Overseas medical referral: the health system challenges for Pacific Island Countries
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Acronyms and abbreviations

AMR  antimicrobial resistance
CHE  current health expenditure
CMDHB  Counties Manukau District Health Board
FSM  Federated States of Micronesia
HIS  health information system
ICD  International Classification of Diseases
MHMS  Ministry of Health and Medical Services
MoH  Ministry of Health
NCD  noncommunicable disease
Nossal Institute  Nossal Institute for Global Health
NZMTS  New Zealand Medical Treatment Scheme
OMR  overseas medical referral
OOP  out-of-pocket
PHC  primary health care
PIC  Pacific Island Country
PNG  Papua New Guinea
PRQS  Pacific Register of Qualifications and Standards
RMI  Republic of Marshall Islands
SCS  specialized clinical services
SOP  standard operating procedure
SPC  the Pacific Community
UHC  universal health coverage
US$  United States Dollar
VSMT  visiting specialist medical team
WHO  World Health Organization
Part 1: Policy brief

1.1 Introduction

Policy makers in Pacific Island Countries (PICs) are facing the need to expand the provision of specialized clinical services (SCS) to meet a perceived increase in demand. Much of the likely growth in demand is related to the rising burden of noncommunicable diseases (NCDs) (1–3). With small and widely dispersed populations, PICs cannot achieve economies of scale for most SCS or provide the caseload needed to build clinical capacity (4–14) with few trained medical specialists (local or international) (8, 15).

As a result, access to overseas medical referral (OMR) for SCS will continue to be a necessary component of PIC health systems. The policy challenge is to make OMR an effective, efficient and equitable part of the national health system, according to national conditions.

The high burden of NCDs together with severe resource constraints in terms of both financial and human resources, make the task of identifying needs and prioritizing access to SCS complex and urgent (16). At the same time, there is concern among Pacific health leaders that the increasing costs of OMR are placing an unsustainable burden on health budgets (6).

In preparing this Policy Brief, we analysed OMR data from 16 countries in the Pacific region, building on a 2014 study by Irava and colleagues in four PICs (15). Most PIC governments support, at least to some extent, access to treatment offshore through government-funded OMR schemes. These schemes are often co-funded through agreements with donors (governments and charitable organizations).

In many PICs, OMR is treated as an activity that lies outside the normal functioning of the national health system, and decisions about referral
are sometimes made on an individual basis without reference to standard operating procedures (SOPs). The inability to provide specialist clinical services domestically is the gap that OMR fills. More attention is therefore needed to the cost, quality, equity and health outcomes of OMR practices in many PICs.

Before this study, we knew the following facts about OMR:

- **Lack of integration with the health system.** OMR processes are poorly integrated into the wider health system in many PICs.
- **Cost.** The costs of providing OMR are a significant part of the delivery of health services in some PICs. Between 2003 and 2013, Tuvalu consumed 44% of its health budget for OMR (4). Budget constraints, inadequate data and lack of transparency related to processes for referral, coordination and financing of OMR are key challenges (15, 17, 18).
- **Quality.** There is very little reporting on the quality of care offered by different OMR service providers or patient outcomes, and existing evidence is contradictory. For example, a study of OMR cardiac treatment found that patient costs in Australia and New Zealand were twice those charged in India, while a 2015 evaluation of the New Zealand Medical Treatment Scheme (NZMTS) found no clear evidence that treating OMR patients in India represented better value for money as compared to New Zealand (17).
- **Equity.** In most PICs, policies are in place to ensure that schemes are accessible (within the limit of the funds available in each country) to men, women and children who meet medical criteria, regardless of ethnicity or gender. However, patient access to OMR schemes is often subject to political influence, which affects equity in outcomes (15, 17, 18).
- **Unanticipated consequences.** A recent concern is the increasing risk presented by OMR patients returning from countries with high prevalence of antimicrobial resistance (AMR); for example, India has one of the highest burdens of AMR in the world (19).

Here, we discuss the challenges of schemes that are funded in full or in part by PIC governments, or supported by bilateral arrangements between donors (government or charitable) and recipient countries. While we have included some information on OMR supported solely by private funding (through crowd fundraising or charitable organizations), there is insufficient information available to deal with this issue thoroughly.
1.2 What we learnt through our research

The burden of NCDs and other conditions requiring SCS is rising in the PICs, but except in a few cases where there is strong external support, the process of providing the needed OMR is often not well organized, not well managed and not integrated into the wider health system. Decision-making is often ad hoc.

The attached Working Paper details the different types of OMR arrangements across PICs, depending on national conditions (see Table 2.1). The different schemes can be summarised briefly as:

- being supported by associated high-income countries (health systems supported by France and the United States of America [USA], including French Polynesia, New Caledonia, Federated States of Micronesia [FSM], Republic of Marshall Islands [RMI] and Palau);
- countries in free association with New Zealand (Cook Islands, Niue, Tokelau and Samoa);
- PIC schemes funded by government revenue (Fiji, Kiribati and Nauru);
- bilateral agreements (Nauru with Australia; Nauru with Papua New Guinea [PNG]; the NZMTS with Fiji, Kiribati, Tonga, Tuvalu and Vanuatu; the Taiwan Health Care Fund with Nauru, Kiribati, Palau, RMI, Solomon Islands and Tuvalu); and
- OMR supported by charitable organizations and faith-based organizations¹, e.g. the tripartite agreements involving charitable organizations (the New South Wales Government and St Vincent’s Private with the Solomon Islands; other charitable schemes in Fiji, RMI, Tonga and Tuvalu).

1.2.1 Demand for OMR is perceived to be rising but there is insufficient data to substantiate this

There is evidence that the level of OMR is rising across the PICs. However, there is no consistent data set across countries showing SCS and OMR patient numbers. The data that are available include only those patients sent overseas through a government scheme, though many more access overseas services privately. Furthermore, the number of patients sent for OMR does not reflect the burden of disease or the need for SCS in most

¹ There is limited documentation of funding arrangements through charitable and faith-based organizations; additional arrangements may exist but were not identified in interviews or secondary data collection.
countries, but simply the number of patients who might gain access in some way to the OMR scheme.

Our research indicates that the numbers are by far the greatest in PIC associated with high-income countries (principally the French territories and PICs supported by the USA and New Zealand), where the annual rate for OMR was 3.83 per 1000 population in 2017 (analysis based on World Health Organization (WHO) country profiles 2019 and interview data); for other independent PIC government- and donor-supported schemes, the rate was 0.34 per 1000 population. Overall, this amounted to 2639 OMR cases across all 16 PICs with a total population of 2.7 million in 2017. (For further details, see Table 2.2.)

The main SCSs requiring OMR were cardiology, ophthalmology and orthopaedic surgery (20). The demand for OMR is commonly increased by the activity of visiting specialist medical teams (VSMTs), who may perform screening and diagnose new patients requiring OMR where the VSMT cannot provide treatment. Despite this, VSMT and OMR are commonly managed separately within PIC ministries of health (MsoH).

1.2.2 OMR selection criteria are incomplete

Generally, patient access to OMR is determined according to two broad criteria: that the treatment for the condition is not available in the country due to the lack of specialist clinical capacity, and that the probability of survival post-OMR is judged as high (generally, a good prognosis following treatment is defined as a greater than 50% survival rate for more than five years).

Patient selection criteria vary by country. Reliable, routine information about OMR policies, selection guidelines and outcomes are not generally available publicly. Further details are provided in Table 2.3. Some countries set a limit on the number of referrals per person while other countries set a limit on annual cost per patient. Exclusions under OMR policy also vary between PIC, and may exclude:

- patients with NCDs (in some countries);
- patients based on age (for example, a maximum eligible age, e.g. 70 years in the Marshal Islands and 65 years in Tonga);
- patients with co-morbidities;
- patients not enrolled in the national insurance scheme (FSM);
• patients with private health insurance (not in all countries) or ability to pay for some services; and
• patient’s ability to fund airfares or support costs.

It was not possible to assess the extent to which these criteria are being implemented, nor whether access to OMR schemes is equitable. Patient selection – and in some cases OMR policies – may be made on a case-by-case basis at the discretion of the OMR Committee or Health Minister.

1.2.3 Governance of OMR is incomplete

There is wide variation between PICs regarding the process for development and review of national OMR policies. Thirteen of the 16 PICs provided information on governance arrangements, and nine of these 13 provided detailed OMR policy documents to our team (Cook Islands, Kiribati, Marshall Islands, FSM, Niue, Solomon Islands, Tokelau, Tonga and Tuvalu; the Fiji policy was under review and was not provided). SOPs are less well established. Guidelines for patient application, selection, appeals, logistics and travel all vary by country. Day-to-day operations – such as reviewing OMR applications, developing policies, or oversight of implementation – are generally the responsibility of an OMR committee appointed by the MoH or equivalent. While only eight of the 16 countries studied provided details, it is usual for the OMR committee to assess patient eligibility for OMR and, commonly, to choose service providers.

Not all countries have an MoH OMR Coordinator, and coordination functions differ across PICs. In some countries, the OMR Coordinator is involved in decision-making and is part of the OMR Committee, with responsibility primarily for administration, processing applications, arranging logistics and travel for OMR patients and providing secretarial support to the OMR Committee. In other countries, there is no OMR Coordinator.

1.2.4 Funding is neither consistent nor equitable

A number of countries fund health care and OMR predominantly through their association with a high-income country (France, USA, New Zealand) (see Table 1.1). Our research suggests that these countries accounted for 70% of all OMR cases in 2017 (1860 or the total 2639).2 Others rely mostly on government budget expenditure, with support for OMR also coming

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2 These figures only represent numbers from OMR schemes (government funded) and do not include other OMR that may be supported through private sources including patient OOP payments or charitable organizations.
from bilateral funding and charitable organizations. Private insurance and out-of-pocket (OOP) expenditure also play a role in some cases. However, there are no reliable data on the full extent and the efficiency of OMR funding, or on equitable allocation between patients.

Table 1.1: Type of OMR arrangements for 16 selected PICs, 2018

| Type of OMR arrangement                                          | Examples                                      |
|-----------------------------------------------------------------|-----------------------------------------------|
| Supported by health financing in associated high-income country | France: New Caledonia, French Polynesia        |
|                                                                  | USA: Palau, FSM, RMI                           |
|                                                                  | New Zealand: Niue, Cook Islands, Tokelau      |
| Predominantly PIC government- and donor-supported schemes       | Nauru, Tuvalu, Kiribati, Tonga, Fiji, Vanuatu,|
|                                                                  | Solomon Islands, Samoa                        |

*Source: By the authors*

In the cases of Niue, the Cook Islands and Tokelau, the governments fund most of the travel costs, while New Zealand funds medical costs for OMR. Nauru, Tuvalu, Kiribati, Tonga, Fiji, Vanuatu and the Solomon Islands all benefit from the NZMTS. In some cases, a patient co-payment is required and other OOP expenditures are common, particularly for medications, diagnostic tests, transport, accommodation and food, even though PIC national health services are heavily subsidised and often provided free of charge.

1.2.5 Government expenditure is rising in some PICs

The level of government expenditure for OMR appears to be rising in many countries. This expenditure varies widely across PICs. Some PICs rely heavily on external sources of funding through bilateral agreements or support from charitable organizations. These donors typically pay for all treatment-related costs, while the government funds travel and logistics.

National data collection was inconsistent and incomplete across PICs. The total OMR spending across all 16 PICs appeared relatively stable during 2013–2017. Our estimates suggest the level of OMR spending across the 16 PICs reached approximately US$ 125 million by 2017 (see Table 2.6), which was slightly above the 2013 level. This expenditure was concentrated very largely in New Caledonia and French Polynesia, both beneficiaries of the French national health insurance scheme, totalling US$ 95 million (of the total US$ 125 million) in 2017.
Excluding New Caledonia, French Polynesia and the FSM MiCare scheme, our research suggests that total government-related spending on OMR may have risen by one third during the period 2013–2017. The level of OMR funding through PIC governments appears to have risen from approximately US$ 19 million in 2013 to US$ 26 million in 2017. The changes during 2013–2017 for the 11 PICs representing predominantly government funding (those with data available) are illustrated in Fig. 1.1 (with further details provided in Table 2.6).³

**Fig. 1.1: Total OMR spending in selected PICs, 2013–2017**

Our research suggests that government OMR expenditure increased between 2013 and 2017 in seven of the 11 PICs in Fig. 1.1 (Cook Islands, FSM, Kiribati, Nauru, Palau, RMI and Tuvalu). Expenditure fell in Samoa, possibly due to the decision to divert funding towards VSMTs. The largest percentage increases in OMR spending during the period were in Tuvalu (292%), Nauru (175%) and Kiribati (102%).

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³ Excluding New Caledonia and French Polynesia, where the French health insurance scheme supports extremely high relative expenditures and Niue, Solomon Islands and Vanuatu, where data for 2013 were unavailable.
1.2.6 OMR cost control is weak

While the data were incomplete, our estimates from various sources suggest that the cost per OMR case varies widely across the PICs, with the highest costs registered in New Caledonia and French Polynesia (average US$ 43,248 and US$ 56,801, respectively in 2017). Among all other PICs studied, the highest average cost was in Vanuatu (US$ 34,170 in 2017) and the lowest in Niue (US$ 885 in 2017). The average cost is above US$ 9000 in 14 of the 16 PICs studied.

Does lower average spending on OMR cases align with stronger health systems? A comparison of current health expenditure (CHE) per capita with average OMR case costs indicates a general trend of declining OMR costs with higher CHE, but the relationship is weak (Fig. 1.2). More important is the wide variation from the mean. Palau, especially, has relatively high levels for both indicators; Niue has high CHE per capita and very low OMR costs; and in Samoa, Tonga, Vanuatu and Solomon Islands CHE is low while OMR costs are high. It is likely that the OMR costs vary more in line with national characteristics than with CHE alone.

Fig. 1.2: CHE and OMR cost per case for 13 PICs, 2017

Source: Data compiled by the authors from (18)

1.2.7 There is little assessment of service providers

The historic pattern of referral – principally to Australia, New Zealand and Hawaii – has changed in recent years as PICs look for lower cost
alternatives in China, India, Malaysia, the Philippines, Singapore and Taiwan. These trends partly reflect the activities of overseas health-care facilities (mainly from India, Taiwan and the Philippines) who are sending agents or representatives to different PICs to promote their services. Assessing new OMR service providers is a significant challenge for PIC governments and OMR committees, because there is little information available to compare costs, quality of treatment, qualifications of specialists, patient outcomes or contract terms.

### 1.2.8 Monitoring and review are inadequate

A key limitation of existing OMR schemes is the absence of regular policy reviews. Very little data are available to policy-makers to assess and monitor OMR schemes, or the quality of care received. Regular monitoring and policy review are desirable in order to assess the need for budgetary adjustment or reallocation and policy update or revision; but in most cases, there is no formal system for tracking the referral process or patient outcomes. Often, inputs come simply from feedback provided verbally by returning patients. Very few PICs have well-established and well-maintained data systems for recording VSMT, OMR and SCS expenditures, and the data that are collected vary widely in terms of the information captured and the quality of the data recorded. The exceptions are the states and territories that provide access to OMR through associated high-income countries.

### 1.3 Policy challenges and health system entry points

Recommendations from the Ninth Directors of Clinical Service Meeting held in Denarau, Fiji on 1–2 April 2019, and the Pacific Heads of Health Meeting held on 3–5 April 2019 and endorsed by the Pacific Ministers of Health provide a starting point for strengthening the delivery of OMR services by the following measures:

- OMR directors in each PIC to ensure appropriate clinical decision-making processes;
- strengthen OMRs/VSMT country policies, seeking harmonization within countries and across the region;
- increase awareness of AMR risk;
- strengthen database management, data analysis and reporting of clinical outcomes to inform policy decisions within countries and across the region; and
• strengthen systems to improve the quality of care for Pacific patients at overseas referral sites.

These recommendations fall into two broad categories that reflect the challenges facing the health systems in PICs:

• **Clinical referral.** The process of appropriately identifying patients needing OMR (including clinical decision-making and harmonization between sending countries).

• **Service delivery.** The clinical outcomes and quality of care delivered by OMR service providers, along with the cost of services provided.

These challenges can best be addressed using a consistent health system strengthening approach – by managing OMR as the final step in an organized referral process, moving through the primary-to-tertiary care spectrum in a two-way referral process. This process is illustrated in Fig. 1.3.

**Fig. 1.3: Health systems referral pathway for OMR services**

| Health referral pathway |
|------------------------|
| 1° Primary Health Care |
| 2° Hospital Service    |
| Local Specialist       |
| VSMT                   |
| OMR                    |

*Source: By the authors*

The blue steps represent services provided in-country; the grey steps indicate services that may be available only occasionally or not at all; and the green represents services provided overseas. The dotted arrows represent the process of follow up and integration back into the local health system.

The efficient working of the referral system is based on the diagnostic capacity of the health providers. At the level of domestic service delivery, local senior and experienced clinical staff have the capacity to determine what can be treated locally and what needs a higher level of care. Where required, further clinical expertise may be provided by VSMT clinicians for patients who cannot be treated locally, and then referred to OMR where
necessary. Within a unified system, VSMTs are both a means of reducing the need for OMR (through treatment and accurate diagnosis) and an efficient referral mechanism in cases where OMR is medically required. This will be enhanced when VSMT and OMR activities are planned as part of, and respond to, priorities identified within national health planning processes. Approaching OMR from this health systems perspective helps to identify entry points through which the recommendations made by the Pacific health ministers may be pursued. This is discussed below.

### 1.3.1 Clinical referral

#### Table 1.2: Potential activities to improve clinical referral in response to Health Ministers’ recommendations*

| Health Ministers’ recommendation | Health system entry point |
|----------------------------------|---------------------------|
| OMR directors ensure appropriate clinical decision-making processes | Appropriate clinical decision-making requires not only a precise diagnosis and understanding of patient need but also a well-functioning referral system to identify the level of service most appropriate to patient need. This requires: identifying priority care issues; defining referral criteria; and defining a service delivery package. Harmonizing these procedures will make each PIC stronger. |
| Strengthen OMR/VSMT country policies and improve harmonization across the region | |

*Agreed at the Eleventh Pacific Health Ministers Meeting, 15–17 April 2015

Source: By the authors

OMR services are often dispensed on an ad hoc basis. OMR, as well as primary and hospital care, can be strengthened when they are organized as a part of a unified system. The referral system provides the basis for a triage process and a patient pathway that offers the most appropriate care at the time necessary. Within the health referral system, coordination between providers is the basis for effective patient pathways and efficient service delivery.

Maintaining consistent patient records and health management information will both reinforce decision-making and provide the basis for monitoring the effectiveness of the system. A suitable model is provided by the Counties Manukau District Health Board under the NZMTS, which provides case management and support to PIC patients in New Zealand (Box 1.1). In each PIC, the MoH could begin by identifying the data and evidence gaps. In this way, OMR patients could be tracked as they move
through the referral system in a way that helps to allocate SCS according to caseload. Data could be recorded and stored in a format consistent with the International Classification of Diseases (ICD), which would improve tracking for clinical purposes and assist epidemiological comparison.

**Box 1.1: NZMTS and Counties Manukau District Health Board**

One example of an effective patient coordination mechanism is New Zealand’s Counties Manukau District Health Board (CMDHB) that provides coordination of OMR patients under the NZMTS. The CMDHB serves a northern population of half a million with primary and hospital care and allied services, and is an OMR provider. The coordination and case management provided by CMDHB for patients referred to New Zealand could be adapted to work in other settings to strengthen referral systems and improve the quality of care for PIC OMR patients. Such a uniform referral system provides the opportunity to integrate OMR, service delivery activities and patient outcomes into the national health information system. By creating a single database that covers OMR together with the activities of VSMTs and local SCS, each PIC could effectively coordinate all referral activities.

Such a referral pathway provides the opportunity, at each step, to make a clear assessment of patient need and to use resources appropriately. In this framework, OMR becomes a routine step in the patient pathway through the health system (from primary to specialized care) as one part of the national referral system.

Such an approach provides the opportunity to strengthen coordination between referring doctors, VSMTs and OMR coordinators. A first step may be the harmonization of VSMT and OMR activities within ministries of health. Managing OMR in this way allows the process of resource allocation for OMR to be dealt with routinely as one part of overall health systems strategy, alongside primary care, VSMT and hospital services. Decision-making in the provision of OMR and other SCS services can then be based on rigorous planning and prioritization processes within the country context (21, 22). Planning and prioritization are further discussed in the Working Paper Section 5.
1.3.2 Service delivery

Table 1.3: Potential activities to improve service delivery in response to Health Ministers’ recommendations*

| Health Ministers’ recommendations | Health system entry point |
|-----------------------------------|---------------------------|
| Identify ways to measure quality of care at overseas referral sites and strengthen criteria for service providers | The first step is to document who the OMR providers are through a process of registration or (eventually) accreditation. With identified providers, standards can be set through a form of agreement or contract negotiation. Controlling risks such as AMR infection during OMR can be achieved. Monitoring providers will be possible only when information on patient outcomes is collected and shared. With these processes in place, a more strategic approach to purchasing OMR services is possible, which will be stronger with wider cooperation between PIC governments. |
| Increase awareness of AMR risk from OMR |  |
| Strengthen data management, analysis and reporting of clinical outcomes to inform policy |  |

* Agreed at the Eleventh Pacific Health Ministers Meeting, 15–17 April 2015

Source: By the authors

There has so far been no formal assessment or evaluation of the quality of care or health outcomes of OMR services. A first step could be the development of common reporting templates among PICs, based on a format consistent with the ICD. This would improve tracking for clinical purposes and assist epidemiological comparison.

While there have been no reported cases of AMR to date in returning OMR patients, the threat is real, and other infections are known to have been acquired during OMR treatment visits. Screening of OMR patients before release and return home should be a quality-of-care requirement for OMR providers, along with the practice of sharing and confirming tests and swab results with the home country as a final referral activity.

Managing the quality of OMR care and patient outcomes and reducing medical risk are high priorities. However, there appears to be an imbalance in the negotiating power between PICs and OMR service providers. Each PIC negotiates the terms and conditions of contracts for OMR service
provision, though they are usually in a weak bargaining position due to the small number of OMR patients for each sub-speciality. This imbalance could be addressed by a range of initiatives that strengthen cooperation across the region, including further investigation of strategic purchasing procedures.

A constructive role by donor partners could help; initially, to strengthen the hand of PIC governments in the setting of conditions or standards in relation to quality of care and patient outcomes. These initiatives might include:

- a more consistent and concerted approach to purchasing, including regional or national accreditation systems for OMR service providers;
- establishing standards for any agreement negotiated with OMR service providers (including those working pro bono), with the support of donor partners;
- introducing appropriate provider payment mechanisms – for example, some form of performance-based payment – as an incentive for providers to comply with these standards;
- agreement among PIC governments on the most effective mode of payment for OMR providers (supported further by donor OMR funding processes); and
- taking advantage of the opportunity for PICs to engage in collective purchasing arrangements.

1.3.3 Regional cooperation

Successful implementation of these initiatives could create the basis for PIC governments, in the longer term, to collaborate within the region through a preferred provider network of accredited facilities in recipient countries with guidelines as to price setting and clinical performance. The Pacific Register of Qualifications and Standards (PRQS) (23), for which the Pacific Community (SPC) has oversight, could provide a framework for such an initiative.

A common approach to referral pathways, sharing services and identifying providers provides a basis for further harmonization in line with the recommendations of the health ministers across the region in a way that draws lessons from the experience in other small-island regions, such as the Eastern Caribbean Network of Care for Specialized Clinical Services (24, 25).
1.4 A process of policy reform

PICs are committed to ensuring equitable access to health services (6, 22). Managing OMR as the final step in the referral process provides a mechanism for balancing OMR needs within the wider health system. The first step in strengthening the process of OMR within the national health system is to begin a process of policy reform, stronger management of service provision and monitoring of outcomes.

Policy reform is a governance process. Health ministers have indicated a direction, the challenge now is to develop a strategy for implementation and to create SOPs on OMR for application, selection and appeal according to uniform objective criteria, along with improved arrangements with service providers. The successful implementation of this process may lead to consideration of a number of additional initiatives.

1.4.1 OMR eligibility

- Most countries use a “good prognosis” selection criterion, defined as a 5-year survival rate of more than 50%; this needs to be applied fairly and uniformly. Tightening this definition by stricter diagnosis and prognosis (based on documented evidence) or a rise in survival percentage may help to manage demand. Monitoring patient outcomes will indicate the effectiveness of different OMR providers in meeting this target.
- With more reliable information, further estimation of eligibility and cost could come from measures such as expected gains in quality-adjusted life years compared to cost per case.
- Greater equity in OMR functioning could act as a mechanism to prevent catastrophic spending for patients and families, with a wider health–cost benefit.

1.4.2 Service inclusions and exclusions

- In some PICs, OMR policies outline the services excluded under the scheme and who might be ineligible to access OMR benefits; in other cases, these need to be clearly stated and implemented. Our study confirms that the interpretation of these policies and the impact of political influence can lead to mismanagement of OMR schemes and to inequities.
• Tightening of inclusion and exclusion criteria for the services offered through OMR – or more consistent application of these criteria – should be considered where processes are not clear.

1.4.3 Control of expenditure and costs

• Cost control is needed to prevent the increase in OMR expenditure from consuming an increasing proportion of the health budget to the detriment of domestic health-care delivery.

• Applying an annual budgetary ceiling for provision of OMR services can provide a cost-control mechanism (dependent on meeting genuine demand for care); further tightening and application of limits on eligibility, annual OMR visits per person or OMR costs per person may be needed.

• A transparent, means-tested system of patient co-payment based on strict rules of “capacity to pay” may help to control costs and increase equitable access to OMR services, while ensuring that co-payment does not present a barrier to those who cannot afford to pay.

1.4.4 Quality and outcomes

• In the market for OMR services, the small number of OMR patients for particular sub-specialities in each PIC make it especially difficult to negotiate; price and quality (and cost per case) are contracting issues. The expected outcomes of OMR service provision and the costs of care need to be specified carefully in enforceable purchaser–provider agreements.

• To reduce the purchaser–provider imbalance, a more systematic approach to selecting and monitoring the performance of OMR service providers is the starting point; such patient data should be entered into the domestic Health Information System (HIS) as one part of the unified national referral system.

• With a known list of preferred providers, PICs could then individually or collectively work to develop provider payment mechanisms designed to create an incentive for providers to respect these standards.

• Improved collection of data on OMR providers and outcomes is a basis for identifying the most effective and efficient providers; a process of accreditation of such providers could lead in the longer term to the development of a network of accredited providers
available to all PICs, who could then combine in the application of a strategic purchasing process to increase bargaining power.

1.4.5 Monitoring and HIS

Monitoring of OMR providers using the PRQS (23), for which SPC has oversight, could provide the framework (and information) for provider accreditation and strategic purchasing arrangements.

1.5 Conclusion

The challenge of providing more effective, efficient and equitable OMR services cannot be fully addressed in the short term. But a consistent step-by-step process of integrating OMR into the national health referral system with equity of access provides a pathway for satisfying an acknowledged health-care need. Looking towards the future, such a process offers the potential to reduce costs through strategic purchasing of services supported by agreements between PICs to share resources for VSMTs and provide OMR within the region.
2.1.1 Policy question

How do small island countries provide effective, efficient and equitable specialized medical care? Pacific Island Countries (PICs) face a range of demographic, geographical and economic conditions that make the delivery of a full range of specialized clinical services (SCS) within the domestic health systems difficult (1–3). Challenges include a relatively small case load for some SCS, as well as limited financing, health workforce and infrastructure, with resources being prioritized towards ensuring that primary health-care services are available to all.

In most PICs, the provision of SCS is limited and is supplemented by alternative mechanisms. There are three ways in which PIC governments might provide SCS: through domestic capacity (local specialists); by visiting specialist medical teams (VSMTs) (long or short term); or by sending patients overseas for treatment, a process known as overseas medical referral (OMR). The conceptual framework presented in Fig. 2.1, describing these different types of SCS, was developed to guide this study. Most PICs use a mix of all three options, and the mix will differ from country to country according to the resources available to the Ministry of Health (MoH).

The focus of this study is the design and operation of OMR schemes. There is concern among Pacific health leaders that the increasing costs of treatment for OMR are placing an unsustainable burden on health budgets (4, 5). Yet, little is known about OMR referral processes and governance, financing, service delivery practices and the policy parameters needed to ensure effective OMR (6, 7).
2.1.2 Aim and purpose of the study

In 2017, Pacific Island health ministers requested a study to map all available evidence and to identify potential options to:

- increase access to OMR;
- improve the quality of care for SCS patients; and
- achieve cost savings through economies of scale (5).

This study responds to the request from Pacific health ministers. In 2019, the Pacific health ministers endorsed a number of recommendations relating to strengthening OMR schemes. The recommendations in this brief seek to elaborate a way to implement these, drawing on health systems thinking.

The paper examines OMR policies and practices and the extent to which they promote access, quality and efficiency in delivery of specialist clinical care. The development of this working paper has involved regular engagement with Pacific health leaders. The findings are based on an analysis of OMR data from 16 countries in the Pacific, building on a 2014 study by Irava and colleagues in four PICs (7). The current study was conducted collaboratively by the World Health Organization (WHO) Division of Pacific Technical Support, the Pacific Community (SPC) and the Nossal Institute for Global Health (Nossal Institute).
2.1.3 Study questions

This study explores key policy questions to better understand the challenges to delivery of OMR services in the unique context of PICs.

– What are the current trends with respect to OMR?
– How are patients referred to OMR schemes (who are eligible, and for what treatments)?
– How are decisions made about OMR scheme operations?
– How is OMR financed and what are the expenditure patterns?
– Who provides OMR services and on what basis?
PIC health systems are struggling to meet the demand for SCS. Much of the demand is related to the rising burden of noncommunicable diseases (NCDs) in the region. Cardiovascular disease and diabetes are among the leading causes of mortality; mental health disorders, musculoskeletal conditions and chronic obstructive pulmonary disease are estimated to account for much of the non-fatal burden of disease (8). This high burden of NCDs, together with the severe resource constraints means that the task of identifying needs and prioritizing access to SCS is complex and urgent. Due to the small populations in most PICs, it is not possible to achieve economies of scale for most SCS. Financing and human resource constraints also limit the development of local specialist capacity. For these reasons, OMR will remain an avenue to access SCS for Pacific populations, but such schemes are not without challenges.

2.2.1 Pacific geography, population and health systems

PICs and Territories cover 20 000 to 30 000 islands located over a vast stretch of the Pacific Ocean. Population sizes range from 1 167 in Tokelau to 905 502 in Fiji (9), with wide variations in social and economic conditions, health infrastructure and health workforce training throughout the region (10).

PIC health systems are primarily financed by government and donor partners with little involvement of private markets.5 PIC governments demonstrate strong commitment to the principles of universal health coverage (UHC). Primary health care and hospital services are predominantly provided free of charge and are delivered through the
MoH or charitable organizations (2, 11, 12). Health services on outer islands are often limited and have only basic facilities and few staff. Many PIC health systems are dependent on donor funding, as well as technical assistance (13–17).

There are few trained specialists (local or international) providing SCS in the region. Fiji, Solomon Islands, Samoa and Tonga have the highest numbers of specialists (9). They are trained in obstetrics and gynaecology (O&G), internal medicine, general surgery, emergency medicine and anaesthesia. Niue, Republic of Marshal Islands (RMI), Nauru and Tokelau rely heavily on expatriate doctors and have few or no local domestic specialists (18).

Even in countries that do have a small number of specialists, Pacific clinicians experience professional isolation in their own countries after returning from international training programmes with few, if any, having colleagues practicing in their specialist field (14). There are limited opportunities for supervision and capacity-building for the PIC healthcare workforce, particularly in specialty areas.

Constraints on training of specialists across the region mean that it will take a very long time to offer a full range of SCS (4, 7, 19–21). In some small island states and countries, this will be a continuing challenge as resources for supervision are limited and case-loads are insufficient for some speciality areas (19, 22).

2.2.2 Challenges with OMR schemes

Rising expenditure on OMR is a key issue in the Pacific and in small island states elsewhere. A recent study including the Seychelles, Maldives and Tuvalu found these countries had significant growth in medical travel between 2003 and 2013 and that that Tuvalu used 44% of its health budget for OMR (4).

Lack of data and transparency of processes for referrals have been noted as key challenges in PICs and other small island states (7, 22). In the Maldives, the medical travel scheme targets vulnerable populations including the elderly and those with long-term, costly diseases. Studies have found that there were no gender or socioeconomic differences among beneficiaries (23). In most PICs, policies are in place to ensure that schemes are accessible (within the limit of the funds available in each country) to men,
women and children who meet medical criteria, regardless of ethnicity or gender (24). At the same time, access to OMR is reportedly subject to political influence, which affects equity in the schemes (7).

An important concern is the varying cost and quality of care delivered by different overseas service providers (5). Comparison of service providers is difficult and there is little regular reporting of OMR outcomes. The limited data available provides conflicting evidence and results are difficult to compare, as the studies measure different variables. For example, one study comparing the costs of cardiac treatment found that costs in Australia and New Zealand were twice as expensive as sending the patient to India (25). However, a 2015 evaluation of the New Zealand Medical Treatment Scheme (NZMTS) found no clear evidence that treating overseas referral patients in India represented better value for money compared to New Zealand (6).

Another newly emerging issue is health security and antimicrobial resistance (AMR). PICs face unique challenges in addressing AMR, including their small size, remoteness, limited resources, fragile health infrastructures and susceptibility to natural disasters (26). An emerging concern is the increasing risk caused by OMR patients returning from countries with high AMR infection rates; many OMR service providers receiving Pacific Island patients are in India, which has one of the highest AMR burdens in the world (27).
2.3 Methods

This working paper is based on analysis of quantitative and qualitative data collected from 16 PICs. Seventeen PICs were invited to participate. Three invited PICs did not participate in the questionnaire: Nauru declined, and New Caledonia and Wallis and Futuna did not respond. However, Nauru and New Caledonia were included in the analysis of secondary policy documents and other data, including annual reports and MoH budget reports. Papua New Guinea (PNG) along with American Samoa and Guam (both US affiliates) were excluded due to limitations concerning the logistics, costs and time needed for data collection.

Data were collected through a questionnaire that was completed between October and December 2018 in person or in writing by officials from MsoH (n=14) and a review of existing PIC OMR policy documents (n=16).

The questionnaire, attached in Appendix 1, focussed on OMR schemes that involved government administration or financing. Representatives from the MoH in these PICs were invited to complete the questionnaire, including directors of health, directors of clinical services, chairpersons of OMR committees, and/or coordinators of OMR schemes. The manner in which the questionnaire was completed in each country (in person or in writing) is reported in Appendix 2. For background, interviews were also conducted with personnel from organizations that currently provide donor funding or coordinate OMR services.

Documents collected included annual reports, national health accounts and data from the WHO global health expenditure database. Most
respondents were not able to share expenditure data in the short time frame available for data collection.

Data were analysed using a framework based on the key questions listed in Section 2.1.3. These findings are discussed in relation to their impact on equity, quality and efficiency in Section 2.6.

Ethics approval was obtained for the project from Melbourne University Human Ethics Advisory Group and Human Ethics Advisory Sub-Committee.

Unless the source is stated, all tables and figures presented in the paper were produced by the study team.
2.4 Findings

2.4.1 Types of schemes

Most PIC governments provide full or partial funding for OMR schemes for a range of SCS, with support provided also by bilateral and charitable organizations (as well as co-financing by patients). Funding arrangements are complex and combine different sources in the various PICs (Table 2.1). The various types of OMR arrangement (government funded, supported by a high-income country, bilateral and tripartite agreements with government or charitable organizations) are presented in Table 2.1.

Table 2.1: Type of OMR arrangements for 16 selected PICs, 2018*

| Type of OMR financing arrangements | OMR financing** in PICs |
|------------------------------------|-------------------------|
| PIC government revenue             | – Fiji, Kiribati and Nauru |
| Supported by health financing in associated high-income country | – Supported by French national health insurance: French Polynesia and New Caledonia  
– Grants based on Compact Agreement with the United States of America (USA): Federated States of Micronesia (FSM), RMI and Palau  
– Free association with New Zealand: Cook Islands, Niue, Tokelau, Samoa |
| Bilateral agreements between governments (MsoH) and donors | – Australia: Nauru  
– NZMTS: Fiji, Kiribati, Tonga, Tuvalu and Vanuatu  
– PNG: Nauru  
– Taiwan Health Care Fund: Nauru, Kiribati, Palau, RMI, Solomon Islands and Tuvalu |
Table 2.1: Type of OMR arrangements for 16 selected PICs, 2018* (contd)

| Tripartite agreement between the MoH, other government agency and charitable organization | – New South Wales Government and St Vincent’s Private: Solomon Islands |
| OMR supported by charitable organizations and faith-based organizations (not exhaustive) | – Fiji |
|  | – Marshall Islands |
|  | – Tonga |
|  | – Tuvalu |

* These arrangements were current as of 2018 when data collection was carried out. Some of these arrangements may have since changed.

** In some cases, OMR service provision also takes place in the country financing OMR. In other cases, e.g. Palau, OMR service providers are contracted in another county (in the case of Palau, the Philippines).

Source: Compiled by the authors

In addition to sending patients for OMR elsewhere, Fiji receives some patients for renal dialysis and other surgical patients referred from other PIC countries, e.g. through NZMTS or directly from government MoH OMR schemes. Fiji, Kiribati and Nauru provide the best examples of government-funded OMR arrangements (and receive additional support through bilateral arrangements). The French Territories – which account for three quarters of all OMR spending among the 16 PICs – are the exception and have direct access to the French national insurance scheme.

Citizens of Cook Islands, Niue and Tokelau have free access to health care in New Zealand. Tokelau is considered a New Zealand Territory and the Cook Islanders and Niue are self-governing in free association with New Zealand. The MoH in the Cook Islands and departments of health in Niue and Tokelau have their own schemes that support airfares (some also cover accommodation) for travel to New Zealand for medical treatment. For Cook Islanders, accommodation is the responsibility of the patient, though support for housing may be provided if it is a long-term referral.

Some PICs have established mechanisms to support OMR through a donor agent or managing contractor. One example is the NZMTS, under which the New Zealand Ministry of Foreign Affairs and Trade has engaged a third-party contractor to ensure that referred patients meet agreed criteria (the involvement of the managing contractor in the NZMTS is described

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8 There is limited documentation of funding arrangements through charitable and faith-based organizations; additional arrangements may exist but were not identified in interviews or secondary data collection.
in Box 2.1). Key informants described the NZMTS managing contractor arrangement as good practice. Respondents also gave many examples of managing contractors and third-party arrangements that were not in the best interest of the PICs. Respondents from Tonga, Tuvalu and Kiribati, for example, mentioned that they were looking for alternative options for the managing contractor as a result of very large increases in costs for services negotiated through their existing third-party agreement.

**Box 2.1: New Zealand Medical Treatment Scheme (NZMTS)**

The New Zealand Ministry of Foreign Affairs and Trade provides funding through the NZMTS to support OMR, VSMT and capacity-building. Support is provided to Fiji, Kiribati, Tonga, Tuvalu and Vanuatu.

The budget for the NZMTS is NZ$ 10,000,000 over 3 years. Each supported country negotiates its own budget through bilateral agreements with New Zealand. Kiribati receives support for VSMT and capacity-building from NZMTS (no OMR).

Under the NZMTS, there are no co-payments from countries or patients for treatment. Most treatment is conducted in New Zealand, Australia or Fiji.

Tonga, Fiji and Tuvalu and Vanuatu have referral committees that screen applications for treatment overseas supported by the scheme.

The Ministry of Foreign Affairs and Trade appoints a managing contractor to manage service provision and coordinate some patient support and logistics in New Zealand. Counties Manukau District Health Board (CMDHB) is the current managing contractor. All patients referred must meet the clinical criteria as assessed; firstly, by the participating country OMR committee and secondly, as approved by the managing contractor following the selection criteria in the NZMTS guidelines.

*Source: Summary by the authors*

The arrangement between the Solomon Islands Government, the New South Wales Government and St Vincent’s Private Hospital in Sydney is an example of a tripartite agreement involving the sending country, an agent and the OMR provider. This agreement, known as the Solomon Islands
10-bed arrangement, is described in Box 2.2. This case points to the issues associated with sustainability and ad hoc agreements between service providers and PICs. The Ministry of Health and Medical Services (MHMS) had limited control over the number of patients accepted for treatment or the costs associated with services under the arrangement.

Box 2.2: Solomon Islands 10-bed arrangement

The arrangement between the Solomon Islands Government, the New South Wales Government and St Vincent’s Hospital was in place from 1993 to 2018. Under the initial arrangement, treatment was provided to citizens of the Solomon Islands free of charge at St Vincent’s Private Hospital in Sydney.

St Vincent’s Private allocated an annual amount for treatment. The number of patients accepted for treatment was determined by the St Vincent’s management. A coordinator appointed by the Solomon Islands Government and its High Commission in Australia provided out-of-hospital support to patients who were referred.

The Solomon Islands Government was responsible for paying for patients’ airfares and accommodation. A recent report from the Solomon Islands MHMS suggests that the MHMS OMR budget also paid for food, airport transfers, medications on discharge, medical consults if patients were seen at the private clinic and some diagnostic tests.

The MHMS allocated about SB$ 1 000 000 (approximately US$ 125 000) to OMR under the 10-bed arrangement (0.38% of the health budget). In 2018, the arrangement was suspended by St Vincent’s Private due to a lack of a coordinator and financing issues.

Sources: (8, 28–30)

2.4.2 OMR trends

This paper focuses on schemes that are funded in part or in full by PICs or associated governments and/or donors (bilateral or charitable), referred to as government-managed OMR. While we include some information on OMR supported by private funding (through crowd fundraising or charitable organizations), we cannot provide an exhaustive list of all private funding. WHO has reported that the number of OMR cases has increased by 59% since 2010 (18). Data on the number of OMR cases
in 2017 were available for 15 out of 16 PICs.\textsuperscript{9} As shown in Table 2.2, an estimated 2639 patients received an OMR in 15 PICs in 2017, equivalent to 0.96 OMR cases per 1000 population. The OMR rates are significantly higher (average 3.83) in those countries associated with France, the USA or New Zealand compared to the fully independent PIC countries (0.38).

| Type of scheme                                           | Country*                  | Total population | OMR cases | OMR rate per 1000 |
|----------------------------------------------------------|---------------------------|------------------|-----------|-------------------|
| Supported by health financing in associated high-income country | French Polynesia          | 283 700          | 669       | 2.36              |
|                                                          | Palau                     | 21 729           | 320       | 14.73             |
|                                                          | Federated States of Micronesia | 105 554        | 462       | 4.38              |
|                                                          | Marshall Islands          | 54 200           | 173       | 3.19              |
|                                                          | Niue                      | 1600             | 70        | 43.75             |
|                                                          | Cook Islands              | 17 459           | 153       | 8.76              |
|                                                          | Tokelau                   | 1499             | 13        | 8.67              |
|                                                          | Sub total                 | 485 741          | 1860      | 3.83              |
| Predominantly PIC government- and donor-supported schemes | Nauru                     | 13 649           | 260       | 19.05             |
|                                                          | Tuvalu                    | 11 200           | 111       | 9.91              |
|                                                          | Kiribati                  | 116 398          | 149       | 1.28              |
|                                                          | Tonga                     | 108 020          | 25        | 0.23              |
|                                                          | Fiji                      | 905 502          | 60        | 0.07              |
|                                                          | Vanuatu                   | 290 000          | 9         | 0.03              |
|                                                          | Solomon Islands           | 620 000          | 10        | 0.02              |
|                                                          | Samoa                     | 196 440          | 155       | 0.79              |
|                                                          | Sub total                 | 2 261 209        | 779       | 0.34              |
| Total                                                    |                           | 2 746 950        | 2639      | 0.96              |

* These arrangements were current as of 2018 when data collection was carried out. Some of these arrangements may have since changed. Sources: (9); interview data

The variation in OMR rates (Fig. 2.2) appears to reflect differences in population size, national conditions and the nature of the OMR scheme. The six PICs with the smallest populations (Palau, Cook Islands, Nauru, etc.)...
Tuvalu, Niue, Tokelau), and thus the biggest challenges in providing SCS, have the highest OMR rates. There is variation, however, between these six countries (partly a result of access to OMR providers). For example, Tokelau with a population of 1499 and no airport had 13 OMR cases in 2017; Niue, with a population of 1600 and direct flights to New Zealand, had 70 cases. Some PICs with OMR schemes linked to France, New Zealand or the USA (FSM, Palau, Cook Islands, Tuvalu, Niue, Tokelau) have higher rates of OMR. Nauru is supported by Australia.

Fig. 2.2: OMR rates per 1000 and total population, 2017

![Graph showing OMR rates per 1000 and total population for various countries in 2017.](image)

*Source: Data compiled by the authors from the survey*

### 2.4.3 OMR eligibility and selection criteria

OMR policies were surveyed in 12 out of 16 PICs.\(^\text{10}\) In most PICs, information about OMR policies or selection guidelines was not publicly available. Niue was the only country that actively publicized information about the scheme, using public radio. In most countries, patients were informed of the OMR schemes by a referring clinician or through word of mouth in

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\(^{10}\) Nauru, New Caledonia and Samoa did not respond to the interview questions on OMR policies and the interview in French Polynesia was conducted in French and not comparable.
the community. According to one official, “there is a limited budget and increased awareness in the public will lead to increased demand”.

While the selection criteria for patient admission to OMR vary from PIC to PIC (summarized in Table 2.3; see also Appendix 3), two broad criteria are commonly applied to assess eligibility:

- treatment for the condition is not available in the country (no specialist capacity); and
- there is high probability of survival, improved health and good prognosis following the treatment.

In most countries, “good prognosis” is defined as greater than 50% survival rate for more than five years after treatment, but the interpretation varies across countries.

**Table 2.3: Key patient selection criteria by country**

| Country   | Example of patient eligibility criteria for selection |
|-----------|-------------------------------------------------------|
| Cook Islands | – Will only fund patient transfers to Auckland  
                          – If the patient condition is related to alcohol and car accidents, then patient must pay 50% of total referral costs  |
| FSM       | – Patient must be enrolled in the national insurance scheme (MiCare) either as a member or dependant  
                          – Patient entitled to a maximum of 3 referrals per year per medical incident  
                          – Patient entitled to a maximum of US$ 50 000 per year  |
| Palau     | – Patient entitled to a maximum of US$ 35 000 per year  
                          – A co-payment of 20% of total costs up to a ceiling of US$ 1000 to 4000 depending on household income  |
| RMI       | – Patients over 70 years old are not eligible |
| Tonga     | – Patients who have private insurance are not eligible  
                          – Patients over 65 years old are not eligible  
                          – Not eligible if condition can wait and be treated by a VSMT  |
| All PICs  | – Treatment for the condition is not available locally and if OMR is undertaken, it will fix the condition  
                          – High chances of survival after treatment (in most cases, greater than 50% rate for survival of more than five years after treatment)  |

*Source: (18)*
Between PICs, there are differences regarding the number of treatments that may be supported for each patient annually. Some countries set a limit on the number of referrals or treatments, some set a limit on an annual cost per patient, while some country policies do not specify any limits.

Exclusions under OMR policy also vary from PIC to PIC, and OMR selection policies may exclude patients based on age (for example, a maximum eligible age), co-morbidities, the patient's ability to pay for some services, or the patient’s ability to fund airfares or support costs. Some policies exclude NCDs. For example, chronic heart conditions, chronic renal failure, some cancers and some neurological conditions are specifically excluded in OMR policies in Kiribati, Tonga, Cook Islands, RMI, Palau, FSM, Tuvalu and Fiji. Some countries, but not all, support access to OMR for patients who have private insurance.

Currently, it is neither possible to assess the extent to which selection criteria are being implemented, nor whether access to OMR schemes is equitable. Patient selection – and in some cases the policies – may be made on a case-by-case basis at the discretion of the OMR committee or Health Minister. One respondent explained that “rejected applications from the OMR committee end up at the Minister’s office for reconsideration”. In other cases, the selection procedure was described as highly political. While most respondents felt that political influence was unavoidable, some countries had established an appeal process to mitigate manipulation of the application and approvals processes.

Demand also appears to be created by VSMTs, which often perform screening and diagnose new patients who may require overseas referral if the VSMT cannot provide treatment in-country. Even so, OMR and VSMT programmes are managed separately within the MoH in most PICs, despite the clear links between them. While no data on referrals made by VSMTs are available, a high number of OMR cases are for availing the specialist services generally provided by VSMTs:

- Data on the conditions associated with OMR cases in 2017 were available for five PICs (Cook Islands, FSM, RMI, Solomon Islands and Tuvalu). The leading causes of OMR cases in these countries in 2017 were cardiology (approximately 21%), ophthalmology (approximately 15%) and orthopaedic surgery (approximately 15%).
- Data on the number of VSMT visits by speciality in 2017 were available for 13 PICs (Fiji, Solomon Islands, Cook Islands, FSM,
Palau, Tonga, RMI, Kiribati, Niue, Tuvalu, Vanuatu, Nauru and Tokelau). The specialities with the greatest number of VSMT visits in these countries were cardiology, orthopaedics, internal medicine, ophthalmology, paediatrics and ENT (as illustrated in Fig. 2.3).

Fig. 2.3: Most common disease conditions for treatment by VSMT for 13 selected PICs, 2017

Source: (18)

2.4.4 OMR policy, governance and practice

Of the 12 countries where information was available, nine had detailed OMR policies (Cook Islands, Kiribati, RMI, FSM, Niue, Solomon Islands, Tokelau, Tonga and Tuvalu). In addition, Vanuatu had recently developed selection criteria for OMR as the beginning of a policy; Fiji and RMI were reviewing their policies; and RMI was reviewing the cost of sending patients to the Philippines and India. Almost half of the OMR policies reviewed for our study were due (or overdue) for an update. OMR policy for Cook Islands is reviewed every five years. In Tonga, OMR policy is reviewed as needed; for example, a recent review was conducted in response to rising costs for offshore treatment and the policy was updated (with an increase in the annual ceiling for treatment cost per patient).
A clear gap is the general lack of established guidelines for the implementation of OMR policies that govern the processes associated with each OMR case. Where guidelines exist, they include details such as the processes involved in patient application, selection, appeals, logistics and travel, including additional allowances such as per diems, accommodation or costs of patient escort or family member.

OMR governance varies between countries. Commonly, governance of OMR processes is the responsibility of an OMR committee appointed by the MoH or equivalent. Typically, the OMR committee assesses eligibility of patients for OMR and – more commonly in recent years – selects service providers. Eight out of 16 PICs provided details about the composition of their OMR committee. As an example, the OMR Committee usually comprises the Director of Clinical Services, the Chief Medical officer, medical specialists working in the MoH, the Permanent Secretary of Health, the Director of Hospital Services, the OMR Coordinator and sometimes an overseas managing contractor. There are some differences: some countries have an OMR coordinator and others do not; and in some countries all local specialists are included in the OMR committee while in others only the clinical director and other MoH staff are included. Some PICs do not have an OMR committee and informal arrangements are made between specialist advisors, the MoH and overseas coordinators or managing contractors.

A summary of the different features of OMR policy and practice governing the functions and tasks of the various PIC schemes is given in Table 2.4.

Table 2.4: Functions and tasks of OMR implementation based on current practice (unless stated)*

| Identifying patients who need referral for treatment overseas |
|---------------------------------------------------------------|
| • MoH puts in place OMR policies, including clinical guidelines. |
| • OMR coordinator and patients complete application, including all supporting documents, test results, X-rays, referral letter stating diagnosis of condition and confirmation that the condition cannot be treated locally. |
| • OMR coordinator discusses referral with local specialists or VSMTs. |
| • OMR coordinator forwards application to overseas referral committee/director of clinical services. |
Granting approval/rejection

• OMR committee approves or rejects applications.

• Once application is approved by OMR committee, OMR coordinator arranges finances to support patient, treatment and travel and medical escort/family member (if policy supports this).

• OMR coordinator informs referring specialist and patient of the outcome of the application

• OMR committee reviews and manages appeals.

Selecting service providers and payment arrangements

• OMR coordinator consults with referring local specialist or VSMT.

• OMR coordinator or director of clinical services communicates directly with service provider or through a representative or agent.

• OMR coordinator, managing contractor (may also be donor in some cases) or their representative negotiate costs for treatment and number of patients that can receive treatment with service provider.

• OMR coordinator, with approval from OMR committee, agrees on fees and costs and arranges payment schedule.

Travel and logistics

• OMR coordinator arranges logistics – transport, accommodation, per diem, support (pastoral care) for patients and medical escort or family member (depending on OMR policy).

Tracking and monitoring

• Practice is highly inconsistent across PICs.

• Referring doctor, regular PHC provider or OMR coordinator integrates patient information into local health records or data base.

• Referring doctor or regular PHC provider follows-up patient and reports patient outcomes following OMR.

• OMR coordinator tracks OMR spending and reports to MoH.

• OMR coordinator and OMR committee oversee and monitor OMR data and information.
Return of the patient

- Practice is highly inconsistent across PICs. An ideal processes should include:

- Managing contractor (may also be donor in some cases) or OMR coordinator arranges payment to service provider.

- OMR coordinator liaises with referral site to arrange logistics for return of patient including reports showing all treatment, tests and services provided.**

- OMR coordinator or referring doctor communicates with service provider and VSMT or hospital to provide follow-up care for patient (this is a critical step that is not done for most cases).**

- Referring doctor or regular PHC provider reports patient outcomes on return home (it is unclear as to who is involved and whose responsibility this is; as a result, it is not done).**

*Practice varies between countries

** Practices that are desired but were reported as not done, or no clear procedure for this task was identified by survey respondents or outlined in OMR policies.

Source: Compiled by the authors

For the first four categories listed in Table 2.4 – identifying patients who need referral for treatment overseas; granting approval/rejection; selecting service providers and payment arrangements; and travel and logistics – the functions described are based on existing practices that are relatively consistent across PICs, as reported in the data collection. For the last two categories in Table 2.4 – tracking and monitoring and return of patients – the list includes practices that were reported as highly inconsistent across PICs. The two final categories therefore include recommended good practice suggested by key informants (and reported as not being done in most PICs). Cook Islands and Niue were the only countries that had a clear process for patient follow up.

The personnel involved in carrying out processes associated with each OMR case are summarized in Table 2.5, including the responsibilities of the different personnel within the MoH and among other stakeholders such as visiting specialists, health minister and service providers. These functions cannot be sufficiently managed by a single coordinator and require a coordinated team approach. Functions and responsibilities are not consistent across PICs. In some countries, the OMR coordinator is involved in decision-making and is part of the OMR committee, with responsibility primarily for administration, processing applications, arranging logistics and travel for OMR patients and providing secretarial...
support to the OMR committee. In some countries, there is no OMR coordinator. Some OMR coordinators said they deal with a high number of applications and the workload was stressful, particularly in conditions where there is no appropriate information system. There is a high rate of turnover in OMR staff.

Table 2.5: Summary of functions and responsibilities of key personnel

| Function/responsible personnel                              | Director of Clinical Services | Hospital director | OMR committee | OMR coordinator | Overseas coordinator | Overseas service provider (agent or representative) | Local specialist | VSMT | Health minister | Referring doctor |
|-------------------------------------------------------------|------------------------------|-------------------|---------------|----------------|----------------------|-----------------------------------------------------|------------------|------|----------------|------------------|
| Patient diagnosis and referral                              | ✔                            |                   |               |                |                      |                                                     |                  |      |                | ✔                |
| Granting approval/rejection of applications and budget       | ✔                            | ✔                 |               | ✔              |                      |                                                     |                  |      |                | ✔                |
| Selecting service providers and arrangements for payment     | ✔                            | ✔                 | ✔             |                |                      |                                                     |                  |      |                | ✔                |
| Travel and logistics                                        | ✔                            | ✔                 | ✔             | ✔              |                      |                                                     |                  |      |                | ✔                |
| Tracking and monitoring                                     | ✔                            | ✔                 | ✔             | ✔              |                      |                                                     |                  |      | ✔              | ✔                |
| Return of patient                                           | ✔                            | ✔                 | ✔             |                |                      |                                                     |                  |      | ✔              | ✔                |

Source: Based on information in Table 2.4

2.4.5 OMR financing

The financing of OMR activities across the 16 PICs is complex, mixed and diverse, comprising general domestic revenue, associated high-income governments, bilateral donors and charitable organizations. Few PICs have well-established and well-maintained data systems for recording VSMT and OMR expenditures. FSM is one example where a significant database is linked to the MiCare insurance scheme. French Polynesia and New Caledonia, both of which are administrative districts of France
covered by the French national insurance scheme, are exceptional among PICs, accounting for three quarters of OMR spending in 2017.

Private insurance may also be used, but generally operates separately from government OMR schemes; e.g. the Fiji OMR policy excludes anyone with private health insurance from accessing the government OMR scheme. OOP expenditure is also common, even in PICs where health services are heavily subsidised and often provided free of charge.

OOP payments are often required for medications, diagnostic tests, transport, accommodation and food. For example, a respondent in Kiribati noted “If during the travels unexpected things happen, then the patients have to cover some part. Some part would be taken care of by the policy.”

There is no clear or consistent data collection process in most of the countries studied. The types of funding included in these data, i.e. government revenues, associated high-income countries and in some cases donor or charitable funding were not clearly delineated by the countries providing the data. Because the data vary between countries, care should be taken in interpretation. Generally, the expenditure included here can be regarded as those for which the government has responsibility and do not represent the total OMR expenditure for those countries reliant on donors for co-financing (or private funding).

**Total OMR expenditure**

Based on the data collected during our research, we estimated national OMR expenditure for all 16 PICs in 2017 at approximately US$ 125 million (Table 2.6). We were able to estimate expenditure for only 13 of these PICs in 2013; however, based on our own estimates, there was little increase in the total OMR expenditure over the period considering the 16 PICs together.

Relative expenditure, and the number of patients accessing OMR, is by far the greatest in the two countries with access to the French national health insurance process: New Caledonia and French Polynesia (US$ 57 million and US$ 38 million, respectively for 2017). In FSM, an independent republic associated with the USA, almost half of the OMR expenditure was funded by the MiCare insurance scheme (US$ 3.1 million of a total of US$ 7.3 million in 2017). Clearly, of a total expenditure of US$ 124 million, expenditures are significantly higher in those countries associated with high-income governments (US$ 109 million) than those where funding

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11 These numbers are from government-funded OMR schemes and do not include OMRs that may be financed by private sources including patient OOP payments and charitable organizations.
comes predominantly from local government and donor-supported funding (US$ 15 million).

Table 2.6: OMR spending in selected PICs, 2013 and 2017 (US$ unadjusted)

| Type of scheme | Country* | 2013 | 2017 |
|----------------|----------|------|------|
| Supported by health financing in associated high-income country | New Caledonia | 65 495 313 | 57 000 937 |
| | French Polynesia | n.a. | 38 000 000 |
| | Palau | 1 935 017 | 2 693 227 |
| | FSM – government | 3 760 122 | 4 231 609 |
| | FSM – MiCare | 2 633 560 | 3 100 000 |
| | RMI | 3 050 990 | 3 604 723 |
| | Niue | n.a. | 61 957 |
| | Cook Islands | 408 660 | 500 478 |
| | Tokelau | 299 790 | 283 831 |
| | Sub-total | | 109 476 762 |
| Predominantly PIC government- and donor-supported schemes | Samoa | 4 934 096 | 3 787 295 |
| | Nauru | 1 393 938 | 3 836 103 |
| | Tuvalu | 1 238 137 | 4 848 400 |
| | Kiribati | 700 451 | 1 412 129 |
| | Tonga | 581 100 | 581 100 |
| | Fiji | 607 586 | 583 176 |
| | Vanuatu | n.a. | 307 530 |
| | Solomon Islands | n.a. | 102 601 |
| | Sub-total | | 15 458 334 |
| Total | | | 124 935 096 |

* These arrangements were current as of 2018 when data collection was carried out. Some of these arrangements may have since changed. Sources: Interview data; (18)

Budget expenditures

Total OMR costs financed in different ways through government vary from PIC to PIC according to population size, the costs that PIC governments are responsible for and the nature of the OMR benefits provided (in some cases this includes treatment costs and other cases it does not). Some PICs rely heavily on external sources to fully or partially fund OMR through bilateral
agreements, or on support from charitable organizations. Typically, these bilateral and charitable donors pay for all treatment-related costs while the PIC government is responsible for travel and logistics.

According to several respondents, the level of budget allocation to OMR is increasing, though the reasons for this may vary. An RMI respondent reported: “We are noting an increase in expenditure, but suspect that this may be due to increasing cost of treatment provided by current service providers rather than increase in number of referrals”. According to our estimates, spending increased between 2013 and 2017 in eight of the 11 countries listed in Table 2.6. The largest increases were in Tuvalu (292%), Nauru (175%) and Kiribati (102%). Spending fell in Samoa by 23% – the largest fall across all countries – reportedly due to a policy decision to redirect spending towards VSMTs. Expenditures fell slightly in Fiji (4%), Tokelau (6%) and New Caledonia (13%).

In some countries (Kiribati, Tuvalu) government expenditures for OMR have often exceeded budget allocations. A respondent from Kiribati said: “In 2017, it was roughly US$ 1.5 million. This year it is a bit lower. This is the budget allocation. But if you look at the total cost it can be much more”. In Niue, one respondent said: “Approved budget for OMR for 2017 is about NZ$ 50 000 but the current spending is up NZ$ 93 000; this comes out of the recurrent budget (centralized through Treasury)”. In Solomon Islands, the respondent noted: “The budget of SB$ 1 million is usually totally expended”. In Vanuatu a respondent noted: “The budget gets spent quickly and is used up [each year] by August. No more finances are available thereafter. Sometimes, additional budget can be negotiated.”

**OOP payment**

In some cases, OOP payments are required and may be negotiated on a case-by-case basis. Tokelau, Cook Islands and Solomon Islands reported they did not have any mechanism for co-payment. According to respondents, co-payment was required (either according to policy or by default) in Kiribati, Tonga and Niue. For example, a respondent in Tonga said: “Co-payments are usually suggested for patients who may have a good prognosis with treatment, but their age may be above 60.” In Niue, a respondent said: “For people that are not eligible, the government may decide to assist with 50% payment, but this decision always goes back to the Cabinet for approval.”
Cost per OMR case

National spending per OMR case varies, as illustrated in Fig. 2.4, where average OMR expenditure per case and annual current health expenditure (CHE) per person are compared for 13 PICs where data were available. These data include OMR costs financed through government, which includes treatment costs in some cases and in other cases does not, e.g. Cook Islands, Niue and Tokelau. This limits the extent to which implications can be drawn from the data, and points to the need for more consistent and comprehensive data collection.

There is no clear relationship between the level of CHE and the average cost per OMR case, which varies according to national circumstances. While there appears to be a general trend of declining OMR costs with higher CHE expenditure, the relationship is weak (see Fig. 2.4). More important is the wide variation from the mean, with Palau especially at relatively high levels for both indicators; Niue has high CHE per capita and very low OMR costs; and in Samoa, Tonga, Vanuatu and Solomon Islands CHE is low while OMR costs are high. It is likely the OMR costs vary more in line with national characteristics than with CHE alone.

**Fig. 2.4: Average spending per OMR case by PIC governments and CHE per capita, 2017**

*CHE per capita was not available for French Polynesia, New Caledonia and Tokelau*

*Source: (18)*

Average OMR costs per case vary greatly between Niue (US$ 885 per patient in 2017) and Tuvalu (US$ 27 238) or Vanuatu (US$ 34 170), where, in both countries, treatment costs are included. The French territories
(French Polynesia and New Caledonia) recorded the highest expenditure. The average cost per OMR is greater than US$ 9000 in all countries except Niue, Cook Islands and Tokelau, all of which have access to OMR through free association with New Zealand and the governments are responsible only for payment of airfares and support costs.

Survey respondents confirmed that most countries struggle to pay service providers, and some recipient countries have stopped receiving PIC patients as they were not able to meet treatment costs on time. In some cases, additional funds have been drawn from other health programmes to supplement OMR costs.

2.4.6 OMR service providers

For historical reasons and due to reliance on external financing, OMR patients have commonly been sent to Australia, New Zealand and Hawaii. From the French territories, patients have commonly been sent to France. The reliance on external actors for financing has meant that PICs have had little control over the number of patients who receive OMR, or the costs associated with services provided.

This pattern has changed in recent years as PICs look for lower cost alternatives in China, India, Malaysia, the Philippines, Singapore and Taiwan. Respondents suggested that it has become common for overseas hospitals and health-care providers (mainly from India, Taiwan and the Philippines) to send representatives (or an agent) to different PICs to market and promote their services. In recent years, agents from these provider countries have negotiated OMR agreements with different PICs through either the minister for health or the OMR committee or coordinator.

It is likely that PICs will continue to play an increasing role in purchasing OMR services, independent of donor partners or historical relationships. However, because there is currently little information available to compare costs, quality of treatment, qualifications of specialists, patient outcomes or contract terms, assessing new service providers to receive OMR patients is a significant challenge for PIC governments and OMR committees. Respondents believed that existing arrangements with multiple service providers were inefficient; and in Tonga, Fiji and Tuvalu, respondents said they had recently changed or were in the process of choosing alternative providers.
Very little data is available to policy makers to monitor the quality of care received by OMR providers and patient outcomes. However, concern was expressed by respondents about language barriers, long distances required to travel for treatment, additional and sometimes unnecessary and costly tests and treatments and poor patient outcomes (including a high number of deaths upon return from treatment overseas).

In most cases, there is no formal system for tracking the referral process or patient outcomes, which have sometimes been assessed simply by using informal word-of-mouth feedback from returning patients. In some countries, OMR data are recorded in Excel files, but this data varies widely between countries in terms of the information captured and the quality of the data recorded. One issue noted by respondents is the absence of formal links between the use of paper records and electronic data systems. It is especially difficult to access patient data across the different sources and formats, which limits the capacity to track patient outcomes.

Most PICs have not conducted any formal evaluation of their OMR scheme. In Tonga, respondents reported that an evaluation had been done, though the findings had not been made public. Only in FSM and Niue did MoH respondents confirm that informal feedback was collected from patients following OMR. For the NZMTS, the managing contractor conducted their own programme review, external to the MoH.
The partners involved in developing this working paper (SPC, WHO and the Nossal Institute) have been in dialogue with Pacific health leaders about ways to strengthen OMR schemes. Key recommendations from the Ninth Directors of Clinical Service meeting held in Denarau, Fiji on 1–2 April 2019, and the Pacific Heads of Health Meeting on 3–5 April 2019 were discussed and endorsed by the Pacific ministers of health.

We endorse the health ministers’ recommendations and see the potential health system entry points for strengthening OMR, drawing on evidence from health systems reform. We do so while recognizing that the diverse political and economic context among PICs and the variable capacity of health systems to deal with OMR means that implementation would differ in each context.

The starting point is an understanding that the provision of OMR is a necessary and routine part of the functioning of health systems in PICs. Approaches that develop policy in relation to OMR in isolation from the rest of the health system may tend to divert resources from other necessary elements of the system. When OMR is approached as the final step in the referral process within the domestic health system, PICs will advance their commitment to UHC principles with an equitable and efficient process for ensuring access to quality health services (4, 31).

Approaching OMR from a health systems perspective requires its integration into the broader health systems planning processes, starting with single national health strategic plans. The regular process of reviewing and identifying priority health concerns across the system, and the need for OMR within those priorities, will provide the basis for defining a package of services, including VSMT and OMR services needed to address health concerns. Lessons can be learned from the approaches...
already applied in the strengthening of primary health care (PHC) service delivery in the Asia-Pacific region and from the experience of imported health services in other small island developing states \((4, 32, 33)\).

Improved information sharing in relation to OMR is essential. Good decision-making – in policy, planning, implementation and financing – is based on good information. By integrating OMR needs, service delivery activities and patient outcomes into the national health information system, each PIC could strengthen existing databases or develop a database to manage OMR outcomes alongside domestic service delivery, integrate the activities of VSMTs, collate clinical data, track OMR patients as they move through the referral system and allocate specialist services according to caseload.

The implications for policy and planning are further discussed in the attached Policy Brief. Reform of OMR processes raises two more long-term issues discussed below.

### 2.5.1 Accreditation and strategic purchasing

The Pacific Register of Qualifications and Standards (PRQS), for which SPC has oversight, could provide a framework for accreditation of service providers \((34)\). Evidence suggests that accreditation of service providers as the basis for strategic purchasing can be used effectively to improve quality and promote more efficient use of resources \((35)\). The responsibility lies primarily with PIC health leaders. Where the responsibility for purchasing OMR services lies with donors or third party contractors acting on behalf of donors, there is potential to work more closely with partner PIC governments to agree on criteria for selection of providers, the terms of contract, the payment mechanism and information sharing.

Dialogue between donors and PIC governments in this way could also build the capacity of PICs to develop strategic purchasing arrangements. Strategic purchasing, however, raises new health system challenges in a situation where PICs have small populations, limited experience and limited bargaining power. A longer process of policy reform is needed to prepare the way for strategic purchasing arrangements and increased cooperation that benefit PICs collectively.
2.5.2 Planning and prioritization

Determining which SCS to fund and which will be provided through local specialists, VSMTs and OMR involves prioritizing how to allocate resources within the health sector. What level of resources can and will be allocated to primary care, what services can efficiently be provided at hospital level, how VSMTs can be put to best use and what services are most efficiently provided through OMR are the key questions.

Within the PIC – where the services provided at each level of care have generally been based on historical patterns rather than measures of medical need or efficient allocation, influenced by external financing and provided for free at the point of care – very few episodes of rigorous prioritization processes have been documented. Indeed, reviews of PHC in the Asia-Pacific cite prioritization as a key area for research (33). While some such processes have been strengthened previously through PHC reform (36), there still appears to be no articulated criteria for prioritization, such as burden of disease, acceptability or cost-effectiveness.

The strengthening of planning and prioritization processes could also provide the basis for improved regional collaboration on OMR at two levels.

Firstly, reforms are necessary at national level, working at the level and pace that is appropriate for the national context. Strengthening of national service delivery and referral systems can pave the way in each country to achieve more effective cooperation at regional level.

Secondly, at the regional level, improved collaboration between countries could provide the opportunity for potential OMR patients from smaller countries to receive treatment from VSMTs in a neighbouring PIC through an agreed pooling of patients (22). Similar arrangements are in place through the Eastern Caribbean Network of Care for Specialized Clinical Services, where intergovernmental agreements facilitate harmonization of health policies and freedom of movement of all citizens within the region (37, 38). Expertise in specialized areas is already developing in the Pacific, e.g. for cancer care in New Caledonia and Fiji. Regional cooperation will also increase the bargaining power of all PICs (when acting together) in negotiations with health providers in the service delivery countries.
This study confirms the findings of earlier work and adds new evidence on a range of critical issues across PICs with respect to governance, financing and service provision for specialized clinical services. These issues are related to questions of equity, financial protection, efficiency and quality of care in the provision of OMR and SCS. The main findings of the study are summarised below.

**Access and financial protection**

- OMR policies in most PICs define both the services and beneficiaries, yet these policies are not widely known and their implementation is often subject to political influence.
- While health services are generally free at the point of care in the Pacific, OMR patients in some PICs are required to pay OOP costs in the absence of policies to ensure financial protection. There is limited data to assess whether these payments cause financial hardship or impact negatively upon access.

**Quality of treatment**

- Information on which quality of care received by OMR patients can be assessed is not systematically shared by OMR providers with PICs or otherwise collected and shared by PICs.
- Consistent with other studies, poor national coordination of OMR – and poor integration into the national health system – is a major limitation for OMR schemes (6, 7, 18).

**Efficiency in service delivery**

- The number of OMR patients and annual expenditure on OMR by PICs appear to be rising, but there is limited comprehensive financial data to make comparisons across countries.
• The variations in the spending by PIC governments per OMR case suggests that there is potential for efficiency gains.
• There is some anecdotal evidence to suggest that contracting of OMR service providers and the use of third-party agents is contributing to inefficiencies.

The issues impacting OMR differ across PICs by the nature of the schemes and contracting of OMR providers. However, fundamental to any reform process is to see OMR as a coordinated step in the national health referral system from primary to secondary care to VSMTs and OMR. This is recognized by others who also see the potential of OMR as contributing to UHC by providing a patient pathway for equitable, effective and efficient health-care delivery (4).
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Appendices

Appendix 1: Survey tool

OMR schemes in the Pacific
Questionnaire guide for interviews

PICs are facing increased challenges due to the rising burden of NCDs. This has led to a rising demand for the provision of tertiary hospital and specialized clinical services that are often not available domestically. Consequently, patients needing specialized care can access services in other countries such as Australia, New Zealand, India and other countries. All PICs have one or several overseas medial referral (OMR) schemes or programmes.

We are conducting interviews to learn more about the policy parameters for OMRs. We want to understand how OMRs are financed, managed and organized and how OMR programmes and services could be improved. The findings of this research will inform policy recommendations to improve OMR across the Pacific region.

The research is based on the outcomes of a side-event meeting during the Sixty-eighth Regional Committee Meeting in October 2017 in Brisbane with representatives from all PICs that was held on the request of Pacific Island Ministers of Health. We thank you very much for your participation.

Date of interview:  _____/_____/2018

Researcher’s name:  ____________________________________________
Participant information

Name: 

Country: 

Position: 

email: 

Phone: 

Questions

Policies and laws for OMR

- Do you have OMR schemes in your country? What overseas medical referrals schemes exist in your country? (Prompt: Please tell me the names of the scheme(s). When did the scheme start (year)? Who is managing the scheme – the government or a funder/donor? What OMR schemes existed in the past and why have they been discontinued?)

- Are your OMR schemes governed by any of the following (Read options to participant and circle any that apply):
  
  a. Unwritten understanding
  b. Policy
  c. Regulation
  d. Law

  (Follow up question: If “b”, “c” or “d”, ask participants if they can provide copies of any existing policy documents, regulations or laws for OMR, or documents can be sent to researchers by email following the interview).

- Who has decided on the policy of OMR? (Prompt: From your memory, please tell me who has been involved in these decisions [persons/ministries/donors]? Who was the driving force?)

- Is the OMR policy publicly available? (Prompt: If yes, where is it publicized, or how are health-care providers and potential patients informed about the available OMR schemes or programmes?)

- How often is the OMR policy reviewed? Is there a formal process for this review? (Prompt: Can you describe the review process?)
Financing OMR

- Can you provide a rough figure or estimate for the annual (or available) budget for OMR in 2017? Does this budget come out of the MoH, or are other ministries involved?

- Who was involved in the decision-making for the OMR budgets? (Prompt: Who manages or has oversight of the OMR budget?)

- What expenditure items are covered by the OMR schemes? (Read options to participants and circle any that apply. Prompt: Do you know of any other costs or expenditure items related to OMR?)
  - Treatment cost
  - Transportation costs including airfare
  - Drug costs
  - Accommodation
  - Costs for caregiver
  - Others, e.g. repatriation costs, emergency evacuation costs

- Is the public informed about available OMR programmes? (Prompt: Is the public informed about how to access OMR? Are OMR budgets and OMR activities reported or documented?)

- Have you observed any trends in OMR expenditure in the past 5–10 years (also, trends in budgeted verses actual expenditure)?

- Is there any co-payment (cap or ceiling) on OMR to be covered by the patient? What are the conditions that determine the co-payment arrangements?

- Is there private funding for overseas medical treatment for patients in your country? (Prompt: Private funding can include patient OOP, private insurance, crowdfunding and other sources.)

Service delivery and list of conditions

- Is there a defined list of diseases, conditions or diagnoses that are included in the OMR scheme? (Follow-up questions: If yes, can you tell me which conditions/diseases or diagnoses are included? Have any conditions been excluded? Why were these conditions, diseases or diagnoses excluded?)

- How was the list of conditions generated? (Prompt: Who was involved in the decision to include or exclude conditions? Is the list updated on a regular
basis? Who is responsible for reviewing and updating the list? How is the list reviewed?)

- Is the list of conditions publicly available? (Prompt: How do health workers, doctors, specialists and the community know about the list? How can they find information about access to OMR?)

**Service delivery – selection of providers**

- Can the MoH provide a list of the overseas providers that have seen OMR patients in the past three years? (Prompt: Which country(ies) are the service providers from? What is their clinical specialty?)

- Can you describe the process for selecting existing or new OMR service providers? How are the services providers selected? Is there a formal process?

- What is the legal relationship between the public health system and OMR service providers? (Prompt: e.g. direct contract/contract via an agent, intermediate or middleman/donor agreement with MoU, etc.)

- Follow-up questions
  - If you contract via an agent or middleman, how are they selected?
  - Is there an open tender process?

- Are there any negotiations with the selected providers on patient cost, patient volume and coordination, etc.?

- Is there an arbitration process between the Ministry and the health provider in case there is a conflict or misinterpretation of costs or quality of care?

- Is there a database for the OMR scheme(s)? (Prompt: What information is tracked on the database, e.g. patient numbers by gender, age, diagnosis, cost, the provider, country, patient outcomes and survival?) Follow up question: Can you share relevant information from the database for this study?

**Service delivery – selection and management of patients**

- How is a patient selected for OMR? Do you apply any eligibility criteria? (Prompt: Who is involved in the selection of cases? Is there a committee and who is the Chair?)
• How are referrals for OMR made? (Prompt: How is the referral process organized? Is there an application process?)

• Who is involved in the referral and approval processes? (Prompt: Can you outline the steps involved or help us to draw a flow diagram?)

• Can you estimate the number of cases that applied for OMR in 2017? Can you estimate the numbers of approved cases in 2017? (Prompt: Which cases/specialties are more likely to be approved? Is there is an appeal process for rejected applications?)

• What about administration of the OMR scheme? (Prompt: Who does this and what is involved, such as contacting providers and coordination of patients? Does this include organizing travel, visas, logistics and payments or anything else?)

• Can you estimate the average length of an overseas stay for an OMR patient? (Prompt: What is the average number of days? What is the longest stay? Who decides how long a patient stays overseas?)

• Who pays the service providers (claim management)? What are the main challenges faced in this process?

• Are patients billed individually or is there bulk billing?

• Do you receive any information about the treatments or procedures that OMR patients receive? (Prompt: What information do you receive? How do you get this information? Do you get itemised invoices, communication with the service providers, electronic health records?)

• Is there any control on the cost of services provided to OMR patients? (Prompt: Are there any mechanisms for comparing costs or maximum limits set for certain procedures to prevent fraudulent claims?)

• Is there any control on the quality of services provided during the overseas treatment?

• What happens when an OMR patient returns home – is there any mechanism for referral back to the public health system? Is the patient given complete medical documentation?

• Has the Ministry conducted any formal or informal evaluation of the quality of treatment received by OMR patients? If yes, what were the main findings of the evaluation?
• Do you track patient outcomes or the survival rates of OMR patients who have returned home?

**Your opinion**

• Do you think your OMR schemes are managed efficiently? Why/why not?

• What are the strengths and weaknesses of your current OMR scheme/s? How could the weaknesses be addressed?

• Do you think the administration of OMR schemes could be managed by a regional body, e.g. claim management, negotiation with providers, cost/quality control, other comments?

• Do you think that OMR schemes are equitable? Why/why not? If not, what needs to be changed in order to make the schemes more equitable?
### Appendix 2: Summary of consultations

| Item                                                  | OMRs                                                                 |
|-------------------------------------------------------|----------------------------------------------------------------------|
| Countries included in analysis                        | All countries – Cook Islands, Fiji, French Polynesia, Kiribati, RMI, FSM, Nauru, New Caledonia, Niue, Palau, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu |
| Face-to-face consultations                             | Fiji, French Polynesia, RMI, FSM, Tonga, Tuvalu                       |
| Country interviews conducted over skype and teleconferencing | FSM, (Australia, New Zealand)*                                      |
| Countries that declined to participate                 | Nauru                                                                |
| Countries included in analysis whose secondary data only was used | Nauru, New Caledonia                                                 |
| Countries that did not respond to survey questions     | New Caledonia, Niue, Wallis and Futuna                              |

* Australia and New Zealand as the receiving countries were contacted to capture information about the referring countries.
## Appendix 3: Summary of OMR policies by country

| Country   | Inclusion criteria                                                                 | Exclusion criteria                                                                 | Special conditions                                                                 | Citizenship                                                                                      |
|-----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| Cook Islands | - Will only fund patient transfer to Auckland  
 - No defined selection criteria or list of conditions to include or exclude | Terminal conditions and conditions that can be treated locally                        | If the patient condition is related with alcohol and car accidents, then patient must pay 50% of total referral costs. | Any free medical service provided in New Zealand will be for Cook Islanders and Permanent Resident certificate holders who have a New Zealand Passport. Those without a New Zealand Passport DO NOT qualify for free health services and will be liable for all medical, hospital and personal costs in New Zealand |
| FSM       | Patient must be enrolled in the National insurance scheme (MiCare) either as a member or dependent. | Terminal conditions, end-stage cancer and conditions that can be treated locally | - Patient entitled to a maximum of three referrals per year for each medical condition  
 - Patient entitled to maximum of US$ 50 000 per year |                                                                                               |
| Fiji      | Terminal conditions, conditions that can be treated locally, organ transplants, end-stage cancer and diagnosis and tests are excluded. |                                                                                     |                                                                                     | Anyone who resides in the country, but not those who hold dual citizenship in Australia or New Zealand. |
### Appendix 3: Summary of OMR policies by country (contd)

| Country | Inclusion criteria | Exclusion criteria | Special conditions | Citizenship |
|---------|-------------------|--------------------|-------------------|-------------|
| **Kiribati** | | – All cancers that are beyond stage 3 are excluded.  
– All types of transplants are excluded.  
– Chronic cardiac failure, chronic hepatitis, chronic neurological conditions, conditions that can be locally treated and terminal conditions.  
– Cases related to eye if they are treatable in-country.  
– Age plays an important role (the exact age is not specified). | – Exclusion and inclusion of certain cases depend from case to case.  
– At least six consultations must be done in country to present a case. | Anyone who resides in country but not those who hold dual citizenship in Australia or New Zealand. |
| **Niue** | Citizenship of Niue | – In the case of people who are not eligible, the Government after considering the case can offer a 50/50 co-payment. | Maximum of three referrals per patient per year. Costs of additional visits within the year must be met by the patient. | The policy reviewed to include only those who have Niue citizenship. |
| **Palau** | | Terminal conditions, conditions that can be locally treated, organ transplants, diagnosis and tests, chronic renal failure and alcohol and drug addiction treatments, alternative/complementary treatment services are excluded. | – Patient entitled to maximum of US$ 35 000 per year  
– A co-payment of 20% of total costs up to a ceiling of US$ 1000 to 4000, depending on household income. | |
### Appendix 3: Summary of OMR policies by country (contd)

| Country                  | Inclusion criteria                                                                 | Exclusion criteria                                                                                     | Special conditions                                                                 | Citizenship |
|--------------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------|
| Republic of Marshall Islands | - Ten dialysis sessions for renal failure not related to diabetes. Family must finance the rest.  
- The survival rate at 5 years for any treatment must be more than 50%. | - Terminal conditions, conditions that can be locally treated, end-stage cancer, TB and related complications are excluded.  
- Diabetes and diabetic complications are excluded.  
- Retinopathy and nephropathy are excluded.  
- Not eligible if you are over 70 years old. | US$ 100 000 is basic cover. If the procedure exceeds this, permission must be sought from the OMR committee. |             |
| Solomon Islands          | Limited to adults                                                                  | - The prognosis is taken into consideration when OMR request is approved.  
- Only patients accessing specialized care can get referred to OMR. Rural patients miss out. |                                                                      |             |
| Tokelau                  | - No pre-defined conditions or criteria  
- Referral made at the clinical presentation |                                                                                                          | N$D 500 000 annually                                                              |             |
### Appendix 3: Summary of OMR policies by country (contd)

| Country  | Inclusion criteria | Exclusion criteria | Special conditions | Citizenship |
|----------|--------------------|--------------------|--------------------|-------------|
| Tonga    | − Not eligible if you have private insurance. <br>− Not eligible if you are over 65 years old. <br>− Not eligible if condition can wait and be treated by a VSMT. <br>− Heart failure, chronic renal failure are excluded. <br>− All other terminal conditions, organ transplants, chronic neurological conditions are excluded. | Patient co-payment is expected in special cases. | Anyone who resides in the country but not those who hold dual citizenship in Australia or New Zealand. |
| Tuvalu   | No inclusion or exclusion criteria. The referral is dependent on the referring doctor. | | | Anyone who resides in the country but not those who hold dual citizenship in Australia or New Zealand. |
| Vanuatu  | No clearly defined conditions. A list was recently developed. Health Services Limited and CMDHB have their own policy. | − Poor prognosis and palliative care cases are excluded. <br>− Multiple comorbidities, end-stage renal failure, myocardial infarction, heart attacks are excluded. | The provider CMDHB decides which patients can be included through the initial referral of the referring doctor. | Anyone who resides in the country but not those who hold dual citizenship in Australia or New Zealand. |
Asia Pacific Observatory on Health Systems and Policies (APO) publications to date

Health System in Transition (HiT) review (18 countries)
• The Fiji Islands (2011)
• The Philippines (2011; 2018)
• Mongolia (2013)
• Malaysia (2013)
• New Zealand (2014)
• Lao People’s Democratic Republic (2014)
• The Republic of the Union of Myanmar (2014)
• Solomon Islands (2015)
• The Kingdom of Cambodia (2015)
• Bangladesh (2015)
• Republic of Korea (2015)
• The Kingdom of Thailand (2015)
• The Kingdom of Tonga (2015)
• People’s Republic of China (2015)
• The Republic of Indonesia (2017)
• The Kingdom of Bhutan (2017)
• Japan (2018)
• Independent State of Papua New Guinea (2019)

HiT policy notes (four countries)
• The Republic of the Union of Myanmar (2015)
  #1 What are the challenges facing Myanmar in progressing towards universal health coverage?
  #2 How can health equity be improved in Myanmar?
  #3 How can the township health system be strengthened in Myanmar?
  #4 How can financial risk protection be expanded in Myanmar?
• The Kingdom of Cambodia (2016)
  Increasing equity in health service access and financing: health strategy, policy achievements and new challenges
• The Kingdom of Thailand (2016)
  Health system review: achievements and challenges
• Bangladesh (2017)
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