HEALTH INFORMATION BULLETIN

"HARVEST THE WELLNESS WITHIN YOU"

WELLNESS FIJI

Using Health Information for Measuring and Improving Health Outcomes

MINISTRY of HEALTH & MEDICAL SERVICES

Shaping Fiji's Health

Strategic Pillar 1: Preventive, curative, and rehabilitative health services

1. Non-communicable diseases, including nutrition, mental health and injuries
2. Maternal, infant, child and adolescent health
3. Communicable diseases, environmental health and health emergency preparedness, response and resilience

Strategic Pillar 2: Health systems strengthening

4. Expanded primary health care, with an emphasis on providing a continuum of care and improved quality and safety
5. Productive, motivated health workforce with a focus on patient rights and customer satisfaction
6. Evidence-based policy, planning, implementation and assessment
7. Medicinal products, equipment and infrastructure
8. Sustainable financing of the health system

Diagram note: the canoe represents the MoHMS initiative to promote health and wellness in the Fiji population

Message from the Director Health Information, Research and Analysis (DHIRA)

"Sound and reliable information is the foundation of decision-making across all health system building blocks, and is essential for health system policy development and implementation, governance and regulation, health research, human resources development, health education and training, service delivery and financing." (WHO)

The availability of health information is critical in allowing us to ask, and to answer, the right questions about health care in Fiji. It is for this reason that Health Information Unit produces the quarterly bulletins which reflect the health care performance from the data received from various health facilities across the country.

This information is inclusive of health information systems such as Public Health and Information Systems (PHIS), Patient Information Systems (PATISPlus), Non communicable diseases data, Hospital Admission and Discharge data, Communicable diseases data and Mortality statistics and other providers of health statistics.

The health information unit collects data on the 15th of the following month of the end of quarter from the health sector and other relevant sectors, analyses the data and ensures their overall quality, relevance and timeliness, and converts data into information for health-related decision-making. This rich dataset needs to be disseminated and communicated to all the health facilities and private doctors and practitioners for measuring and improving health outcomes. It also paves the way for use of reliable information as evidence for monitoring and evaluation that leads to effective and efficient planning, policy formulation, preventative interventions and clinical improvements.

It is vital that the data providers take note of the recommendations and compliance issues in order to contribute and obtain quality information that will have a better statistical analysis for improved decision making at various levels of the health system. The selection of current indicators in this report is based on available information and importance to various sections requirements.

We are susceptible to new ideas and improvements on this revised structure and look forward towards hearing more from the users on the use of health information for measuring and improving health outcomes. As you would note sections 5 (Human Resources) and 8 (Financing) are not part of the bulletin due to its separate feedback mechanisms.

I would like to thank all involved in the process for their diligent and consistent effort in ensuring this bulletin is made available to us.

Mr Shivnay Naidu
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Ministry of Health and Medical Services
Suva, Fiji.

Acknowledgement

The Health Information Unit would like to acknowledge the data contributors and providers from all the Divisional hospitals, the Sub divisional hospitals, health centers and nursing stations from in Fiji.

There are various key persons whose technical and analytical contribution are acknowledged in the collating, analyzing and producing relevant data for measuring and improving health outcomes.

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- Ms N.Nisha – Data Entry [Mortality]
- Ms L. Marama – Data Entry [Mortality]

Abbreviations

CD	Communicable Disease
CMRIS	Consolidated Monthly Return Information System
CYP	Couple Years Protection
DM	Diabetes
HIU	Health Information Unit
HTN	Hypertension
MCH	Maternal Child Health
MR	Measles-Rubella [vaccine]
NIMS	National Iron and Micronutrient Supplement
NCD	Non-Communicable Disease
OPV	Oral polio vaccine
PATIS	Patient Information System
PHIS	Public Health Information System
PNC	Postnatal clinic
RHD	Rheumatic heart disease
SNAP	Smoking, Nutrition, Alcohol and Physical activities
SIC	Sister-In-Charge
TT	Tetanus Toxoid
VCCT	Voluntary counseling and confidential testing
VIA	Visual inspection using ascetic acid

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Glossary of Key Terms

The following glossary provides definitions of key terms used in the context of this bulletin.

Antepartum still births	A stillbirth where the baby died before the onset of labour ($\geq$ 28 weeks gestation or, in absence of a reliable gestational age, those with a birth weight of $\geq$ 1000G).
Caesarean section	Carried out when a normal vaginal birth could put the mother or the unborn baby at risk.
Crude death rate	The total number of deaths occurring among the population of a given geographical area during a given year per 1000 population.
Fetal deaths	Baby expelled from the mother's body at $\geq$ 22 weeks gestation, but before 28 weeks gestation that shows no signs of life. (In the absence of a reliable gestational age, includes those with a birth weight between 500-999g).
Intrapartum stillbirths	A stillbirth where the baby died after the onset of labour or during delivery ($\geq$28 weeks gestation or, in absence of a reliable gestational age, those with a birth weight of $\geq$ 1000g).
Premature mortality	Deaths that occur before a person reaches an expected age, for instance, age 75
Perinatal mortality	The "number of stillbirths and deaths in the first week of life per 1,000 live births, the **perinatal** period commences at 22 completed weeks (154 days) of gestation and ends seven completed days after birth
Still births	A baby born with no sign of life at or after 28 weeks gestation.
Under 5 mortality	Number of deaths occurring in a given population of under-five children during a specified time period.

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Section 1: Non Communicable Diseases [NCD], including Nutrition, Mental Health and Injuries

1.1 Cancer

Female Cancer Sites	Incidence Rate (per 100,000 population)	
	2015 IR (n)	2014 IR (n)
Breast, NOS	8.7(37)	4.9 (21)
Cervix, uteri	4.2(18)	5.6(24)
Unknown primary site	2.8(12)	0.0(0)
Ovary	2.3(10)	0.0(0)
Head, face or neck, NOS	1.6(7)	0.0(0)
Endometrium	0.0(0)	4.9(9)
Lung	0.0(0)	2.1(6)
Stomach	0.0(0)	1.4(5)
Rectum	0.0(0)	1.2(5)

Source: Pathology report, MCDC
*Incidence Formula: Number of new cases by cancer sites/(Total # of Females-Number of new cancer cases by sites)*100,000*

More than 20 million new cases of cancer are predicted worldwide in 2025, with four fifths of the burden falling on low- and middle-income countries (LMICs). To understand the local cancer situation and tackle the increasing incidence, there is a pressing need for planners to have relevant and unbiased data on the cancer burden in their communities.

(WHO,IACR, 2014). The above table shows the Incidence rate for the top 5 female cancer sites. Breast cancer was noted to be high in Q4, 2015 when compared to the same period last year. This is also similar to Q3 of 2015 where breast cancers were reportedly the leading cause of female cancers for that period. Cervix uteri was the leading cause of female cancers in Q4, 2014, however, its ranking has dropped to second place this quarter. Unknown primary site is ranking amongst the top 5 as many cases are still diagnosed poorly and this reflects as a coding nuisance.

1.1.1 Incidence of Cancer Sites for Females by age-groups

Incidence of top 5 Female cancer sites by age groups Q4,2015]
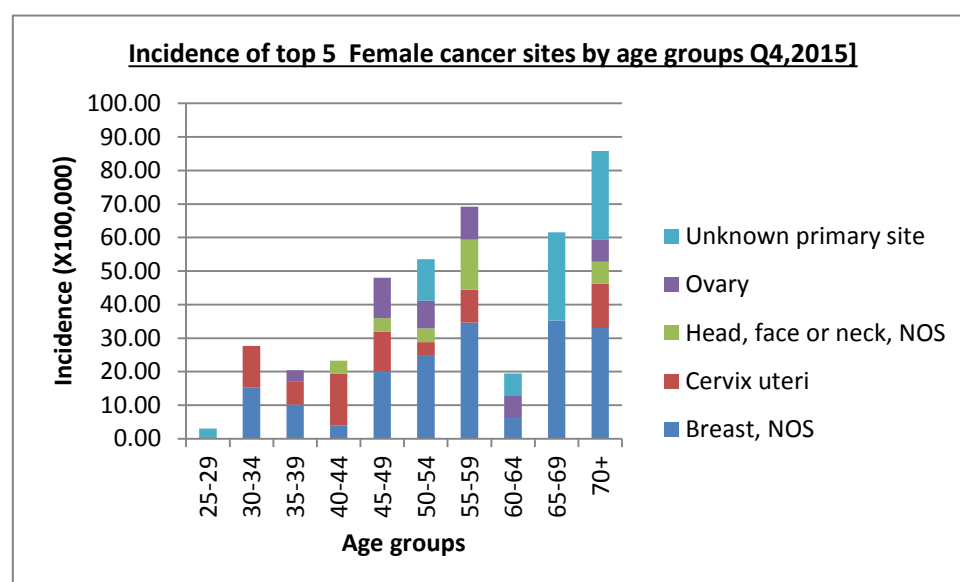
The above graph shows the incidence of cancer sites by age groups. It was noted that Breast cancer is common throughout the age groups 30-70+ years and had a higher incidence in the age groups 50-59 and 70+ years whereas cervical cancer was noted to have later onset between the 30-59 and 70+ age groups.

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1.1.2 Incidence of Cancer Sites for Females by ethnicity

Incidence of cancer sites for Females by Ethnicity [Q4,2015]
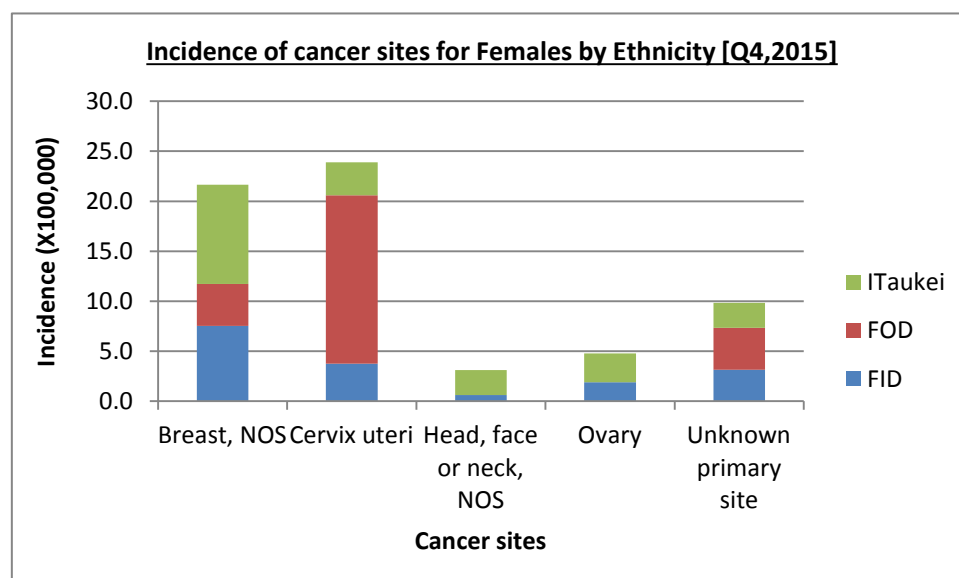
The above graph shows the incidence of cancer sites by ethnicity. In Q4, 2015 84 reports were received. The iTaukei was noted to have the highest frequency (n=51) followed by FIDs (n=27) and FODs (n=6). The iTaukei was noted to have the highest number of Breast cancer (n=24) followed by FIDs (n=24). It was also noted that most of the female cancer sites were dominant by the iTaukei followed by the FIDs and FODs

1.1.3 Male Cancer 2015 vs 2014

| Male Cancer Sites	Incidence Rate (per 100,000 population)	
	2015 IR (n)	2014 IR(n)
Unknown primary site	3.17(14)	0.0(0)
Liver and Prostate	1.59(7)	1.59(7)
Colon, NOS and Hodgkin lymphoma	1.13(5)	0.0(0)
Lung, NOS	0.91(4)	0.0(0)
Stomach, NOS	0.68(3)	1.37(6)
Brain, supratentorial, NOS	0.0(0)	1.14(5)
Rectum, Digestive organs, NOS, Polycythaemia vera	0.0(0)	0.91(4)
Esophagus, NOS, Colon, NOS	0.0(0)	0.68(3)
Source: Pathology report, MCDC *Incidence Formula:Number of new cases by cancer sites/(Total # of Males-Number of new cancer cases by sites)*100,000*		

In Q4 of 2015, a total of 74 cases were received compared to 91 cases of the same period last year. This result shows the inconsistency in submitting the reports to HIU during compilation. The above table shows the 5 leading cancer sites for Q4; 2015.The above table shows the incidence of the top 5 cancer sites Q4, 2015 vs. Q4, 2014. In Q4, 2015, the 3 leading sites for cancer amongst men are unknown primary site (n=14), Liver and Prostate (n=7) & Colon and Non Hodgkin lymphoma (n=5) when compared to the same period last year Liver and Prostate (n=7) followed by Stomach NOS (n=6) and Brain, supratentorial, NOS (n=5) were the three leading sites for male cancer.

1.1.4 Incidence of top 5 male cancer sites by age group [Q4, 2015]

Incidence of cancer sites for males by age-groups [Q4,2015]

Y-axis: Incidence (X100,000) — 0.0, 20.0, 40.0, 60.0, 80.0, 100.0, 120.0, 140.0

X-axis: Age groups — 20-24, 25-29, 30-34, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70+

Legend:
- Unknown primary site
- Stomach, NOS
- Lung, NOS
- Liver and Prostate gland
- Colon, NOS and Hodgkin lymphoma

Source: Pathology report, MCDC

The above graph shows the age groups of men with the top 5 cancer cases. It has been noted that unknown primary sites was reported with a higher frequency amongst the 70+ age groups when compared to the same period last year prostate and stomach cancers are common in the age groups 60-64 and 35-39. The cases of Liver and prostate were also common in the 70+age group followed by lung cancer in the age groups 45-64 years in Q4, 2015

1.1.5 Incidence of cancer sites for Males by Ethnicity, Quarter 4, 2015

Incidence of cancer sites for males by Ethnicity [Q4,2015]

Y-axis: Incidence (X100,000) — 0.0, 1.0, 2.0, 3.0, 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0

X-axis: Cancer sites — Colon, NOS and Hodgkinlymphoma; Liver and Prostate gland; Lung, NOS; Stomach, NOS; Unknown primary site

Legend:
- ITaukei
- FOD
- FID

Source: Pathology report, MCDC
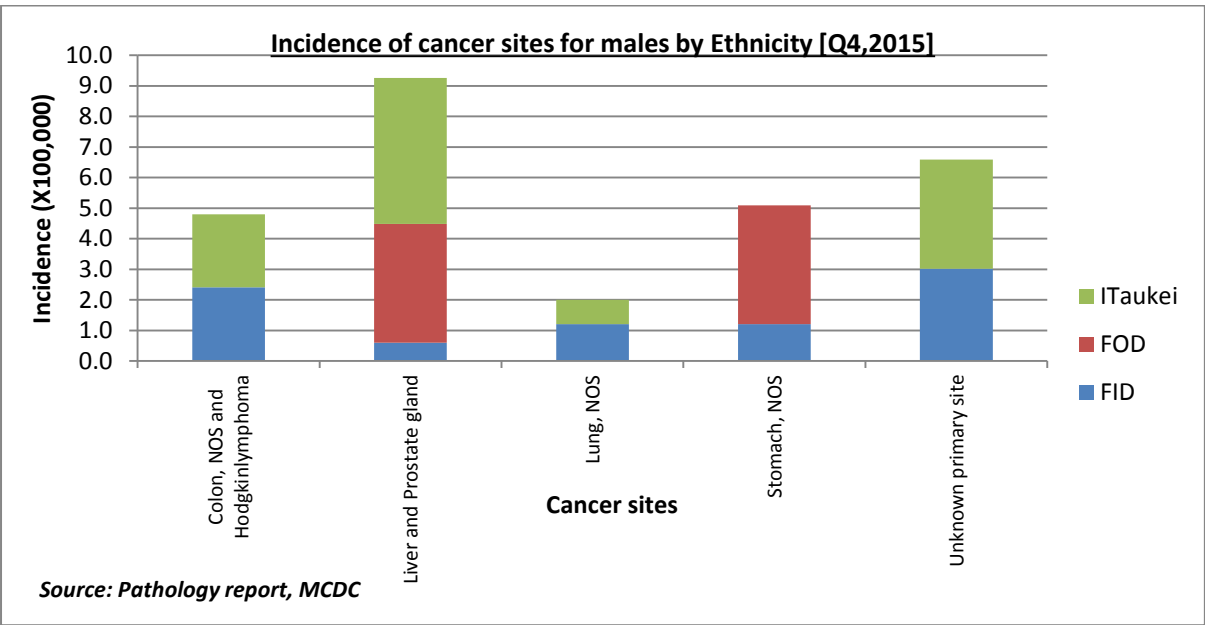
The above graph shows the incidence of cancer sites by ethnicity. In Q4,2015 45 reports were received. The iTaukei was noted to have the highest frequency (n=29) followed by FIDs (n=14) and FODs (n=2). The iTaukei was noted to have the highest number of Liver and Prostate gland (n=12) followed by unknown primary site (n=9). It was also noted that most of the male cancer sites were dominant by the iTaukei followed by the FIDs and FODs.

Cancer cases in Pediatric Population Quarter 4, 2015
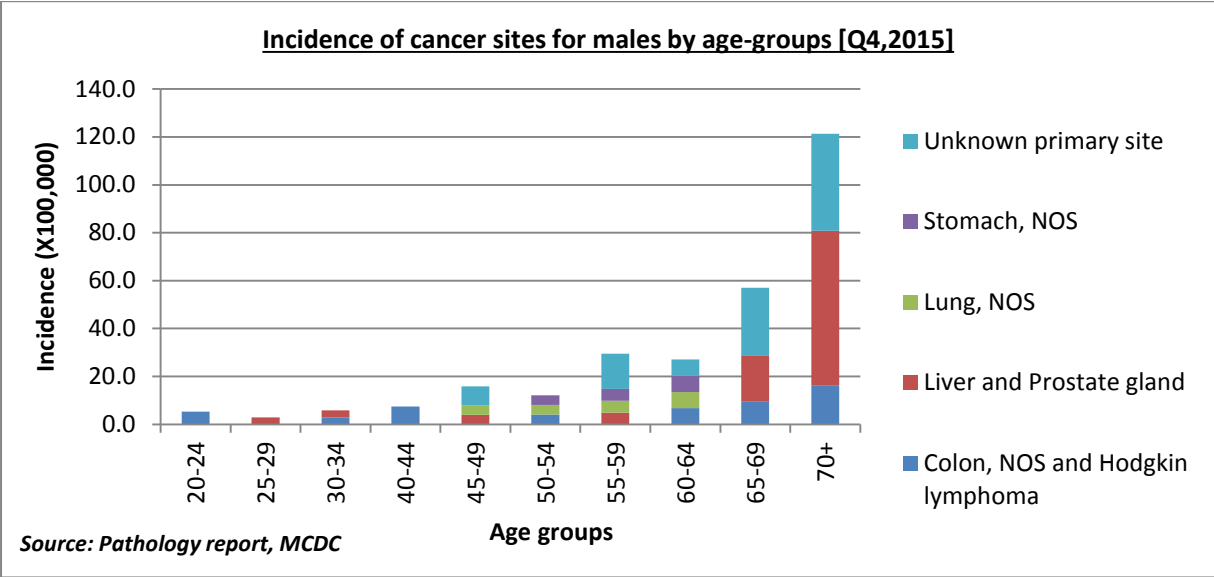
Incidence of Paediatrics by gender Q4,2015

Source: Pathology report, MCDC
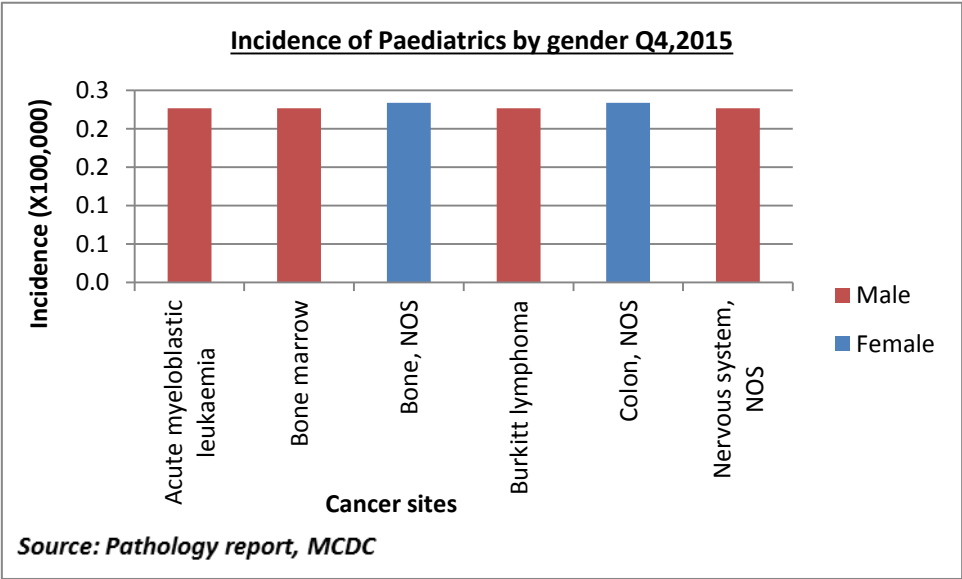
The graph summarizes the 6 Pediatric cancer cases that were reported in Q4, 2015 when compared to the same period last year there were 4 cases reported. It was noted that male had high frequency (n=4) when compared to females (n=2).

Incidence of Paedeatrics by age groups [Q4,2015]

Source: Pathology report, MCDC
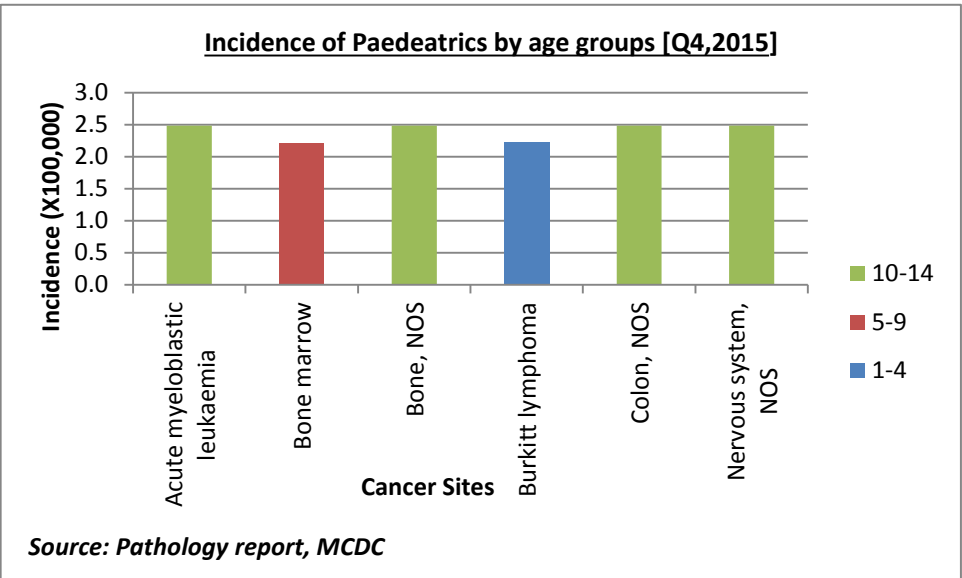
The graph shows the incidence of Pediatrics by age groups, it was noted that most cases for acute myeloblastic leukemia (n=1), Bone NOS (n=1), Colon NOS (n=1 & Nervous system NOS (n=1) were at the age of 10-14 years followed by cases for bone marrow (n= 1) for 5-9 years and Burkitt lymphoma (n=1) at the age of 1-4 years.

Incidence of Paediatrics by ethinicity Q4,2015

Source: Pathology report, MCDC
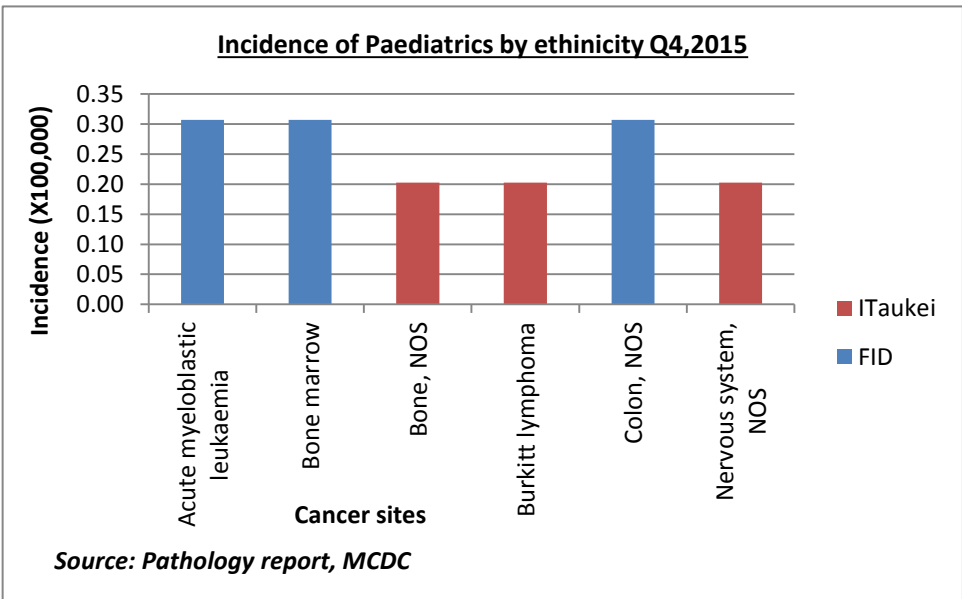
The graph shows incidence of Pediatrics by ethnicity. FID and I Taukei was noted to have the same frequency (n=3).

1.2 Diabetes

Diabetes is a chronic disease that occurs either when the pancreas does not produce enough insulin or when the body cannot effectively uses the insulin it produces. In 2012 diabetes was the direct cause of 1.5 million deaths. In 2014 the global prevalence of diabetes was estimated to be 9% among adults 18+ years. (IARC on Cancer, 1965)

Data for Diabetes are obtained from the Diabetes notification form received from the Public Health Facilities every week.

Diabetes forms received by facilities Q4,2015	
Facility	**Forms received N(%)**
Dreketi Health Centre	1 (1.20)
Lakeba Hospital	6(7.2)
Nadi Hospital	49(59)
Namaka Health Centre	1(1.20)
Natabua Health Centre	2(2.4)
National Diabetic Hub, Suva	13(15.6)
Navua Hospital	5(6.02)
Savusavu Hospital	6(7.2)
Grand Total	**83**
Source: Diabetes Notification Form	
Note: The denominator for calculating percentage is total Diabetes form received.	

The shows the incidence of DM for Q4, 2015. 83 DM notification was received compared to 123 reports in the same period last year. This figure is likely to be grossly underreported with only 8 out of 102 facilities submitting reports.

1.2.1 Age distribution by gender for new DM cases

Age distribution by gender for new DM Cases

Source: Diabetes Notificaiton Form
Note
1.*The denominator for calculating percentage is total Diabetes forms received.*
2. *A total of 83reported DM new cases were received;*
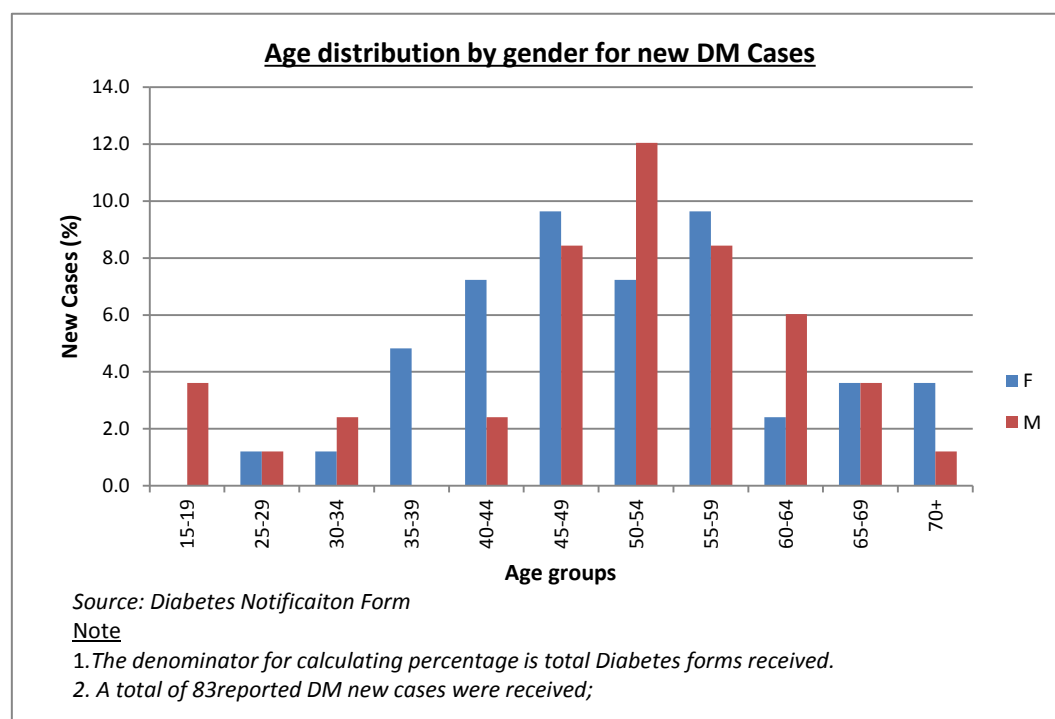
The graph below represents new diabetic cases between the age group of 15-70+ years by gender. It indicates that male contributed the highest number of diabetes patients in the age-group 50 – 54 in Q4, 2015. There is clear demonstration that out of the reported figures women contributed the highest frequency of DM cases. There is also a trend from previous reports where the at risk age groups for developing or detecting DM for women is around age group 35-49 years. Men for this quarter seemed to have earlier detection or earlier onset of disease (15-19 age groups). However these results are taken at a point and must be interpreted in this context.

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1.2.2 Fasting Blood Sugar by gender and ethnicity

Blood Sugar	Total	Percentage	Gender				Ethnicity					
RBS			F	%	M	%	FOD	%	iTaukei	%	FID	%
6-7	1	0.01	0	0.00	1	0.02	0	0.0	0	0.0	1	0.02
8-9	3	0.03	2	0.05	1	0.02	0	0.0	2	0.1	1	0.02
10-11	8	0.08	5	0.12	3	0.07	0	0.0	3	0.1	5	0.09
12-13	1	0.01	1	0.02	0	0.00	0	0.0	0	0.0	1	0.02
14-15	13	0.13	4	0.10	9	0.22	0	0.0	3	0.1	10	0.19
16-17	4	0.04	1	0.02	3	0.07	0	0.0	0	0.0	4	0.07
18-19	4	0.04	2	0.05	2	0.05	1	0.3	0	0.0	3	0.06
>20	17	0.17	7	0.17	10	0.24	2	0.7	7	0.3	8	0.15
Not answered	32	0.32	20	0.48	12	0.29	0	0.0	11	0.4	21	0.39

Percentage calculation;
1. **Formula:[number diagnosed/Total number of reports received*100]**
2. **Gender & Ethnicity: Total Number of Gender /Number per RBS level.**

source: DM Notification Form

The above table shows the total number of RBS level and its percentage, it also represents the gender and ethnicity proportion.   It was also noted that most of the RBS column was not answered from Nadi Hospital Please be advised that these fields are important to fill in which HIU reports on the incidence of DM in Fiji.

1.2.3 Proportion per division

Blood Sugar	Central		Eastern		Northern		Western	
RBS	Number	%	Number	%	Number	%	Number	%
6-7	1	0.06	0	0.0	0	0.0	0	0.000
9-10	0	0.00	2	0.3	1	0.1	3	0.058
11-12	1	0.06	1	0.2	1	0.1	3	0.058
13-14	1	0.06	1	0.2	0	0.0	3	0.058
15-16	3	0.17	0	0.0	0	0.0	7	0.135
17-18	2	0.11	0	0.0	0	0.0	2	0.038
19	2	0.11	0	0.0	0	0.0	1	0.019
>20	4	0.22	2	0.3	2	0.3	9	0.173
Not answered	5	0.28	0	0.0	3	0.4	24	0.462

Source: DM notification form
Formula: Total number by division/Number per RBS level

The above table indicates the reporting of the DM form by the 4 division. It was noted that the Western division recorded the highest reports received in Qtr. 4 of 2015, followed by the Central division, Northern and the Eastern division recorded the lowest. It was also noted that the Western Division did not filled the DM forms completely and were shown not answered and followed by the Central Division. *The total numbers of forms received were not used and only used the total number by division as the denominator and numerator as the number per RBS.*

1.3 Non Communicable Disease – PHIS Report

1.31 Screening and SNAP coverage

Percentage Screened and SNAP by Division, Quarter 4, 2015

Source: CMRIS Online [PHIS & Hospital], HIU, MOHMS.
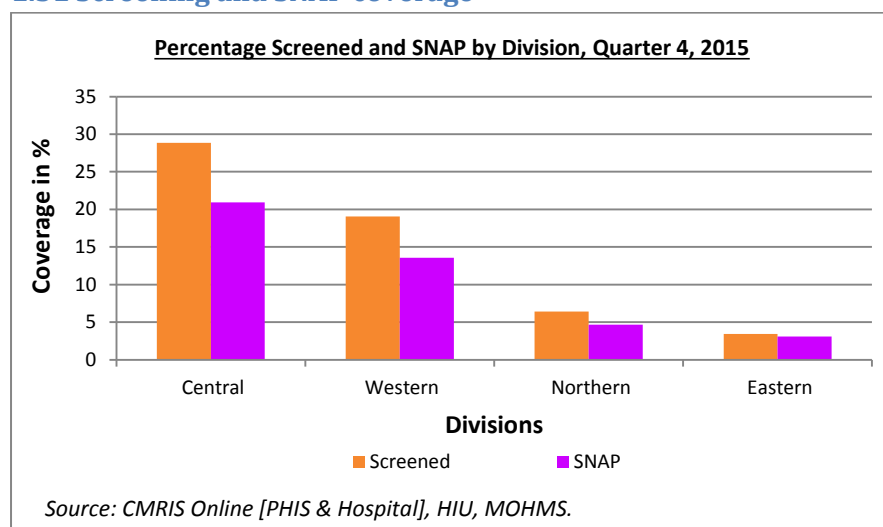
(Note: For calculating % screened (30+ age group) provided SNAP – the numerator is the number SNAP upon the number screened for each division by percentile (screened (n=15384) and SNAP (n=11273). Out of the totals that were screened, 73% received counseling regarding lifestyle activities, smoking, nutrition, alcohol and physical activities (SNAP). The largest number snapped was from the Central division (29%), followed by the Western division(19%), while the Eastern division(3%) had the lowest.

The results indicate that there were 26% gap in those screened and those who were provided counseling on SNAP which is concerning. The objective of any screening programme is to ensure early intervention for prevention. If those screened are not getting the correct advice on prevention than the screening programme will not achieve its ultimate outcome of reducing the burden of hypertension and diabetes in the population.

As per the PHIS counting rules the number screened should equal to or be more than the number SNAP. The ultimate goal is to have 100% screened and SNAP.

1.3.2 Incidence of Diabetes, Hypertension & Dual per 10,000 population

Incidence of Diabetes, Hypertension and Dual by Division, Quarter 4, 2015

Source: CMRIS Online[PHIS]
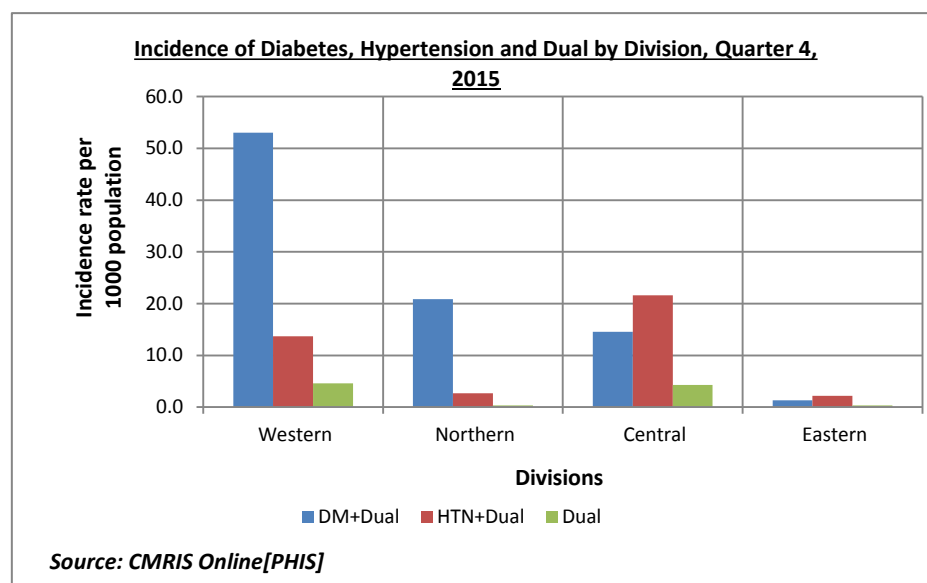
(Note: The numerator is the number of DM, HTN & Dual cases (both new cases <30 and 30+).The denominator used was the total number screened (n=15384)).

The Western Division reported the highest incidence of Diabetes & Dual cases while the Central Division reported the highest incidence of Hypertension.

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1.4 National Iron and Micronutrient Supplement (NIMS)

1.4.1 NIMS tabular report by division

Division	NIMS (n)					
	6mnths - 1 yrs	1 - 2 yrs	2 - 3 yrs	3 - 4 yrs	4 - 5 yrs	CBA
Central	1	83	39	31	30	0
Eastern	0	0	0	0	0	54
Northern	0	16	5	1	7	2
Western	0	14	4	7	4	105
Total	1	113	48	39	41	161
Source: CMRIS Online [PHIS]						

NIMS were most frequently distributed in the Central Division, followed by the Northern Division and the Western Division while the Eastern Division reported the lowest distribution. Similar trends were observed for the same period last year.

It has been observed that the NIMS data and CBA has been under reported. The completeness of reporting relies heavily upon the release of statistics captured by the Dieticians. The non-availability of the components for NIMS may also result in low reported figures.

All NIMS dosages should be recorded by dieticians and provided to the Zone Nurses. These figures should then be submitted to the Sister in Charge to ensure that the information is captured in the PHIS forms and sent to the Sub-Divisional Health Sister as a compiled report.

Section 2: Maternal, Infant, Child and Adolescent Health

2.1 Births

The Outcome of Pregnancy, Mode of deliveries and other maternity relevant information [Hospital only] are covered in this section. The Birth report for the Central Division is not fully captured for this quarter due to the pending reports yet to be received at HIU from CWMH. The reporting of this section commenced this year.

This evidence is an imperative for comprehensive measuring of health outcomes of delivery; resource allocation; improvement and development of birthing units for better health care; and service planning.

2.1.1 Outcomes of Pregnancy [Hospital birth]

Division	Live Births	Intrapartum Stillbirths	Antepartum Still Births	Total Number Of Stillbirths	Total Births	Fetal Death
Central	247(1.1)	0(0)	0(0)	0(0)	247(1.1)	1(0.1)
Eastern	22(0.1)	0(0)	0(0)	0(0)	22(0.1)	0(0)
Northern	497(2.3)	0(0)	3(0.01)	3(0.0)	500(2.3)	1(0.1)
Western	1177(5.4)	6(0.03)	9(0.04)	15(0.1)	1192(5.5)	7(0.8)
Total	1943(8.9)	6(0.03)	12(0.1)	18(0.1)	1961(9.0)	9(1.0)
note: number of births (rates per 100,000 CBA population)						
Source: CMRIS Online [Hospital MCH]						

Note: 2015 FBOS population (n= 217490) was used as denominator to calculate the rates per 1000 population. The Reporting format is number (rate). The Outcome of Pregnancy section captures information about live births (of any gestation), still births ≥28 weeks (intrapartum and antepartum) and foetal losses from 22 – 27 weeks gestation age.

The rates are significantly low because the denominator used is the national FBOS CBA Population instead of the CBA Population by division. The Western Division reported the highest number of live births followed by the Central and Northern Division, while the Eastern Division reported the least.

The Western Division reported the highest number of Stillbirths (n=15); whereby majority of the cases were reported from Lautoka Divisional Hospital (n=11) followed by Ba Mission Hospital (n=1), Nadi Hospital (n=1), Sigatoka District Hospital (n=1) and Tavua Hospital (n=1). The Northern Division reported 3 Stillbirths that occurred in the Labasa Divisional Hospital. While the Central and the Eastern Division reported nil cases.

The Western Division also reported the highest fetal deaths (n=7); most of the cases were reported from the Nadi Sub Hospital (n=4) followed by the Sigatoka District Hospital (n=2) and Lautoka Divisional Hospital (n=1). The Northern Division also reported 1 fetal death that occurred in Labasa Divisional Hospital. The Central Division also reported 1 fetal death that occurred at the Nausori Maternity Unit, while the Eastern Division reported nil cases.

2.1.2 Mode of Delivery [Hospital delivery only]

Division	Normal Vaginal Delivery n(%)	Breech n(%)	Emergency Caesarean Section n(%)	Elective Caesarean Section n(%)	Ventouse n(%)	Forceps n(%)	Other n(%)	Total Number Of Deliveries (n)	Total Number Of Emergency Sections n(%)	Total Number 0f Elective Sections n(%)
Central	247(99.6)	0(0)	0(0)	0(0)	0(0)	1(0.4)	0(0)	248	0(0)	0(0)
Eastern	22(100)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	22	0(0)	0(0)
Northern	404(77.5)	5(1.0)	81(15.5)	26(5.0)	4(0.8)	1(0.4)	0(0)	521	81(32.7)	26(10.5)
Western	1022(86.8)	9(0.8)	103(8.8)	28(2.4)	10(0.8)	5(2.0)	0(0)	1177	104(41.9)	28(11.3)
Total	1695(86.1)	14(0.7)	184(9.3)	54(2.7)	14(0.7)	7(2.8)	0(0)	1968	185(74.6)	54(21.8)
Source: CMRIS Online [Hospital MCH]										

Note: the total number of deliveries was used as a denominator to calculate the mode of deliveries by percentage.the reporting format is number (percent). The mode of Delivery section captures service delivery information at hospital level including live births of any gestation and stillbirths (≥28 weeks gestation) only.

Normal vaginal delivery and emergency caesarean section were the most common modes of delivery reported at the hospitals followed by the Forceps and Breech procedures. A caesarean section is usually carried out when a normal vaginal birth could put the mother or the unborn baby at risk.

The Western Division reported the highest number of normal vaginal deliveries followed by the highest number of emergency caesarean section and also the highest number of elective caesarean section

The Northern Division reported the second highest number of normal vaginal deliveries followed by the second highest number of emergency caesarean section and also the second highest number of elective caesarean section. In the Northern Division, majority of the normal vaginal deliveries were reported from the Labasa Divisional Hospital (n=294) followed by Savusavu Hospital (n=63) and Waiyevo Hospital (n=29) while the Nabouwalu Sub-divisional Hospital (n=18) reported the least cases. It was noted that all of the emergency caesarean section, elective caesarean section, forceps and breech occurred mainly in the Labasa Divisional Hospital.

The Central Division reported the third highest number of normal vaginal deliveries in which majority of the cases were reported from the Nausori Maternity Unit (n=167) followed by Navua Hospital (n=40), Korovou Hospital (n=27) and Vunidawa Hospital (n=13). There were nil cases of emergency caesarean section and elective caesarean reported from the Central Division.

The Eastern Division reported the least numbers of normal vaginal deliveries in which whereby majority of the cases were reported from the Levuka Hospital (n=14) followed by the Vunisea Hospital (n=5), Lakeba Hospital (n=2) and Lomaloma Hospital (n=1).

There are usually low numbers of caesarean sections reported at Sub-divisional Hospitals, unless there are surgical deliveries performed by a Medical Team from the Divisional hospitals. It is assumed that due to the limitation of resources and the safe motherhood programme/policy most of the cases from the Eastern Division are referred to major Divisional Hospitals.

There was no data available to compare with the same period last year as the reporting of this section began this year.

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2.1.3 Others – Births Section [Hospital only]

Division	Unbooked Mothers Who Delivered n(%) *	Babies Born Before Arrival n(%) **	Mothers Under 15Years Old n(%) *	Mothers Aged 15-19Years n(%) *	Live Born Low Birth Weight n(%)	Intrapartum Transfers n(%) *
Central	8(3.2)	7(2.8)	1(0)	14(5.6)	5(2.0)	36(14.5)
Eastern	1(4.5)	1(5)	0(0)	0(0)	2(9.1)	1(4.5)
Northern	6(1.2)	7(1)	0(0)	22(4.2)	33(6.6)	8(1.5)
Western	11(0.9)	12(1)	1(0.1)	94(8.0)	91(7.7)	146(12.4)
Total	26(1.3)	27(1)	2(0.1)	130(6.6)	131(6.7)	191(9.7)
Source: CMRIS Online [Hospital MCH]						

The table above records information on Other maternity related indicators and intrapartum transfers. It captures miscellaneous data for live births of any gestation and stillbirths (≥28 weeks gestation).

The Western Division recorded the highest in all the categories followed by the Central and the Northern Division while the Eastern Division recorded the lowest .This is mainly due to most of the cases are referred from Sub-divisional level and below health facilities to major Divisional Hospitals to ensure safe motherhood practices as limited resources are available to cater for this need.

In the Western Division, majority of the Unbooked Mothers Who Delivered were reported from the Lautoka Divisional Hospital (n=3), Ba Mission Hospital (n=2), Nadi Hospital   (n=2), Sigatoka District Hospital (n=2), Rakiraki Hospital   (n=1) and Tavua Hospital (n=1); while in the Central Division, majority of the Unbooked Mothers Who Delivered were reported from the Nausori Maternity (n=5), Korovou Hospital (n=2) and Navua Hospital (n=1); in the Northern Division, majority of the Unbooked Mothers Who Delivered were reported from the Labasa Divisional Hospital (n=5) and the Waiyevo Hospital (n=1); and in the Eastern Division, only 1 case was reported from the Levuka Hospital.

Note:

*Total number of deliveries for the reporting period by each division was used as the denomination to calculate the percentage of Unbooked Mothers Who Delivered, Mothers Under 15 Years Old, Mothers Aged 15-19 Years and Intrapartum Transfers.

**Total number of live births for the reporting period by division was used as the denominatior to calculate the percentage of Babies Born Before Arrival and Live Born Low Birth Weight.

2.2 Antenatal Clinic

This section covers both Hospital and Medical Area Maternal Health Status. The Antenatal report for the Central Division is not fully captured for this quarter due to the pending reports from CWMH.

2.2.1 Normal and At Risk Pregnancy Table

Division	Normal Pregnancy (NP) + At Risk Pregnancy (ARP) n(proportion)	NP n(proportion)	ARP n(proportion)
Central	4954(0.26)	2022(0.24)	2932(0.28)
Eastern	818(0.04)	469(0.06)	349(0.03)
Northern	3678(0.20)	1841(0.22)	1837(0.18)
Western	9327(0.50)	3995(0.48)	5332(0.51)
Total	**18777**	**8327**	**10450**

Source: CMRIS Online [Hospital MCH & PHIS]

There were a total of 18777 attendances at antenatal clinics in the 4thquarter of 2015 which is 86% more than what was reported the same period last year (n=2636). This was because in the previous year the hospital data was not included in the reporting template. The majority of the maternal health visits were from the Western Division followed by the Central and the Northern Division, while the Eastern Division reported the lowest. When compared to the same period last year the Northern Division reported the highest number of the maternal health visits followed by the Western and the Eastern Division, while the Central Division reported the lowest as reports from CWMH is pending.[Note: the reporting format is in number (proportion)]. The proportion was calculated using the number of attendances for each division as numerator and the total pregnancies (total of Normal Pregnancy (NP) + At Risk Pregnancy (ARP) as the denominator.

2.2.2 At Risk Pregnancy Conditions

Risk Factor/ Complications in pregnancy	% of women at risk during pregnancy n[relative prevalance]
Anaemia	1952[10.4]
Diabetes	1585 [8.4]
VDRL	770 [4.1]
Hep B	369 [2.0]
Cardiac	319 [1.7]
Prev Caesar	262 [1.4]
Elderly Primp	255 [1.4]
Obstruct Labour	159[0.8]
Hyper tension	89 [0.5]
Obesity	80 [0.4]
Under Weight	17 [0.1]

Source: CMRIS Online [Hospital MCH & PHIS] including CWM Report

The table shows the reported relative prevalence of various risk conditions for women attending ANC clinics. The largest contributor of complications was Anemia followed by Diabetes and VDRL.

The relative prevalence was calculated using each condition upon the total number of Normal Pregnancy (NP) + At Risk Pregnancy (ARP)) by percentage.

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2.3 Postnatal Care

2.3.1 PNC and Family Planning Pap Smears

Papsmear per 1000 CBA population by Division for Quarter 4, 2015

Source: CMRIS Online [PHIS]
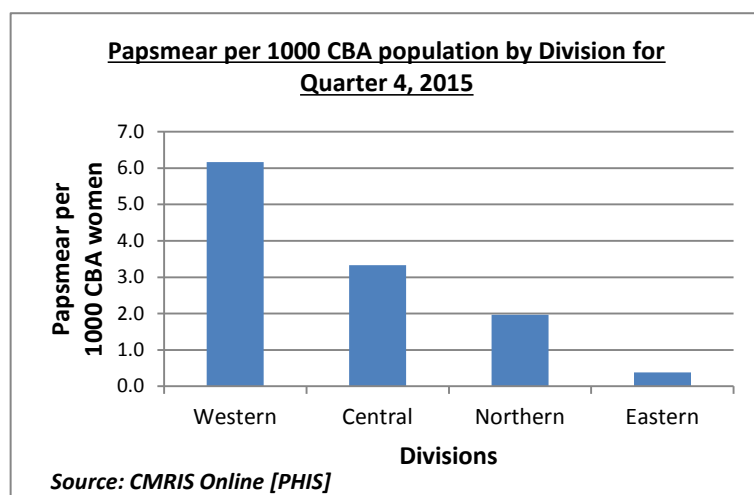
Note: the Papsmear data was gathered from the normal pregnancy, at risk pregnancy, postnatal and family planning tabular reports from medical area level and below & hospitals.

A total of 2576 pap smears were conducted in combined clinics. The Western Division reported the highest number of Pap smears conducted at their combined clinics followed by the Central Division while the Eastern Divisions recorded the lowest. When compared to the same period last year (n=1519) there was an increase of 26% in pap smears been conducted. This increase was due to the inclusion of pap smears conducted in the Hospitals.

2.4 Family Planning

2.4.1 Contraceptive Methods in Family Planning

Percentage - Dispersion of Contraceptive Methods by Divisions Quarter 4, 2015

Division	Oral Pills	IUCD	Depo Provera	Noristerat	Implants	Condoms Female	Condoms Male	Vasectomy	Tubal Ligation
Central	15.3	3.4	44.2	0.6	17.0	0.5	6.2	0.0	0.0
Eastern	20.5	4.8	72.3	4.7	55.4	0.0	4.3	0.0	0.0
Northern	10.2	0.8	34.5	2.4	9.3	0.2	9.7	0.3	0.7
Western	20.5	8.8	44.7	2.1	60.2	2.6	8.1	0.0	0.5
All	16.6	5.1	43.8	1.7	33.9	1.2	7.5	0.0	0.3
Source: CMRIS Online [Hospital MCH & PHIS]									

Note: The number of dispersion of Contraceptive Methods for each Division upon the number of CBA population n=217490 (FBOS, 2015) by % was used to calculate the dispersion of Contraceptive Methods

The above shows the percentage of contraceptives dispensed by different methods. Depo Provera, Implants and Oral pills were the most common contraceptive methods used for birth control followed by Condom Male, IUCD and Noristerat.

The three main contraceptive method distributed were Depo Provera, Implants and Oral Pills. The Western Division reported the highest dispersion of Implants (n=5092) and Oral Pills (n=1734) while the Central Division recorded the highest dispersion of Depo Provera (n=3799). Same trend were observed on the same period last year.

2.4.2 Family Planning Couple of Years Protection, Quarter 4, 2015

Division	Years Protection Dispensed for the quarter										
	ECP	Oral Pills	IUCD	Depo Provera	Noristerat	Implants	Female Condoms	Male Condoms	Vasectomy	Tubal Ligation	CYP Rate (per 100 Women)
Central	0.0	0.3	1.1	1.1	0.0	6.4	0.0	0.0	0.0	0.0	8.7
Eastern	0.0	0.4	1.6	1.8	0.1	21.0	0.0	0.0	0.0	0.0	16.2
Northern	0.0	0.2	0.3	0.9	0.0	3.5	0.0	0.1	0.3	0.7	6.8
Western	0.0	0.4	2.9	1.1	0.0	22.9	0.0	0.1	0.0	0.5	14.7
Total	0.0	0.3	1.7	1.1	0.0	12.9	0.0	0.1	0.0	0.3	11.0
Source: CMRIS Online[Hospital MCH & PHIS]											

This table above shows the Years of Protection for each of the contraceptive methods being dispensed by division and at national level. It is the standard international indicator for measuring the effectiveness of family planning program.

The highest CYP was demonstrated in the Eastern Division followed by the Western Division while the Northern Division reported the lowest.

It was noted, the highest years of protection dispensed were Noristerat followed by ECP, Tubal Ligation, IUCD, Vasectomy, Oral Pills, Implants and Depo Provera.

2.5 Immunization

2.5 Immunization by Division & Vaccines

Division	HepB0	BCG0	DPTHep BHib1	OPV1	Penumoccal 1	Rotavirus1	DPTHep BHib2	OPV2	Penumoccal 2	DPTHep BHib3	OPV3	Penumoccal 3	Rotavirus2	MR1	OPV4
Central	186	186	1,777	1,768	1,775	1,777	1,849	1,842	1,849	1,958	1,954	1,959	1,961	1,410	1290
Eastern	20	20	123	122	123	125	164	163	163	195	193	196	197	159	187
Northern	382	383	539	539	539	539	670	669	669	693	691	692	695	524	556
Western	338	569	1,380	1,380	1,381	1,378	1,533	1,533	1,533	1,506	1,507	1,506	1,502	1,200	1209
Total	926	1158	3819	3809	3818	3819	4216	4207	4214	4352	4345	4353	4355	3293	3242
% per 100 births	18.3	22.9	75.4	75.2	75.4	75.4	83.3	83.1	83.2	86.0	85.8	86.0	86.0	65.1	64.0
Source: CMRIS Online [Hospital MCH & PHIS]															

The above table includes public health facilities data gathered from Hospitals (Divisional and Sub-divisional) and PHIS (Medical area level and below) on vaccines given for immunization.

The coverage of MR1 was 65.1%. *The coverage was calculated using the number of vaccine given by each division as numerator and the quarterly prorata of 2014 live births (20249) figure as the denominator by percentage.* When compared to the same period last year, there was a decrease of 4.1% in the MR1 coverage (69.2%) [Note: the quarterly prorate of 2013 live births (20970) was used as denominator].

The low coverage in the Births Immunization which was HepB0 and BCG0 was due to the pending reports from CWM and also assumption is that babies that are yet to be immunized received immunization on the following month which falls on the 24hrs grace period.

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2.6 MCH/ IMCI

2.6.1 IMCI Birth to 2 months
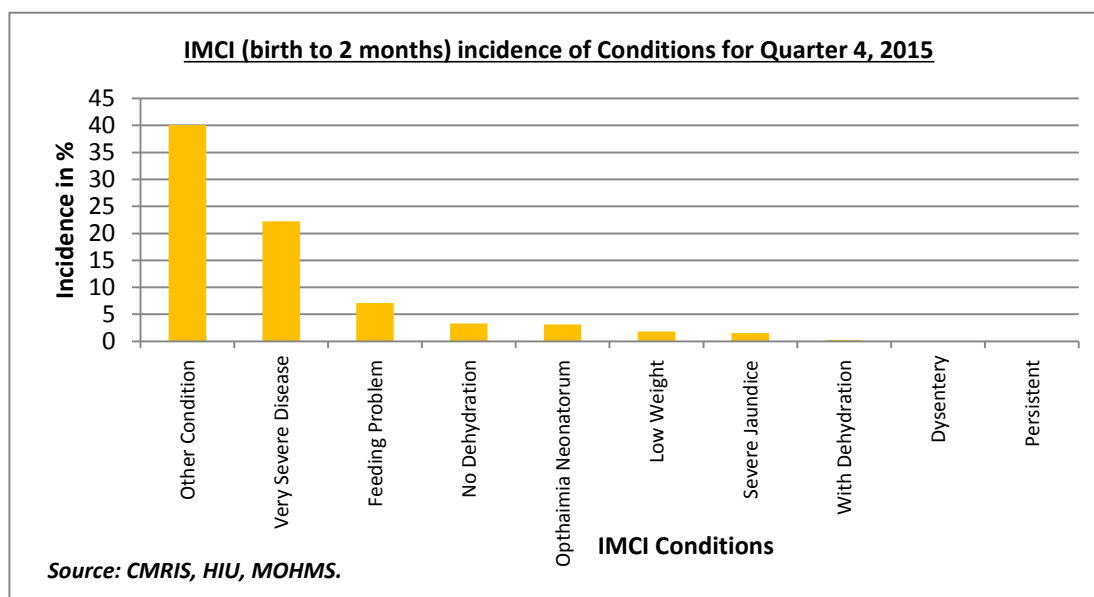
IMCI (birth to 2 months) incidence of Conditions for Quarter 4, 2015

Source: CMRIS, HIU, MOHMS.

[[*Note: The relative incidence was calculated using the number of each IMCI (birth to 2months) condition as numerator and the number seen (n=676) was used as the denominator.*

This graph represents the incidence of IMCI conditions (%) of children from birth to 2months attending IMCI clinic at various health facilities in our country. It was noted that the top 5 ranked IMCI conditions among the birth to 2months children were: other conditions *(Not Otherwise Specified – exclusive of multiple conditions being captured but not indicated),* very severe disease, feeding problem, no dehydration and ophthalmia neonatorum.
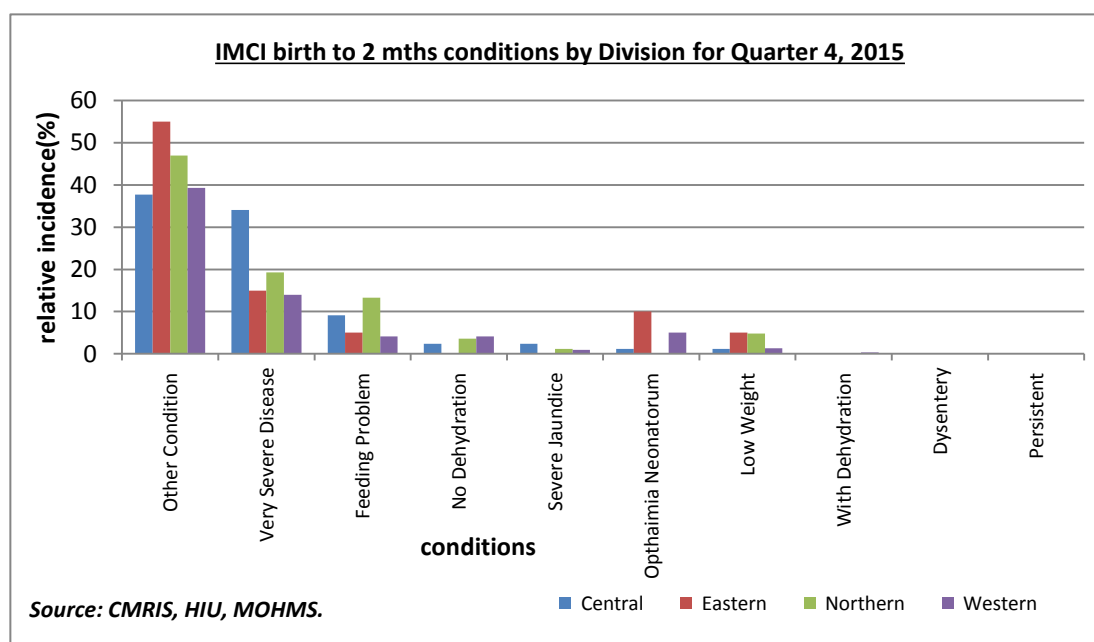
IMCI birth to 2 mths conditions by Division for Quarter 4, 2015

Source: CMRIS, HIU, MOHMS.

■ Central ■ Eastern ■ Northern ■ Western

[*Note: The relative incidence was calculated using the number of each IMCI (birth to 2months) condition as numerator and the number seen was used as the denominator]*

The Western Division (n=321) reported the highest IMCI number seen with majority of the cases being reported from the Lautoka/ Yasawa SD (n=84), Ba SD (n=84) and Nadi SD (n=73) respectively.

The Central Division (n=252) reported the second highest IMCI numbers seen, wheremost of the cases were reported from the Suva SD (n=127), followed by Rewa SD (n=56) and CWM Divisional Hospital (n=44) respectively.

The Northern Division (n=83) reported the third highest IMCI numbers seen in which majority of the cases were reported from the Macuata SD (n=32) and Taveuni SD (n=14) while the Eastern Division (n= 20) reported the least number of IMCI cases seen withthe majority of the cases were reported from the Lomaiviti SD (n=12) and Kadavu SD (n=7).

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2.6.2 IMCI 2 months - 5 years

IMCI (2months to 5 years) incidence of conditions for Quarter 4, 2015

Source: CMRIS, HIU, MOHMS.

[Note: The incidence was calculated using the number of each IMCI (2months to 5year) condition as numerator and the number seen (n= 38763) was used as the denominator]

This graph represents the incidence of IMCI conditions (%) of children from 2months to 5years attending IMCI clinic at various health facilities in our country. It was noted that the top 5 ranked IMCI conditions among the 2months to 5years children were: Pneumonia followed by all other respiratory conditions, fever rash, scabies and impetigo.

IMCI 2 mths to 5 yrs conditions by Division for Quarter 4, 2015

Source: CMRIS, HIU, MOHMS.
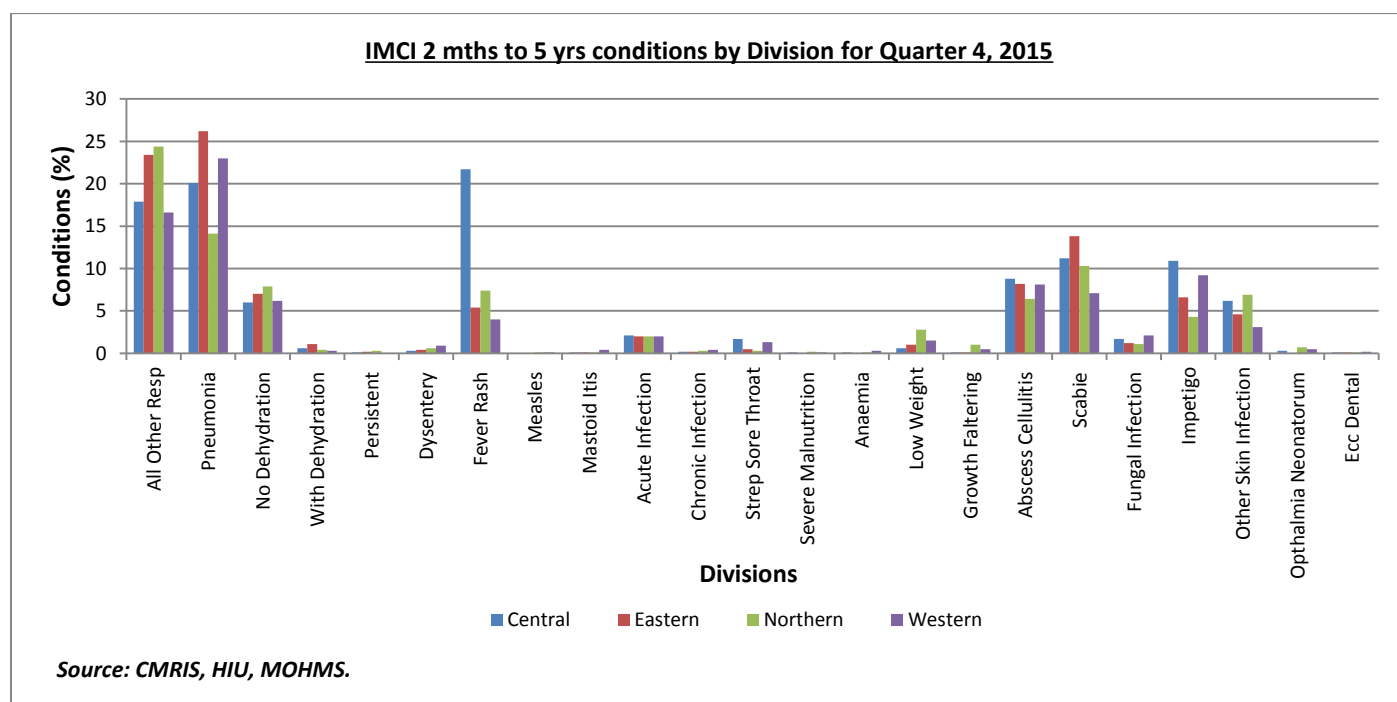
[Note: The relative incidence was calculated using the number of each IMCI (2months – 5years) condition as numerator and the number seen was used as the denominator]
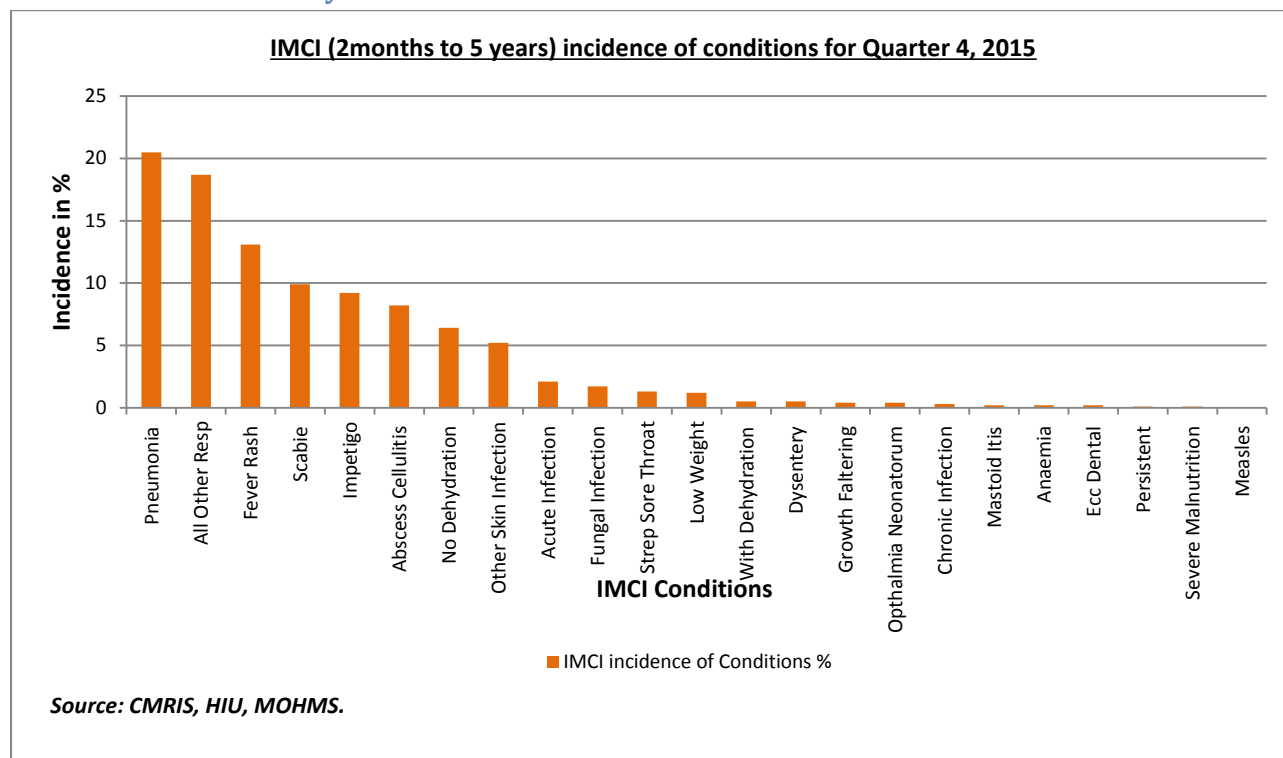
The Central Division (n= 18731) reported the highest IMCI numbers seen with whereby majority of the cases were reported from the Suva SD (n= 9669), followed by Rewa SD (n= 5434), Tailevu SD (n=1114), CWM Divisional Hospital (n=888), Naitasiri SD (n=860) and Serua/Namosi SD (n= 766) respectively.

The Western Division (n= 12623) reported the second highest IMCI number seen with majority of the cases being reported from the Nadi SD (n= 4731), Ba SD (n= 2254), Nadroga/Navosa n= 1477, Lautoka/ Yasawa SD (n= 1460), Ra SD (n= 1340), Tavua SD (n= 1134) and Lautoka Divisional Hospital (n=227) respectively.

The Northern Division (n= 5526) reported the third highest IMCI numbers seen in which majority of the cases were reported from the Cakaudrove SD (n= 2043), Macuata SD (n= 1175), Bua SD (n=997), Taveuni SD (n= 689) and Labasa Divisional Hospital (n=622). while the Eastern Division (n= 1883) reported the least number of IMCI cases seen with the majority of the cases were reported from the Lomaiviti SD (n= 847), Kadavu SD (n= 527), Lakeba SD (n= 342) and Lomloma SD (n=153).

There is a need for public health interventions around the top 5 ranked conditions.

2.7 School Health Report

This report is captured from the PHIS School Health Summary Report from each sub-division.

2.7.1 Number of Schools Visited & School Size

Division	# of Schools visited	Total number of schools	School coverage visited (%)	Total Roll for the year	Total # Seen	Coverage seen (%)	# Not Consented
Central	22	213	10.3	54465	2753	5.1	74
Eastern	15	117	12.8	8032	770	9.6	0
Northern	44	175	25.1	23849	0	0.0	0
Western	15	238	6.3	48150	104	0.2	0
Total	96	743	12.9	134496	3627	2.7	74

Source: CMRIS Online [PHIS]

The tables above shows 12.9% of the total number of schools were visited during the reporting period which gives an indication that more schools were visited on the first half of the year. The total roll out for the school visited were 134496 of which only 2.7% of the children were seen, 0.4% were missed due to absentee and 0.1% were not given consented for vaccinated.

 Approximately 0.5 proportions of the schools in the Northern Division were visited followed by the Central Division (0.2), Western Division (0.2) and the Eastern recorded.

2.7.2 Conditions for Children Seen

Health Information Bulletin 4th Quarter, 2015 – Using Health Information for Measuring and Improving Health Outcome
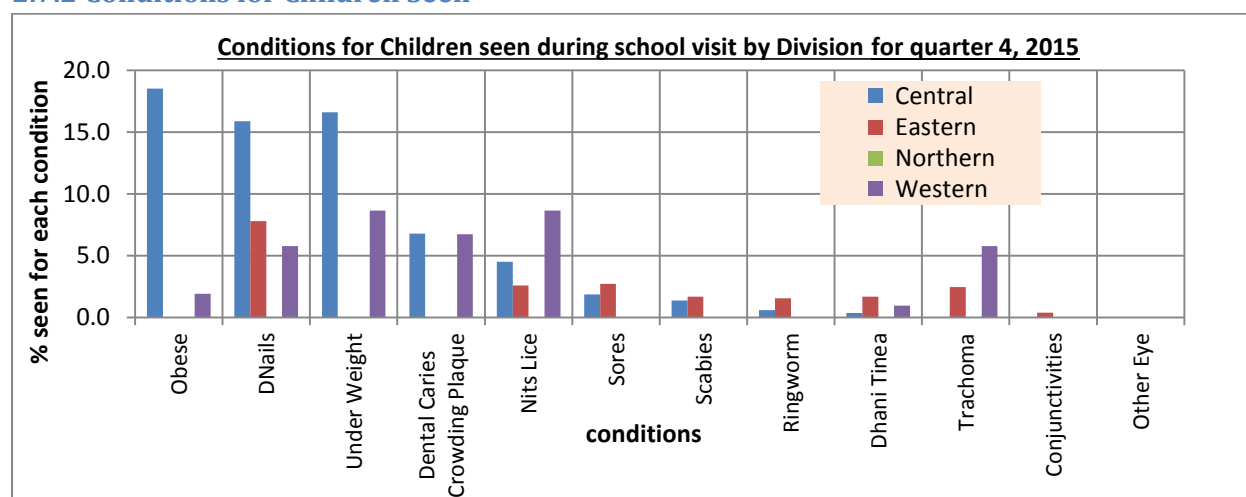
Majority of the children were seen with: obesity (14.1%) followed by, Dirty Nails (13.9%), Underweight (12.8%), Dental Caries, crowding plaque (5.3%) and nits lice (4.2%).

The Central Division reported the highest percentage of children seen with obesity (14.1%), dirty nails (15.9%), underweight (16.6%) and dental caries (6.8%) while the Western Division reported the highest percentage of children seen with nits & lice (8.7%).

The Northern Division was not captured on this graph as they focus on class 8 girls who are due for HPV 3 Immunization.

2.7.3 School Immunization Coverage

School Immunization (MR2 & TT) % Coverage

School Immunization (MR2 & TT) % Coverage - Quater 4, 2015
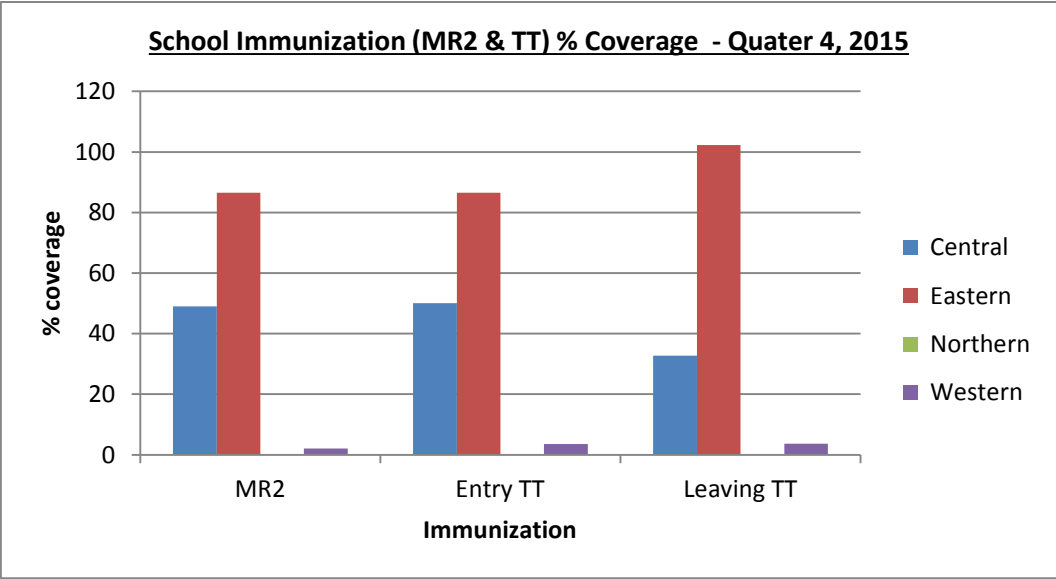
The above graph represents the Immunization coverage for MR2 & TT given to new enrolment students in class 1 & school leavers for class 6. The estimated coverage of MR2 was 20%, new entry for TT (21%) and leaving TT was 15%.

The Eastern Division recorded the highest coverage of school children immunized

with MR2, Entry TT and Leaving TT followed by the Central division and Western recorded the lowest. None was reported in the Northern Division as they focus more on class 8 girls who are due for HPV 3 Immunization.

HPV Immunization % Coverage by Division

HPV Immunization % Coverage by Division for Quarter 4, 2015

Source: CMRIS Online [School]
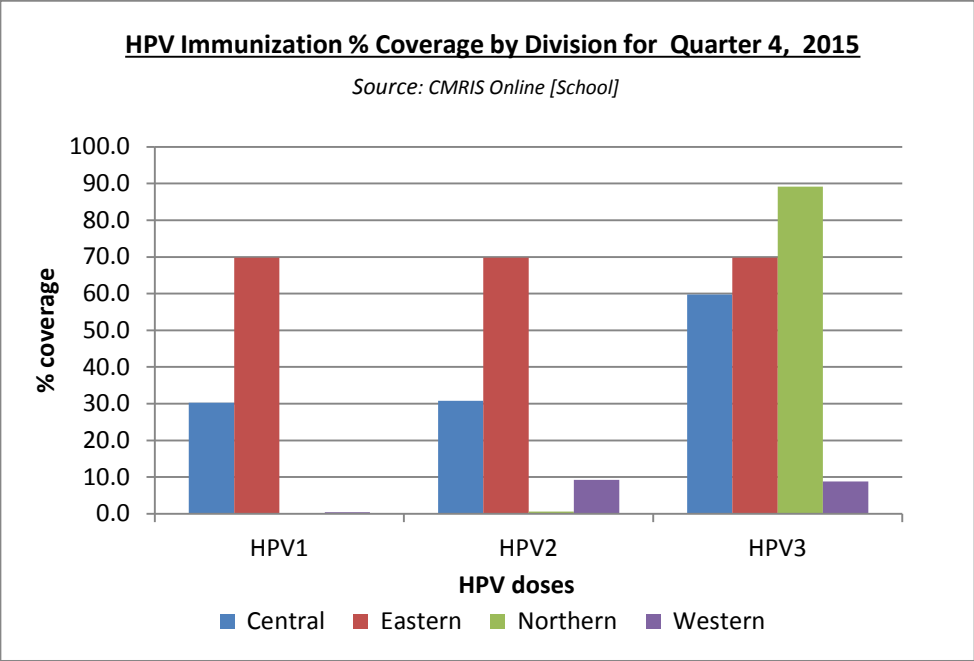
This graph shows the HPV Immunization coverage in percentage by division. The HPV vaccines are given to female students in Class 8 for cervical cancer prevention. In this period, there was a decrease in the HPV3 (n=1370; 17%) coverage by 9 % when compared to same period last year(n=2042;26%). The HPV3 (17%) recorded the highest coverage of girls immunized than HPV2 (10%) and HPV1 (9%).

Section 3 – Communicable Diseases [CD]

The Notifiable Diseases analyses have been compiled from the Notifiable Disease Certificates received from 97 sites out of all public health facilities, 101 private health facilities and 2 private labs nationally. This report has been compiled from 91% data from 4th quarter 2015 (public health facilities only).

3.1 National Notifiable Disease Surveillance System
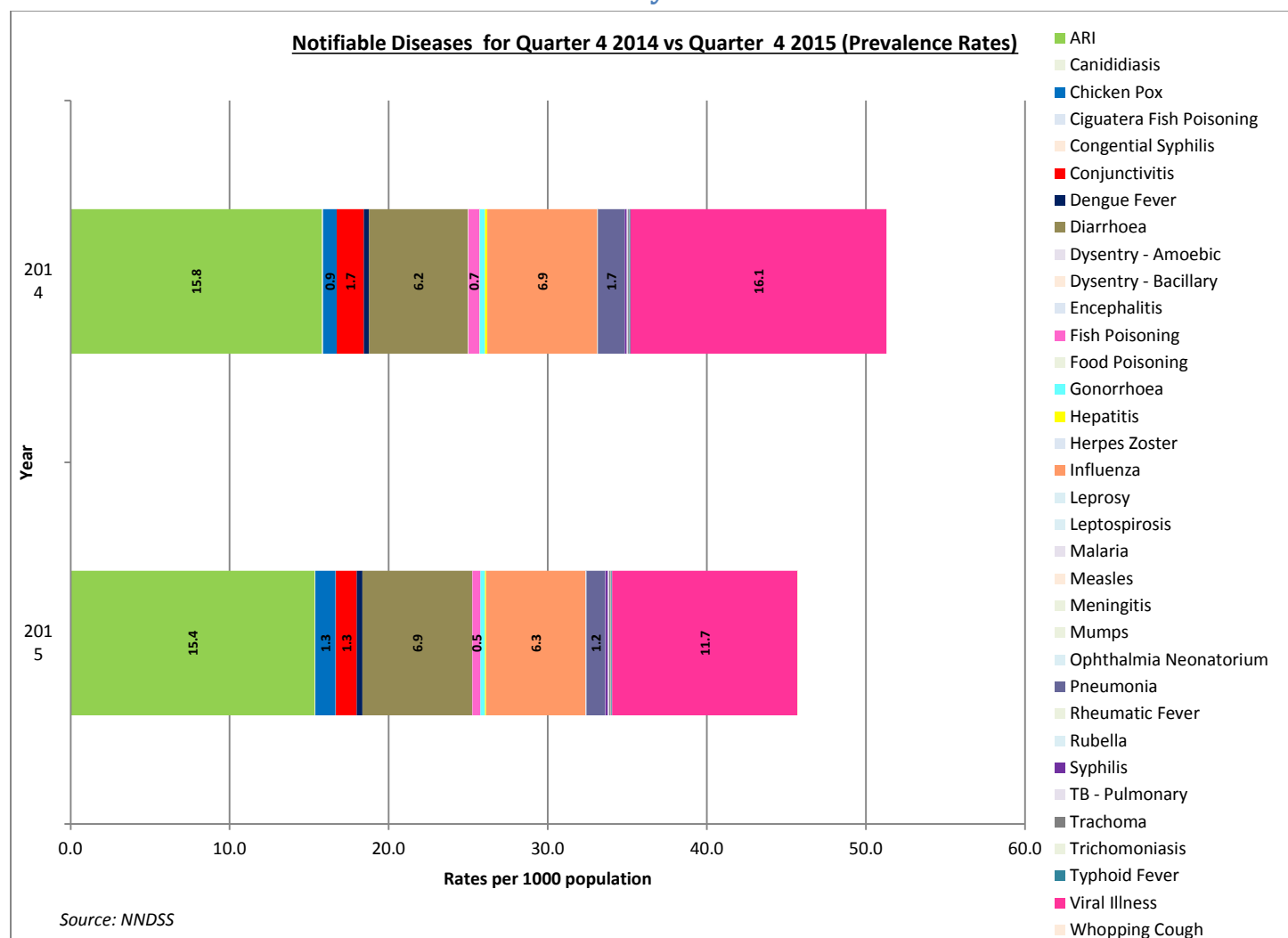
Source: NNDSS

The incidence rates were calculated using 2015 projections from FBOS (868532) and reported as per 1,000 populations. The predominance of ARI, Viral Illness, Diarrhoea and Influenza is noted in both 2014 and 2015. The GPs reports are also included. Generally, reporting was higher in 2014 compared to 2015; this is because many of the reports are yet to be received. There may be some discrepancies as all lab based data are not reported and private sector data is still largely incomplete.

There is an obvious time lag noted for this reporting period as a result of pending submissions. Time lags affect analysis and comprehensiveness of reports markedly. On average there was only 91% reporting for this period from the Divisions which makes surveillance for infectious diseases difficult as sensitivity of the system reduces with reduction of complete and timely reports.

3.1.1 Top Ten Notifiable Diseases for Quarter 4 2014 vs Quarter 4 2015
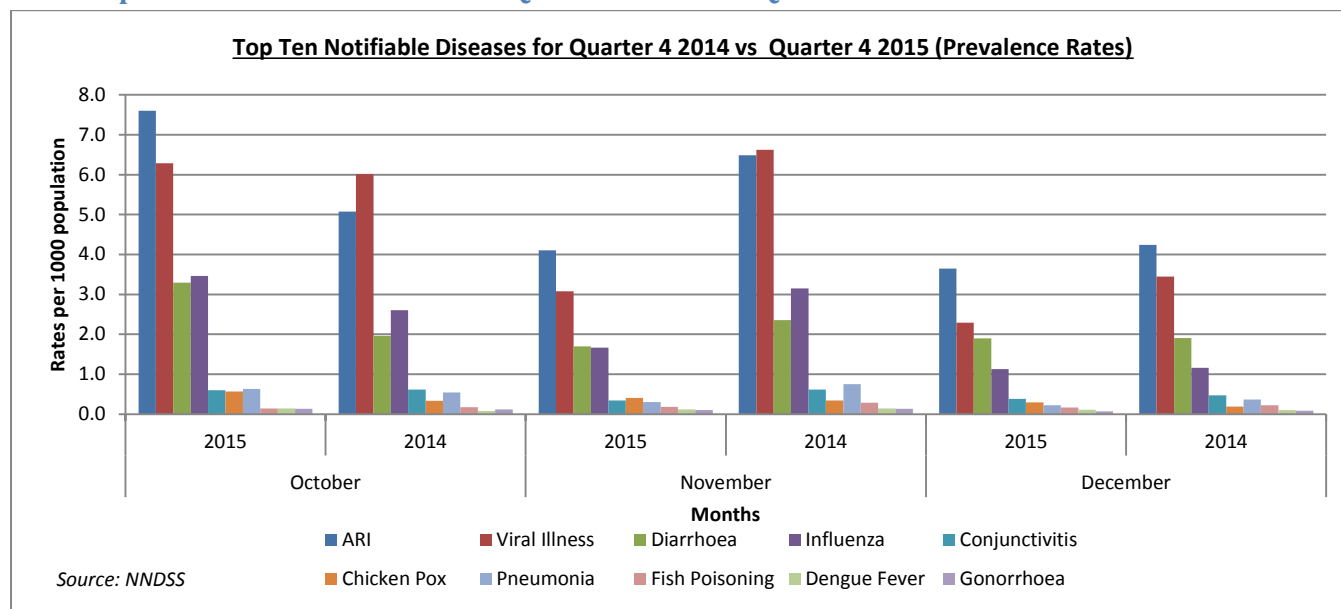
Top Ten Notifiable Diseases for Quarter 4 2014 vs Quarter 4 2015 (Prevalence Rates)

Source: NNDSS

Legend: ARI, Viral Illness, Diarrhoea, Influenza, Conjunctivitis, Chicken Pox, Pneumonia, Fish Poisoning, Dengue Fever, Gonorrhoea

The incidence rates were calculated using 2015 projections from FBOS (868532) and reported as per 1,000 populations. Over both the years, a predominance of diseases with viral origins was noted, such as ARI, Viral Illness and Diarrhoea.

Chicken Pox is the 6th leading cause of diseases for 2015 (n=1094) and 2014 (n=745) signaling a clear need for early public health response.

Dengue Fever was reported 315 cases in 2015, 277 cases in 2014 signaling for public health interventions for these areas to reduce risks of outbreaks.

3.1.2 LTD Diseases
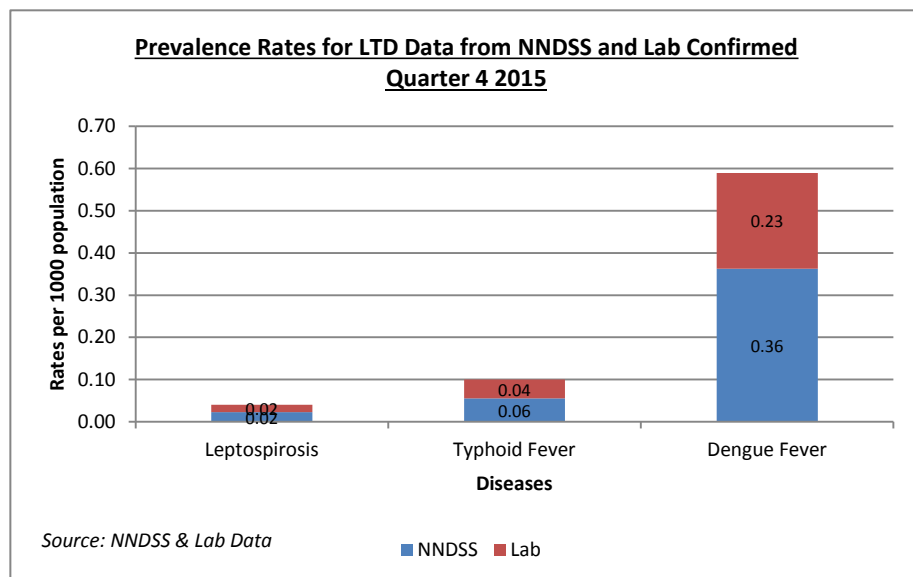
Prevalence Rates for LTD Data from NNDSS and Lab Confirmed Quarter 4 2015

Source: NNDSS & Lab Data

Legend: NNDSS, Lab

The incidence rates were calculated using 2015 projections from FBOS (868532) and reported as per 1000 population. The data sources are NNDSS and Laboratory data from FCCDC.

There is a higher case load of Dengue Fever from the NNDSS (n=315) compared to laboratory confirmed data (n= 197); this is due to clinically suspected cases being reported in NNDSS. The Laboratory confirmed cases of Typhoid fever are 39 and NNDSS noted 48 cases. There were 20 cases of Leptospirosis reported from NNDSS whereas 15 cases were from Laboratory data.

All reporting officers are reminded to report all Notifiable cases through the mechanism of the NNDSS.

3.1.3 Top Ten Diseases by Gender

Top Ten Diseases by Gender Quarter 4 2015
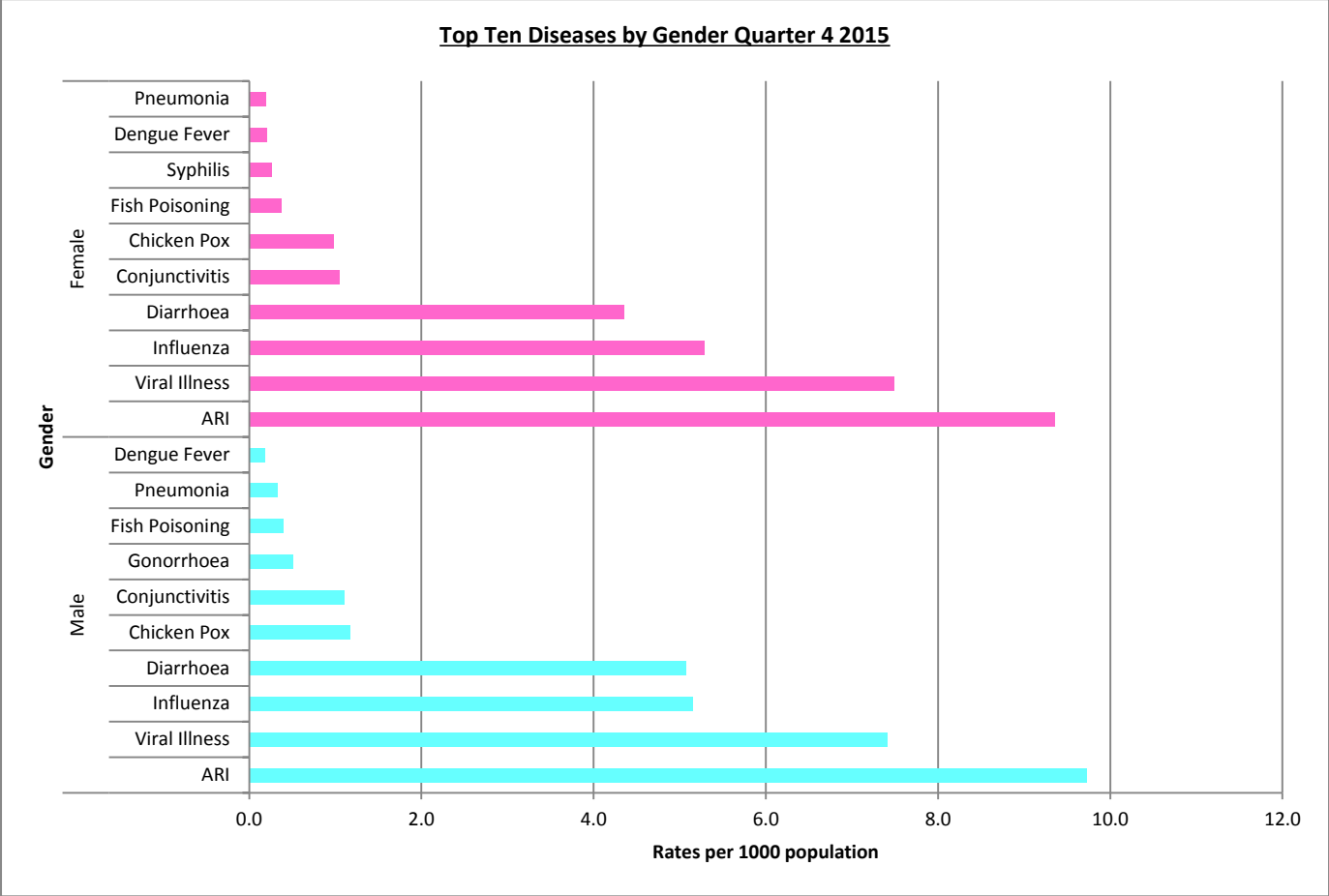
The incidence rates were calculated using 2015 population projections from FBOS (Male 441129 and Female 427402) and reported as per 1,000 populations. There is conformity to the national trend for male but in different rank order. There is agreement in the top nine cases in female Gender but in different rank order. The 10th leading condition for female is Syphilis instead of Gonorrhea. This could be due to the ability to screen women at ANC for Syphilis and the ability of men to present earlier due to symptom presentation for Gonorrhoea.

The cases of unknown gender made up 33% (n= 12853) in 4th quarter 2015. It is important for those reporting Notifiable diseases to specify gender, ethnicity and age. The current percentage demonstrates that those reporting on NNDSS are still unresponsive to the request to clearly state gender, ethnicity and age.

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3.1.4 Top Ten Diseases by Ethnicity

Top Ten Diseases by Ethnicity Quarter 4 2015

Source: NNDSS
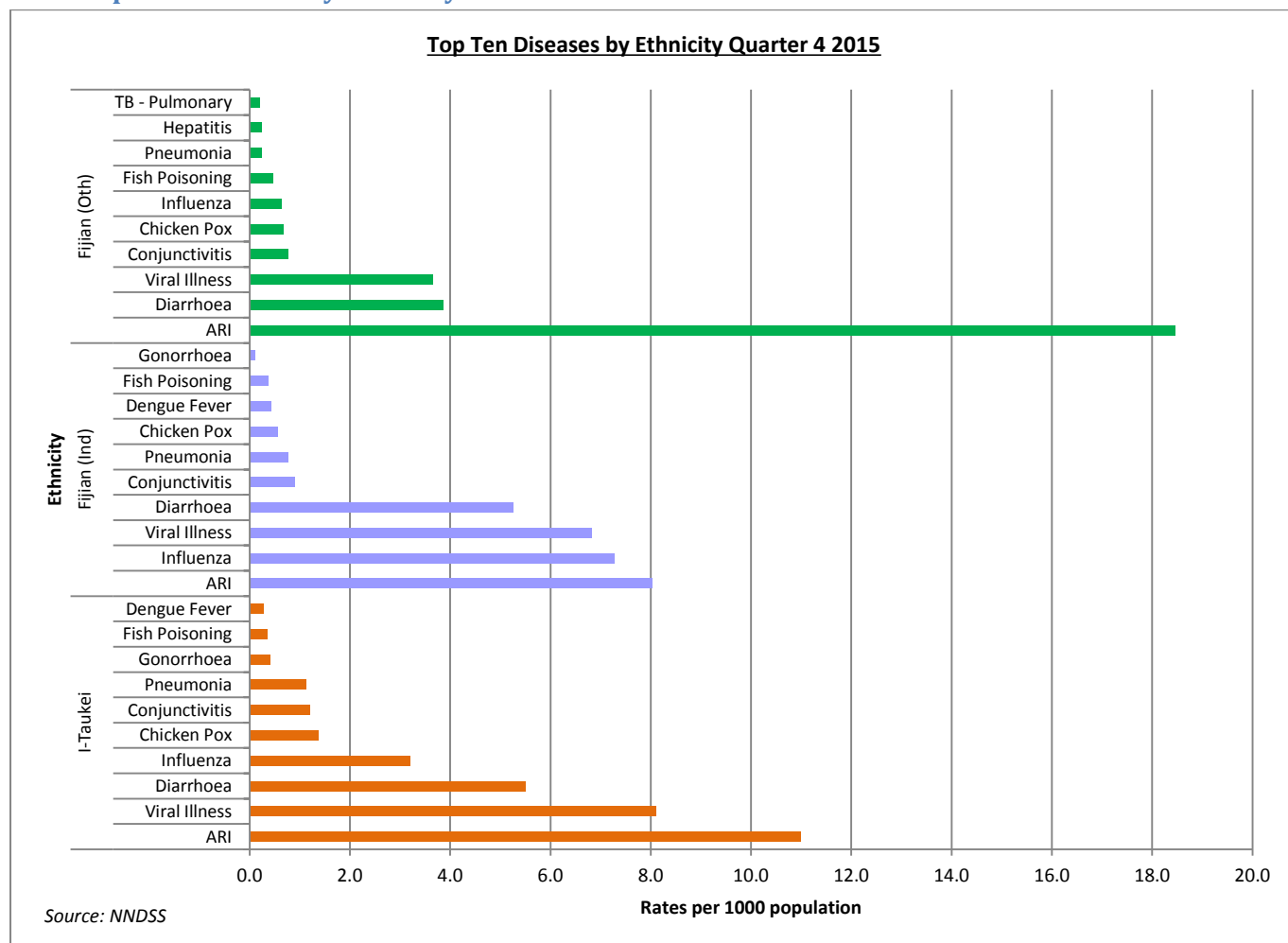
The incidence rates were calculated using MoHMS 2014 population (I-Taukei 536483, Fijian (Ind) 355299 and Fijian (Others) 41242) and reported as per 1,000 populations**.** 25% (n= 9662) of cases were unclassified by ethnicity in 4th quarter 2015. It is important to categorize each reportable disease according to ethnicity, age, gender, and locality.

I-Taukei and Fijians of Indian category simulate the national dataset but in different rank order. The Fijians of other category simulates the top eight conditions of the national dataset differing in rank order; the 9th & 10th leading conditions for this category are Hepatitis and TB.

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3.1.5 Top Ten Diseases for Central Division

Top Ten Diseases for Central Division by Subdivisions 4th Quarter 2015

Source: NNDSS
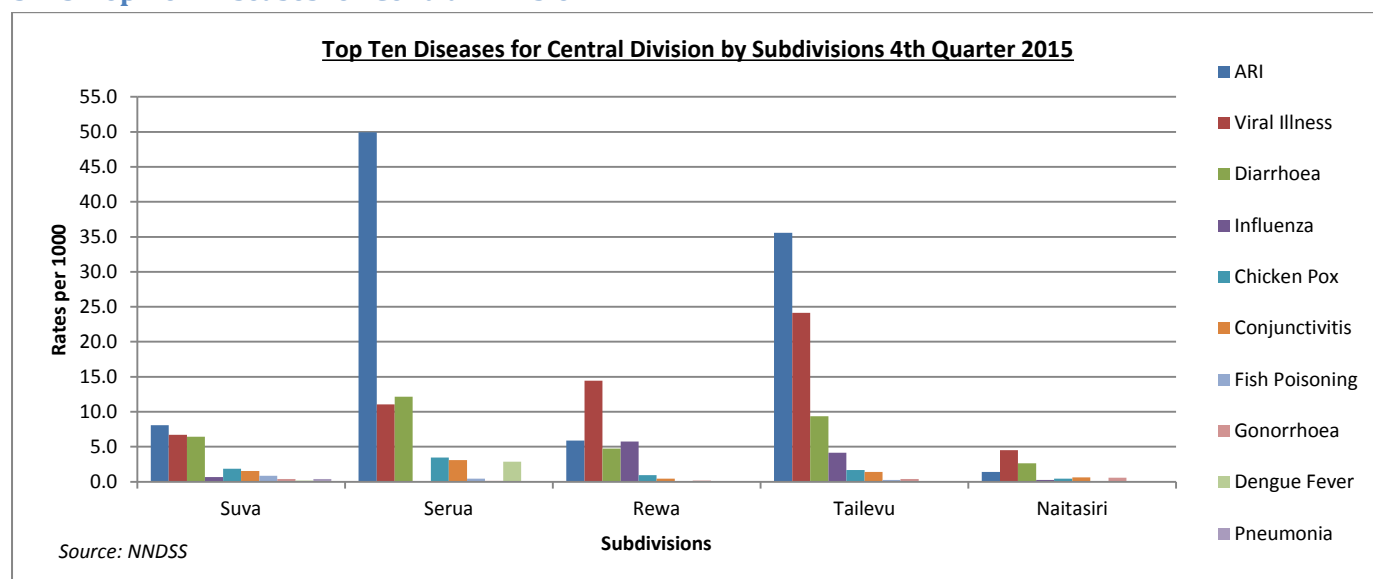
The incidence rates were calculated using MoHMS 2014 population (Suva 217597, Serua 29588, Rewa 84872, Tailevu 22384 and Naitasiri 20232) and reported as per 1,000 populations. The predominance of ARI, Viral Illness, Diarrhoea, and Influenza were recorded in Central division and is mostly recorded in Suva, Serua and Rewa. All the conditions in Central division are following the national rank order but in a differing array.

Chicken Pox cases are noted in Suva (n=405), Serua (n=103), Rewa (n=79), Tailevu (n=37) and Naitasiri (n=9), signaling a clear need for early public health response.
Dengue fever cases were reported in Suva (n=31), Serua (n=85), and Rewa (n=8), signaling for public health interventions for these areas to reduce risks of outbreaks. Calls for adequate preventions and control are made in the light of emerging viral infections in the region and country.

3.1.6 Top Ten Diseases for Western Division

Top Ten Diseases for Western Division by Subdivisions 4th Quarter 2015

Source: NNDSS
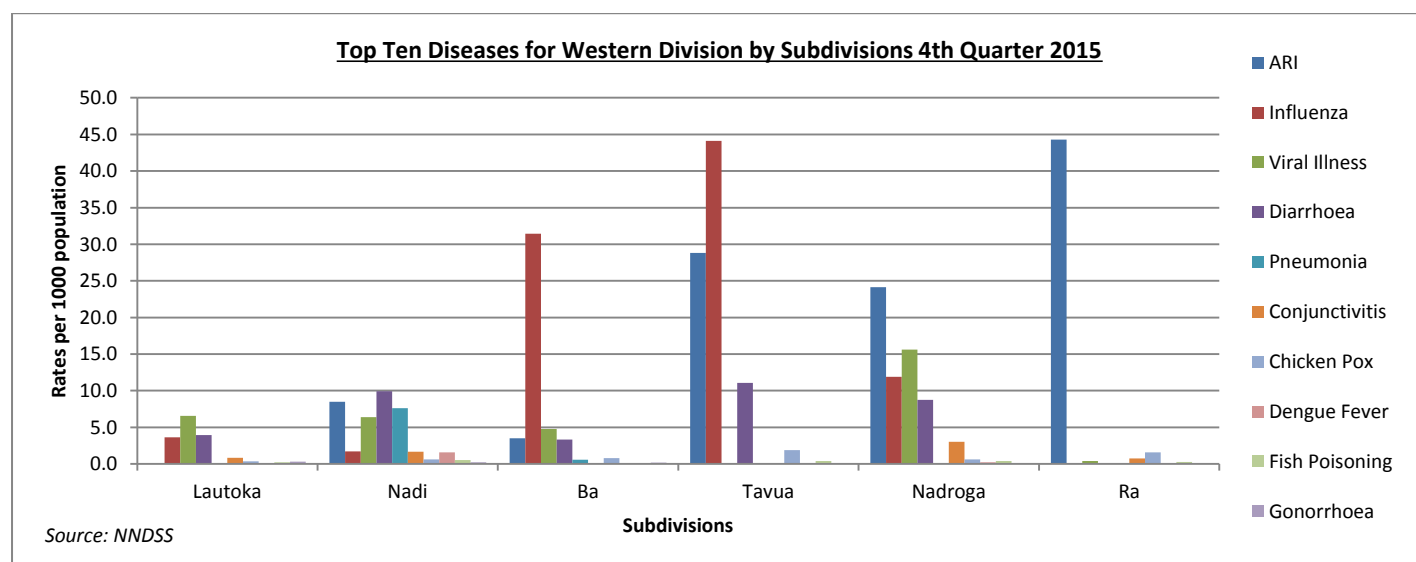
The incidence rates were calculated using MoHMS 2014 population (Lautoka 132385, Nadi 90810, Ba 56143, Tavua 26376, Nadroga 52730 and Ra 29266) and reported as per 1,000 populations. The predominance of ARI, Influenza, Viral Illness, Diarrhoea and Pneumonia were recorded in Western division and is mostly recorded in Tavua, Nadroga and Nadi; due to the majority of the reports being received from these sub divisions. All the conditions in Western division are following the national rank order but in a differing array.
Dengue fever cases were reported in Nadi (n=143) and Nadroga (n=11) signaling for public health interventions for these areas to reduce risks of outbreaks. Chicken Pox cases are reported from all the subdivisions signaling a clear need for early public health response.

3.1.7 Top Ten Diseases for Northern Division

Top Ten Diseases for Northern Division by Subdivisions 4th Quarter 2015

Source: NNDSS
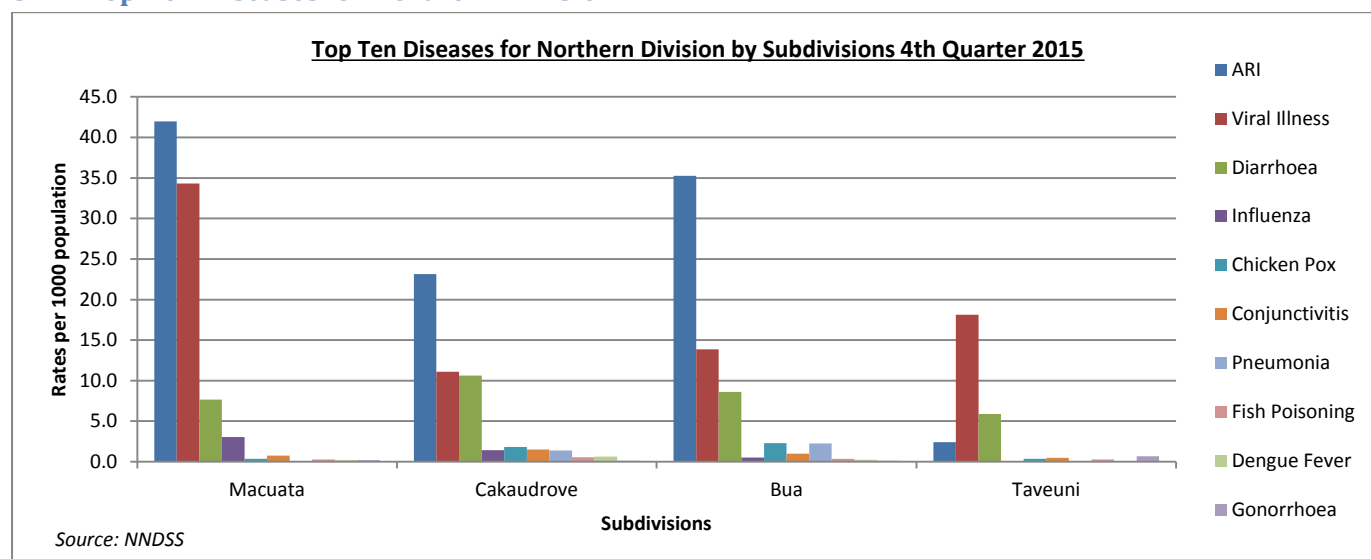
The incidence rates were calculated using MoHMS 2014 population (Macuata 64439, Cakaudrove 33034, Bua 16868 and Taveuni 16649) and reported as per 1000 population. The predominance of ARI, Viral Illness, Diarrhoea, Influenza and Chicken Pox were recorded in Northern division. Majority of the cases are recorded in Macuata, Cakaudrove and Bua sub divisions which are the most populated in the Northern Division. All the conditions in Northern division are following the national rank order but in a differing array.

Macuata (n=12), Cakaudrove (n=21) and Bua (n=4) have reported dengue cases requiring ongoing public health awareness on prevention and control. The North has a localized outbreak of dengue fever although reporting is poor on NNDSS. The advice continues to ensure that all Notifiable diseases are duly reported on NNDSS as per the Public Health Act provisions.

Chicken Pox cases are reported from all the subdivisions signaling a clear need for early public health response.

3.1.8 Top Ten Diseases for Eastern Division

Top Ten Diseases for Eastern Division by Subdivisions 4th Quarter 2015
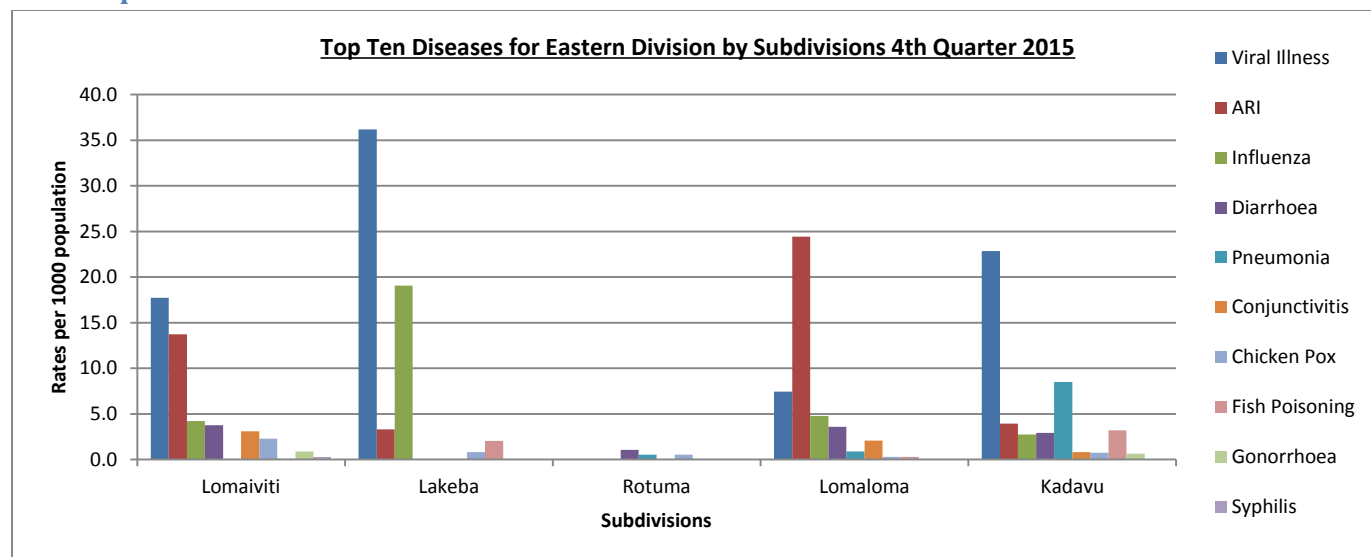
The rates were calculated using MoHMS 2014 population (Lomaiviti 16187, Lakeba 7294, Rotuma 1866, Lomaloma 3358 and Kadavu 10946) and reported as per 1000 population. The predominance of Viral Illness, ARI, Influenza, Diarrhoea and Pneumonia were recorded in Eastern division. Majority of the cases are recorded in Lomaiviti, Lakeba and Kadavu sub divisions.

The top nine conditions in Eastern division are following the national rankings but in differing rank order. One of the conditions in top ten ranking is Syphilis instead of Dengue Fever for 4th quarter.

Chicken Pox cases are reported from all the subdivisions signaling a clear need for early public health response.

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Section 4 – Expanded Primary Health care – Hospital Report

4.1 Summary of Morbidity

4.1.1 Summary of Morbidity through Admission, Quarter 4, 2015

Summary of Morbidity through Admission Quarter 4 2015

Cause Group	Rate per 1000 Admission
Pregnancy, Childbirth & the Puerperium	352.3
Diseases of the Circulatory System	124.9
Certain Infectious & Parasitic Diseases	100.8
Diseases of the Respiratory System	99.2
Diseases of the Skin & Subcutaneous Tissue	57.7
Endocrine, Nutritional & Metabolic Diseases	50.4
Injury, Poisoning & Certain Other Consequences of External Causes	45.2
Diseases of the Genitourinary System	44.9
Diseases of the Digestive System	30.2
Diseases of the Musculoskeletal System & Connective Tissue	17.3
Diseases of the Nervous System	15.7
Diseases of the Blood & Blood Forming Organs	15.0
Symptoms, Signs & Abnormal Clinical & Laboratory Findings, NEC	13.4
Certain Conditions Originating in the Perinatal Period	7.7
Factors Influencing Health Status & Contact with Health Services	7.5
Neoplasms	6.4
Diseases of the Eye & Adnexa	4.3
Mental & Behavioural Disorders	3.0
External Causes of Morbidity & Mortality	1.6
Congenital Malformation,Deformation Abnormalities	1.6
Diseases of the Ear & Mastoid Process	1.1

Rates per 1000 Admission

The above graph demonstrates the Admissions by Cause Group in the 4th quarter 2015. Leading overall admissions are Pregnancy, Childbirth & Puerperium [n=1552], Diseases of the Circulatory System [n=550], Certain Infectious & Parasitic Diseases [n=444] and Diseases of the Respiratory System [n=437]. Compared with the 4th Quarter of 2014, the leading admissions were still Pregnancy, Childbirth & Puerperium [n=2141], Diseases of the Circulatory System (also the 2nd highest) [n=834], Diseases of the Respiratory System [n=759] and Certain Infectious & Parasitic Diseases [n=578]. The rates used were calculated per 1000 admissions.

4.1.2 Admission Rate by Age-Group, Quarter 4, 2015

Admission rate by Age Group, Quarter 4, 2015
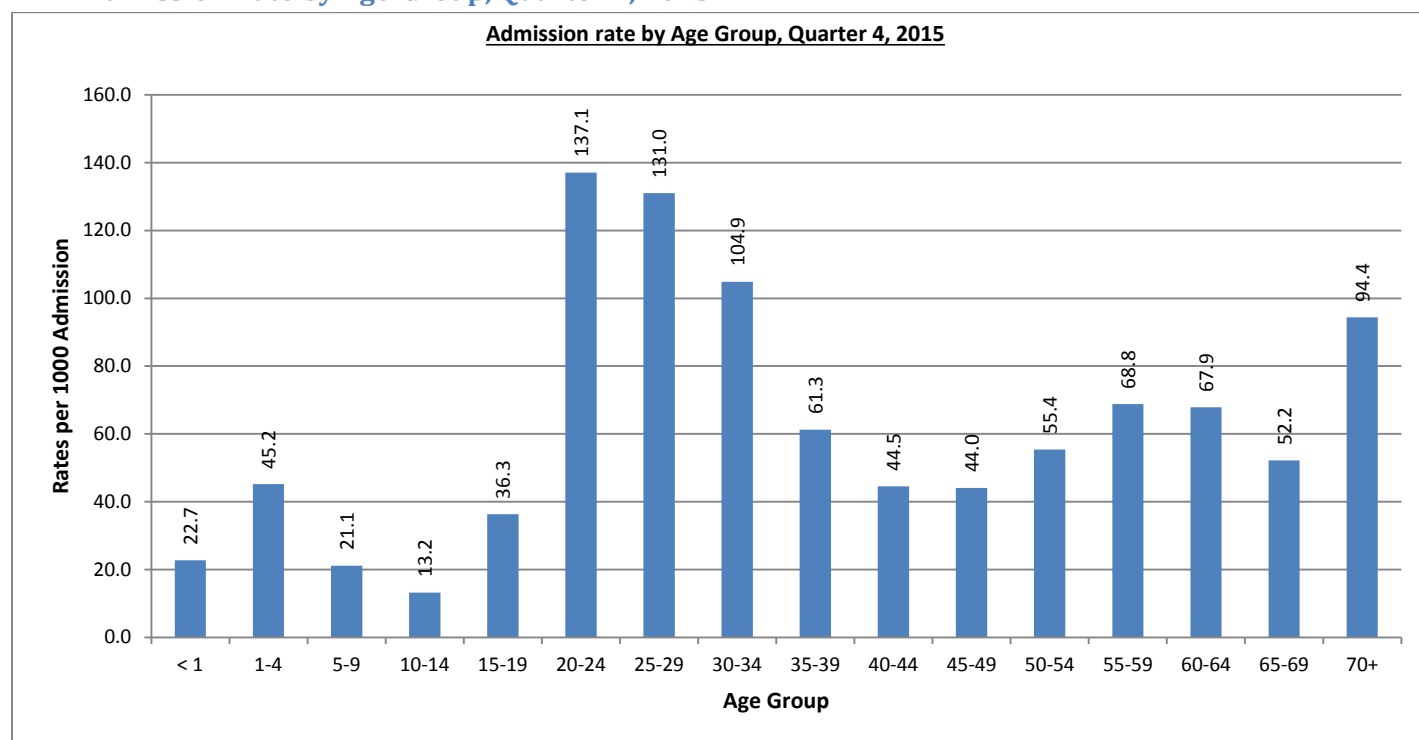
The highest occurrence of admissions were among the 20 – 34 years age groups [n=1643]; this was approximately 37% of all admissions, where the cause of morbidity were due to pregnancy, its complications and outcomes, Single spontaneous delivery [n=546], Perineal laceration during delivery n=[347], Preterm delivery [n=71], Incomplete spontaneous abortion [n=68] and Gestational (pregnancy-induced} hypertension without significant proteinuria [n=49] and Labour and delivery complicated by Fetal stress, unspecified [n=45]

The under-five population comprised of approximately 7% of the total admissions for 4th Quarter 2015; the top 3 causes of morbidity for this age group are Pneumonia [n=86], Diarrhoea & gastroenteritis of presumed infectious origin [n=18] and Viral Infection [n=17].

The lowest frequency of admissions were among 10-14 age groups (n=58) at approximately 1.3%; the top 3 causes of morbidity for this age group are Diarrhoea & gastroenteritis of presumed infectious origin [n=4], Cellulitis of lower limb [n=3] and Local infection skin & subcutaneous tissue unspecified [n=2]. The 70+ age group comprised of approximately 9% of the total admissions; the top 3 causes of morbidity for this age group are Congestive heart failure [n=24], Acute subendocardial Myocardial Infarction [n=19], and Pneumonia unspecified [n=15].

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4.1.3 Admission by Gender, Quarter 4, 2015

Admission Rates by Age Groups and Gender, Quarter 4, 2015

Source: Manual Tear-Offs & PATISPLUS
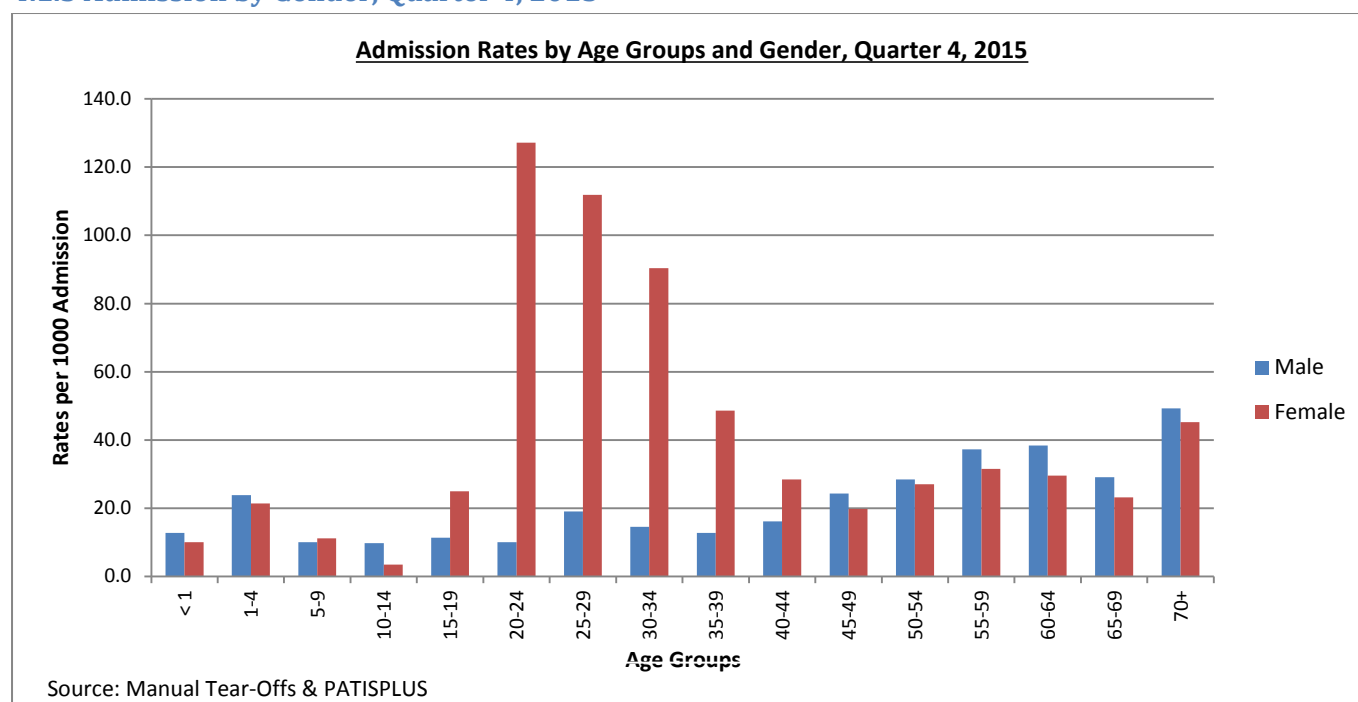
The graph represents the age groups disaggregated by gender. It shows that females contributed a higher number of cases in the age groups 25-24, making up the majority of case in this group. This is due to pregnancy, childbirth and puerperium.

Males in the age groups <1 – 14 were mostly admitted due to Males in the age groups <1 – 14 were mostly admitted due to Pneumonia unspecified [n=46], Diarrhoea & gastroenteritis of presumed infectious origin [n=17] and Viral infection unspecified [n=16]. In males with the age group >50 contributed a higher number of admissions for Congestive heart failure [n=44], Stroke not specified as haemorrhage or infarction [37] and Acute subendocardial Myocardial Infarction [n=35].

4.1.4 Top 10 Causes of Morbidity by Disease, Quarter 4, 2015

Top 10 Causes of Morbidity by Disease, Quarter 4, 2015

Disease	Rate
Cellulitis of lower limb [L03.11]	12.0
Acute subendocardial MI [I21.4]	12.5
Local infection skin & subcutaneous tissue unspecified [L08.9]	15.9
Stroke not specified as haemorrhage/infarction [I64]	17.5
Congestive heart failure [I50.0]	18.6
Type 2 DM with foot ulcer due to multiple causes [E11.73]	18.8
Diarrhoea & gastroenteritis of presumed infectious origin [A09]	19.8
Septicaemia unspecified [A41.9]	22.2
Viral infection unspecified [B34.9]	30.2
Pneumonia unspecified [J18.9]	35.0

Source: Hospital Discharge Data from Sub-Divisional Hospitals & PATISPLUS

The graph displays the Top 10 causes of admissions by diseases with Pneumonia unspecified [n=154] leading which accounted for 35.0 per 1000 admissions, while Cellulitis of lower limb [n=53] accounting for 12.0 per 1000 admissions, is the tenth cause of admission. For the same period in 2014 Pneumonia [n=270] was also the leading cause of admissions and Essential (primary) hypertension [n=61] with the least admissions. Viral infection and Cellulitis of lower limb were highest among the I-Taukei with 13.5% admissions compared to Fijian of Indian descent at 6.7% and Fijian of Other descent with 0.5% admission; while in gender distribution in 4th quarter 2015 the Males had highest admissions for both Pneumonia with 9.1% [n=81] and Viral infection unspecified at 8.1% [n=72] than women.

4.1.5 Top 10 Diseases by Gender, Quarter 4, 2015

Top 10 Diseases by Gender Quarter 4 ,2015

Disease	Rate per 1000 Admission
Female	
Acute subendocardial MI	3.6
Cellulitis of lower limb	4.5
Local infection skin & subcutaneous tissue unspecified	7.3
Congestive heart failure	7.5
Stroke not specified as haemorrhage/infarction	8.2
Type 2 DM with foot ulcer due to multiple causes	9.8
Diarrhoea & gastroenteritis of presumed infectious origin	10.2
Septicaemia unspecified	11.8
Viral infection unspecified	13.8
Pneumonia unspecified	16.6
Male	
Cellulitis of lower limb	7.5
Local infection skin & subcutaneous tissue unspecified	8.6
Acute subendocardial MI	8.9
Type 2 DM with foot ulcer due to multiple causes	9.1
Stroke not specified as haemorrhage/infarction	9.3
Diarrhoea & gastroenteritis of presumed infectious origin	9.5
Septicaemia unspecified	10.4
Congestive heart failure	11.1
Viral infection unspecified	16.3
Pneumonia unspecified	18.4

Source: Manual Tear-Offs & PATISPLUS

The above graph shows the top 10 causes of Morbidity distributed by Gender. The leading admissions by diseases for Female and Male are Pneumonia and Viral Infection. The 10th leading causes of admissions for the females are the Acute subendocardial Myocardial Infarction whereas for males the 10th leading cause of admissions was Cellulitis of lower limb. The rates used were per 1000 admissions.

4.1.6 Rates for Top 10 Causes of Morbidity by Divisions, Quarter 4, 2015

Rates for Top 10 Causes of Morbidity by Divisions, Quarter 4, 2015

	Diseases of the Circulatory System	Certain Infectious & Parasitic Diseases	Diseases of the Respiratory System	Endocrine, Nutritional & Metabolic Diseases	Injury, Poisoning & Certain Other Consequences of External Causes	Diseases of the Skin & Subcutaneous Tissue	Diseases of the Genitourinary System	Diseases of the Digestive System	Diseases of the Nervous System	Diseases of the Musculoskeletal System & Connective Tissue
Central	222.5	167.1	188.2	86.9	49.7	93.6	81.2	45.8	30.6	34.4
Eastern	93.6	197.0	197.0	34.5	142.9	147.8	103.4	49.3	24.6	9.9
Western	245.9	171.6	135.8	100.0	89.0	83.5	68.8	52.3	27.5	25.7
Northern	124.0	173.6	214.9	62.0	86.8	144.6	70.2	74.4	8.3	41.3

Diesases

Source: Manual Tear-Offs & PATISPLUS

The graph above shows the top 10 causes of Morbidity by Divisions. Most admissions were reported from the Western Division [n=1090] followed by the Central Division [n=1047], the Northern Division [n=242] & the Eastern Division [n=203] for the 4th Quarter of 2015. Different Divisions have differing top 10 causes of morbidity compared to the 4th quarter of 2014; which has Pregnancy, Childbirth & the Puerperium as the leading causes of morbidity for all the Divisions. In this quarter the leading cause of Admissions nationwide are Pregnancy, Childbirth & the Puerperium in the Central Division (n=850), Western Division (n=640), and Eastern Division [n=43] whereas for the Northern Division the Diseases of the Respiratory System (n=52) was the leading cause of admission. **The Labasa Divisional Hospital has backlog of uncoded folders which is the reason for the low numbers reported from the Northern division**.

4.2 Outpatients

4.2.1 Outpatient comparative quarter 3, 2014 and 2015

Comparative of total outpatient seen in Outpatient Services by Division, Quarter 4, 2015

Source: PHIS, HIU, MOHMS.
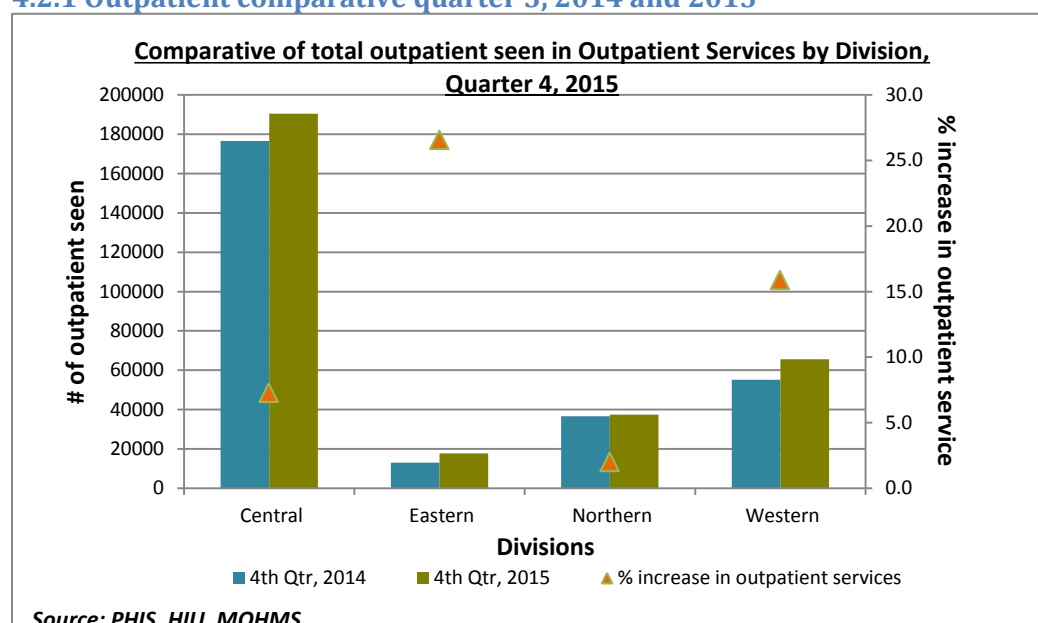
An average of 77779 out-patients (total OP n= 311117) were seen which was 9.5% more compared to same period last year (281437). The Eastern Division (↑26.6%) reported the highest outpatient services followed by the Western Division (↑15.9%) and the Central Division (↑7.3%), while the Northern Division (2%) reported the least outpatient services. When compared with the same period last year, the result are as follows; the Eastern Division (↑70.7%) reported the highest outpatient services followed by the Central Division (↑69.5%) and the Northern Division (↑66.7%), while the Western Division (62.7%) reported the least outpatient services.

4.3 Holding Beds

4.3.1 Holding beds tabular by Division

Division	No. Bed	Total Patients	No. Referred	No. Discharged	No. Held Over12 hours	No. Deliveries	Occupancy Rate (%)	Held Over 12 Hours (%)
Central	113	3666	825	2757	475	4	35.3	13
Eastern	64	151	58	101	65	3	2.6	43
Northern	86	701	283	413	42	5	8.9	6
Western	93	522	286	233	24	5	6.1	4.6
Total	356	5040	1452	3504	606	17	15.4	12

Source: CMRIS Online [PHIS]

The table above provides the information on the utilization of and need for beds at health centres. The Central division had the highest number of holding beds, the highest number of total patients and had the greatest number of people held over 12 hours followed by the Northern division while the Eastern division reported the lowest.

Patients held over 12 hours should be transferred to hospital as the health centers are not liable to admit patients unless there are genuine reasons such as transportation delays, weather problems and geographical location of the facility. The numbers of delivery were reported to be higher in the North and west. This is reflective of the greatest number of deliveries occurring at the divisional hospitals in alignment with the practice of Safe Motherhood. Similar patterns were observed when compared with the same period last year.

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Section 6 – Evidence-based Policy, Planning, Implementation and Assessment.

Mortality

A total of 1,382 deaths (excluding 24 stillbirths) were reported at the end of 4th quarter, 2015 giving an estimated crude death rate of 1.6 per 1000 population (using the 2015 FBOS population projections as a denominator). In comparison to the 4th quarter of 2014, 1050 MCDC were received at HIU and the crude death rate (CDR) stood at 1.1 per 1000 population. These were from the certificates received from each division from 1st October 2015 to 15th January 2016. The reporting period was from 1st October 2015to 31st December 2015.

6.1 Mortality by Chapter & Tabular

The major cause of mortality recorded for this quarter is Non Communicable Disease covering 74.7% of the total mortality while 25.3% covers the rest of the diseases. Diseases of the circulatory system, Endocrine, nutritional and metabolic diseases and Neoplasms continue to be the three leading causes of mortality, similar to the 4th quarter, 2014. There has been no significant change in the top 10 chapters of mortality compared to the same period last year.

6.1.1 Top Ten causes of mortality (by chapter)

Code	Diseases	Total	%
I00-I99	Diseases of the circulatory system	492	35.6
E00-E90	Endocrine, nutritional and metabolic diseases	288	20.8
C00-D48	Neoplasms	155	11.2
V00-Y98	External causes of mortality	97	7.0
A00-B99	Certain infectious and parasitic diseases	66	4.8
J00-J99	Diseases of the respiratory system	58	4.2
N00-N99	Diseases of the genitourinary system	40	2.9
R00-R99	Signs and symptoms	39	2.8
K00-K93	Diseases of the digestive system	39	2.8
G00-G99	Diseases of the nervous system	21	1.5
	Grand Total	**1382**	**100**

6.1.2 Top 10 causes of mortality (tabular-103 list)

Top 10 causes of mortality (Tabular 103 list)

causes of mortality (103 list)	percent (%)
Diabetes mellitus	19.2
Ischaemic heart disease	18.7
Cerebrovascular accident	7.0
Hypertensive diseases	4.6
Other heart diseases	4.4
Other external causes of mortality	3.2
Signs and symptoms	2.8
Sepsis	2.7
Other malignant neoplasms	2.7
Other diseases of the genitourinary system	2.5
Chronic lower respiratory system	2.2

Source: MCDC, HIU, MOHMS

The graph shows that the five major causes of mortality by diseases are diabetes (n=266), IHD (n=258), cerebrovascular disease (n=96), hypertension (n=64) and other heart diseases (n=61). Other external cause of mortality has moved up in ranking from 8th place in 4th quarter, 2014 to the 6th place in this reporting period. These are cases of hanging, strangulation and suffocation of undetermined intent (n=12), exposure to an unspecified factor (n=12), poisoning due to pesticide, undetermined intent (n=6), contact with blunt object (n=4),

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sequelae of surgical and medical procedure as the cause of abnormal reaction (n=3), inhalation of gastric content (n=2) and inhalation and ingestion of other objects causing obstruction of respiratory tract (n=1) Chronic lower respiratory diseases have fallen in ranking from 6th place in 4th quarter, 2014 to 10th place in this period. Diseases of the "Other" classifications have bulk cases which may be unspecified and is the reason that this classifications have appeared in the top 10 causes of mortality by disease.

6.2 Males vs Females Mortality

6.2.1 Males vs Females Mortality

Male				Female		
Disease	Cases	%		Diseases	Cases	%
Diseases of the circulatory system	310	38.7		Diseases of the circulatory system	182	31.3
Endocrine, nutritional and metabolic diseases	155	19.4		Endocrine, nutritional and metabolic diseases	133	22.8
External causes of mortality	67	8.4		Neoplasms	90	15.4
Neoplasms	66	8.2		Certain infectious and parasitic diseases	37	6.3
Diseases of the respiratory system	40	4.9		External causes of mortality	30	5.2
Certain infectious and parasitic diseases	30	3.7		Symptoms, signs and abnormal clinical and laboratory findings not elsewhere classified	18	3.1
Diseases of the genitourinary system	25	3.2		Diseases of the respiratory system	18	3.1
Diseases of the digestive system	23	2.9		Diseases of the digestive system	16	2.7
Symptoms, signs and abnormal clinical and laboratory findings not elsewhere classified	21	2.6		Diseases of the genitourinary system	15	2.5
Diseases of the nervous system	13	1.6		Diseases of the musculoskeletal and connective tissue	9	1.5
Congenital malformation, deformation and chromosomal abnormalities	11	1.4		Diseases of the skin and subcutaneous tissue	8	1.3
Certain conditions originating in the perinatal period	11	1.4		Diseases of the nervous system	8	1.3
Diseases of the skin and subcutaneous tissue	10	1.2		Diseases of the blood and blood forming organs and certain disorders involving the immune mechanism	8	1.3
Diseases of the musculoskeletal and connective tissue	9	1.1		Congenital malformation, deformation and chromosomal abnormalities	4	0.8
Diseases of the blood and blood forming organs and certain disorders involving the immune mechanism	7	0.8		Certain conditions originating in the perinatal period	3	0.6
Mental and behavioural disorders	2	0.3		Pregnancy, child births and puerperium	2	0.4
Diseases of the ear and mastoid process	1	0.1		Mental and behavioural disorders	1	0.2
				Diseases of the eye and adnexa	1	0.2
Grand Total	**799**	**100.0**		**Grand Total**	**583**	**100.0**

The top 3 chapters remain the leading causes of mortality in both genders. 57.8% of the deaths for this reporting period are male and 42.2% are female. The same top 2 chapters remain the leading causes of mortality in both genders (Diseases of the circulatory system and Endocrine, nutritional and metabolic diseases). The top 5 chapters for Females remain the same as per the 4th quarter, 2014. Females may be driving the Endocrine and Neoplasms dataset and may be contributing to the higher ranking, but not by too much of a margin than males. This is also evidenced by the Diabetic notification section where diabetes was reported higher in females than males.

6.2.2 Percentage of deaths for males and females by age-groups

The pyramid above shows the percentage of mortality by age groups and gender for this quarter. Most males died within the age group 65-69 (15.4%, n=112); while majority of the females died within the age group of 70-74

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(14.6%, n=85). Adult males have a greater frequency of deaths in the 40 to 69 age group compared to the rest of the age groups. In females the highest frequency of mortality is delayed by 10 years, when compared to males, with a greater frequency in the 50-89 age groups. This also translates into the aptitude of females to live longer than males (based on the reporting period).

6.3 Premature mortality
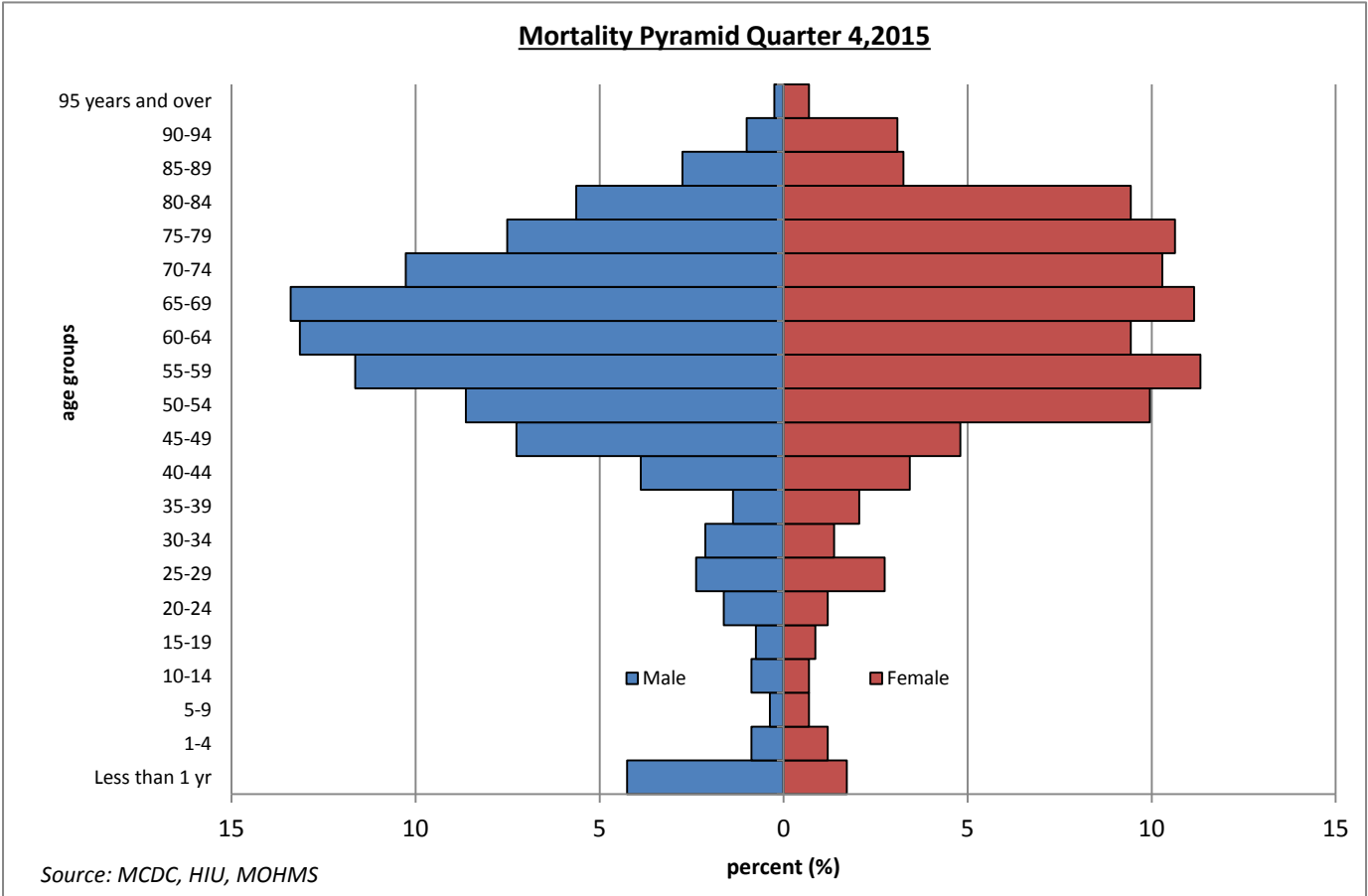
Mortality Pyramid Quarter 4,2015

Source: MCDC, HIU, MOHMS

The pyramid above shows the percentage of mortality by age groups and gender for this quarter. Most males died within the age group 65-69 (13.4%, n=107); while majority of the females died within the age group of 50-84 (72.2%, n=421). Adult males have a greater frequency of deaths in the 50 to 74 age group compared to the rest of the age groups. There was an increased percentage of deaths in males in the less than 1year age group; the major cause of mortality was conditions originating in the perinatal period (29.4%). 23.4% of male deaths between the age group of 65-69 were due to ischaemic heart disease whereas 17.6% of male deaths between the age groups of 30-34 were due to Other heart diseases and 15.8% of male deaths in 25-29 age groups were due to other external causes of mortality. In females the highest frequency of mortality is from 50 to 84 age groups where 22.8% of these deaths were due to diabetes mellitus. Majority of the deaths in female were at the 55-59 years age groups where 22.7% of this death was also due to diabetes mellitus. There was also a high percentage of deaths in the 25-29 years age group for females and leukaemia was the most common cause of death (18.8%).

6.3.1 Premature mortality rate per 1000 population (<60yrs)

Age groups	Number of deaths			Population projection (FIBOS) 2015			Premature mortality rate per 10,000 population		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	41	17	58	44806	42427	87233	9.2	4.0	6.6
5-9	3	4	7	45262	42696	87958	0.7	0.9	0.8
10-14	7	4	11	40201	37338	77539	1.7	1.1	1.4
15-19	6	5	11	39355	36739	76094	1.5	1.4	1.4
20-24	13	7	20	37540	35427	72967	3.5	2.0	2.7
25-29	19	16	35	34670	32650	67321	5.5	4.9	5.2
30-34	17	8	25	33990	32480	66470	5.0	2.5	3.8
35-39	11	12	23	30536	29440	59976	3.6	4.1	3.8
40-44	31	20	51	26962	25742	52703	11.5	7.8	9.7
45-49	58	28	86	25179	25012	50191	23.0	11.2	17.1
50-54	69	58	127	24633	24298	48931	28.0	23.9	26.0
55-59	93	66	159	20332	20225	40556	45.7	32.6	39.2
Total	**368**	**245**	**613**	**403466**	**384473**	**787939**	**9.1**	**6.4**	**7.8**

Premature mortality in Fiji are deaths less than 60 years (42.9%, n=561) for this period. The population projection for 2015 from FIBOS was used to calculate this rate. Majority of these deaths are recorded in the age groups from 45-59 years. In the 45-59 age group, 31 per 10,000 males died prematurely compared to 22 per 10,000 females in this reporting period

6.4 Mortality by Divisions

6.4.1 Mortality by divisions

Causes of mortality in the Central division Quarter 4, 2015

I00-I99 - Diseases of the circulatory system
E00-E90 - Endocrine, nutritional and metabolic diseases
C00-D48 - Neoplasms
V01-Y98 - External causes of mortality
A00-B99 - Certain infectious and parasitic diseases
N00-N99 - Diseases of the genitourinary system
J00-J99 - Diseases of the respiratory system
R00-R99 - Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified
K00-K93 - Diseases of the digestive system
G00-G99 - Diseases of the nervous system
P00-P96 - Certain conditions originating in the perinatal period
L00-L99 - Diseases of the skin and subcutaneous tissue
Q00-Q99 - Congenital malformations, deformations and chromosomal abnormalities
M00-M99 - Diseases of the musculoskeletal system
D50-D89 - Diseases of the blood and blood-forming organs
O00-O99 - Pregnancy, childbirth and puerperium
F00-F99 - Mental and behavioral disorder
H00 - H59 - Diseases of the eye and adnexa
H60 - H95 - Diseases of the ear and mastoid process

Source: MCDC, HIU MOHMS

The graph shows the percentage of causes of deaths in the Central division. The 4 major causes of death are circulatory diseases (31.5%, n=218), endocrine, nutritional and metabolic diseases (21.3%, n=148), cancer (12.5%, n=87) and external causes of mortality (7.7%, n=53). The 3 major causes of death for I-Taukei and FOD are circulatory diseases, endocrine, nutritional and metabolic disorders, and cancer whereas for FID, the main cause of death was circulatory diseases followed by endocrine, nutritional and metabolic diseases then cancer.

Causes of mortality in the Eastern division Quarter 4, 2015

E00-E90 - Endocrine, nutritional and metabolic diseases
I00-I99 - Diseases of the circulatory system
R00-R99 - Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified
C00-D48 - Neoplasms
V01-Y98 - External causes of mortality
K00-K93 - Diseases of the digestive system
M00-M99 - Diseases of the musculoskeletal system

Source: MCDC, HIU MOHMS
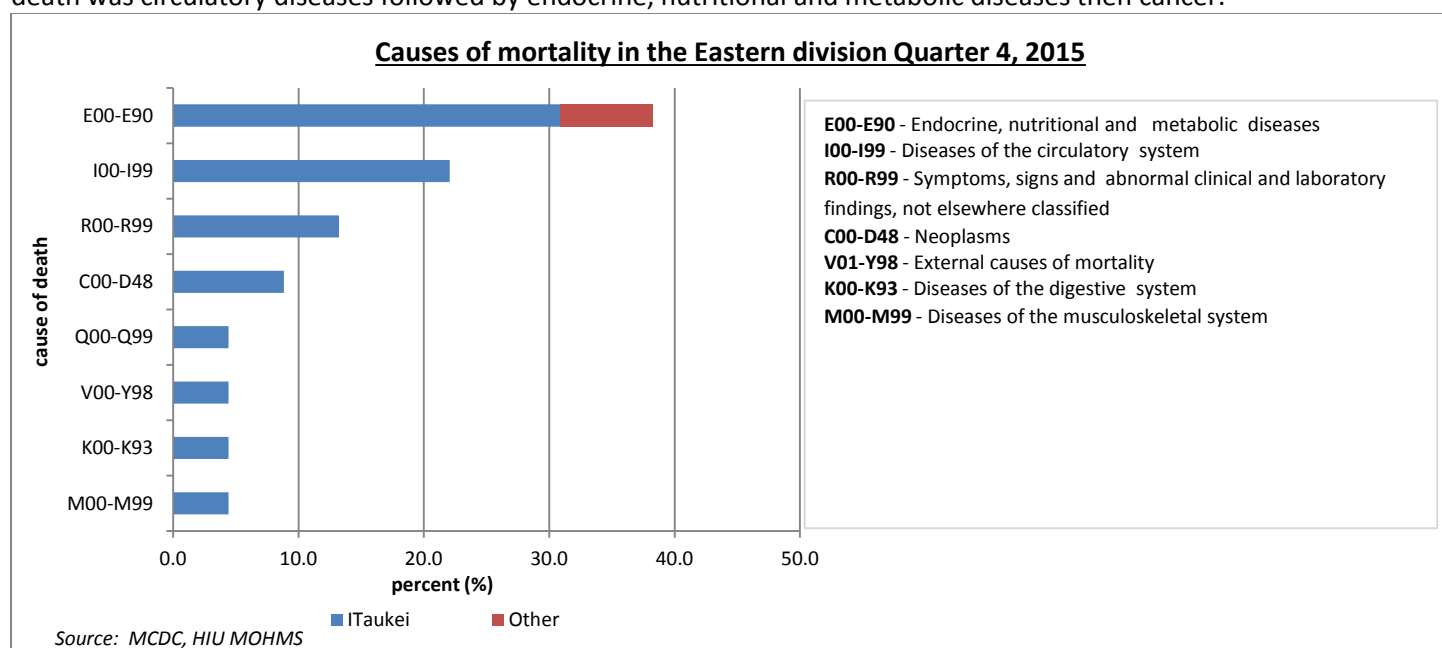
The graph shows the percentage of causes of mortality in the Eastern division. The major cause of death is endocrine, nutritional and metabolic diseases with 38.3% (n=10), followed by circulatory diseases with 22% (n=6). The leading cause of death for I-Taukei are endocrine, nutritional and metabolic diseases followed by circulatory

diseases whilst the main cause of death for FODS was endocrine, nutritional and metabolic diseases. There was no reported death for FIDS in this reporting period.

Causes of mortality in the Northern division Quarter 4, 2015

I00-I99 - Diseases of the circulatory system
E00-E90 - Endocrine, nutritional and metabolic diseases
C00-D48 - Neoplasms
V01-Y98 - External causes of mortality
R00-R99 - Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified
J00-J99 - Diseases of the respiratory system
M00-M99 - Diseases of the musculoskeletal system
A00-B99 - Certain infectious and parasitic diseases
K00-K93 - Diseases of the digestive system
N00-N99 - Diseases of the genitourinary system
Q00-Q99 - Congenital malformations, deformations and chromosomal abnormalities
L00-L99 - Diseases of the skin and subcutaneous tissue
G00-G99 - Diseases of the nervous system

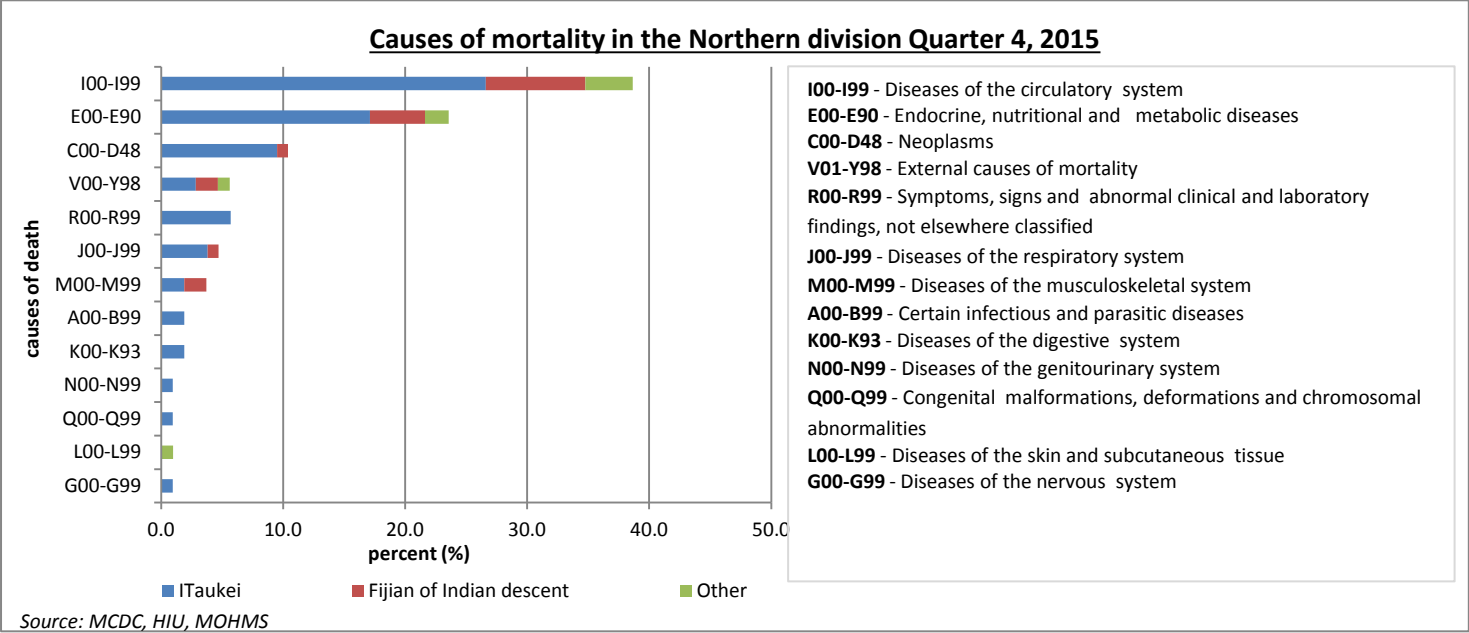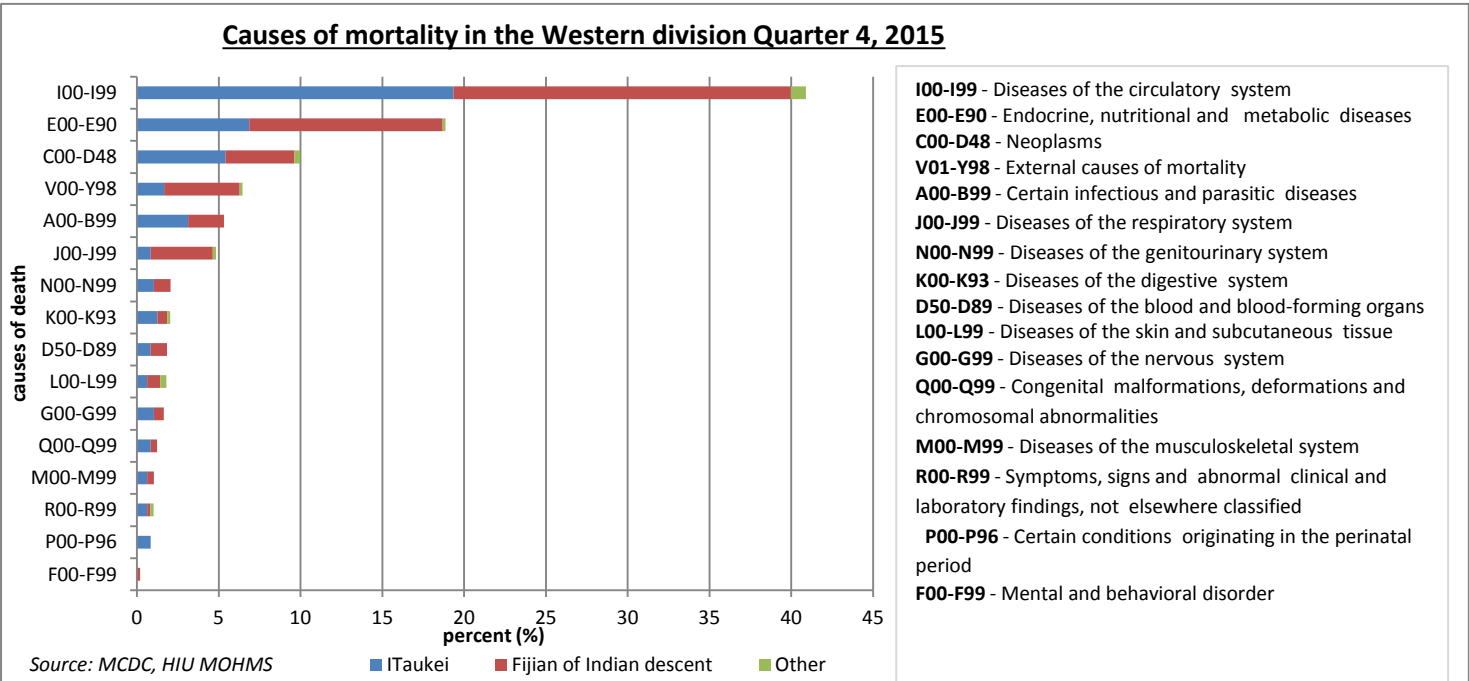■ ITaukei   ■ Fijian of Indian descent   ■ Other
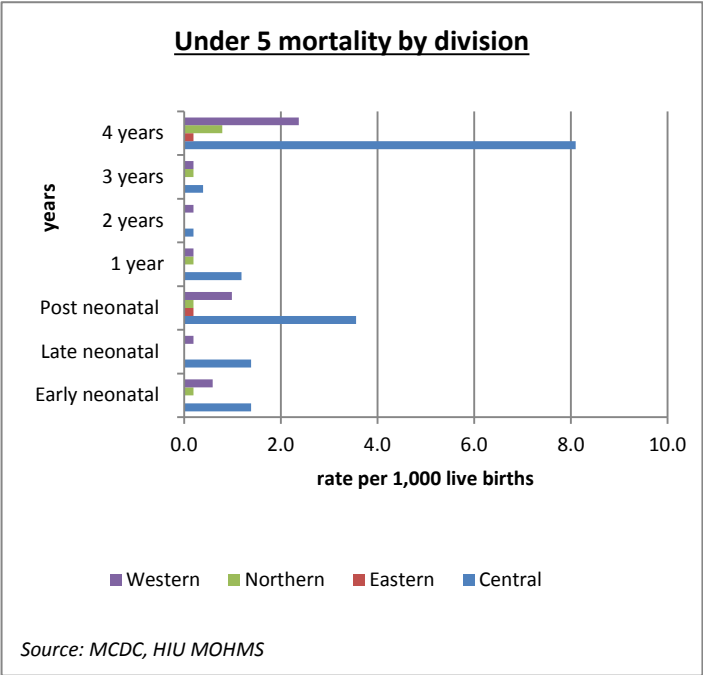
Source: MCDC, HIU, MOHMS

The graph shows the percentage of causes of deaths in the Northern division. The 4 major cause of death are circulatory diseases (38.6%, n=45), endocrine, nutritional and metabolic diseases (23.6%, n=27), cancer (10.4%, n=12) external causes of mortality (5.6%, n=7). The leading cause of death for I-Taukei is circulatory diseases followed by endocrine, nutritional and metabolic diseases then cancer whereas for FID the leading cause of death was circulatory diseases followed by endocrine, nutritional and metabolic diseases then external causes of mortality. The leading cause of death for FOD was circulatory system followed by endocrine, nutritional and metabolic disease.

Causes of mortality in the Western division Quarter 4, 2015

I00-I99 - Diseases of the circulatory system
E00-E90 - Endocrine, nutritional and metabolic diseases
C00-D48 - Neoplasms
V01-Y98 - External causes of mortality
A00-B99 - Certain infectious and parasitic diseases
J00-J99 - Diseases of the respiratory system
N00-N99 - Diseases of the genitourinary system
K00-K93 - Diseases of the digestive system
D50-D89 - Diseases of the blood and blood-forming organs
L00-L99 - Diseases of the skin and subcutaneous tissue
G00-G99 - Diseases of the nervous system
Q00-Q99 - Congenital malformations, deformations and chromosomal abnormalities
M00-M99 - Diseases of the musculoskeletal system
R00-R99 - Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified
P00-P96 - Certain conditions originating in the perinatal period
F00-F99 - Mental and behavioral disorder

Source: MCDC, HIU MOHMS   ■ ITaukei   ■ Fijian of Indian descent   ■ Other

The graph shows the percentage of causes of deaths in the Western division. The 4 major causes of death are circulatory diseases (40.9%, n=222), endocrine, nutritional and metabolic diseases (18.9%, n=102), cancer (10%, n=54) and external causes of mortality (6.5%, n=35). The 3 major causes of death for I-Taukei are circulatory diseases followed by endocrine, nutritional and metabolic diseases then cancer whereas for FID, the 3 major causes were circulatory diseases followed by endocrine, nutritional and metabolic diseases then external causes of mortality. The major cause of death for FOD is circulatory diseases.

6.5 Under 5 mortality by division

6.5.1 Under 5 Mortality

Under 5 mortality by division

Source: MCDC, HIU MOHMS

6.5.2 Perinatal Mortality

Perinatal mortality by facility

Source: MCDC, HIU MOHMS

The 2015 MDG target for Under 5 mortality rate is 9.3 per 1,000 live births. The Under 5 mortality rate stands at 11.1 per 1000 live births for this quarter compared to 9.2 per 1000 live-births in 4th quarter 2014. The Infant mortality rate stood at 8.7 per 1000 live-births compared to 6.9 per 1000 live-births in the same period last year. The Central Division reported the highest Under 5 mortality (n=41) followed by the Western (n=12), Northern (n=4) and Eastern Division (n=1) in this reporting period.
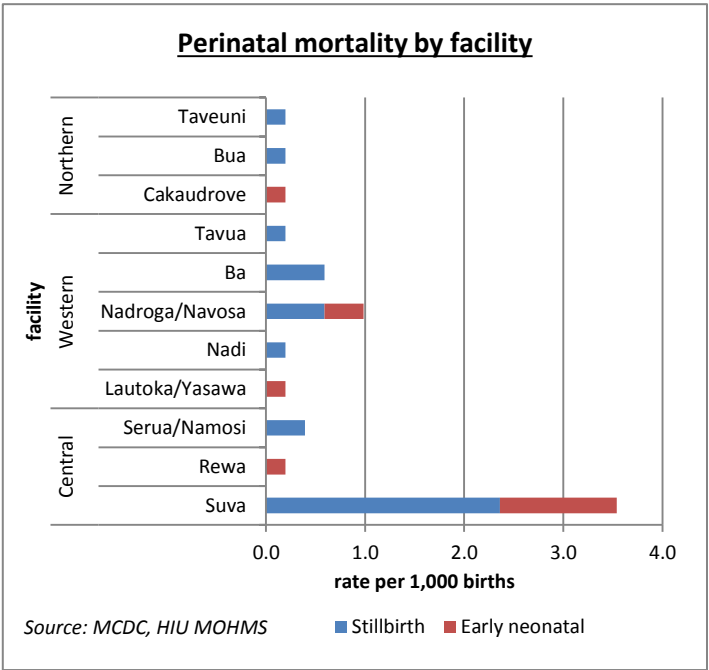
The Perinatal mortality rate stands at 6.9 per 1000 births for this quarter compared to 4.8 per 1000 births in 4th quarter 2014. . The most perinatal death was reported from Suva (n=18), followed by Nadroga/Navosa (n=5)

6.6 Compliance to Reporting Requirements

6.6.1 Non-Communicable Disease
Reports received - DM Notification vs PHIS online

PHIS		DM Notification	%reported
Dual	DM	Forms	
146	1184	83	6.2

The table shows the number of new diabetic cases received in Qrt.4 of 2015. There more cases reported in PHIS compared to the DM notification form. There is still a gross underreporting noted in all facilities.

6.6.2 PHIS
Percentage PHIS Paper based form and PHIS On-line report received

Divisions	% Received
Central	100
Northern	100
Western	99
Eastern	74

The preceding analysis is based on the 93.1% of reports received through the paper based reports and online entries from the four divisions for quarter 4, 2015. When compared with the results from same period last year there was a 5.4% decline in the receipt of reports. This was achieved through continues follow-up and routine monitoring by SDHS and HIU that had contributed to the improvement in reporting. Eastern division got the lowest coverage of reports received due to the pending reports from Rotuma.

On-time monitoring of PHIS paper-based and online reports received at HIU per Quarter.

Divisions	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Central	100	100	100	86	100	100	100	100	95	100	100	100
Eastern	100	100	100	100	100	100	67	100	100	87	67	67
Northern	100	100	100	100	100	100	100	100	100	100	100	100
Western	97	100	100	100	100	100	86	100	96	96	100	100
% coverage monthly	99.1	100.0	100.0	96.5	100.0	100.0	88.2	100.0	97.8	95.8	91.8	91.8
% coverage quarterly	99.7			98.8			95.3			93.1		
% coverage bi-quarter	99.3						94.2					
% coverage Annual	96.7											
Source:CMRIS Online[PHIS]												

The table above shows the percentage of monthly reports received on-time from each division in 2015 which illustrates the performance of each Division's consistency in delivering reports to HIU. There has been an improvement in submission of PHIS reports over the quarterly series however; there is still a need for improvement in submission. Overall, the Northern Divisions (100%) has been consistent in submitting their PHIS reports (paper based) even though they face challenges in their geographical location; followed by the Central Division (98%) and the Western Division (98%) while **the Eastern Division (91%) fared the least efficient in on-time submissions.**

PHIS late reporting Quarter 4, 2015.

| Reports received late by Month from the following Medical Areas [received after 15th of the following month]			
Division	**Oct**	**Nov**	**Dec**
Central	Nil	Nil	Nil
Eastern	Vunisea Medical Area Daviqele Medical Area Cicia Medical Area Rotuma Medical Area	Levuka Medical Area Bureta Medical Area Gau Medical Area Koro Medical Area Rotuma Medical Area	Levuka Medical Area Bureta Medical Area Gau Medical Area Koro Medical Area Rotuma Medical Area
Northern	Nil	Nil	Nil
Western	Nadarivatu Medical Area	Nil	Nil

Source: CMRIS Online [PHIS, The table shows the medical areas that were late in monthly reporting by each division in Quarter 4, 2015.

Connectivity Update:

The figure below shows the accessibility and connectivity of the SDHS to PHIS Online System. Total Facility: 20 (14 connected and 6 not connected).

Division	Sub Division	Accessibility	Division	Sub Division	Accessibility
Central	Suva Subdivision	Accessible	Northern	Cakaudrove Sub-Division	Accessible
	Serua/Namosi Subdivision	No Connection at all		Macuata Subdivision	Accessible
	Rewa Subdivision	Accessible		Taveuni Subdivision	Accessible
	Tailevu Subdivision	Accessible		Bua Subdivision	Accessible
	Naitasiri Subdivision	Accessible	Western	Nadroga/ Navosa Subdivision	Accessible
Eastern	Lomaiviti Subdivision	Inaccessible at SDHS level but accessible in Hospital Level)		Nadi Subdivision	Accessible
	Kadavu Subdivision	Accessible		Ba Subdivision	No Govnet Access
	Lakeba Subdivision	Inaccessible		Tavua Subdivision	Accessible
	Lomaloma Subdivision	Inaccessible		Ra Subdivision	Accessible
	Rotuma Subdivision	Inaccessible		Lautoka/Yasawa Subdivision	Accessible

6.6.3 Communicable Disease

Quarter 4 NNDSS Received Certificates for Central Division 2015
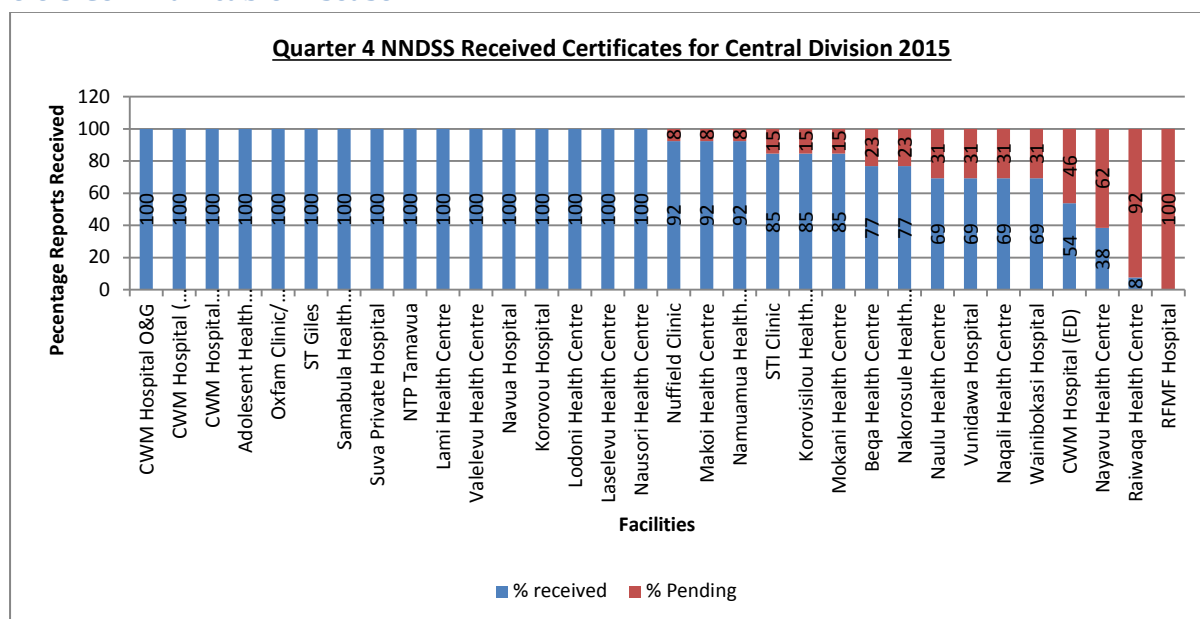
83% of reports were received for 4th quarter 2015 from the Central division.
This division had the lowest compliance rate compared to all other divisions.

Quarter 4 NNDSS Received Certificates for Western Division 2015

Source: NNDSS
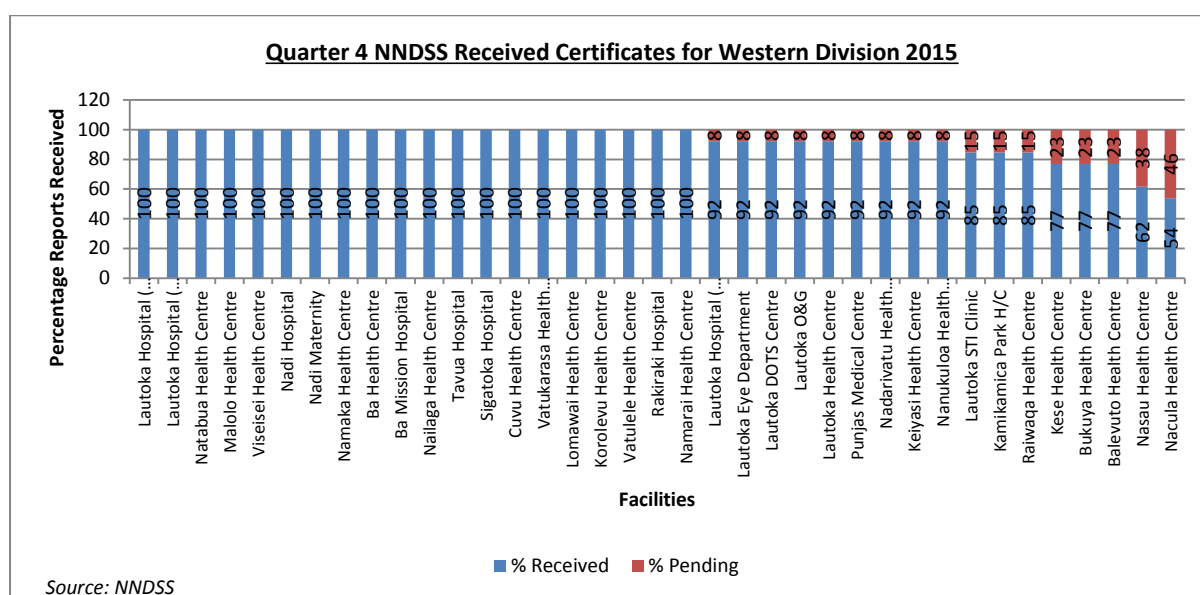
93% of reports were received for 4th quarter 2015 from the Western Division.
This division has improved in the submission of reports as compared to other quarterly reports compliance rate.

Quarter 4 NNDSS Received Certificates for Northern Division 2015

Source: NNDSS
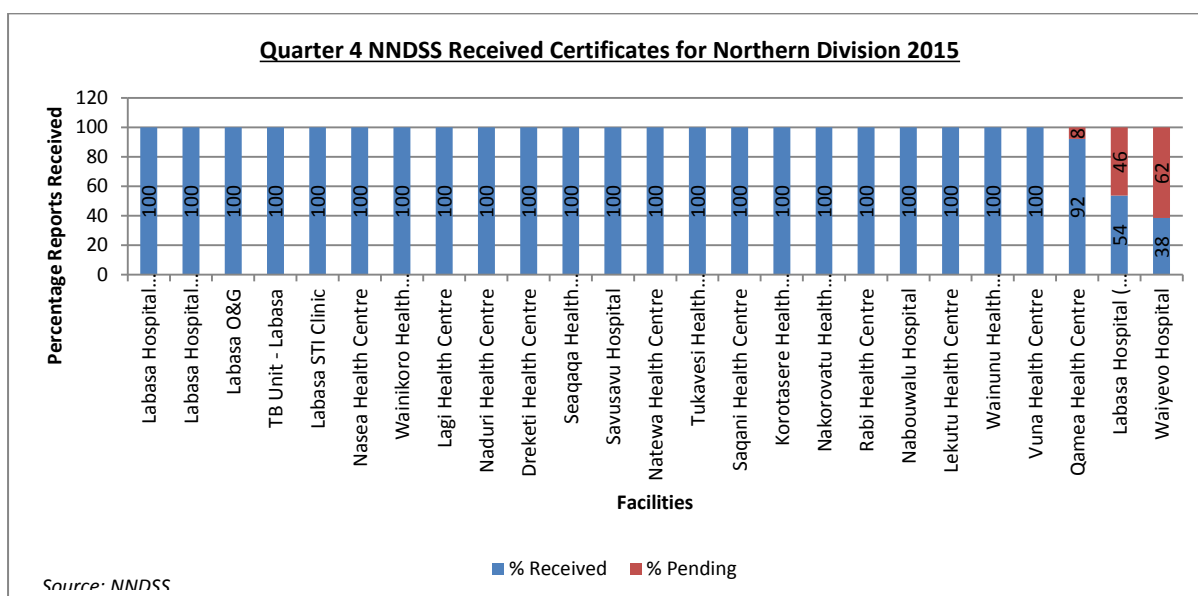
95% of reports were received for 4th quarter 2015 from the Northern division.
This division had the 2nd comprehensive coverage of report submission when compared to all other Divisions.
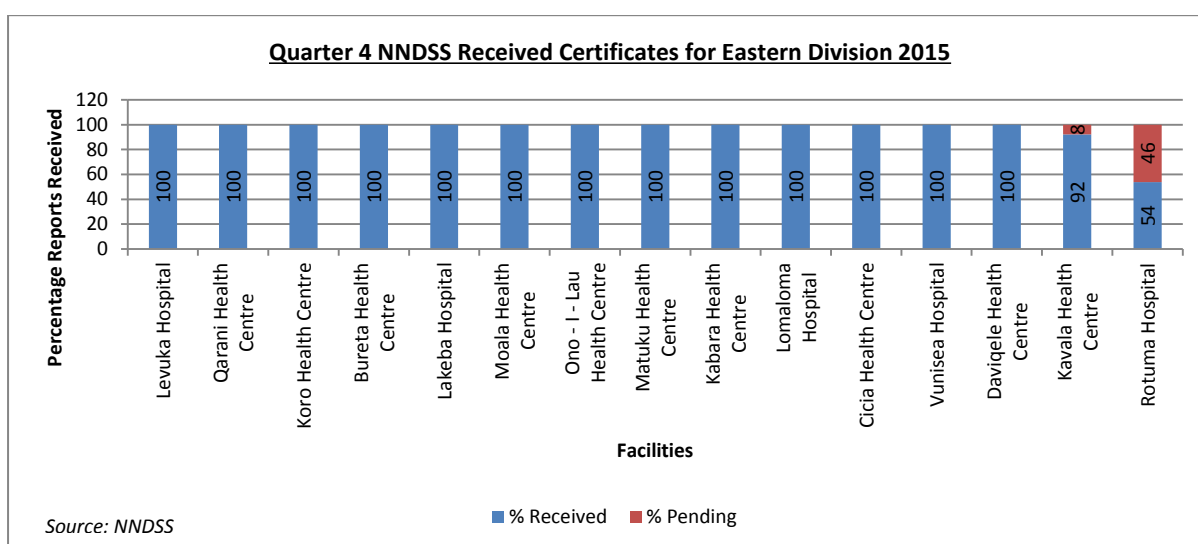

Quarter 4 NNDSS Received Certificates for Eastern Division 2015

Source: NNDSS

96% of reports were received for 4th quarter 2015 from the Eastern division.
This division had the most comprehensive coverage of report submission when compared to all other Divisions.

Acknowledgements to the Eastern division facilities for their reports as this are the best division in reporting of the Notifiable diseases for this quarter.

NNDSS Received Certificates by Divisions for Quarter 4 2015

Source: NNDSS
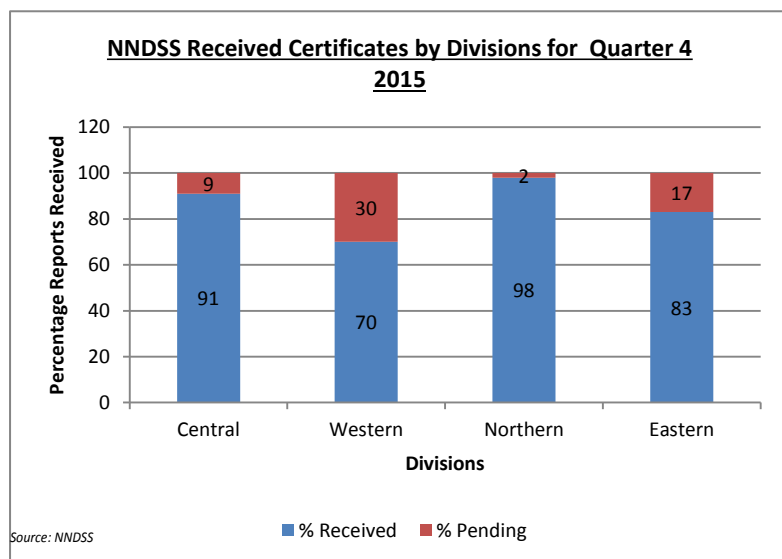
The following divisions are congratulated for being the best divisions in NNDSS reporting:

✓ *Northern – 98% for 3rd quarter 2015.*

✓ *The Western division had the lowest rates of reporting at 70%, followed by Eastern 83% and Central division with 91% reporting for 3rd quarter 2015.*

HIU urges all the divisions to improve their submissions and capture of notifiable diseases as the deadline for receiving of all the notifiable diseases certificates is on a weekly basis. All outbreak situations still require routine reporting on the Notifiable Disease Certificate. **The HIU draws attention to the timeliness of submissions which needs marked improvement from all facilities in all divisions.**

GPs Reports Received for Quarter 4, 2015

Source: NNDSS
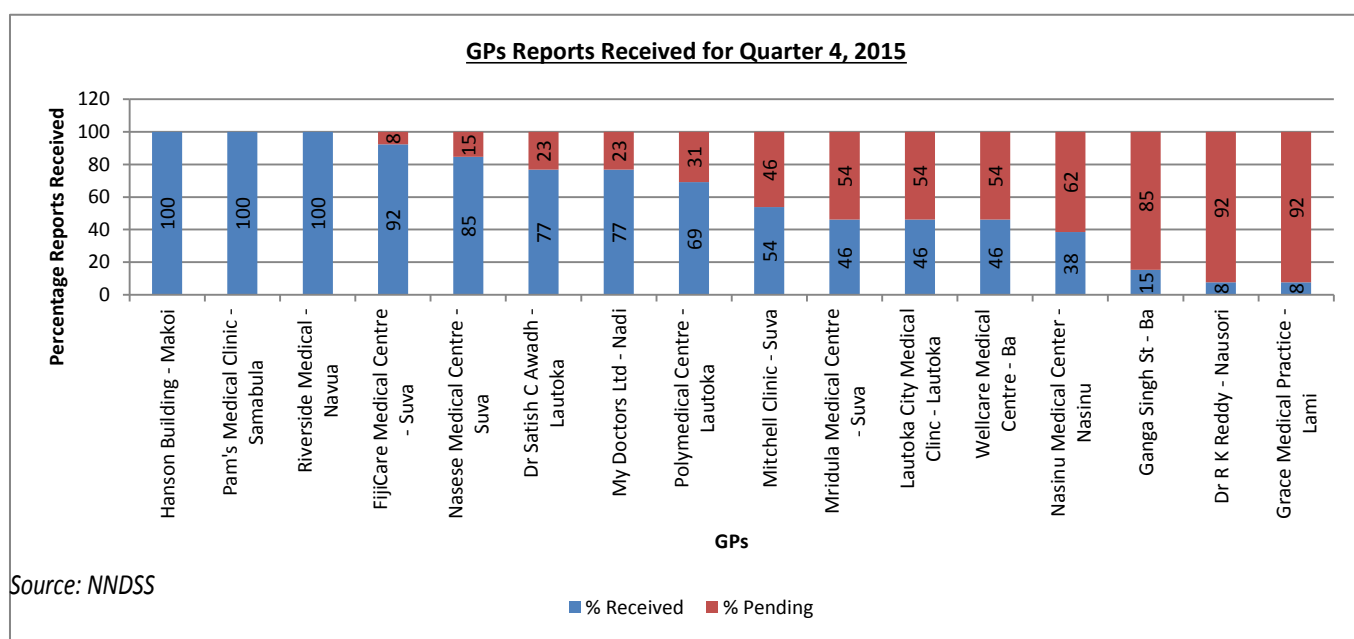
The General Practitioners have been reporting the Notifiable diseases since April of 2014 and HIU acknowledges all the private practitioners who have been submitting their reports. A total of 16 GPs have submitted their reports for the 3rd quarter 2015 (July to September) which equates to 15% of coverage from GPs. Acknowledgement is made to the 3 GPs who have complied with 100% reporting for the 3rd quarter. The rest of the GP's and private laboratories are encouraged to follow suit.

Requesting all the GPs to report the Notifiable disease reports as required according to the Public Health Act to report every week ending and if there is no case also report and indicate as NIL case.

Private laboratories are yet to report cases (Vanmed, Austec, and Suva Private Lab).

6.6.4 Hospital Monthly Returns

Reporting Facilities

REPORTING FACILITIES			
Central	**Western**	**Northern**	**Eastern**
CWM Hospital	Lautoka Hospital	Labasa Hospital	Cicia Hospital
Korovou Maternity Hospital	Ba Mission Hospital	Nabouwalu Hospital	Lakeba Hospital
Nausori Maternity Hospital	Nadi Hospital	Savusavu Hospital	Levuka Hospital
Navua Maternity Hospital	Naiserelagi Maternity Hospital	Waiyevo Hospital	Lomaloma Hospital
Tamavua Hospital	Rakiraki Hospital		Matuku Hospital
Vunidawa Hospital	Tavua Hospital		Rotuma Hospital
Wainibokasi Hospital	Sigatoka Hospital		Vunisea Hospital
St Giles Hospital			
Source: Manual Tear-Offs & PATISPLUS			

Total: 25; Divisional Hospitals – 3; Subdivisional Hospitals – 18; Specialized Hospitals – 2 (St Giles, Tamavua/ Twomey Hospital; Private Hospitals – 2 (Naiserelagi Maternity and Military Hospital)

Data on Hospital services has been obtained from the Hospital Discharge Data, PATISPLUS for those facilities on-line and Manual Tear-Offs for those facilities where PATISPLUS is still not available. PATISPLUS is only available at CWM, Labasa, Lautoka and Nadi. Manual tear-offs are from the Sub-Divisional Hospitals. Hospital Discharge Data are obtained from all Sub-Divisional Hospitals and Divisional Hospitals (PATISPLUS).

Percentage received for Hospital Maternal and Child Health [MCH] reports

Compliance to Reporting - Paperbase MCH Report Quarter 4, 2015 by Divisions
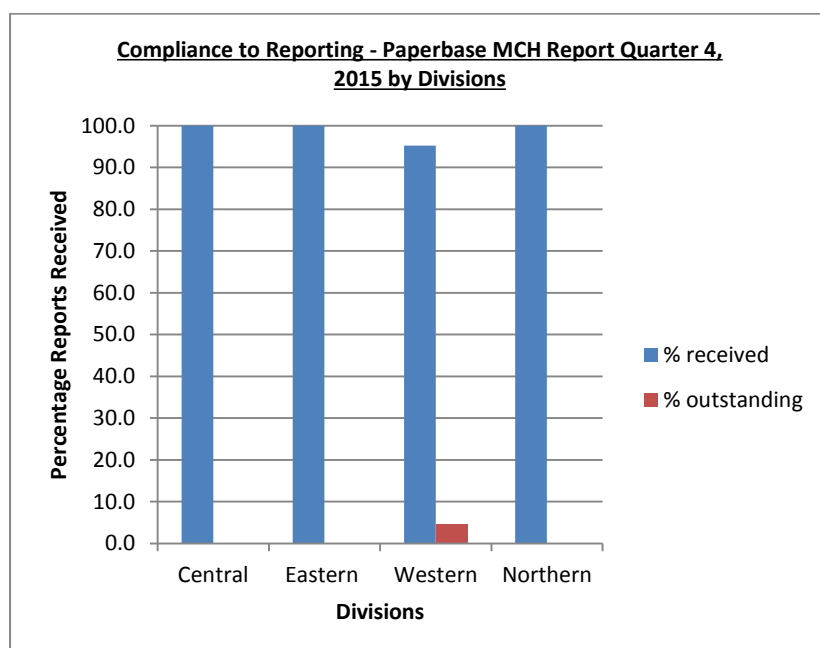
The analysis for the MCH Report is based on the reports received through paper based reports from the four Divisions for the 4th Quarter 2015. A few Sub-Divisional Hospitals have yet to submit their reports as illustrated in the graph. Western Division submitted 95.2% of the MCH Form. Congratulations to the Central, Eastern and Northern Divisions for 100% submission. The facility yet to report on the MCH forms is Nadi Sub divisional Hospital.

Percentage received for Hospital Monthly Return reports

Compliance to Reporting - Paperbase Hospital Monthly Return Quarter 4, 2015 by Divisions
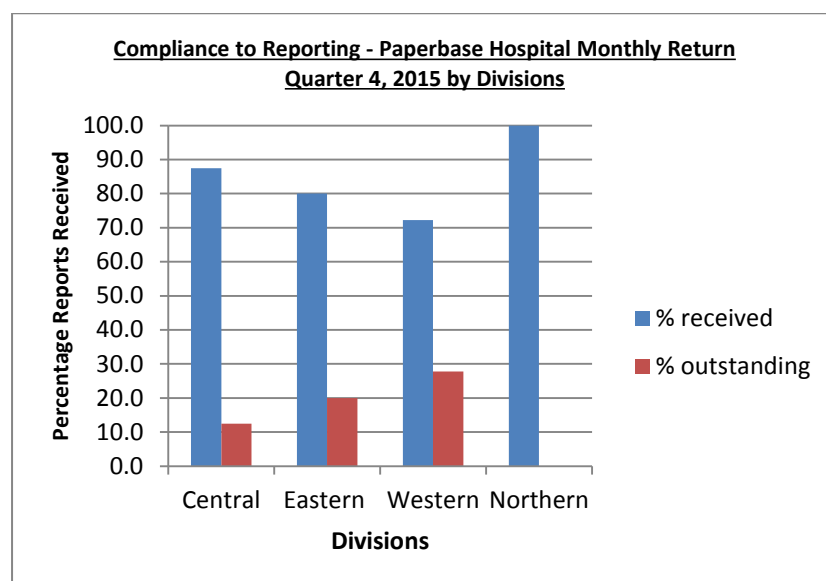
The analysis for Hospital Monthly Return is based on the reports received through paper-based systems from the Divisions. The Central Division still has outstanding returns for the 4th quarter which stands at 12.5%; as there were no reports from Military Hospital and Rotuma Hospital. Western Division has outstanding returns of 27.8% and Eastern Division stands at 20.0%. Congratulations to the Northern Division for 100% submission. This is consistent with PHIS on time reports and CMRIS where the Western division lags behind the other divisions.

Percentage received for Inpatient Tear-offs reports

Compliance to Reporting - Paperbase Hospital Inpatient Tear-offs Quarter 4, 2015 by Divisions
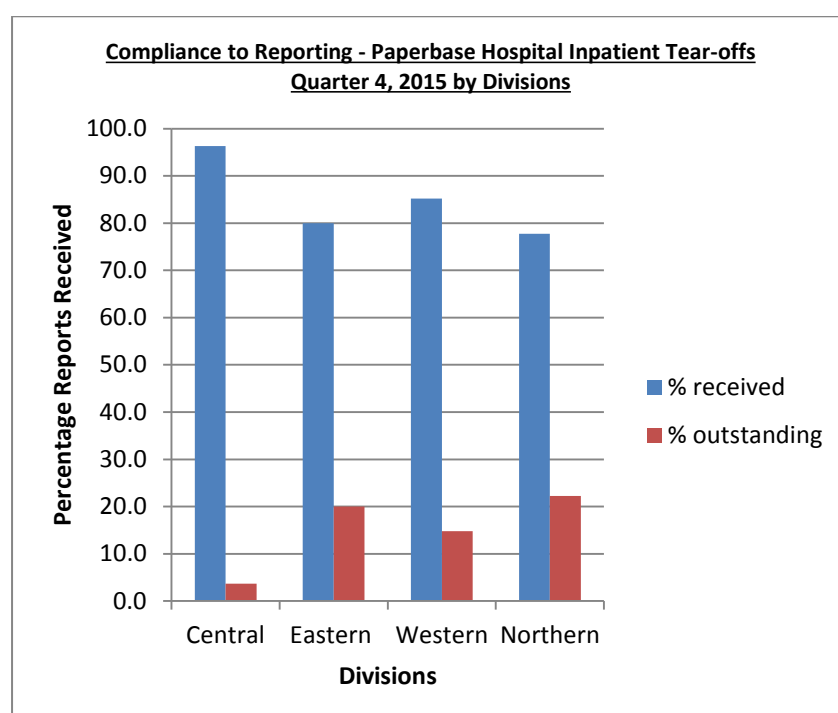
The analysis for Hospital Inpatient Tear-Offs is based on reports received through Manual systems from the Divisions. The Central Division's outstanding reports is 3.7%, Western stands at 14.8%, Northern Division still have outstanding returns which stand at 22.2% and the Eastern Division stands at 20% of the returns for 4th quarter 2015. The facilities yet to submit their reports are Wainibokasi, Rotuma, Nabouwalu, Taveuni, Ba Mission, Rakiraki and Tavua Hospital. All divisions need to improve in their submissions as Inpatient data cannot be coded without these submissions and datasets presented are not complete without the inclusion of these core inpatient datasets.

6.6.5 Mortality
Number of MCDC yet to be received at HIU by months

Facility	Month			Total
	October	**November**	**December**	
CWM Divisional Hospital	2	4	3	9
Labasa Divisional Hospital	24	16	12	52
Lautoka Divisional Hospital		2		2
Grand Total	26	22	15	63

The table shows the number of Medical Cause of Death Certificates (MCDC) that is yet to be received at HIU. These are the admissions in PATIS-plus where the patient has been discharged as deceased. Please note that MCDCs received after the 15th of January 2016 (for October to December) are not included in this analysis but will be counted in the Annual Report. **Recommendations for all health facilities to submit the HIU copy of the MCDCs within 48 hours after death has occurred except for forensic investigation.** Please note that the Labasa Hospital has the highest number of pending MCDCs. The Assistant Statisticians are requested to ensure timely and complete submissions of all MCDC's and notify HIU in the event of delayed MCDCs.

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Section 7 – Medicinal products, equipment and infrastructure

7.1 Pharmacy Indicator

7.1.1 Medicine Stock-Out Comparative report

Percentage medicine stock out by division for quarter 4 comparative for 2014 & 2015

Source: PHIS, HIU, MOHMS.
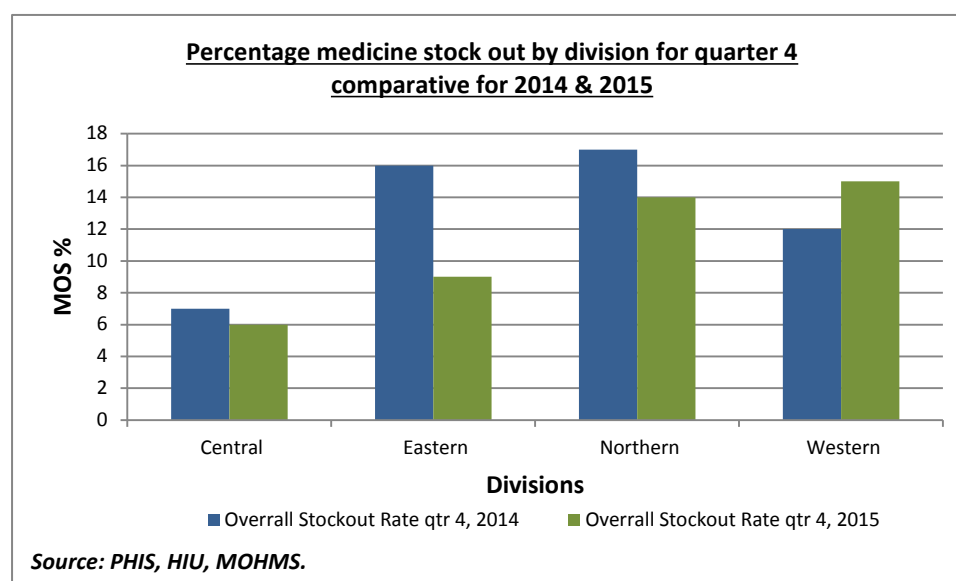
The overall stock out for quarter 4 was 119%, which was 8.3% less than what was reported in the same period last year (13%). The above table shows the percentage of Medicine Stock Out by divisions. During the 4th Quarter, 2015, the Western Division had the most medicine stock outs with 15% across all medical areas followed by the Northern Division (14%) and Eastern Division (9%), while the Central division reported the lowest percentage (6%). When compared with the results of the same period last year, the Northern Division (17%) recorded the most stock-out followed by the Eastern (16%) and the Western Division (12%) while the Central reported the lowest percentage (7%).

7.1.2 Medicine Stock out Rate by Sub-Division

Division	Sub Division	Overall Stock out Rate (%)
Central	Tailevu	12
	Rewa	11
	Naitasiri	8
	Serua/Namosi	6
	Suva	2
Eastern	Kadavu	19
	Lakeba	10
	Lomaiviti	5
	Lomaloma	1
	Rotuma	0
Northern	Cakaudrove	21
	Taveuni	14
	Bua	10
	Macuata	8
Western	Ba	40
	Tavua	25
	Lautoka/Yasawa	23
	Nadroga/Navosa	9
	Ra	3
	Nadi	0
Source: CMRIS Online [PHIS]		

The table above shows the medicine stock out rate by sub-division. The medicine that usually stock-out in the top 5 sub-division in each division were Flucloxacilin, Amoxicillin, Pracetamol Elixir, Vaccines and Paracetamol Tablets.

7.1.3 Key medicine stock-out by Division

Percentage of key medicine stock-out by Divisions in Nursing Centres/ Health Centres level for Quarter 4, 2015

Source: PHIS, HIU, MOHMS.
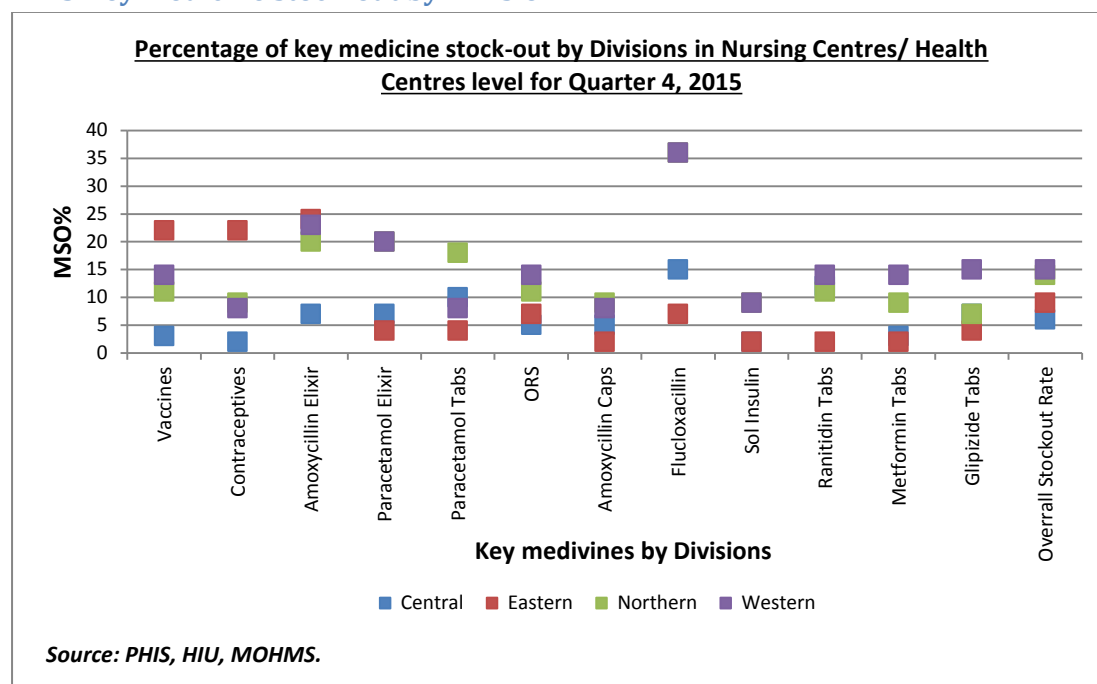
The common stock out in this quarter were Flucloxacillin (24%) followed by Amoxycillin Elixir (18%), Paracetamol Elixir (13%), Vaccines (13%), Paracetamol Tabs (10%) , Ranitidine Tabs (10%), Contraceptives (9%). ORS (9%), Glipizide Tabs (9%), Metformin Tabs (7%), while Amoxycillin Caps (6%) and Sol Insulin (6%). Overall, there was a decrease in medicine stock by 8.3% this quarter when compared with the same period last year (12%).

There is need for sustainability of all key Medicine in the Medical area level. There is a major need in immediate notification practice by health professional at Medical Area level and below to the Fiji Biochemical Pharmaceutical Service when there is a stock out.

Section 8 - Reference Table

8.1 Hospital Utilization

No	Institution	Number of Outpatient	Number of Beds	Total Admission	Total Discharge	Total Patient Days	Occupancy Rate	Daily Bed State	Average Length of Stay
1	CWM Hospital	28,157	481	4,843	4,783	41,320	93%	449	8.6
2	Navua Hospital		22	312	305	939	46%	10	3.1
3	Vunidawa Hospital	2,074	24	68	67	131	6%	1	2.0
4	Korovou Hospital	1,529	16	197	193	422	29%	5	2.2
5	Nausori Hospital	532	17	498	477	544	35%	6	1.1
6	Wainibokasi Hospital	624	12	188	188	839	76%	9	4.5
	Central Division Sub-total	**32,916**	**572**	**6,106**	**6,013**	**44,195**	84%	**480**	**7.3**
7	Lautoka Hospital	39,914	305	3,054	2,993	15,599	56%	170	5.2
8	Nadi Hospital	37,299	75	928	888	3,263	47%	35	3.7
9	Sigatoka Hospital	17,003	66	718	668	2,525	42%	27	3.8
10	Ba Mission Hospital	18,309	50	737	712	1,695	37%	18	2.4
11	Tavua Hospital	6,397	29	176	156	438	16%	5	2.8
12	Rakiraki Hospital	5,050	30	183	179	669	24%	7	3.7
	Western Division Sub-total	**123,972**	**555**	**5,796**	**5,596**	**24,189**	47%	**263**	**4.3**
13	Labasa Hospital	21,466	182	2,136	1,848	7,767	46%	84	4.2
14	Savusavu Hospital	12,474	56	490	466	1,508	29%	16	3.2
15	Waiyevo Hospital	2,481	33	138	132	485	16%	5	3.7
16	Nabouwalu Hospital	4,261	26	160	153	618	26%	7	4.0
	Northern Sub-total	**40,682**	**297**	**2,924**	**2,599**	**10,378**	38%	**113**	**3.5**
17	Levuka Hospital	4,616	40	127	116	433	12%	5	3.7
18	Vunisea Hospital	1,980	22	54	49	226	11%	2	4.6
19	Lakeba Hospital	851	12	45	43	137	12%	1	3.2
20	Lomaloma Hospital	1,446	16	23	22	126	9%	1	5.7
21	Matuku	317	5	13	13	39	8%	0.4	3.0
22	Rotuma Hospital		14				0%	0.0	0
	Eastern Division Sub-total	**9,210**	**109**	**262**	**243**	**961**	10%	**10**	**4.0**
	TOTAL (Divisional)	**206,780**	**1,533**	**15,088**	**14,451**	**79,723**	57%	**867**	**5.5**

SPECIALISED AND PRIVATE HOSPITALS

No	Institution	Number of Outpatient	Number of Beds	Total Admission	Total Discharge	Total Patient Days	Occupancy Rate	Daily Bed State	Average Length of Stay
1	St Giles Hospital	1,907	86	109	92	5,643	71%	61	61.3
2	Tamavua/Twomey Hospital	6,217	91	92	90	3,816	46%	41	42.4
4	Military Hospital		9				0%	0	0
5	Naiserelagi Maternity	431	7	38	34	41	6%	0.4	1.2
	Specialized Hospital Sub-total	**8,555**	**193**	**239**	**216**	**9,500**	54%	**103**	**44.0**
	GRAND TOTAL	**215,335**	**1,726**	**15,327**	**14,667**	**89,223**	56%	**970**	**6.1**

8.2 Percentage increased and decreased in Outpatient Services by Medical area level and below

Division	Sub-division	Medical Area	4th Qtr, 2014	4th Qtr, 2015	% ↑↓ comparative 4th Qtr, 2014 and 2015.
Central	Naitasiri	Vunidawa	17	59	71.2
		Laselevu	910	1230	26.0
		Naqali	1775	2371	25.1
		Nakorosule	874	755	-15.8
	Rewa	Wainibokasi	4417	5759	23.3
		Mokani	3572	4363	18.1
		Nausori	25924	16809	-54.2
	Serua/Namosi	Beqa	1178	4957	76.2
		Namuamua	869	1263	31.2
		Navua	6267	5335	-17.5
		Korovisilou	2743	1701	-61.3
	Suva	Lami	14317	21312	32.8
		Nuffield	15806	23393	32.4
		Samabula	15700	21353	26.5
		Makoi	21247	23963	11.3
		Suva	413	427	3.3
		Valelevu	30979	31924	3.0
		Raiwaqa (Central)	19555	12495	-56.5
	Tailevu	Lodoni	2657	3210	17.2
		Korovou	6126	6450	5.0
		Nayavu	1258	1307	3.7
Eastern	Kadavu	Vunisea	221	404	45.3
		Daviqele	1453	2051	29.2
		Kavala	1519	1410	-7.7
	Lakeba	Matuku	441	709	37.8
		Ono-i-lau	343	528	35.0
		Kabara	895	886	-1.0
		Lakeba	948	907	-4.5
		Moala	1136	1046	-8.6
	Lomaiviti	Gau	1160	5462	78.8
		Levuka	151	136	-11.0
		Koro	2785	2227	-25.1
		Bureta	1197	889	-34.6
	Lomaloma	Cicia	253	463	45.4
		Lomaloma	443	478	7.3
	Rotuma	Rotuma	33	75	56.0
Northern	Bua	Nabouwalu	1049	1261	16.8
		Wainunu	1486	1625	8.6
		Lekutu	2558	2708	5.5

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	Cakaudrove	Natewa	602	872	31.0
		Tukavesi	1552	1777	12.7
		Saqani	655	728	10.0
		Rabi	1279	1355	5.6
		Korotasere	942	862	-9.3
		Savusavu	830	740	-12.2
		Nakorovatu	1412	946	-49.3
	Macuata	Labasa	7547	8283	8.9
		Dreketi	2723	2895	5.9
		Naduri	936	995	5.9
		Wainikoro	4071	3994	-1.9
		Lagi	858	702	-22.2
		Seaqaqa	5648	4184	-35.0
	Taveuni	Waiyevo	486	915	46.9
		Vuna	1519	2115	28.2
		Qamea	499	439	-13.7
Western	Ba	Nailaga	2867	4096	30.0
		Balevuto	3241	3097	-4.6
		Ba	9050	7697	-17.6
	Lautoka/Yasawa	Lautoka	1159	5447	78.7
		Kese	740	1179	37.2
		Viseisei	3556	4155	14.4
		Kamikamica	5978	6641	10.0
		Malolo	1164	1167	0.3
		Nacula	1045	1037	-0.8
		Natabua	1788	1460	-22.5
	Nadi	Namaka	8083	7945	-1.7
		Bukuya	412	340	-21.2
		Nadi	1133	933	-21.4
	Nadroga/Navosa	Cuvu	0	4468	100.0
		Vatukarasa	0	893	100.0
		Raiwaqa (Western)	840	1211	30.6
		Keiyasi	1728	1632	-5.9
		Lomawai	3452	3170	-8.9
		Korolevu	2426	2115	-14.7
		Sigatoka	1295	1055	-22.7
		Vatulele	808	544	-48.5
	Ra	Rakiraki	401	1367	70.7
		Namarai	236	319	26.0
		Nanukuloa	1873	2370	21.0
		Nasau	1149	774	-48.4
	Tavua	Nadarivatu	541	396	-36.6
		Tavua	173	93	-86.0
		Vatukoula	65	13	-400.0
Total			**281437**	**311117**	**9.5**

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The above table shows the comparative percentage increase and decease in outpatient services for quarter 4, 2014 and quarter 4, 2015.

8.3 Notifiable Diseases by Months for Quarter 4 2015

No.	Diseases	October	November	December
1	Acute Poliomyelitis	0	0	0
2	Acute Respiratory Infection	6,604	3,561	3,169
3	Anthrax	0	0	0
4	Brucellosis	0	0	0
5	Chicken Pox	490	349	255
6	Cholera	0	0	0
7	Conjunctivitis	516	293	329
8	Dengue Fever	120	100	95
9	Diarrhoea	2,861	1,477	1,651
10	Diphtheria	0	0	0
11	Dysentry (a) Amoebic	1	0	0
	(a) Bacillary	6	9	3
12	Encephalitis	0	0	1
13	Enteric Fever (a) Typhoid	14	15	19
	(b) Para Typhoid	0	0	0
14	Fish Poisoning	125	159	141
15	Ciguatera Fish Poisoning	2	10	3
16	Food Poisoning	0	0	0
17	German Measles (Rubella)	5	5	2
18	Infectious Hepatitis	17	22	15
19	Influenza	3,010	1,443	976
20	Leprosy	0	0	1
21	Leptospirosis	8	8	4
22	Malaria	0	1	0
23	Measles (Morbilli)	2	1	0
24	Meningitis	8	9	7
25	Mumps	0	0	0
26	Plague	0	0	0
27	Pneumonia	549	265	190
28	Puerperal Pyrexia	0	0	0
29	Relapsing Fever	0	0	0
30	Rheumatic Fever	3	4	3
31	Smallpox	0	0	0
32	Tetanus	0	0	0
33	Trachoma	38	38	7
34	Tuberculosis (a) Pulmonary	34	33	16
	(b) Others	0	0	0
35	Typhus	0	0	0
36	Viral Illness/ Infection	5,461	2,674	1,993
37	Whooping Cough	1	0	0
38	Yaws	0	0	0
39	Yellow Fever	0	0	0
40	**Sexually Transmitted Diseases**	-		
	(a) Gonorrhoea	114	86	57
	(b) Candidiasis	18	15	3
	(c) Chlamydia	0	0	0
	(d) Congential Syphilis	2	2	0
	(e) Lymphogranulona Venerum	0	0	0
	(f) Herpes Zoster (Shingles)	5	2	3
	(g) Ophthalmia Neonatorium	3	1	0
	(h) PID	0	0	0
	(i) Syphilis	59	41	34
	(j) Trichomoniasis	10	3	3
	(k) Genital Warts	0	0	0

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