

# TIMOR-LESTE PUBLIC EXPENDITURE REVIEW

Changing Course:  
Towards Better and More  
Sustainable Spending





# Why conduct a Public Expenditure Review?

A Public Expenditure Review (PER) is a diagnostic tool that aims to evaluate the efficiency and effectiveness of public spending.



It analyzes the level and composition of public expenditures over several years to investigate their consistency with stated policy priorities and whether they achieved the intended outcomes.



This analysis can help governments gauge the efficacy of their budget processes and the impact of their spending by looking at how public resources are allocated and disbursed.



This can help to inform changes to the way public funds are allocated, spent, and accounted for, in a way that supports the achievement of the government's key objectives.

# How can we evaluate public spending on health in Timor-Leste?

Evaluate against the Government of Timor-Leste's stated objectives

National Health Sector Strategic Plan (NHSSP) 2011-2030

Health Financing Strategy 2018-2022

Evaluate against international frameworks and goals

Universal Health Coverage

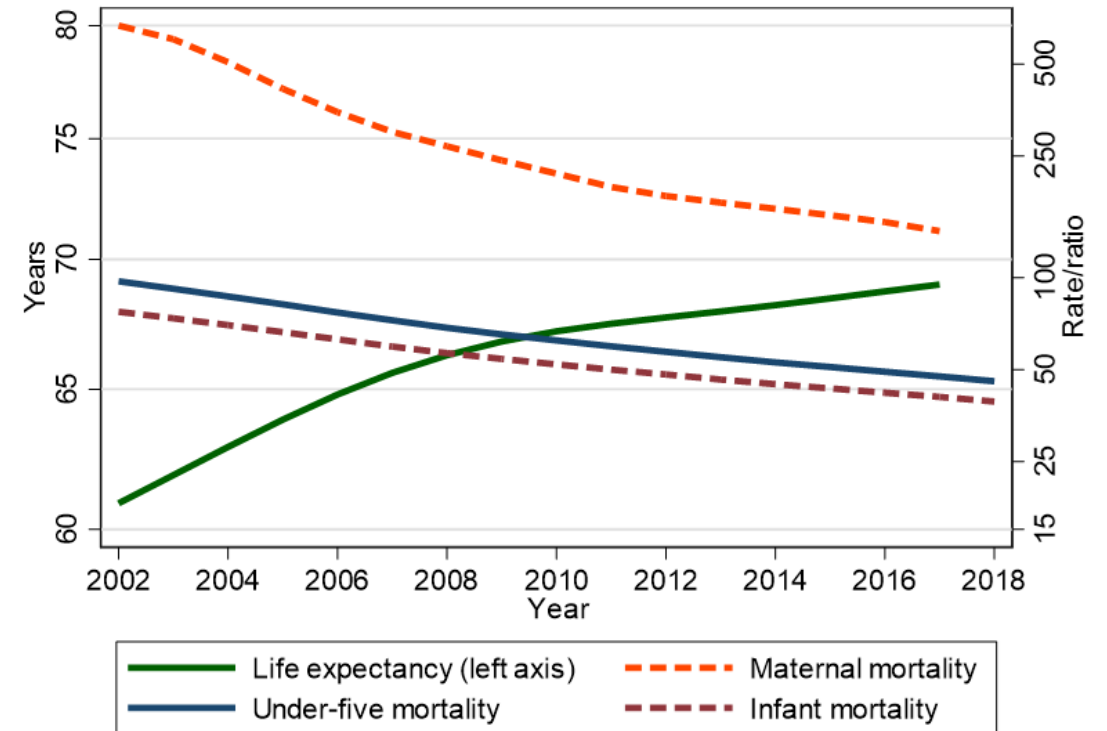
Sustainable Development Goals

World Bank Human Capital Index

Timor-Leste has made **progress** on key population **health outcomes** over the past two decades

- Increase in life expectancy from 61 in 2002 to 69 years in 2018
- The under-five mortality rate has declined from 97 in 2002 to 44 per 1,000 live births in 2019  
→ **Recent DHS 2016 study 41**
- Infant mortality has declined from 77 per 1,000 live births in 2002, down to 38 per 1,000 live births in 2019  
→ **Recent DHS 2016 study 30**
- Hence, maternal mortality also declining from 668 in 2002 to 195 per 100,000 live births in 2016  
→ **Recent DHS 2016 study 195**

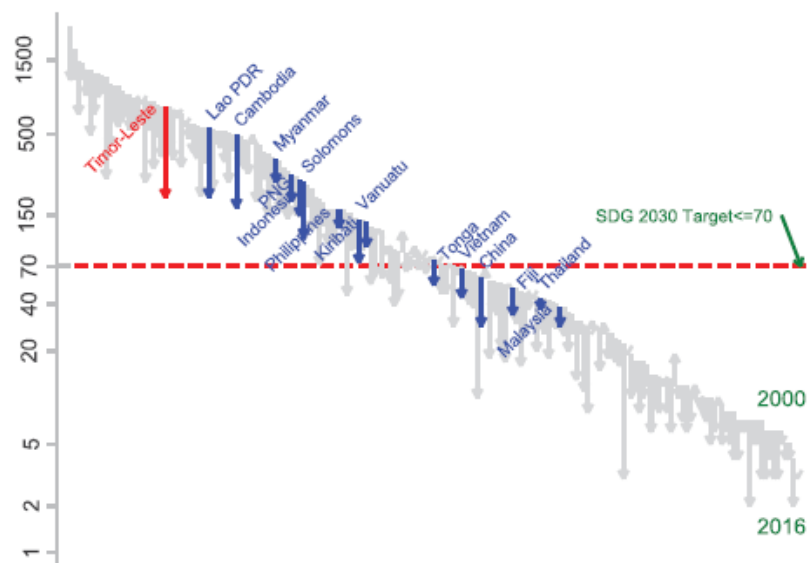
**KEY POPULATION HEALTH OUTCOMES IN TIMOR LESTE**



Source: World Development Indicators

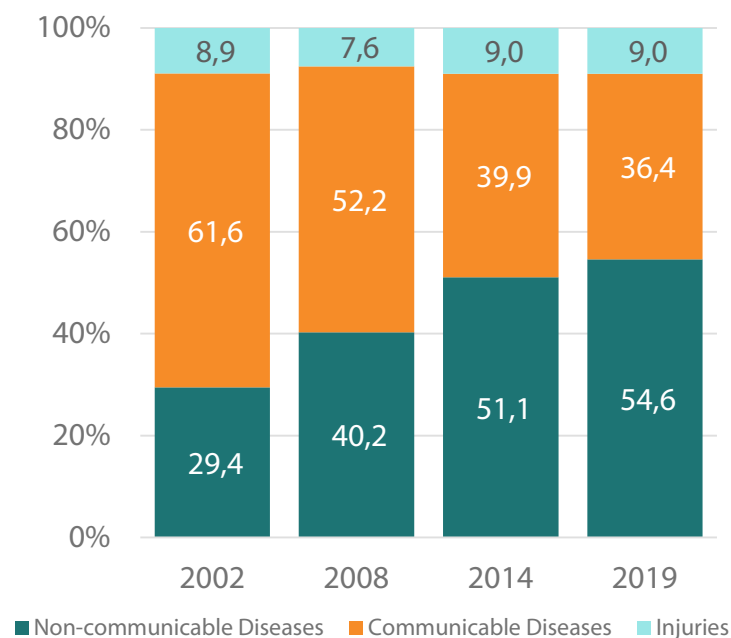
# Despite good progress on many health indicators, there remain significant health challenges...

MDGs to SDGs for maternal mortality



Source : World Bank

Burden of disease by cause



Source : Institute of Health Metrics and Evaluation (IHME)

For example, there is a significant way to go to meet the 2030 MMR target under the SDG framework

The share of non-communicable diseases (NCDs) in the overall burden of disease has increased significantly.

- NCDs now account for 55 percent of the burden of disease, up from 29 percent in 2002
- Stroke, heart and lung diseases, and diabetes are now among the top 10 diseases

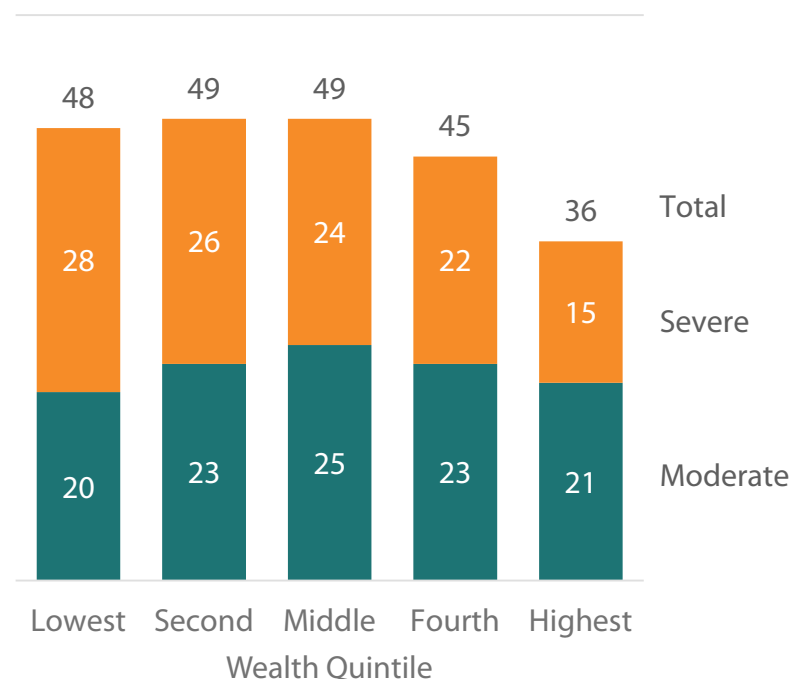
# Chronic malnutrition is a severe problem that affects children's cognitive and physical development...

Child Stunting Prevalence (%)



Source : World Bank

Child Stunting by Household Income Level



Source : DHS 2016

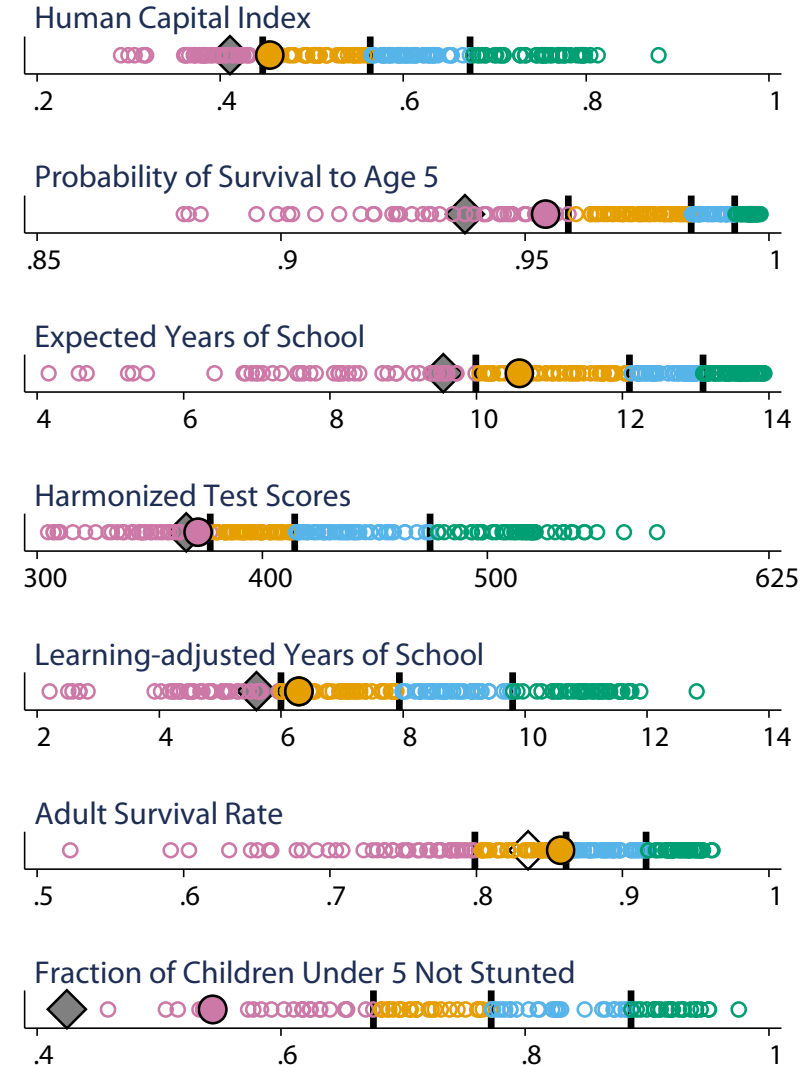
**Almost half of children under five are stunted** – a very high value when compared to other countries

The prevalence of severe stunting is lowest among the wealthiest households (15 percent), but it is notable that the prevalence of **moderate stunting is similar across all income levels**

Timor-Leste ranks **128** out of 174 countries on the HCI, with **a score of 0.45**

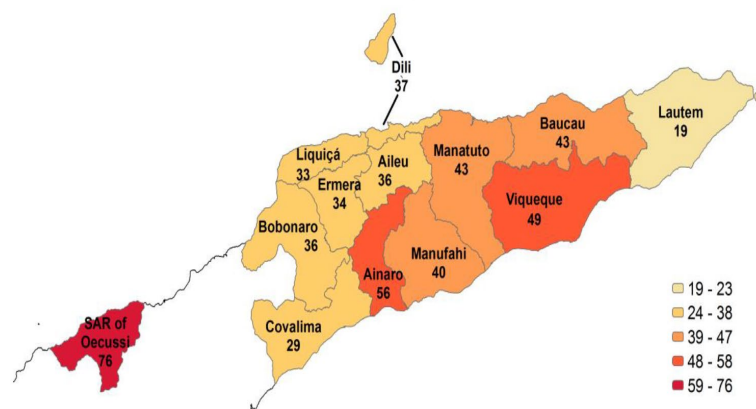
Timor-Leste is **in the bottom quartile globally** for the child mortality, test score, and stunting metrics.

Source : The World Bank's Human Capital Index (HCI)



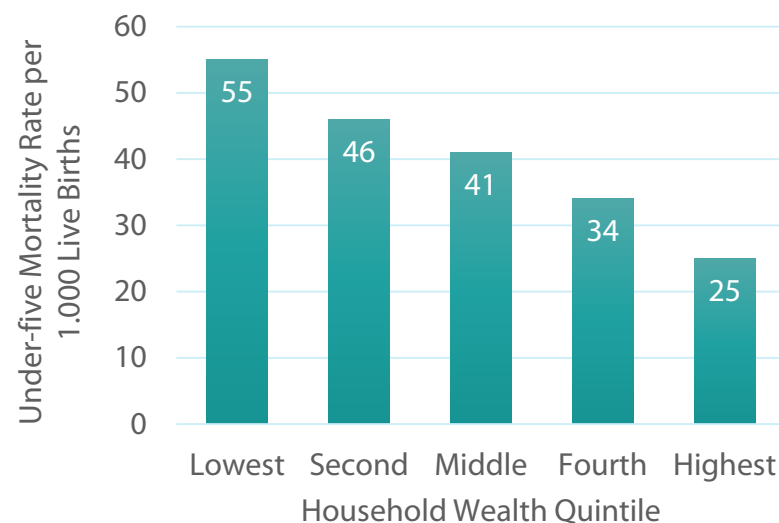
# There are **large disparities** in health outcomes observed across geographies and socioeconomic strata...

Under-five mortality by municipality



Source : DHS 2016

Under-five mortality by income



Source : DHS 2016

Under-five **mortality rate** is 2-3 times higher in the remote exclave of Oecusse, when compared to other municipalities.

Is double the rate among households in the poorest quintile compared to those in the richest quintile



# Service Delivery in Timor-Leste

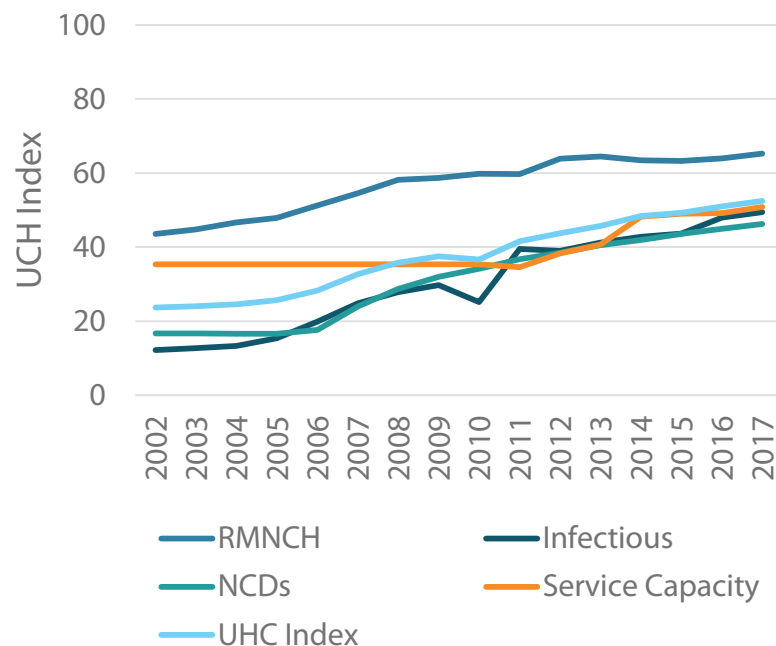
There has been **significant improvement** in selected maternal and child health services between 2009 and 2016. However, coverage of other **critical services** such as immunization (DPT3 and measles) **have declined**

Maternal and child health service indicators

Indicator	Year	
	2009	2016
Modern contraceptive use	21,1	24,1
Antenatal care from a skilled provider	86	84,5
Antenatal visits for pregnancy: 4+ visits	55,1	76,8
Assistance during delivery from a skilled provider	31,8	58,4
Place of delivery: Health facility	23,8	49,8
Delivery by caesarean section	2,1	3,7
DPT3 vaccination received	66,4	61,7
Measles vaccination received	67,8	69,3

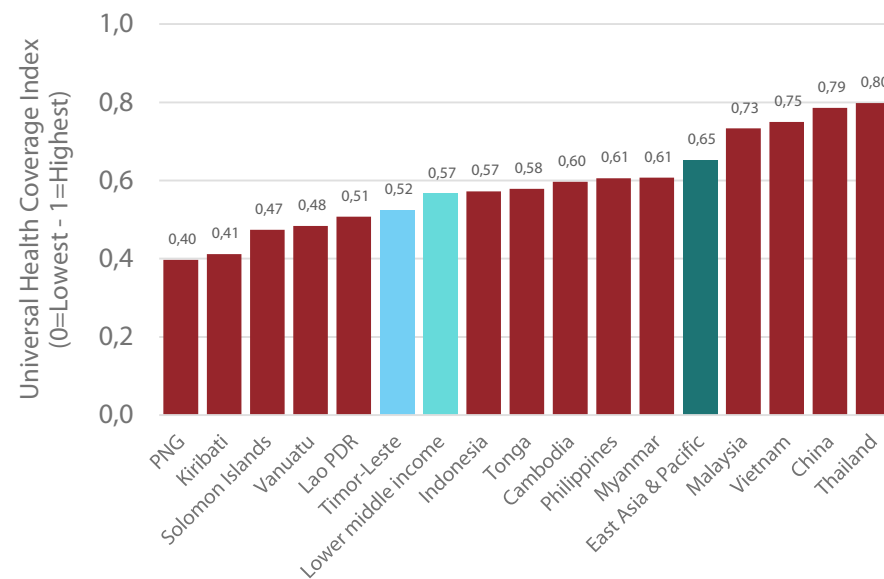
# While health service coverage has improved overall, there is still significant progress to be made...

UHC service coverage



Source : Universal Coverage Monitoring Database, WHO

Universal Health Coverage index



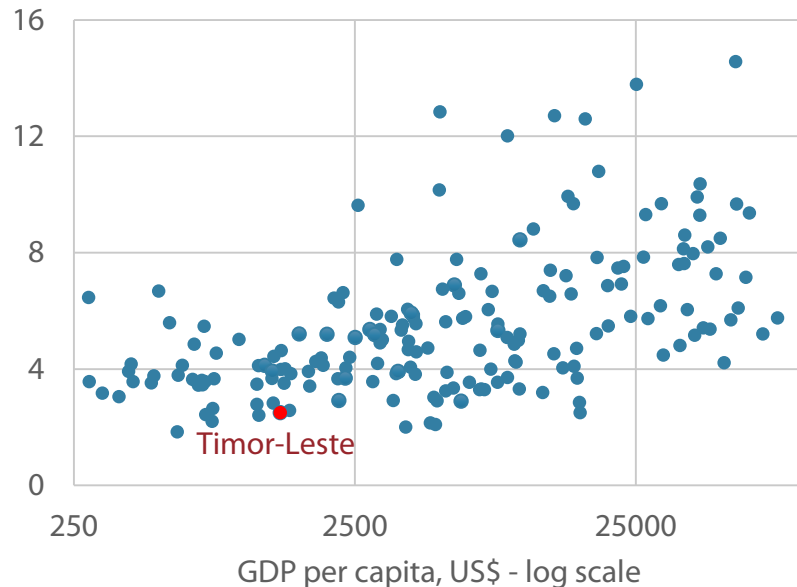
Note: data is for 2017  
Source : World Bank

Timor-Leste's performance on these indicators has improved over time.

However, the country's score on the UHC index is 52 out of 100, below the average of 65 for East Asia & Pacific and the average of 57 among lower-middle income countries.

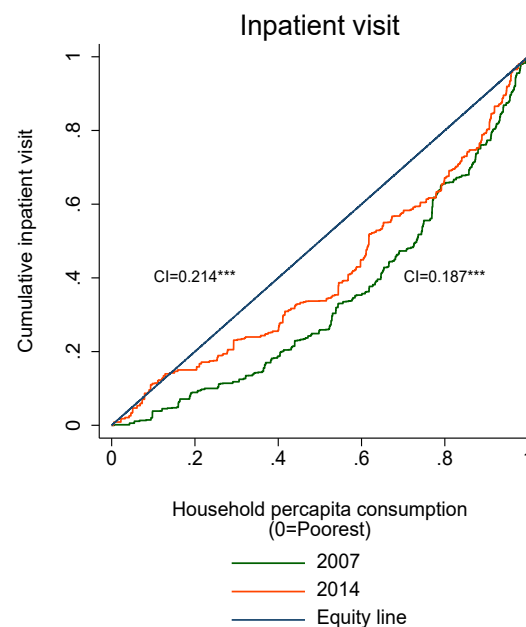
# Health service utilisation remains relatively low...

Outpatient contact rate



Note: exclude countries with outpatient visits above 15 per capita  
Source : IHME (2020) and MoH (2018)

Equity of access to inpatient care



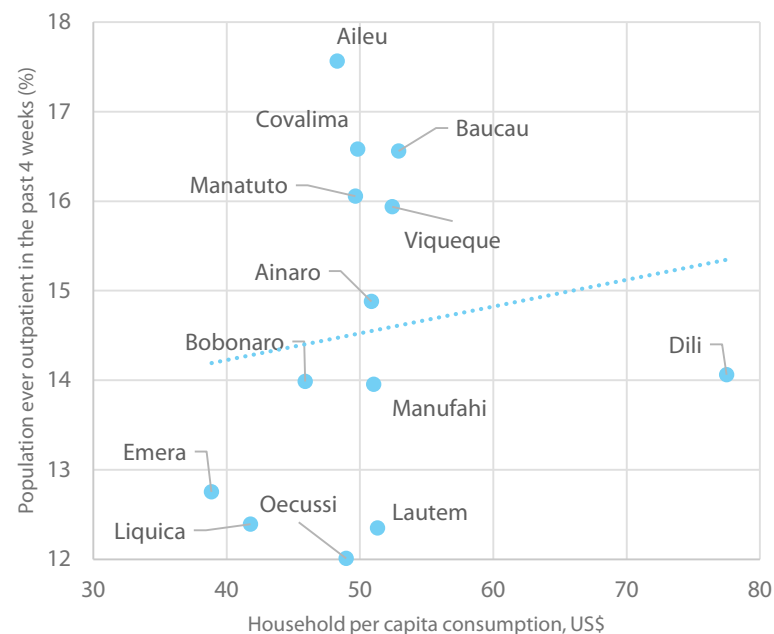
Note: concentration index  
Source : TL-SLS 007 and 2014

The outpatient utilization rate in 2017 was approximately 2.5 visits per person per year – lower than the NHSSP's target of a minimum of 3 visits per person per year, and significantly lower than most countries in the East Asia & Pacific region

However, the degree of inequity has reduced over time – the concentration index in 2014 is closer to the straight diagonal line, which represents equity in utilisation.

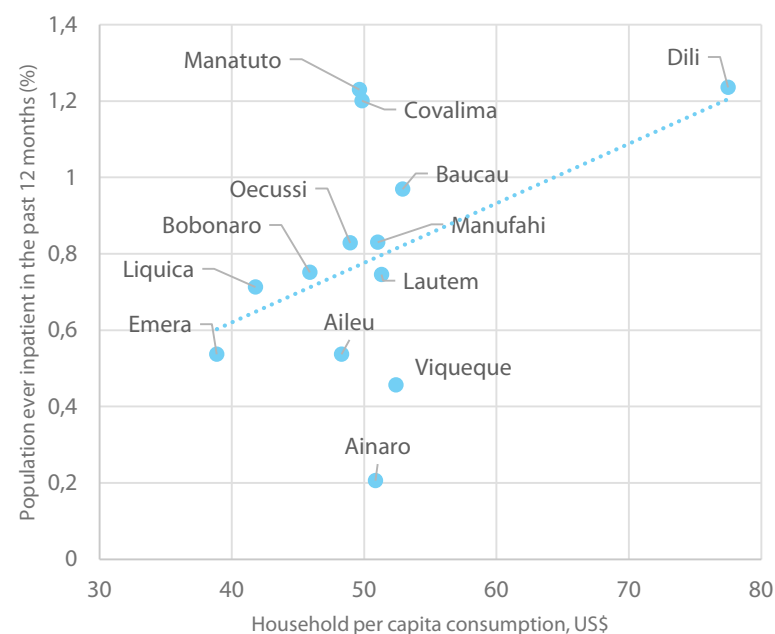
Rural and poor households are likely to receive lower quality care, and there is still progress to be made towards **greater equity in access** to care....

### Access to outpatient care



Note: population ever outpatient in past 4 weeks (%)  
Source : TL-SLS 2014

### Access to inpatient care



Note: population ever inpatient in past 12 months (%)  
Source : TL-SLS 2014

On average, wealthier households access health facilities (especially inpatient care) more frequently than less well-off households



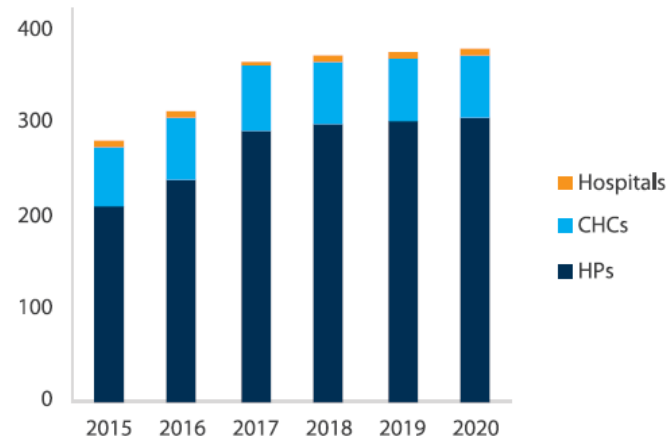
# Physical Resources

The quantity of healthcare infrastructure has increased over the past decade.

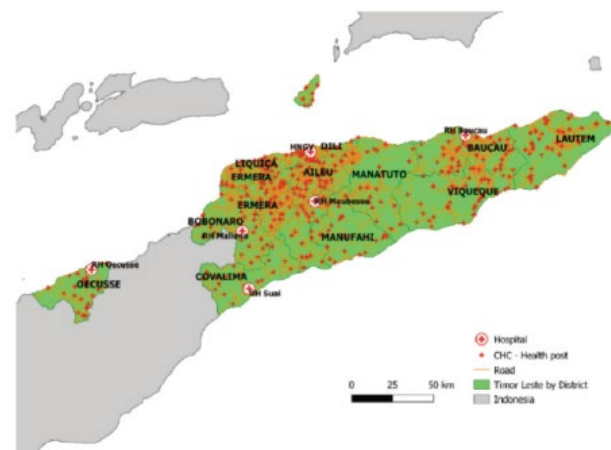
However, the distribution of health facilities is uneven, with significant variations across municipalities

And, effective coverage of health services depends on infrastructure, other inputs, and care processes.

Number of health facilities



Geographical distribution of health facilities



Availability of supply items

	Hospital	CHC	HP	All
Adult scale	100%	98%	97%	97%
Child scale	100%	92%	79%	81%
Infant scale	100%	94%	56%	64%
Stadiometer	100%	93%	88%	89%
Thermometer	100%	98%	82%	85%
Stethoscope	100%	99%	79%	83%
Blood pressure meter	100%	93%	74%	78%
Nebulizer machine	100%	61%	7%	18%
Peak-flow meter	60%	62%	5%	17%
Pulse oximeter	100%	48%	6%	15%
Oxygen cylinder	100%	62%	10%	21%
Disposable syringes	100%	100%	93%	95%
Infusion set	100%	94%	70%	75%
Cannula	100%	88%	66%	71%
Latex gloves	100%	98%	71%	77%

# Health care workers

Between 2010 and 2015, the number of medical doctors grew more than ten-fold

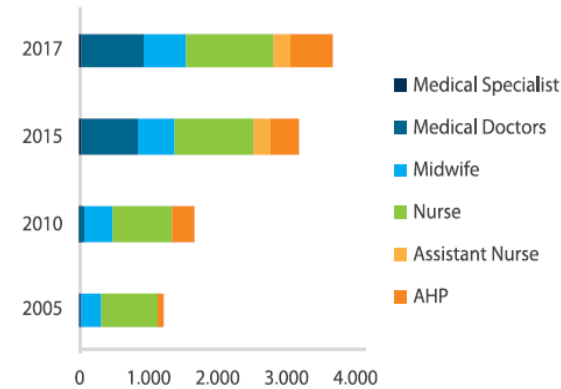
The proportion of health workers is relatively high, although still below the regional average

The distribution of health workers across municipalities is highly unequal, with urban areas attracting a substantially higher number of workers than rural areas, and with significant disparities across municipalities. For example, the ratio of health workers to population in Ermera (9) is significantly lower than in Baucau, Covalima, Manututo, and Viqueque – all above 20

Increases in the quantity of physical resources have not translated into greater availability and quality of services.

COVID-19 and recent flooding have further revealed underlying weaknesses in the health system.

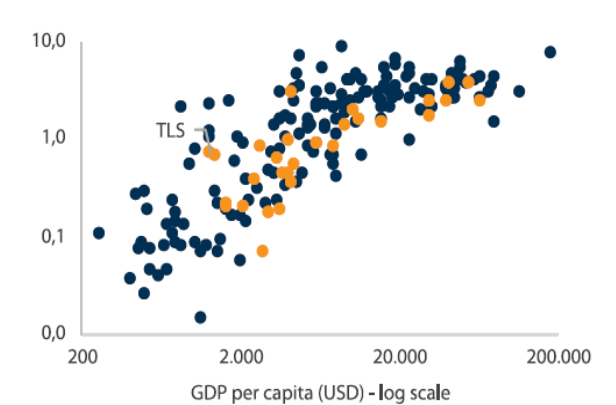
Health workers (special grades)



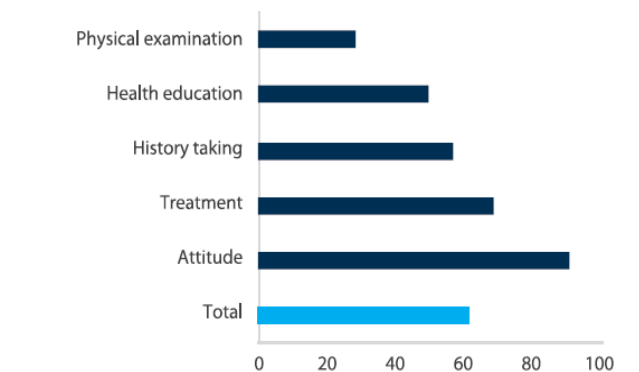
Distribution of health workers (per 10,000 population)



Physicians (per 1,000 people)



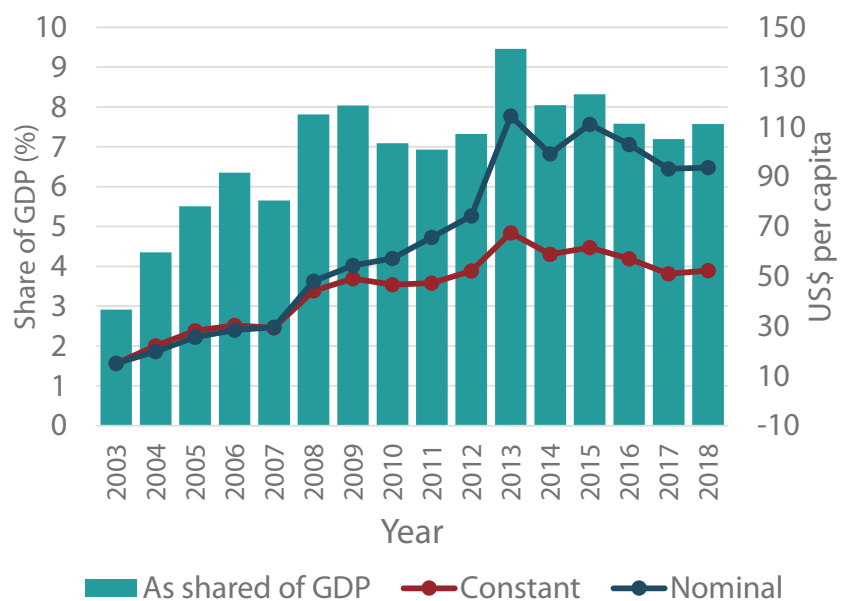
Clinical performance scores (%)



# Analyzing health sector performance from the financing perspective:

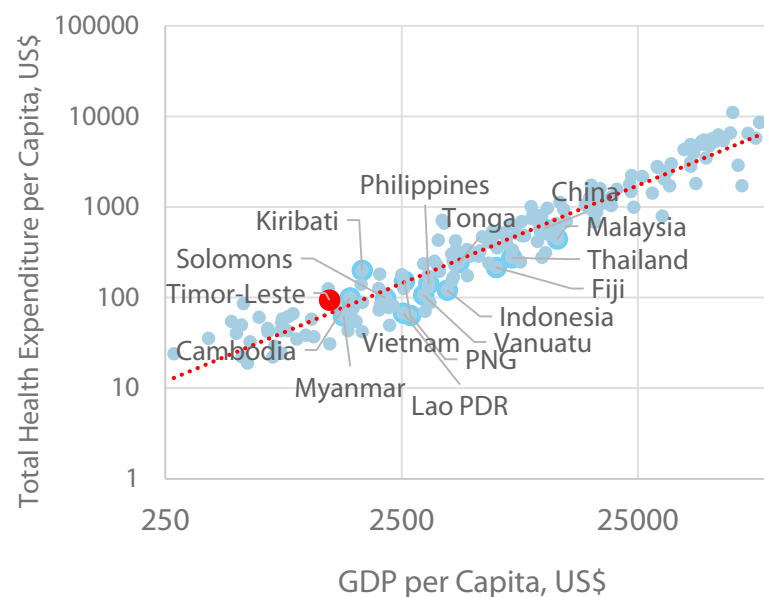
## Total health spending is broadly comparable with regional and income peer countries

Total health expenditure per capita



Source : WHO

Health expenditure (2018)



Source : World Bank

The level of spending has grown substantially, increasing considerably over the past decade

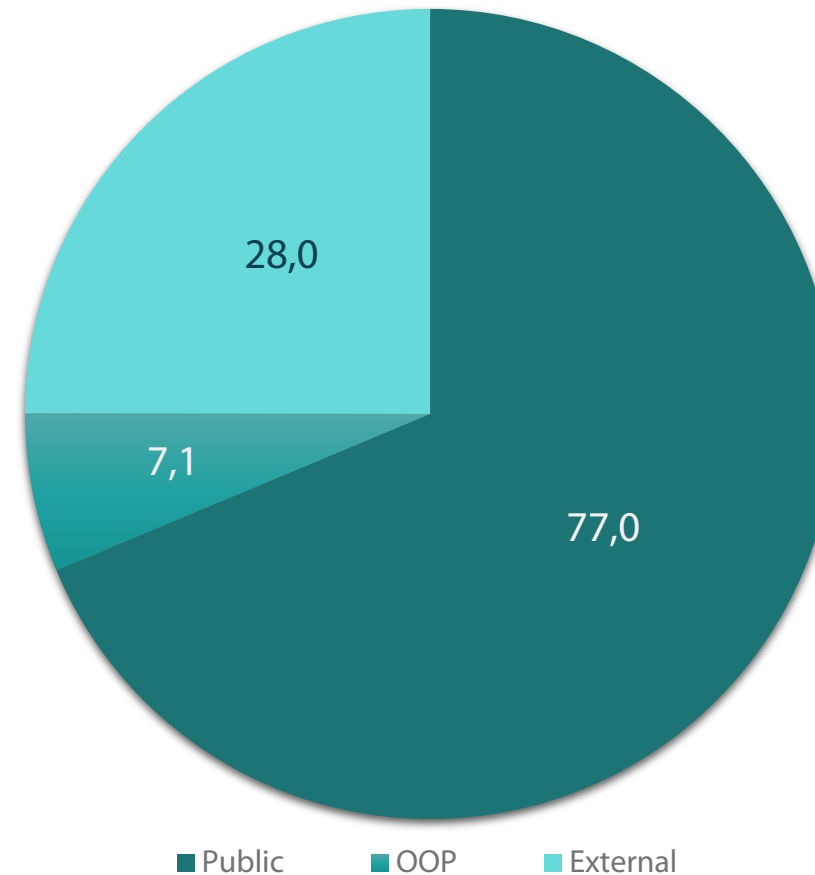
Total health spending was about \$94 per capita in 2018, equivalent to 7.6 percent of GDP.

This level of health spending is comparable to other countries at a similar level of income.

## The largest source of health expenditure in Timor-Leste was from the **government budget**

In 2018, 77 percent of current health expenditure was financed by government

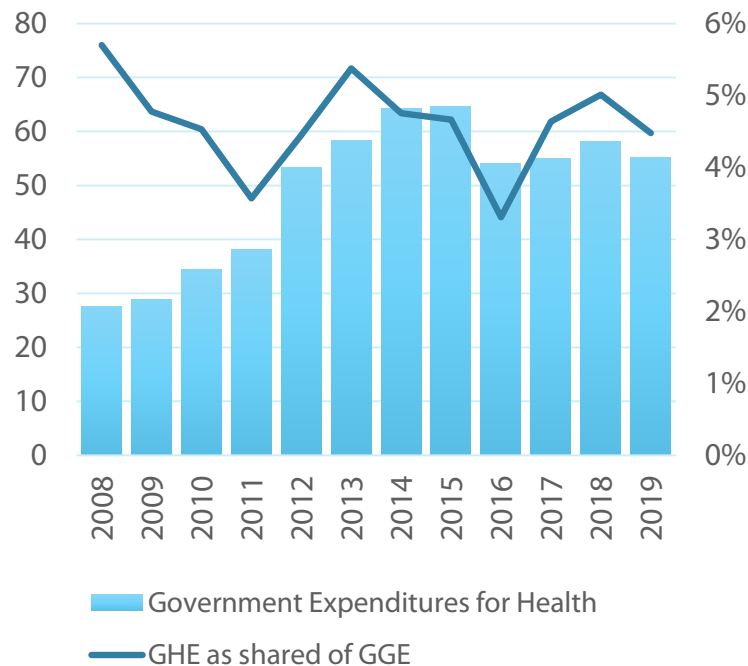
External resources for health also play significant role, which has share almost one third of current health expenditure in Timor-Leste





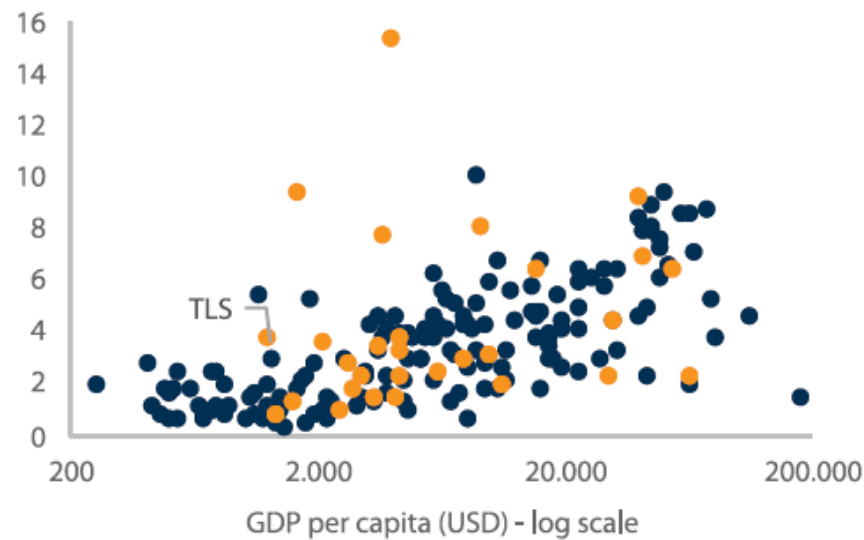
# Public spending on health increased considerably until 2015, but has been subdued since then...

Public spending on health (USD million and %)



Source : Ministry of Finance (BOOST))

Public spending on health (% of GDP)



Source : WHO (2018)

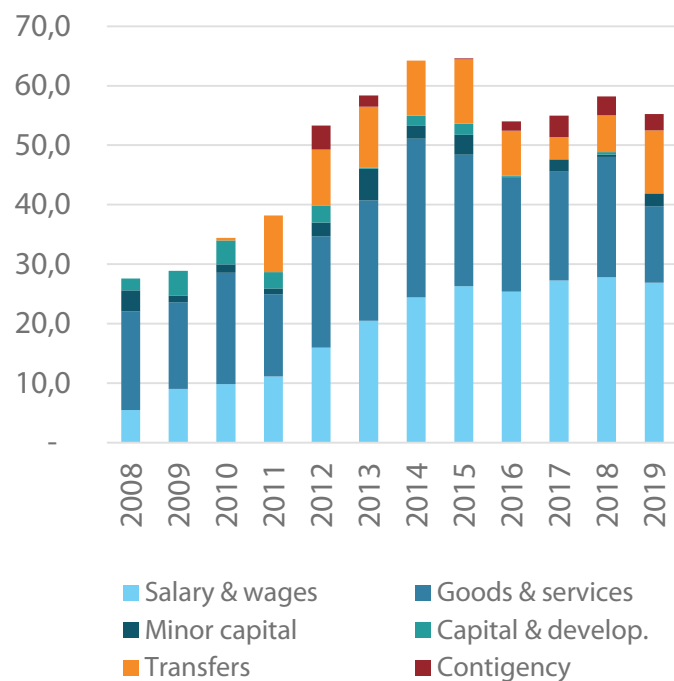
In nominal terms, government health spending has increased substantially from approximately \$28 million in 2008 to \$65 million in 2015. However, spending during 2016-2019 was lower than in the previous period

GHE was equivalent to 3.7 percent of GDP in 2018, which is relatively high compared to regional and income peers

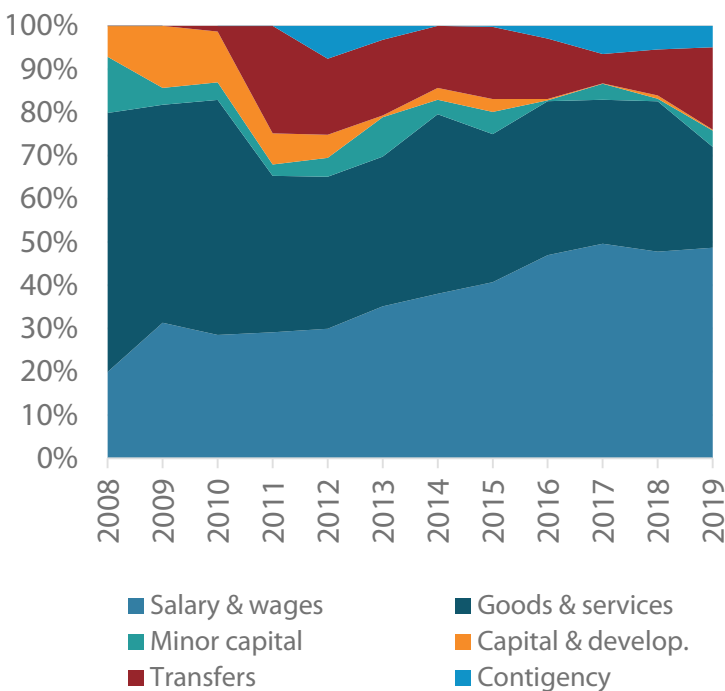
In April 2020, an autonomous COVID-19 Fund was established to finance both health and economic measures. The Fund was endowed with \$220 million from the Petroleum Fund. The public health sector response to COVID-19 was costed at approximately \$50 million.

# The composition of public spending on health has changed significantly, with **wages & salaries** growing in importance.

Composition of public spending on health (USD million)



Composition of public spending on health (%)



The wages & salaries share increased from about 20 percent in 2008 to 49 percent in 2019

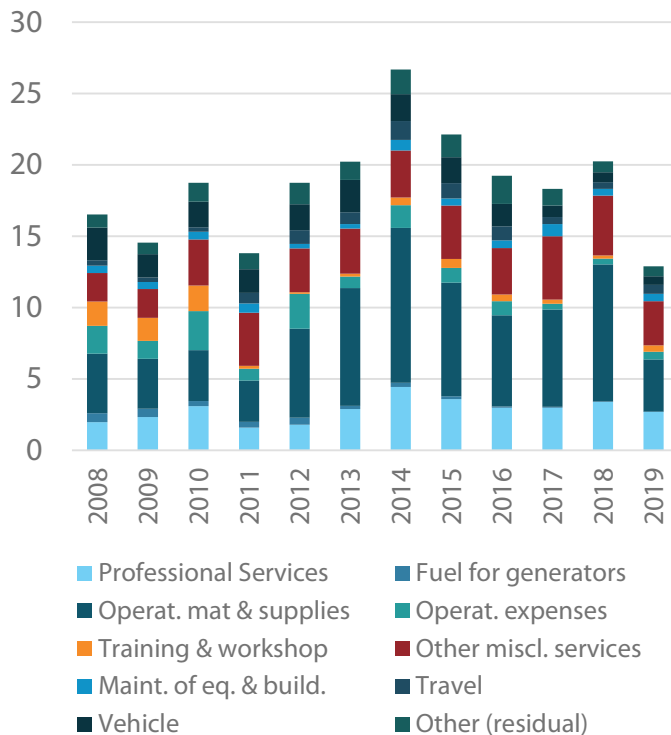
Conversely, the share of goods & services declined from 60 percent in 2008 to 23 percent in 2019

Total capital spending – which comprises capital & development and minor capital – has also declined significantly, from 20 percent in 2008 to about 4 percent in 2019.

However, public transfers have been significant since 2011.

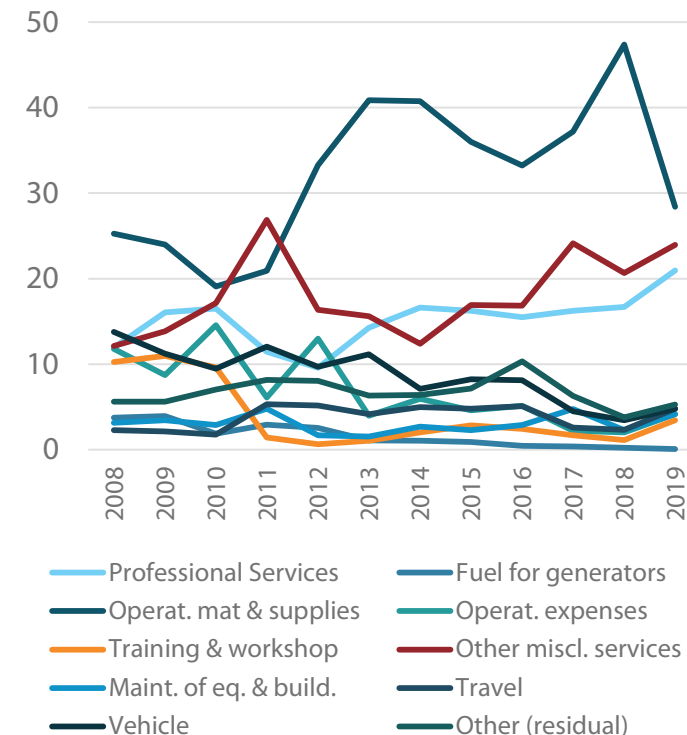
# The absolute **decline** in spending on goods & services may have an impact on supply-side readiness...

Spending on goods & services (USD million)



Source : Ministry of Finance (BOOST))

Spending on goods & services (%)



Source : Ministry of Finance (BOOST))

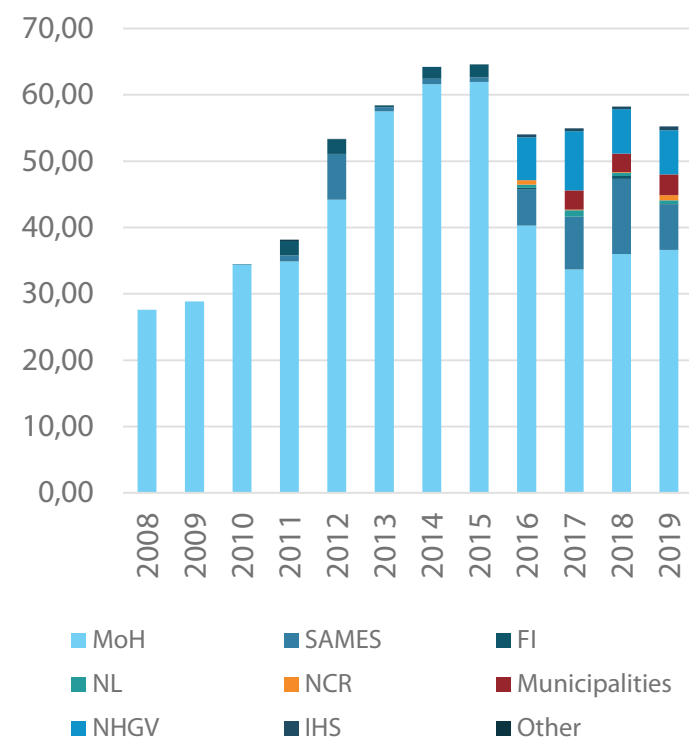
Spending on goods & services has been declining since 2014, largely due to a fall in operational materials & supplies – which had increased up until then

- This decline in spending contrasts with reports of limited availability of medicines and other supplies.
- The share of operational materials & supplies in total spending on goods & services has been volatile, while professional services and other miscellaneous services have increased

The relative and absolute size of other miscellaneous services is also concerning, since these expenditures should probably be allocated to a better-defined category

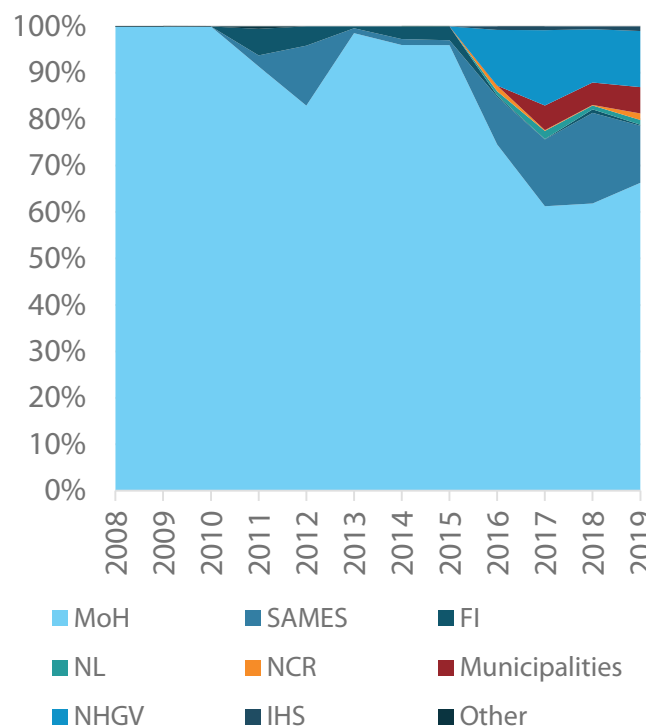
# The **composition** of health spending has also changed with the establishment of autonomous agencies and the decentralisation process..

Health spending by agency (USD)



Source : Ministry of Finance (BOOST))

Health spending by agency (%)



Source : Ministry of Finance (BOOST))

Until 2015, the vast majority of the government health budget was channelled through the MoH

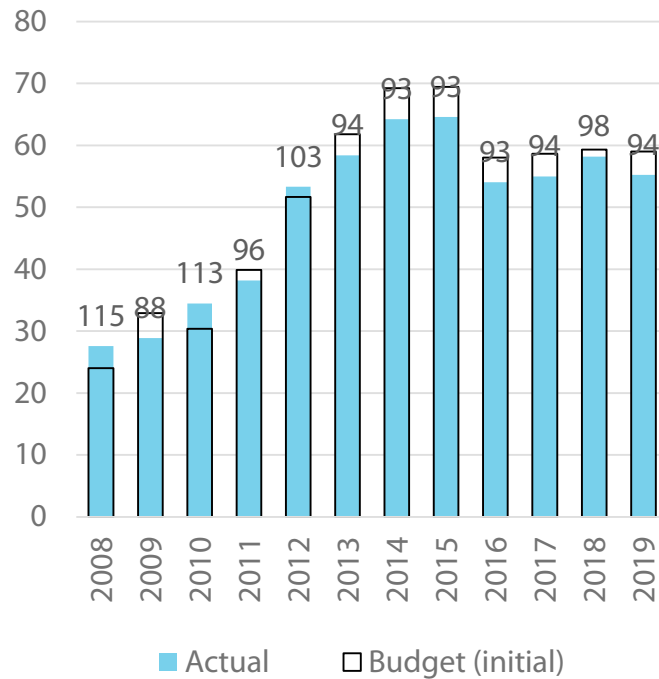
However, autonomous agencies have had their own budget since 2016, and municipalities since 2017.

In 2019, the MoH accounted for about two-thirds of public spending on health, while SAMES and the National Hospital (HNGV) accounted for 12 percent each, other public entities were collectively responsible for 3 percent, and municipalities 6 percent.



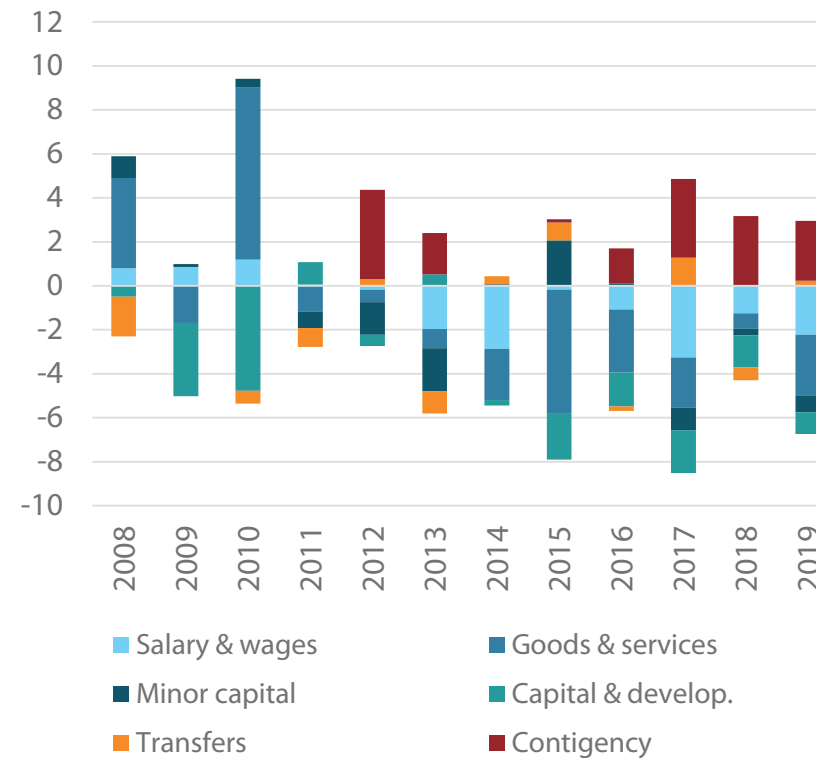
# The **execution rate** of the health budget has been steady over the years...

Budget execution (USD million and %)



Source : Ministry of Finance (BOOST))

Contributions to execution (USD million)



Source : Ministry of Finance (BOOST))

The execution rate has been consistently above 90 percent

This can be partly explained by the large weight of wages & salaries, which typically have high execution rates

Goods & services have exhibited higher variability, with the execution rate ranging between 80 and 89 percent in 4 out of the past 5 years.

Poor **budget execution** has been a challenge across many budget line items and spending units

In 2019, there was significant under-spending in some municipalities, especially in wages & salaries – possibly due to the difficulty in recruiting

Low execution rates for goods & services and minor capital were observed in the MoH, HNGV, and National Laboratory – either due to poor planning and budgeting, or difficulties in procurement

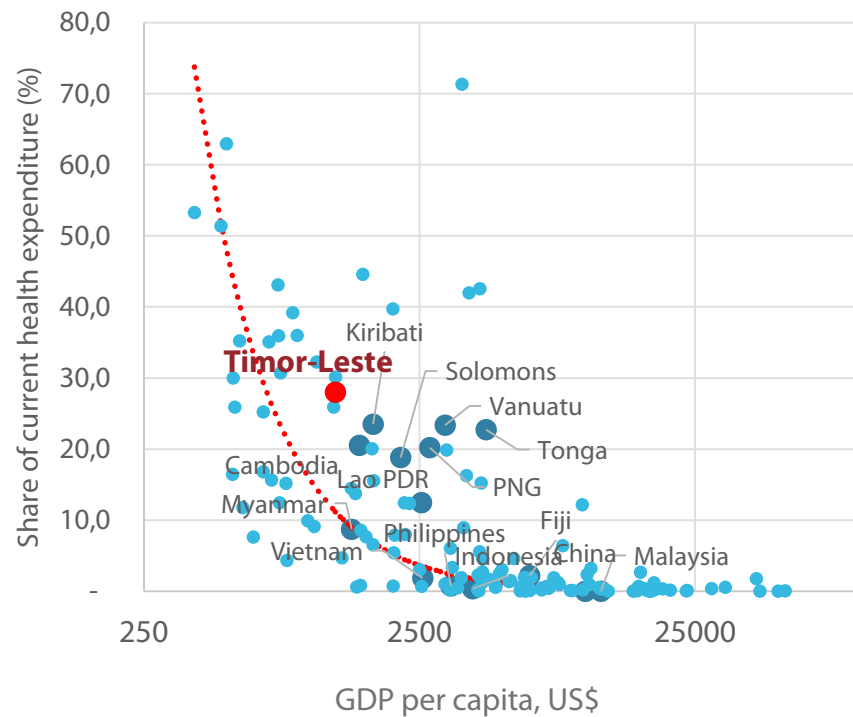
Health spending by agency (%)

Organization	Wage & Salary	Goods & Services	Minor Capital	Capital & Development	Transfer	Contingency
Ministry of Health	94,6	75,9	71,2	0,0	102,2	n.a
National Hospital Guido Valadares	83,1	63,6	59,7	n.a	n.a	n.a
SAMES	87,3	96,0	97,4	n.a	n.a	n.a
National Laboratory	92,9	82,4	65,9	n.a	n.a	n.a
National Center for Rehabilitation	92,2	97,1	96,8	n.a	n.a	n.a
Institute of Health Sciences	107,0	111,2	89,8	n.a	n.a	n.a
Municipal de Baucau	102,3	96,8	n.a	n.a	n.a	n.a
Municipal de Bobonaro	82,4	87,2	n.a	n.a	n.a	n.a
Municipal de Dili	82,7	141,9	n.a	n.a	n.a	n.a
Municipal de Ermera	92,3	90,2	n.a	n.a	n.a	n.a
Municipal de Aileu	93,9	92,6	n.a	n.a	n.a	n.a
Municipal de Ainaro	73,1	95,8	n.a	n.a	n.a	n.a
Municipal de Covalima	94,0	99,3	n.a	n.a	n.a	n.a
Municipal de Lautém	69,8	99,6	n.a	n.a	n.a	n.a
Municipal de Liquiçá	78,0	91,8	n.a	n.a	n.a	n.a
Municipal de Manufahi	82,7	93,3	n.a	n.a	n.a	n.a
Municipal de Manatuto	95,4	102,0	n.a	n.a	n.a	n.a
Municipal de Viqueque	74,4	67,3	n.a	n.a	n.a	n.a
Commission for Administration of Infrastructure Fund (FI)	n.a	n.a	n.a	8,3	n.a	n.a

Source : Ministry of Finance (BOOST)

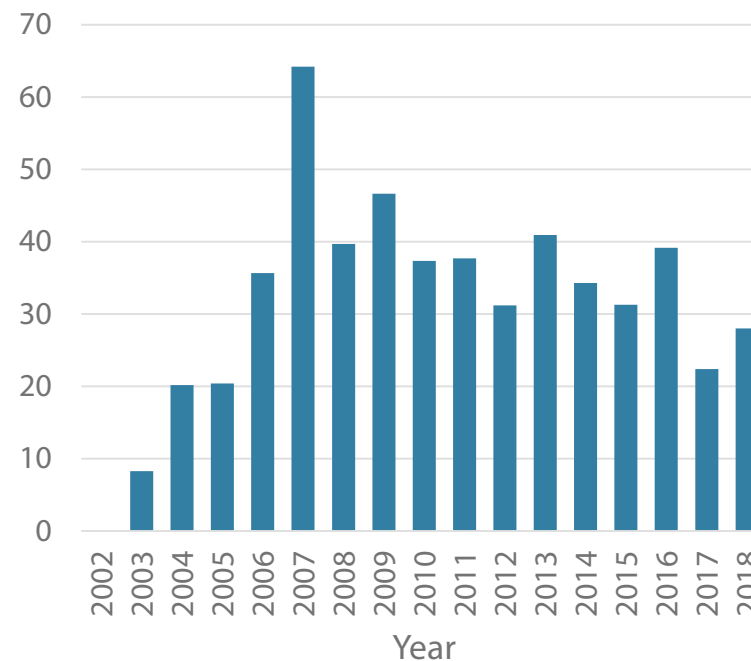
# Development assistance is the second largest source of funds for health, although it has been declining over time...

External financing for health (2018)



Source : WHO (Global Health Expenditure Database)

External financing for health as a share of current health expenditure (%)



Source : WHO (Global Health Expenditure Database)

In 2018, \$33 million were disbursed by development partners for health-related activities, comprising 27 percent of current health spending. (high compared to other LMIC)

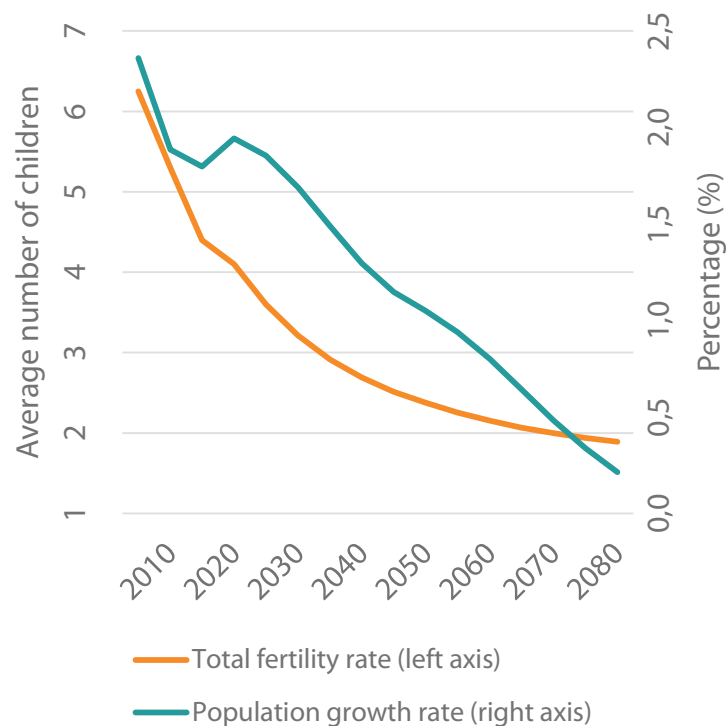
External financing has been declining as a share of total health spending over the years, but it remains relatively high

Development assistance for health is likely to continue declining but will continue to be the dominant source of funding for selected activities

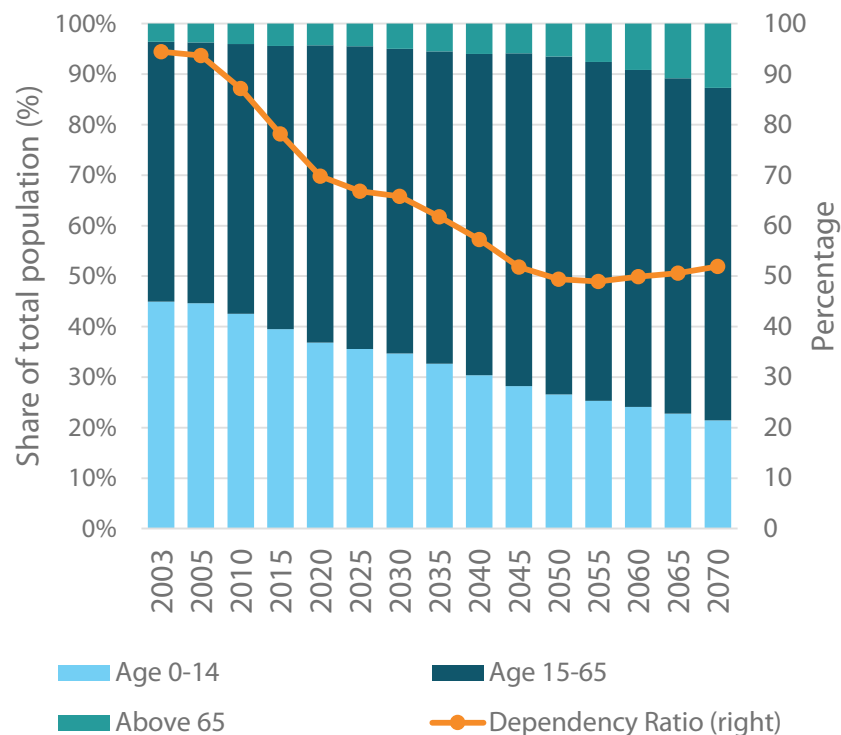
# Measuring efficiency of spending :

The health system will have to adapt to meet changing needs from demographic and epidemiological trends.

Total fertility rate and population growth (%)



Population aged 65 and over (% total)



The total fertility rate has been reduced but is still one of the highest in the region.

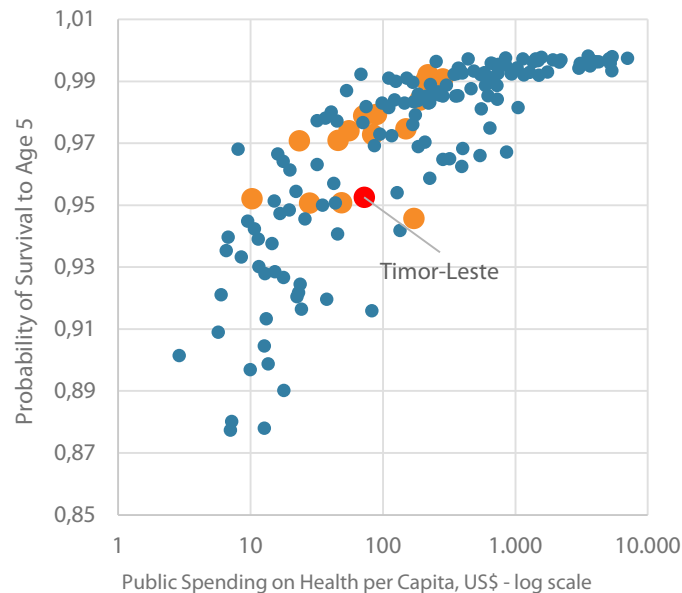
Population growth rate has declined but still growing at more than 2 percent per year

By 2030, the population is expected to reach 1.57 million – a 21 percent increase from today – which will increase demand for health services



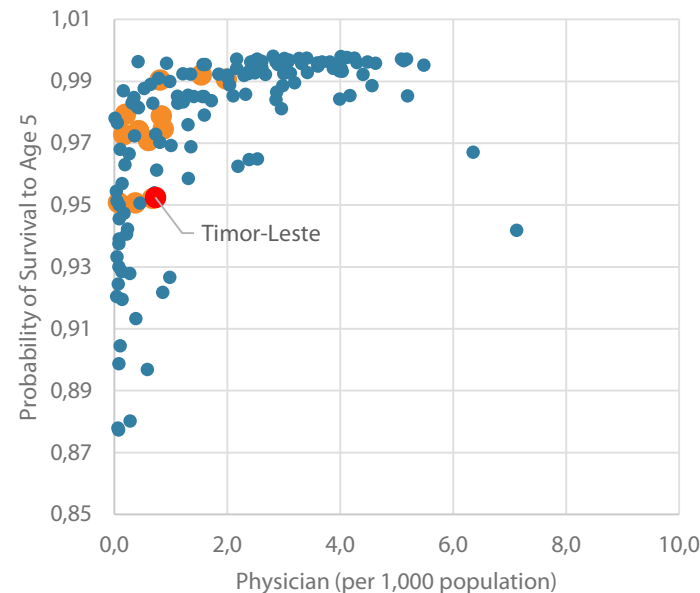
Regardless of how much can be spent on health, it is important to improve the **efficiency and effectiveness** of public spending...

### Spending and child survival



Source : World Bank

### Physicians and child survival



Source : World Bank

The analysis suggests that the level of public spending per capita and the number of doctors per 1,000 people could be better employed to achieve improved outcomes.

For instance, public spending per capita is similar to the levels observed in Indonesia, Philippines and Vietnam, but the child survival is lower.

Conversely, Myanmar has a similar health outcome even if it is spending significantly less than Timor-Leste.

# Conclusion

Timor-Leste has come a long way in rebuilding its health system and improving health outcomes.

- The country's achievement of health-related Millennium Development Goals is particularly laudable.
- However, emerging challenges include a shifting burden of disease towards non-communicable diseases (NCDs) and ensuring preparedness against public health threats such as COVID-19, while continuing to make progress on infectious diseases, maternal and child health, and nutritional outcomes.

An increase in health spending over the years has enabled critical investments in the health sector.

- Public health expenditure comprised most of spending, which has helped to protect the population against large and impoverishing health expenditures.
- The country has begun to experience a 'health financing transition'
- The sustainability of health programs that have been predominantly financed by external sources may be at risk.
- Furthermore, a large share of the increase in health spending has gone towards a higher wage bill for doctors, which is neither efficient nor sustainable in the long term.

Higher spending on health has not translated into markedly better service availability and quality.

- Health service utilization remains relatively low
- There is uneven access to care across geographic areas and by socioeconomic strata
- COVID-19 is likely to exacerbate these inequities through various channels: disruptions to essential health and nutrition services

Changes in the institutional and policy context have also led to shifts in health spending patterns.

- With the establishment of autonomous agencies and the decentralization of selected health functions
- While these reforms were intended to improve the responsiveness of budgetary allocations to needs on the ground, the overall PFM system remains sluggish and continues to hinder budget execution

# Look forward

A key priority will be to address the high rate of childhood stunting

- Key interventions include multi-sector coordination and policy reforms, improvements to nutrition-specific services in the health sector, and behavior change communication.

Improving the efficiency of spending is key to raising the effectiveness of health service delivery.

- Strengthening the quality of spending
- Institutional arrangements also need to be reviewed to improve responsiveness and accountability.
- Establishing financial rules and regulations that strike a balance between control and flexibility over spending decisions would help to increase both autonomy and accountability of spending units.

A cohesive operational plan for the health sector would help to improve coordination among health sector entities.

- Better communication and integrated planning with MoH would help improve the timely flow of information and enhance planning processes.

Within the health sector, there will be a need to significantly rethink investment and spending decisions.

- In PHC, prevention, early detection, and treatment of NCDs is an emerging and growing need.
- Enforcing standardized guidelines and care protocols for essential services would help to assure a minimum service standard and raise quality of care.

COVID-19 and recent natural disasters have also highlighted emergency preparedness and response as a critical area for improvement.

- The country's ability to prepare for and respond to emergencies will need to be strengthened through investments in surveillance and surge capacity, comprehensive risk assessments, and effective coordination mechanisms, among others.

Finally, investing in the health information system and encouraging the use of data for decision making will be a critical underlying element to all the reforms mentioned above.

- Consolidating health information systems will be a useful step towards acquiring a better perspective on the performance of the health sector.



# Thank You