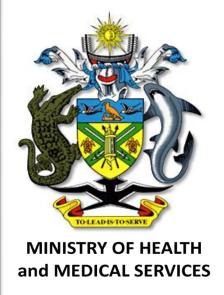
Statistical Health Core Indicator Report



Solomon Islands 2018

30 April 2019

TABLE OF CONTENTS

Introd	luction 3
Data	Completeness
Overv	riew4
1.	Maternal deaths
2.	Infant mortality rate
<i>3.</i>	Under-five mortality rate
4.	Contraceptive use
<i>5.</i>	Contraceptive Prevalence
<i>6.</i>	Access to antenatal care
<i>7</i> .	Acute respiratory infection (ARI) in children
<i>8.</i>	Children immunised against measles
<i>9.</i>	Malnourished children
<i>10.</i>	Communities with access to safe drinking water
11.	Communities with access to improved sanitation
12.	Basic hygiene practices
<i>13.</i>	Malaria mortality rate
14.	Annual parasite incidence rate (API) malaria
<i>15.</i>	Tuberculosis case notification rate
<i>16.</i>	Tuberculosis treatment success rate
<i>17.</i>	Human Immunodeficiency virus positive test
<i>18.</i>	Diabetes
19.	Hypertension
<i>20.</i>	Health promoting schools
<i>21.</i>	Rehabilitation services
<i>22.</i>	National referral hospital, average weekly discharges
<i>23.</i>	National referral hospital, bed occupancy rate
<i>24</i> .	National referral hospital, average length-of-stay
<i>25.</i>	Nurse to population ratio
<i>26.</i>	Outpatient consultations per capita
<i>27.</i>	Rural health clinics without a registered nurse
<i>28.</i>	Mental health services
<i>29.</i>	Unsupervised deliveries
<i>30.</i>	Stock availability, national medical stores
<i>31.</i>	Stock availability, primary health care facilities
<i>32.</i>	Water and sanitation at health facilities
<i>33.</i>	Health facilities with access to equipment
<i>34.</i>	Provinces with access to DHIS2 dashboards
<i>35.</i>	Recurrent budget allocated to provinces
<i>36.</i>	Monthly financial reports
Data	quality

Introduction

This report on the core health indicators for Solomon Islands includes 36 indicators covering four areas:

- 1. Health improvement
- 2. Health care
- 3. Health policy and planning
- 4. Administration and finance.

The core indicator set itself has undergone some revisions, however in light of the evidence provided here, further review of the relevance of some of these indicators (especially in areas where no information is available) may still be required. While some core indicators may include international and regional reporting requirements, such as the Millennium Development Goals, the actual list of indicators has been adapted to best meet the country's overall needs to monitor those areas with most relevance as determined by the Ministry of Health. While every effort has been made to produce empirically relevant data, the values presented here are likely affected by reporting biases including under-counting and misreporting. Conversely, the biases are presented to show concrete examples of data quality issues within the overall health system. It is important to note that, though some methodological issues exist, all the data presented within this document has been measured to some degree by the health system.

Data Completeness

Overall completeness (measured in terms of the number of forms returned from functional health facilities, as a percentage of total number of functional health facilities per province) of data from provincial health facilities was 98% in 2018 (Table 1). All reporting rates were well and above the national target (80%) throughout the year, even in December when it dropped to a low of 88%. The provinces with lower reporting rates than the national target were Honiara (75%) and Malaita (71%) in December as well as Renbel for all months except July, August, and September. It should be noted that four provinces – Western, Temotu, Central and Choiseul – were able to reach 100% completeness throughout 2018.

Data used in compiling the MHMS Core Indicator Report is from the Statistics Unit at the Ministry of Health and Medical Services. This completeness rate is associated with the following 24 indicators:

- Maternal Deaths
- Infant Mortality Rate
- Under 5 Mortality Rate
- Contraceptive Use
- Contraceptive Prevalence
- Antenatal Care
- RHC without RN
- ARI at Health Facilities
- Measles Vaccination
- Malnourished Children
- Malaria Mortality Rate
- Malaria Incidence
- Stock availability at PHC
- Diabetes at Health Facilities
- Hypertension at Health Facilities
- Outpatient Consultations
- Unsupervised Deliveries
- Nurse to Population ratio
- Water & Sanitation at HF
- TB Case Notification Rate
- TB treatment Success Rate
- NRH, Weekly Discharges
- NRH, Bed Occupancy Rate
- NRH ALOS

Table 1: Monthly report of health activities data completeness rate, 2018

Province	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Guadalcanal	100%	100%	100%	100%	100%	100%	100%	100%	97%	100%	97%	97%	99%
Western	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Malaita	98%	97%	97%	100%	99%	98%	98%	99%	97%	96%	87%	71%	95%
Temotu	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Central	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Choiseul	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Isabel	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	93%	88%	98%
Makira	100%	100%	100%	97%	100%	100%	100%	100%	100%	97%	97%	89%	98%
Honiara	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	75%	98%
Renbel	50%	50%	50%	50%	50%	50%	100%	100%	100%	50%	50%	50%	63%
Solomon Islands	99%	99%	99%	99%	99%	99%	100%	100%	99%	98%	95%	88%	98%

Reporting rate 100%

Reporting rate less than 100%

Reporting rate less than national target (80%)

Overview

This table shows the values per indicator since 2011 for Solomon Islands. The colours green and red indicate a respective improvement or worsening of the indicator between 2017 and 2018. Despite providing a good overview of the country's core indicators and their performance, it is important to highlight that other factors may affect the value and trend of an indicator. Therefore the "Methodological/System Issues" section provided for each indicator should be considered before drawing conclusions.

Indic		2011	2012	2013	2014	2015	2016	2017	2018
Defir									
1	Maternal deaths Absolute number of maternal deaths in one year	23	16	18	17	24	18	16	20
2	Infant mortality rate Infant mortality rate (probability of dying between birth and age 1 per 1,000 live births)	17	18.1	17.8	23.8*	16.9*	18.9*	19.7*	15.4*
3	Under-five mortality rate Under-five mortality rate (probability of dying by age 5 per 1,000 live births)	20.7	21.3	21.3	30.3*	21.2*	23.8*	27.1*	20.6*
4	Contraceptive use Total number of contraceptive contacts (all forms) seen at health facilities in one year (per 1,000 population)	231	237	246	245	262	345	392	426
5	Contraceptive prevalence The proportion of women of reproductive age who are using (or whose partner is using) a modern contraceptive method at a given point in time	n/a	8.1%	8.4%	8.4%	8.9%	11.7%	13.4%	14.6%
6	Access to antenatal care The average number of antenatal clinic visits attended per mother in one year	4.4	4.6	4.3	4.3	4.3	4.3	4.3	4.4
7	Acute respiratory infection (ARI) in children Number of children (aged 0-59 months) who had 'presumed pneumonia' (moderate or severe ARI) and were taken to an appropriate health-care provider (per 1,000 population)	747	772	801	968*	804*	912*	812*	741*
8	Children immunised against measles Percent of children (aged 12-23 months) who have received one dose of measles-containing vaccine in one year	68%	82%	73%	95%	76%	91%	93%	93%
9	Malnourished children Percent of children (aged 0-24 months) classified as malnourished or severely malnourished in the HIS Health Facility Monthly Reporting Form	12.8%	12.4%	12.5%	12.2%	10.9%	9.3%	8.3%	11.7%
10	Communities with access to safe drinking water The percentage of communities using an improved drinking water source	n/a	n/a	n/a	35%	54%	n/a	n/a	n/a
11	Communities with access to improved sanitation The percentage of communities that are open defecation free	n/a	n/a	n/a	1%	13%	n/a	n/a	n/a
12	Basic hygiene practices Proportion of the population washing hands with soap at critical times	n/a	n/a	n/a	5-10%	16%	n/a	n/a	n/a

Indic		2011	2012	2013	2014	2015	2016	2017	2018
Defir	Malaria mortality rate								
13	The number of deaths due to malaria per 100,000 population per year	3.5	3.3	3.2	3.8	2.2	3.3	4.4	3.0
14	Annual parasite incidence (API) malaria Number of blood samples confirmed positive by microscopy or rapid diagnostic test (RDT) (per 1,000 population per year)	52	41	43	30	41	89	85	93
15	Tuberculosis case notification rate The number of bacteriologically confirmed (new and relapse) tuberculosis cases in a given year (per 100,000 population)	75	68.4	63.7	59.4*	70.2	65.3	60.2	61.6
16	Tuberculosis treatment success rate Percentage of new, bacteriologically confirmed smear-positive tuberculosis cases that were cured or in which a full course of treatment was completed	89.7%	89.0%	91.1%	89.5%	94.0%	93.7%	92.7%	n/a
17	Human immunodeficiency virus (HIV) positive tests Percent of tests returned positive for HIV in a given year	0.04%	0.06%	n/a	n/a	0.07%	0.03%	0.00%	0.03%
18	Diabetes Percent of people presenting to health facilities with diabetes (confirmed or suspected)	11.9%	13.7%	12.1%	12.8%	16.6%	18.8%	26.8%	28.9%
19	Hypertension Percent of people presenting to health facilities with hypertension (confirmed or suspected)	30.7%	32.2%	34.8%	32.9%	35.9%	35.0%	36.6%	41.4%
20	Health promoting schools Total number of established and currently active health promoting schools	3	4	5	13	19	23	29	60
21	Access to rehabilitation services Percent of people registered as having disabilities who receive rehabilitation services from CBR staff in a given year	3.5%	3.9%	6.2%	4.2%	17.4%	14.7%	48.2%	52.3%
22	National Referral Hospital (patient discharges) Weekly average number of patients discharged from all NRH wards in a given year	196.1	205.8	206.7	243.3	252.5	285.8	226.8	210.7
23	National Referral Hospital (bed occupancy) Proportion of available acute inpatient beds that have been occupied over one year	84%	78%	89%	75%	82%	86%	80%	83%
24	National Referral Hospital (average length-of-stay) Average number of days patients spend in hospital	8.0	7.0	7.9	5.9	5.9	5.4	7.8	7.7
25	Nurse to population ratio Number of registered nurses in a given year (per 1,000 population)	1.3	1.3	1.3	0.7	1.4	1.4	1.4	2.2
26	Outpatient consultations per capita Number of visits for ambulant care, not including immunisations, for the total population (including repeat visits) per capita	1.5	1.6	1.7	1.6	1.7	2.0	2.0	1.9
27	Rural health clinics without a registered nurse Absolute number of rural health clinics that do not have a registered nurse in a given year	n/a	n/a	n/a	≥34	34	25	38	16

lus al! -	· ·								
Indic Defin		2011	2012	2013	2014	2015	2016	2017	2018
Dejiii	Provincial mental health services								
28	Total number of provincial hospitals offering mental health services	2 / 10	2 / 10	1/10	2/10	2 / 10	2/10	2 / 10	2/10
	Unsupervised deliveries								
29	Proportion of births not attended by a skilled health worker (doctor, nurse or midwife) in a	11%	12%	10%	11%	11%	10%	10%	9%
23	given year	11/0	12/0	1070	11/0	11/0	10/0	10/0	370
	Stock availability at national medical store								
30	Availability of critical and essential medicines in a given year	88%	82%	94%	98%	98%	98%	90%	72%
	Stock availability at primary health care facilities				_	_	_		
31	Availability of critical and essential medicines in a given year	57%	64%	65%	73%	74%	83%	72%	20%
22	Water and sanitation at health facilities		000/	. /-	. /-		. /-	NI.	.12
32	Percent of health facilities without functioning water supply and/or sanitation	n/a	88%	n/a	n/a	n/a	n/a	New Inc	dicators
	Area health centres without minimum standard equipment								
33	Absolute number of area health centres without minimum standard equipment in a given	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	year								
34	Provinces accessing HIS dashboards	n/a	n/a	3	9	9	9	9	10
34	Number of provinces with access to live dashboard feedback based on HIS data	11/ a	11/ a	J	9	9	9	9	10
	Recurrent budget allocated to provinces								
35	Percent of total MHMS budget (including external funds) that is allocated to Provincial	37%	32.7%	36.1%	42.2%	39.4%	39.5%	38.4%	37.9%
	Health Departments in the final MHMS budget								
	Monthly financial reporting								
36	Number of monthly financial reports submitted from MHMS Finance Unit to MHMS Senior	n/a	n/a	9	11	12	11	12	11
	Management (i.e. PS, US, CEO NRH, Provincial Health Directors and Program Managers)								
	Indicator is getting better								
	Indicator is getting worse								
	Indicator is not changing								
n/a	Data was unavailable for this report								
*	Projected data based on current figures and reporting completeness rate								

1. Maternal deaths

Number of maternal deaths

Absolute number of maternal deaths in a given year Maternal death is 'the death of a woman while pregnant or within 42 days of termination of pregnancy... from any cause related to the pregnancy or its management, but not from accidental or incidental causes'

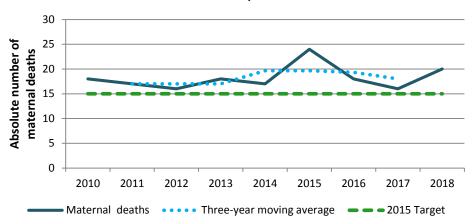
Methodological/System Issues:

- Data has been sourced from DHIS2.
- The absolute number of deaths is reported instead of Maternal Mortality Rate (MMR). This is because MMR can increase significantly with the presence of one maternal death in a province, due to low reported values and small population size.

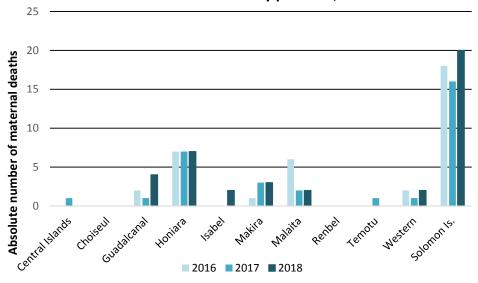
Province	2012	2013	2014	2015	2016	2017	2018
Central Islands	1	1	0	2	0	1	0
Choiseul	3	0	1	0	0	0	0
Guadalcanal	2	3	0	1	2	1	4
Honiara*	3	8	8	9	7	7	7
Isabel	0	0	0	1	0	0	2
Makira	0	2	1	2	1	3	3
Malaita	5	2	6	7	6	2	2
Renbel	0	0	0	0	0	0	0
Temotu	1	1	0	0	0	1	0
Western	1	1	1	2	2	1	2
Solomon Is.	16	18	17	24	18	16	20

^{*}Data for Honiara is biased by the maternal deaths that were reported at NRH

Number of Maternal deaths Solomon Islands, 2010-2018



Number of maternal deaths by province, 2016-2018



2. Infant mortality rate

Infant Mortality Rate

Infant mortality rate (probability of dying between birth and age 1 per 1,000 live births)

$$IMR = \frac{\text{Number of deaths of infants aged } 0 - 11 \text{ months}}{\text{Number of live births}} \times 1,000$$

Methodological/System Issues:

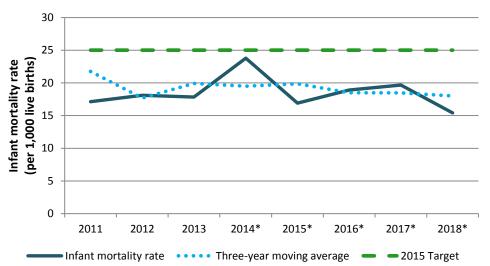
- Data has been sourced from DHIS2.
- Mortality data is weak in the country.
- It is likely that the number of infant deaths is under-reported.
- Caution should be applied when looking at single-year data, due to stochastic variation (see notes on data quality at the end of the report), especially at the provincial-level.

Province	2012	2013	2014*	2015*	2016*	2017*	2018*
Central Islands	29.2	22.5	16.7	15.6	12.7	17.2	14.6
Choiseul	33.1	21.5	23.0	11.8	30.6	26.1	28.7
Guadalcanal	18.5	21.2	21.0	15.9	20.2	16.3	9.4
Honiara ^	21.1	20.9	26.0	14.9	20.9	24.6	18.5
Isabel	23.1	15.7	28.3	17.1	17.1	17.7	16.0
Makira	19.8	19.0	23.3	16.6	15.1	17.8	14.3
Malaita	16.6	14.4	26.1	19.2	19.5	20.2	17.4
Renbel	0.0	0.0	86.5	0.0	0.0	71.4	0.0
Temotu	11.8	19.1	22.8	22.9	19.4	26.5	9.0
Western	7.2	10.8	14.1	19.7	13.6	10.3	8.0
Solomon Is.	18.1	17.8	23.8	16.9	18.9	19.7	15.4

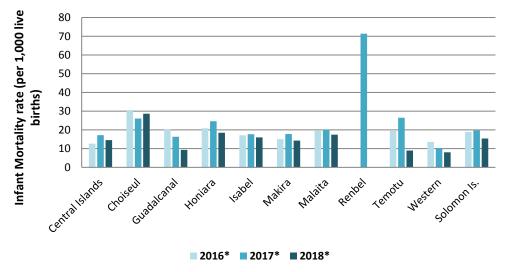
^{*}Projected data based on current figures and reporting completeness

^2014 is the first year that mortality data from the NRH has been included in the core indicators. This has improved data completeness and increased mortality rates accordingly

Infant mortality rate Solomon Islands, 2011-2018*



Infant mortality rate by province, 2016-2018*



3. Under-five mortality rate

Under-five Mortality Rate

Under-five mortality rate (probability of dying by age 5 per 1,000 live births)

$$U5MR = \frac{\text{Number of deaths of children aged } 0 - 59 \text{ months}}{\text{Number of live births}} \times 1,000$$

Methodological/System Issues:

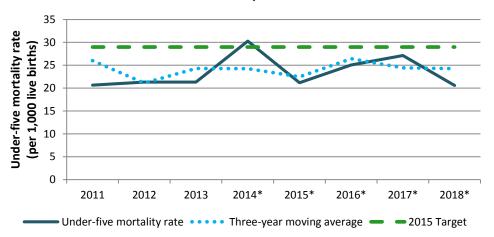
- Data has been sourced from DHIS2.
- Mortality data is weak in the country.
- It is likely that the number of child deaths is under-reported.
- Caution should be applied when looking at single-year data, due to stochastic variation (see notes on data quality at the end of the report), especially at the provincial-level.

Province	2011	2012	2013	2014*	2015*	2016*	2017*	2018*
Central Islands	28.2	30.9	28.7	23.8	17.1	13.2	27.5	20.8
Choiseul	27.9	40.6	28.1	36.5	18.5	48.4	36.3	34.4
Guadalcanal	25.1	25.2	27.6	32.2	20.6	22.5	22.4	16.5
Honiara^	16.7	21.1	20.9	26.0	16.5	23.4	30.8	23.5
Isabel	23.7	24.5	20.9	36.4	22.8	20.5	21.0	22.6
Makira	18.7	25.2	26.4	33.6	24.1	20.7	20.9	17.6
Malaita	31.1	22.9	19.6	35.5	26.2	28.9	33.4	25.1
Renbel	172.4	0.0	0.0	86.5	55.6	47.6	71.4	0.0
Temotu	9.2	13.7	19.1	30.4	28.2	20.3	28.7	9.0
Western	12.4	10.2	15.3	24.6	23.8	17.9	18.1	11.3
Solomon Is.	20.7	21.3	21.3	30.3	21.2	23.8	27.1	20.6

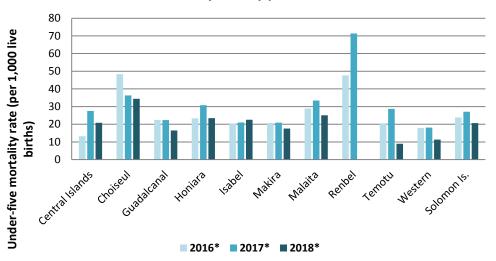
^{*}Projected data based on current figures and reporting completeness

^2014 is the first year that mortality data from the NRH has been included in the core indicators. This has improved data completeness and increased mortality rates accordingly

Under-five mortality rate Solomon Islands, 2011-2018*



Under-five mortality rate by province, 2016-2018*



4. Contraceptive use

Contraceptive Use

Contraceptive contacts (all forms) as seen at health facilities per 1,000 population

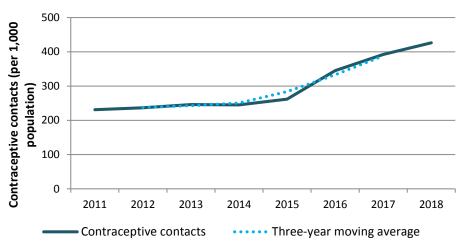
Contraceptive Use = $\frac{\text{Total number of 'family planning' contacts in a given year}}{\text{Total population}} x 1,000$

Methodological/System Issues:

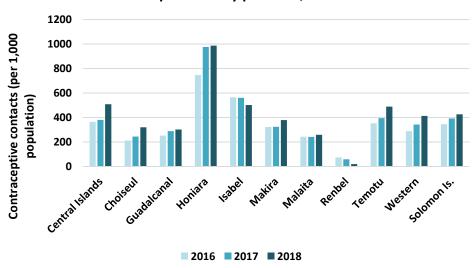
- Data has been sourced from DHIS2.
- The best way to capture contraceptive prevalence rate is through household surveys. As a result, a proxy of contraceptive contacts is being used to determine contraceptive use in the country.
- Data for contacts in a given year has been sourced from current users of pills, injections, condoms, IUCDs and implant (jadelle) independent of those users having contact with the health facility each month. This leads to a significant higher number of contacts reported than actual contacts at the health facility.
- This issue was rectified with the introduction of the new HIS form in 2018 which allows reporting on new and returning contacts. Despite that change, the indicator value for 2018 has been calculated using the same method as in previous years. This helps showing a trend of usage and will be changed once data for multiple years becomes available.
- While this indicator can tell us about service utilisation, it does not provide information on health outcomes.

Province	2011	2012	2013	2014	2015	2016	2017	2018
Central Islands	1024	613	562	476	334	364	380	509
Choiseul	207	203	179	198	159	212	244	320
Guadalcanal	80	100	110	123	183	252	289	302
Honiara	266	428	502	515	522	747	976	987
Isabel	332	329	452	457	447	564	561	501
Makira	230	264	287	237	281	323	323	379
Malaita	161	147	143	156	177	243	242	259
Renbel	77	80	59	76	52	73	58	19
Temotu	232	213	218	240	283	352	395	488
Western	222	251	219	205	230	288	342	413
Solomon Is.	231	237	246	245	262	345	392	426

Contraceptive contacts Solomon Islands, 2011-2018



Contraceptive use by province, 2016-2018



5. Contraceptive Prevalence

Modern Contraceptive Prevalence Rate (mCPR)

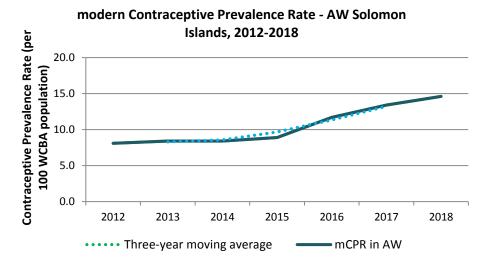
Modern Contraceptive Prevalence Rate is the proportion of women of reproductive age who are using (or whose partner is using) a modern contraceptive method at a given point in time

Modern Contraceptive Prevalence =
$$\frac{in \ a \ given \ year}{Population \ for \ women \ in} x \ 100$$
the child bearing age (WCBA) (15-49)

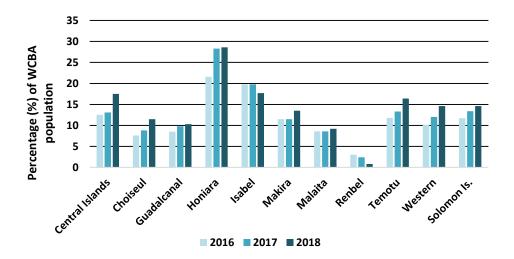
Methodological/System Issues:

- Data has been sourced from DHIS2.
- The best way to capture contraceptive prevalence rate is through household surveys. However, since the service is provided on a routine basis and records on current users are maintained at the health facility level, this data has also been part of the HIS monthly reporting from the facilities.
- While this data has allowed computation of mCPR, caution should be taken when interpreting the results as recording of current users of modern contraception may not be consistent across all health facilities.
- Reviving and strengthening the tickler box system (to maintain good record
 of current users of modern contraception) across all health facilities will
 certainly improve the quality of this information.

Province	2012	2013	2014	2015	2016	2017	2018
Central Islands	21.0	19.3	16.4	11.5	12.5	13.1	17.5
Choiseul	7.3	6.5	7.1	5.7	7.6	8.8	11.5
Guadalcanal	3.4	3.7	4.2	6.2	8.5	9.8	10.3
Honiara	12.4	14.5	14.9	15.1	21.6	28.3	28.6
Isabel	11.6	15.9	16.1	15.7	19.8	19.8	17.7
Makira	9.4	10.2	8.4	10.0	11.5	11.5	13.5
Malaita	5.2	5.1	5.5	6.3	8.6	8.6	9.2
Renbel	3.3	2.4	3.1	2.1	3.0	2.4	0.8
Temotu	7.1	7.3	8.0	9.5	11.8	13.3	16.4
Western	8.8	7.7	7.2	8.1	10.1	12.0	14.6
Solomon Is.	8.1	8.4	8.4	8.9	11.7	13.4	14.6



modern Contraceptive Prevalence Rate by Province, 2016-2018



6. Access to antenatal care

Average number of ANC visits per mother

The average number of ANC visits a woman completed before delivery in a given year.

 $Avg \ ANC \ visits \ per \ mother = \frac{\text{Avg anc visits in a given year}}{\text{Number of total births in the same year}}$

Methodological/System Issues:

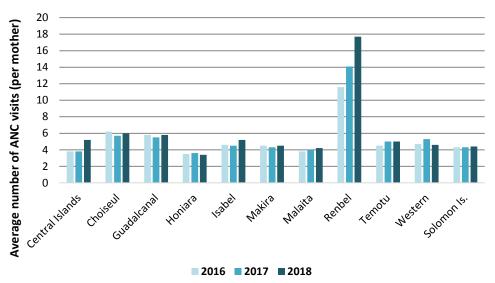
- Data has been sourced from DHIS2.
- ANC 4+ is the preferred indicator to measure ANC coverage among expectant women.
- Prior to the use of the new HIS monthly report in all the health facilities in 2018, data for the preferred indicator (ANC 4+) was not captured in the monthly report form. As a result, ANC visits per mother is used as a proxy.

Province	2011	2012	2013	2014	2015	2016	2017	2018
Central Islands	4.3	3.8	4.6	3.7	3.9	3.8	3.8	5.2
Choiseul	5.0	5.0	6.0	5.0	5.7	6.2	5.7	6.0
Guadalcanal	6.0	5.5	6.5	5.7	5.5	5.8	5.5	5.8
Honiara	3.4	4.2	3.6	3.5	3.7	3.5	3.6	3.4
Isabel	3.3	3.1	4.9	5.5	4.7	4.6	4.5	5.2
Makira	4.3	4.3	4.5	4.6	4.4	4.5	4.3	4.5
Malaita	5.1	4.8	3.8	3.7	3.7	3.8	4.0	4.2
Renbel	6.8	7.6	11.2	11.5	8.2	11.6	14.1	17.7
Temotu	5.4	4.9	4.9	4.6	4.5	4.5	5.0	5.0
Western	4.8	5.1	4.4	5.1	4.9	4.7	5.3	4.6
Solomon Is.	4.4	4.6	4.3	4.3	4.3	4.3	4.3	4.4

Solomon Islands, 2011-2018 5.0 Average number of ANC visits (per 4.0 mother) 1.0 0.0 2011 2012 2013 2014 2015 2016 2017 2018 Average ANC visits • • • • Three-year moving average

Average antenatal care visits

Average antenatal care visits by province, 2016-2018



7. Acute respiratory infection (ARI) in children

Number of children presenting with acute respiratory infection at health facilities

Number of children aged 0-59 months who had acute respiratory infection (moderate/severe) and were taken to an appropriate healthcare provider per 1,000 population

ARI Moderate/Severe = $\frac{\text{Total number of moderate and severe ARI}}{\text{Total Population (under 5 years)}} \times 1,000$

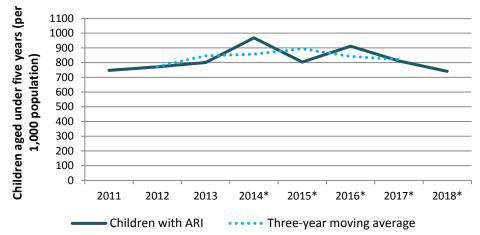
Methodological/System Issues:

- Data has been sourced from DHIS2.
- Prior to the use of new HIS monthly report in all health facilities in 2018, data for ARI mod/severe < 5 years has been used as proxy to measure ARI with pneumonia at the health facility level.
- In 2018, data on pneumonia among the children has been used in this case.
- Data from NRH is not available.
- This indicator has been calculated and updated using revised population estimates based on the 2009 census.

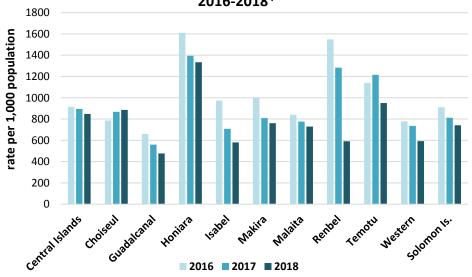
Province	2011	2012	2013	2014*	2015*	2016*	2017*	2018*
Central Islands	703	750	636	1014	740	915	894	848
Choiseul	801	725	765	772	713	787	867	886
Guadalcanal	485	557	658	738	578	658	559	477
Honiara	1410	1648	1550	1659	1655	1611	1395	1334
Isabel	824	796	699	810	900	973	709	580
Makira	730	746	764	912	791	997	809	762
Malaita	668	593	687	916	723	841	777	730
Renbel	945	1632	1570	2151	1233	1550	1283	591
Temotu	1045	1137	1219	1382	899	1140	1215	951
Western	674	669	647	793	645	779	736	593
Solomon Is.	747	772	801	968	804	912	812	741

^{*}Projected data based on current figures and reporting completeness

Children with ARI taken to a health facility Solomon Islands, 2011-2018*



Children with ARI taken to a health facility by province, 2016-2018*



8. Children immunised against measles

Number of children immunised against measles

Number of children (aged 12-23 months) who have received one dose of measlescontaining vaccine in one year

$$\textit{Measles Coverage} = \frac{\text{Total number of children aged } 12-23 \text{ months}}{\text{Total number of children}} x 100$$

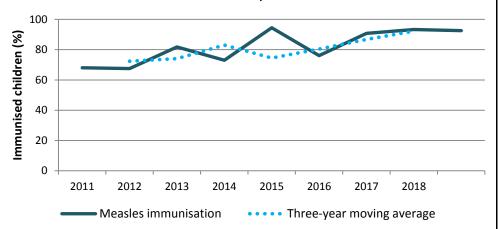
Methodological/System issues:

- Data for 2014 represents the coverage for measles campaign that was carried out due to a measles outbreak in the country. This was sourced from the EPI program. Data for the rest of the years is from DHIS2.
- Coverage is particularly high in 2014 due to a catch-up campaign launched after a measles outbreak.
- Vaccines are recorded where they were administered not necessarily considering where the child usually resides.
- Revised estimates for population projections from National Statistics Office were used to estimate population by age-group for each year.
- This indicator has been calculated and updated using revised population estimates based on the 2009 census.

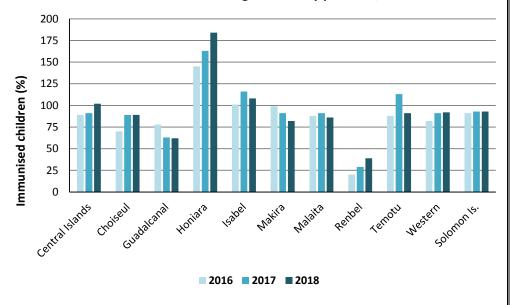
Province	2011	2012	2013	2014	2015	2016	2017	2018
Central Islands	74	76	80	81	88	89	91	102
Choiseul	81	64	68	89	76	70	89	89
Guadalcanal	42	40	53	64	46	78	63	62
Honiara*	120	182	120	133	128	145	163	184
Isabel	67	74	91	87	104	101	116	108
Makira	75	86	96	107	100	99	91	82
Malaita	54	69	56	101	60	88	91	86
Renbel	36	59	30	63	15	20	29	39
Temotu	86	100	97	66	107	88	113	91
Western	76	98	74	109	82	82	91	92
Solomon Is.	68	82	73	95	76	91	93	93

^{*}Coverage biased by higher number of vaccinations

Measles immunisation among children Solomon Islands, 2011-2018



Measles immunisation among children by province, 2016-2018



9. Malnourished children

Number of malnourished children

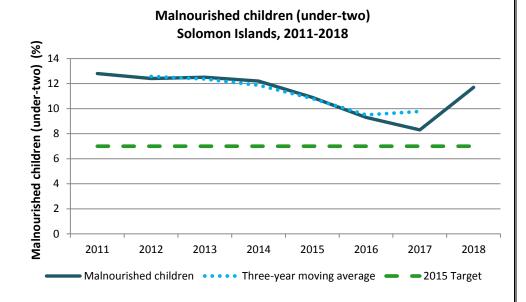
Percent of children aged less than two years old classified as 'malnourished' or 'severely malnourished' in the HIS Health Facility Monthly Reporting form

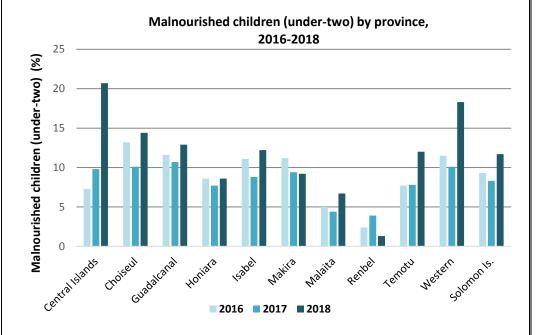
$$\textit{Malnourished} = \frac{\text{Total number of children classified as malnourished}}{\text{Total number of children aged } 0 - 23 \text{ months}} x \ 100$$
 with their nutritional status recorded at a health facility

Methodological/System Issues:

- Data has been sourced from DHIS2.
- The preferred indicator to collect as indicated by the nutrition program is stunting (height-for-age) as opposed to malnourished children.
- Between 2011 and 2017 data for malnourished and severely malnourished was defined as children weighing ≤80% weight for age (WFA) and ≤60% weight for age (WFA) respectively. While the definition exists in the monthly reporting guideline, it is not certain how strictly it was adhered to.
- In 2018, data collected for malnutrition was changed to stunting and severely stunting, wasting and severely wasting, underweight and overweight, and obese. These are reflected in the table below.
- Increase in the percentage of malnourished children in 2018 could reflect better data being reported due to that change.

Province	2011	2012	2013	2014	2015	2016	2017	2018
Central Islands	10.6	10.1	11.1	12.1	9.3	7.3	9.8	20.7
Choiseul	17.9	18	18.2	18.2	16.4	13.2	10.1	14.4
Guadalcanal	17	14.8	16	15.3	13.6	11.6	10.7	12.9
Honiara	10.9	10.6	10.5	10.8	9.2	8.6	7.7	8.6
Isabel	13.9	14.4	15.9	17.5	17	11.1	8.8	12.2
Makira	15.2	14.6	13.9	13.9	11.2	11.2	9.4	9.2
Malaita	9.9	7.6	7.5	6.5	6.1	5	4.4	6.7
Renbel	5.5	9.9	4.4	8.2	2.4	2.4	3.9	1.3
Temotu	8.8	9.6	10	8.9	8.1	7.7	7.8	12
Western	13	14.2	14.2	13.5	12	11.5	10.1	18.3
Solomon Is.	12.8	12.4	12.5	12.2	10.9	9.3	8.3	11.7





10. Communities with access to safe drinking water

Communities with access to safe drinking water

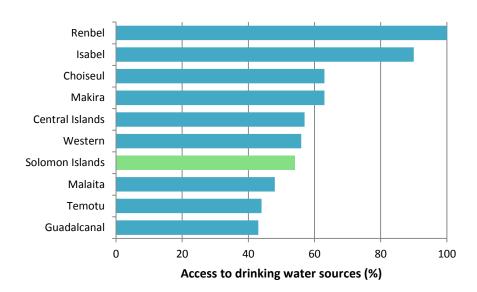
The percentage of population using an improved drinking water source

Methodological/system issues:

- 2015 data is sourced from MHMS Environmental Health Division RWASH baseline survey conducted in December 2015.
- 2010 and 2014 data were sourced from the RWASH Strategic Plan (2015-2020).
- Data is only available for 2014 and 2015.
- Currently there isn't any link between RWASH data collection processes and DHIS2.

Province	2011	2012	2013	2014	2015	2016	2017	2018
Central Islands					57			
Choiseul					63			
Guadalcanal					43			
Honiara					n/a			
Isabel					90			
Makira					63			
Malaita					48			
Renbel					100			
Temotu					44			
Western					56			
Solomon Is.	n/a	n/a	n/a	35%	54%	n/a	n/a	n/a

Access to basic drinking water sources by province (improved source available within 30 min walk) Solomon Islands, 2015



11. Communities with access to improved sanitation

Communities with access to improved sanitation

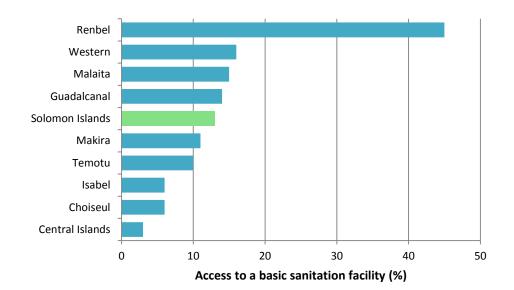
The percentage of communities that are open defecation free (ODF)

Methodological/system issues:

- Data is only available on access to a basic sanitation facility (improved type facility not shared with other households) for 2015.
- 2015 data was sourced from MHMS Environmental Health Division RWASH baseline survey conducted in December 2015.
- 2014 data was sourced from the RWASH Strategic Plan (2015-2020).
- Data is only available for 2014 and 2015.
- Currently there isn't any link between RWASH data collection processes and DHIS2.

Province	2011	2012	2013	2014	2015	2016	2017	2018
Central Islands					3			
Choiseul					6			
Guadalcanal					14			
Honiara					n/a			
Isabel					6			
Makira					11			
Malaita					15			
Renbel					45			
Temotu					10			
Western					16			
Solomon Is.	n/a	n/a	n/a	1%	13%	n/a	n/a	n/a

Access to a basic sanitation facility (improved type facility not shared with other households) Solomon Islands, 2015



12. Basic hygiene practices

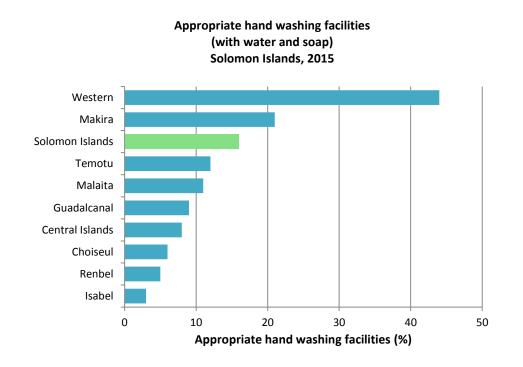
Basic hygiene practices

Proportion of the rural population **not washing hands** with soap at critical times

Methodological/system issues:

- Data is only available for appropriate hand washing facilities (with water and soap).
- 2015 data was sourced from MOMS Environmental Health Division RWASH baseline survey conducted in December 2015.
- The 2014 data was sourced from the RWASH Strategic Plan (2015-2020).
- Data is only available for 2014 and 2015.
- Currently there isn't any link between RWASH data collection processes and DHIS2.

Province	2011	2012	2013	2014	2015	2016	2017	2018
Central Islands					8			
Choiseul					6			
Guadalcanal					9			
Honiara					n/a			
Isabel					3			
Makira					21			
Malaita					11			
Renbel					5			
Temotu					12			
Western					44			
Solomon Is.	n/a	n/a	n/a	5- 10%	16%	n/a	n/a	n/a



13. Malaria mortality rate

Malaria Mortality Rate

The number of deaths due to malaria per 100,000 population per year

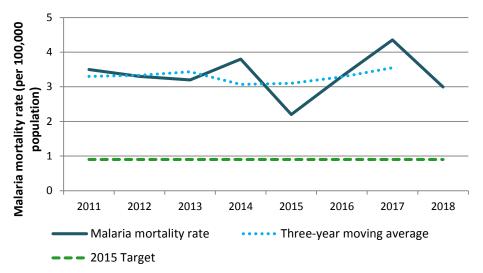
 $Malaria\ Mortality = rac{ ext{Total number of deaths due to malaria in a given year}}{ ext{Total population}}\ x\ 100,000$

Methodological/System Issues:

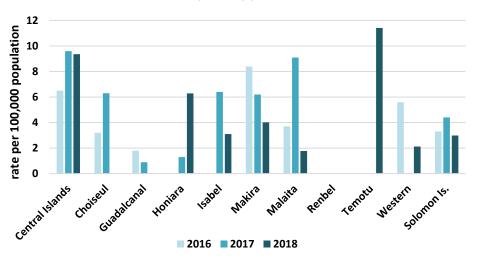
- Prior to 2018, data for this indicator has been sourced from DHIS2 only.
- In 2018 DHIS2 malaria death reporting was discontinued with the introduction of the new indicator form.
- Currently, no one system is adequately capturing malaria deaths. Therefore, the reported deaths in 2018 is the sum of all cases reported via the Medical Statistics Unit administrative death registry system and DHIS2 (using numbers reported from facilities before using the new HIS form). The data has been cleaned to remove duplicates.
- Presumptive malaria deaths at NRH have been included since 2015.

Province	2011	2012	2013	2014	2015	2016	2017	2018
Central Islands	3.7	10.7	0.0	6.8	0.0	6.5	9.6	9.4
Choiseul	3.6	10.6	0.0	0.0	0.0	3.2	6.3	0.0
Guadalcanal	2.0	3.0	2.9	1.9	0.0	1.8	0.9	0.0
Honiara	0.0	0.0	0.0	0.0	5.4	0.0	1.3	6.3
Isabel	0.0	3.6	0.0	0.0	0.0	0.0	6.4	3.1
Makira	7.1	6.9	9.0	0.0	2.2	8.4	6.2	4.0
Malaita	6.9	2.7	5.3	7.1	4.4	3.7	9.1	1.8
Renbel	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0
Temotu	4.5	0.0	4.3	0.0	4.1	0.0	0.0	11.4
Western	1.2	1.2	1.2	8.1	0.0	5.6	0.0	2.1
Solomon Is.	3.5	3.3	3.2	3.8	2.2	3.3	4.4	3.0

Malaria mortality rate Solomon Islands, 2011-2018



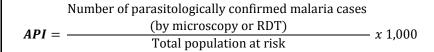
Malaria mortality rate by province, 2016-2018



14. Annual parasite incidence rate (API) malaria

Annual parasite incidence (malaria)

Number of blood samples confirmed positive by microscopy or rapid diagnostic test (RDT) per 1,000 population per year

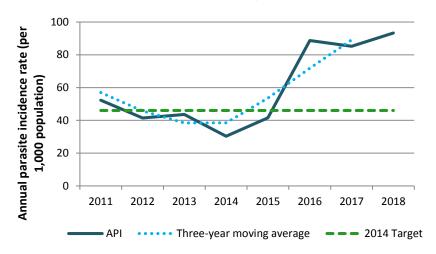


Methodological/System Issues:

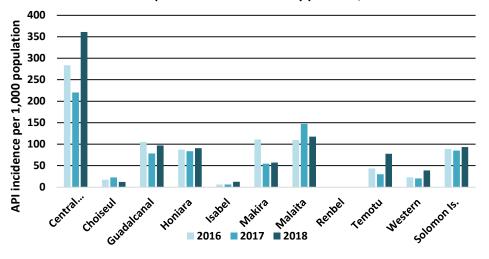
- Data has been sourced from DHIS2.
- In 2015, the malaria program introduced case-based reporting through the malaria case management register which was widely adopted by all health facilities in 2016.
- It is believed that this shift has contributed to better reporting of malaria cases in the country which, coupled with access to better diagnostic services during the year¹, led to a substantial increase in API in 2016.

Province	2011	2012	2013	2014	2015	2016	2017	2018
Central Islands	57	64	56	72	156	284	221	361
Choiseul	57	43	41	23	17	17	23	12
Guadalcanal	65	37	64	34	41	105	79	97
Honiara	94	83	70	53	63	87	84	91
Isabel	2	2	6	4	5	6	6	12
Makira	60	69	81	59	56	111	55	57
Malaita	54	42	36	24	42	110	148	118
Renbel	0	0	1	0	0	0	0	0
Temotu	7	12	10	6	12	43	30	78
Western	23	12	12	8	8	23	20	39
Solomon Is.	52	41	43	30	41	89	85	93

Malaria annual parasite incidence Solomon Islands, 2011-2018



Malaria annual parasite incidence rate by province, 2016-2018



¹ Annual report on malaria status in Solomon Islands in 2016 final.

15. Tuberculosis case notification rate

Tuberculosis case notification rate

The number of bacteriologically confirmed (new and relapse) tuberculosis cases in a given year per 100,000 population

Number of bacteriologically confirmed tuberculosis cases (new and relapse) $TB \ notification \ rate = \frac{\text{in a given year}}{\text{Total population}} x \ 100,000$

System/Methodological Issues:

■ This data is collected provincially on a quarterly basis, outside of the routine monthly report, and is stored in DHIS2 in a separate reporting module.

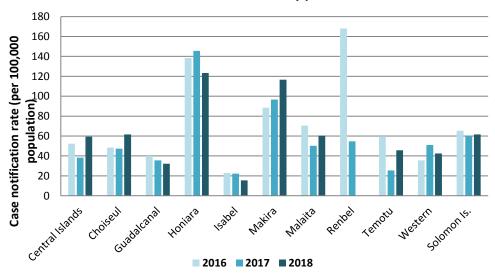
Province	2012	2013	2014*	2015	2016	2017	2018
Central Islands	21.5	59.5	18.9	56.8	52.3	38.3	59.3
Choiseul	17.7	27.7	74.2	46.2	48.4	47.3	61.7
Guadalcanal	35.9	40.9	23.7	30.7	40.0	35.5	32.1
Honiara	174.8	144.0	179.3	190.1	138.3	145.5	123.3
Isabel	46.4	10.5	27.2	16.7	22.8	22.3	15.5
Makira	50.8	79.0	40.8	60.3	88.5	96.7	116.7
Malaita	78.7	55.0	38.6	72.8	70.5	50.2	60.3
Renbel	153.5	60.0	0.0	85.9	168.0	54.7	n/a
Temotu	91.8	98.2	110.2	61.2	59.8	25.4	45.7
Western	40.2	53.5	76.8	51.1	35.5	51.0	42.4
Solomon Is.	68.4	63.7	59.4	70.2	65.3	60.2	61.6

^{*}Projected data based on current figures and reporting completeness

Solomon Islands, 2011-2018 100 80 60 40 2011 2012 2013 2014* 2015 2016 2017 2018 Case notification rate • Three-year moving average 2015 Target

Tuberculosis case notification rate

Tuberculosis case notification rate by province 2016-2018



16. Tuberculosis treatment success rate

Tuberculosis treatment success rate

Percentage of new, bacteriologically confirmed smear-positive tuberculosis cases that were cured or in which a full course of treatment was completed

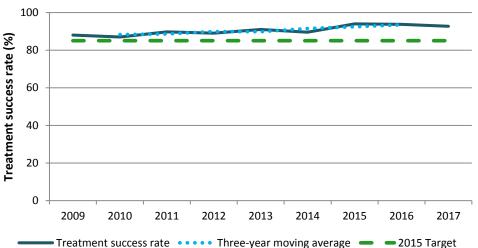
$$TSR = \frac{\text{Number of new smear - positive cases cured}}{\text{Number of new smear - positive cases}} \times 100$$
who underwent treatment

System/Methodological Issues:

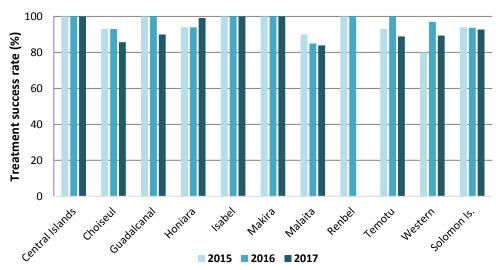
- This data is collected provincially on a quarterly basis, outside of the routine monthly report, and is stored in DHIS2 in a separate reporting module.
- Due to the delay in waiting for all patients treated in one year to receive a full course of treatment, data for 2018 will not be complete until later in 2019. The most recent year with a full data-set is 2017.

Province	2011	2012	2013	2014	2015	2016	2017
Central Islands	100.0	100.0	60.0	100.0	100.0	100.0	100.0
Choiseul	100.0	100.0	100.0	92.3	93.0	93.0	85.7
Guadalcanal	100.0	81.3	90.9	100.0	100.0	100.0	90.0
Honiara	72.2	79.4	81.6	95.2	94.0	94.0	99.1
Isabel	100.0	100.0	100.0	83.3	100.0	100.0	100.0
Makira	92.3	83.3	100.0	100.0	100.0	100.0	100.0
Malaita	90.0	87.2	93.1	75	90.0	85.0	83.9
Renbel	n/a	100.0	n/a	n/a	100.0	100.0	n/a
Temotu	80.0	100.0	100.0	90.9	93.0	100.0	88.9
Western	95.2	91.3	92.3	87.5	80.0	97.0	89.4
Solomon Is.	89.7	89.0	91.1	89.5	94.0	93.7	92.7

Tuberculosis treatment success rate Solomon Islands, 2009-2017



Tuberculosis treatment success rate by province, 2015-2017



17. Human Immunodeficiency virus positive test

Percentage of HIV-positive tests per year

Percentage of positive human immunodeficiency tests (HIV) in a given year

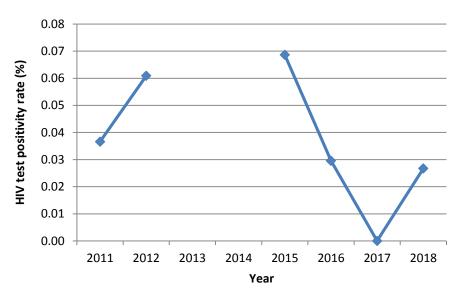
$$\textit{HIV Positive } \% = \frac{\text{Indianumber of people with a laboratory confirmed human}}{\text{Absolute number of samples laboratory tested for HIV}}$$

Methodological/System Issues:

- Data has been sourced from MHMS, HIV/STI administrative records.
- Data for 2013 and 2014 is currently unavailable.
- In 2016, 6,760 individuals were tested and 2 were tested positive for HIV.
- In 2018, 3,740 tests were carried out and 1 was tested positive for HIV.

Province	2011	2012	2013	2014	2015	2016	2017	2018
Central Islands								
Choiseul								
Guadalcanal								
Honiara								
Isabel								
Makira								
Malaita								
Renbel								
Temotu								
Western								
Solomon Is.	0.04	0.06	n/a	n/a	0.07	0.03	0.00	0.03

National HIV test positivity rate



18. Diabetes

Number of NCD patients presenting to health facilities with diabetes

Percent of NCD patients presenting to health facilities with diabetes (confirmed or suspected)

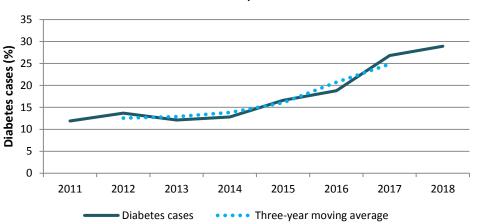
$$\textbf{\textit{Diabetes}} = \frac{\text{On the HIS form}}{\text{Total number of people reported with NCDs}} x \ 100$$
on the HIS form

System/Methodological Issues:

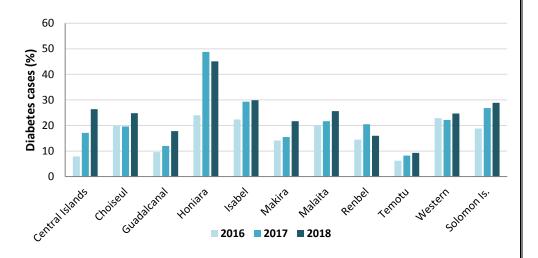
- Data has been sourced from DHIS2.
- While the current indicator does not indicate prevalence, it is a proxy for clinical workload relating to diabetes treatment as well as the burden of disease of diabetes amongst those patients presenting to a health facility.
- Data from the NRH NCD Clinic would provide further insight into the diabetes workload.

Province	2011	2012	2013	2014	2015	2016	2017	2018
Central Islands	14.2	9.4	8.2	8.6	9.4	7.9	17.1	26.4
Choiseul	10.7	10.6	11.8	12.4	15.6	19.8	19.6	24.8
Guadalcanal	5.8	5.7	6.2	5.8	6.3	9.6	12.0	17.8
Honiara	11.4	16.1	15.5	12.9	22.4	24	48.8	45.1
Isabel	12.7	14.0	17.5	20.4	19.2	22.4	29.3	29.9
Makira	7.4	11.3	12.1	14.8	17.2	14.1	15.5	21.7
Malaita	9.5	9.3	8.8	9.8	17.9	20.2	21.7	25.6
Renbel	9.5	8.1	9.8	10.9	14.7	14.5	20.5	16.0
Temotu	5.1	5.1	6.3	3.5	5.1	6.2	8.2	9.3
Western	16.7	20.4	16.8	18.6	20.5	22.9	22.2	24.7
Solomon Is.	11.9	13.7	12.1	12.8	16.6	18.8	26.8	28.9

Diabetes cases at NCD clinics Solomon Islands, 2011-2018



Diabetes cases at NCD clinics by province, 2016-2018



19. Hypertension

Number of NCD patients presenting to health facilities with hypertension

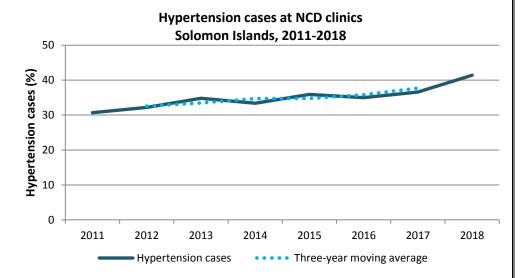
Percent of NCD patients presenting to health facilities with hypertension (confirmed or suspected; and new or old cases)

$$Hypertension = \frac{\text{Total number of people with hypertension reported}}{\text{Total number of people reported with NCDs}} x 100$$
on the HIS form

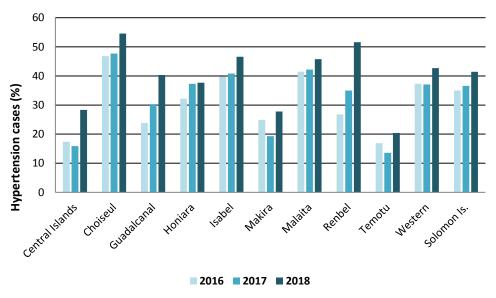
Methodological/System Issues:

- Data has been sourced from DHIS2.
- While the current indicator does not indicate prevalence, it is a good proxy for clinical workload relating to hypertension treatment as well as the burden of disease of hypertension amongst those patients presenting to a health facility.
- Data from the NRH NCD Clinic would provide further insight into the hypertension workload.

Province	2011	2012	2013	2014	2015	2016	2017	2018
Central Islands	10.7	10.6	9.5	16.0	16.4	17.4	15.9	28.3
Choiseul	43.2	44.3	49.3	46.4	48.3	46.8	47.7	54.6
Guadalcanal	13.4	13.2	15.6	19.8	20.7	23.8	30.3	40.3
Honiara	28.4	31.2	34.7	31.0	37.6	32.2	37.3	37.7
Isabel	31.5	32.5	39.8	40.7	41.3	39.8	40.8	46.6
Makira	27.6	32.4	16.9	16.3	17.0	24.9	19.3	27.8
Malaita	28.4	32.6	44.7	41.2	44.7	41.5	42.2	45.8
Renbel	36.0	35.1	32.6	34.8	45.6	26.8	35	51.6
Temotu	10.1	13.7	13.1	9.5	16.0	16.9	13.6	20.4
Western	38.7	39.3	37.0	35.0	36.9	37.3	37.1	42.7
Solomon Is.	30.7	32.2	34.8	32.9	35.9	35.0	36.6	41.4



Hypertension cases at NCD Clinics by province, 2016-2018



20. Health promoting schools

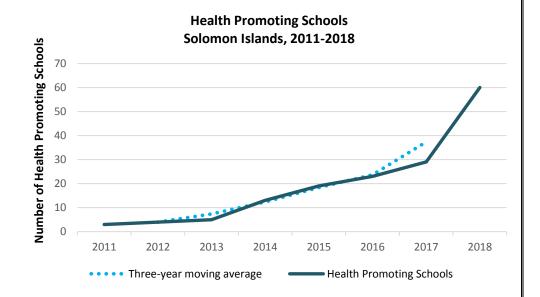
Number of health promoting schools

Total number of established and currently active health promoting schools

Methodological/System Issues:

- Data has been sourced from the Health Promotion Annual Report.
- Health promoting schools that had been established but are inactive today have been excluded from all years due to incomplete historical data. As a result, numbers for previous years might be slightly inaccurate.

Province	2011	2012	2013	2014	2015	2016	2017	2018
Central Islands	0	0	0	0	0	1	1	1
Choiseul	0	0	0	0	0	1	2	2
Guadalcanal	0	1	1	1	1	2	2	2
Honiara	1	1	1	9	13	13	13	13
Isabel	0	0	0	0	0	0	1	3
Makira	0	0	1	1	3	3	3	3
Malaita	1	1	1	1	1	2	2	24
Renbel	0	0	0	0	0	0	0	0
Temotu	0	0	0	0	0	0	0	0
Western	1	1	1	1	1	1	5	12
Solomon Is.	3	4	5	13	19	23	29	60



21. Rehabilitation services

Access to rehabilitation services

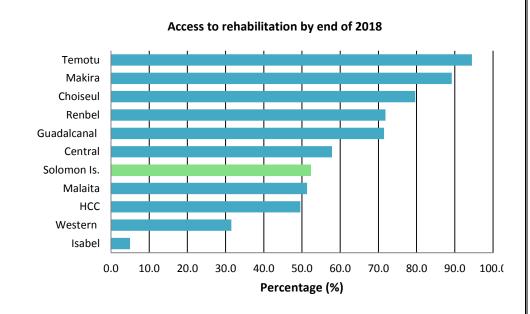
Percent of people registered as having disabilities who receive rehabilitation services visits from MHMS Community Based Rehabilitation (CBR) staff per year

$$Access = \frac{\text{Total number of patients receiving rehabilitation services}}{\text{Total number of patients with disabilities}} \times 100$$

Methodological/System Issues:

- Data has been sourced from MHMS Community Based Rehabilitation Administrative Records.
- Data from Disability Nationwide Survey 2005 was used as proxy for total number of disabled people in the country for 2011 and 2012.
- Revalidated data for 2013 was used as target population for disability people in the country for 2013 to 2018.
- Revalidation was not carried out in Malaita and Guadalcanal and therefore data from the Nationwide Survey of 2005 is still used as a proxy for total disabled people in the two provinces.
- Sudden increase observed in 2017 resulted from the deployment of CBR staff to station at the provincial level to provide ongoing service and activity. Prior to that, service delivery was concentrated at Honiara with little outreach to the provinces and their communities conducted.

Province	2011	2012	2013	2014	2015	2016	2017	2018
Central Islands	0.0	0.0	0.0	0.0	100.0	28.5	36.3	57.9
Choiseul	2.3	1.9	9.2	5.3	15.5	18.2	62.3	79.7
Guadalcanal	0.0	0.0	0.6	1.8	13.8	7.0	8.3	71.5
Honiara	19.9	16.4	9.5	28.2	60.2	82.9	58.1	49.6
Isabel	3.9	16.6	0.0	0.0	0.0	3.2	0.0	5.0
Makira	4.0	7.5	34.0	22.0	28.6	49.7	91.7	89.2
Malaita	0.0	1.6	1.5	0.0	0.0	0.0	35.3	51.3
Renbel	0.0	0.0	0.0	0.0	58.8	0.0	0.0	71.9
Temotu	18.2	16.1	23.9	20.5	27.8	0.0	7.5	94.5
Western	9.5	3.4	21.4	3.3	72.1	43.4	79.9	31.5
Solomon Is.	3.5	3.9	6.2	4.2	17.4	14.7	48.2	52.3



22. National referral hospital, average weekly discharges

NRH Weekly average of patients discharged

Weekly average of patients discharged from NRH wards in a given year

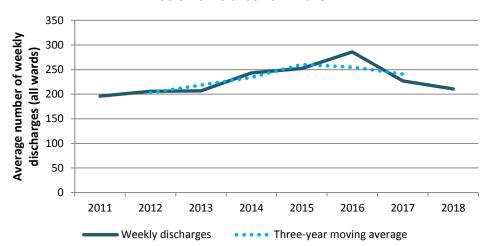
$$Average Discharge = \frac{\text{Total discharges from acute care}}{52 \text{ (weeks)}}$$

Methodological/System Issues:

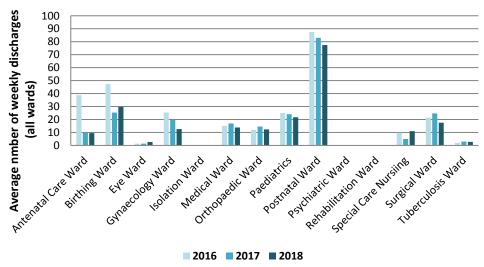
- Data has been sourced from DHIS2.
- Discharge data is captured daily at the NRH through an administrative bed count process entered in an Excel-based system. Monthly summaries are processed by the HIS unit and entered into DHIS2.
- Data quality for these values fluctuates between 2014 and 2015. However, improvement is observed in the data collection processes in recent years.
- Indicator relates to live discharges.

Ward	2011	2012	2013	2014	2015	2016	2017	2018
Antenatal Care Ward	10.8	8.9	9.4	15	22.6	38.8	9.7	9.5
Birthing Ward	n/a	n/a	n/a	67.5	73.2	47.4	25.3	29.7
Eye Ward	4.5	2.3	1.9	1.4	1.9	1.3	1.3	2.6
Gynaecology Ward	19.4	21.8	26.3	31.4	26.5	25.4	19.6	12.6
Isolation Ward	0	0	1.7	1.7	0.1	0	0	0
Medical Ward	8.7	8.1	14.2	15.9	10.4	15.1	16.9	13.8
Orthopaedic Ward	12.2	14.4	13.2	13	13.8	11.9	14.5	12.3
Paediatrics	19.9	15.3	18.9	21.1	19.4	25.1	24	21.7
Postnatal Ward	80.2	94.5	80.7	35.4	46.5	87.6	83	77.4
Psychiatric Ward	0.77	0	0	0	0	0	0	0
Rehabilitation Ward	0.56	0.38	0.4	3.6	0.06	0	0	0
Special Care Nursing	12.9	13.9	14.3	12.1	12.3	9.7	4.9	11
Surgical Ward	23.9	25.1	23.5	21.9	22.2	21.5	24.7	17.5
Tuberculosis Ward	2.4	1.1	2.3	3.1	3.5	1.9	3	2.7
NRH	196.1	205.8	206.7	243.3	252.5	285.8	226.8	210.7

National Referral Hospital, weekly average discharges Solomon Islands 2011-2018



National Referral Hospital, weekly average of patients discharges by ward, 2016-2018



23. National referral hospital, bed occupancy rate

Bed occupancy rate (National Referral Hospital)

Proportion of available acute inpatient beds that have been occupied over one year (at the National Referral Hospital)

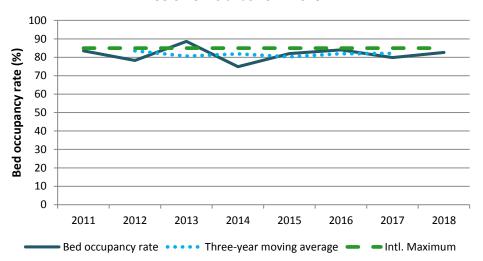
$$BOR = \frac{\text{Total inpatient days in acute care}}{\text{Total number of beds in acute care} * 365 \text{ (days)}} \times 100$$

Methodological/System Issues:

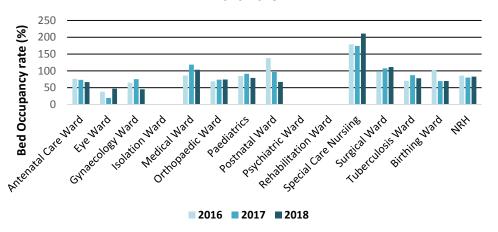
- Data has been sourced from DHIS2.
- Bed occupancy data is captured daily at the NRH through an administrative bed count process entered in an Excel-based system.
 Monthly summaries are processed by the HIS unit and entered into DHIS2.
- The denominator (number of total beds by ward) needs review as it is not accurately reflecting the changes in bed numbers that are occurring within the wards. The occupancy rate is likely under-reported.
- Data was not available for the Birthing Unit between 2011-2013.

Ward	2011	2012	2013	2014	2015	2016	2017	2018
Antenatal Care	53	70	48	55	74	76	73	66
Eye	66	44	19	24	29	38	19	47
Gynaecology	76	80	82	37	63	65	75	45
Isolation	n/a	n/a	16	28	12	n/a	0	0
Medical	79	70	102	93	88	86	119	103
Orthopaedic	80	87	84	74	65	68	74	74
Paediatrics	85	75	78	68	80	85	91	79
Postnatal	74	87	79	30	105	138	97	67
Psychiatric	84	0	0	n/a	n/a	n/a	n/a	n/a
Rehabilitation	77	65	82	59	21	0	0	0
Special care nursing	197	233	247	219	186	179	174	211
Surgical	103	98	110	96	97	97	107	111
Tuberculosis	75	34	90	86	73	70	87	78
Birthing	n/a	n/a	n/a	117	120	102	69	70
NRH average	84	78	89	75	82	86	80	83

National Referral Hospital, bed occupancy rate Solomon Islands 2011-2018



National Referral Hospital, bed occupancy rate by ward, 2016-2018



24. National referral hospital, average lengthof-stay

Average length-of-stay (ALOS)

Average number of days patients spent in the hospital

$$ALOS = \frac{\text{Total inpatient days in acute care}}{\text{Total discharge in acute care}}$$

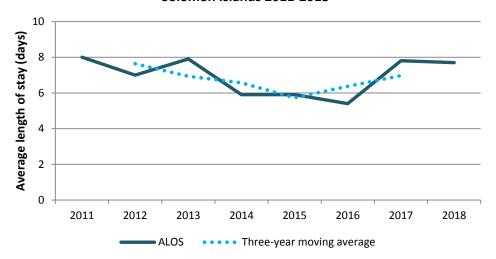
Methodological/System Issues:

- Data has been sourced from DHIS2.
- Length of stay data is captured daily at the NRH through an administrative bed count process entered in an Excel-based system. Monthly summaries are processed by the HIS unit and entered into DHIS2.
- Data quality for these values fluctuate.
- The significant decline in ALOS in 2016 is due to the closure of the rehabilitation ward at NRH.

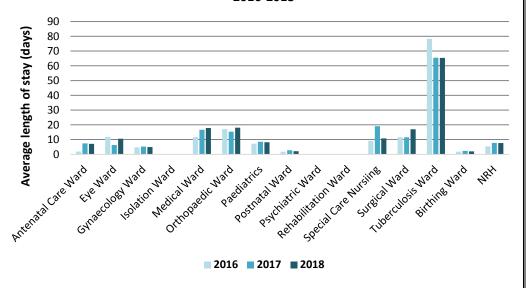
Ward	2011	2012	2013	2014	2015	2016	2017	2018
Antenatal Care	4.8	6.6	5.0	3.9	3.2	1.9	7.4	7.1
Eye	12.3	8.4	4.3	6.5	6.4	11.8	6.4	10.6
Gynaecology	5.5	5.1	4.3	1.5	4.4	4.7	5.3	4.9
Isolation	n/a	n/a	3.7	4.9	18.0	0.0	0.0	0.0
Medical	15.6	17.0	15.3	12.0	17.2	11.7	16.7	17.8
Orthopaedic	17.2	17.7	18.5	16.8	13.8	17.1	15.4	18.1
Paediatrics	9.3	8.6	7.9	6.2	7.1	7.2	8.5	8.2
Postnatal	2.2	2.2	2.3	2.0	2.6	1.8	2.8	2.1
Psychiatric	37.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rehabilitation	99.4	112.0	142.2	10.4	127.3	0.0	0.0	0.0
SCN^	7.9	8.8	8.9	9.2	8.0	9.2	19.0	10.8
Surgical	11.1	10.0	11.8	11.3	11.1	11.7	11.6	17.0
Tuberculosis	68.0	70.5	79.9	60.7	45.9	78.3	65.5	65.4
Birthing	n/a	n/a	n/a	1.5	1.4	1.8	2.3	2.0
NRH average	8.0	7.0	7.9	5.9	5.9	5.4	7.8	7.7

[^]SCN = Special Care Nursery

National Referral Hospital, average length-of-stay Solomon Islands 2011-2018



National Referral Hospital, average length-of-stay by ward, 2016-2018



25. Nurse to population ratio

Number of nurses per 1,000 population

Number of registered nurses in a given year per 1,000 of the total population in the same year

Nursing Rate =
$$\frac{\text{Total number of registered nurses in a given year}}{\text{Total population}} x 1,000$$

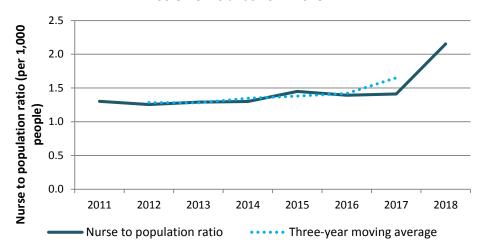
Methodological/System Issues:

- This data is derived from the Human Resources establishment list from 2011 2014 and from the Provinces and NRH in 2015-2017.
- In 2018, provincial data was sourced from DHIS2 except for NRH. NRH data was sourced from NRH Nursing Administration record.
- Data prior to 2018 does not include any nurse aides or midwives. As a result, the number for 2018 is significantly higher.
- Data for 2014 does not include Renbel.

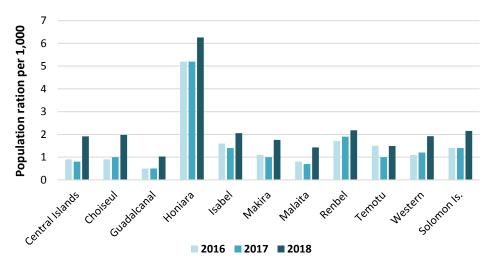
Province	2011	2012	2013	2014	2015	2016	2017	2018
Central Islands	0.9	0.8	0.9	0.4	0.7	0.9	0.8	1.9
Choiseul	1.1	1.1	1.0	0.8	0.9	0.9	1.0	2.0
Guadalcanal	0.4	0.5	0.5	0.4	0.7	0.5	0.5	1.0
Honiara^	4.9	4.5	5.0	1.0	4.9	5.2	5.2	6.3
Isabel	1.2	1.1	1.0	1.3	1.4	1.6	1.4	2.1
Makira	1.0	0.9	0.9	1.0	1.1	1.1	1.0	1.8
Malaita	0.7	0.7	0.6	0.7	1.0	0.8	0.7	1.4
Renbel	2.5	3.1	3.0	n/a	2.6	1.7	1.9	2.2
Temotu	1.5	1.4	1.2	0.8	0.9	1.5	1.0	1.5
Western	0.8	0.8	0.8	0.8	0.8	1.1	1.2	1.9
Solomon Islands	1.3	1.3	1.3	0.7	1.4	1.4	1.4	2.2

[^]Data for 2011-2013 in Honiara includes the NRH whereas data for 2014 does not

Nurse to population ratio Solomon Islands 2011-2018



Nurse to population ratio by province, 2016-2018



26. Outpatient consultations per capita

Number of outpatient consultations per capita

Number of visits for ambulant care, not including immunisations, for the total population (including repeat visits) per capita

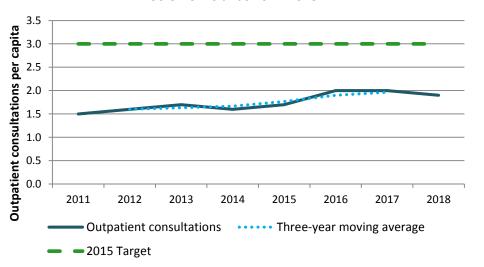
$$\textbf{\textit{Consultations}} = \frac{\text{Total number of outpatient consultations in a given year}}{\text{Total population}}$$

Methodological/System Issues:

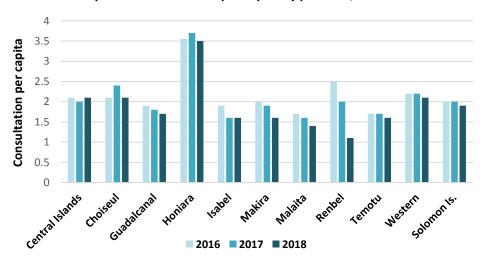
- Data has been sourced from DHIS2.
- Outpatient data from NRH was included for the first time in 2016. Inclusion
 of data from NRH has significantly increased the number of outpatient
 consultations per capita for Honiara.
- Data does not include injections and dressings which, if included, would make the number of outpatient consultations per capita 2.5 in 2018.

Province	2011	2012	2013	2014	2015	2016	2017	2018
Central Islands	1.5	1.7	1.5	1.6	1.7	2.1	2.0	2.1
Choiseul	2.1	2.1	2.1	1.8	1.8	2.1	2.4	2.1
Guadalcanal	1.1	1.3	1.6	1.6	1.6	1.9	1.8	1.7
Honiara	1.7	2.3	2.2	2.1	2.2	3.6	3.2	3.5
Isabel	1.4	1.6	1.4	1.5	1.8	1.9	1.6	1.6
Makira	1.5	1.6	1.7	1.5	1.6	2.0	1.9	1.6
Malaita	1.3	1.2	1.2	1.4	1.3	1.7	1.6	1.4
Renbel	3.3	3	2.8	2.6	2.6	2.5	2.0	1.1
Temotu	1.7	1.7	1.7	1.7	1.5	1.7	1.7	1.6
Western	2	2.1	2.1	1.9	2.0	2.2	2.2	2.1
Solomon Is.	1.5	1.6	1.7	1.6	1.7	2.0	2.0	1.9

Outpatient consultations Solomon Islands 2011-2018



Outpatient consultations per capita by province, 2016-2018



27. Rural health clinics without a registered nurse

Registered nurses in rural health clinics

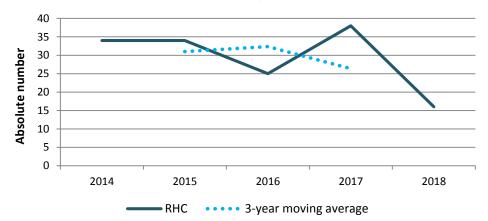
Absolute number of rural health clinics that do not have a registered nurse in a given year

Methodological/System issues:

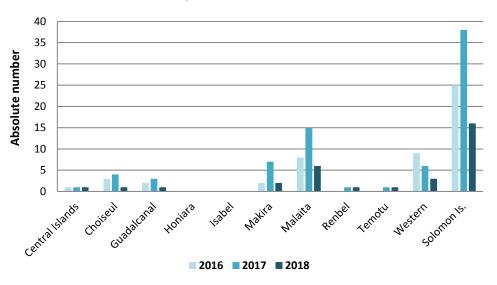
- As information for Renbel was not available, the number for 2014 represents the minimum number of rural health clinics that do not have a registered nurse (actual number could be higher).
- 2014 2017 data was sourced from the Provincial HR records. This does not include midwives (who are also registered nurses with specialized training on midwifery). In 2017, out of the 38 RHCs without a Registered Nurse, 10 had a midwife.
- In 2018 HR data is now reported as part of the HIS monthly reporting from health facilities in the country. Thus, data for 2018 has been sourced from DHIS2 and has included midwives and nurse aides as Registered Nurses. As a result, the number for 2018 is significantly lower.

Province	2011	2012	2013	2014	2015	2016	2017	2018
Central Islands				1	2	1	1	1
Choiseul				4	6	3	4	1
Guadalcanal				4	2	2	3	1
Honiara				0	0	0	0	0
Isabel				3	1	0	0	0
Makira				0	2	2	7	2
Malaita				9	12	8	15	6
Renbel				n/a	0	0	1	1
Temotu				2	2	0	1	1
Western				11	7	9	6	3
Solomon Is.	n/a	n/a	n/a	≥34	34	25	38	16

RHC without Registered Nurses Solomon Islands, 2014-2018



Number of rural health clinics without registered nurses, by province, 2016-2018



28. Mental health services

Provincial mental health services

Total number of provincial hospitals offering mental health services

Methodological/System Issues:

- Data was sourced from MHMS Mental Health Program records.
- Kilu'ufi hospital was reopened in 2014 to accept mental health patients.
- Table 1 only includes hospitals that have specialized wards for patients needing mental health care.
- Table 2 is added for the first time to show hospitals that also provide mental health services.

Hospitals with specialized wards with mental health care 2010 - 2018

Province	2010	2011	2012	2013	2014	2015	2016	2018
Central Islands								
Choiseul								
Guadalcanal								
Honiara	1	1	1	0	1	1	1	1
Isabel								
Makira								
Malaita	1	1	1	1	1	1	1	1
Renbel								
Temotu								
Western								
Solomon Is.	2	2	2	1	2	2	2	2

Hospitals that also provides mental health services 2010-2018

Province	2010	2011	2012	2013	2014	2015	2016	2018
Central Islands	1	1	1	1	1	1	1	1
Choiseul	1	1	1	1	1	1	1	1
Guadalcanal	1	1	1	1	1	1	1	1
Honiara^	0	0	0	0	0	0	0	0
Isabel	1	1	1	1	1	1	1	1
Makira	1	1	1	1	1	1	1	1
Malaita^	1	1	1	1	1	1	1	1
Renbel	1	1	1	1	1	1	1	1
Temotu	1	1	1	1	1	1	1	1
Western	2	2	2	2	2	2	2	2
Solomon Is.	10	10	10	10	10	10	10	10

[^] excludes hospitals with mental health care wards

29. Unsupervised deliveries

Births not attended by skilled health worker

Proportion of births not attended by a skilled health worker (doctor, nurse, nurse aid or midwife) in a given year

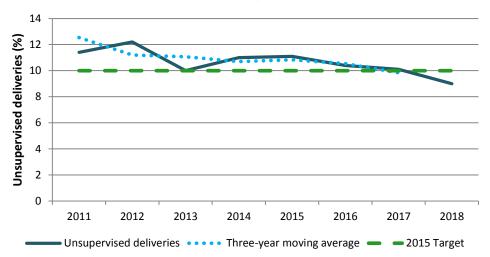
$$\textit{Unsupervised deliveries} = \frac{\text{Number of births not attended}}{\text{by skilled health personnel}} \ x \ 100$$

Methodological/System Issues:

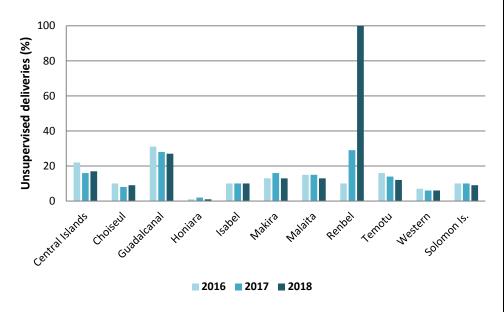
- Data has been sourced from DHIS2.
- Birth reporting has improved significantly since 2015.

Province	2011	2012	2013	2014	2015	2016	2017	2018
Central Islands	19	22	18	20	23	22	16	17
Choiseul	9	11	9	11	11	10	8	9
Guadalcanal	33	32	27	27	32	31	28	27
Honiara	0	0	0	0	0	1	2	1
Isabel	6	7	9	10	9	10	10	10
Makira	13	13	12	18	14	13	16	13
Malaita	26	28	20	21	19	15	15	13
Renbel	52	53	45	31	26	10	29	100
Temotu	14	14	17	17	13	16	14	12
Western	8	7	6	6	7	7	6	6
Solomon Is.	11	12	10	11	11	10	10	9

Unsupervised deliveries Solomon Islands, 2011-2018



Unsupervised Deliveries by province, 2016-2018



30. Stock availability, national medical stores

Stock availability for critical and essential medicines at National Medical Stores

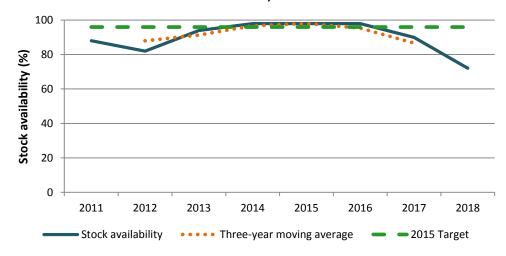
Percent of essential medicines in stock at national medical stores (as of 31 December)

Methodological/System Issues:

- Data for this indicator was sourced from National Pharmacy Division.
- Having better linkages between DHIS2 and mSupply will support a routine mechanism to collect this data.
- A target of 96% was set in the 2012 Core Indicator Report.

Province	2011	2012	2013	2014	2015	2016	2017	2018
National	88	82	94	98	98	98	90	72
Medical Store	00	02	34	36	96	30	90	/2

Stock availability, national medical stores, Solomon Islands, 2011-2018



31. Stock availability, primary health care facilities

Stock availability for critical and essential medicines at primary health care facilities

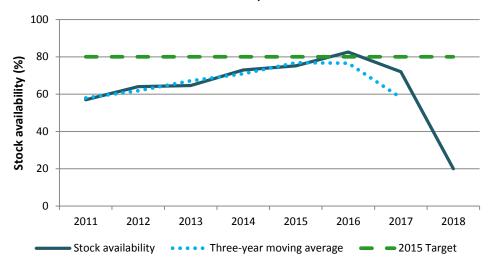
Percent of all essential medicines in stock at primary health care facilities per month.

Methodological/System Issues:

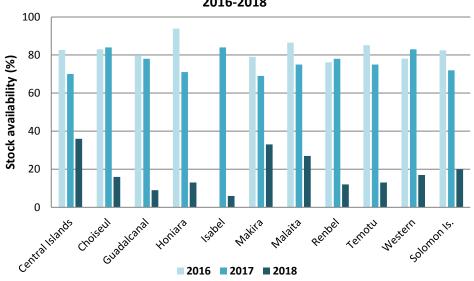
- 2015 data was sourced from a survey of 100 health facilities by NMS. It does not include information from Renbel, Makira, Temotu, or Western Province. In 2015, only Choiseul, Isabel and Malaita had a significant number of health facilities surveyed for availability of essential medicines.
- 2017 data was sourced from a survey of 278 health facilities across all provinces.
- Having better linkages between DHIS2 and mSupply will support routine data collection of this information.
- Only 1 facility was surveyed in Central Province in 2016 and data was not available for Isabel Province.
- 2018 data was sourced from DHIS2. This is based on the number of months a health facility reports stock out of at least one essential medical.
- A target of 80% was set in the 2012 Core Indicator Report.

Province	2011	2012	2013	2014	2015	2016	2017	2018
Central Islands			73	82	77	83	70	36
Choiseul			74	81	82	83	84	16
Guadalcanal			n/a	n/a	72	80	78	9
Honiara			n/a	n/a	70	94	71	13
Isabel			46	54	67	n/a	84	6
Makira			62	79	n/a	79	69	33
Malaita			65	75	73	87	75	27
Renbel			n/a	71	n/a	76	78	12
Temotu			66	66	n/a	85	75	13
Western			66	73	n/a	78	83	17
Solomon Is.	57	64	65	73	74	83	72	20

Stock availability at primary health care facilities, Solomon Islands, 2011-2018



Stock availability at primary health care facilities by province, 2016-2018



32. Water and sanitation at health facilities

Health facilities without functioning water supply and sanitation

Percent of health facilities with(out) functioning water supply and sanitation in a given year

Methodological/System Issues:

- 2017 Data is based on a facility survey (Tupaia) which was carried out in 327 health facilities (HF) across all provinces in the country.
- 2018 data has been sourced from DHIS2. To be in line with SDG reporting, definition for this indicator has changed to Basic services, Limited services and No services and extended to include a measure for Hygiene and Waste Management practice at the facility level. This data is now captured in the HIS monthly report from health facilities.
- This data is presented in the tables below.

2017: % HFs with water and HFs with toilets available

	% of HF	with water	available	% of HF with toilet available			
Provinces	Yes	No	unknown	Yes	No	unknown	
Central	86.4	13.6	0.0	27.3	72.7	0.0	
Choiseul	88.5	3.8	7.7	61.5	30.8	7.7	
Guadalcanal	79.1	18.6	2.3	72.1	25.6	2.3	
Honiara	94.7	5.3	0.0	94.7	5.3	0.0	
Isabel	67.7	25.8	6.5	54.8	38.7	6.5	
Makira	62.2	37.8	0.0	24.3	75.7	0.0	
Malaita	68.0	26.7	5.3	46.7	48.0	5.3	
Renbel	100.0	0.0	0.0	33.3	66.7	0.0	
Temotu	76.5	23.5	0.0	23.5	76.5	0.0	
Western	87.9	12.1	0.0	72.4	27.6	0.0	
Solomon Is.	77.3	19.9	2.7	54.1	43.2	2.7	

2018: % HFs with water access and HFs with sanitation access

	% of HF	with wate	er access	% of HF with sanitation				
			No			No		
Provinces	Basic	Limited	Service	Basic	Limited	Service		
Central	16.4	80.2	3.4	11.6	74.4	14.0		
Choiseul	39.0	57.3	3.7	27.9	49.2	23.0		
Guadalcanal	37.0	57.3	5.7	36.1	48.5	15.4		
Honiara	96.3	3.8	0.0	96.8	3.2	0.0		
Isabel	59.8	37.8	2.4	40.9	48.6	10.5		
Makira	29.8	44.1	26.1	21.4	34.3	44.3		
Malaita	35.7	50.6	13.7	30.8	50.1	19.1		
Renbel	66.7	0.0	33.3	33.3	5.6	61.1		
Temotu	50.0	40.5	9.5	8.9	47.6	43.5		
Western	57.1	35.5	7.4	41.2	42.2	16.6		
Solomon Is.	43.0	46.9	10.0	33.4	45.2	21.3		

2018: % HFs with hygiene practices access and HFs with waste management access

	% of HF v	vith hygien access	e practice	% of HF with waste management access			
Provinces	Basic	Limited	No Service	Basic	Limited	No Service	
Central	13.1	81.1	5.8	3.2	83.3	13.4	
Choiseul	33.5	59.3	7.3	23.4	57.8	18.9	
Guadalcanal	34.4	58.4	7.2	30.8	52.0	17.2	
Honiara	94.3	5.7	0.0	96.9	3.1	0.0	
Isabel	36.2	60.2	3.7	26.5	58.0	15.5	
Makira	19.6	53.2	27.2	16.6	42.4	41.1	
Malaita	29.7	59.2	11.1	23.3	59.2	17.6	
Renbel	61.1	5.6	33.3	33.3	33.3	33.3	
Temotu	26.2	57.1	16.7	12.3	47.5	40.2	
Western	33.3	55.9	10.8	25.3	59.4	15.3	
Solomon Is.	32.9	56.0	11.1	26.1	53.5	20.4	

33. Health facilities with access to equipment

Area health centres without minimum standard equipment

Absolute number of area health centres without minimum standard equipment in a given year

Methodological/system issues:

■ This information is not being routinely collected.

Province	2011	2012	2013	2014	2015	2016	2017	2018
Central Islands								
Choiseul								
Guadalcanal								
Honiara								
Isabel								
Makira								
Malaita								
Renbel								
Temotu								
Western								
Solomon Is.	n/a							

34. Provinces with access to DHIS2 dashboards

Number of provinces accessing dashboards

Absolute number of provinces with access to live dashboard feedback based on health information systems (HIS) data

Methodological/system issues:

- While there are only nine provinces, two DHIS2 access points were installed in Guadalcanal (one for Honiara CC).
- Renbel has been given access to DHIS2, however accessing the system directly at the provincial health centre (Tango AHC) remains a challenge. This is partly due to the lack of internet connection between the ISP in the province and Tingoa AHC.
- Setting up the connection at Tingoa AHC can improve access to DHIS2 by health program managers in the province.

Province	2011	2012	2013	2014	2015	2016	2017	2018
Central Islands			0	1	1	1	1	1
Choiseul			1	1	1	1	1	1
Guadalcanal			1	1	1	1	1	1
Honiara HCC			0	1	1	1	1	1
Isabel			0	1	1	1	1	1
Makira			0	1	1	1	1	1
Malaita			0	1	1	1	1	1
Renbel			0	0	0	0	0	1
Temotu			0	1	1	1	1	1
Western			1	1	1	1	1	1
Solomon Is.	n/a	n/a	3	9	9	9	9	10

35. Recurrent budget allocated to provinces

Percent of recurrent budget disbursed to provinces

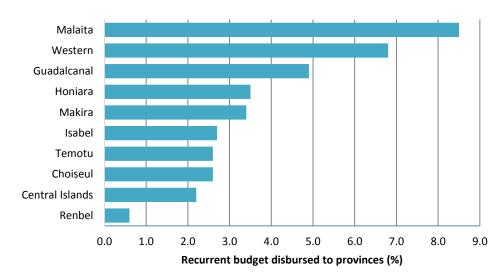
Percent of total MHMS budget (including external funds) that is disbursed to Provincial Health Departments in the final MHMS budget allocations (as defined in the budget through cost centres 0307 and 0482 – 0490)

Methodological/System issues:

- This data is sourced through the Ministry of Finance and is not linked with DHIS2.
- The data relates to the actual budgeted amount expensed and includes payroll.

Province	2011	2012	2013	2014	2015	2016	2017	2018
Central Islands	n/a	2.1	2.1	2.3	2.2	2.5	2.1	2.2
Choiseul	n/a	2.1	2.7	2.6	2.6	2.6	2.5	2.6
Guadalcanal	n/a	4.0	4.6	6.0	5.1	5.1	5.2	4.9
Honiara	n/a	2.2	2.6	3.1	3.5	3.6	3.7	3.5
Isabel	n/a	2.4	2.5	2.8	2.8	2.8	2.7	2.7
Makira	n/a	2.9	3.1	3.6	3.6	3.5	3.5	3.4
Malaita	n/a	8.1	8.9	10.3	9.3	9.0	8.6	8.5
Renbel	n/a	0.6	0.6	0.7	0.7	0.6	0.6	0.6
Temotu	n/a	2.1	2.4	2.7	2.4	2.8	2.6	2.6
Western	n/a	6.3	6.6	8.2	7.3	7.1	6.9	6.8
Solomon Is.	37	32.7	36.1	42.2	39.4	39.5	38.4	37.9

Percentage of recurrent budget disbursed to provinces - 2018



36. Monthly financial reports

Number of monthly financial reports submitted

Number of monthly financial reports submitted from MHMS Finance Unit to MHMS Senior Management (i.e. PS, US, CEO NRH, Provincial Health Directors and Program Managers)

Methodological/System Issues:

- This data is provided by the MHMS Finance Unit.
- In 2013 a system was put in place to provide financial status reports to the MHMS Senior Management.
- A target of 10 reports per year was set in 2013.

Province	2011	2012	2013	2014	2015	2016	2017	2018
Central Islands					11	12	12	12
Choiseul					11	12	12	12
Guadalcanal					10	12	12	12
Honiara					11	12	12	12
Isabel					10	12	12	12
Makira					12	12	12	12
Malaita					6	12	12	12
Renbel					12	12	12	12
Temotu					11	12	12	12
Western					10	12	12	12
Solomon Is.	n/a	n/a	9	11	12	11	12	11

Data quality

Health information system

The Solomon Islands has multiple mechanisms in place for the collection of data. The central mechanism for data storage and management is the District Health Information System (DHIS2) database, which was implemented in 2011. Since 2014, provincial-level health information officers have been able to enter data directly from the HIS Monthly Health Facility Reporting Form into DHIS2, except for Renbel. Data for Renbel has been entered into DHIS2 by the HIS Unit Officer at MHMS HQ. This is partly due to the fact that internet access has not been set up at the provincial health headquarter to allow the HIS Officer at Renbel to have complete access to DHIS2.

Several public health programs (including malaria, reproductive and child health, tuberculosis, health promotion (HP), community-based rehabilitation (CBR), RWASH and supply chain management) capture and analyse their own routine data. While data for reproductive and child health, RWASH, and HR are embedded into the new HIS monthly report form in 2018, datasets for other health programs, such as malaria and TB, have been integrated into DHIS2 separately. Other data collection systems that are yet to be integrated into DHIS2 either as separate datasets or through linkages via Application Program Interfaces (allows for automated data exchange between systems) include but are not limited to CBR, NCD – SolPEN, Eye Care, and Oral & Dental Health programs.

The National Referral Hospital also has its own information systems known as Daily Bed Statement and the Hospital Admission, Discharge and Transfer (ADT) system. The Daily Bed Statement system has been used to obtain monthly statistics on ADT summary, births, deaths, immunisation of new-born babies, and outpatient attendance at General OPD. This data is also shared with the Medical Statistics Unit and inputted into DHIS2 on a monthly basis. This has allowed computation and reporting of the three core indicators for the hospital – ALOS, BOR, and Average Weekly Discharge. In 2018 this reporting system was extended to Kilu'ufi and Gizo hospital.

The other information system that also exists and is partially functioning at the Medical Record Department of NRH is the Hospital ADT System. This system was meant to be developed to capture data on cause of admission to the hospital including key hospital indicators (ALOS, BOR, and Weekly discharged to name a few). Work on this new development started in 2015 with the initial support of the

ICTSU Department within the Ministry of Finance and Treasury. A significant amount of resources has been expended for this development, but to date, work is still incomplete to allow extraction of information for three of the core indicators for NRH. Despite that, the developer engaged to do the work has started working on the outpatient module of the system. Since there is no proper coordination and oversight on this development, it is not clear at this stage when the work will be completed and fully operational at the hospital level. For the Ministry of Health to have a better understanding on the current status of this development, it is critical that this work is assessed to better inform the decision for improving and/or strengthening inpatient information system.

The HIS Unit has also undergone revision of the monthly reporting of the health activities form to capture information for better monitoring of the NHSP 2015-2020, SDG, UHC, and other programmatic indicators. The Form has now been rolled out, and in 2018 it was used for monthly reporting of health activities from all health facilities in the country. While key indicators for many of the health programs are now captured on the new monthly report form, indicators for other health programs such as HP and Oral & Dental health are not included. The HIS unit is now working very closely with these two programs to ensure their key indicators are collected routinely and embedded in the DHIS2 platform.

While efforts have been made to improve system integration, further work is still required to improve data sharing and linkages between DHIS2 and other existing health systems as well as those outside of health such as Promadis (CRVS) maintained at Civil Registry, Ministry of Home Affairs.

Data sources

Of the 36 current indicators 24 were sourced from DHIS2. Other data sources include administrative records from other health programs such as mSupply, CBR, HP, and Mental health.

Where possible, other data sources have been consulted to populate these analytical reports, including:

- 2005/06 NCD STEPS Survey
- 2007 Demographic and Health Survey
- 2009 Census
- 2012 Health Facility Survey
- 2015 Health Facility Costing Study
- 2017 Tupaia Health Facility Survey
- Annual Report of Malaria Status in Solomon Islands 2016-2018

- Country studies
- Strategic plans (i.e. for malaria and TB)
- MHMS Annual Reports
- Draft Health Systems in Transition Report (WHO)

Data completeness

Data completeness for 24 indicators that were sourced from DHIS2 stands at 98% in 2018. This completeness is associated with the following indicators:

- Maternal Deaths ■ RHC without RN ■ ARI at Health Infant Mortality **Facilities** Rate ■ Under 5 Mortality Measles Rate Vaccination Contraceptive Malnourished Use Children Contraceptive Malaria Mortality Prevalence Rate Antenatal Care ■ Malaria Incidence
- Stock availability at PHCDiabetes at Health Facilities

Hypertension at

Health Facilities

Consultations

Unsupervised

Deliveries

Outpatient

- Water & Sanitation at HF
- n TB Case

 Notification Rate
 - ■TB treatment Success Rate
 - NRH, Weekly Discharges
 - NRH, Bed Occupancy Rate
- Nurse to Population NRH ALOS ratio

Data representativeness

Data used in this report has been inclusive of reports from FBO owned facilities as well as NRH. However, that may not rule out the fact that it is possible that some of the data contained in the core indicator report is subject to bias, due to underreporting as a result of events occurring outside of the health system. However, it is also worth mentioning that significant effort has been made to improve mortality reporting as well as reporting from NRH.

Data consistency

As with any small population (and for statistical purposes, the Solomon's can be considered 'small'), there is an issue of stochastic variation in the data. This is when variations in the data (such as a mortality rate increasing) are caused by random fluctuation and not actual changes in health care that lead to differences in mortality. Stochastic variation is especially problematic in small populations, and when dealing with rare events (such as maternal mortality). It is for this reason that comparing single-year data must be done with caution. It is oftentimes helpful to aggregate data over several years and to calculate moving averages. This helps to reduce the random fluctuations (up and down trends) seen in the data.

Data adjustments

For some indicators, discrepancies between DHIS2 and data from previous years published in the equivalent reports has been uncovered in the process of the creation of this year's report. Most likely, data entry after report completion in previous years is the reason for this. These discrepancies are not significant but important to mention and, under the assumption that DHIS2 provides the most upto-date data, update the values in this report accordingly. Therefore, some historical indicator data differs from previous reports. One such example is the annual parasite incidence rate malaria.

Population data

The HIS unit recently received revised population estimates for Solomon Islands and its provinces. At this point in time, the population data in DHIS2 has not yet been updated completely. Therefore, the majority of indicators are based on the previous population estimations, with the exception of children immunized against measles and acute respiratory infection in children. Those two indicators already use the revised population estimations.