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KIRIBATI

HEALTH FINANCING SYSTEM ASSESSMENT

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Despite notable improvements in recent decades, most population health outcomes in Kiribati do not compare well with other small countries in the Pacific. In many respects, this reflects the very difficult geographic, environmental and social determinants of health that the country faces. Strong collaboration across sectors is essential to implement the commitment to “health in all Government policies” agreed to in the Ambo Declaration in 2017. The Ministry of Health and Medical Services has taken impressive steps to improve its oversight of health sector performance. Continued attention to spending health dollars better is needed to achieve more efficient and quality outcomes from frontline service delivery, including for the outer islands.

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Executive Summary

This report identifies critical opportunities and constraints faced by the Kiribati health system as it makes progress towards Universal Health Coverage (UHC), and works to protect health outcomes through effective management of changes in financial and other institutional arrangements in the health sector.

[How are health outcomes tracking?](#)

Many population health outcomes have improved significantly in Kiribati in the two decades to 2017. Life expectancy at birth has risen from 60 to 69 years between 1990 and 2016 (74 years for females and 64 years for males) (World Bank 2017). Maternal mortality declined slightly from six deaths in 1990 to five in 2016.¹ Under-five and infant mortality have also declined, albeit slowly, from 96 to 52 and from 69 to 33 per 1,000 live births, respectively between 1990 and 2016 (World Health Organization - WHO 2017; Kiribati Annual Health Bulletin 2016).

Life expectancy and infant mortality rates (IMR) compare unfavorably to other countries in the region and much worse than expected relative to the country's income level. Inadequate water and sanitation facilities contribute to frequent outbreaks of food and water-borne diseases, which have the worst impact on the very young and old. Limited housing options, high levels of smoking, and poor nutrition contribute to Kiribati having the highest prevalence of tuberculosis (TB) in the Pacific, which is compounded by South Tarawa, where one-half of the population lives, being one of the most densely populated areas in the Pacific. Like other countries in the region, Kiribati now faces a 'double burden of disease'. While many challenges remain in the areas of maternal and child health and in communicable diseases, there has been an important shift in the burden of disease—from infectious diseases to non-communicable diseases (NCDs). NCDs have grown from an estimated 38 percent of the disease burden to 58 percent over the 25 years to 2017.

[What resources are currently invested in health?](#)

In principle, the population of Kiribati has low cost access to some form of basic health care, delivered predominantly by the Ministry of Health and Medical Services (MHMS) through a network of four hospitals, 22 health centers and 83 village clinics, all public facilities. Kiribati has a small population dispersed on 21 islands across a vast area in the Pacific Ocean. Access to basic health services in remote, hard-to-reach small maritime populations in outer islands makes referrals and health services logistics very difficult, expensive and often only available by sea. Facilities and staff vary significantly across geographic locations and island groups, and nearly two-thirds of the clinical staff are in the highly-urbanized island of South Tarawa (50 percent of the population). Outpatient consultations were 4.9 per person in 2016, much higher than that reported by other countries in the region.

Total health expenditure (THE) per capita in Kiribati was US\$154 (AU\$171)² in 2014, comparable to other countries with similar levels of income. Significant increases in nominal THE in the decade to 2017 have not translated into similar increases of real or per capita expenditure. Indeed, real THE has only increased slightly between 2004 and 2014, while real THE per capita has decreased by approximately 25 percent in that same period, reflecting high population growth.

[Who is paying for health and what is the money used for?](#)

¹ For small populations, absolute numbers of maternal deaths are a more relevant measure than mortality rates.

² The official currency in Kiribati is the Australian dollar. Amounts in this report are in Australian dollars unless indicated otherwise. Exchange rate of US\$1 = AU\$1.10966 (www.oanda.com – mid-point between bid and ask rate) used.

In Kiribati, the majority of THE is funded by government (public),³ with an estimated one in every five dollars coming from external partners. Public expenditure on health was 81 percent of THE in 2014, like other countries in the Pacific. In recent years, the health sector in Kiribati received around 15 percent of the total Government of Kiribati annual budget, second after the Ministry of Education. Private Health Expenditure (PrHE) was 19 percent in 2014, mainly from nongovernment organizations (NGOs), with minimal formal out-of-pocket (OOP) payment. However, indirect costs such as travel and time lost can be a significant personal expense, particularly for those living in more remote areas. This health financing landscape is very particular to Pacific Island Countries, and is substantially different to countries in other regions with similar levels of income.

In 2016, an estimated 40 percent of public expenditure on health was spent on NCDs, followed by just over 25 percent on maternal, neonatal and child health, with the balance spent, in decreasing order, on communicable disease, system strengthening, family planning and gender-based violence⁴. An estimated 68 percent of expenditure occurs in hospitals, and 20 percent in clinics. The largest expenditure categories for domestic spending were payroll (45 percent of total domestic expenditure), followed by specialist purchases (pharmaceuticals at 12 percent) and overseas medical referral (10 percent). External financing is mostly targeted to public health projects identified as priority areas by Development Partners (DPs).

[What role does external financing play in the health sector, and what changes are expected?](#)

The health sector is relatively dependent on external funding, with DPs providing 14 percent of THE in 2014 (or 17 percent of public expenditure on health) (World Bank 2017). This is higher than might be expected given the level of income, but less than other countries in the Pacific. DP contributions to health are either channeled through the Government's system, referred to as 'on-system' or as the case may be, off-system. While there is a great push from DPs to contribute through established government systems, clear budget and expenditure data for off-system DP contributions continues to be difficult to access.

DP support is expected to remain significant over coming years, but some of the more traditional DPs have started, or are planning, to decrease funding. As overall income levels have increased, Kiribati is no longer eligible for some donor grant financing in certain health programs, most immediately Gavi support to the immunization program. Other changes include lower Global Fund to Fight AIDS, Tuberculosis and Malaria (GF) grants. These changes will require the government to assume responsibility for financing these public health programs to avoid affecting service delivery and health outcomes. This highlights the importance of communicating transition arrangements clearly and early. MHMS is now actively managing these transitions with ongoing support from DPs.

[What can the MHMS do now to strengthen health services?](#)

With modest macroeconomic growth anticipated and planned government support for the health sector already strong (from both domestic and external sources), the ministry needs to continue its drive for improved spending impact. The ministry's Health Strategic Plan (2016-19) clearly articulates many of the challenges confronting the health sector and provides a sound platform for moving forward. The policy options set out below build on the MHMS strategic plan's objectives and focus on a limited number of high-impact actions that align with MHMS priorities.

³ Public expenditure on health (or government expenditure) includes both domestic and DP support.

⁴ These categories reflect the Strategic Objectives set out in the Kiribati Health Strategic Plan. There are strong linkages between these Strategic Objective areas, for example, family planning services are an important component of broader reproductive/ maternal/ neonatal/ adolescent and child health.

To improve spending the government needs to continue to build its understanding of how financial, human and other resources are being allocated and used across the health sector and how these resources can best contribute to achieving priority health outcomes. This involves getting in to the detail and developing budgets and in-year reporting that creates a better line-of-sight between resource allocation and the frontline service delivery activities (by location) that are essential in providing quality primary health care. Health budgets and in-year reporting also need to reflect the considerable contribution that external funds make to the sector. Integrating information on external funds within budgets (and budget-setting processes) and within monitoring reports will disclose a more complete cost of service delivery and assist MHMS with planning for transition from external funds at the appropriate time.

A concerted effort is also required to find efficiency gains—particularly in higher spending areas. Human resources (payroll) is a highly significant and rising cost within the MHMS budget. Controlling payroll-related costs and ensuring they more directly contribute to service delivery outcomes at the frontline is a critical aspect of ‘better spending’. Hospitals and pharmaceuticals/medical supplies are other high-spending areas where practical cost-saving measures can be introduced, and efficiency gains delivered. Achieving better control over pharmaceutical procurement will also help to avoid overspending and stop the diversion of funds from other priority areas to meet these regular cost overruns.

Achieving better health outcomes involves strong partnerships and active coordination by MHMS within and across sectors, with DPs and civil society organizations. Social determinants such as improved housing, water and sanitation are vital in achieving and sustaining improved health outcomes but are contingent on the concerted effort of other government agencies and partners. Similarly, addressing health financing constraints and public finance issues (such as a new accounting system) requires the support and cooperation of the Ministry of Finance and Economic Development. Through the Ambo Declaration (Health in All Policies), the government is committed to working across sectors “to ensure that health remains among the top national development priorities, striving for universal health coverage to achieve better health for all, and leaving no-one behind” (Government of Kiribati, 2017). MHMS plays a key role in building and maintaining the partnerships needed within government and with DPs to give effect to this commitment.

Policy Recommendation Summary:

There is a strong sense of momentum in the health sector in Kiribati, with commitment to achieving better population health outcomes. Better results are achievable, with the ministry continuing to lead the sector in practical actions that can make health financing and service delivery in Kiribati more efficient, equitable, affordable and accountable.

Policy Recommendation 1: *Improve the quality of health expenditure*

MHMS to demonstrate that it is using existing allocations efficiently and effectively. Building on progress to date, this involves understanding the detail of how financial, human and other resources are being allocated and used across the health sector to achieve improvements in priority health indicators.

Policy Recommendation 2: *Strengthen partnerships within and across key sectors*

MHMS plays the key role in building and maintaining the partnerships needed within government, with DPs and with civil society organizations to give effect to the commitment made in the Ambo Declaration.

Abbreviations

AU\$	Australian Dollar	LMIC	Lower-Middle-Income Country
BMI	Body Mass Index	MFED	Ministry of Finance and Economic Development
DALYs	Disability-adjusted Life Years	MHMS	Ministry of Health and Medical Services
DFAT	Department of Foreign Affairs and Trade	NCD	Noncommunicable disease
DP	Development Partner	NGO	Nongovernment Organization
DPT	Diphtheria Pertussis Tetanus	NTBLSP	National Tuberculosis and Leprosy Strategic Plan
Gavi	Global Alliance for Vaccines and Immunisation	OOP	Out-of-pocket
GDP	Gross Domestic Product	PCV	Pneumococcal Conjugate Vaccine
GF	The Global Fund to Fight AIDS, Tuberculosis and Malaria	PFM	Public Financial Management
GHED	Global Health Expenditure Database	PNA	Parties to the Nauru Agreement
GNI	Gross National Income	PrHE	Private Health Expenditure
HDI	Human Development Index	RERF	Revenue Equalisation Reserve Fund
HFSA	Health Financing System Assessment	RV	Rotavirus
HIES	Household Income and Expenditure Survey	SDG	Sustainable Development Goals
HIS	Health Information System	SDS	Service Delivery Statement
HIV	Human Immunodeficiency Virus	TB	Tuberculosis
IFMIS	Integrated Financial Management Information System	THE	Total Health Expenditure
IMF	International Monetary Fund	UHC	Universal Health Coverage
IMR	Infant Mortality Rate	UN	United Nations
IPV	Inactive Poliomyelitis Vaccine	UNICEF	United Nations Children's Fund
KDP	Kiribati Development Plan	US\$	United States Dollar
KHSP	Kiribati Health Strategic Plan	WDI	World Development Indicator
KITP	Kiribati Internship Trainee Program	WHO	World Health Organization

Section One: Introduction

Kiribati:	Population (2015): 110,136	Lower-Middle-Income Status	Gross National Income (GNI) per capita (2016): US\$2,270
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1. **Kiribati is a small country comprising 33 atolls and islands in the equatorial Pacific Ocean.** Only 21 of the 33 atolls and islands are currently inhabited. The estimated population in 2015 was 110,136, with just over one-half living in urban areas (NSO, 2016). The total fertility rate is relatively high at 3.7 (World Bank 2014), with an average annual population growth rate of 1.82 percent between 2010-2015 (United Nations [UN] Population Division, 2017). The UN estimates that the population of Kiribati will reach 142,000 by 2030. The population is relatively young, with a median age of 22, approximately one-third are under 15 years of age, and only 3 percent are above the age of 64 (UN 2015). The geographic spread of Kiribati is vast, spanning more than 5,000 kilometers across the Pacific Ocean. However, the total land mass is only 811 square kilometers and is clustered in three broad island groupings; the Gilbert, Phoenix, and Line islands. The country is not only geographically isolated, it is particularly vulnerable to climate change with almost its entire land area close to sea level. Despite its small population and highly dispersed land area, the island of South Tarawa—where one-half of the population lives—is one of the most densely populated areas in the Pacific.

2. **This report assesses the Kiribati health financing system.** As an intrinsic and necessary element of Universal Health Coverage (UHC), health financing is not only about assessing the sufficiency of resources but is also about examining how sustainably, efficiently, and equitably those resources are raised, pooled, and allocated in the Kiribati health system. The overall objective is to identify key health financing-related opportunities and constraints. With the country’s transition from externally financed programs such as Gavi and the Global Fund to Fight AIDS, Tuberculosis and Malaria (GF) approaching, and in the face of the challenge to make progress toward the health objectives of the National Strategic Plan 2016-2019, UHC, and the Sustainable Development Goals (SDG), this Health Financing System Assessment (HFSA) is timely.

3. **The HFSA uses a combination of data from domestic and global sources.** In some cases, these data conflict; however, in each instance, the source of the data used throughout the HFSA is cited. Domestic data includes reported actuals up to the 2016 fiscal year. Global databases are typically 2014, given the two-year lag in their publication. The report continues with a contextual overview of Kiribati’s macroeconomic context including its economic growth, poverty, shared prosperity, and a discussion of the country’s overall macrofiscal environment. This is followed by a discussion of Kiribati’s population health outcomes and progress towards UHC. Performance is compared to a group of relatively similar countries with a population size below 750,000. The report next summarizes Kiribati’s health financing system with a focus on the two sources and agents of health financing in the country: government budgetary expenditures and external financing. The paper concludes with a discussion and some policy options.

Section Two: Background

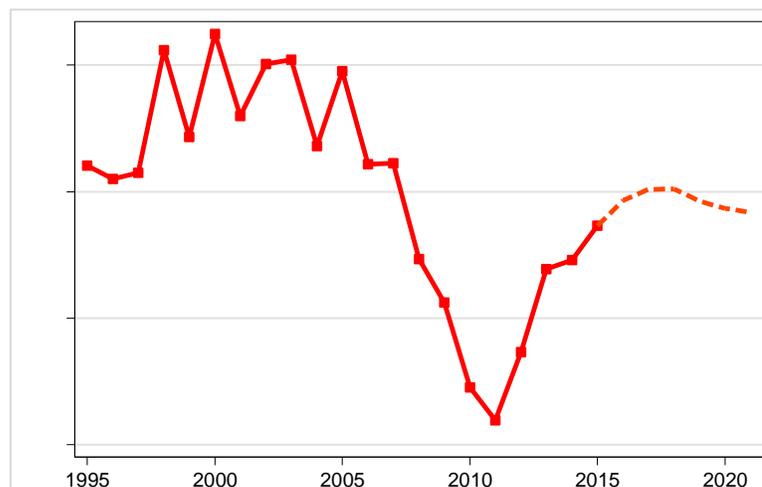
Summary

- Kiribati is classified as a lower-middle-income (LMIC) country, with a small population, large geographic area and exposure to external shocks.
- GDP per capita is expected to grow slowly, at around 0.1 percent per year on average over the period 2016-21.
- Kiribati relies heavily on revenue from fishing licenses and external grants, both of which can be volatile.
- Over the six years to 2017, MHMS has received a relatively high and consistent share of the Government of Kiribati annual budget, ranging between 16.6 percent in 2011 to 15.3 percent in 2016.

2.1 Economic Growth, Poverty and Shared Prosperity

4. **With a Gross National Income (GNI) per capita of US\$2,270 in 2016, Kiribati is classified as an LMIC, ranking between Uzbekistan and Ukraine.** Despite its LMIC status, Kiribati is classified as a fragile state by the World Bank and is eligible for concessionary International Development Association financing due to its small population size, geographic challenges, and vulnerability to external shocks.⁵ From the mid-1990s, growth in real Gross Domestic Product (GDP) per capita had been erratic. Kiribati's domestic economy shrank for four consecutive years following the global economic crisis in 2007. The country experienced positive economic growth again in 2011 primarily due to significant contributions from fishing revenues. Since then, real GDP per capita in Kiribati has been increasing (Figure 2-1).

Figure 2-1: Real GDP Per Capita (1995-2015)



Source: World Bank 2017.

Note: GDP per capita in 2014 Constant US\$.

5. **Despite this recent string of annual growth results, Kiribati's GDP per capita has yet to return to its 1995 level.** In terms of sectoral contributions to national output, 23 percent of Kiribati's GDP in 2013 came from agriculture, 5 percent from manufacturing, and 70 percent from the services sector (including government, which

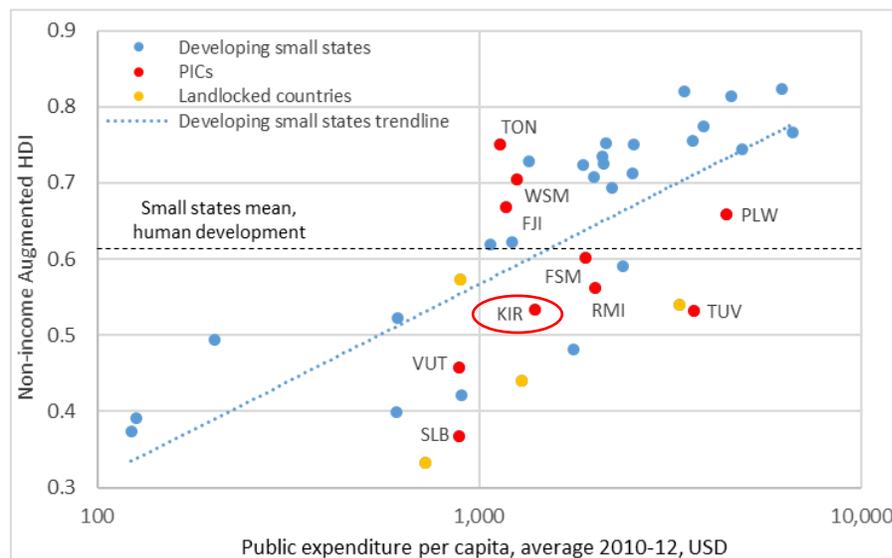
⁵ Kiribati is among the Harmonized List of Fragile Situations released annually by the World Bank.

plays a dominant role in the economy). Less than 1 percent of GDP comes from natural resources, lower than the average for other Pacific countries and for small countries. GDP per capita is expected to grow at an average of 2.1% per year over the period 2016-21 (International Monetary Fund - IMF 2017). The most recent poverty assessment conducted in 2006 estimated that 22 percent of the population was poor, with 5 percent classified as extremely poor (Department of Foreign Affairs and Trade - DFAT 2014). An additional 44 percent of the population was deemed to be vulnerable.

6. **Average educational attainment among the population is eight years, in keeping with Kiribati's income level.** Nevertheless, the quality of education remains a concern. A significant share of the labor force (about 38 percent) reported being unemployed in the 2015 census; a further 21 percent reported being self-employed, while 6 percent were considered subsistence workers. The services sector employed 60 percent of the working labor force, while 24 percent were in the agricultural sector and 14 percent worked in manufacturing (NSO 2016).

7. **Ultimately, a large proportion of public spending is intended to promote an improvement in a country's human development.** The human development index (HDI) is a measure that helps to assess and compare human development by combining life expectancy, education, and per capita income indicators. Compared with other Pacific Island countries and developing small states, human development in Kiribati is situated below a notional average for countries of a similar income level. Kiribati's HDI is below that of Tonga, Samoa and Fiji; like the Marshall Islands and Tuvalu; and above Vanuatu and the Solomon Islands (Figure 2-2).

Figure 2-2: Relationship Between Human Development and Public Spending Per Capita in Small States



Source: World Bank 2017.

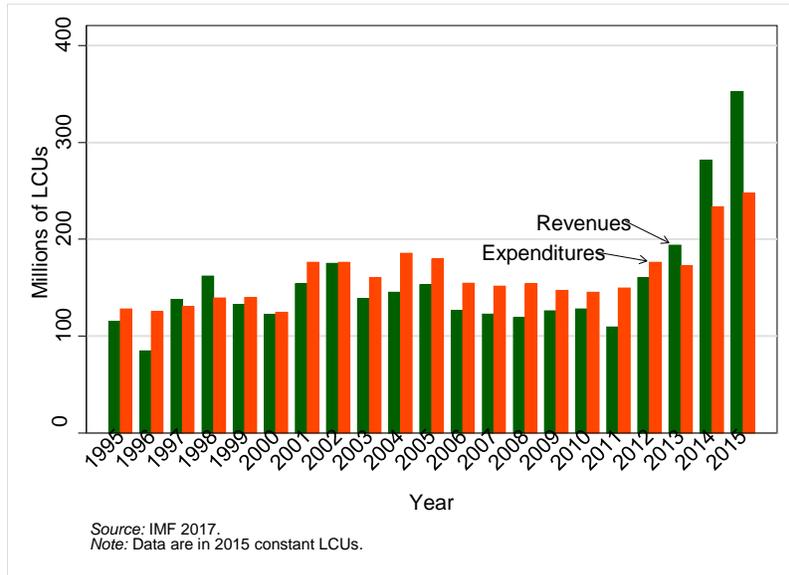
Note: Pacific Island Countries (PICs), Solomon Islands (SLB), Vanuatu (VUT), Kiribati (KIR), Tuvalu (TUV), Republic of Marshall Islands (RMI), Federated States of Micronesia (FSM), Tonga (TON), Palau (PLW), Fiji (FJI), Samoa (WSM- as per the ISO country code).

2.2 Macroeconomic Context

8. **At 165 percent of GDP, general government revenues were very high in 2015.** By contrast, the average for Pacific countries was 66 percent and for LMICs and small countries it was 29 percent. About 25 percent of government revenues comprised external grants, and the bulk of the remainder came from fishing license fees (56 percent). Personal income taxes, Value-added Tax, and excise taxes, and company taxes amounted to less than 4 percent each of government revenues. The high government revenue relative to GDP reflects transfers to the Revenue Equalisation Reserve Fund (RERF). The recent high levels of fishing license revenues reflect the introduction

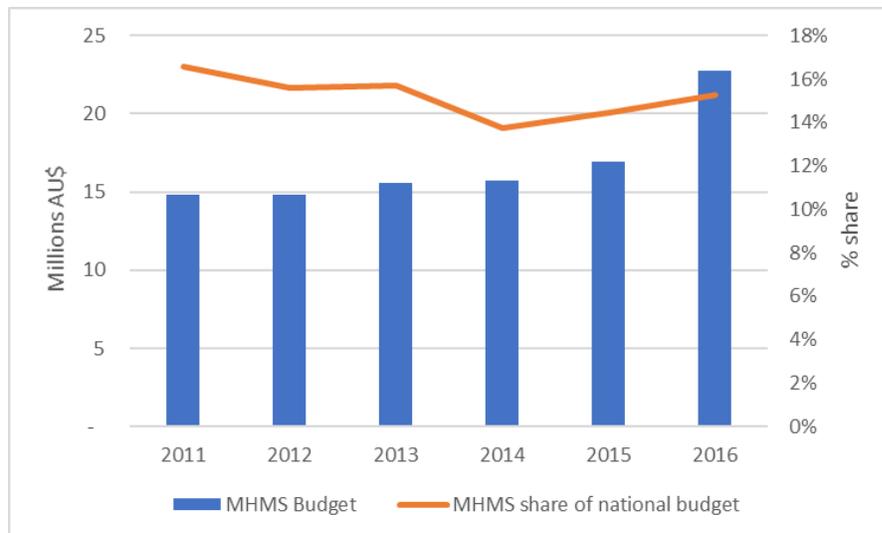
of the Vessel Day Scheme through the Parties to the Nauru Agreement (PNA) in 2012. Under the PNA, the number of days that ships are allowed to fish in Kiribati waters is limited and the fee per day is set at US\$8,000 (2015-16). Favourable exchange rates result in higher revenues from this source and a significant surplus of revenues over expenditures (Figure 2-3).

Figure 2-3: Government Revenues and Expenditures (1995-2015)



9. **Health is a priority sector for government budgetary allocations.** Over the 2011-16 period, MHMS has received a relatively consistent share of the government-funded budget expenditure, ranging between 16.6 percent in 2011 to 15.3 percent in 2016 (Figure 2-4). Global and regional benchmarks indicate this to be on the higher end of the range.

Figure 2-4: MHMS Nominal Recurrent Budget and Share of National Recurrent Budget (2011-16)

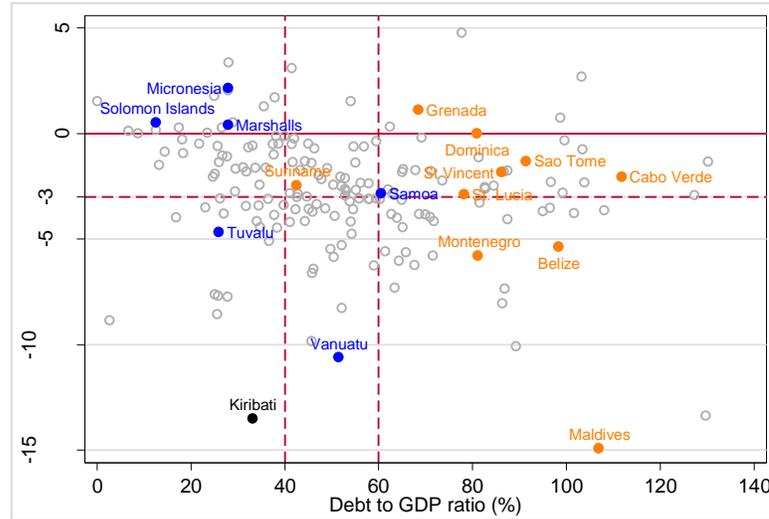


Source: Government of Kiribati Budget Books.

10. **Kiribati has a sovereign wealth fund called the RERF.** Revenues have typically ranged from AU\$100-AU\$200 million (in constant dollars) per annum. In 2015, revenues were atypical and exceeded AU\$200 million—leading to a

fiscal surplus of 31 percent of GDP in that year. In the same year, debt levels were below 25 percent of GDP (IMF 2017). Fiscal tightening is expected in coming years, with revenues projected to decline below 100 percent of GDP, deficit levels rising to 15 percent of GDP (much higher than the 3 percent threshold recommended by the IMF), and debt levels rising to 39 percent of GDP. The projected debt level is still lower than the 40-60 percent of GDP range recommended by the IMF.

Figure 2-5: Projected Debt and Deficit (2016-21)



Source: IMF 2017.

Section Three: Health Outcomes

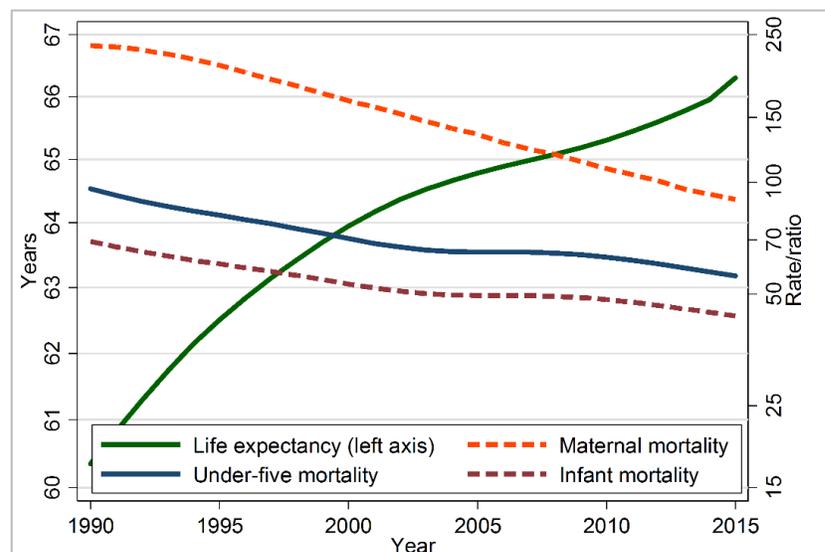
Summary

- Kiribati does well in terms of financial protection from direct costs of health care—as evidenced by the low formally recorded out-of-pocket (OOP) spending on health; it also meets the 80 percent coverage target for antenatal care and skilled birth attendance.
- The country ranks lowest among comparators on many of the other indicators—especially those related to tobacco use, Diphtheria Pertussis Tetanus (DPT3) childhood immunization, and access to water and sanitation.
- Measures of life expectancy and infant mortality in Kiribati rank the lowest among comparators, and much lower than expected relative to the country’s income level.

3.1 Demographics and Health Outcomes

11. **Kiribati’s population has become healthier since 1990** (Figure 3-1). Life expectancy at birth has risen from 60 years in 1990 to 69 years in 2016 (74 years for females and 64 years for males). Maternal mortality has fallen slightly—from six deaths in 1990 to five in 2016. Under-five and infant mortality have also declined, albeit slowly, from 96 to 52 and from 69 to 33 per 1,000 live births, respectively between 1990 and 2016 (World Health Organization - WHO 2017; Kiribati Annual Health Bulletin 2016).

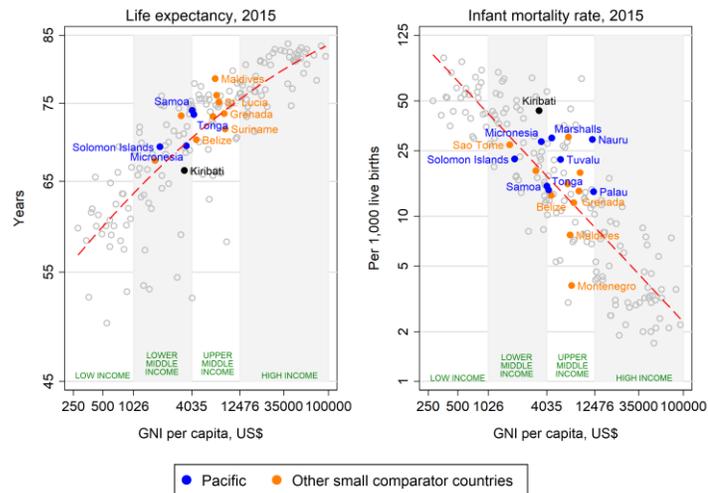
Figure 3-1: Key Population Health Outcomes in Kiribati (1990-2015)



Source: World Bank 2017.

12. **Despite notable improvements in population health in recent decades, Kiribati does not compare well against other Pacific Island countries and small states.** Kiribati’s life expectancy and infant mortality ranks lowest among comparators and much worse than expected relative to its income level (Figure 3-2). Kiribati did not attain the under-five mortality Millennium Development Goal that called for a two-thirds reduction in the rate over 1990-2015 period; and at the current trend, Kiribati will most likely not meet the 2030 SDG target of 25 per 1,000 live births. In 2016, Kiribati experienced five maternal deaths from 2,788 live births.

Figure 3-2: Life Expectancy and Infant Mortality Relative to Income and Other Comparators



Source: World Bank 2017.

Note: Both X and Y axes are in log scale.

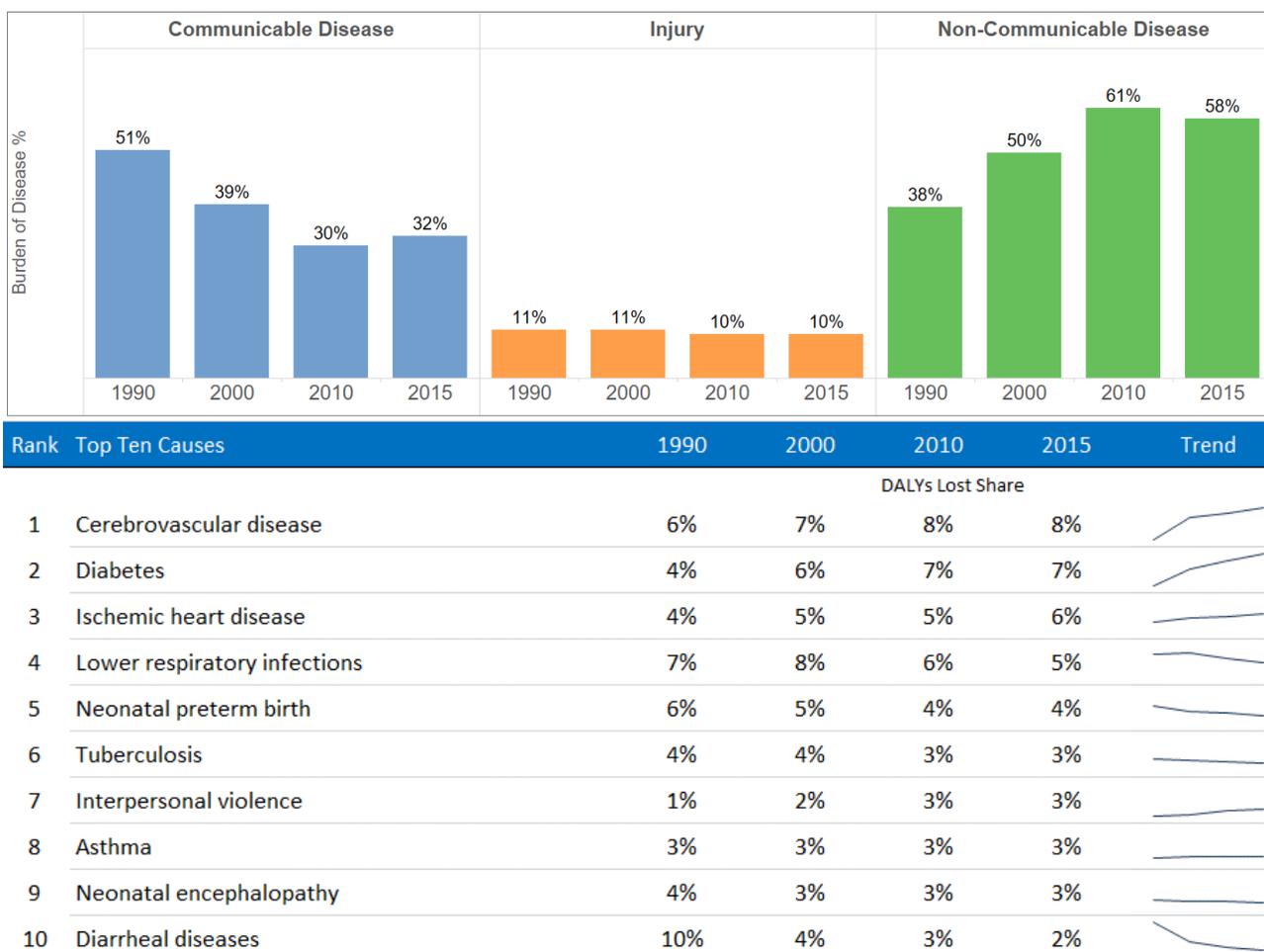
13. As with other countries in the region, Kiribati is undergoing a rapid epidemiological transition and non-communicable diseases (NCDs) now account for the largest share of the burden of disease. Whereas in 1990 38.3 percent of morbidity and premature mortality was due to NCDs, by 2015 this number had risen to 58.1 percent (Figure 3-3) (IHME 2016).⁶ This trend is expected to continue in the coming years. Cerebrovascular diseases, diabetes, and ischemic heart disease were responsible for the largest shares of the overall disease burden, collectively causing over one-fifth of all disability-adjusted life years (DALYs) lost due to morbidity and premature mortality in 2015.⁷ Cerebrovascular diseases were also the leading cause of deaths. Although TB's share has declined in recent decades, it remains among the top ten causes: accounting for 3.2 percent of the overall burden of disease.

14. Prominent health risk factors in Kiribati include: high Body Mass Index (BMI), dietary risks, high fasting plasma glucose, smoking tobacco and high systolic blood pressure. Each of these risks have been growing steadily over the 25-year period from 1990-2015 (Table 3-1).

⁶ Institute of Health Metrics and Evaluation (2016).

⁷ DALYs refer to aggregated healthy years of time lost at the population level as a result of disease-related morbidity and premature mortality.

Figure 3-3: Burden of Disease (1990-2015)



Source: IHME 2016.

Table 3-1: Top Ten Risk Factors (1990-2015)

Rank	Risk Factors	1990	2000	2010	2015	Trend
		DALYs Lost Share				
1	High BMI	8%	11%	13%	15%	
2	Dietary risks	8%	11%	12%	14%	
3	High fasting plasma glucose	8%	10%	12%	13%	
4	Tobacco smoke	9%	11%	12%	12%	
5	High systolic blood pressure	6%	8%	9%	10%	
6	Child and maternal malnutrition	18%	12%	9%	7%	
7	High total cholesterol	3%	3%	3%	4%	
8	Unsafe water, sanitation, and handwashing	11%	6%	4%	3%	
9	Air pollution	5%	5%	3%	3%	
10	Low glomerular filtration rate	1%	2%	3%	3%	

Source: IHME 2016.

15. The ‘**Top 10 causes of premature death**’ are increasingly led by NCDs, which is like other countries in the region (Table 3-2). The leading causes of premature death in Kiribati are summarized in Table 3-2, and are similar to the selection of other countries in the Pacific with cardiovascular disease; diabetes, urogenital, blood and endocrine diseases, and neoplasm accounting for more than one-half of all deaths (55 percent). The leading cause of premature death from communicable disease is diarrhea and lower respiratory disease which is very similar to selected countries (except PNG).

Table 3-2: Top Ten Causes of Premature Death in Kiribati and Selected Countries (2015)

Rank	Causes of premature death	Cohort Average	Kiribati	Fiji	PNG	Samoa	Solomon Islands	Tonga	Vanuatu
Total YLLs Lost Share									
1	Cardiovascular diseases	30%	29%	31%	25%	32%	34%	23%	34%
2	Diabetes, urogenital, blood, and endocrine diseases	16%	15%	25%	10%	21%	16%	14%	13%
3	Diarrhea, lower respiratory, and other common infectious diseases	8%	11%	9%	15%	7%	8%	9%	9%
4	Cancer	12%	7%	7%	7%	11%	9%	17%	9%
5	Neonatal disorders	4%	7%	5%	4%	2%	3%	5%	5%
6	Chronic respiratory diseases	6%	6%	5%	14%	5%	7%	5%	6%
7	HIV/AIDS and tuberculosis	1%	5%	1%	2%	2%	2%	1%	2%
8	Cirrhosis and other chronic liver diseases	2%	3%	1%	2%	2%	2%	2%	2%
9	Digestive diseases	2%	2%	1%	2%	2%	2%	4%	2%
10	Other non-communicable diseases	2%	1%	3%	2%	2%	2%	3%	2%

Source: IHME 2016.

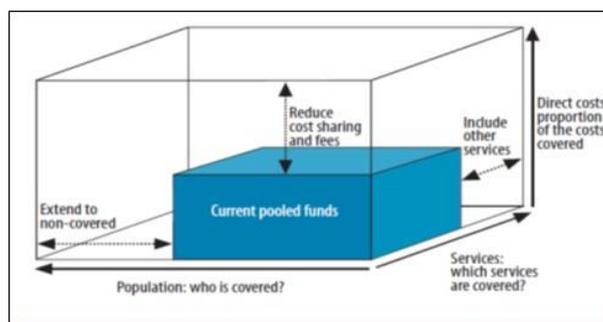
Note: YLLs – Years of Life Lost.

3.2 Universal Health Coverage (UHC)

16. **UHC is concerned with ensuring that people receive the health services that they need when that need arises, while not experiencing financial hardship because of receiving those services.** In any country, health needs are essentially infinite. This means that need must be defined. The three dimensions of the UHC cube consider: who is covered; which services are provided; and how much of the cost is covered publicly (Figure 3-4). Kiribati provides government-financed coverage to its population at public facilities and everyone—at least in principle—has access to a basic package of services free of charge at the time of seeking care. The WHO-World Bank (2015) monitoring framework recommends that countries monitor a mixture of preventive and promotive/ treatment indicators, as well as financial protection metrics, to assess health system coverage and progress towards UHC (WHO and World Bank 2015).⁸

⁸ Preventive and promotive interventions include family planning coverage with modern methods, antenatal care, skilled birth attendance, immunization coverage, prevalence of tobacco smoking, access to improved water sources, and access to improved sanitation, among others. Recommended treatment interventions include those related to TB, hypertension, and diabetes. Financial protection indicators include OOP health expenditures as a share of total consumption expenditure. In addition, the monitoring framework recommends assessing financial protection by the share of the population who are impoverished because of OOP spending on health.

Figure 3-4: The Three Dimensions of the UHC Cube

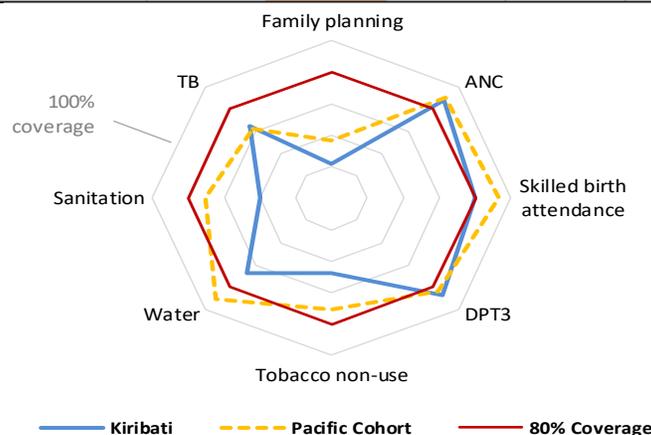


Source: World Health Organization, world health report 2010.

17. Table 3-3 reports a selection of WHO-World Bank UHC tracer indicators for which data were readily available for Kiribati and Pacific small country comparators. Kiribati meets the 80 percent coverage threshold for antenatal care, skilled birth attendance and DPT3, however, it ranks low, sometimes lowest, among comparators on several other indicators—especially those related to family planning, tobacco use, and access to water and sanitation.

Table 3-3: UHC Tracer Indicators (2010-15)

Indicator		Pacific Cohort	Kiribati	Marshall Islands	FSM	Samoa	Solomon Islands	Tonga	Vanuatu
Preventative/ Promotive	Family Planning	36%	22%	45%	55%	27%	35%	34%	49%
	Antenatal Care	90%	88%	92%	80%	93%	91%	99%	76%
	Skilled Birth Attendance	93%	80%	99%	100%	83%	86%	98%	89%
	DPT3	84%	87%	85%	72%	66%	98%	82%	64%
	Tobacco non-use	70%	48%	83%	-	70%	73%	70%	84%
	Water	91%	67%	95%	89%	99%	81%	100%	95%
	Sanitation	71%	40%	77%	57%	91%	30%	91%	58%
Average	83%	68%	89%	80%	84%	77%	90%	78%	
Treatment	Tuberculosis	63%	65%	71%	67%	55%	66%	59%	66%



Source: World Bank 2017.

Notes: (i) Attainment less than 80 percent highlighted in red; (ii) World Development Indicator (WDI) data was not available for all indicators; (iii) The Pacific Cohort average also includes the results for Fiji, Palau and Tuvalu who are not displayed.

18. **An emerging issue for health coverage is the forthcoming transition from external support for both the immunization program and the TB program.** The immunization program is currently supported by Gavi, the United Nations Children’s Fund (UNICEF), WHO and the Australian Government, while the TB Program is now supported by the Australian Government and the GF. To ensure continued coverage of all the Kiribati population for both immunization services and treatment of TB, the government will assume responsibility for managing these programs over the next two years.

Section Four: Vulnerable Groups and Equity in Health Coverage

Summary

- While we know that the level of health service provision varies across the country, the degree of inequity, and the needs and locations of vulnerable groups are not yet well understood.
 - Improving equity will mean that isolated and vulnerable groups across society have access to quality basic health services.
 - The collection and publication of health information has improved a lot in the last two years. There is now opportunity to use health information to better understand the health status of the vulnerable.
-

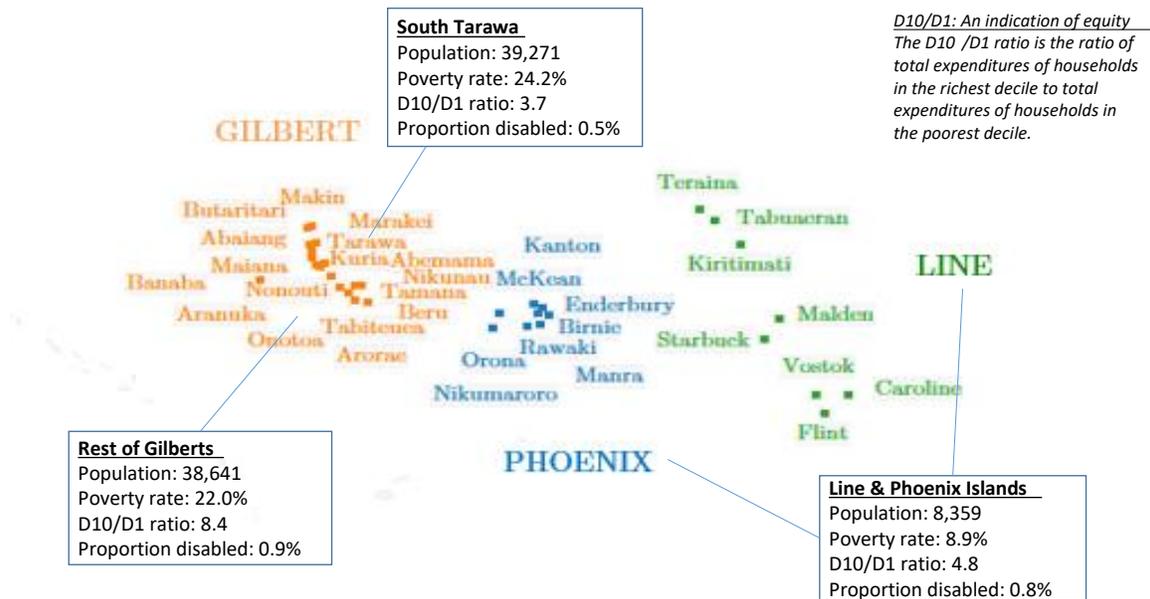
19. **The location and health needs of vulnerable groups is another critical dimension of UHC.** The third goal of the Kiribati Development Plan (KDP) (2016-2019) is: “to improve population health and health equity through continuous improvement in the quality and responsiveness of health services, and by making the most effective and efficient use of available resources.” To meet this goal—to achieve better health equity—the ministry will need to identify the health needs and location of vulnerable groups across the country.

20. **It is not clear who the most vulnerable are:**

- Is it all those living in rural and remote areas, or just specific communities in isolated locations with limited or no access to health services?
- Is it the elderly or some groups within the elderly?
- Are all children able to access and use services when needed, or do specific groups miss out? Why?
- Does it matter if you are a woman or a man, or a boy or a girl and what health services you are able to access and use?
- Are people with disabilities able to access and use health services the same as those who do not have disabilities?

These are the kind of questions that need to be understood and then used to inform planning and use of finite health resources.

Figure 4-1: Equity, Poverty and Disability in Kiribati⁹



Source: NSO & United Nations Development Program (UNDP) 2010.; NSO 2006.

Notes: Basic needs poverty line is used to estimate poverty rates. The D10/D1 ratio represents the Inequality Index.

21. **The health information system (HIS) will play a critical role in providing information that will assist in identifying vulnerable groups and then in monitoring their progress toward better health access and improved health outcomes.** The HIS can provide a wide variety of relevant health information such as location, age, sex, medical condition and facility attendances which will help in identifying and monitoring health services to vulnerable groups.

22. **Initial insight in understanding health equity in Kiribati can be gleaned from Figure 4-1 where information on equity, poverty and disability is overlaid upon a map of the country.** This helps us to consider possible relationships between economic and geographic factors, access to health care, and health outcomes. Levels of disability are significantly higher in the less-populated island groups outside of South Tarawa—in Line, Phoenix and the Rest of the Gilberts. Reported poverty is significantly higher in the Gilberts—both in the heavily populated South Tarawa (24 percent) and other islands (22 percent). In contrast, poverty in the Line and Phoenix Islands is much lower at 8.9 percent. Interestingly, the D10/D1 ratio suggests that economic disparity may be a lot higher in the Rest of the Gilbert Islands (excluding South Tarawa) than in the rest of the country.

23. **There are many ways to view equity, other sections in this report that relate to vulnerable groups and equity in health coverage include:**

Resourcing Equity	Section in this Report
Linking Facilities with Clinical Staff	Linking Physical and Human Resourcing (Section 5.1)
Financial Resourcing	Spending on Strategic Objectives and Health Facilities (Section 6.2)

⁹ Revised population numbers are available from the 2015 Population and Housing Census, however, the available HIES data used to assess poverty and inequality is from the 2006 survey. The next HIES is scheduled for 2018.

Section Five: Health Care Organization and Delivery

Summary

- Kiribati has four hospitals (two are on Tarawa), 22 health centers and 83 village clinics.
 - Hospitals offer both primary care and higher-level services while health centers and village clinics offer basic primary services, with health centers offering both inpatient and outpatient care.
 - Resourcing—both facilities and clinical staff—varies significantly across geographic locations and island groups. In the absence of a costed service-delivery plan for clinical and public health services, it is not possible to make judgments on the appropriateness of the current distribution of resources.
-

24. **The MHMS is the central actor in the Kiribati health system, and functions as funder, regulator, and provider of nearly all services.** The private sector plays a minimal role within the health sector, with limited private practice; there is no social health insurance and negligible private insurance. MHMS is currently run through three major administrative branches: Public Health, Curative Health and Nursing. The MHMS is further structured into a total of 18 divisions (for 2017 budget classification), which have various reporting lines to the administrative branches. The MHMS uses the following six programs to track resource allocations and progress: (i) NCDs; (ii) Communicable Diseases; (iii) Maternal, Neonatal and Child Health; (iv) System Strengthening; (v) Family Planning; and (vi) Gender-based Violence.

25. **The collection and publication of health information data has progressed substantially over the 2016-17 period.** In early 2016, the Kiribati Annual Health Bulletin for 2015 was published. Three monthly health bulletins have been published since then and, more recently, the 2016 Kiribati Annual Health Bulletin has also been published. These bulletins provide management with essential and timely information to plan and deliver services that address the needs of the population. HIS has had its own budget since 2017, but its reporting line is to public health. The primary monitoring and evaluation report currently being disseminated by MHMS is the Kiribati Health Bulletin and the Service Delivery Statements (SDS). The SDS present financial and nonfinancial measures of progress towards the ministry's six strategic objectives and are used by management to plan and monitor health service delivery.

26. **The network of hospitals, health centers and clinics is funded through budgetary appropriations which are based on historic costs, adjusted to take account of new policy initiatives.** While the bulk of these costs are met through MHMS, other ministries and island councils also provide some degree of support. For example, nurse aides work alongside MHMS staff at the clinics. These nurse aides are engaged by the local councils rather than MHMS. More generally, apart from the area of overseas medical referrals, funding for the health system is not based specifically on patient load nor fee for service. With overseas medical referrals, MHMS pays medical fees and travel expenses for patients who are sent overseas for treatment. One-half of the overseas referrals in 2016 were sent to Taiwan, where MHMS receives support for treatment costs through the Taiwan Medical Fund. The remaining destinations for treatment include India, Fiji and Hawaii.

27. **Procurement of pharmaceutical products is centralized under the Pharmacy Division.** In 2016, this was the largest item of expenditure after salaries. Workflow in the Accounts Unit indicates many low-value purchases, which is likely to reflect a lack of strategic procurement within MHMS and an overreliance on emergency purchasing. This can impose additional cost burdens on MHMS through bulk discounts forgone and additional freight charges.

5.1 Physical and Human Resources

28. The publicly funded health system in Kiribati is well established, with four hospitals providing 205 beds, 22 health centers led by medical assistants and 83 village clinics led by public health nurses (Table 5-1). The village clinics offer a basic package of preventive and curative primary care services, while the health centers offer both inpatient and outpatient services. Public health nurses in the clinics are supported by one or more nurse aides employed by the local councils.

29. Six other health care providers include Integrated Management of Children’s Illness clinic, Gynaecology clinic, Kiribati Family Health Association, Diabetic clinic, Reproductive Health Development and Adolescent Health Development (MHMS 2015). Of these, two are nongovernment clinics: the Kiribati Family Health Association clinic and another funded by the New Zealand Government at the Marine Training Center (Kiribati Health Financing Note, World Bank, 2015). The Marine Training Center clinic is not available to the general public. In addition, another privately owned facility operates in Bairiki offering outpatient consultations and an adjacent pharmacy. As will be presented later in the report, all health care services, apart from those offered by the privately-owned facility, are provided free to all Kiribati residents by the government, with minimal OOP expenditure (0.1 percent of THE in 2014) (World Bank 2017).

Table 5-1: Health Sector Resourcing: Facilities and Clinical Staff

Location	Population	Facility Dispersion				Clinical Staff					
		Hospital	Health Center	Village Clinic	Sub-Hospital Facility Metric	Hospital	Health Center	Village Clinic	Sub-Hospital Staffing		
									Hospital Pop'n Metric	Per Facility	v Pop'n
South Tarawa [^]	56,388	2	0	13	2.3	220	0	39	39.0	3.0	6.9
North Tarawa	6,629	0	1	6	10.6	0	1	6	0.0	1.0	10.6
Gilbert Islands	36,616	1	17	57	20.2	18	27	54	4.9	1.1	22.1
Phoenix and Line Islands	10,503	1	4	7	10.5	22	7	6	20.9	1.2	12.4
[^] Main area of urban concentration											

Source: Government of Kiribati.

Notes: (i) Sub-Hospital Facilities metric = (health centers + village clinics) per 10,000 people; (ii) Hospital v Pop’n metric = clinical staff per 10,000 people; (iii) Sub-Hospital Staffing per facility metric = clinical staff per facility (health centers + village clinics); and (iv) Sub-Hospital Staffing per pop’n metric = clinical staff (in health centers + village clinics) per 10,000 people. Population data drawn from 2015 Population and Housing Census, Government of Kiribati, 2016.

30. In 2016, MHMS had an approved establishment of 818 positions—comprising both clinical and support staff, however, not all these positions are filled at any one time. The 2016 Kiribati Annual Health Bulletin reported 400 clinical staff were currently working in the country’s health facilities (Table 5-1). These 400 clinical staff included 50 medical officers, 35 medical assistants and 315 nurses (including midwives).¹⁰ This equals about 3.6 ‘skilled health workers’ per 1,000 population (WHO 2016).¹¹ In addition, MHMS employs six dental surgeons, five pharmacists and three physiotherapists. The remaining positions are clerical and support staff.

31. The distribution of staff demonstrates the challenges in delivering health services over the large geographic area that Kiribati encompasses—one or two clinical staff are stationed in most facilities, relying on radio contact for support. Clinical staff are distributed across the inhabited islands to ensure at least some level of access

¹⁰ The nurses total of 315 includes nurses, public health nurses and midwives.

¹¹ The *Global Strategy on Human Resources for Health, Workforce 2030* (draft, 2017) estimates an indicative threshold of an aggregate density of 4.45 skilled health workers (physicians and nurses/midwives) as necessary to meet SDG targets.

to clinical staff is available to all. By island, the population per clinical staff member varies from 856 on Teeraina (Washington Island) in the Line Islands to 268 on Banaba (excluding Kanton, with a population of 20 and one medical assistant staffing the Health Center there).

32. **The distribution of clinical staff across groups of inhabited islands is set out in Table 5-1 which summarises the dispersion of facilities and their clinical staff by the following locations: the country's main area of urban concentration of South Tarawa, North Tarawa, and the Gilberts island groups, and the Phoenix and Line Islands.** As noted below, the government accounting system does not provide for any subnational or outer island classification of budgets or expenditures. The current system is, therefore, unable to track actual expenditures at this level. This prevents a more detailed analysis of the cost of services delivered by location. Nevertheless, the distribution of clinical staff does provide an indication of how resources are applied across the country.

33. **Nearly two-thirds (64 percent) of the country's clinical staff are in South Tarawa, which is home to about one-half of the population.** South Tarawa is served by two hospitals and a network of 13 clinics—each staffed with three nurses. The other half of the population reside on other atolls and islands. The Gilbert Islands (excluding Tarawa), has the largest population (36,616 with an average of about 2,154 people on each island. Each of its 17 inhabited islands is served by a health center with one or two clinical staff, and a number of village clinics with one nurse in each.

34. **The number of village clinics on each island varies markedly; from none on some islands, to almost three per 1,000 people on other islands—the average number of clinics is about 1.3 per 1,000 people.** The populations living on the Phoenix and Line Islands are much smaller. The Phoenix and Line Islands have fewer facilities and staff than the Gilbert Islands. The ratio of health centers and village clinics is 10.5 per 10,000—nearly one-half that of the Gilbert Islands (20.2 per 10,000). The ratio of sub-hospital staff is also much lower at 13.4 per 10,000 compared to 22.1 per 10,000 in the Gilbert Islands. Nine of the group's 10 facilities are staffed by only one clinician—with only the London Health Center and Village Clinic having more than one (they both have two staff).

35. **Without the benefit of costed service-delivery plans for clinical and public health services, it is not possible to assess whether the current distribution of resources is appropriate.** As a first step in addressing this issue, it would be useful to start developing a better understanding of the estimated cost of service delivery at facility level by documenting current costs and services provided. Given current data constraints within the existing accounting system, this exercise may need to proceed with a data collection exercise based on representative facilities at various locations.

5.2 System Strengthening Issues

36. **A range of system strengthening issues related to Public Financial Management (PFM) have been identified.** These include activities related to transaction recording and budgetary control. MHMS maintains its own record of budget allocations, commitments and expenditures using an MS Access database provided by the Ministry of Finance and Economic Development (MFED). Some progress has been made in reconciling MHMS records with those held in MFED, however, the MFED system does not record commitments and is unable to apply budgetary control at a central level. The accrual and payment of arrears is a related matter. As part of the 2016 budget process, MHMS identified outstanding payment arrears totalling AU\$2.4 million and received a one-off allocation to clear these arrears. Regular monitoring and reporting of arrears is now required to ensure this problem does not recur.

37. **MHMS reporting can be improved to better align health expenditure (from all sources) with priority areas and service-delivery activities.** MHMS needs to track expenditure by geographic location and, where appropriate, by facility, but the existing accounting system, Attaché, has not been configured to do this. DP expenditure is typically

recorded through their own (parallel) systems and is not reported routinely throughout the year. The absence of geographic location and DP spending is a significant gap in the information available to MHMS for planning and monitoring.

38. Efficiency gains, through implementing better procurement practices can create fiscal space¹² for MHMS.

There are relatively large numbers of payments being processed in the MHMS Accounts Unit which may indicate inefficient purchasing. A review of current procurement practices may identify cost savings. There is evidence that MHMS is paying more for pharmaceuticals than other countries in the Pacific Islands. Achieving cost savings in pharmaceutical procurement may also help MHMS maintain better expenditure control in this high-value area. A reported AU\$734,000 of the AU\$2.4 million arrears paid by MHMS related to pharmaceuticals; and by June 2016, the ministry had already exhausted its annual pharmaceutical budget with one-half of the fiscal year remaining.

39. A key performance indicator in both the KDP and the ministry's Strategic Plan is the availability of essential medicines at facility level.

The DFAT-funded roll-out of the mSupply mobile app, together with the Tupaia web portal, is now starting to measure medicine availability. As this exercise progresses, MHMS will be in a better position to manage its pharmaceuticals supply chain. The government is currently investigating the replacement of its Attaché accounting system with a new integrated financial management information system (IFMIS). Support in this regard has been sought from the Asian Development Bank and the World Bank. A new IFMIS will present the government with considerable opportunities to improve transaction recording, budgetary control, financial reporting and (perhaps) other management information.

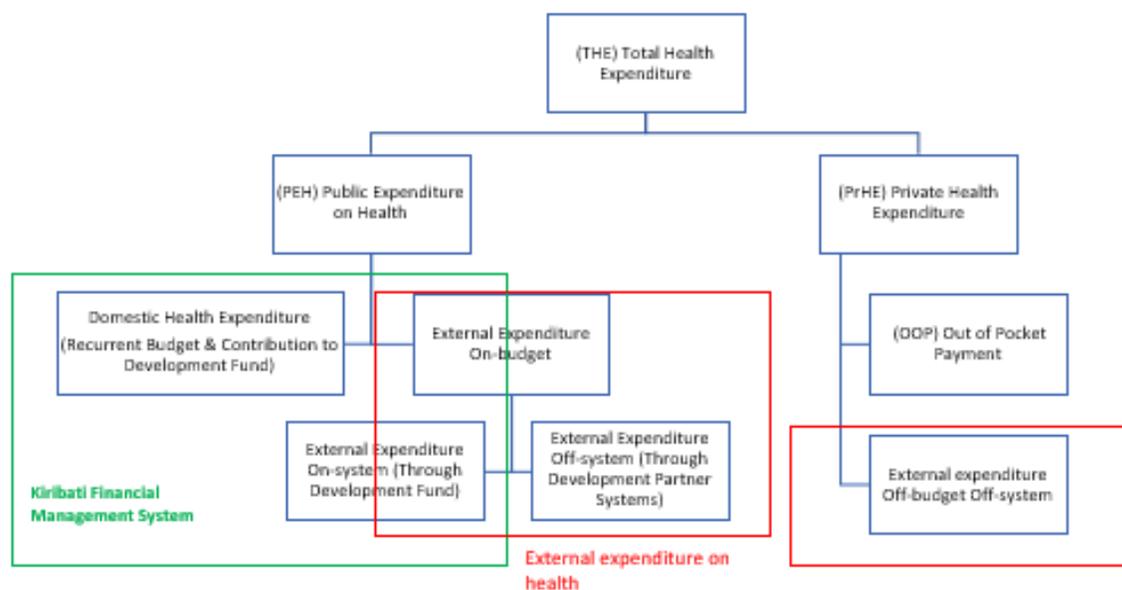
¹² Fiscal space is defined as capacity in a government's budget that allows it to provide resources for a desired purpose without jeopardizing the sustainability of its financial position or the stability of the economy.

Section Six: Health Financing

Total Health Expenditure (THE)	Public Expenditure on Health	External Expenditure on Health	Private Health Expenditure (PrHE)	OOP Payments
US\$154 per capita	81 percent of THE	14 percent of THE	19 percent of THE	0 percent of THE

40. **THE includes both public expenditure on health and PrHE.** In Kiribati, public expenditure on health includes the domestic contribution of the Government of Kiribati raised through general consolidated revenue collection and on-budget external financing—both on- and off-system (Figure 6-1). PrHE, on the other hand, includes OOP payments and all other external expenditure (off-budget and off-system). This analysis focuses on expenditure rather than budget allocation; however, budget execution rates have been included to highlight implementation challenges faced by MHMS.

Figure 6-1: Health Financing in Kiribati



41. **Difficulties with tracking financial data leads to discrepancies between international databases and country data.** There is limited data available on external financing of public expenditure on health as most is administered through DP systems with estimates appearing in government budget papers. As a result, amounts reported in government budget documents may well differ from those reported in the WDI database. For the sake of comparison between countries, this report uses THE as reported in the WHO Global Health Expenditure Database (GHED) (and the resulting public expenditure on health), and specifies which estimates of public expenditure on health are being used for Kiribati / MHMS specific analysis. Data from the international database has a two-year lag and the latest date available at the time of this report was 2014.

6.1 Total Health Expenditure (THE)

THE is the sum of both public (domestic and external financing) and PrHE (including OOP)

42. **Over the two decades to 2017, THE has risen substantially, both in nominal and in real terms, however, due to population growth, real THE per capita has decreased (Figure 6-2).** Between 1995 and 2014, Kiribati experienced one of the lowest real annual growth rates in total health spending per capita amongst comparator countries in the Pacific; more recently, between 2004 and 2014, real THE per capita has dropped by 25 percent. THE per capita in Kiribati was US\$154 in 2014, as expected given the country's income (Figure 6-3). As a share of GDP, THE was 10.2 percent, much higher than expected given Kiribati's income. This is, however, a very difficult metric to interpret for small economies where significant deviations from the global norms are expected (and not necessarily meaningful).

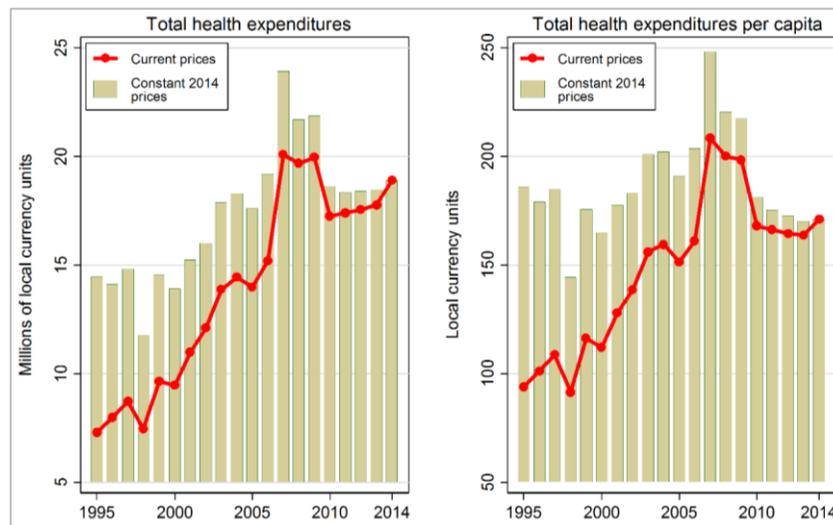
Nominal: Nominal amounts are unadjusted and reflect the impact of inflation or population growth over time.

Real: Real amounts are adjusted to remove the impact of inflation (or deflation) over time.

Per capita/Per person: Per capita/ per person amounts divide the expenditure by the total population in the country.

43. **Kiribati has experienced this marginal decline in health spending per capita despite negative real annual growth in GDP per capita (albeit the negative growth was close to zero).** Given that most health spending in Kiribati is public, it is clear that the government has struggled to maintain its commitment to the health sector.

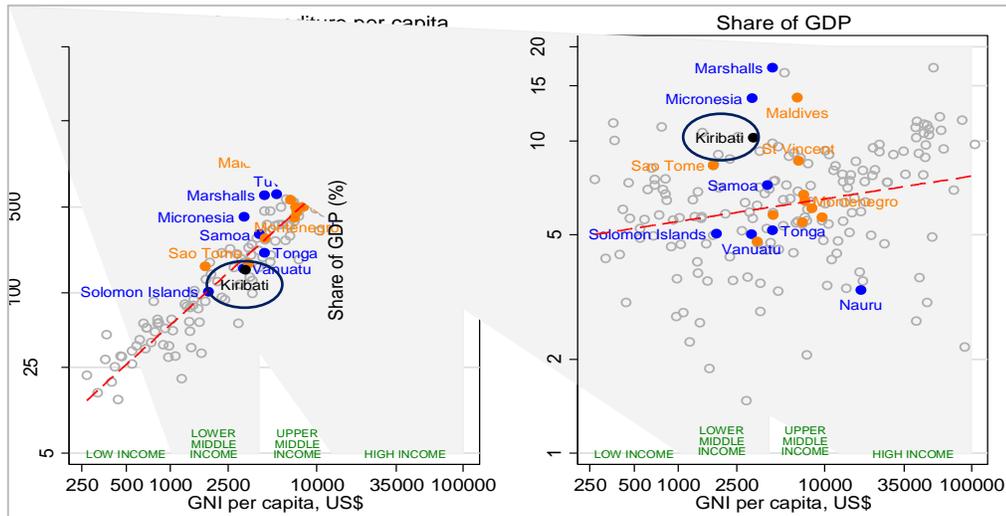
Figure 6-2: THE and THE Per Capita, Real vs Nominal (AU\$) (1995-2014)



Source: WHO GHED 2017a.

Notes: (i) values are indexed at 2014 constant prices; (ii) local currency unit = Australian dollar.

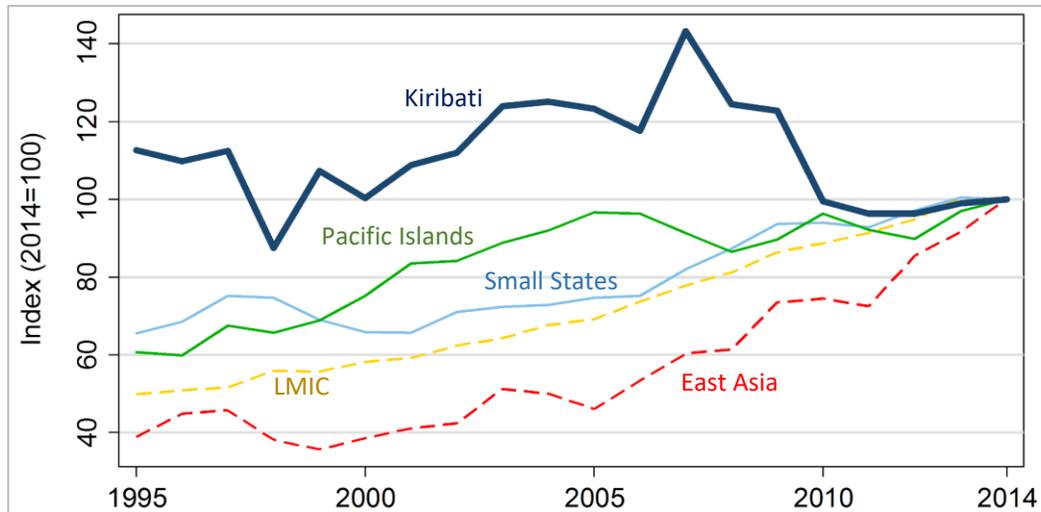
Figure 6-3: THE Per Capita and as Share of GDP (2014)



Source: World Bank 2017 and WHO GHED 2017a.
 Note: Both X and Y axes are in log scale.

44. In other country groupings—such as the Pacific Islands, the Small States, the East Asia region and LMICs—there is an overall upward movement in real THE per capita over the period 1995 to 2014, typically ending with a period of plateauing spending levels from the late 2000s (Figure 6-4). In Kiribati, in contrast, there is greater volatility with real spending falling over the period—with a peak in 2007 and a period of settling from 2010.

Figure 6-4: Real THE per Capita vs Comparators (1995-2014)



Source: WHO GHED 2017a.
 Notes: Values are indexed at 2014 constant prices.

45. THE in Kiribati is largely public and predominantly domestically funded, but with an overall high reliance on external financing and almost no recorded OOP payments. According to international data, THE in 2014 was composed of 81 percent public expenditure on health—just over 80 percent of which was domestically funded—and 0 percent OOP. The profile of health financing in Kiribati is similar to other Pacific Island Countries (Figure 6-5), and this composition of health financing is unique to Kiribati and Pacific Island Countries in general, compared to other

countries with similar levels of income, as they behave differently to the more traditional global health financing transitions—particularly through ongoing low OOP payments and a high external share of funding.

46. **The level of OOP spending for health is the lowest in the region.** Indirect and unrecorded OOP spending on transport and related opportunity costs of seeking care may, however, be highly significant given the dispersed geography of the country and the distance people are required to travel to access health care. Low OOP is a feature that Kiribati should actively seek to maintain. International evidence shows that OOP contributes to increasing health inequality as it links access to ability to pay and can deter or delay utilization.

Figure 6-5: Select Health Expenditure Indicators in the Pacific Cohort (2014) and GNI per Capita (2016)

Country	Nominal THE per capita (US\$)	THE as % of GDP	As % of THE				Public Expenditure on Health (as % of Government Expenditure)	GNI per capita (US\$)
			OOP	Public Expenditure on Health	Private Expenditure on Health	DP		
Samoa	301	7.2	5.9	90.6	9.4	23.8	15.08	4,120
Tonga	213	5.2	11.9	82.4	17.6	19.3	13.50	4,060
Fiji	204	4.5	23.0	65.8	34.2	0.0	9.25	4,780
Vanuatu	158	5.0	5.8	89.8	10.2	48.3	17.94	3,170
Kiribati	154	10.2	0.0	81.2	18.8	13.8	5.81	2,270
Solomon Islands	102	5.1	4.6	91.9	8.1	56.6	12.54	1,880
PNG	92	4.3	10.5	81.3	18.7	21.1	9.54	2,680

Source: World Bank 2017

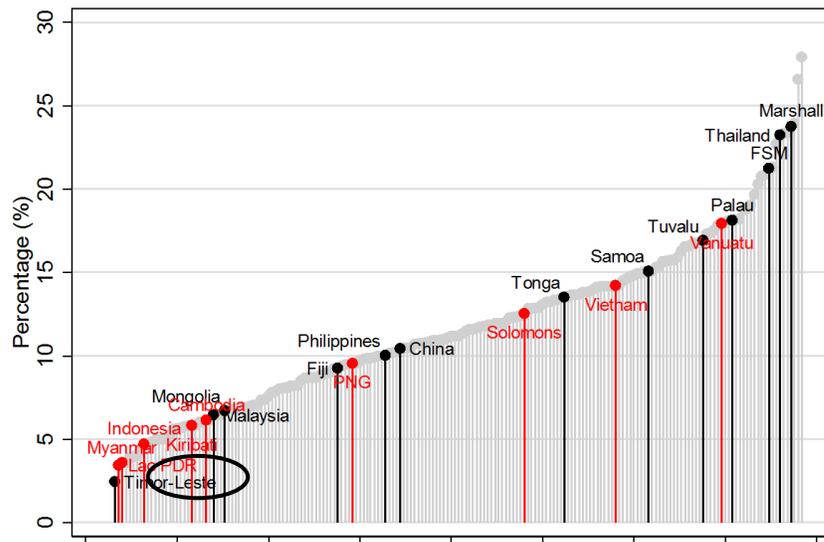
Note: Vanuatu GNI per capita is from 2014, latest year available.

6.2 Public Expenditure on Health

Public expenditure on health is the sum of government-sourced (domestic) health expenditure and external expenditure (DP) that is recorded on-budget (budget support on contributions to the development fund).

47. **Global data sources show that public expenditure on health forms 81 percent of THE in Kiribati.** This includes contributions to health expenditures financed from general revenue and DP support. According to international data, the public expenditure on health share of national expenditure in 2014 was 5.8 percent (Figure 6-6). According to domestic data, however, public expenditure on health represented 10 percent of total national expenditure. The vast majority of public expenditure on health is domestically funded—indeed, according to global data, about eight out of every 10 Australian dollars spent in 2014 was domestic, while two were from external financing. In 2016, around two-thirds of Kiribati general revenue was sourced from fisheries activities. Such a heavy reliance on one source of revenue presents the risk of volatile financing for health.

Figure 6-6: Health Share of National Expenditure (2014)



Source: World Bank 2017.

48. **Public expenditure on health has almost doubled between 2011 and 2016—from AU\$16 million to AU\$31.5 million (Table 6-1).** This equated to around AU\$286 per capita in 2016. According to national data, MHMS received the third largest recurrent budget allocation of any ministry in Kiribati (AU\$22.8 million, or 15 percent), after the Ministry of Education in 2016. Major recurrent budgetary allocations included: Education AU\$32.4 million (22 percent); Finance and Economic Development (MFED) AU\$29.6 million (20 percent); Environment, Lands and Agricultural AU\$6.4 million (4.3 percent); and Public Works and Utilities AU\$5.4 million (3.6 percent). The MFED was allocated AU\$29.6 million but this included AU\$23.2 million in subsidies. The rest of this section is based on Government of Kiribati budget and expenditure data. Notably, there is volatility in public expenditure on health—both budget and actuals—across the period 2011-16, in part because of volatility in DP contribution reporting of budget and expenditure. Actual spending was significantly below budget from 2011-13, and above budget in 2014-16.

Table 6-1: Public Expenditure on Health (Thousands of AU\$) (2011-16)¹³

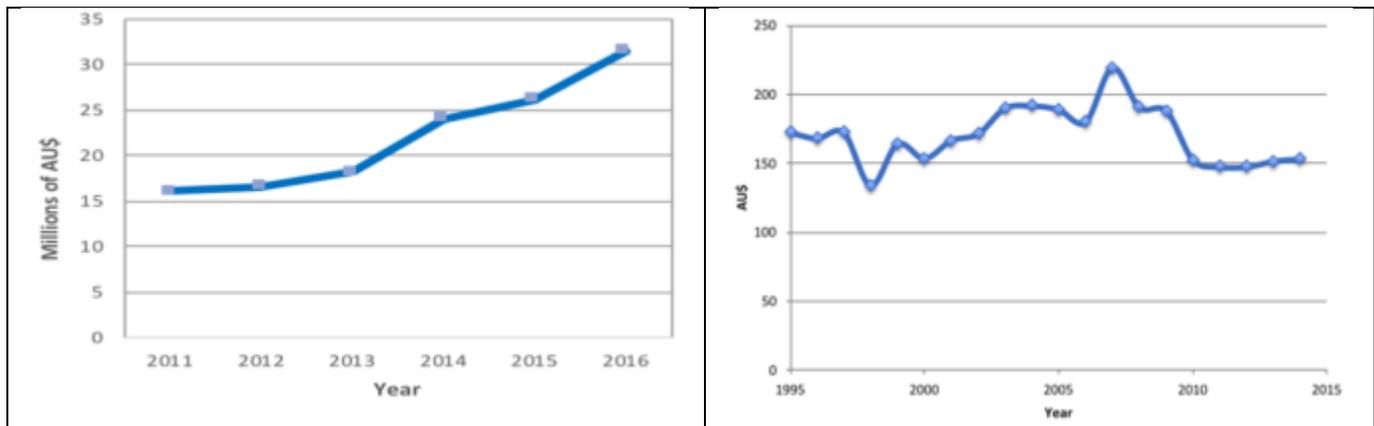
	2011	2012	2013	2014	2015	2016	Movement
Original Budget	21,471	22,087	20,906	18,239	19,817	28,165	■
Final Budget	20,543	20,341	19,388	20,245	25,805	21,477	■
Actual Expenditure	15,978	16,607	18,192	23,987	26,667	31,467	■
Actual Exp. v Original Budget	-26%	-25%	-13%	32%	35%	12%	■

Source: World Bank 2013; Government of Kiribati Annual Account 2016, Government of Kiribati 2017.

49. **Despite the large increases in nominal public expenditure on health between 2011 and 2016, national data confirms global data: real per capita public expenditure on health has remained rather static over this same period.** Volatility can also be seen in real per capita expenditure during this period, from a low of AU\$134 in 1998 to a high of AU\$219 in 2007 (Figure 6-7).

¹³ Using 2016 Budget and Actual Amounts for earlier years as audited full expenditure data was not available at the time of the report.

Figure 6-7: Public Expenditure on Health: Total Nominal (Left) and Real Per Capita (Right) (2011-16)



Source: MFED 2016; World Bank 2017.

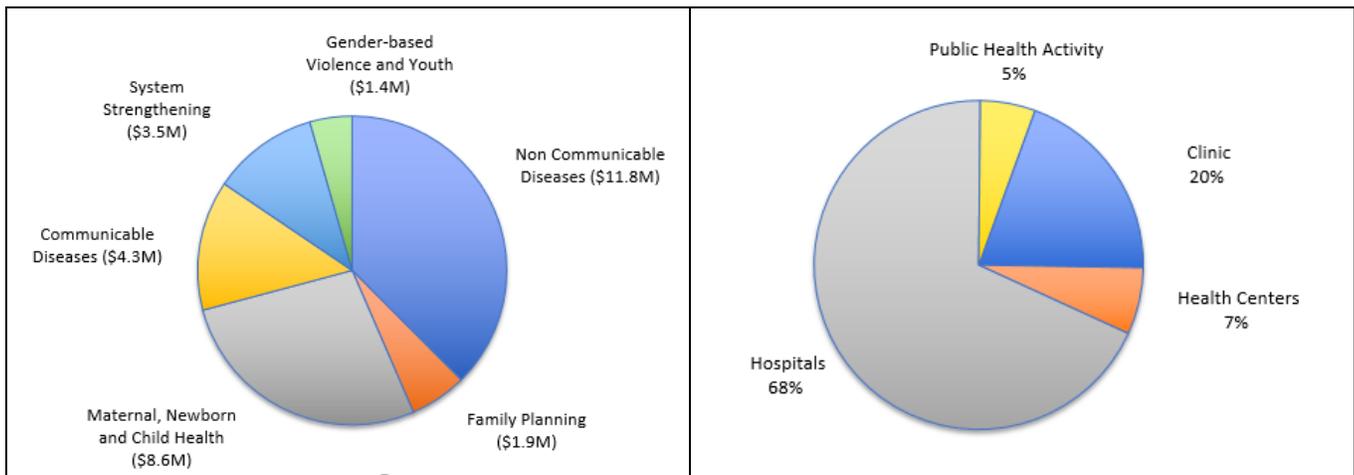
50. **The MHMS is committed to improving health outcomes by progressing six strategic objectives.** Based on estimates by senior management of the time spent at facility level on activities related to each of the six strategic objectives, total public expenditure on health is allocated between the strategic objectives (Figure 6-8). In 2016, spending to reduce the prevalence of NCDs is estimated to absorb the largest share of the ministry's resources (AU\$11.8 million) closely followed by spending on maternal, newborn and child health (AU\$8.6 million), and activities related to the prevention of communicable diseases (AU\$4.3 million) while System Strengthening receives AU\$3.5 million. Family Planning and Gender-based Violence and Youth Services receive an estimated AU\$1.9 million and AU\$1.4 million respectively.

51. **Based on the limited Chart of Accounts categories, the major share of recurrent public expenditure on health in 2016 occurred at hospital level (68 percent), 27 percent in lower-level facilities, and the balance on public health activities (Figure 6-8).**¹⁴ Tungaru Central Hospital, while classified as a referral hospital, still provides a high level of primary health care due to its proximity to the largest section of the population on South Tarawa (one-half of the total population).

52. **The limitations in the existing accounting system (Chart of Accounts) are a major issue for planning, reporting and monitoring in the health sector in Kiribati.** The existing Chart of Accounts does not support a program-based approach to planning and budgeting, it only allows analysis by the dimensions of ministry, division, economic item, and budget/actual. Neither does the Chart of Accounts provide for budget and expenditure classification by subnational, geographic or facility dimensions. Examination of facility-level expenditure, therefore, relies on estimates derived using the proxy measures of direct expenditure; the share of pharmaceuticals; and the share of overheads on clinics, health centers, hospitals and public health activities. Plans to replace the current accounting system will also facilitate the adoption of program budgeting within government (as foreshadowed in the MFED Strategic Plan 2016-2019). The development of program budgeting within MHMS will provide an opportunity to explore alternative structures for the ministry's strategic objectives (for example, based on a model of care/platform approach to health service delivery).

¹⁴ Proxy measures were used to estimate facility spending. These include: direct expenditure; the share of pharmaceuticals; and the share of overheads on clinics, health centers, hospitals and public health. The 2016 budget is used as the base year for this analysis. Due to data limitations, we are unable to calculate the allocations for earlier years. Based on staffing numbers, an estimated 24 percent of expenditures were allocated to lower-level facilities (22 health centers and 83 clinics/dispensaries) while 69 percent of expenditures were allocated to the four hospitals.

Figure 6-8: Estimates of Public Expenditure on Health by Strategic Objective (AU\$) (left) and by Facility Level (%) (right) (2016)



Source: Estimates based on the cost model used to prepare the service-delivery statements.

6.3 Domestic Expenditure on Health

Domestic Expenditure on Health consists of health expenditure funded by resources raised through general consolidated revenue collection, including both domestic recurrent expenditure and government-sourced contributions to the Development Fund for health.

53. **Domestic expenditure increased significantly from AU\$14.3 million to AU\$25.6 million between 2011 and 2016 (Table 6-2).** Over this period, payroll grew by 31 percent, and operational expenditure by 86 percent. A third category of expenditure is the ‘Contribution to Development Fund’ which was introduced in 2012. The ministry pays a range of recurrent costs from this fund, including local and overseas referrals.¹⁵ The amount expended on health via the Development Fund has varied since its introduction—from 6 percent of total domestic recurrent health expenditure in 2012 to 13 percent in 2015 and 14 percent in 2016.

54. **In 2016, domestic expenditure on payroll totalled AU\$11.4 million (45 percent of the domestic health expenditure), while operating costs and domestic contributions to the Development Fund represented 41 percent (AU\$10.6 million) and 14 percent (AU\$3.6 million) respectively.** Within the 2016 payroll, salaries of AU\$6.4 million represent 56 percent of total payroll costs, with the remaining 44 percent allocated to overtime and various allowances.

¹⁵ The Contribution to the Development Fund represents financing for health specialists, local and overseas referrals and wages for DOTS workers, which are all paid through the Development Fund. An important point to note is that balances are carried forward from year to year, unlike the Consolidated Fund.

Table 6-2: Domestic Recurrent Health Expenditure by Economic Classification (Thousands of AU\$) (2011-16)

Recurrent Expenditure	2011	2012	2013	2014	2015	2016	Trend
Payroll	8,602	8,750	9,484	10,299	10,807	11,425	
Operational	5,708	5,303	5,546	6,077	6,984	10,618	
Contribution to Development Fund	0	917	1,367	2,103	2,554	3,596	
Total Domestic Recurrent Health Exp.	14,310	14,970	16,397	18,479	20,345	25,639	

Source: World Bank 2013; MFED 2016; MFED 2017.

Note: There is a discrepancy of AU\$4,710.95 between annual accounts and ministry records for 2016.

55. **One-quarter of all MHMS expenditure is spent on salaries, whereas specialist purchases (pharmaceuticals) and overseas medical referrals together account for another one-quarter of expenditure in 2016.** Salaries are clearly the largest expenditure (28 percent in 2016), followed by specialist purchases (Pharmaceuticals) (12 percent); overseas medical referrals (11 percent); allowances (9 percent); direct local purchases (includes food and rations) (6 percent); and leave grants (5 percent) (Table 6-3).¹⁶ Over recent years, the larger spending areas have all grown, but at different rates, some gradually whereas others saw large jumps, such as leave grants doubling between 2015 and 2016. Notably, Overseas Medical Referrals have grown the fastest (45 percent per year). Such elevated growth levels in large spending areas places pressure on the budget. Careful attention on these areas is required to prevent further erosion of fiscal space.

Table 6-3: Domestic Expenditure by Expenditure Type (Thousands of AU\$) (2011-16) (2016 is Budget data)

	2011	2012	2013	2014	2015	2016	Trend
Salaries	5,568	5,318	5,740	5,798	6,214	6,443	
Specialist Purchases (Pharmaceuticals)	1,673	1,816	1,413	1,879	2,246	3,066	
Overseas Medical Referrals	-	579	982	1,662	1,948	2,556	
Allowances	1,172	1,366	1,447	1,743	1,965	2,102	
Direct Local Purchases	1,100	1,198	1,630	1,477	1,399	1,502	
Leave Grants	291	323	603	556	530	1,089	

Source: World Bank 2013 currently contains some classification issues that prevent the identification of some of these funding categories over time.

Note: This figure identifies certain but not all categories of expenditure. The six identified are the top six by amount.

56. **Overseas medical referrals and specialist purchases (pharmaceuticals) are putting pressure on the MHMS budget.** The high growth in Overseas Medical Referrals is expected to continue straining the MHMS budget. In 2016, there were 106 recorded international referrals for medical treatment at an average cost of about AU\$29,000 per referral. Taiwan was the most frequented destination (53 patients) followed by India (34 patients). Other destinations include Fiji and Hawaii (for Kiritimati Island residents). These referrals represented 11 percent of domestic health expenditure to treat just 0.1 percent of the population. The specialist purchases (pharmaceuticals) budget is overspent nearly every year, with overspending ranging from 4 percent in 2011 to 39 percent in 2015 (Table 6-4). At the end of 2015, MHMS had incurred arrears of some AU\$735,000 for pharmaceuticals (which were

¹⁶ Leave Grants are a fixed amount of AU\$750 paid to assist government employees to return to their home islands for annual leave.

paid in later years). The difficulties in budget control have, however, continued with the 2016 budget as Specialist Purchases were fully exhausted in the first six months of the budget year.

Table 6-4: Specialist Purchases Expenditure (including Pharmaceuticals) (AU\$) (2011-16)

	2011	2012	2013	2014	2015	2016	Movement
Original Budget	1,614	1,614	1,614	1,614	1,614	2,399	-----■
Final Budget	1,614	1,614	1,913	1,614	1,614	3,052	-----■
Actual Expenditure	1,673	1,816	1,413	1,879	2,246	3,066	-----■
Actual Exp. v Original Budget	4%	13%	-12%	16%	39%	28%	-----■

Source: World Bank 2013; 2016 Budget Book.

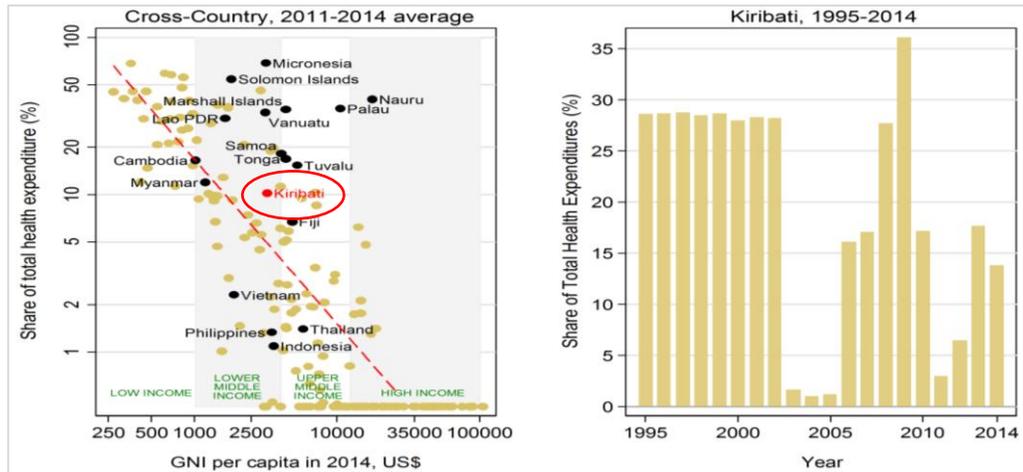
57. **The availability of essential medicines and commodities at primary health care facilities has been identified by MHMS as a performance indicator for the strategic objective of system strengthening; however, measurement of this indicator is yet to commence.** Regular measurement will help to ensure that the purchasing of essential medicines is programmed and orderly, rather than through emergency purchasing and the accumulation of large arrears due to unforeseen stock-outs. Roll-out of the DFAT-funded mSupply mobile app will assist with this. There is also evidence that Kiribati pays higher unit costs for certain, but not all, pharmaceuticals compared with other Pacific countries. This may reflect a higher level of emergency purchasing (currently occurring each month). Use of the mSupply mobile app to track stock at clinics and health centers is expected to reduce the need for emergency purchasing. MHMS is also looking at options for improving procurement of pharmaceuticals, including through regional approaches.

6.4 External Financing for Health

External Financing for Health comprises contributions (money, in-kind contributions, services) that are provided by entities not part of the country in question. Due to data constraints, this section mostly focuses on DP contributions that are on-system (that is, contributions formally reported to government).

58. **External financing has been an important component of THE in Kiribati.** As with many other Pacific Island countries, external financing in Kiribati has shown notable volatility during the two decades to 2014 (Figure 6-9). Indeed, external finance has moved from a stable and highly significant level of about 28 percent of THE from 1995 to 2002, to an ongoing period of volatility and less predictability. During this time, lower levels of support are recorded between 2003-05, and 2011-12—contrasting starkly to the higher levels in 2008-09. This volatility might be due to poor recording both in country and by DPs but also because of the use of different databases tracking disbursements or expenditure, rather than because of actual extreme changes in support. According to global data, while external financing stood at 14 percent of THE (or 17 percent of public expenditure on health) in 2014, it averaged 10 percent between 2011 and 2014, again higher than what might expected given the level of income, but less than other countries in the Pacific (Figure 6-9).

Figure 6-9: External Share of THE (2014)

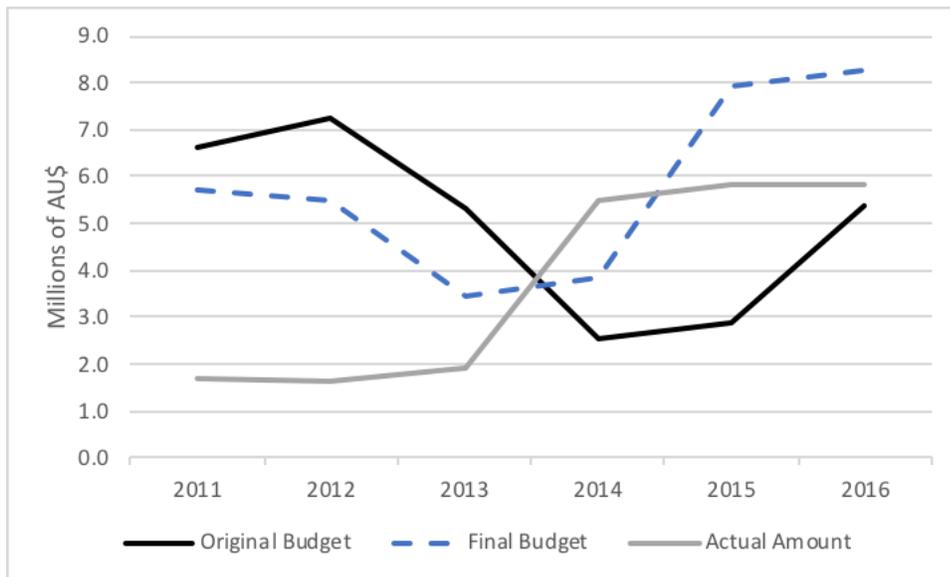


Source: World Bank 2017.

Note: Both X and Y axes are in log scale on Cross-Country Average figure.

59. According to national data, actual on-budget DP expenditure for health was AU\$5.8 million in 2016—in the same range as the previous two years.¹⁷ Over the period 2011 to 2016, on-budget DP expenditure has grown at a faster rate than government expenditure overall, with an annualized growth rate over the period of 28.4 percent. This growth in expenditure may, however, be mostly due to poor recording, as highlighted by the significant difference between recorded budget and expenditure (Figure 6-10). In 2016 the New Zealand Government provided the bulk of this funding (AU\$3 million) followed by the Australian Government (AU\$1.1 million) (Table 6-5).

Figure 6-10: DP Health Expenditure (AU\$)¹⁸



Source: Government of Kiribati budget.

Note: Expenditure figures for 2016 based on MHMS records, pending final publication in 2018 Budget Book.

¹⁷ Expenditure to October 2016. Final expenditure figures will be reported in 2018 Budget.

¹⁸ As reported in published Budget Books.

Table 6-5: DP Health Expenditure by Source (Thousands of AU\$) (2012-16)

	2012	2013	2014	2015	2016	Trend
Australia	212	11	2,130	1,875	1,122	
Canada	0	0	0	12	0	
Japan	0	0	157	0	94	
New Zealand	6	438	1,762	3,348	2,978	
PIFS	0	0	8	0	0	
SPC	364	197	176	129	7	
Taiwan	508	603	903	526	245	
UNFPA	121	6	57	65	235	
UNICEF	181	238	124	223	320	
WHO	242	401	191	128	642	
Others	2	0	0	16	181	
Total Development Partners	1,636	1,894	5,508	6,322	5,824	

Source: Government of Kiribati Budget and DP reports to Ministry of Health and Medical Services for 2016.

Notes: (i) PIFS: Pacific Islands Forum Secretariat; SPC: Secretariat for the Pacific Community; (ii) 2012-16 actual reported expenditure, including expenditure reported by development partners through their own systems; (iii) UNDP (as the principal recipient of the multi-country GF grants for TB and Human Immunodeficiency Virus - HIV) also provided financial support to Kiribati in 2015 (US\$11,041) and 2016 (US\$135,213), however, this information has not been formally communicated to MHMS.

60. **As with global data, reported DPs' expenditure in the national budget reflects significant volatility year on year.** There is also significant variation between budgeted amounts and final expenditure. As noted in the Kiribati Health Financing Note, World Bank 2015, this level of uncertainty and unpredictability in DP funding is not helpful to health sector stakeholders pushing for sector-wide planning, optimizing resource allocation, efficient use of resources and monitoring and evaluation. The current accounting system may also be contributing to some of the issues experienced with managing DP funding through government systems.

61. **There is currently limited in-year reporting by DPs on expenditure through their own systems.** Total expenditures are reported during the budget process but, throughout the year, the ministry has not been receiving routine reports on progress against these allocations, despite developing a reporting template which is communicated to DPs according to the reporting timeline needs. In 2016, according to national data, the DP contribution of AU\$5.8 million to the health sector represented nearly 20 percent of public expenditure on health. Of this amount, some 70 percent, or AU\$4.0 million, flows through DPs' own systems.

62. **In recent years, DP assistance from New Zealand has become increasingly significant, and the largest source of external financing.** While DP assistance is a critical component of health financing in Kiribati, as it is in other Pacific Countries, the programmatic nature of that funding requires careful oversight and management by the recipient government. The ongoing security of funding for core health services is of paramount importance and is best financed from recurring funding streams that are controlled by the country and its budgetary system.

6.5 Transition Arrangements

External financing is expected to remain significant in the future but contributions from some more traditional DPs have started decreasing and are anticipated to decrease further in upcoming years. The larger transitions include those from Gavi support to immunization, and a reduction in funding available from the GF to support TB and HIV through a regional grant. New Zealand is now providing support for the Kiribati Internship Training Program

(KITP) through to 2019. Without a further funding commitment beyond this period, MHMS will need to take up funding for this program. Less information is known about future commitment from other donors.

63. **Gavi (2017) has been supporting the Kiribati immunization program since 2008, with total support since then of US\$625,000 (48 percent nonvaccine support; 52 percent vaccine support).** In addition to the traditional vaccines, MHMS expenditure on the immunization program was supplemented by support from Gavi for the introduction of new vaccines: (i) Pentavalent (2008); (ii) Pneumococcal Conjugate Vaccine (PCV) (2013); and Inactivated Poliomyelitis Vaccine (IPV) (2015). MHMS also received a US\$100,000 Vaccine Introduction Grant for the each of these vaccines.

64. **UNICEF has also been providing technical and procurement assistance to Kiribati through the Vaccine Independence Initiative—support that will continue post transition—and has also provided operational funding and support for Rotavirus (RV) vaccine in 2017.** Based on the country’s economic status, Kiribati became ineligible for further Gavi support from 2017 (although IPV support continued that year). From 2018, MHMS will be expected to fully fund all vaccines on its schedule. Australia has indicated, however, that it will provide partial funding support for new vaccines (PCV, RV and IPV) during the transitional period to smooth the abrupt financial demands on the government health budget. Current Gavi pricing is available to MHMS through to 2021.

65. **Annual immunization coverage in Kiribati is volatile, and in 2016 was below the regional average for all selected vaccines (Figure 6-16).** Further improving immunization rates in the context of transition from DP financing will require significant commitment from government and DPs.

Table 6-6: Immunization Coverage in the Pacific (2016)

Country	BCG	DTP3	HepB3	Hib3	Measles1	Polio3
Fiji	99	93	93	93	95	93
Kiribati	79	81	81	81	80	82
PNG	72	61	61	61	51	62
Samoa	82	90	90	90	77	90
SI	80	94	94	94	82	89
Tonga	91	96	96	96	98	96
Vanuatu	94	81	81	81	84	81
<i>Average</i>	<i>85</i>	<i>85</i>	<i>85</i>	<i>85</i>	<i>81</i>	<i>85</i>

Source: WHO 2017b.

Note : BCG : Bacillus Calmette-Guérin vaccine.

66. **The TB National Program has also benefited from significant external support.** GF has been providing support to TB/HIV in Kiribati through regional grants since 2003, initially through the Pacific Community (formerly known as the Secretariat for the Pacific Community) as the principal recipient of the grant and, since 2015, with the United Nations Development Program (UNDP) as the principal recipient. Support includes direct funding, technical assistance, and the supply of drugs and commodities. The program continuation request has been submitted to GF and, while some level of support is expected to continue from 2018 for the next grant iteration, exact levels of support for Kiribati through the regional grant have not been finalized. The TB National Program has also been receiving significant support from Australia—a significant change occurred in early 2017 when Australia’s longer-term funding support for TB in Kiribati moved from being delivered through an external organization to being directed through government systems. DFAT support is expected to be maintained throughout the 2016-20 span of the National Tuberculosis and Leprosy Strategic Plan (NTBLSP) and beyond. This recognizes the particularly acute burden of TB as a public health issue in Kiribati.

67. **Transition for the TB program is already underway, with MHMS absorbing some staffing costs and paying for a share of the TB drugs (which are procured through the Global Drug Facility) in 2016.** Under the new NTBLSP 2016-20, the program will seek greater integration with the delivery of other public health services, and opportunities for collaboration (for example, with the RMNCAH¹⁹ program, which also targets the adolescent and young adult age groups with the highest TB incidence rates). The inclusion of leprosy within the NTBLSP 2016-20 recognizes the similarities in target populations and disease risk for TB and leprosy and the potential efficiencies gained by tackling them jointly. The TB case notification rate in 2016 was 518 cases (per 100,000 in population), almost double the rate from 2010 (265 cases) (DFAT 2017). The overall higher rate of notification is due in part to the availability of a GeneXpert machine (installed in 2014) which enables up to 4,000 diagnoses a year compared to less than 1,000 when it was just microscopy. It is also a result of ongoing training and community awareness programs—with over 65,000 people (including from the health sector and vulnerable groups, such as the disabled and prisons) now able to identify TB symptoms and with better awareness of the available health services.

68. **Maintaining health improvements achieved in these traditionally DP-funded national programs will require additional financing from the Government of Kiribati.** Estimates of the potential financial impacts of the transitions from Gavi for immunization support, GF for TB/HIV support, Australia for TB and New Zealand for the KITP are noted in Table 6-7. These estimates highlight the total cost should all DPs withdraw and MHMS maintains similar levels of services and expenditure. As noted earlier, a certain level of support is expected to continue. MHMS has already starting absorbing some of the financing. Indeed, MHMS started funding TB drugs in 2016 and fully funding pentavalent (DTP-Hib-HepB) vaccine following the expiration of that Gavi grant. MHMS will need to fully fund PCV by 2017, and RV (currently funded and procured by UNICEF) and IPV vaccines by 2018, in addition to other conventional vaccines that are funded by MHMS as part of the existing Expanded Program for Immunisation. The current cost projections are based on UNICEF VII invoices, Gavi and GF negotiated prices.

¹⁹ RMNCAH: Reproductive, Maternal, Newborn, Child, and Adolescent Health.

Table 6-7: Estimated Financing Requirements from Transitioning Arrangements

	2017	2018	2019	2020	2021	Movement
Expanded Program on Immunisation						
<i>Replace Gavi Funding</i>						
PCV	43,160	43,383	43,383	43,606	43,606	
Pentavalent*	15,118	14,740	14,740	14,817	14,817	
IPV**	0	0	7,143	7,143	7,143	
Rotavirus	0	24,242	72,727	72,727	72,727	
<i>Less Interim Australian Support</i>						
- Funding	(150,000)	(100,000)	(50,000)	0	0	
Sub total	(91,722)	(17,634)	87,994	138,294	138,294	
Estimate	-	-	-	117,000	140,000	
Tuberculosis/Leprosy/HIV						
<i>Replace Global Fund/UNDP Funding</i>						
- Funding	0	0	0	225,500	225,500	
- Commodities	0	0	0	8,312	8,312	
<i>Replace Australian Funding for National TB and Leprosy Strategic Plan</i>						
- Funding	0	0	400,000	400,000	400,000	
Sub total	0	0	400,000	633,812	633,812	
Estimate	0	0	400,000	635,000	635,000	
Kiribati Internship Training Program						
<i>Replace New Zealand Funding</i>						
- Funding	0	0	0	0	247,275	
Estimate	0	0	0	250,000	250,000	
Total	0	0	400,000	1,002,000	1,025,000	

Sources: (i) PCV and Pentavalent: Gavi 2017a; (ii) IPV: Gavi 2017b.

Notes: (i) Amounts in 2017 Australian dollars (exchange rate used: AU\$1.00: US\$0.77); (ii) UNICEF advises that Kiribati will receive 3,200 doses of IPV in 2018 but funding beyond then is uncertain; (iii) UNICEF advises that Kiribati has sufficient RV supplies to August 2018; (iv) DP support is not confirmed but it is likely that Kiribati will receive a further three years' support for RV; (v) Australian funding for vaccine transition transferred to Development Fund, any balances carry over; (vi) GF/UNDP support currently to end 2019 - estimated support for 2018 is US\$173,642; (vii) UNDP reports that US\$6,400 worth of commodities provided to June 2017; (viii) DFAT support for the TB/Leprosy program is available to end 2018; and (ix) KITP: ongoing funding covers assessment visits from Fiji National University and does not include the three specialist positions funded in 2017.

6.6 PrHE and OOP Spending

PrHE includes funds channelled through NGOs as well as payments borne directly by a patient. **OOP Payment** expenditures are any direct contribution by households, including donations and in-kind payments, to health practitioners and suppliers of pharmaceuticals, and other goods and services whose primary intent is to contribute to the restoration or enhancement of the health status of individuals or population groups.

69. In Kiribati, PrHE is reported to represent 19 percent of THE (approximately US\$29 per capita in 2014), but with very low recorded OOP spending. Much of this expenditure is channelled through NGOs and is not reported through government. The ministry charges some limited OOP fees but these are not significant compared with expenditures. The local and overseas referral schemes provide funding for fees, transport and subsistence for eligible patients. Indirect costs of seeking health care (for example, salary/wages foregone, the cost of travelling to a village clinic to seek attention) are not currently tracked, however, and are likely to be significant given the country's geography and the costs involved in maritime travel. The HIES to be conducted in 2018 provides an opportunity to gather further data on any OOP expenses faced by people seeking to access the health system.

Section Seven: Policy Discussion & Recommendations

Summary of Policy Recommendations:

- Improve the quality of expenditure
 - Strengthen partnerships within and across key sectors
-

70. **Policy development in the health sector is guided by the Kiribati Health Strategic Plan (KHSP) (2016-2019).** This plan has been formulated within the overarching KDP 2016 to 2019. The KDP identifies health as an important determinant for economic development for Kiribati. It recognizes that improved living standards lead to a healthier population, improved economic performance and a productive future. The third goal of the KDP is to improve population health and health equity through continuous improvement in the quality and responsiveness of health services, and by making the most effective and efficient use of available resources. More detailed assessment of the quality of care provided at the different levels of the health system is needed. It is important for health service managers to analyze and understand how effective services are in managing key health issues, particularly NCDs and avoiding complications and rapidly rising costs. For example, how well has the Package of Essential NCD Interventions (PEN) been adapted to the Kiribati operating context? How good is the continuity of care provided to patients across the health system? Is the referral system operating effectively?

71. **The KHSP acknowledges the many challenges that confront the health system in Kiribati, as it seeks to improve the quality and delivery of health services.** These challenges include the need to improve the availability of essential medicines and supplies, and the availability and maintenance of equipment. The strategic plan also identifies the country's reliance on support from DPs in providing health services, and the challenges in coordinating and prioritizing that DP support. Human resource issues include an ageing health workforce, with a shortage of paramedical and support staff; and a lack of qualified staff—particularly in laboratory and radiography services, health promotion, environmental health and health information. Other workforce issues include the need for processes to monitor the competency of health workers, including regular clinical supervision and support. Global studies estimate that as much as 20-40 percent of all health spending is wasted (WHO 2010). The area of human resourcing is specifically identified globally as an area where significant efficiencies can be achieved, and additional fiscal space created (WHO 2016). The strategic plan also identifies the need for accurate, timely and relevant health information to inform planning, policy development and sector monitoring.

72. **Six strategic objectives have been identified by the ministry to direct sector efforts toward an improved health service for people across the country's 21 inhabited islands:**

- Noncommunicable diseases;
- Family planning;
- Maternal and child health;
- Communicable diseases;
- System strengthening; and
- Gender-based violence and youth services.

73. **A set of 29 performance indicators have been identified and will help MHMS monitor progress over time.** These indicators are measured regularly through HIS data collected and consolidated by the ministry's Health Information Unit. The ministry uses these indicators for, among other things, internal benchmarking of progress against the strategic objectives. Comparable indicators are also reviewed annually for benchmarking performance against other Pacific countries. The performance indicators are set out in Appendix One.

74. **There is a strong sense of momentum in the health sector in Kiribati, and a commitment to achieving better population health outcomes.** Continued progress is achievable, with the ministry leading the sector in practical actions that can make health financing and health delivery in Kiribati more efficient, equitable, affordable and accountable for a healthier population.

Policy Recommendation 1: Improve the Quality of Health Expenditure

75. **MHMS to demonstrate that it is using existing allocations efficiently and effectively.** Building on progress to date, this involves understanding the detail of how financial, human and other resources are being allocated and used across the health sector to achieve improvements in priority health indicators:

- **Ensure that quality primary health care, including disease prevention, is measured regularly as part of the HIS.** This will provide the most cost-effective use of resources by helping to ensure that people access an appropriate level of care and that avoidable episodes of care are minimized;
- **Create a stronger ‘line-of-sight’ between funding allocations and frontline service-delivery activities** (and ultimately health outcomes), including the development of a better understanding of estimated cost of service delivery at facility level;
- **Increase analysis and debate on how effective services are in managing key health issues**, particularly NCDs, and avoiding complications and rapidly rising costs;
- **Investigate alternative options for delivering care for geographically isolated areas** (for example, the feasibility of a hub and spoke model for Kiribati);
- **Integrate external funding more effectively in health sector plans and budget, with clear quarterly reporting on allocations and expenditures.** This will also assist with smooth transition planning from external funding sources where required;
- **Implement a targeted approach to improve efficiency in key high-spending areas, such as human resources/payroll, hospitals, pharmaceuticals/medical supplies, and referrals; and**
- **Consider, more generally, an in-depth PFM study, looking at bottlenecks in budget execution.**

Policy Recommendation 2: Strengthen Partnerships Within and Across Key Sectors

76. **MHMS to continue to build its collaboration with MFED and other key sectors responsible for better housing, water and sanitation, education and nutrition.** On 9 April 2017, the Government of Kiribati adopted the Ambo Declaration (Health in All Government Policies), which sets out its commitment to take into account systematically the health and health system impacts of government decisions across all sectors to improve population health and health equity. MHMS plays the key role in building and maintaining the partnerships needed within government, with DPs and with civil society organizations to give effect to this commitment:

- **Build meaningful engagement with other ministries and partners in major health forums**, such as the health sector coordination committee meetings, the Joint Annual Performance Review of the Health Sector, and National Health Forum each year;
- **Participate actively in the monitoring of the KDP together with the new Kiribati Vision 20** and utilizing forums such as the monthly Secretaries Meetings to progress issues where increased collaboration and results are required; and
- **Work with other ministries to support cross-sector initiatives to deal with the social determinants of health (water supply, sanitation, and housing).**

Appendix One: Health Performance Indicators

Performance Indicators		2019 Target	2015 Result	2016 Result	KDP
NCDs					
1.	Adult Mortality Rate from NCDs (30 to 69 years) per 10,000 population		45.9	43.4	Yes
2.	Number of Diabetes-related Amputations	68 (25% reduction)	69	61	Yes
3.	Diabetes – Occasions of Service per 1,000 Population		129	150	No
4.	Hypertension– Occasions of Service per 1,000 Population		123	145	No
5.	Mortality Rate from Road Traffic Injuries – number and rate of deaths per 100,000 population	0	1.9	1.8	Yes
Family Planning					
6.	Adolescent birth rate for 10-14 years per 1,000 girls in that age group		3.4	0	Yes
7.	Adolescent birth rate for 15-19 years per 1,000 girls in that age group		33.1	37	Yes
8.	Contraceptive Use: Contraceptive contacts (all forms except condoms) as seen at health facilities per 1,000 population		25	27	Yes
9.	Contraceptive Use: Contraceptive contacts (all forms) as seen at health facilities per 1,000 population		531	336	
Maternal, Newborn and Child Health					
10.	Maternal deaths	<2	4	4	Yes
11.	Neonatal mortality rates per 1,000 live births		10	15	Yes
12.	IMR per 1,000 live births		32	31	Yes
13.	Under 5-years mortality rates per 1,000 live births		51	54	Yes
14.	Proportion of births attended by skilled health personnel	>95%	87%	92%	Yes
15.	Childhood measles immunization - proportion of children who have received at least one measles vaccination by 12 months	>95%	89%	83%	No
16.	Malnutrition – number or proportion of children under 5 years who are malnourished	25% reduction	795	808	No
Communicable Diseases					
17.	TB case notification rate (all forms) per 100,000 population	315	421	470	No
18.	TB treatment success rate - percentage of new, bacteriologically confirmed smear-positive TB cases that were cured or in which a full course of treatment was completed		80%	90%	Yes
19.	Presence of 7 International Health Regulations core capacities for surveillance and response		-	-	Yes
System Strengthening					
20.	Number of quarterly health and finance reports produced that track progress against core indicators for KHSP implementation		Two monthly and one Annual Health Bulletin	Annual Finance Report and Annual Health Bulletin	Yes
21.	Number of health workers per 10,000 population		38.3	37	Yes
22.	Availability of essential medicines and commodities at primary health care facilities		Pharmacy discussion	Awaiting data	Yes
23.	Number of outpatient consultations per capita		5.2 (0.1 Tugaru Central Hospital)	4.9	Yes
24.	Financing – amount and percentage of total government recurrent budget allocated to health each year (excluding external funding)		15.2%	15.3% (Budget)	No
25.	Percentage of THE from donors		24%	19.1% (Budget)	No
26.	Per Capita Expenditure on Health		AU\$259	AU\$256 (Budget)	No

Performance Indicators		2019 Target	2015 Result	2016 Result	KDP
27.	Hospital (bed occupancy by hospital) - proportion of available acute inpatient beds that have been occupied over one year		103% TCH	83.4%	No
28.	Hospital (average length of stay, by hospital) - average number of days patients spend in hospital		8.8 TCH	7.2	No
Gender-based Violence and Youth Services					
29.	Number of cases dealt with by the Family Health Center and other health facilities		312	482	Yes

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