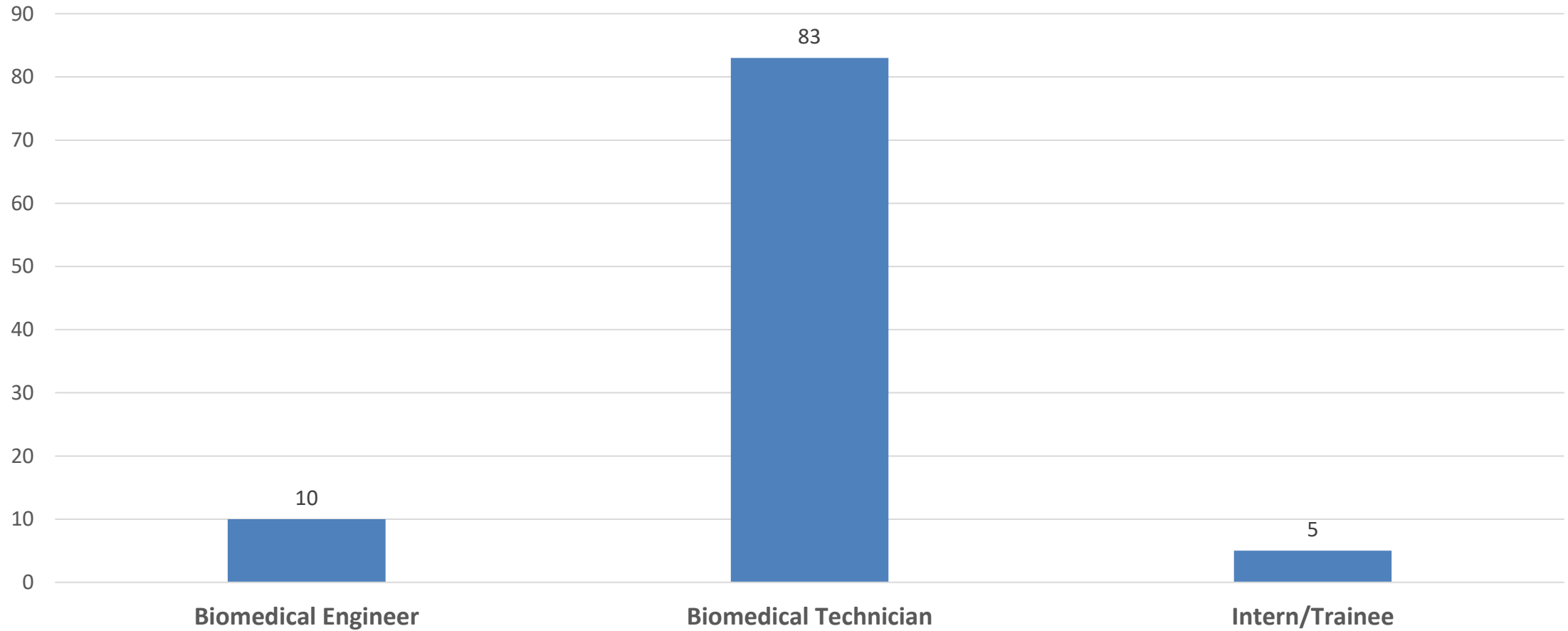
66% of workforce <40 yrs

Age of Biomedical Workforce: 2014-2023



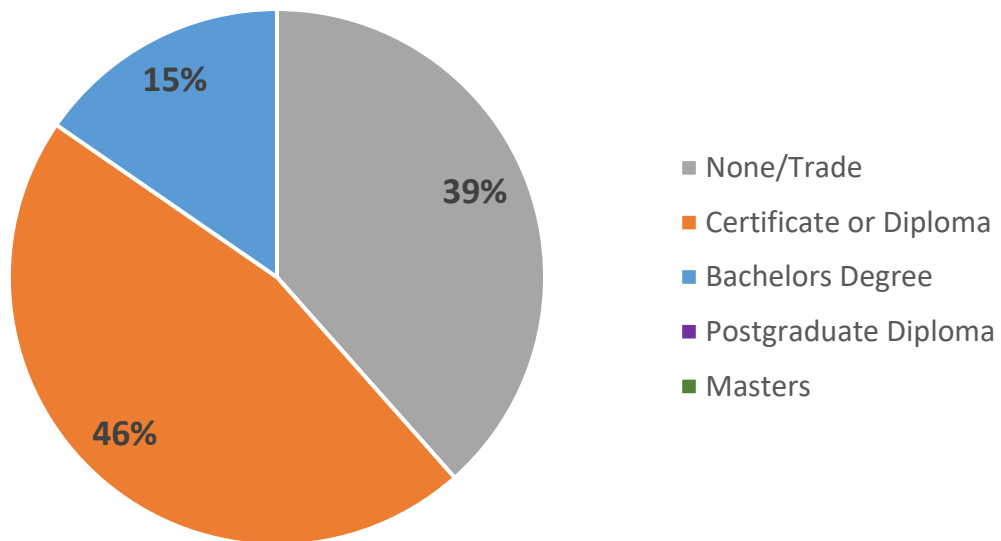
# Workforce

2023 Biomedical Workforce by Role

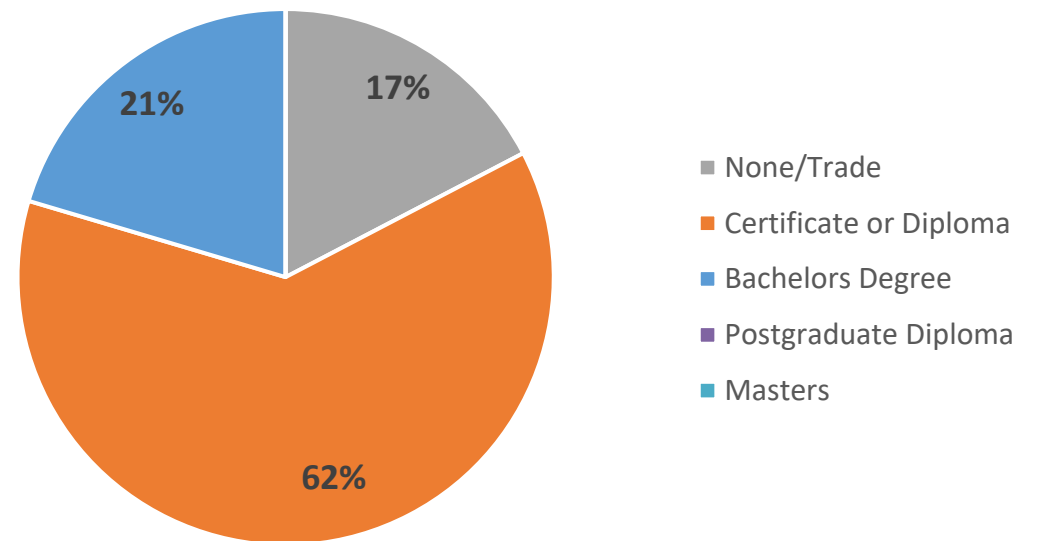


# Workforce - Qualifications

Highest Level of Training/Qualifications - 2014

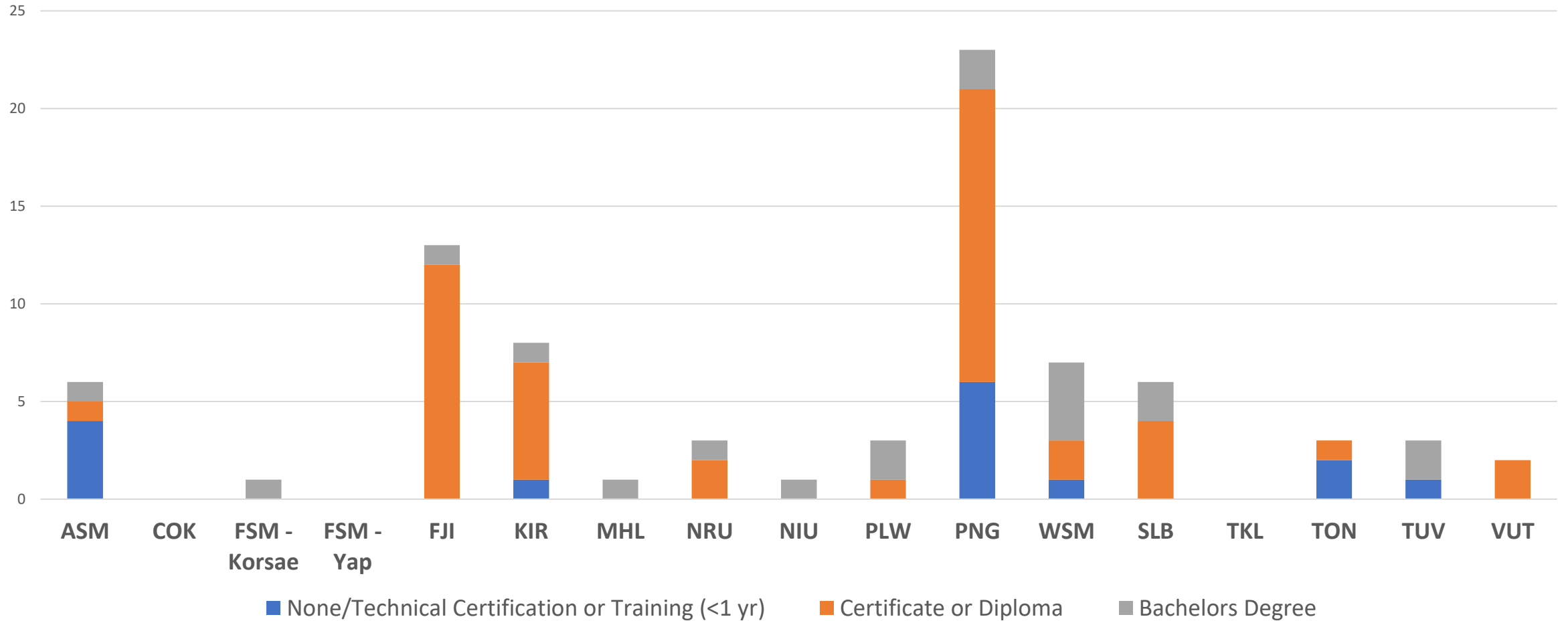


Highest Level of Training/Qualifications - 2023



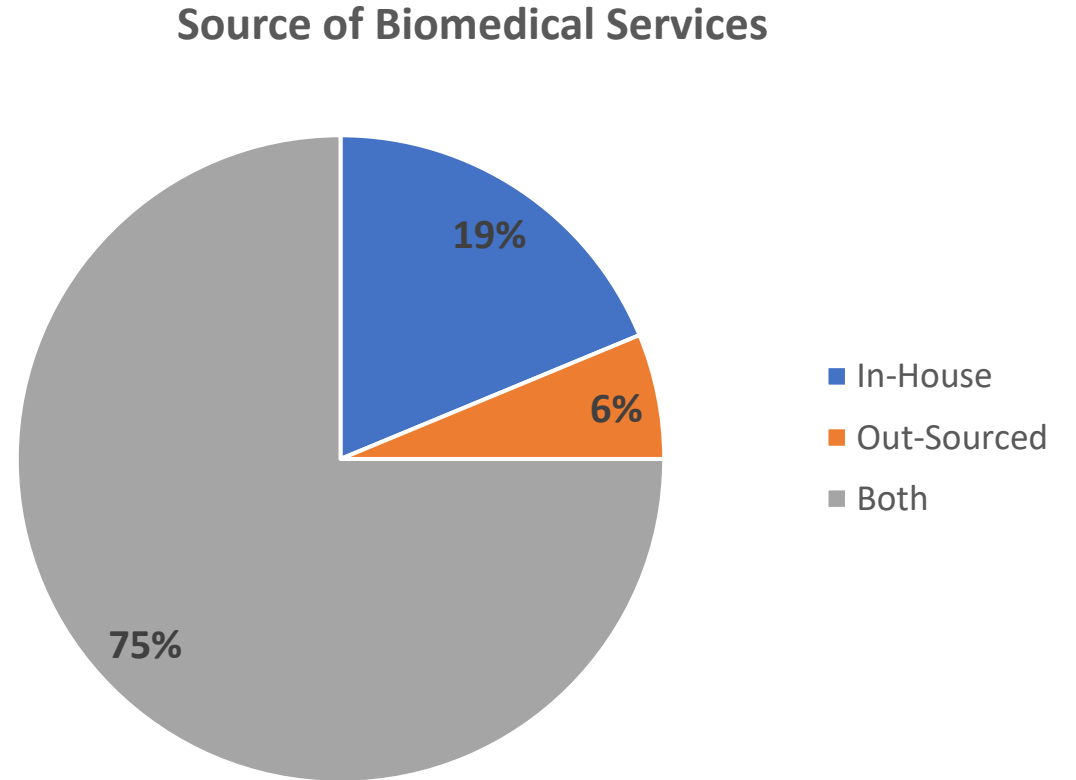
# Workforce - Qualifications

Qualifications by Country 2023

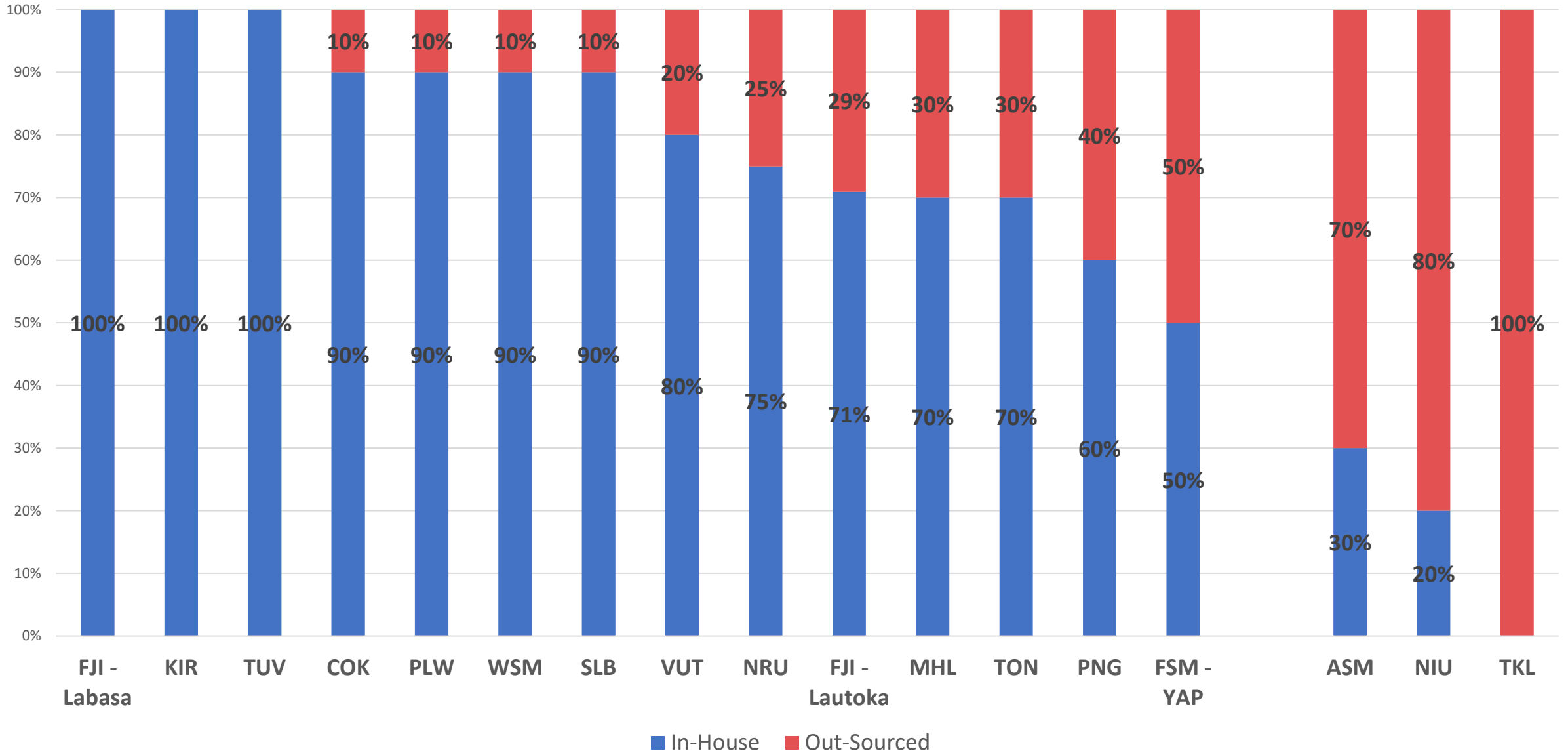


# Biomedical Services

- 19% (3 of the 16 countries surveyed) indicated they had 100% capacity in-house for biomedical services



## Source of Biomedical Services



<b>American Samoa (ASM)</b>
<b>Cook Islands (COK)</b>
<b>Federated States Micronesia (FSM) - Kosrae</b>
<b>Federated States Micronesia (FSM) - Yap</b>
<b>Fiji (FJI) - Labasa</b>
<b>Fiji (FJI) - Suva</b>
<b>Kiribati (KIR)</b>
<b>Marshall Islands (MHL)</b>
<b>Nauru (NRU)</b>
<b>Niue (NIU)</b>
<b>Palau (PLW)</b>
<b>Papua New Guinea (PNG)</b>
<b>Samoa (WSM)</b>
<b>Solomon Islands (SLB)</b>
<b>Tokelau (TKL)</b>
<b>Tonga (TON)</b>
<b>Tuvalu (TUV)</b>
<b>Vanuatu (VUT)</b>

<b>Equipment Policy</b>		
<b>2014</b>	<b>2019</b>	<b>2023</b>
		Drafted
Approved	Implemented	Implemented (RR)
	Implemented (R)	Non-Existent
Non-Existent	Non-Existent	Non-Existent
	Implemented (NF)	Implemented
Non-existent	Implemented (NF)	Implemented
Implemented	Implemented (NF)	Drafted
	Planned	Drafted
	Non-Existent	Planned
	Planned	Drafted
	Implemented (RR)	Non-Existent
		Implemented
Implemented	Implemented (NF)	Implemented
Planned	Not Sure	Planned
Non-existent	Planned	Planned
	Planned	Planned
Drafted	Drafted	Drafted
Non-existent	Non-existent	Drafted

<b>Equipment Committee</b>		
<b>2014</b>	<b>2019</b>	<b>2023</b>
		Exists (NA)
Approved	Exists (NA)	Exists (A)
	Exists (A)	Non-Existent
Non-Existent	Exists (NA)	Non-Existent
	Exists (A)	Exists (A)
Exists (A)	Exists (NA)	Exists (A)
Exists (A)	Exists (NA)	Drafted
	Exists (NA)	Non-Existent
	Non-Existent	Planned
	Exists (A)	Exists (A)
	Planned	Planned
		Exists (A)
Exists (A)	Exists (NA)	Exists (NA)
Drafted	Not Sure	Exists (NA)
Exists (A)	Non-existent	Exists (NA)
	Exists (A)	Planned
Exists (A)	Exists (NA)	Drafted
Non-existent	Non-existent	Planned

<b>Procedure Manual</b>		
<b>2014</b>	<b>2019</b>	<b>2023</b>
		Drafted
Non-existent	Planned	Implemented
	Implemented (RR)	Implemented
Implemented (RR)	Implemented (RR)	Non-Existent
	Not Sure	Implemented
Drafted	-	Implemented
Implemented	Implemented (NF)	Drafted
	Planned	Planned
	Non-Existent	Planned
	Planned	Planned
	Planned	Drafted
		Implemented
Implemented	Implemented (RR)	Implemented (RR)
Non-existent	Not Sure	Drafted
Non-existent	Non-Existent	Non-Existent
	Implemented (RR)	Planned
Non-Existent	Non-Existent	Non-Existent
Non-existent	Implemented (R)	Implemented

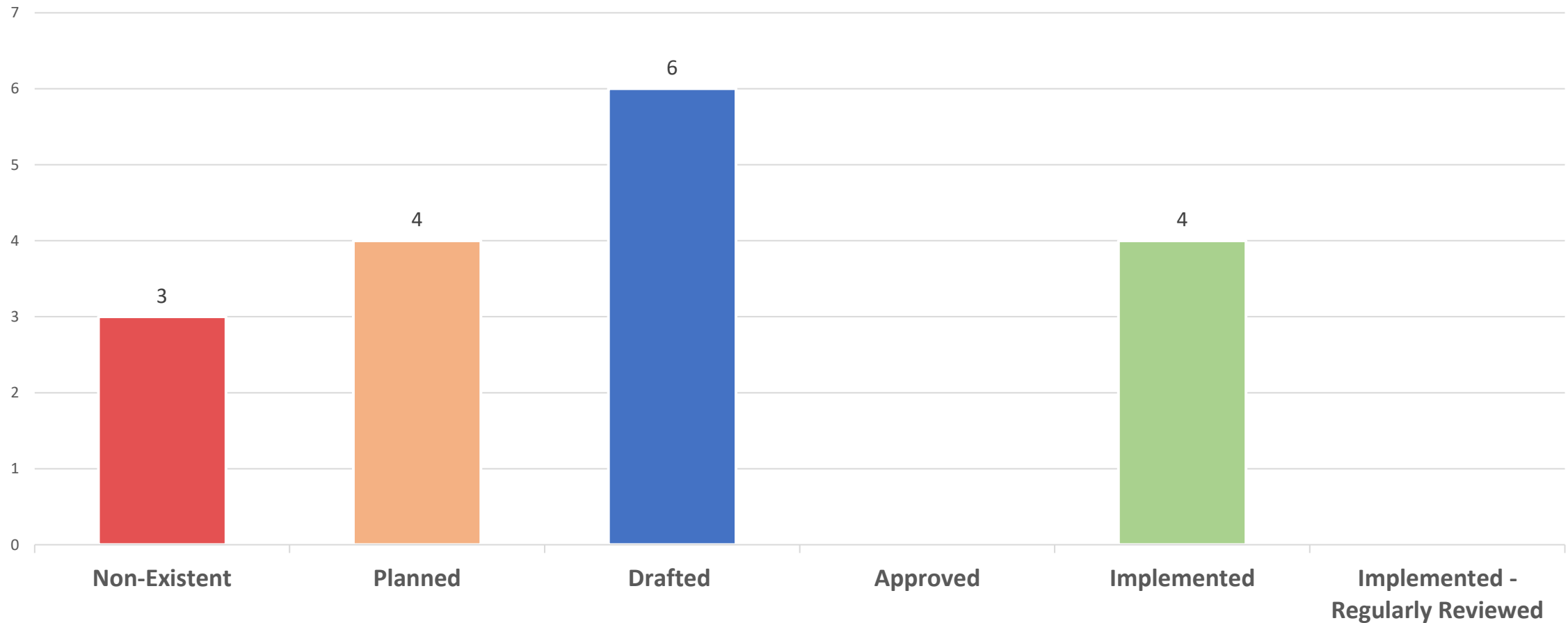


	In-House Biomedical Services	Availability of Finance	Equipment Policy	Equipment Committee	Procedure Manual	Reporting
<b>American Samoa (ASM)</b>	30%	Rarely	Drafted	Exists (NA)	Drafted	Yes
<b>Cook Islands (COK)</b>	90%	Always	Implemented (RR)	Exists (A)	Implemented	Yes
<b>Federated States Micronesia (FSM) - Kosrae</b>		Mostly	Non-Existent	Non-Existent	Implemented	Partly
<b>Federated States Micronesia (FSM) - Yap</b>	50%	Rarely	Non-Existent	Non-Existent	Non-Existent	No
<b>Fiji (FJI) - Labasa</b>	100%	Mostly	Implemented	Exists (A)	Implemented	Partly
<b>Fiji (FJI) - Suva</b>	71%	Often	Implemented	Exists (A)	Implemented	Partly
<b>Kiribati (KIR)</b>	100%	Never	Drafted	Drafted	Drafted	Yes
<b>Marshall Islands (MHL)</b>	70%	Mostly	Drafted	Non-Existent	Planned	Partly
<b>Nauru (NRU)</b>	75%	Often	Planned	Planned	Planned	Yes
<b>Niue (NIU)</b>	20%	Rarely	Drafted	Exists (A)	Planned	Yes
<b>Palau (PLW)</b>	90%	Rarely	Non-Existent	Planned	Drafted	Partly
<b>Papua New Guinea (PNG)</b>		Mostly	Implemented	Exists (A)	Implemented	No
<b>Samoa (WSM)</b>	90%	Rarely	Implemented	Exists (NA)	Implemented (RR)	Partly
<b>Solomon Islands (SLB)</b>	90%	Often	Planned	Exists (NA)	Drafted	Yes
<b>Tokelau (TKL)</b>	0%	Always	Planned	Exists (NA)	Non-Existent	No
<b>Tonga (TON)</b>	70%	Often	Planned	Planned	Planned	No
<b>Tuvalu (TUV)</b>	100%	Rarely	Drafted	Drafted	Non-Existent	Yes
<b>Vanuatu (VUT)</b>	80%	Rarely	Drafted	Planned	Implemented	Partly

# National Medical Equipment Policy

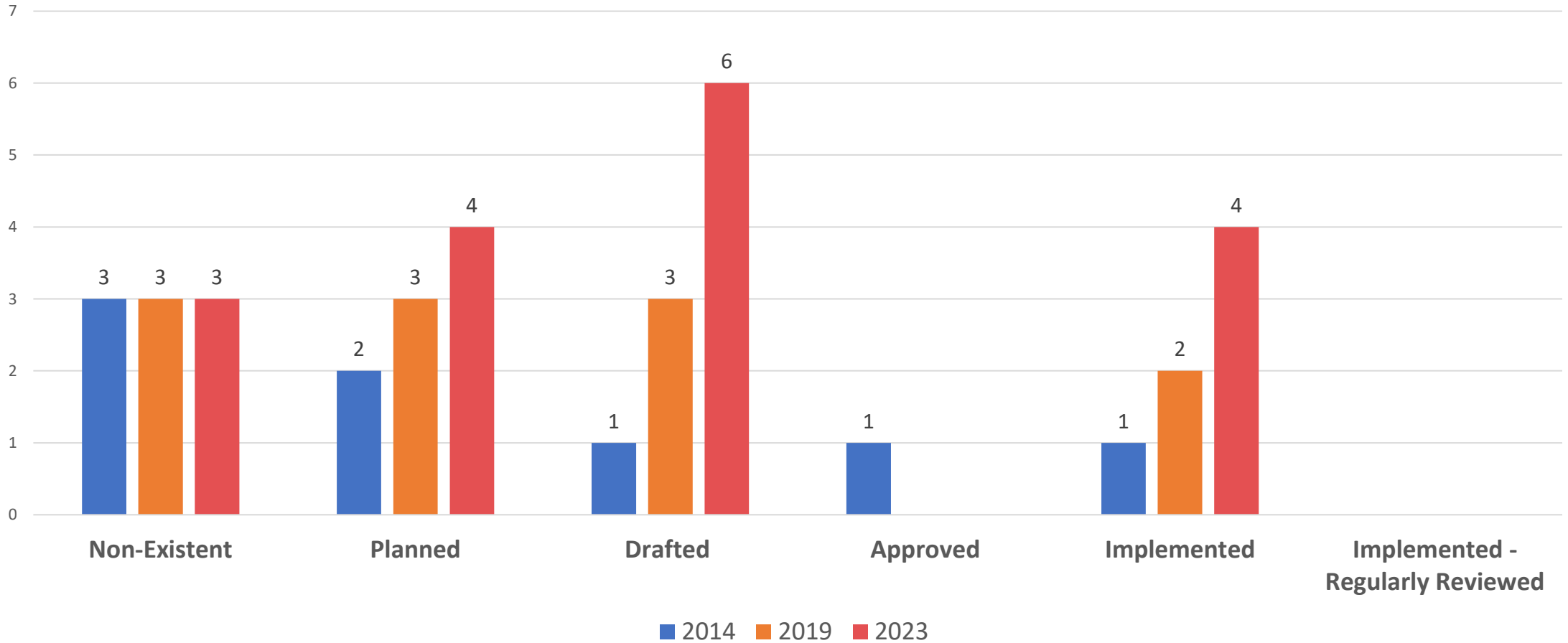
24% of countries implemented

2023 Status of National Equipment Management Policy



**56% of respondents progressed  
25% of respondents no change  
19% of respondents regressed**

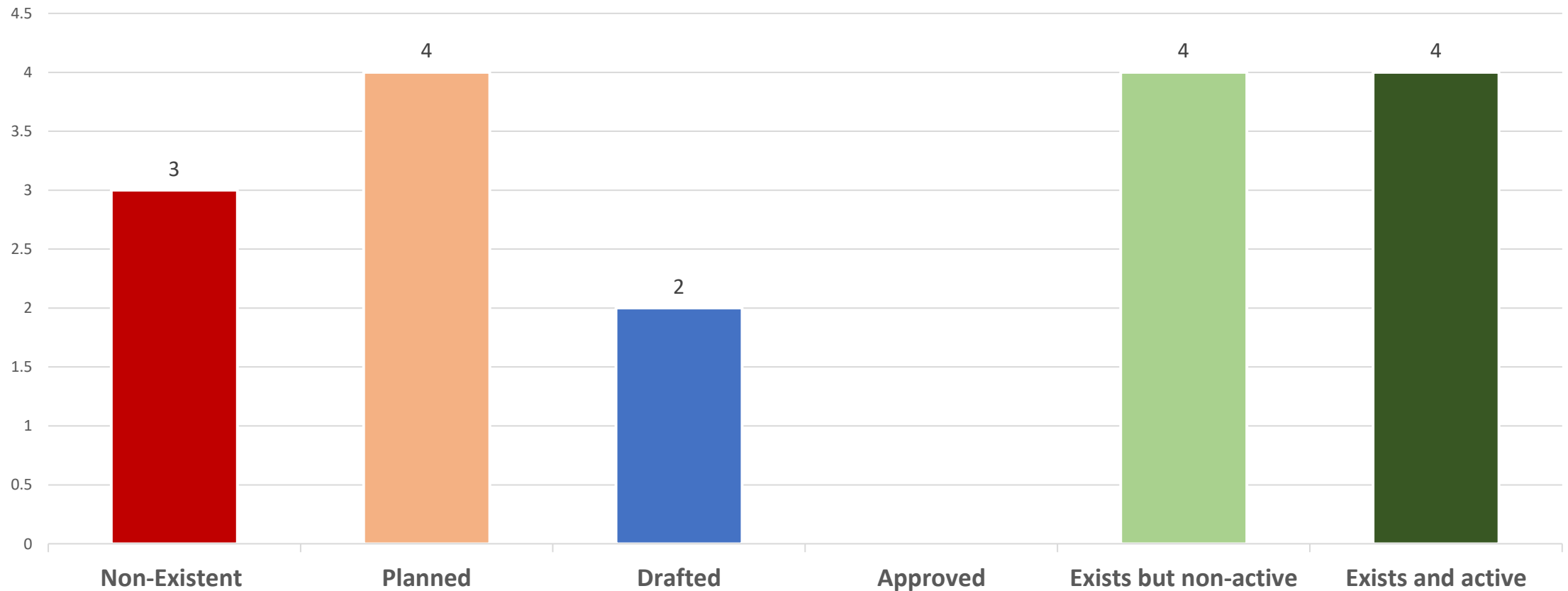
### Progress on National Equipment Management Policy 2014 - 2023



# National Equipment Committee (or equivalent)

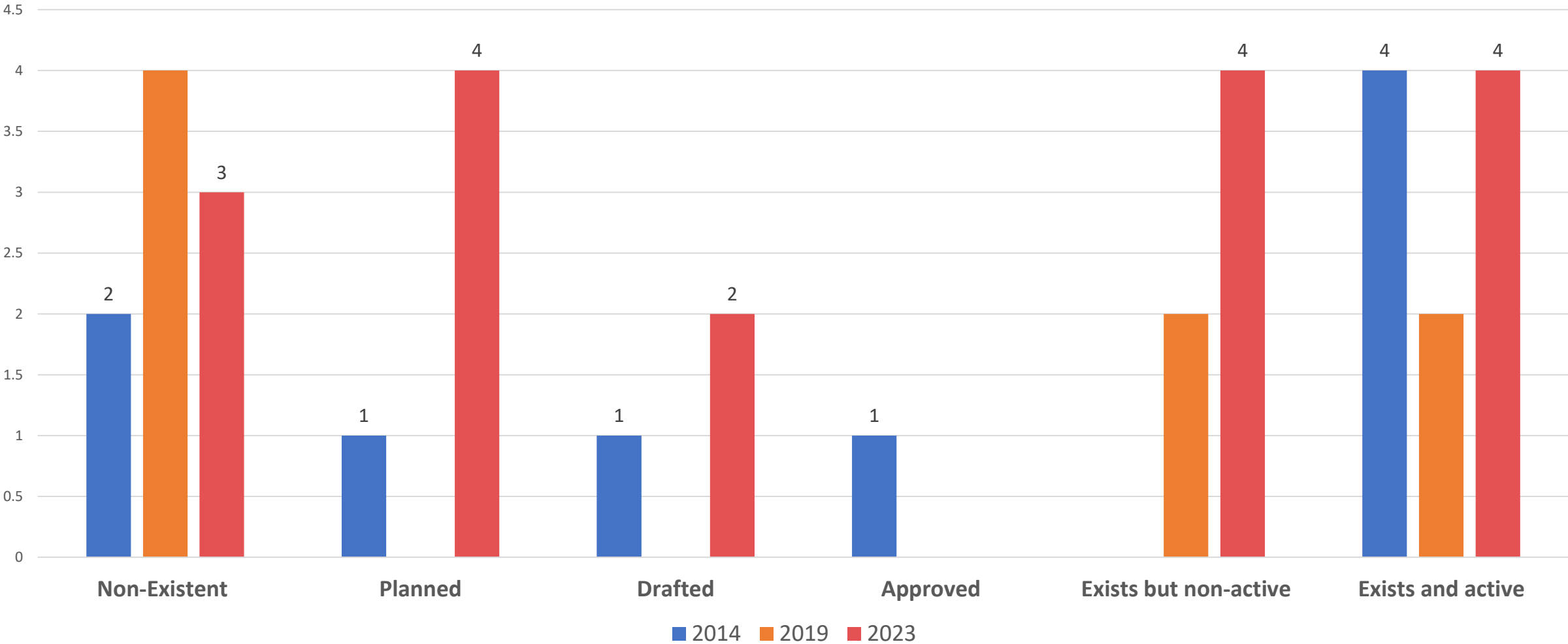
Exists in 47% of countries

2023 Status of National Equipment Committee



**25% of respondents progressed  
25% of respondents no change  
50% of respondents regressed**

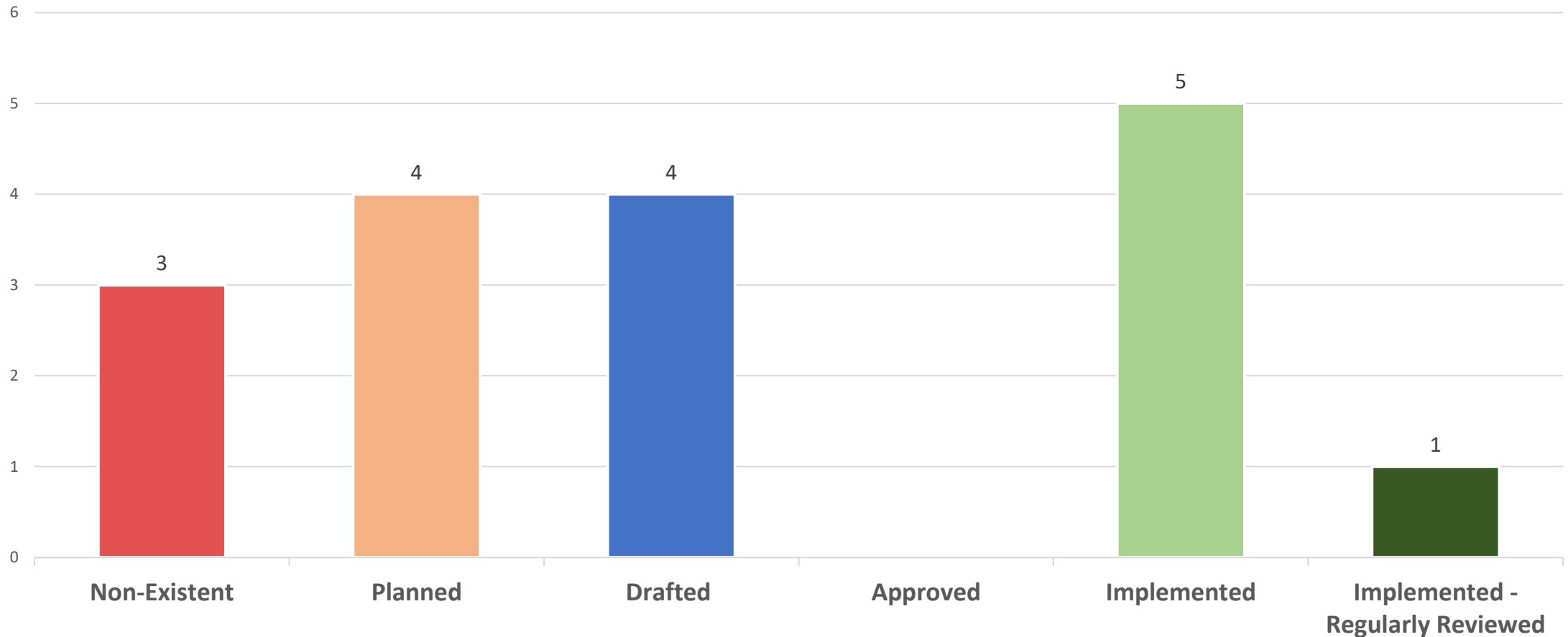
### Progress on National Equipment Committee 2014 - 2023



# Biomedical Procedure Manual

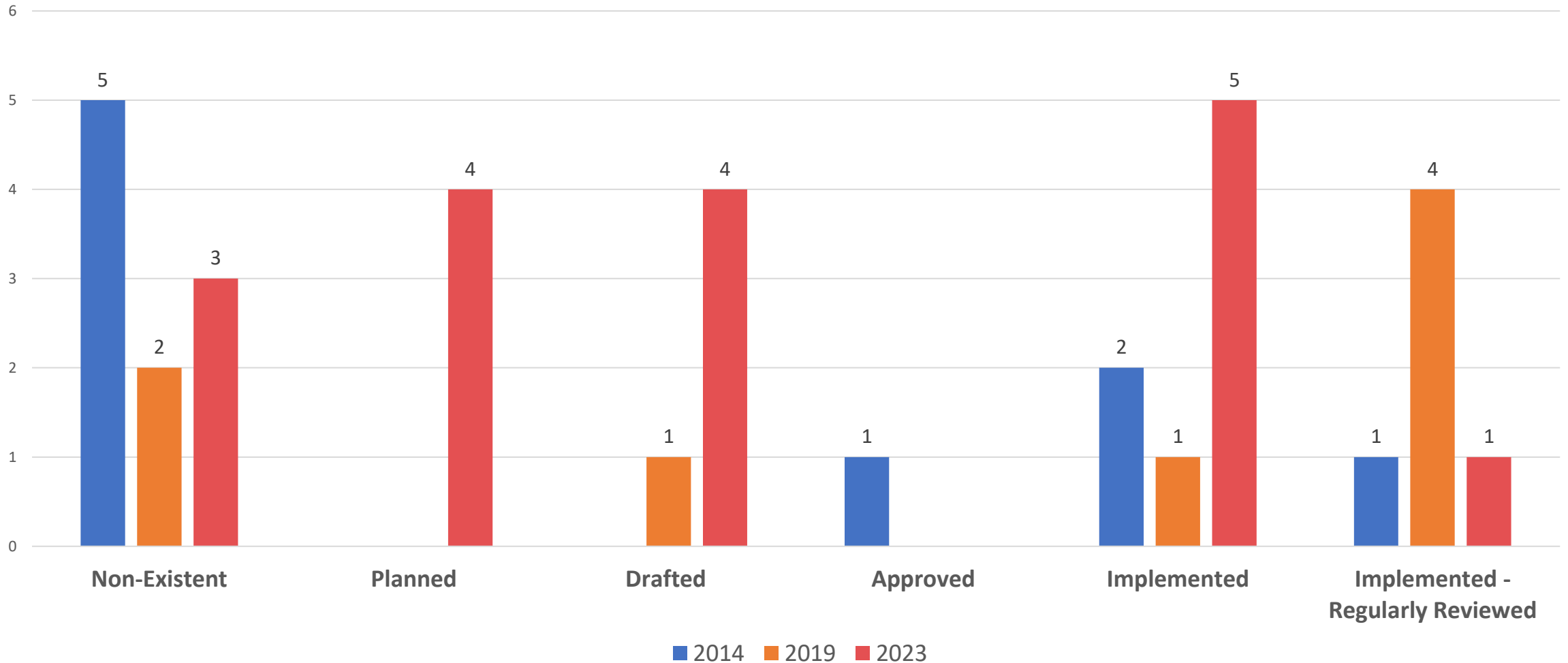
35% of countries implemented

Current Status of Biomedical Procedure Manual 2023



**50% of respondents progressed  
25% of respondents no change  
25% of respondents regressed**

### Progress on Biomedical Procedure Manual 2014 - 2023



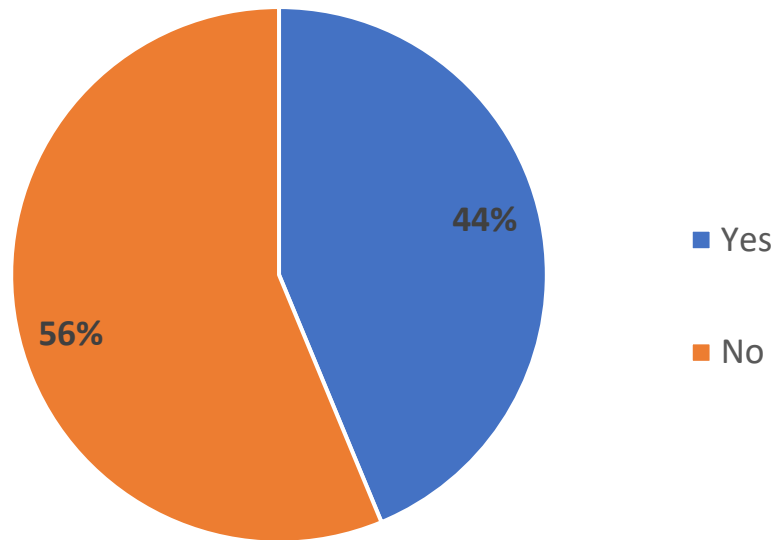
# Challenges and Issues Identified:

- Funding and human resources
- Training and ongoing support for professional development
- Donation Policy
- Disposal of Medical Equipment
- Not enough workspace
- Tools and Test Equipment
- Spare parts availability



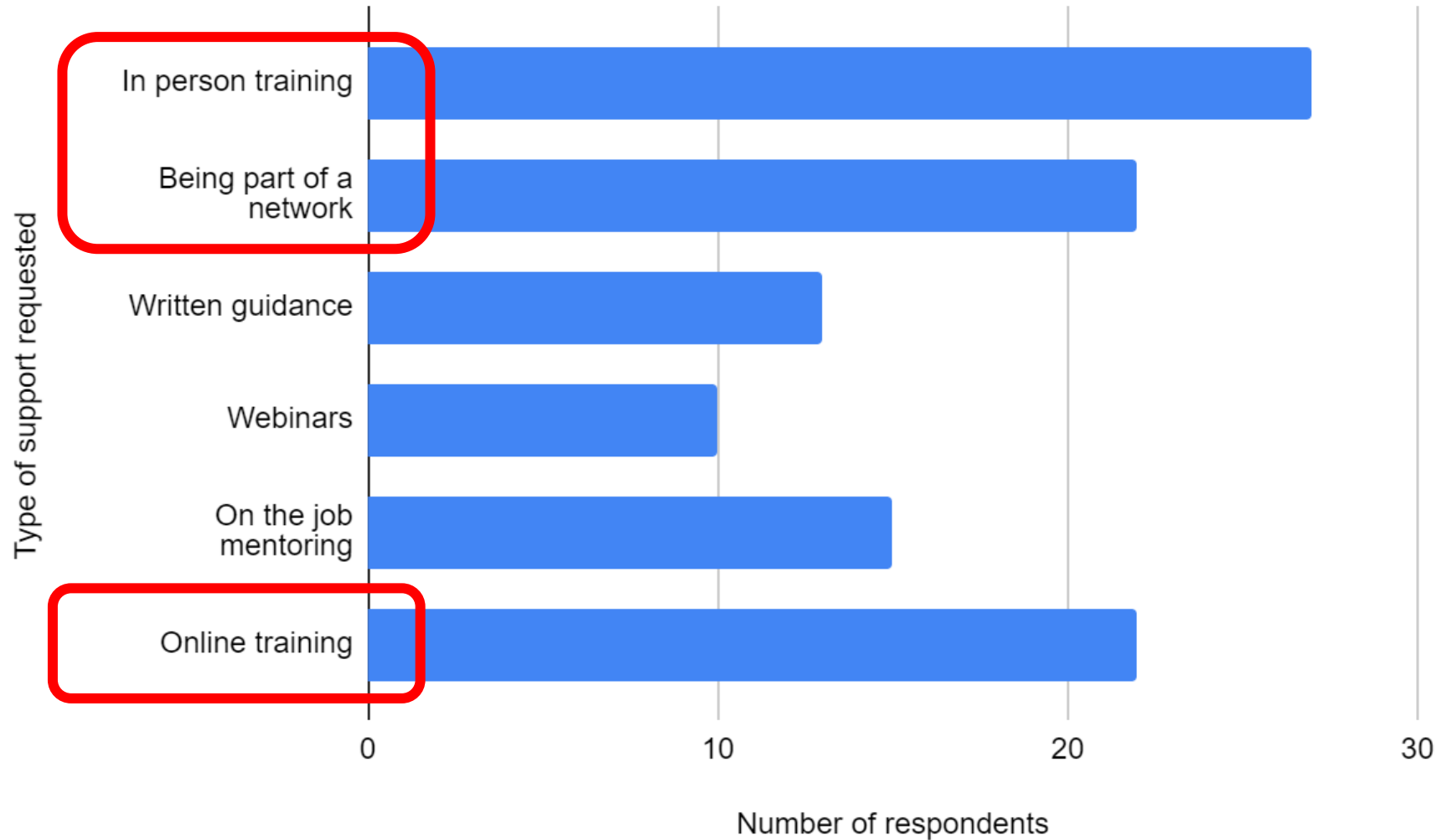
# Training and Professional Development

Requirement for continuous professional development of biomedical staff?



- 56% of countries do not have a **requirement for continuous professional development** of biomedical staff in their procedures
- 65% of countries reported that they ‘never’ or ‘rarely’ had finance available for **user equipment trainings**
- 71% of countries reported that they ‘never’ or ‘rarely’ had finance available for **service equipment trainings**

# Support



# Recommendations for Governments

- Finalisation of data and review of current policies
- Support access to biomedical training leading to formal qualifications and ongoing professional development training
- Consideration of retention package to provide incentives to work in the biomedical field such as higher salary, retention pay
- Award tenders only to manufacturers that provide ongoing and timely support to PICs through provision of spare parts and technical advice

# Recommendations for Partners

- Provide technical support for the biomedical workforce through the development and provision of in-person and online training in local language and access to training opportunities leading to formal qualifications
- Ensure that any biomedical equipment procured for donation meets country regulatory requirements and technical specifications, and includes provision for installation/training/maintenance, where appropriate