

HEALTH INFORMATION BULLETIN



Using Health Information for Measuring and Improving Health Outcomes

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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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.

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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 (≥ 28 weeks gestation or, in absence of a reliable gestational age, those with a birth weight of $\geq 1000\text{G}$).
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 ≥ 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 (≥ 28 weeks gestation or, in absence of a reliable gestational age, those with a birth weight of $\geq 1000\text{g}$).
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

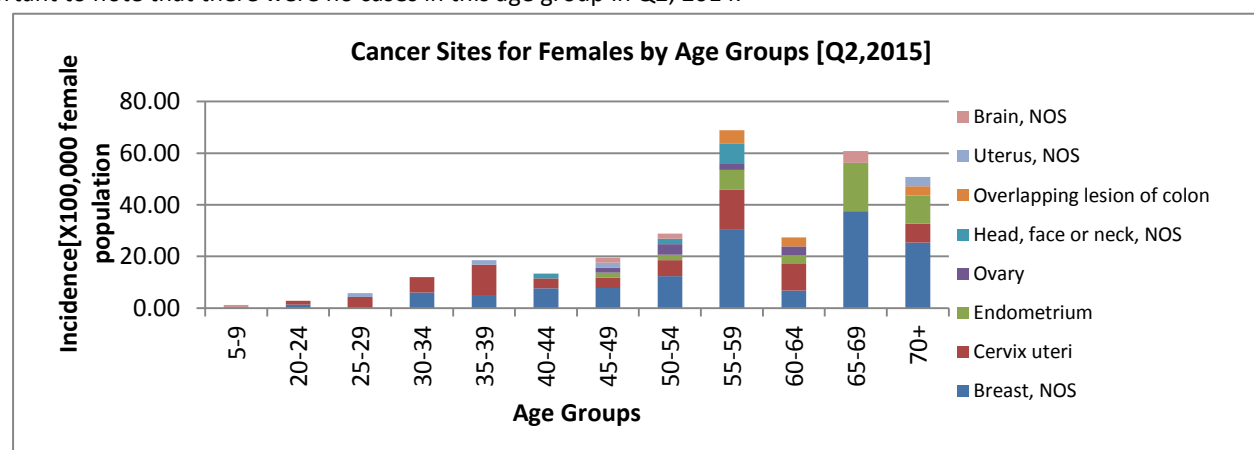
Cancer Sites in Females	Incidence Rate per 100,000 population (number of cases)	
	2015	2014
Breast, NOS	12.18 (52)	1.80 (8)
Cervix	7.31 (33)	0.40 (4)
Endometrium	3.05 (13)	0
Head face or neck, NOS, Ovary, Unknown Primary Sites	1.17 (5)	0
Uterus, NOS	0.94 (4)	0.20 (1)
Colon, NOS	0.94 (4)	0
Brain, NOS	0.94 (4)	0
Thyroid gland	0	0.20 (1)
Lymph node	0	0.20 (1)

In 2012, there were an estimated 14.1 million new cases of cancer in the world: 7.4 million (53%) in males and 6.7 million (47%) in females, giving a male: female ratio of 10:9 (UK, 2012). For the same period IARC GLOBOCAN estimated that Fiji had 277 cases of breast cancer (IR= 65.8 per 100000 females), 161 cases of cervical cancer (IR= 38.2 per 100000 females) and 47 cases of uterine cancer (IR= 11.2 per 100000 females) (Assosiation, 1979).

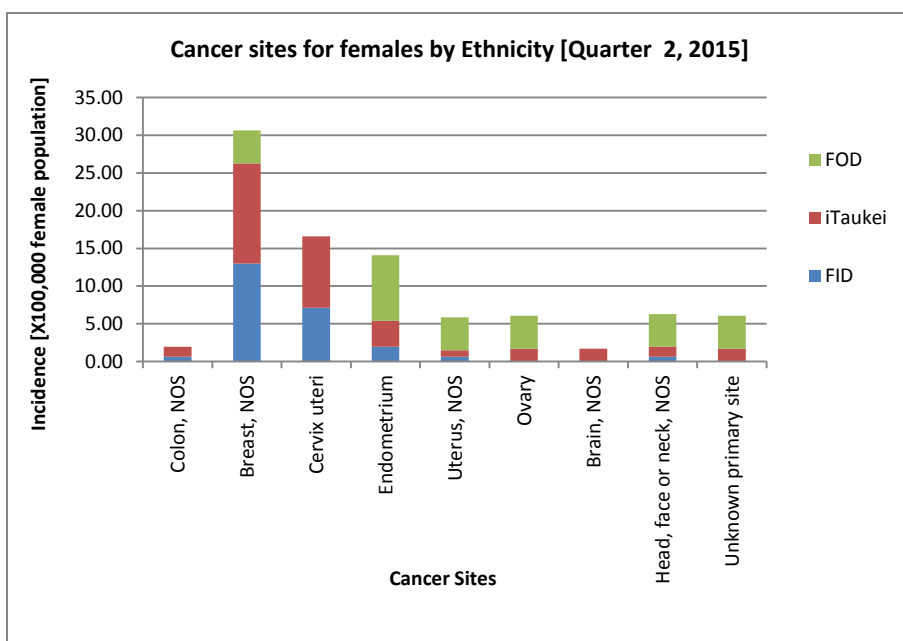
The table indicates the top 5 female cancers received for quarter 2, 2015. In this period a total of 251 cases were received compared to 23 for the same period last year. The 3 leading sites for cancer among women are Breast (n=52), Cervix uteri (n=33) and Endometrium (13). The incidence rates of the 3 leading female cancer sites is higher in 2nd quarter of 2015 compared to the same period last year and this could be a reporting artifact rather than true increases.

1.1.1 Cancer sites for Females by age-groups

The graph shows the age group distribution of women in the top 5 group (Table 1). It has been noted that Breast cancer is common in the age group 55-59 whereas cervical cancer is common in multiple age groups; 35-39, a second peak in the 55-59, and 60-64 year age groups. These peaks in cervical cancer cases could be apparent as a result of screening being sought at a higher frequency among these age groups; as well as late presentations. The same age groups are affected by cervical cancer throughout previous publications. . The comparative period for 2014 had a wider range of women affected by breast cancer; between 45-60 age groups. There is also demonstration of women between the age groups 65-69 and 70yrs developing cases of breast cancer; it is important to note that there were no cases in this age group in Q2, 2014.



1.1.2 Cancer sites for females by ethnicity



The I-Taukei female population was noted to have the highest cancer incidence of cervical cancer (n=81) followed by FIDs (n=37) and FODs (n=7). Cases of breast cancer were reported with higher frequency amongst I-Taukei and FID women within the age groups 55-59 years. Cervical cancers were also noted to be higher in the I-Taukei (9.43 per 100,000 females) for the age groups 35-39 years. However, cancer of the cervix was equally high in ID women (7.15 per 100,000 females). This clearly demonstrates a need for earlier screening and clinical interventions (breast and cervix cancers) for all women.

1.1.3 Top 5 Male Cancer 2014 vs 2015

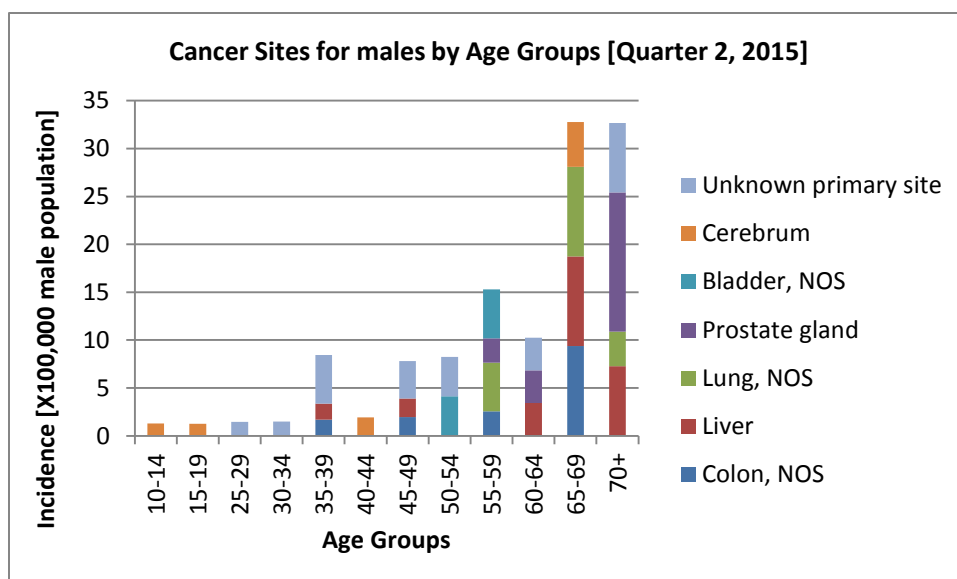
Cancer sites in Males

Cancer Sites in Males	Incidence Rate (per 100,000 population) (n=)	
	2015	2014
Unknown primary site	2.81 (12)	0
Liver	1.64 (7)	0.4 (2)
Prostate gland	1.40 (6)	0
Lung, NOS	1.17 (5)	0
Colon, NOS	1.17 (5)	0
Bladder, NOS	0.94 (4)	0
Cerebrum	0.94 (4)	0
Rectum	0	0.4 (2)
Lymph node	0	0.2 (1)
Skin, NOS	0	0.2 (1)
Kidney	0	0.2 (1)

A total of 92 cases were received in Q2, 2015 compared to 8 received for 2014. There is variability in the numbers of male cancers reported to the registry, due to delays in receiving the pathology reports. The 3 leading sites for cancer amongst men are Unknown primary site (n=12), Liver (n=7) and Prostate (n=6). The incidence rate of the 3 leading male cancer sites were higher in Q2, 2015 compared to Q2, 2014 as shown in the above table due to improved reporting. IARC GOBOCAN reported that Fiji had liver (70 cases; IR 16.04 per 100,000 males) and bowel cancer (56 cases; IR 12.83 per 100,000 males) in the 3rd and 5th positions in 2012. (Association, 1979)

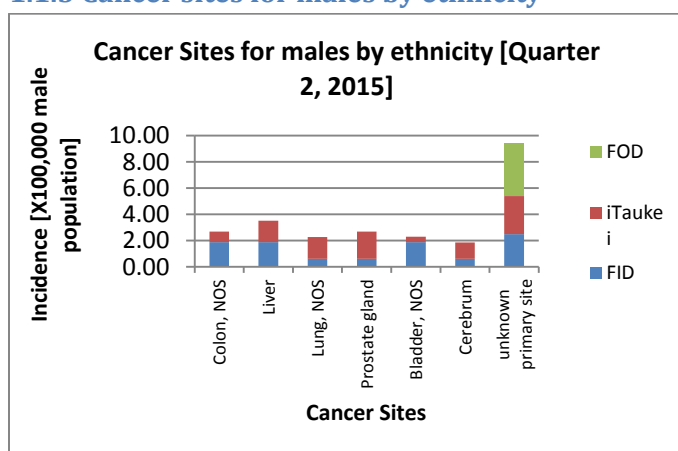
Source: Pathology report, MCDC and PATISplus

1.1.4 Cancer sites for males by age-groups



The graph shows the age groups of men in the top 5 cancer case category. It has been noted that unknown primary site were reported with higher frequency amongst 35-39 age groups for Q2, 2015 compared to the same period last year where Liver (n=2) and rectum (n=2) cancers were recorded as the leading cause of cancers in males Prostate cancers were note in the ≥55 year age categories

1.1.5 Cancer sites for males by ethnicity



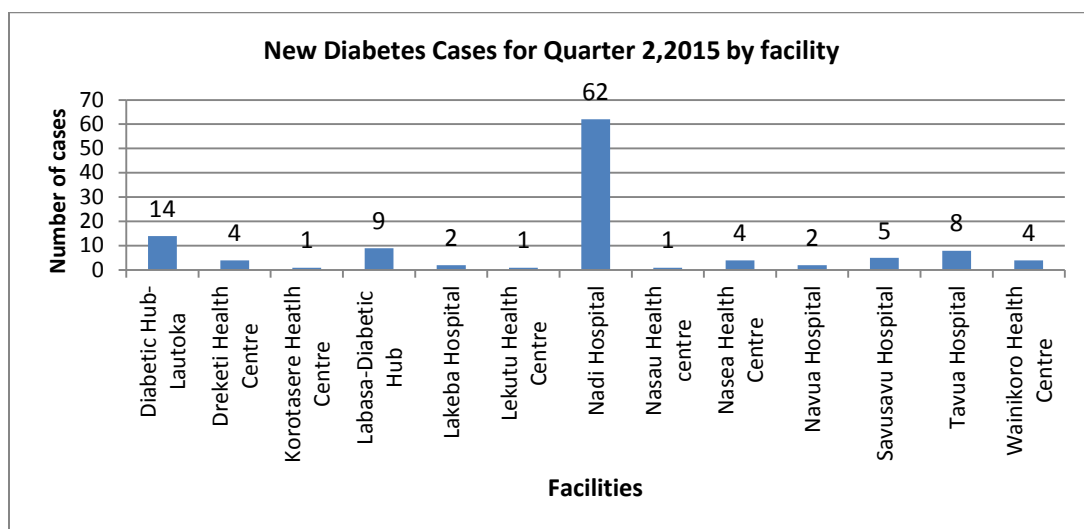
The I-Taukei was noted to have the highest cancer incidence (n=26) followed by FIDs (n=16) and FODs (n=1). Unknown primary sites were reported with the higher frequency amongst I-Taukei men. Colon, Liver and Bladder cancers were reported at a higher rate in FID males for this period. It is also important to note that the presence of ill-defined sites demonstrates poor diagnosis resulting in inability to apply correct coding to classify the disease.

Cancer cases in the Pediatric Population

Site	Incidence Rate (per 100,000 pediatric population) (n=)				
	Gender		Age-groups		
	Female	Male	1-4	5-9	10-14
Lip, NOS	0	1	0	1.24 (1)	0
Stomach	1	0	1.09 (1)	0	0
Bone marrow	0	1	0	1.24 (1)	0
Kidney, NOS	0	1	0	0	1.30 (1)
Cerebrum	0	1	0	1.24 (1)	0
Cerebellum, NOS	1	0	0	0	1.30 (1)
Brains, NOS	1	0	0	0	1.30 (1)

A total of 7 cases were received in the pediatric population [0-14years] in Q2, 2015. There were no cases reported in Q2, 2014 compared to 7 in Q2, 2015.

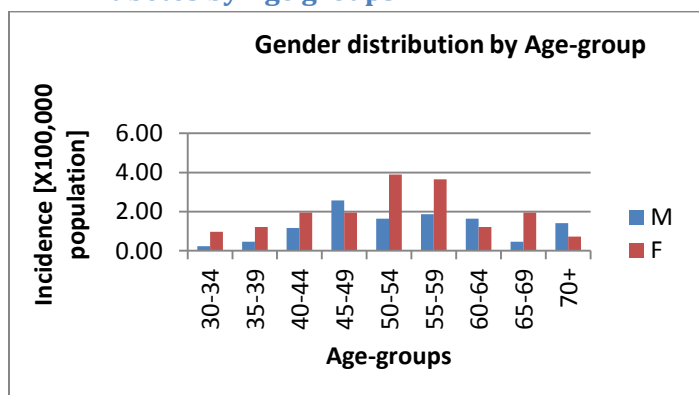
1.2 Diabetes



Source: DM Notification Form HIU

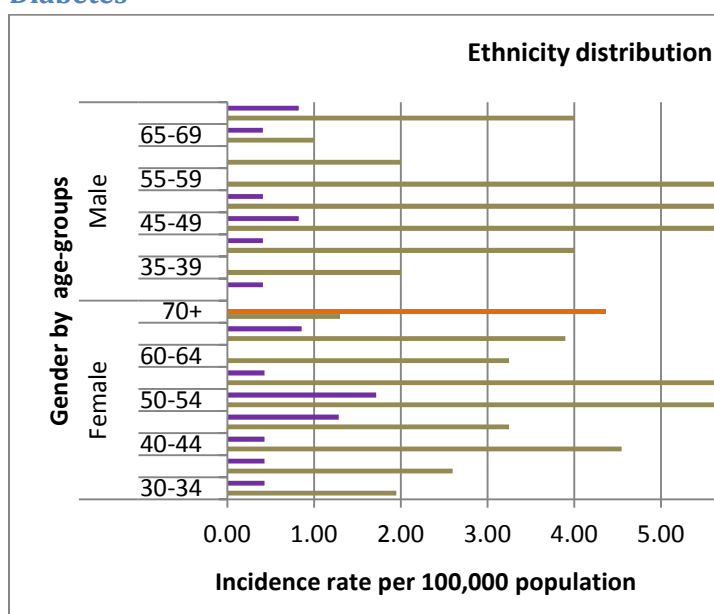
The total numbers of diabetes notifications received in Quarter 2, 2015 were 117 compared to 182 cases in Quarter 2, 2014. There were 13 facilities that reported the incidence of diabetes in this quarter compared to 26 facilities reporting for the same period last year. The Nadi Hospital reported the highest number of cases (n=62) and compared to the same period last year (n= 57) cases were reported from the same facility. The reduced frequency of reporting new cases affects the ability to correctly identify incidence of disease, resulting in reduced precision for planning, policy and strategic decision making.

1.2.1 Diabetes by Age groups



The graph represents the new diabetic cases between the age group 30-70+ by gender. It indicates that females contributed the highest number of diabetic patients in the age groups 30-44, 50-59 and 65-69 in the present quarter compared to the same quarter of 2014. However the results may be skewed due to severe underreporting from health facilities. The results may also demonstrate that females are being screened more than males, with resultant increases in case load from this gender.

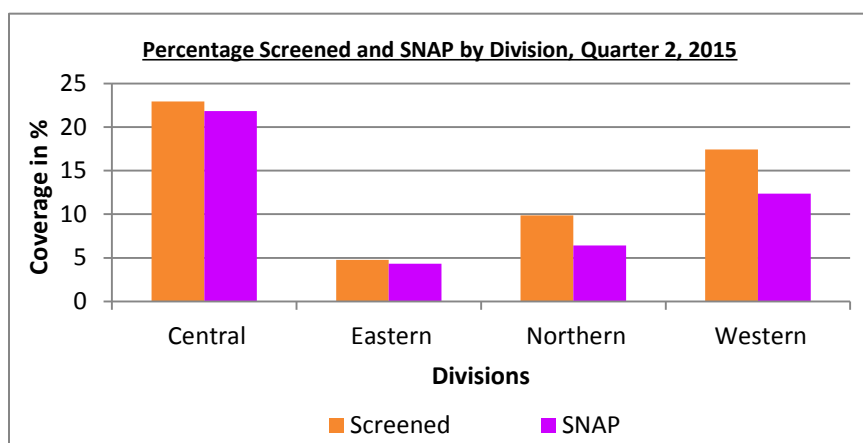
1.2.2 Ethnicity distribution by age-groups for Diabetes



FIDs continue to make up the bulk of new diabetes cases for almost all age groups. This reflects the overall national trend and also reflects known genetic risk factors. It should be noted however, that this rising trend may also be a result of health seeking behavior.

1.3 Non Communicable Disease – PHIS Report

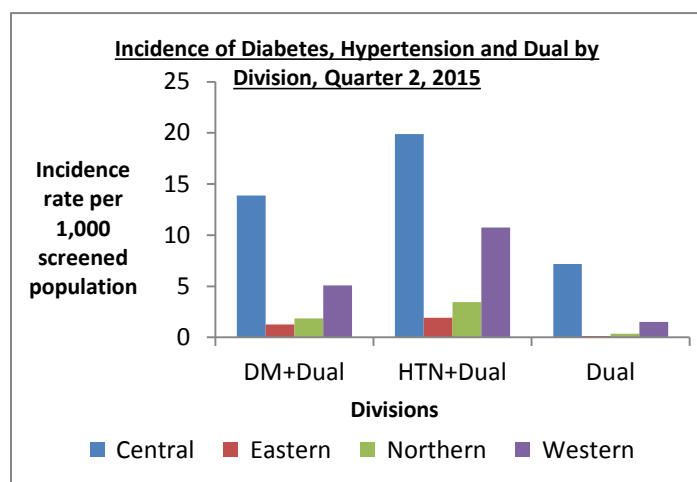
1.3.1 Screening and SNAP coverage



In the 2nd quarter, 2015 – 19940 people were screened for diabetes and hypertension. Out of this 81.7% received Counseling regarding lifestyle activities, smoking, nutrition, alcohol and physical activities (SNAP). The largest number screened was from the Central division, followed by the Western division, while the Eastern division had the lowest number

screened. Similar trends were observed in the same period last year. *[Note: the denominator for the coverage is total of SNAP & Screened –36237 for this reporting period to calculate the %].* The results indicate that there was 18.3% 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 the screening programme will not achieve its ultimate outcome of reducing the burden of hypertension and diabetes in the population. This is clearly evident in the Northern Division where only 35% of the population were counseled on SNAP; followed by the Western (29%), Eastern (9.4%) and Central (4.8%) divisions. *[The numerator is number SNAP upon the denomination number screened for each division by percentile]* 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 however there is still a great difference between the percentage screened and SNAP

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



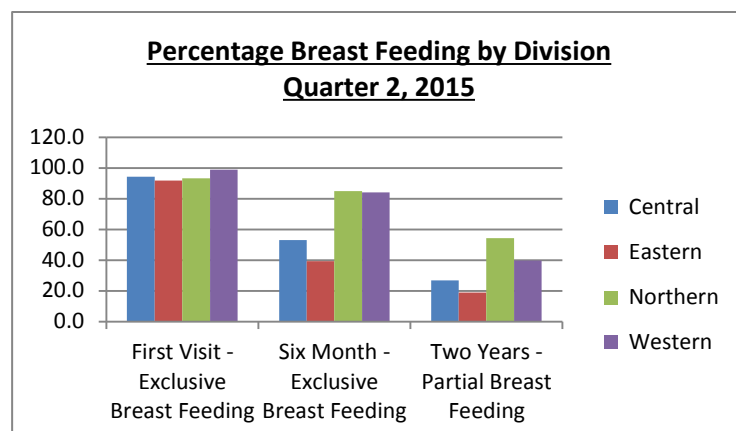
The bar graph shows the incidence of Diabetes (DM), Hypertension (HTN) and Dual reported through PHIS. Overall, Hypertension (n=708HTN+Dual) comprised 3.6% and was the commonest condition reported throughout the four Divisions followed by Diabetes (n=436DM+ Dual) which was 2.2% and Dual (n=182) was 0.9%. *[The numerator is the number of cases (both new cases <30 and 30+) and the denominator is the no. screened to calculated the percentage and note: DM and HTN rates include the dual cases – both new cases <30 and 30+].* Central Division (2%) recorded the highest incidence of hypertension cases followed by Western (1.1%), Northern (0.3%) and Eastern (0.2%) Divisions out of the total number that was screened (19940).

Source: CMRIS Online [PHIS]

1. 4 Nutrition

Malnutrition affects 1 in 2 people on the planet. Good nutrition is the bedrock of human well-being. Before birth and throughout infancy, good nutrition allows brain functioning to evolve without impairment and immune systems to develop more robustly. For young children, good nutrition status averts death and equips the body to grow and develop to its full potential. Over the course of the human lifespan, it leads to more effective learning at school, better-nourished mothers

who give birth to better-nourished children and adults who are likelier to be productive and earn higher wages. In middle age, it gives people metabolisms that are better prepared to ward off the diseases



associated with changes in diet and physical activity. Without good nutrition, people's lives and livelihoods are built on quicksand. (Report, 2014)

1. 4.1 Percentage Breast Feeding

The Western Division recorded 98.8% mothers practicing breast feeding during the birth to 6 months, followed by the Central (94.2%) and Northern (93.2%) Division while the Eastern (91.8%) recorded the lowest number. *[Denominator is the number of babies seen at the health center and the numerator is the number of mothers practicing breast feeding exclusively]*

The Northern and Western Division recorded 69% and 67% of the mothers who continued breast feeding after 6 months and up to 2 years, followed by the Central Division (43%) while the Eastern Division (32%) recorded the lowest number. *[Denominator is the number of babies seen for the 6 month and 2 years clinic and the numerator is the number of mothers practicing breast feeding in the two periods].* Similar patterns were observed in the same period last year.

Source: CMRIS Online [PHIS]

The increase in mothers practicing breast feeding during the first visit in all Divisions may be due to MCH advocacy and educational programs at medical area and below levels.

1.5 National Iron and Micronutrient Supplement (NIMS)

1.5.1 NIMS tabular report by division

Division	NIMS					
	6mnths - 1 yrs	1 - 2 yrs	2 - 3 yrs	3 - 4 yrs	4 - 5 yrs	CBA
Central	7	60	42	24	28	118
Eastern	2	40	31	18	22	2
Northern	0	2	4	0	0	95
Western	4	2	1	0	0	1
Total	13	104	78	42	50	216

Source: CMRIS Online [PHIS]

Over the quarterly series reporting from 2013 onwards, it has been reported that the NIMS data and CDA has been under reported. The completeness of reporting relies heavily upon the release of statistics captured by the Dietitians.

HIU captures only the complete dose. *[Note: As per in the counting rules, it is stated for CBA NIMS doses, only count the first 'dose'. This is when three components; Ferrous Sulphate, Pyrantel Pamoate and Vitamin A are given. If Only one or two doses are given, record only for your own reference, but this is not reported in PHIS.]* All NIMS dosages should be recorded by dietitians/ health professional mainly the nurses. These figures should be then be submitted to the Sister in Charge to be entered in the PHIS forms and sent to Sub-Divisional Health Sister or the Divisional Health Sister as a compiled report.

NIMS were commonly distributed in the Central Division, followed by the Eastern Division while in the Western Division reported the lowest distribution. When compared to the same period last year similar trend where observed. There was under reporting of NIMS distribution as the number captured in PHIS was recorded only by nurses and lacked reporting from dietitians in both quarterly periods.

Despite the drive by HIU to rectify the reporting issue with Family Health, Nursing division and Dietetics Division – this has not been adequately addressed. The non-availability of the components for NIMS may also result in low reporting rates.

The cohort measures of coverage are dependent upon the true distribution figures by nurses and dietitians.

Section 2: Maternal, Infant, Child and Adolescent Health

2.1 Births

The Outcome of Pregnancy [Hospital birth + Medical Area birth], Mode of deliveries [Hospital delivery only] and other maternity relevant information [Hospital only] are covered in this section. The birth data captures births occurring in the private sector but only those submitted from the Suva Private Hospital and Public Health Facilities. The Nasese Medical Centre birthing unit has not submitted any returns pertaining to births at their facility. The data collection in the tables below is of necessity 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 + Medical Area birth]

Division	Live Births	Intrapartum Stillbirths	Antepartum Still Births	Total Number Of Stillbirths	Total Births	Fetal Death
Central	2322 (2.7)	5 (0)	15 (0)	20 (0)	2342 (2.7)	1 (0)
Eastern	40 (0)	0 (0)	0 (0)	0 (0)	40 (0)	0 (0)
Northern	967 (1.1)	2 (0)	2 (0)	4 (0)	971 (1.1)	5 (0)
Western	2228 (2.6)	2 (0)	17 (0)	19 (0)	2247 (2.6)	4 (0)
Total	5557 (6.4)	9 (0)	34 (0)	43 (0)	5600 (6.5)	10 (0)

Source: CMRIS Online [Hospital MCH & PHIS]

The Outcome of Pregnancy section captures information about live births (of any gestation), still births (intrapartum and antepartum) and foetal losses from 22 weeks gestation. The rates are low as this is for quarter period reporting. [Note: 864370 FBOS population was used as denominator to calculate the rates per 1000 population]

The Central Division reported the highest number of live birth deliveries occurring at the Divisional and Sub-Divisional hospitals followed by the Western and the Northern Division while the Eastern Division reported the lowest, similar trends were observed in the 1st quarter, 2015 (Note: for the month of June the MCH report for births from CWM Hospital is not captured in this report). There was a 14.6% decrease in the number of births when compared to the same period last year (6418).

Western Division also recorded the highest number of stillbirths and fetal deaths when compared to the other three divisions as this trend was similar for quarter 1, 2015. These stillbirths and fetal deaths occurred mainly at the Divisional Hospital, whereby Lautoka Hospital recorded 18 stillbirths and 3 fetal deaths followed by CWM Hospital reporting 16 stillbirths and Labasa Hospital reported 4 stillbirths and 4 fetal deaths.

2.1.2 Mode of Delivery [Hospital delivery only]

Division	Normal Vaginal Delivery	Breech	Emergency Caesarean Section	Elective Caesarean Section	Ventouse	Forceps	Other	Total Number Of Deliveries	Total Number Of Emergency Sections	Total Number Of Elective Sections
Central	1989(2.3)	10 (0)	309 (0.4)	0 (0)	21 (0)	13 (0)	0 (0)	2342(2.7)	309 (0.4)	0 (0)
Eastern	40 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	40 (0)	0 (0)	0 (0)
Northern	801 (0.9)	9 (0)	138 (0.2)	20 (0)	1 (0)	6 (0)	0 (0)	975 (1.1)	137 (0.2)	20 (0)
Western	1956 (2.3)	12 (0)	188 (0.2)	48 (0.1)	9 (0)	7 (0)	0 (0)	2220(2.6)	187 (0.2)	48 (0.1)
Total	4786(5.5)	31 (0)	635 (0.7)	68 (0.1)	31 (0)	26 (0)	0 (0)	5577(6.5)	633 (0.7)	68 (0.1)

Source: CMRIS Online [Hospital MCH]

The mode of Delivery section captures service delivery information at hospital level only for newly born baby. The section includes live births of any gestation and stillbirths (≥ 28 weeks gestation) only. Normal vaginal delivery and caesarean section were most common mode of delivery reported at the hospitals followed by Forceps and Breech. The rates are low as this is for quarter period reporting. [Note: 864370 FBOS population was used as denominator to calculate the rates per 1000 population]

The Central Division reported the highest normal vaginal deliveries followed by the Western Division while the Eastern Division reported the lowest. However, when compared to the quarter 1 same year the Western Division reported the highest normal vaginal deliveries followed by the Central Division while the Eastern Division remains the same. (Note: for the month of June the MCH report for births from CWM Hospital is not captured in this report).

Caesarean Section was reported to be the second common procedure used for delivery. A caesarean section is usually carried out when a normal vaginal birth could put the mother or the unborn baby at risk. The Central Division reported the highest emergency caesarean followed by the Western Division while the Eastern recorded the lowest similar to the trend noted in quarter 1 period in the same year. There is usually low numbers of caesarean sections reported at Sub-divisional Hospitals, unless there are surgical deliveries performed by a Medical Team from the Divisional hospital. It is assumed that due to the limitation on resources most of the cases from the Eastern Division are referred to major Divisional Hospitals.

2.1.3 Others – Births Section [Hospital only]

Division	Unbooked Mothers Who Delivered	Babies Born Before Arrival	Mothers Under 15Years Old	Mothers Aged 15-19Years	Live Born Low Birth Weight	Intrapartum Transfers
Central	26 (0)	15 (0)	0 (0)	137 (0.2)	165 (0.2)	158 (0.2)
Eastern	2 (0)	1 (0)	0 (0)	0 (0)	0 (0)	2 (0)
Northern	10 (0)	9 (0)	2 (0)	54 (0.1)	72 (0.1)	50 (0.1)
Western	29 (0)	18 (0)	0 (0)	152 (0.2)	104 (0.1)	226 (0.3)
Total	67 (0.1)	43 (0)	2 (0)	343 (0.4)	341 (0.4)	436 (0.5)

Source: CMRIS Online [Hospital MCH]

The above tabular records information on Other maternity related indicators and intrapartum transfers. It collects information on the count of live births of any gestation and stillbirths (≥ 28 weeks gestation). There were more intrapartum transfers reported in the Western Division followed by the Central Division while the Eastern Division recorded the lowest similar to the trends observed in the quarter 1 period same year. (Note: for the month of June the MCH report for births from CWM Hospital is not captured in this report). This is mainly due to most of the cases are referred from Sub-divisional level below to major Divisional hospital, with reasons of complication during pregnancy. Adolescent mothers aged 15-19years delivering at hospital was reported high in the Western Division followed by the Central and Northern Division. Low birth weight of a newly born baby was reported high in the Central Division followed by the Western Division while the Eastern Division recorded the lowest. Babies born before arrival were referred from the medical area below facilities to the nearest Hospital. The rates are low as this is for quarter period reporting. [Note: 864370 FBOS population was used as denominator to calculate the rates per 1000 population]

Primarily most cases from the Medical Area and below level are been referred to the major Sub-divisional and Divisional Hospitals to ensure safe motherhood practices as limited resources are available to cater for this need at lower levels.

2.2 Antenatal Clinic

2.2.1 Normal and At Risk Pregnancy Table

Division	Normal Pregnancy (NP) + At Risk Pregnancy (ARP)	NP	ARP
Central	6319	2282	4037
Eastern	989	566	423
Northern	5785	2754	3031
Western	10877	4311	6566
Total	23970	9913	14057

This table includes both Hospital and Medical Area Maternal Health Status. There were a total of 23970 attendances at antenatal clinics in the 2nd quarter of 2015, which is 53.6% less than the 1st quarter period in the same year (n=36810) for normal pregnancies and at risk pregnancies. The majority of maternal visits for normal pregnancy were for the Western Division followed by the Northern, Central and Eastern Divisions.

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

2.2.2 At Risk Pregnancy Conditions

Risk Factor/ Complications in pregnancy	% of at risk pregnancies
Anaemia	5.1
Obstruct Labour	2.1
Previous Caesar	0.8
Diabetes	0.6
VDRL	0.5
Cardiac	0.5
Elderly Primp	0.3
Hep B	0.2
Under Weight	0.1

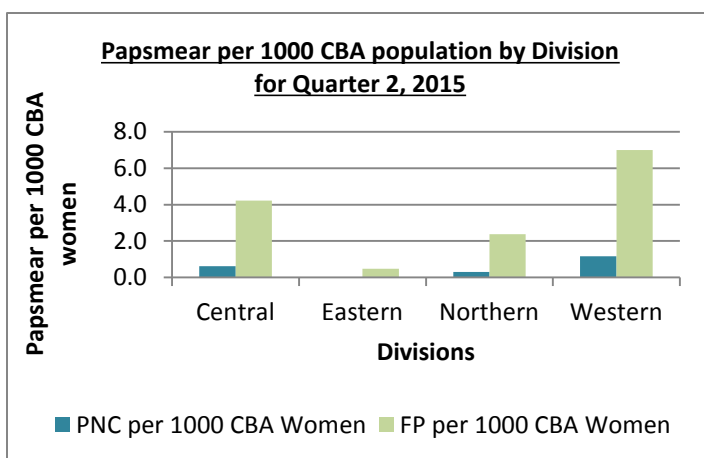
The table shows the reported relative prevalence of various risk conditions for women attending ANC clinics. The largest contributor of complications was Anemia followed by previous history of Obstructed Labour and a Previous Caesar.

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

2.3 Postnatal Care

2.3.1 PNC and Family Planning Pap Smears

A total of 3540 pap smears were conducted in combined clinics; 87% of pap smears were recorded through family planning clinics and 13% through postnatal clinics. This is 36.2% less than the numbers reported for the same period in 2014 (n=2257). - The VIA programmed numbers were not available with HIU and may be a plausible contributor to this trend



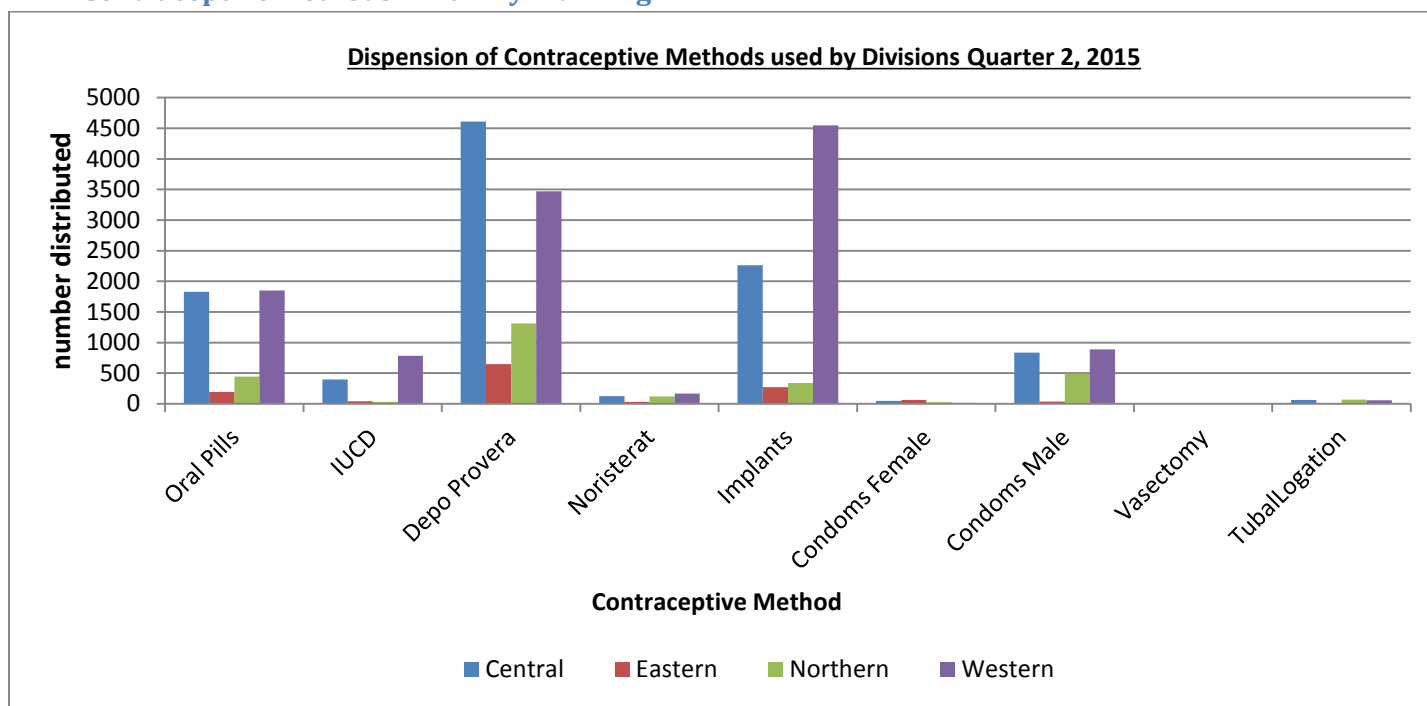
It is demonstrable that the majority of the Pap smear activities are being done in family planning units. This trend has been noted throughout the quarterly series. The Western and Central Divisions had the highest number of Pap smears conducted at Family Planning Clinics followed by Northern and Eastern Divisions.

The increase in numbers may also be due to inclusion of papsmears done in hospitals in this reporting period, higher attendance by the expected group, increase in trained health professionals, , availability of resources for conducting pap smears and/or accuracy in reporting.

Source: CMRIS Online [Hospital MCH & PHIS]

2.4 Family Planning

2.4.1 Contraceptive Methods in Family Planning



Source: CMRIS Online [Hospital MCH & PHIS]

The above shows the amount 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 as reported by all divisions. The Western Division noted an increase in implants whereas the Central Division had the highest uptake in Depo Provera injection. In the overall distribution pattern of contraceptive methods, the Western division recorded the highest distribution followed by Central division while Eastern recorded the lowest.

2.4.2 Family Planning Couple of Years Protection, Quarter 2, 2015

Division	Years Protection Dispensed										
	ECP	Oral Pills	IUCD	Depo Provera	Noristerat	Implants	Female Condoms	Male Condoms	Vasectomy	Tubal Ligation	CYP Rate (per 100 Women)
Central	9.8	339.6	1310.1	1157.3	21.1	9032.6	3.2	59.1	.0	880.0	55.9
Eastern	.0	37.1	141.9	162.5	5.3	1037.4	4.6	2.4	.0	.0	58.7
Northern	1.9	82.6	105.6	328.0	20.2	1292.0	1.8	34.3	.0	680.0	26.5
Western	1.9	335.3	2580.6	867.3	28.2	17282.4	1.3	62.2	.0	550.0	96.7
Total	13.6	794.6	4138.2	2515.0	74.8	28644.4	10.9	158.0	.0	2110.0	70.5

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 Western division for this quarter and the uptake in IUCD and Implants were most likely the reasons for this increase in CYP. As demonstrated in the table above, the highest years of protection

dispensed is due to implants, followed by IUCD, Depo-Provera, Tubal Logation, oral pills, male condoms, noristerat, ECP and lastly female condoms.

The following facilities were consistent in the distribution of contraceptive methods. In the Central Division; the Suva Sub-division, Rewa Sub-division (Particularly in the Nausori medical area), Tailevu Sub-division (particularly in the Lodon medical area), Naitasiri Sub-division (particularly in the Vunidawa medical area) and Serua/Namosi Sub-division (Particularly in Navua medical area). The Western Division also was consistent in the distribution of contraceptive methods; the Lautoka medical area, the Nadi medical area and the Ba medical area. In the Northern Division; the, the Labasa medical area was consistent in the distribution of contraceptive methods. And lastly, In the Eastern Division; the Vunisea medical area, the Levuka medical area were consistent in the distribution of contraceptive methods.

2.5 Immunization - Immunization by Division & Vaccines

Division	HepBO	BCG0	DPTHeB Hib1	OPV1	Penumoccal1	Rotavirus1	DPTHeB Hib2	OPV2	Penumoccal2	DPTHeB Hib3	OPV3	Penumoccal3	Rotavirus2	MR1	OPV4
Central	3,198	3,160	2,756	2,758	2,755	2,747	2,436	2,434	2,440	2,174	2,176	2,169	2,159	2,215	994
Eastern	33	33	176	175	174	173	197	197	198	173	172	173	170	230	124
Northern	979	956	941	925	936	941	787	774	784	699	690	695	698	879	416
Western	2,097	2,207	2,098	2,088	2,085	2,095	1,904	1,902	1,868	1,585	1,584	1,560	1,576	1,784	916
Total	6307	6356	5971	5946	5950	5956	5324	5307	5290	4631	4622	4597	4603	5108	2450
% per 100 births	124.6	125.6	118.0	117.5	117.5	117.7	105.2	104.8	104.5	91.5	91.3	90.8	90.9	100.9	48.4

Source: CMRIS Online [Hospital MCH & PHIS]

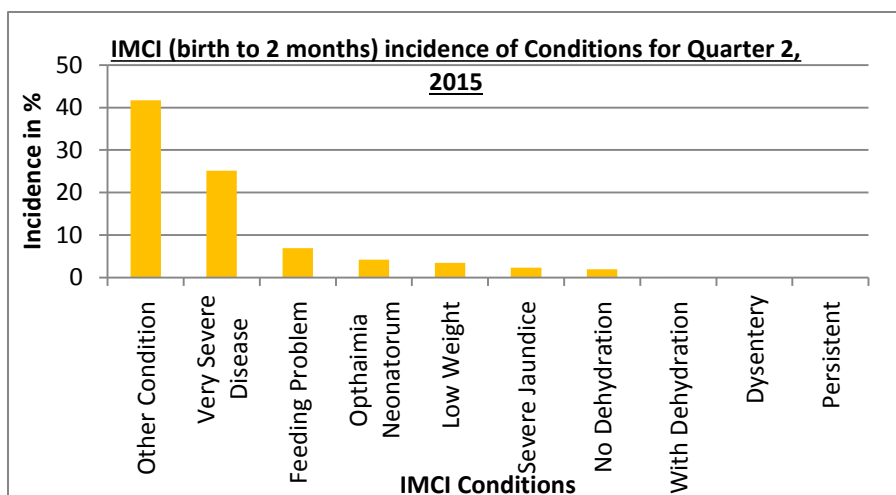
The above table includes merged data gathered from Hospitals (Divisional and Sub-divisional) and PHIS (Medical area level and below) public health facilities on vaccines given for immunization.

Based on the above figure, estimated coverage of MR1 was about 100.9%. *[This estimation has used ¼ of 2014 live births (20249) as denominator]*. About 6.3% more when compared with the same period, 2014 the estimated coverage of MR1 was about 94.6%. *[This estimation has used ¼ of 2013 live births (20970) as denominator]*.

Assumption for more than 100% coverage for most of the vaccines is that may be due to some children being immunized late which means that children that were supposed to be immunized from previous month, got vaccinated during the reported month which affected the target population used for the denominator in calculating the percentage coverage.

2.6 MCH/ IMCI

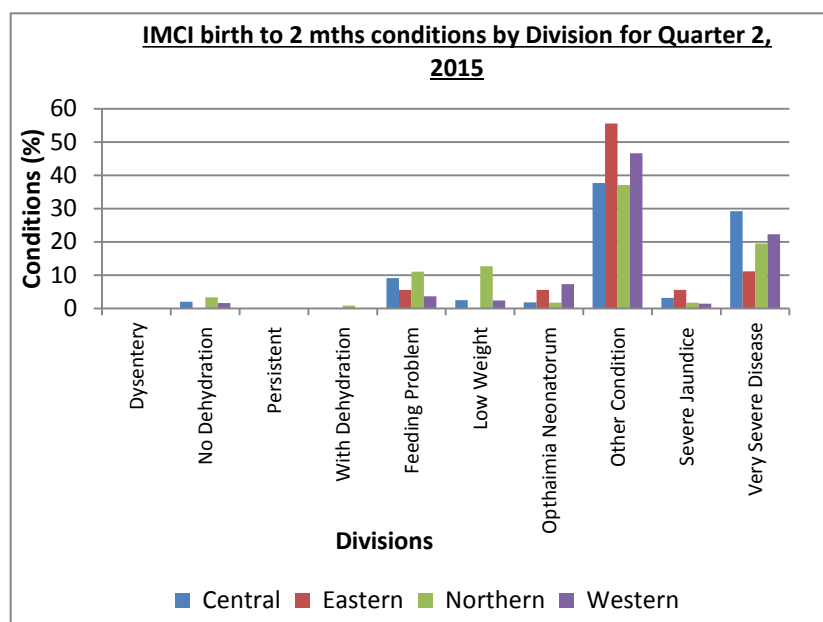
2.6.1 IMCI Birth to 2 months



This graph represents the incidence of IMCI conditions in percentage of children from birth to 2 months attending IMCI clinic at various health facilities in our country. [Note: the denominator is the number seen 3354 to calculate the incidence in percentage] The Central Division (n= 1590) was noted to have higher IMCI number seen with majority from the Suva SD, followed by Rewa and Serua Namosi SD. The Western Division recorded 1317 IMCI numbers seen with majority were received at Lautoka/ Yasawa SD, Nadi SD and Ba SD

respectively followed by the Northern Division (383) and the least were recorded from the Eastern Division (n= 64).

Source: CMRIS Online [Hospital MCH & PHIS]



The graph shows that more children were seen under the category of with other conditions, very severe disease, feeding problem, Ophthalmia Neonatorum and low weight. These were reported from the Eastern Division followed by the Northern Division while the Central Division reported the lowest.

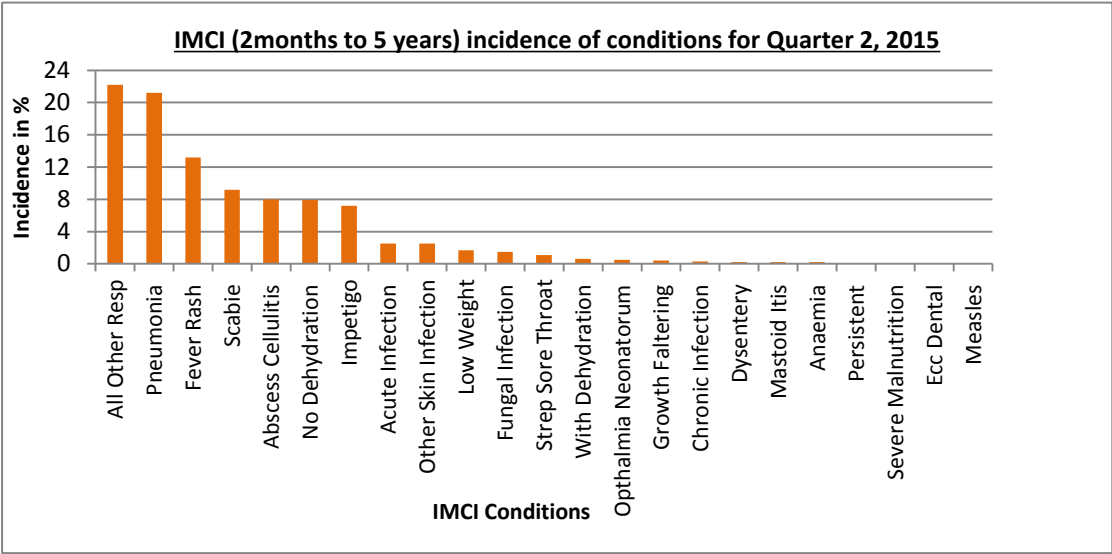
The Northern division was noted to have higher frequency of conditions of feeding problems, low weight, and diarrhea with dehydration. There is a need for interventions such as nutritional advocacy and nutritional support for parents/ guardians, early WASH interventions and meticulous holistic care of the 0-2month babies to tackle low birth weights.

Under the category of other conditions,

Tavua SD recorded the highest followed by the two main divisional hospitals (CWM & Labasa) and Tailevu SD. Rewa SD recorded the highest in very severe diseases whereas Lautoka/ Yasawa SD dominated in persistent diarrhea followed by Tailevu SD and CWM Hospital. Kadavu SD and Lomaiviti SD were noted to have more no dehydration cases which are understandable as they are located in the Eastern Division. The conditions are common throughout Fiji in the specified age groups (birth – 2months). This should require urgent attention from relevant authorities in addressing the issue and for intervention such as wellness awareness on IMCI conditions to parents/ guardians, nutritional advocacy and meticulous holistic care of the birth – 2months children.

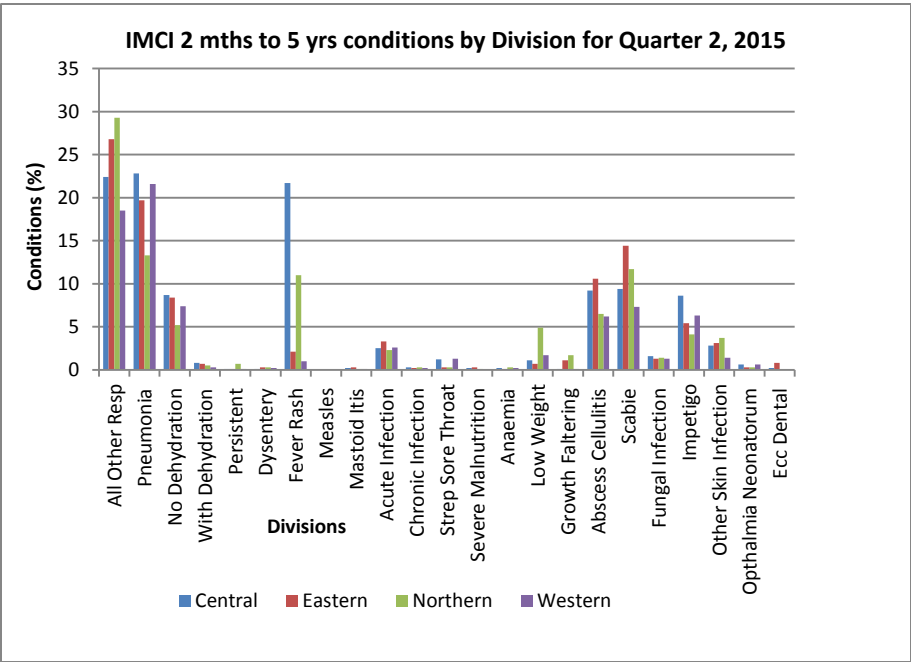
2.6.2 IMCI 2 months - 5 years

Incidence of Condition



Source CMRIS Online [Hospital MCH & PHIS]

This graph represents the incidence of IMCI conditions in percentage of children from 2months to 5 years attending IMCI clinic at various health facilities in our country. [Note: the denominator is the number seen 39541 to calculate the incidence in percentage]. The Central Division (n=20885) recorded the highest number of children seen at the IMCI Clinic from 2months-5years followed by Western Division (n=12354), Northern Division (n=4796) and Eastern Division (n=1506).



The above shows that more children were seen under the category of respiratory related conditions, pneumonia, fever rash, scabies, abscess cellulitis and impetigo. These were reported from the Northern Division followed by the Eastern Division while the Western Division reported the lowest.

The Northern Division recorded the highest frequency of conditions of all other respiratory conditions, pneumonia and scabies. Under the all other respiratory conditions, Macuata Sub-Division recorded the highest followed by Rotuma sub-division and Labasa Hospital.

There is a need for interventions such as wellness awareness on IMCI conditions to parents/ guardians, nutritional advocacy and meticulous holistic care of the 2month to 5years children.

Source: CMRIS Online [Hospital MCH & PHIS]

2.7 School Health Report

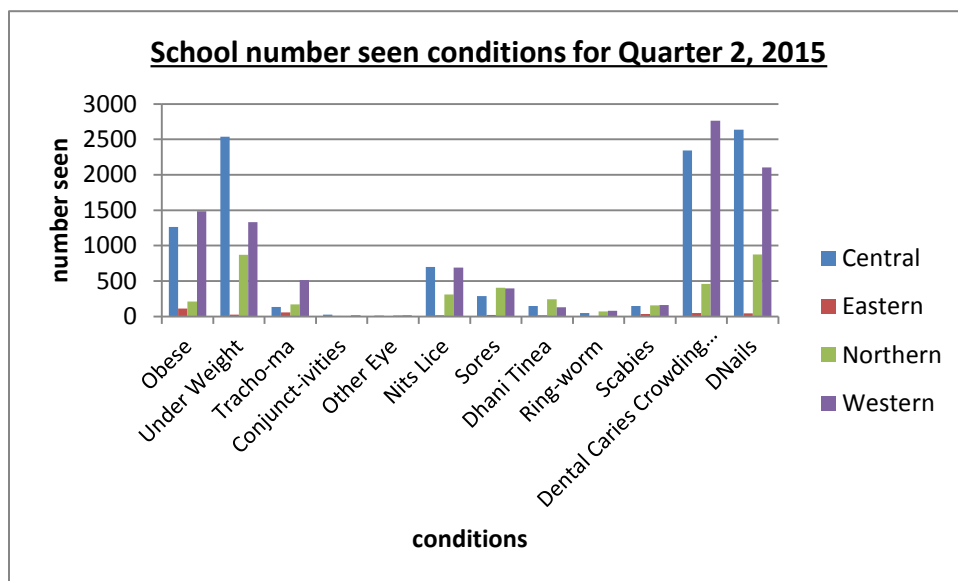
This is the first time HIU is reporting on the School Health Report. This report is captured from the PHIS School Health Summary Report and entered online by the School Health Sister. The school data include the schools visited, the total enrolment, number of students seen, number of children with each condition, the number of children screened for RHD and number of immunizations given for new enrolments & school leavers and also the HPV immunizations given to target group. The PHIS Online system uses a master list of schools provided by the Ministry of Education which contains the official enrolment for each primary school in Fiji.

2.7.1 School Visited & School Size

School Visited/Size	School Visited	Total Roll	Total Seen	No. Not Consented
Central	78	15348	14010	531
Eastern	14	697	674	3
Northern	97	7782	7377	37
Western	129	16268	14536	310
Total	318	40095	36597	881

Source: CMRIS Online (PHIS)

The table above shows the total number of schools visited (n=318) during the reporting period. Western Division (n=129) visited more schools followed by Northern (n=97), Central (n=78) and Eastern (n=14). The total roll for the school visited were 15,348 of which only 14,010 children were seen and 531 were not consented for vaccinated.



2.7.2 Conditions for Children Seen

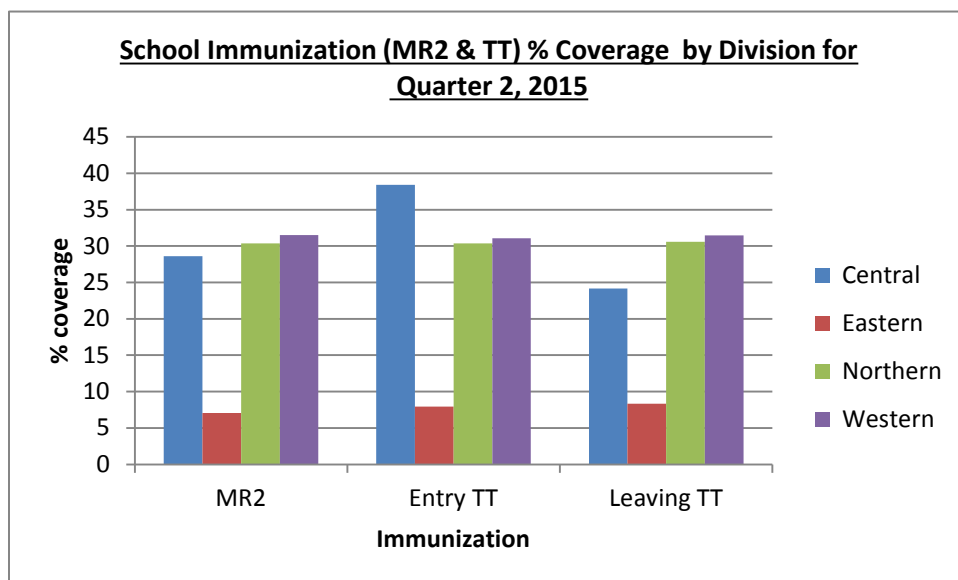
These graphs show the conditions of school children that were seen during school visit. More children were seen with the conditions of Dirty Nails (n=5660) followed by dental caries, crowding, plaque (n=5617), underweight (n=4757), Obese (n=3067) and Sores (n=1111). Central Division (n=2635) had more children seen with Dirty Nails with Western (n=2105) and Northern Division (n=875) followed by Eastern Division (45) who had the least. Under the Dental Caries,

crowding and plaque, Suva Sub-divisions (n=1243) got the highest number of children seen for this conditions followed by Nadi & Rewa Sub-divisions with 990 and 984 number seen respectively.

There is a need for interventions such as wellness awareness on personal hygiene conditions to school children and also to parents/ guardians on nutritional advocacy and meticulous holistic care of the children.

2.7.3 School Immunization Coverage

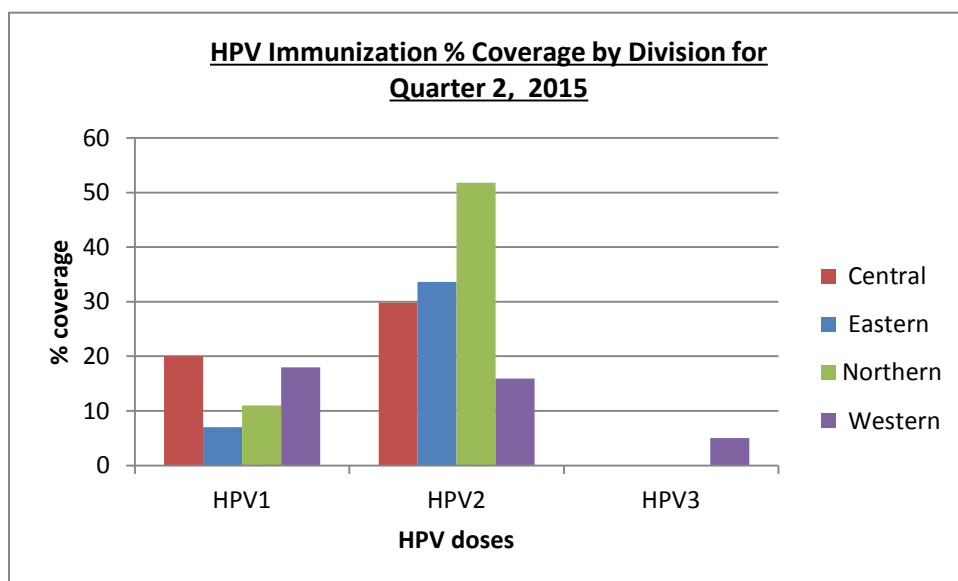
School Immunization (MR2 & TT) % Coverage



coverage than Western Division (31%), Northern Division (30%) and Eastern Division (8%).

This graph represents the Immunization coverage for MR2 & TT given to school new enrolments (class1) & school leavers (class6). Base on the graph shown, estimated coverage for MR2 is 29%, for entry TT is 32% and leaving TT is 27%. Western Division got high coverage for children immunized with MR2 & school leavers TT (Leaving TT) followed by Northern Division, Central Division and Eastern Division. For School Entry TT Immunization, Central Division (38%) got the highest

HPV Immunization % Coverage by Division



Nadi (127, 282) Schools were the leading sub-divisions in their respective division that contributes to their coverage. Ba Sub-Division was the only sub-division that report on HPV3 during the reporting period.

This graph shows the HPV Immunization % coverage by Division. This Immunization is given to female students in Class 8 (Year 8) for cervical cancer prevention. Of the three doses of HPV, HPV2 (27%) got the highest % coverage of girls immunized than HPV1 (17%) and HPV3 (2%). For HPV1 & HPV2 doses, Suva sub-division contributes more to their coverage which saw about 456 & 680 girls in class 8 immunised for these 2 doses, followed by Cakaudrove(n=129, 244) & Macuata (n= 10, 279) Schools and also Lautoka/Yasawa (n=204, 80) &

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 2nd quarter 2015 (public health facilities only).

3.1 National Notifiable Disease Surveillance System

Notifiable Diseases by Months for Quarter 2, 2015

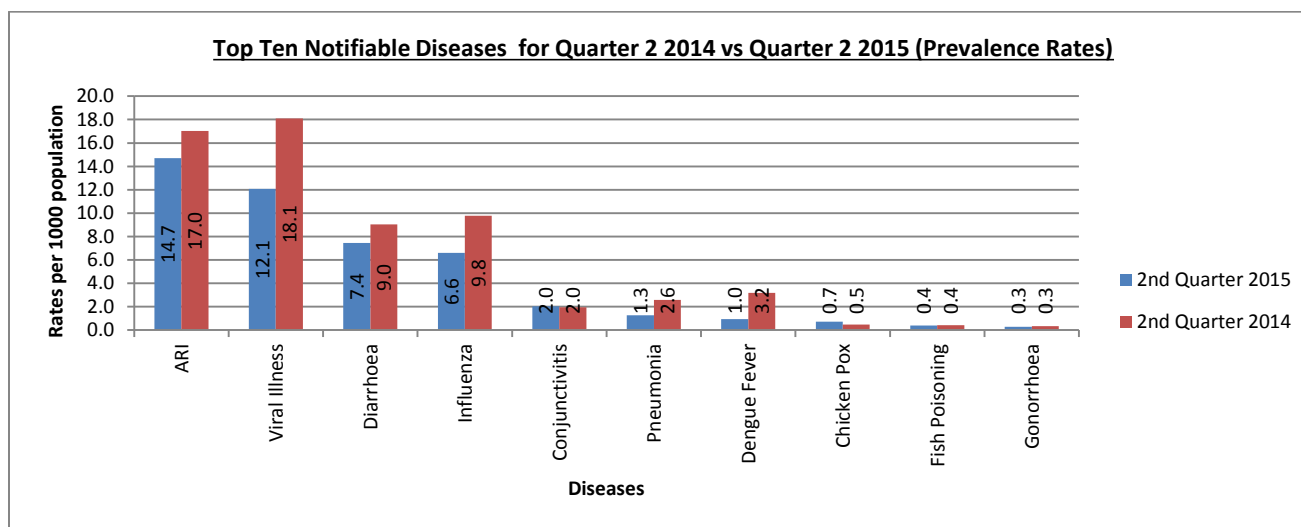
No.	Diseases	April	May	June
1	Acute Poliomyelitis	0	0	0
2	Acute Respiratory Infection	4348	4855	3506
3	Anthrax	0	0	0
4	Brucellosis	0	0	0
5	Chicken Pox	163	211	244
6	Cholera	0	0	0
7	Conjunctivitis	600	720	431
8	Dengue Fever	294	269	262
9	Diarrhoea	1936	2286	2213
10	Diphtheria	0	0	0
11	Dysentery (a) Amoebic	0	0	0
	(a) Bacillary	11	10	10
12	Encephalitis	0	0	0
13	Enteric Fever (a) Typhoid	32	33	46
	(b) Para Typhoid	0	0	0
14	Fish Poisoning	122	77	150
15	Ciguatera Fish Poisoning	3	3	1
16	Food Poisoning	1	1	4
17	German Measles (Rubella)	11	9	0
18	Infectious Hepatitis	40	41	23
19	Influenza	1747	2130	1830
20	Leprosy	0	0	0
21	Leptospirosis	25	15	23
22	Malaria	0	0	0
23	Measles (Morbilli)	1	7	2
24	Meningitis	8	6	0
25	Mumps	0	1	1
26	Plague	0	0	0
27	Pneumonia	372	306	424
28	Puerperal Pyrexia	0	0	0
29	Relapsing Fever	0	0	0
30	Rheumatic Fever	3	3	2
31	Smallpox	0	0	0
32	Tetanus	0	0	0
33	Trachoma	51	50	28
34	Tuberculosis (a) Pulmonary	30	28	19
	(b) Others	6	2	4
35	Typhus	0	0	0
36	Viral Illness/ Infection	3426	4021	2999
37	Whooping Cough	0	0	0
38	Yaws	0	0	0
39	Yellow Fever	0	0	0
40	Sexually Transmitted Diseases			
	(a) Gonorrhoea	76	76	97
	(b) Candidiasis	5	8	11
	(c) Chlamydia	0	0	0
	(d) Congential Syphilis	1	1	2
	(e) Lymphogranuloma Venerum	0	0	0
	(f) Herpes Zoster (Shingles)	3	6	3
	(g) Ophthalmia Neonatorum	1	1	0
	(h) PID	0	0	0
	(i) Syphilis	44	58	45
	(j) Trichomoniasis	4	8	1
	(k) Genital Warts	0	0	0

Source: NNDSS

Notes:

1. The vaccine preventable diseases have been validated with the VPD Surveillance mechanism.
2. The leprosy case has been confirmed with the respective unit.
3. Chlamydia testing does not currently happen in the country. Checked
4. There may be some discrepancies as all lab based data are not reported and private sector data is still largely incomplete.
5. **The HIV dataset is being obtained from the Family Health Unit. This is the national dataset and the incidence rate of HIV infection for 2nd quarter 2015 is 15 and the total number of confirmed cases for HIV positive is 625.**

3.1.1 Top Ten Diseases



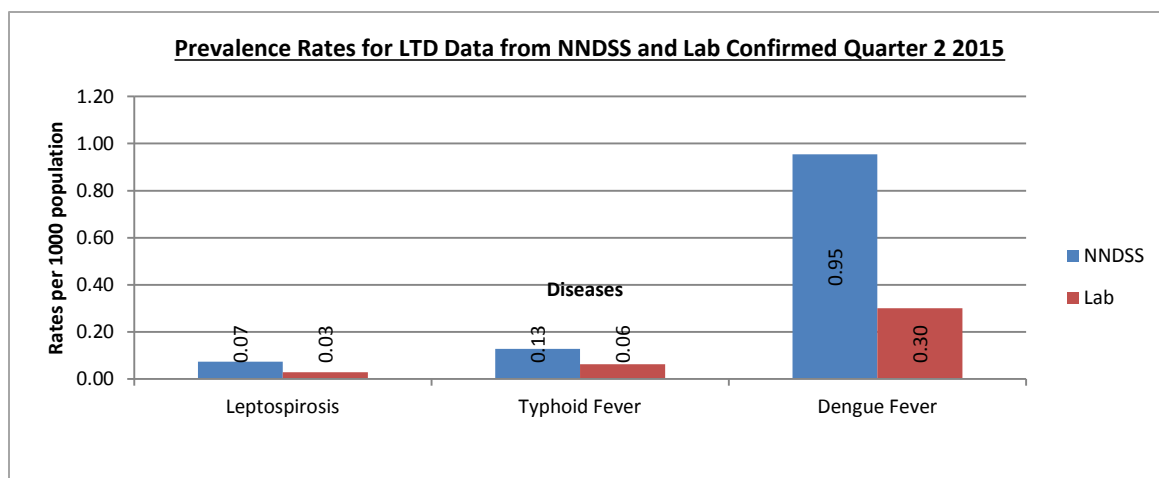
Source: NNDSS

The incidence rates were calculated using 2014 projections from FBOS (864370) and reported as per 1000 population. The predominance of ARI, Viral Illness, Influenza and Diarrhoea 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.

Dengue fever is the 7th leading cause of diseases for 2015 (n=825) and 2014 (n=2757) signaling for public health interventions for these areas to reduce risks of outbreaks. The increased activity of emerging viral illnesses (Zika and Chikungunya) in the region also signals the need for prevention and control.

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 reduces the sensitivity for surveillance of infectious diseases. Most pending reports were from June 2015.

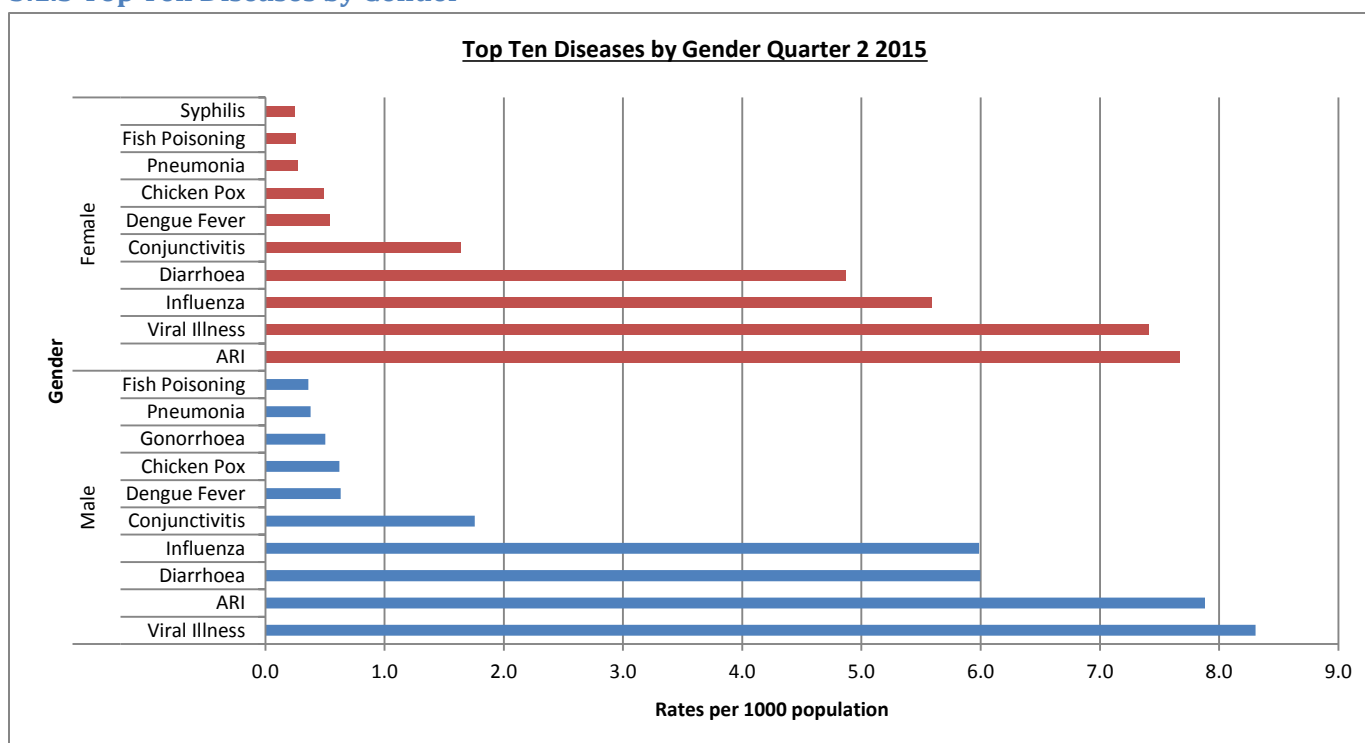
3.1.2 LTD Diseases



Source: NNDSS and Lab data

The incidence rates were calculated using 2014 projections from FBOS (864370) and reported as per 1000 population. The data sources are NNDSS and Laboratory data from Mataika House. There is a higher case load of Dengue Fever from the NNDSS (n=825) compared to laboratory confirmed data (n= 260); this is due to clinically suspected cases being reported in NNDSS. The Laboratory confirmed cases of Typhoid fever are 54 and NNDSS noted 111 cases. There were 63 cases of Leptospirosis reported from NNDSS whereas 25 cases were from Laboratory data (note that some cases were not reported on NNDSS). **All reporting officers are reminded to report all Notifiable cases through the mechanism of the NNDSS.**

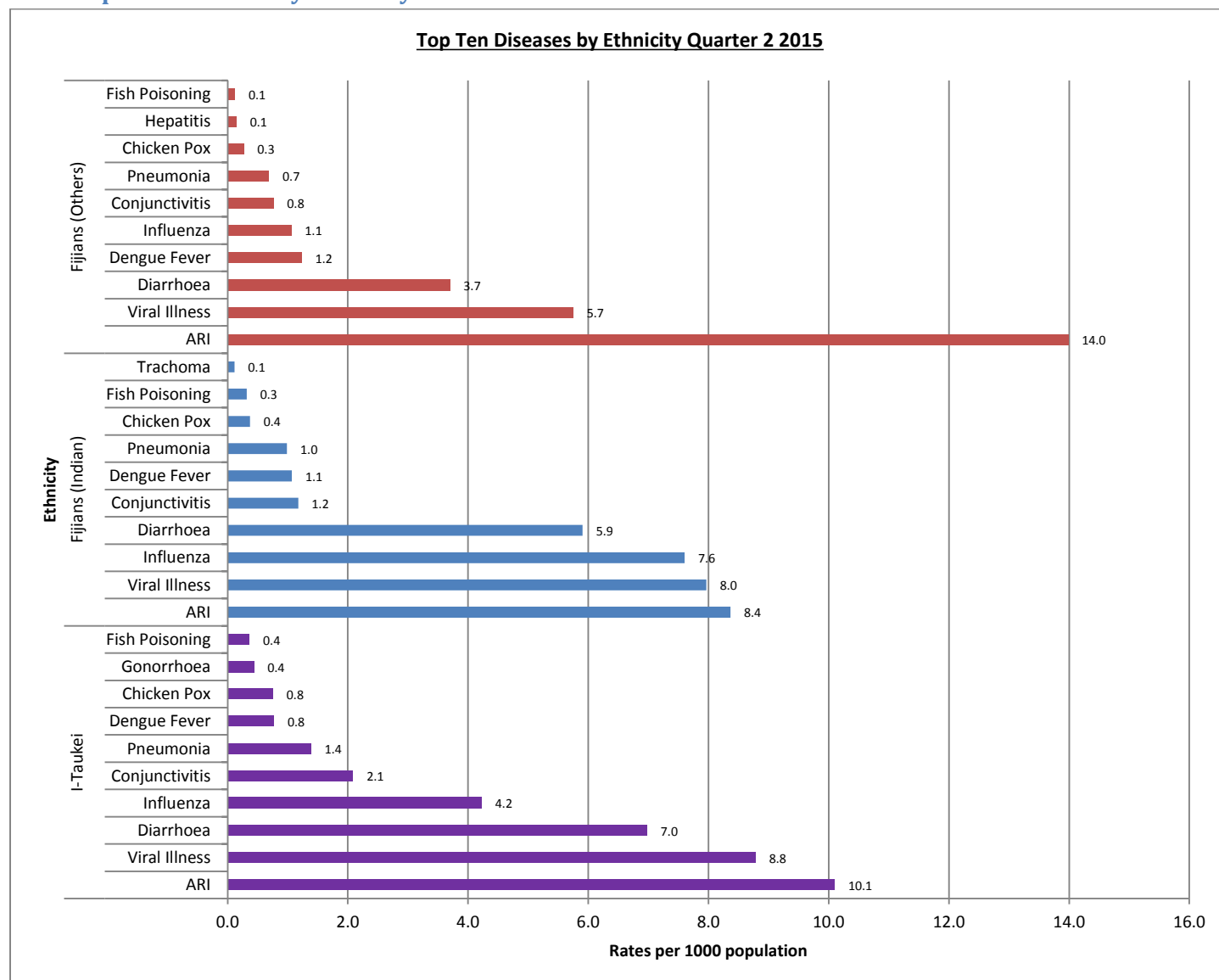
3.1.3 Top Ten Diseases by Gender



Source: NNDSS

The incidence rates were calculated using 2014 population projections from FBOS (Male 439287 and Female 425083) and reported as per 1000 population. There is conformity to the national trend for male but in different rank order. However, there is agreement in the top nine cases in female Gender but also in different rank order. The 10th leading condition for female is Syphilis instead of Gonorrhoea. This could be due to the mode of screening done at ANC. The cases of unknown gender made up 34% (n=13708) in 2nd 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.

3.1.4 Top Ten Diseases by Ethnicity

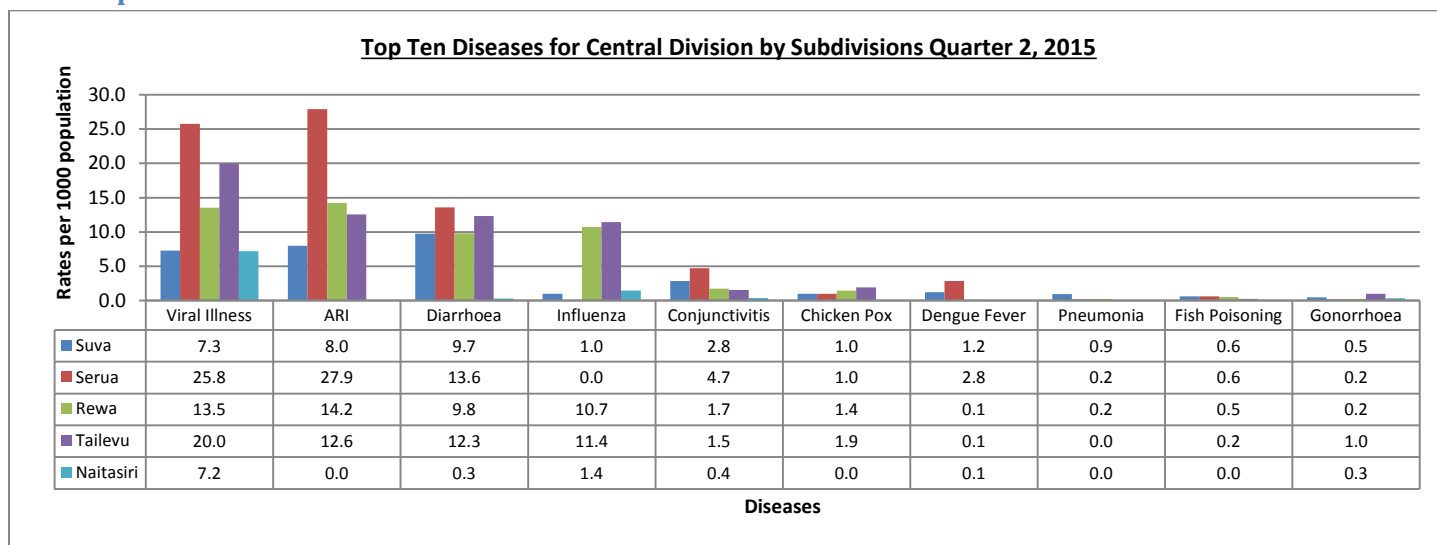


Source: NNDSS

The incidence rates were calculated using 2014 projections from FBOS (I-Taukei 476320, Fijian (Ind) 347512 and Fijian (Others) 40538) and reported as per 1000 population. 25% (n= 10215) of cases were unclassified by ethnicity in 2nd quarter 2015. It is important to categorize each reportable disease according to ethnicity, age, gender, and locality.

I-Taukei category simulate the national dataset but in different rank order. The Fijians of Indian and Other descent category simulates the top nine conditions of the national dataset differing in rank order; the 9th leading condition for this category is; Trachoma and Hepatitis accordingly instead of Gonorrhoea.

3.1.5 Top Ten Diseases for Central Division



Source: NNDSS

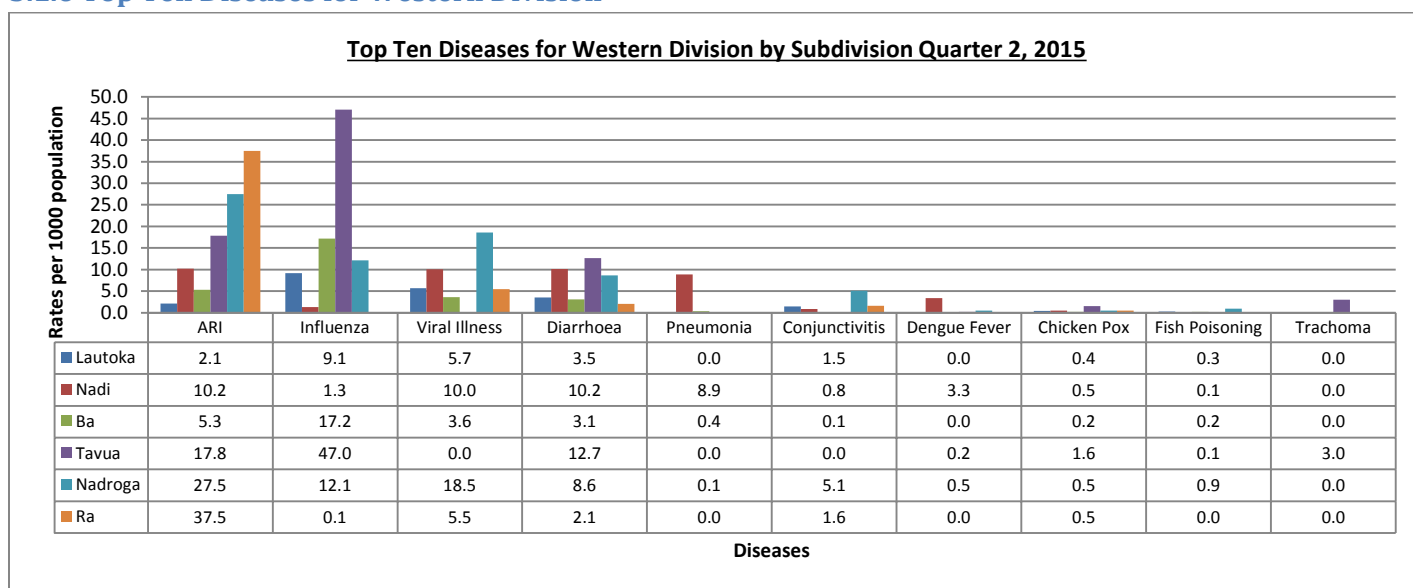
The incidence rates were calculated using 2014 projections from FBOS, HIU population proportions were applied to this dataset (Suva 204633, Serua 27996, Rewa 79772, Tailevu 18865 and Naitasiri 18902) and reported as per 1000 population. The predominance of ARI, Viral Illness, Diarrhoea, Influenza and Conjunctivitis were recorded in central division and is mostly recorded in Serua and Rewa; due to the complete report received from these sub divisions. All the conditions in Central division are following the national rank order but in differing array.

Dengue fever cases are noted in Suva (n=244), Serua (n=79), Rewa (n=8), Tailevu (n=1) and Naitasiri (n=1), signaling for public health interventions for these areas to reduce risks of outbreaks. This must also be combined with environmental risk assessment of transmission by the vectors. Calls for adequate prevention and control are made in the light of emerging viral infections in the region and country.

TB cases were reported in Suva (n=38) and Serua (n=2) and Rewa (n=1) respective public health and contact tracing are warranted for the areas with confirmed cases. Public health and clinical interventions must be cohesive and complimentary.

Infectious hepatitis cases have been reported from Suva (n=36) and Serua (n=5) and may be cases of Hepatitis A. Urgent investigations into these cases and possible sources of infection must be identified, with public health interventions put in place rapidly. Additionally, the ability to differentiate between the type of hepatitis is crucial for management of cases and further prevention. Improving diagnostic ability for hepatitis is warranted.

3.1.6 Top Ten Diseases for Western Division



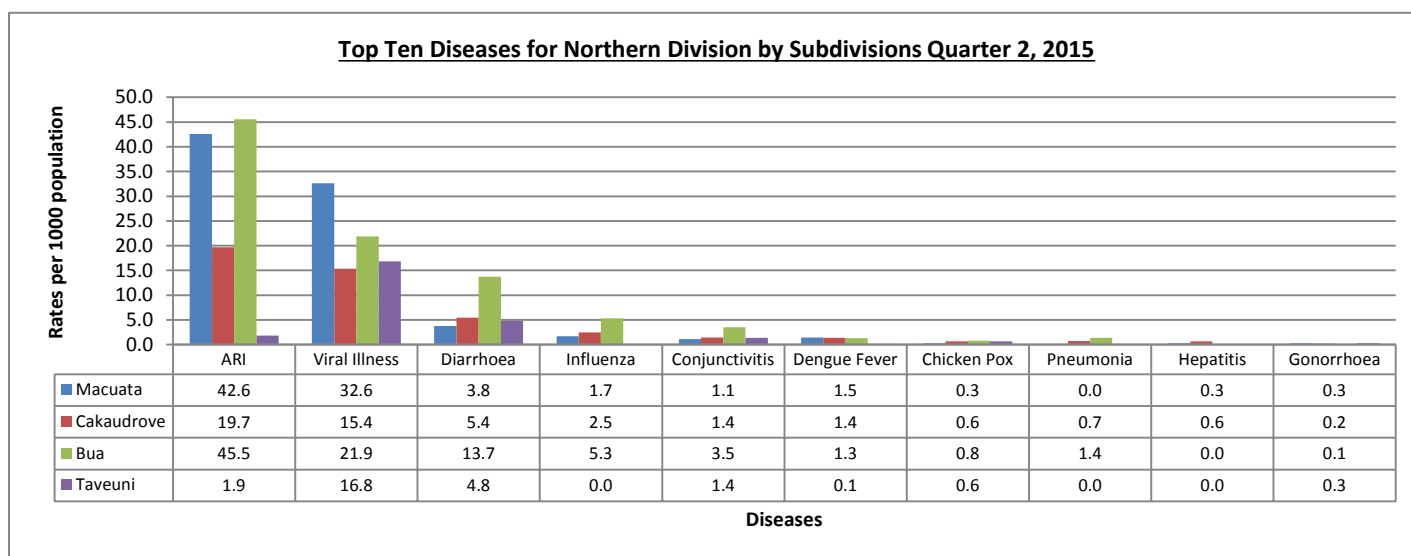
Source: NNDSS

The incidence rates were calculated using 2014 projections from FBOS, HIU population proportions were applied to this dataset (Lautoka 102195, Nadi 85990, Ba 52755, Tavua 25070, Nadroga 51003 and Ra 28275) and reported as per 1000 population. The predominance of Influenza, ARI, Viral Illness, Diarrhoea and Pneumonia were recorded in Western division and is mostly recorded in Nadi; due to the majority of the reports being received from this sub division. The top 9 conditions in Western division are following the national rank order but in differing array, whereas the 10th leading cause is Trachoma instead of Gonorrhoea as in national trend.

Dengue fever cases were reported from all the subdivisions signaling for public health interventions for these areas to reduce risks of outbreaks. TB cases were reported in Lautoka (n=19), Nadroga (n=2) and Ra (n=1) and respective public health and contact tracing are warranted for the areas with confirmed cases. This must also be combined with environmental risk assessment of transmission by the vectors. Calls for adequate preventions and control are made in the light of emerging viral infections in the region and country. Public health and clinical interventions must be cohesive and complimentary.

Infectious hepatitis (predominantly Hepatitis A) cases were also reported in Lautoka (n=2), Nadi (n=6), Ba (n=4), Nadroga (n=6) and Tavua (n=2) signaling a clear need for early public health response.

3.1.7 Top Ten Diseases for Northern Division



Source: NNDSS

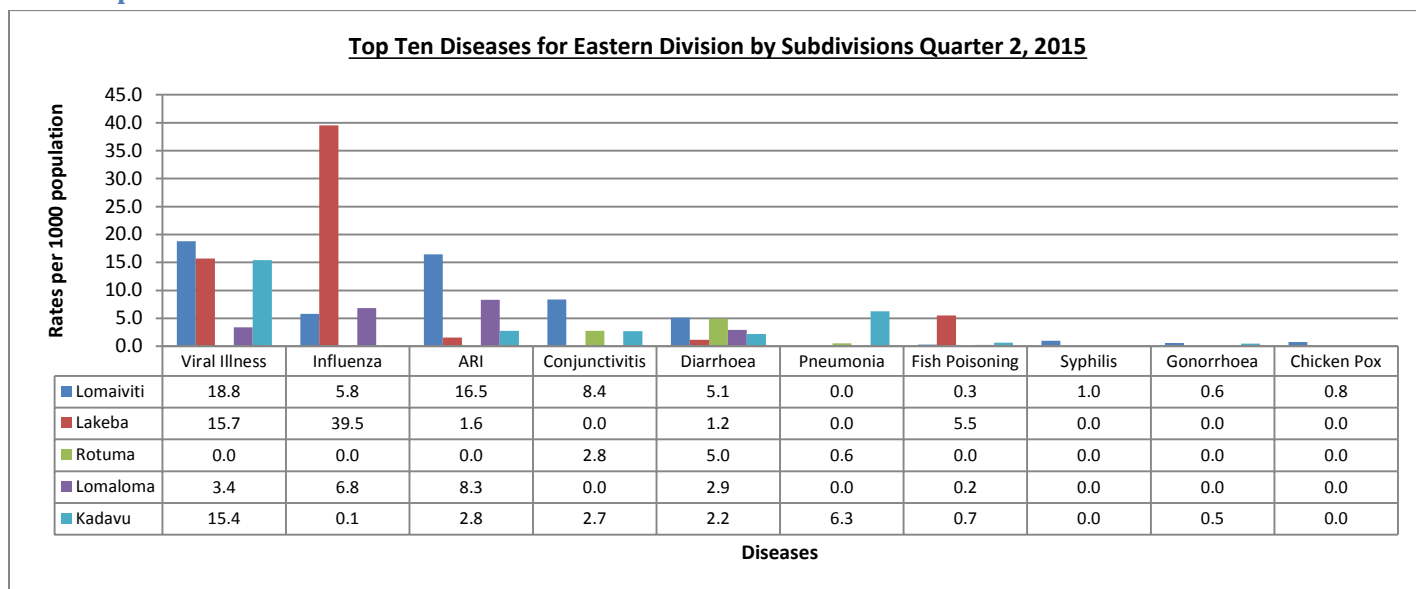
The incidence rates were calculated using 2014 projections from FBOS, HIU population proportions were applied to this dataset (Macuata 70960, Cakaudrove 30918, Bua 15083 and Taveuni 15646) and reported as per 1000 population. The predominance of ARI, Viral Illness, Diarrhoea, Influenza and Conjunctivitis 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. The top 9 conditions in the Northern division are following the national rankings but in differing array. One of the conditions in top nine is Hepatitis instead of Fish Poisoning.

Macuata (n=103), Cakaudrove (n=42), Bua (n=20) and Taveuni (n=2) 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.

TB cases were reported in Macuata (n=7) and Bua (n=1) and respective public health and contact tracing are warranted for the areas with confirmed cases. Public health and clinical interventions must be cohesive and complimentary.

Infectious hepatitis (predominantly Hepatitis A) cases were also reported in Macuata (n=18) and Cakaudrove (n=20) signaling a clear need for early public health response.

3.1.8 Top Ten Diseases for Eastern Division



Source: NNDSS

The rates were calculated using 2014 projections from FBOS, HIU population proportions were applied to this dataset (Lomaiviti 13122, Lakeba 6883, Rotuma 1815, Lomaloma 4094 and Kadavu 10390) and reported as per 1000 population. The predominance of Influenza, Viral Illness, ARI, Diarrhoea and Trachoma were recorded in Eastern division. Majority of the cases are recorded in Lomaiviti and Kadavu sub divisions.

The top nine conditions in Eastern division are following the national rankings but in differing sort order. One of the conditions in top ten ranking is Syphilis instead of Dengue Fever. This may indicate that STI's were progressively higher in the Eastern division for this quarter than nationally and responsive actions may be warranted.

There was no case of Dengue Fever being reported in Eastern division for 2nd quarter. Infectious hepatitis (predominantly Hepatitis A) cases were reported in Lomaiviti (n=5) signaling a clear need for early public health response.

Section 4 – Expanded Primary Health care – Hospital Report

4.1 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	29,144	481	6,576	6,465	33,847	77%	372	5.2
2	Navua Hospital	N/A	22	385	382	1,059	53%	12	2.8
3	Vunidawa Hospital	1,389	24	88	84	150	7%	2	1.8
4	Korovou Hospital	1,046	16	245	231	525	36%	6	2.3
5	Nausori Hospital	214	17	638	615	775	50%	9	1.3
6	Wainibokasi Hospital	1,046	12	207	199	817	75%	9	4.1
	Central Division Total	32,839	572	8,139	7,976	37,173	71%	408	4.7
7	Lautoka Hospital	38,260	305	6,033	5,802	17,062	61%	187	2.9
8	Nadi Hospital	40,919	75	1,318	1,305	4,039	59%	44	3.1
9	Sigatoka Hospital	11,514	66	609	585	1,772	30%	19	3.0
10	Ba Mission Hospital	18,446	50	736	709	2,025	45%	22	2.9
11	Tavua Hospital	11,365	29	334	308	651	25%	7	2.1
12	Rakiraki Hospital	6,112	30	326	305	949	35%	10	3.1
	Western Division total	126,616	555	9,356	9,014	26,498	52%	291	2.9
13	Labasa Hospital	30,232	182	2,076	1,760	9,762	59%	107	5.5
14	Savusavu Hospital	16,761	56	529	526	1,547	30%	17	2.9
15	Waiyevo Hospital	3,904	33	332	324	762	25%	8	2.4
16	Nabouwalu Hospital	5,393	26	247	233	917	39%	10	3.9
	Northern Total	56,290	297	3,184	2,843	12,988	48%	143	4.1
17	Levuka Hospital	5,792	40	185	175	555	15%	6	3.2
18	Vunisea Hospital	1,693	22	83	78	410	20%	5	5.3
19	Lakeba Hospital	796	12	33	27	116	11%	1	4.3
20	Lomaloma Hospital	1,405	16	18	15	81	6%	1	5.4
21	Matuku	376	5	12	12	31	7%	0.34	2.6
22	Rotuma Hospital	916	14	9	9	44	3%	0.48	4.9
	Eastern Division Total	10,978	109	340	316	1,237	12%	14	3.9
	TOTAL (Divisional)	226,723	1,533	21,019	20,149	77,896	56%	856	3.9

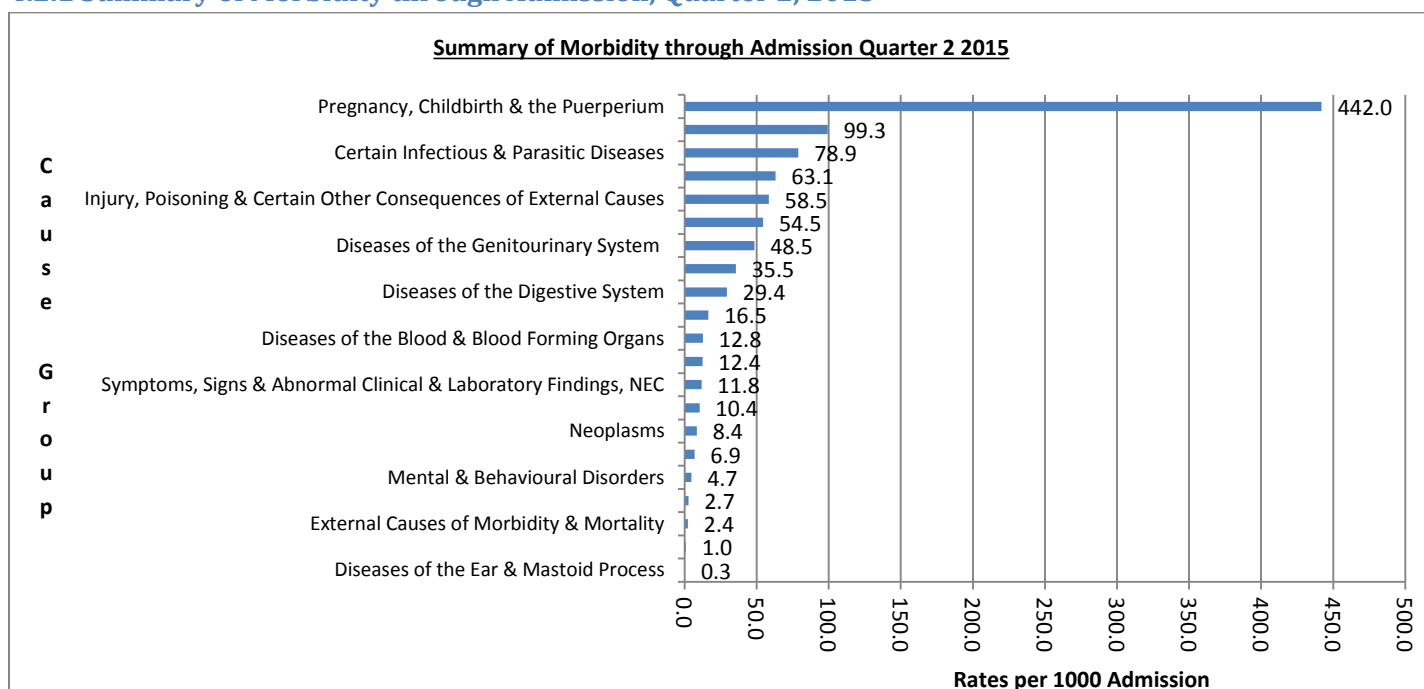
SPECIALISED AND PRIVATE HOSPITALS

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	1,862	86	87	87	5,095	65%	56	58.6
2	Tamavua/Twomey Hospital	4,773	91	84	80	4,345	52%	48	54.3
4	Military Hospital	NIL	9	NIL	NIL	NIL	0%	0	0
5	Naiserelagi Maternity	573	7	41	39	52	8%	1	1.3
	Specialized Hospital Sub-total	7,208	193	212	206	9,492	54%	104	46.1
	GRAND TOTAL	233,931	1,726	21,231	20,355	87,388	56%	960	4.3

Based on the above reporting, the overall average length of stay is 4.3 days. The analysis is based on the reports received by Divisional and Sub divisional Hospitals for the 2nd Quarter 2015. The table above illustrates that less patients were discharged from the Divisional and Sub Divisional Hospitals. The discrepancy was noted, as a total of 876 patients were not discharged from the hospitals. This also indicates the quality of entry from the providers and their level of supervision of data. The reports have narrowed gaps with more discharges being reported in the 2nd quarter. **There were no outpatients reported from Navua Hospital for April to June as it is reported in PHIS through the Navua Health Centre.** The bed occupancy rates (BOR) have improved and with improved statistics on admissions and discharges, the perception is that BOR will reflect the true facility incidence. The wide gap between discharges and admissions are being slowly addressed except in Labasa Hospital 316 discharges still pending, Lautoka Hospital (231 undischarged patients), CWM Hospital (111 undischarged patients), and Ba Hospital (27 undischarged patients). For CWMH, Lautoka and Labasa Hospital the patients discharged from the hospitals are sometimes not discharged in PATISPLUS on time due to network problems, role delineation issues, willful omissions and poor compliance to timely, complete and accurate reporting.

4.2 Admission Data

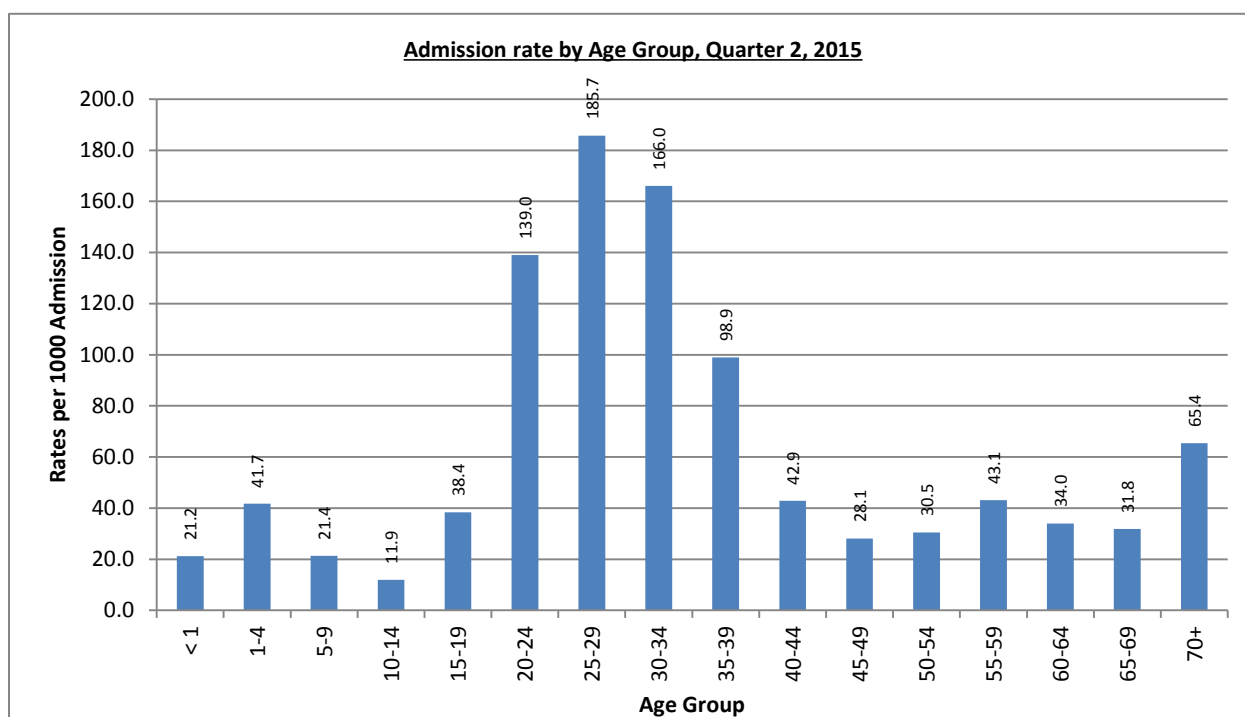
4.2.1 Summary of Morbidity through Admission, Quarter 2, 2015



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

The above graph demonstrates the Admissions by Cause Group in the 2nd quarter 2015. Leading overall admissions are Pregnancy, Childbirth & Puerperium [n=2627], Diseases of the Circulatory System [n=590], Certain Infectious & Parasitic Diseases [n=469] and Diseases of the Respiratory System [n=375]. Compared with the 2nd Quarter of 2014, the leading admissions were still Pregnancy, Childbirth & Puerperium [n=2743], Certain Infectious & Parasitic Diseases [n=1311], Diseases of the Circulatory System [n=827], and Injury, Poisoning & Certain Other Consequences of External Causes [n=773]. The rates used were calculated per 1000 admissions.

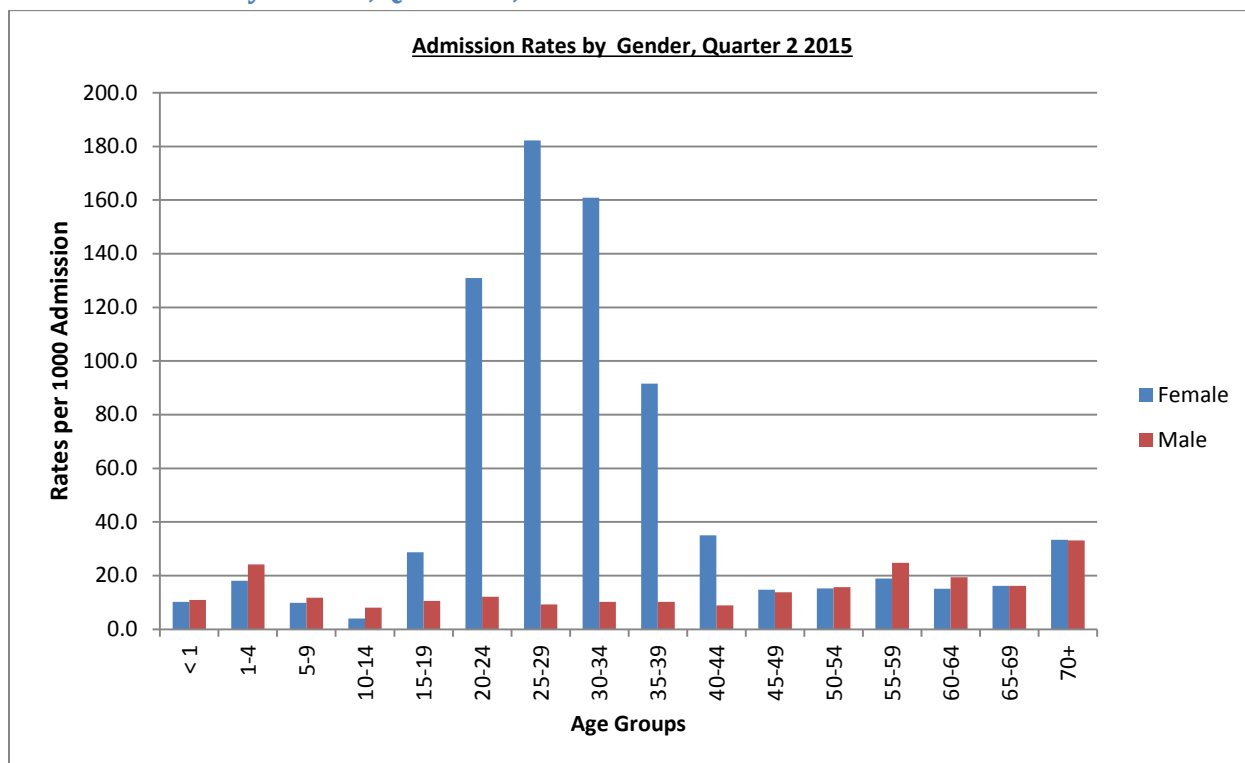
4.2.2 Admission Rate by Age-Group, Quarter 2, 2015



Source: Manual Tear-Offs & PATISPLUS

The highest occurrence of admissions were among the 25 – 29 yrs age groups (n=1104); this was approximately 49% of all admissions, where the cause of morbidity were due to pregnancy, its complications and outcomes (Single spontaneous delivery (n=1001), First degree perineal laceration during delivery (n=592), Perineal laceration during delivery, unspecified (n=448), Single delivery by caesarean section (n=67) and Labour & delivery complicated by fetal distress, unspecified (n=60). The under-five population comprised of approximately 6.2% of the total admissions for 2nd Quarter 2015; the top 3 causes of morbidity for this age group are Pneumonia (n=31), Diarrhoea (n=19) and Congenital pneumonia unspecified (n=15). The lowest frequency of admissions were among 10-14 age groups (n=71) at approximately 11.9%; the top 3 causes of morbidity for this age group are Viral infection (n=9), Diarrhoea (n=8), and Cellulitis of lower limb (n=3).

4.2.3 Admission by Gender, Quarter 2, 2015

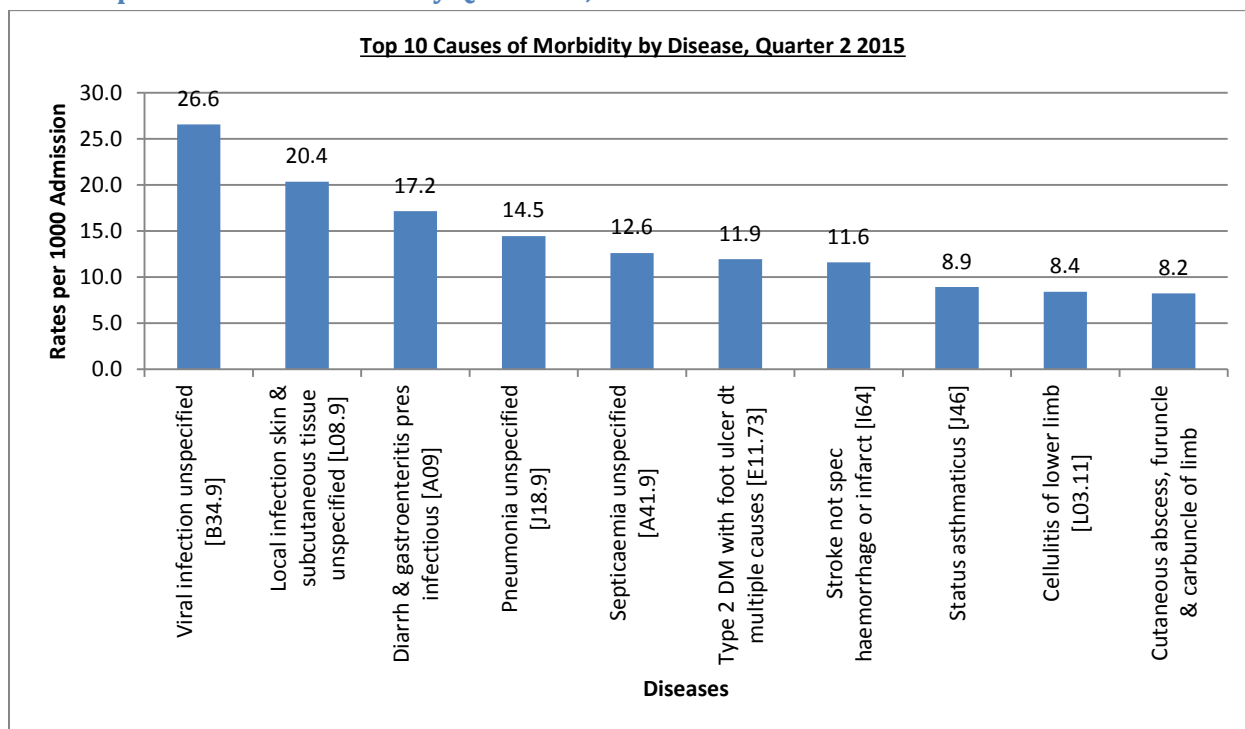


Source: Manual Tear-Offs & PATISPLUS

The graph represents the age groups disaggregated by gender. It shows that female contributed a higher number of cases in the age groups 25-29, 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 Pneumonia [n=25], followed by Diarrhoea & gastroenteritis of presumed infectious origin [n=25] and Viral infection unspecified [22]. In males with the age group >50 contributed a higher number of admissions for Local infection skin & subcutaneous tissue unspecified [n=47], Congestive heart failure [n=39] and Septicaemia unspecified [n=22].

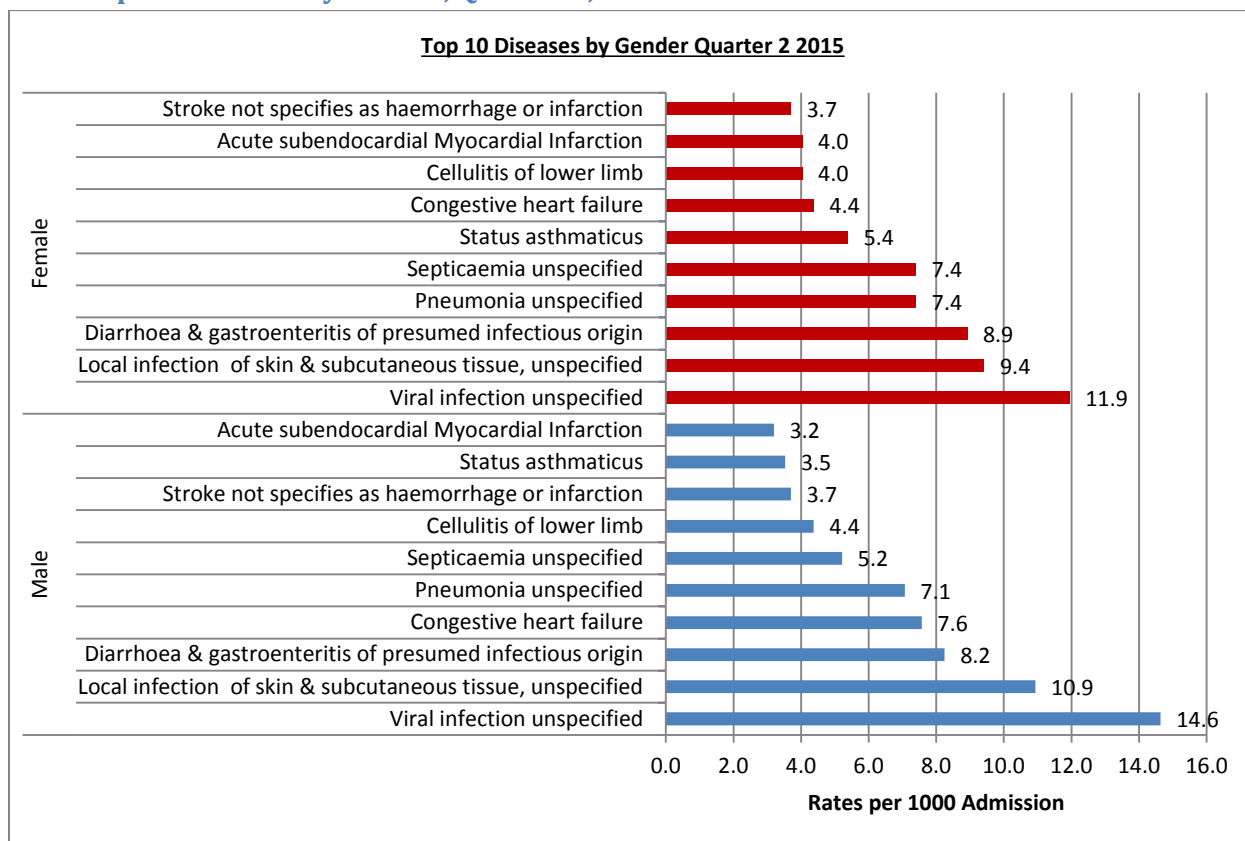
4.2.4 Top 10 Causes of Morbidity Quarter 2, 2015



Hospital Discharge Data from Sub-Divisional Hospitals & PATISPLUS

The graph displays the Top 10 causes of admissions by diseases with Viral Infection unspecified [n=158] leading which accounted for 26.6 per 1000 admissions, while Cutaneous abscess, furuncle & carbuncle of limb [n=49] accounting for 8.2 per 1000 admissions is the tenth cause of admission. For the same period in 2014 Viral Infection [n=405] was also the leading cause of admissions and Hypertension [n=70] with the least admissions. Viral infection and Cellulitis of lower limb were highest among the I-Taukei with 22% admissions compared to Fijian of Indian descent at 11% and Fijian of Other descent with 1% admission; while in gender distribution in 2nd quarter 2015 the Males had highest admissions for both viral infection with 10.4% [n=87] and Local infection skin & subcutaneous tissue, unspecified at 8% [n=65] than women. The unavailability of over 600 records from the major divisional hospitals may also be contributing to the conditions seen above.

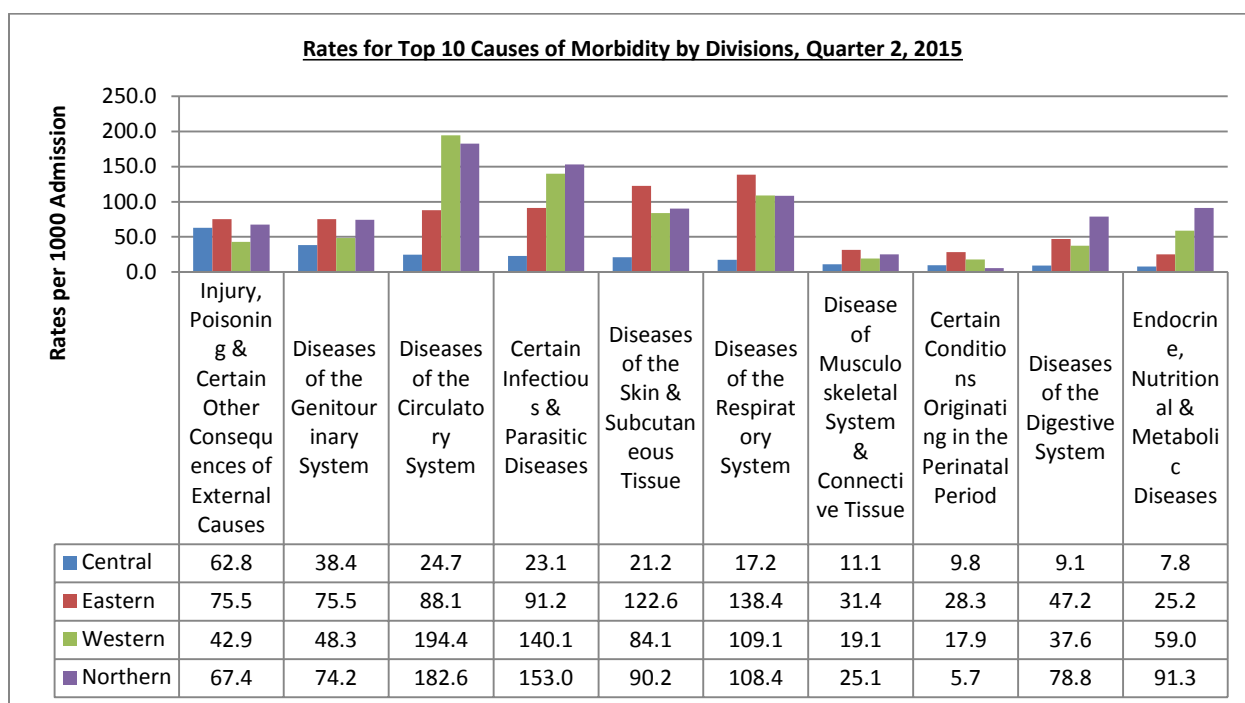
4.2.5 Top 10 Diseases by Gender, Quarter 2, 2015



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 Viral Infection and Local infection of skin & subcutaneous tissue, unspecified. The least admissions for the females are the Acute subendocardial Myocardial Infarction and Acute subendocardial Myocardial Infarction whereas for males the least admissions were for Acute subendocardial Myocardial Infarction and Status Asthmaticus. The rates used were calculated per 1000 admissions.

4.2.6 Rates for Top 10 Causes of Morbidity by Divisions, Quarter 2, 2015

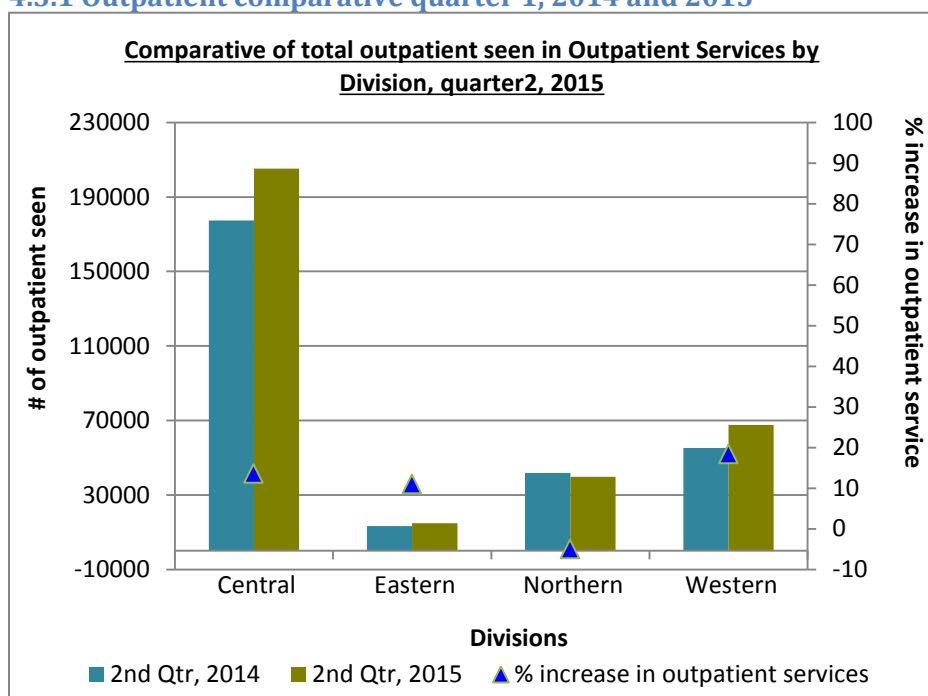


Source: Manual Tear-Offs & PATISPLUS

The graph above shows the top 10 causes of Morbidity by Divisions. Most admission were reported from Western Divisions [n=1262] followed by Northern Divisions [n=768], Central Divisions [n=692] & Eastern Divisions [n=230] for 2nd Quarter 2015. Different Divisions have different top 10 causes of morbidity compared to 2nd quarter 2014 which have Certain Infectious & Parasitic Diseases as the leading causes of morbidity for all the Divisions. In 2nd quarter 2015, the Central division, Injury, Poisoning & Certain Other Consequences of External Causes, Diseases of the Genitourinary System and Diseases of the Circulatory System were the top three causes of morbidity. The Western and the Northern divisions leading cause of admission were Diseases of the Circulatory System, Certain Infectious & Parasitic Diseases and Diseases of the Respiratory System. The leading causes of morbidity for Eastern Division were Diseases of the Respiratory System, Diseases of the Skin & Subcutaneous Tissue and Certain Infectious & Parasitic Diseases.

4.3 Outpatients

4.3.1 Outpatient comparative quarter 1, 2014 and 2015



A total of 327474 outpatients were seen through the outpatient service in all the divisions compared to a total of 287543 outpatients seen through the same period in 2014. This was an increase of 12.2% in the 2nd Quarter [2015] when compared to the same period last year. The Western Division recorded 18.3% increase in outpatient services, followed by the Central Division (13.6%) and Eastern Division (11%) while the Northern Division recorded 5% decrease in outpatient services. When compared with the same period last year, Central recorded the highest increase followed by the Western, Northern and Eastern Divisions. *Source: CMRIS Online [PHIS]*

4.3.2 Outpatient services by Sub-division *Source: CMRIS Online [PHIS]*

Below are the Medical Area's that were responsible for the percentage increase in outpatient services nationally

Division	Sub-division	Medical Area	2nd Qtr, 2014	2nd Qtr, 2015	% ↑↓(-indicates decrease) comparative Qtr 2, 2014 and 2015.
National			287543	333097	13.7
Western	Nadroga/Navosa	Cuvu	0	4780	100.0
		Vatukarasa	0	843	100.0
		Sigatoka + Cuvu(2014)	2236	5583	59.9
		Korolevu+Vatukarasa(2014)	2728	3302	17.4
		Raiwaqa (Western)	1240	1283	3.4
		Vatulele	774	710	-9.0
		Keiyasi	2136	1926	-10.9
		Lomawai	3405	2978	-14.3
	Lautoka/Yasawa	Lautoka	639	5249	87.8
		Kamikamica	3597	6481	44.5
		Kese	631	1081	41.6
		Natabua	1630	1917	15.0
		Nacula	1110	1010	-9.9
		Viseisei	3804	3107	-22.4
		Malolo	1610	1113	-44.7
	Tavua	Vatukoula	163	331	50.8
		Tavua	376	344	-9.3
		Nadarivatu	660	442	-49.3
	Ba	Nailaga	2710	4792	43.4
		Ba	8275	7946	-4.1
		Balevuto	3240	2970	-9.1
	Ra	Nanukuloa	1921	2785	31.0
		Namarai	314	224	-40.2
		Nasau	1153	671	-71.8
		Rakiraki	2663	747	-256.5
	Nadi	Namaka	6507	9070	28.3
		Nadi	925	1034	10.5
		Bukuya	690	467	-47.8
Eastern	Lomaiviti	Levuka	140	622	77.5
		Koro	1821	2337	22.1
		Bureta	1007	1250	19.4
		Gau	1328	1093	-21.5
	Lakeba	Matuku	459	1063	56.8
		Moala	637	1339	52.4
		Kabara	828	1063	22.1
		Ono-i-lau	264	273	3.3
		Lakeba	860	835	-3.0
	Rotuma	Rotuma	280	531	47.3
	Kadavu	Daviquele	2080	2018	-3.1

		Kavala	2175	1524	-42.7
		Vunisea	552	285	-93.7
	Lomaloma	Lomaloma	376	330	-13.9
		Cicia	401	270	-48.5
Northern	Bua	Nabouwalu	1022	1663	38.5
		Lekutu	3067	3525	13.0
		Wainunu	1669	1564	-6.7
	Cakaudrove	Natewa	549	689	20.3
		Saqani	864	1049	17.6
		Savusavu	593	699	15.2
		Korotasere	1051	898	-17.0
		Tukavesi	1704	1432	-19.0
		Nakorovatu	1572	1295	-21.4
		Rabi	2065	936	-120.6
	Taveuni	Qamea	299	364	17.9
		Vuna	2023	2127	4.9
		Waiyevo	905	862	-5.0
	Macuata	Dreketi	2759	3249	15.1
		Lagi	721	721	0.0
		Wainikoro	4394	4316	-1.8
		Labasa	8928	8289	-7.7
		Seaqaqa	6354	5110	-24.3
		Naduri	1251	995	-25.7
Central	Rewa	Wainibokasi	5089	15460	67.1
		Nausori	25747	27266	5.6
		Mokani	3454	3638	5.1
	Suva	Nuffield	11467	18706	38.7
		Lami	14864	20438	27.3
		Samabula	17001	20390	16.6
		Valelevu	27086	31192	13.2
		Makoi	20308	22468	9.6
		Raiwaqa (Central)	21881	18808	-16.3
		Suva	2989	543	-450.5
	Naitasiri	Naqali	2165	3065	29.4
		Laselevu	1113	1151	3.3
		Nakorosule	932	768	-21.4
		Vunidawa	281	91	-208.8
	Serua/Namosi	Navua	5899	6691	11.8
		Korovisilou	2649	2425	-9.2
		Namuamua	1329	1088	-22.2
		Beqa	1955	1252	-56.2
	Tailevu	Nayavu	1266	1305	3.0
		Lodoni	3814	3516	-8.5
		Korovou	6119	5034	-21.6

The above table report shows the percentage increase and decrease in outpatient service comparative 2nd quarter, 2014 and 2015. In 2014 Cuvu health facility was part of Sigatoka medical area and Vatukarasa health facility was part of Korolevu medical area however, in 2015 they both become medical areas.

4.4 Holding beds tabular by Division

Division	No. Bed	Total Patients	No. Referred	No. Discharged	No. Held Over 12 hours	No. Deliveries	Occupancy Rate (%)	Held Over 12 Hours (%)
Central	126	6735	1211	4061	1651	8	58.7	24.5
Eastern	66	147	65	86	66	5	2.4	44.9
Northern	85	759	342	409	88	20	9.8	11.6
Western	87	603	279	289	31	15	7.6	5.1
Total	364	8244	1897	4845	1836	48	24.9	22.3

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, number of total patients and had the greatest number of people held over 12 hours while Western Division recorded the least number held.

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 problem and geographical location of the facility. The numbers of delivery were reported to be higher in the North. 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.

It was reported, the Central Division also had the highest number of discharges in the Rewa Sub-division (n=2863); the respective medical areas were responsible for the increase; Nausori medical area (n=2182) and Wainibokasi medical area (n=664) medical area. While in Suva Sub-Division (n=1094); Samabula medical area (n=221) recorded the highest discharge trailed by Makoi medical area (n=220).

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

Mortality

A total of 805 Medical Cause of Death Certificates (MCDC) were received at the Health Information Unit at the end of the 2nd quarter, 2015 giving an estimated crude death rate of 0.9 per 1000 population (using the 2014 FBOS population projections as a denominator). In comparison to the 2nd quarter of 2014, 887 MCDC were received at HIU and the crude death rate (CDR) stood at 1 per 1000 population. These were the certificates received from each division from 1st April 2015 to 15th July 2015.

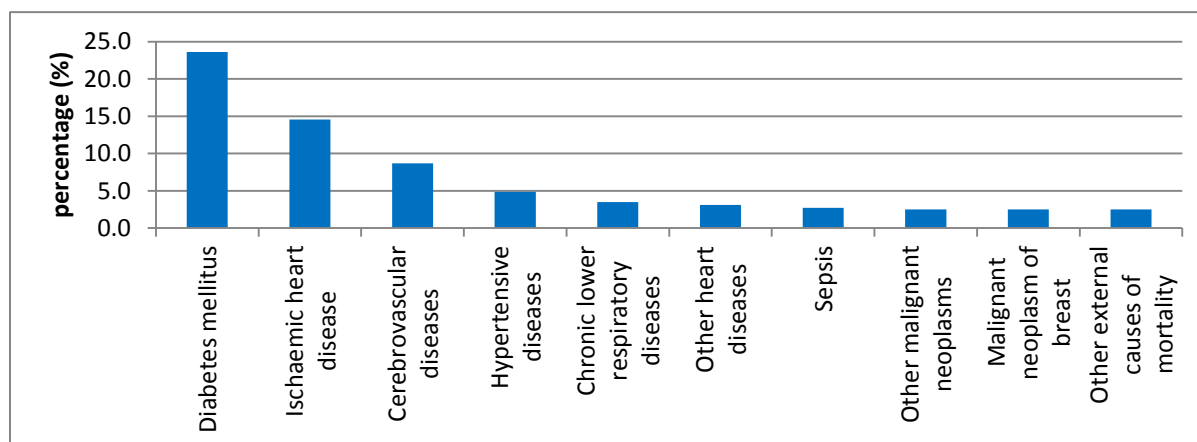
6.1 Mortality by Chapter & Tabular

Non Communicable Diseases are the major causes of mortality (Top 10 causes) for 2nd quarter, 2015 covering 76.4% of the total mortality while 23.6% 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 2nd quarter, 2014. External causes of mortality have fallen in ranking from the 2nd quarter, 2014 from the 5th to the 6th place in the 2nd quarter, 2015. There has been no significant change in the top 10 chapters of the mortality over the last 2 years as shown below.

6.1.1 Top Ten causes of mortality (by chapter)

Diseases	Cases	%
Diseases of the circulatory system	262	32.5
Endocrine, nutritional and metabolic diseases	205	25.5
Neoplasms	85	10.6
Diseases of the respiratory system	44	5.5
Certain infectious and parasitic diseases	42	5.2
External causes of mortality	35	4.3
Diseases of the digestive system	20	2.5
Diseases of the genitourinary system	19	2.4
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	15	1.9
Diseases of the nervous system	14	1.7
Grand Total	805	

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



The graph shows that NCDs (96.1%) remains the major cause of mortality whereby diabetes (23.6%) and IHD (14.5%) remain the two leading causes of mortality for this quarter and comparative reporting period. Cerebrovascular disease has moved up in ranking from 7th place in the 1st quarter, 2014 to the 3rd place in this reporting period. Hypertensive diseases have fallen in ranking from 3rd place in 2nd quarter, 2014 to 4th place in this period. Other External causes of mortality has also fallen in ranking from 7th place in 2nd quarter, 2014 to 10th place in this reporting 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. The two leading causes of mortality (diabetes & IHD) remain to be dominant throughout the four divisions in which the Central Division recorded the greatest frequency of mortality by cause followed by the Western Division, the Northern Division and the least were recorded from the Eastern Division.

6.2 Males vs Females Mortality

6.2.1 Males vs Females Mortality

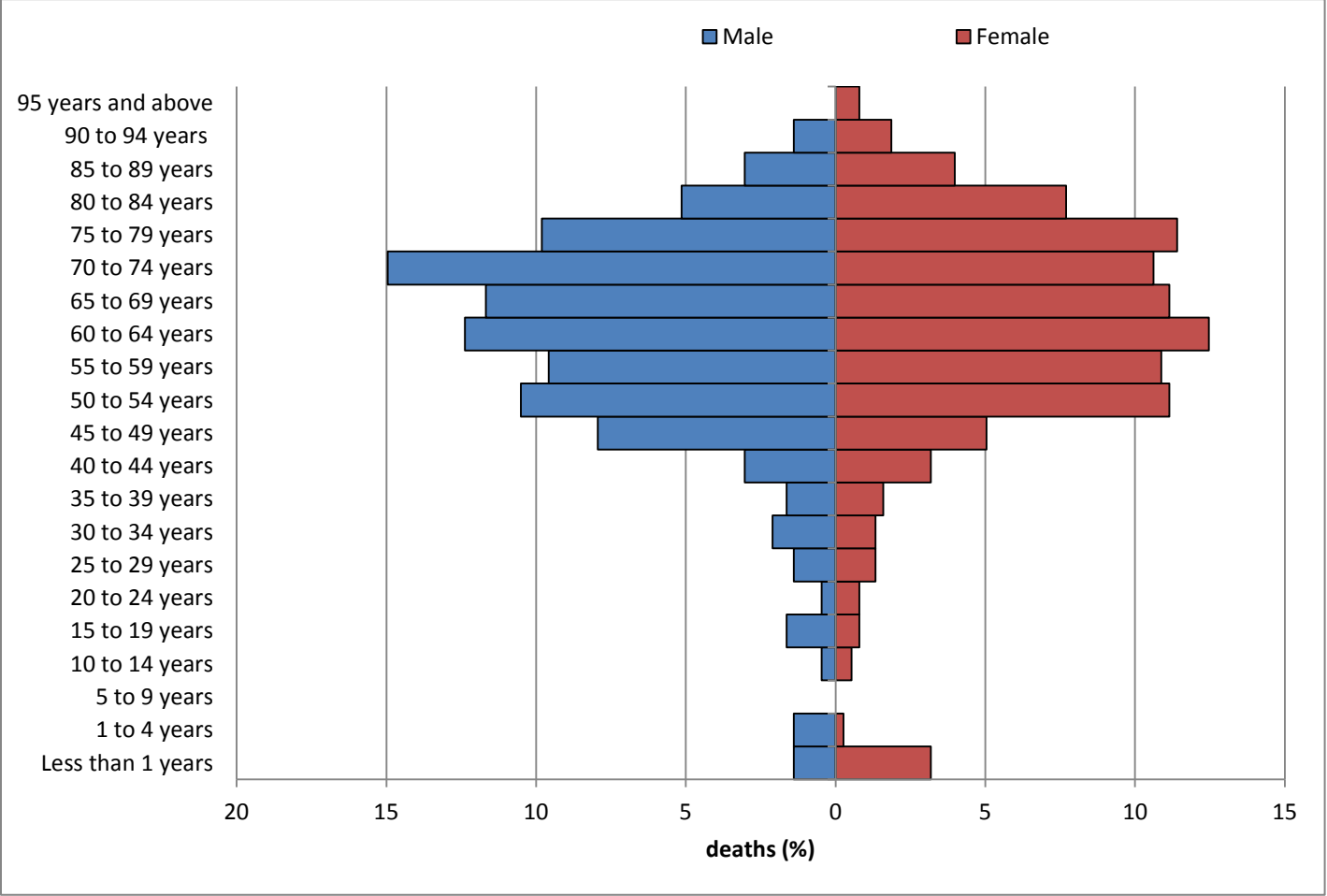
Male			Female		
Diseases	Cases	%	Diseases	Cases	%
Diseases of the circulatory system	166	38.8	Endocrine, nutritional and metabolic diseases	110	29.2
Endocrine, nutritional and metabolic diseases	95	22.2	Diseases of the circulatory system	96	25.5
Neoplasms	35	8.2	Neoplasms	50	13.3
Diseases of the respiratory system	31	7.2	Certain infectious and parasitic diseases	26	6.9
External causes of mortality	23	5.4	Diseases of the respiratory system	13	3.4
Certain infectious and parasitic diseases	16	3.7	External causes of mortality	12	3.2
Diseases of the digestive system	15	3.5	Diseases of the genitourinary system	12	3.2
Symptoms, signs and abnormal clinical and laboratory findings not elsewhere classified	11	2.6	Symptoms, signs and abnormal clinical and laboratory findings not elsewhere classified	11	2.9
Diseases of the genitourinary system	7	1.6	Certain conditions originating in the perinatal period	9	2.4
Diseases of the nervous system	7	1.6	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	8	2.1
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	7	1.6	Diseases of the skin and subcutaneous tissue	8	2.1
Diseases of the skin and subcutaneous tissue	5	1.2	Diseases of the nervous system	7	1.9
Certain conditions originating in the perinatal period	4	0.9	Diseases of the musculoskeletal and connective tissue	7	1.9
Diseases of the musculoskeletal and connective tissue	3	0.7	Diseases of the digestive system	5	1.3
Congenital malformation, deformations and chromosomal abnormalities	2	0.5	Congenital malformation, deformations and chromosomal abnormalities	2	0.5
Mental and behavioural disorders	1	0.2	Mental and behavioural disorders	1	0.3
Grand Total	428		Grand Total	377	

The top 2 chapters remain the leading causes of mortality in both genders. The top 4 chapters for Female remain the same as per the 2nd quarter, 2014. It is important to know that the male gender follows the top three rankings by chapters in the National dataset. Females may be driving the Endocrine and Neoplasms dataset and may be contributing to the higher ranking. This is consistent with the diabetes incidence results from the diabetes notification forms, where females had consistently higher rates of incidence (1.1.2). In males in the same reporting last year, the External cause of mortality was rank 4th and falls to 5th rank in this quarter.

Symptoms, signs and abnormal clinical and laboratory findings not elsewhere classified (Nonsense codes) are found in 8th rank in both sexes for this reporting period; these nonsense codes were also found in the similar rankings for the 2nd quarter, 2014. This is concerning as it demonstrates that medical officers are not able to accurately classify deaths. This flags training on certification of death and requires commitment from all senior managers to enable officers to be released and trained in certifying deaths, in particular, from all departments in the Divisional hospitals, where most deaths are certified.

The inability to classify causes of death correctly greatly inhibits the strategic analysis and targeting of information for policy, planning and decision making. The top 2 chapters remains the leading cause of mortality in all the four divisions, followed by Neoplasms with FIDs dominating in the Western Division whereas the I-Taukei ethnicity take lead in the Central and the Northern Division. Furthermore, external causes of mortality noted to be the 4th highest in ranking in the Western Division amongst the FIDs.

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 deaths occur between the age groups from 45-79 years where males recorded 76.9% and female recorded 72.7%. In these age groups, males of I-Taukei descent recorded 43.7%, Fijian of Indian descent recorded 29.7% and Fijian of other descent recorded 3.5% of all male deaths. On the other hand, females of I-Taukei descent recorded 48.3 %, Fijian of Indian descent recorded 22% and Fijian of other ethnic descent recorded 5% of all female deaths. Adult males have a greater frequency of deaths in the 45 to 79 age group compared to the rest of the age groups. In females mortality is delayed by 5 years (highest frequency of mortality) compared to males with a greater frequency in the 50-84 age group. **For 5-9 years, there is no MCDC received from the facilities.**

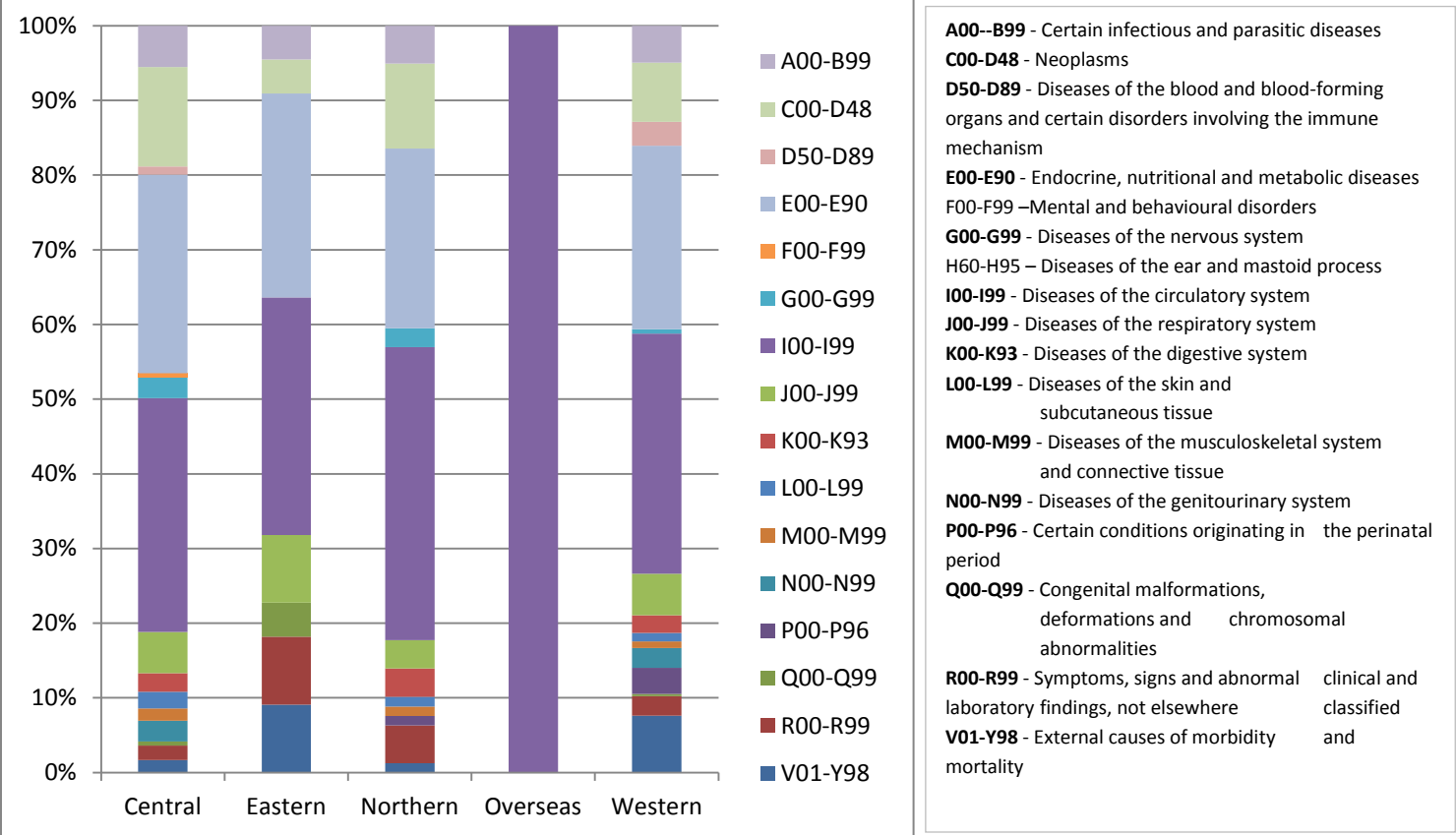
6.3 Premature mortality

6.3.1 Premature mortality rate per 1000 population (<65yrs)

Age groups	Death			Population 2014 (FBOS)			Death Rate per 10,000 population		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	12	13	25	44370	41879	86249	2.7	3.1	2.9
5-9	0	0	0	43581	40922	84503	0.0	0.0	0.0
10-14	2	2	4	40385	37406	77790	0.5	0.5	0.5
15-19	7	3	10	39679	36867	76547	1.6	0.7	1.2
20-24	2	3	5	38405	35811	74217	0.5	0.7	0.6
25-29	6	5	11	35955	33235	69190	1.4	1.2	1.3
30-34	9	5	14	35214	33015	68229	2.0	1.2	1.6
35-39	7	6	13	31457	29812	61269	1.6	1.4	1.5
40-44	13	12	25	27579	25955	53533	2.9	2.9	2.9
45-49	34	19	53	25558	25092	50650	7.7	4.5	6.1
50-54	45	42	87	24837	24275	49112	10.1	10.0	10.1
55-59	41	41	82	20427	20141	40568	9.2	9.8	9.5
60-64	53	47	100	14817	15304	30120	11.9	11.2	11.6
Total	428	377	805	422264	399713	821977	96.5	90.0	93.3

6.4 Mortality by Divisions

6.4.1 Mortality by divisions



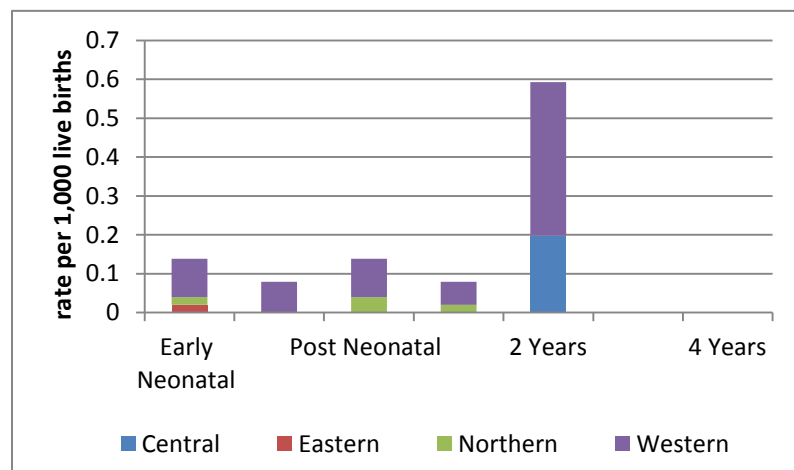
The graph shows the percentages of deaths by Division of residence of the deceased. Central division recorded 361 (44.8%) deaths followed by Western division with 342 (42.5%) deaths then Northern division with 79 (9.8%) deaths followed by Eastern division with 22 (2.8%) deaths and 1 (0.1%) was Overseas death.

The majority of the divisional are attributable to diseases of the circulatory system followed by the Endocrine and Neoplasm for the 2nd quarter 2015. The trend remains the same in comparison to 2nd quarter 2014 as circulatory leading followed by endocrine and neoplasms.

The top 3 classification of death for Central, Western and Northern Divisions is Circulatory system followed by Endocrine and Neoplasms. The Eastern Division recorded Circulatory system as the highest frequency followed by Endocrine and third are External Causes of Mortality, Symptoms, signs and abnormal clinical and laboratory findings (ill-defined) and Respiratory system.

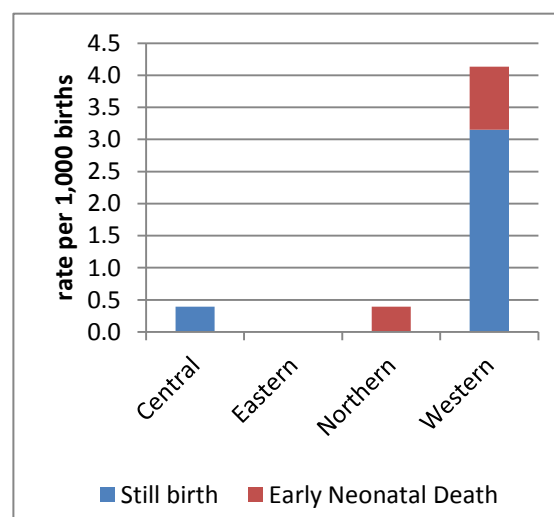
6.5 Under 5 mortality by division

6.5.1 Under 5 Mortality



The Under 5 mortality rate stands at 4.9 per 1000 live births for this quarter compared to 6.3 per 1000 livebirths in 2nd quarter 2014. The Infant mortality rate stood at 3.5 per 1000 livebirths compared to 5.3 per 1000 livebirths in 2nd quarter 2014. The Western Division reported the highest Under 5 mortality (n=19) followed by the Northern (n=4) and Central and Eastern Division recorded one each in this reporting period. The low number of Under 5 deaths recorded for the Central and Eastern Division was mainly due to late reporting.

6.5.2 Perinatal Mortality

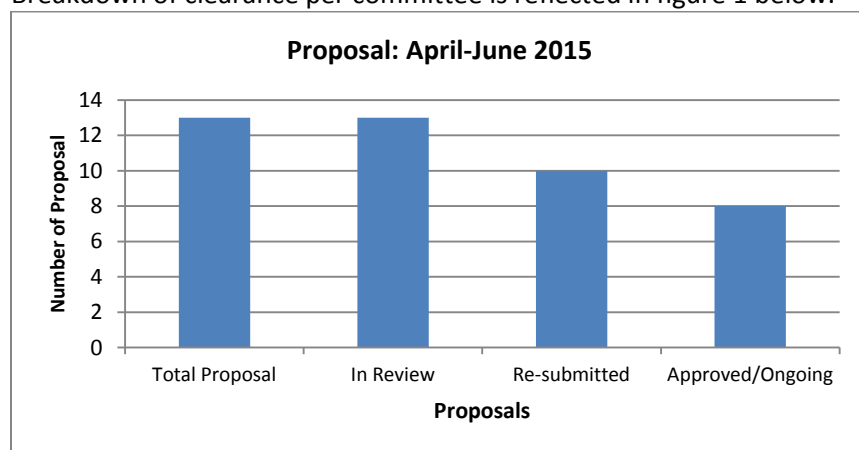


The Perinatal mortality rate stands at 4.9 per 1000 births for this quarter compared to 6.1 per 1000 births in 2nd quarter 2014. As mentioned earlier, no early neonatal death shown in the graph for the Central and Eastern division and no still brths reported for the Eastern and Northern division were mainly due to late reporting.

6.6 Research Update

A total of 13 proposals were submitted for review and clearance by FNRERC. The 13 proposals were In-Review, 10 for Re-submission and Ongoing/Approved: 8.

Breakdown of clearance per committee is reflected in figure 1 below.



6.7 Compliance to Reporting Requirements

6.7.1 Non-Communicable Disease

Cancer

ICD-O is a dual classification with coding systems for both topography and morphology. The topography code describes the site of origin of the neoplasms and uses the same 3-character and 4-character categories as ICD-10 for malignant neoplasms (C00– C80); this allows greater specificity for coding sites of non-malignant neoplasms than is possible in ICD-10. The morphology code describes the cell type of the tumor and its biologic activity, in other words, the characteristics of the tumor itself.

A pathologist may receive several specimens from the same patient for example; (a). A biopsy (b) resected primary site and (c) a metastatic site. The cancer registrar is only interested in the primary site and will report only (b) the primary site and morphology with a behavior code /3. Coding is based on what the pathologist states. However, if the behavior is unclear or not stated, the cancer registrar codes the behavior as assigned in ICD-O, [C80.9] resulting in most cases being bulked into unknown primary sites.

Diabetes

The total number of diabetes notification received in Quarter 1, 2015 were 200 compared to 112 cases in Quarter 1, 2014. There were 22 facilities reporting the incidence of diabetes in this quarter compared to 18 facilities reporting for the same period last year. Nadi Hospital reported the highest number of cases (n=91) and compared to the same period last year, 17 cases were reported from Labasa Diabetic Hub.

The total number of diabetes notifications received in Quarter 2, 2015 was 117 compared to 182 cases in Quarter 2, 2014. There were 13 facilities that reported the incidence of diabetes in this quarter compared to 26 facilities reporting for the same period last year. The Nadi Hospital reported the highest number of cases (n=62) and compared to the same period last year (n= 57) cases were reported from the same facility. The reduced frequency of reporting new cases affects the ability to correctly identify incidence of disease, resulting in reduced precision for planning, policy and strategic decision making.

6.7.2 PHIS

Percentage Paper base report received for PHIS

Divisions	% Received
Central	100
Eastern	100
Northern	100
Western	100

The preceding analysis is based on the 100% of reports received through the paper base reports from the four divisions for 2nd quarter, 2015. There was 0% decline in the receipt of reports. This was a huge achievement for PHIS, as the above is based on the follow-up and routine monitoring by SDHS- and HIU that had contributed to the improvement in reporting. The thorough and effective continuous feedback from HIU is one of the factors that contributed to completeness of reporting in PHIS.

Source: CMRIS Online [PHIS]

Percentage Online reports received for PHIS

Divisions	% Received
Central	100
Eastern	100
Northern	100
Western	100

The preceding analysis is based on 100% of reports received through PHIS online 2nd quarter, 2015 and same period last year. There was a great improvement in online reporting for HIU. Note; HIU enters data for those SDHS's who do not access to the PHIS online. The discrepancy between the online reporting and paper-based is due to the ability of Sub-divisions to access PHIS online for immediate data entry; the lag time for received paper base reports is due to transport and delivery logistics. There will be

continuation of paper-based reports until the online system is able to sustain reporting requirements. The need for monitoring and strengthening data entry personal at sub-divisional level is an imperative. Source: CMRIS Online [PHIS]

On-Time Report for Quarter 2, 2015

This is the 2nd quarter update of the monitoring of on-time submission:-

% of reports received On-Time by Division & by Month [received by 15th of the following month]				Total %
Division	April	May	June	
Central	85.7	100	100	95.2
Eastern	100	100	100	100
Northern	100	100	100	100
Western	100	100	100	100
Total	96.4	100	100	98.8

The table shows the percentage of monthly reports received on-time from each division in 2nd Quarter, 2015. There has been a huge improvement in submission within the 3 month period and it illustrates the performance of each Division's consistency in delivering reports from their respective reporting units to the Health Information Unit

(HIU). The Western, Eastern and Northern Divisions have been consistent in submitting their PHIS reports (paper base) even though they face challenges in their geographical location. The Central Division fared the least efficient in on-time submissions, despite being closest to HIU and having better access to resourcing for health information.

PHIS late reporting Quarter 2, 2015.

Reports received late by Month from the following Medical Areas [received after 15th of the following month]			
Division	April	May	June
Central	Korovisilou Medical Area, Beqa Medical Area and Namuamua Medical Area	Nil	Nil
Eastern	Nil	Nil	Nil
Northern	Nil	Nil	Nil
Western	Nil	Nil	Nil

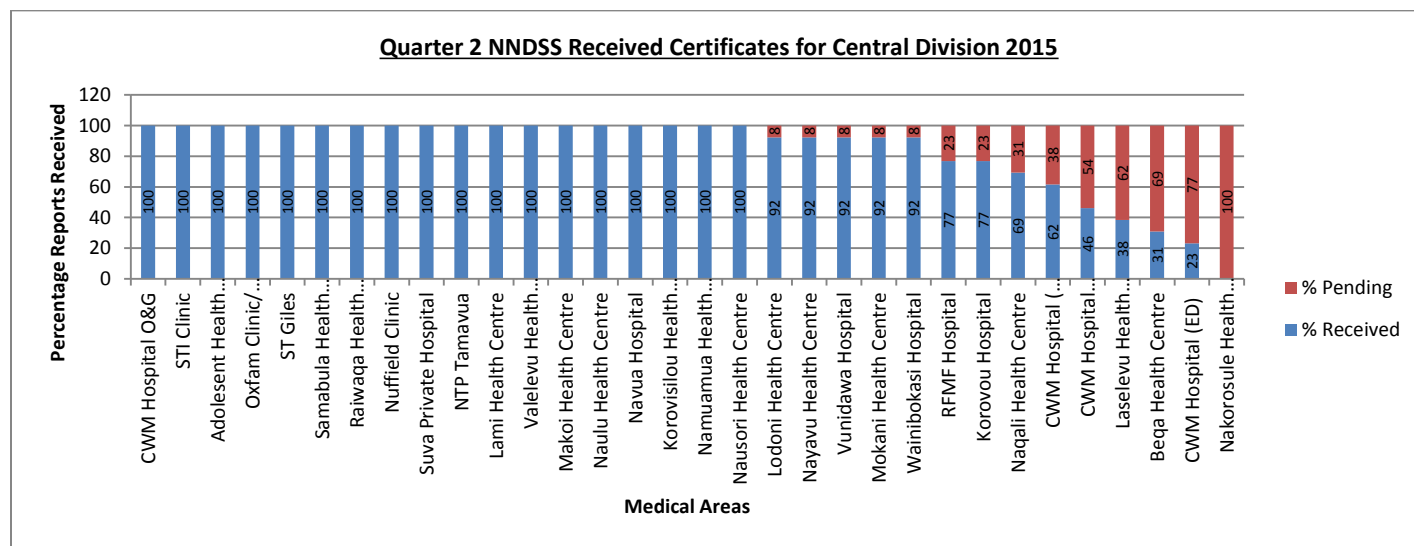
The table shows the medical areas that were late in monthly reporting by each division in 2nd Quarter, 2015.

Source: CMRIS Online [PHIS]

Connectivity Update:

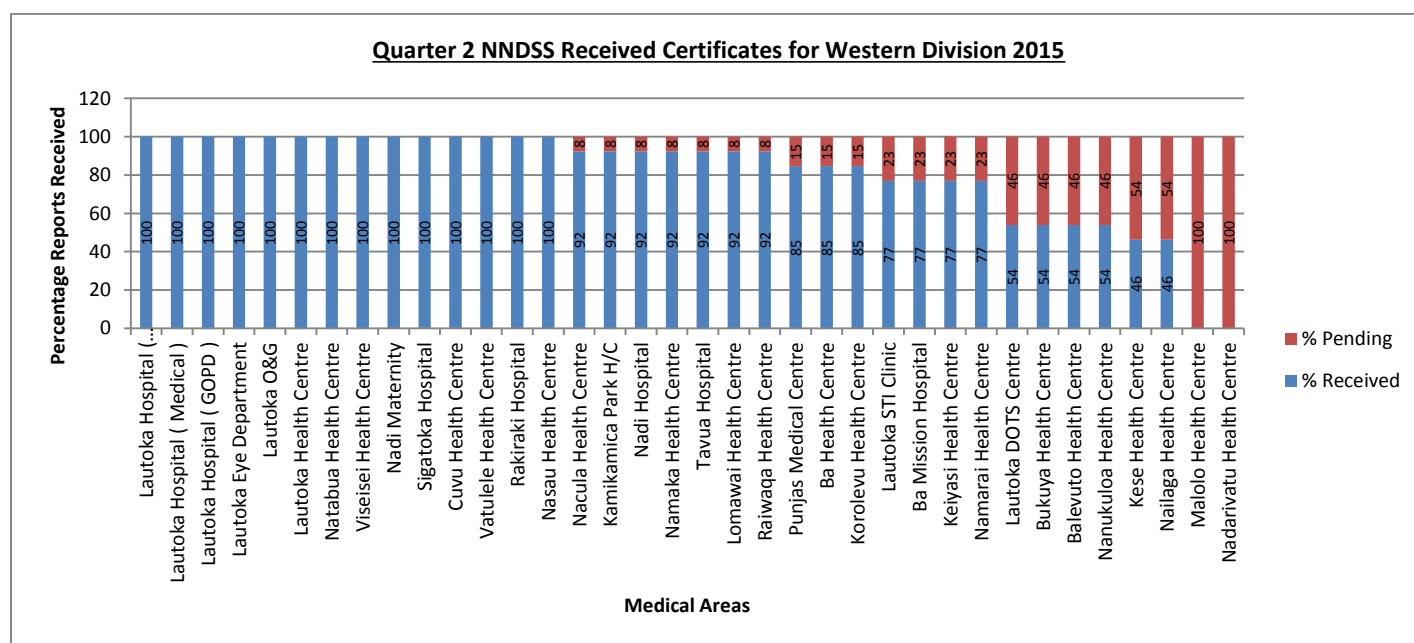
The figure below shows the accessibility and connectivity of the SDHS to PHIS Online System. Total Facility: 20 (14 connect)

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	Having issues with connectivity		Bua Subdivision	Accessible
	Naitasiri Subdivision	Having issues with connectivity	Western	Nadroga/ Navosa Subdivision	Accessible
Eastern	Lomaiviti Subdivision	Accessible		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	Accessible		Lautoka/Yasawa Subdivision	Accessible



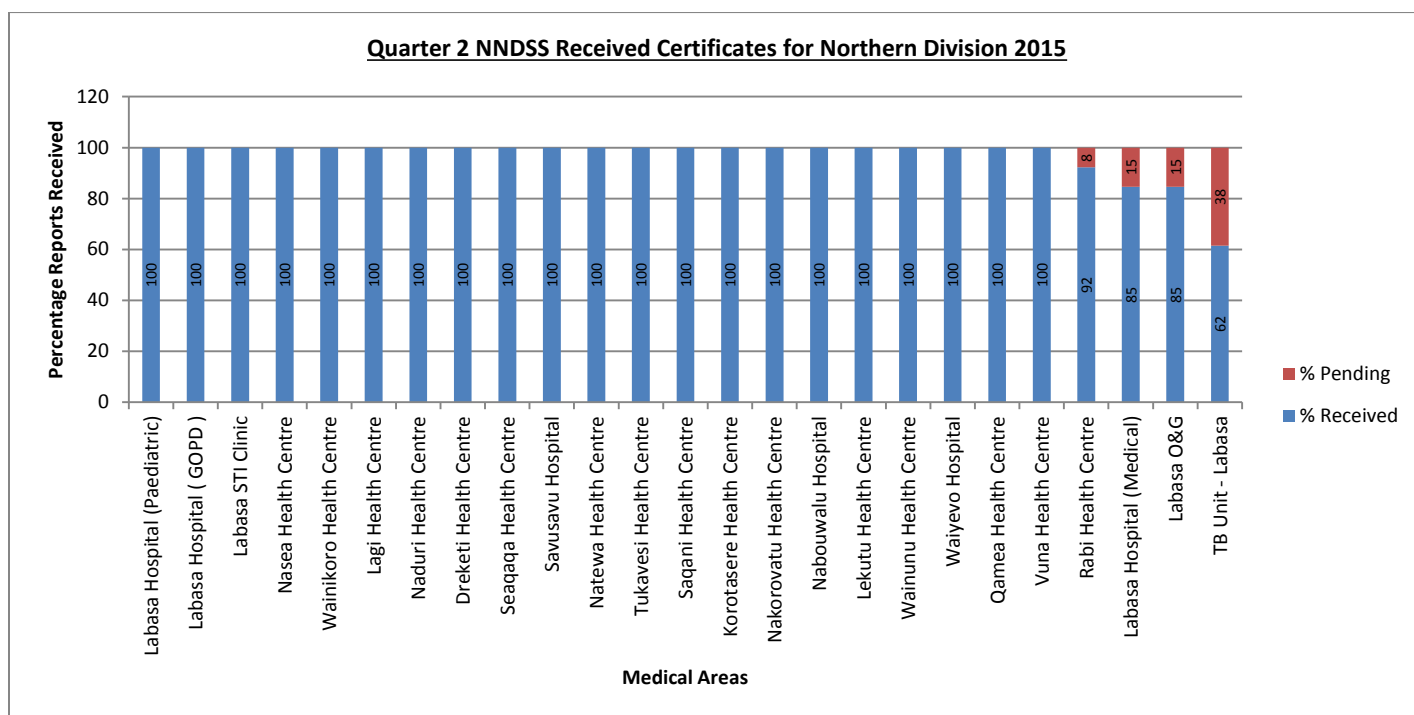
Source: NNDSS

84% of reports were received for 2nd quarter 2015 from the Central division.



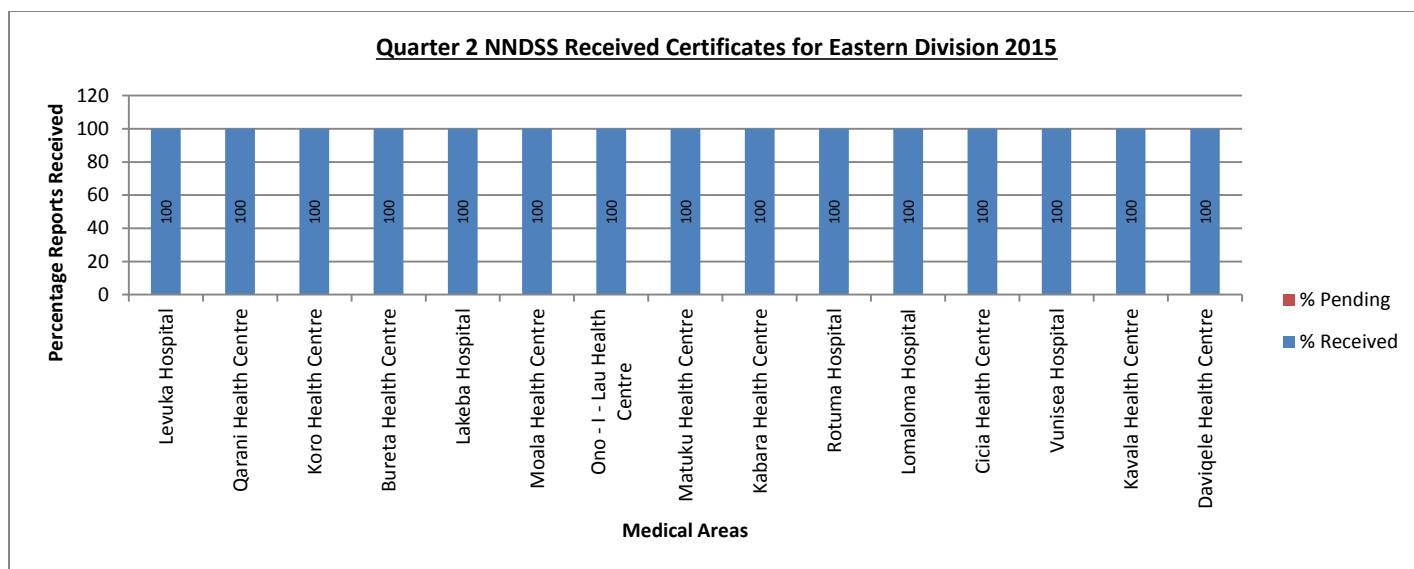
Source: NNDSS

81% of reports were received for 2nd quarter 2015 from the Western Division.



Source: NNDSS

97% of reports were received for 2nd quarter 2015 from the Northern division.



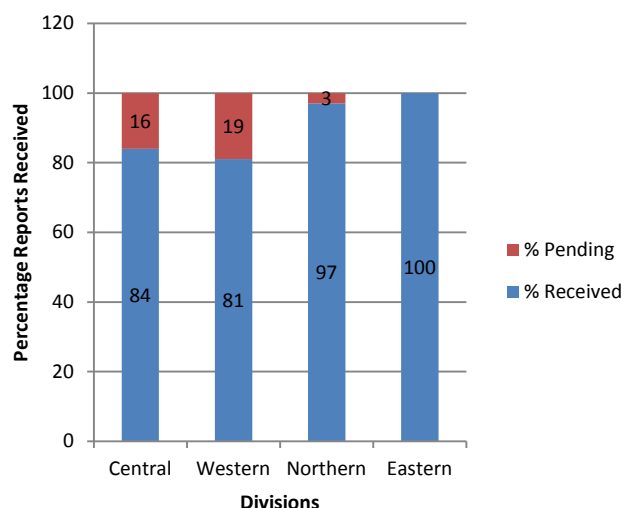
Source: NNDSS

100% of reports were received for 2nd 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 2 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.*

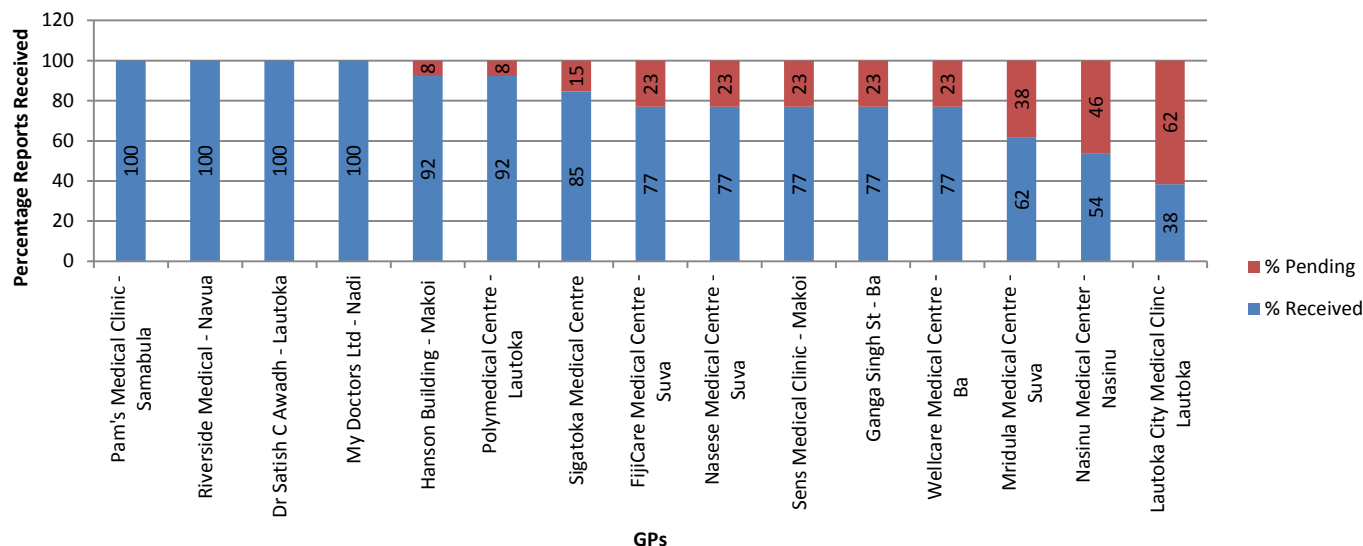
The following divisions are congratulated for being the best divisions in NNDSS reporting:

✓ **Eastern – 100% for 2nd quarter 2015**

✗ The Western division had the lowest rates of reporting at 81%, followed by Central 84% and Northern division with 97% reporting for 2nd quarter 2015.

Source: NNDSS

GPs Reports Received for Quarter 2 2015



Source: NNDSS

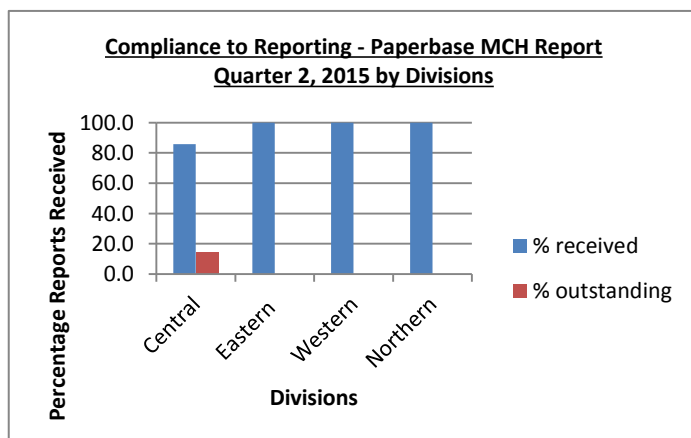
The General Practitioners have been reporting the Notifiable diseases since April of 2014 and HIU acknowledges all the private practitioners who have been submitting their reports. A total of 15 GPs have submitted their reports for the 2nd quarter 2015 (April to June) which equates to 15% of coverage from GPs. Acknowledgement is made to the 4 GPs who have complied with 100% reporting for the 2nd 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).

6.7.4 Hospital Monthly Returns

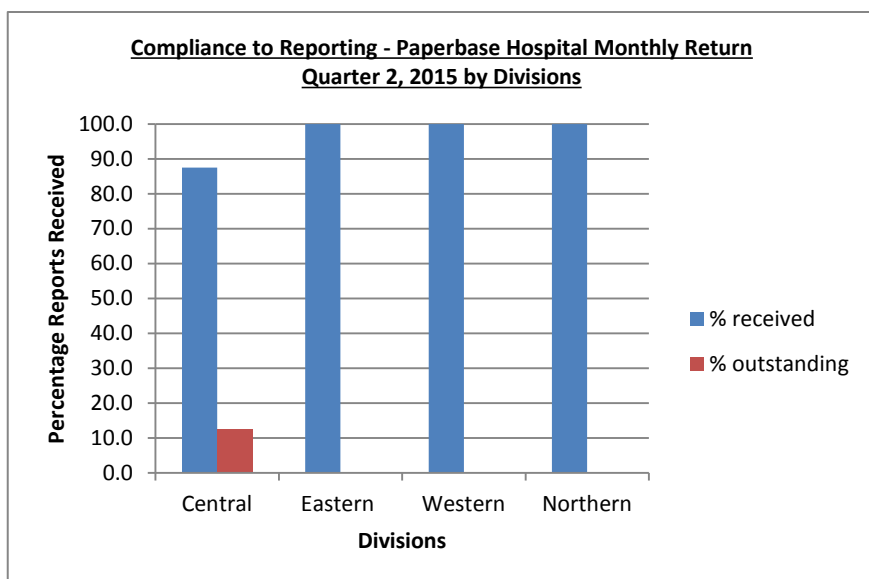
Percentage received for MCH paper base report



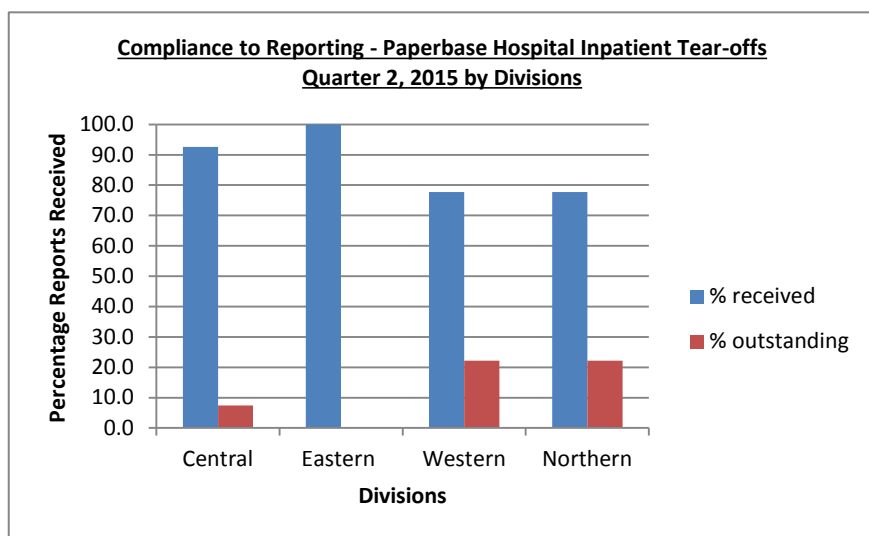
The analysis for the MCH Report is based on the reports received through paper base from the four Divisions for 2nd Quarter 2015. A few Sub-Divisional Hospitals have yet to submit their reports as illustrated in the graph. Central Divisions submitted 85.7%. Congratulations to the Eastern, Western and Northern Divisions for 100% submission. The facilities yet to report on the MCH forms are CWM Hospital [Maternity Unit]. This is consistent with PHIS on time reports where the Central division lags behind the other divisions.

Source: MCH Report

Percentage received for Hospital Monthly Return reports



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 2nd quarter which stands at 12.5%; as there were no reports from Military Hospital. Congratulations to the Eastern, Western and the Northern Divisions for 100% submission. This is consistent with PHIS on time reports and CMRIS where the Central division lags behind the other divisions.



Percentage received for Hospital Inpatient Tear-offs

The analysis for Hospital Inpatient Tear-Offs is based on reports received through Manual systems from the Divisions. Congratulations to the Eastern for 100% submission. The Central Divisions outstanding reports is 7.4%, Western and Northern Divisions still have outstanding returns which stand at 22.2% of the returns for 2nd quarter 2015. The facility yet to submit their reports are Tavua and Sigatoka and Taveuni Hospital. All divisions except

the Eastern division 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.

Source: Sub-Divisional Hospital Inpatient Tear-offs

6.7.5 Mortality

Number of MCDC yet to be received at HIU by months

Facility	April	May	June	Total
CWM Divisional Hospital	16	20	18	54
Labasa Divisional Hospital	18	9	2	29
Lautoka Divisional Hospital	7	1	0	8
Grand Total	41	30	20	91

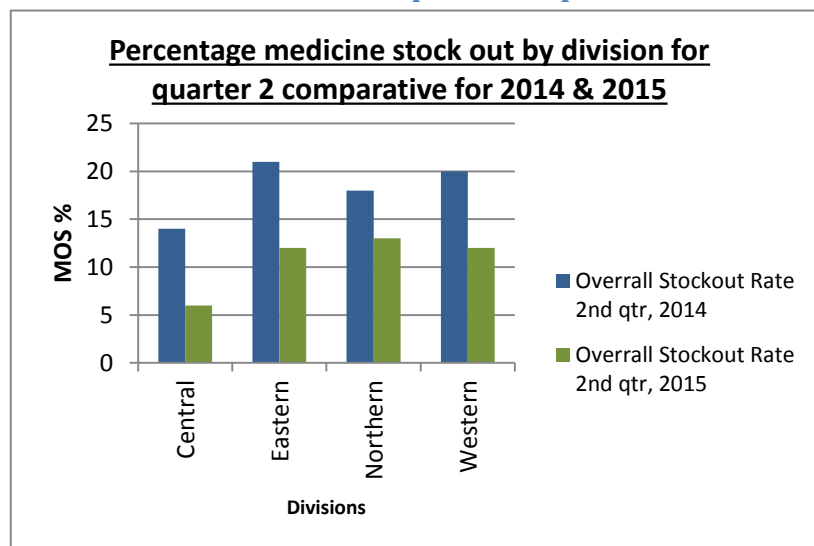
The table shows the number of Medical cause of death certificates that are yet to be received at HIU. These are the admissions in PATISplus where the patient has been discharged as deceased. Please note that Medical Cause of Death Certificates (MCDCs) received after 15th July 2015 from April to June is 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 CWMH has the highest number of pending MCDCs, followed by Labasa Hospital. The Assistant Statisticians are requested to ensure timely and complete submissions of all MCDC's and notify HIU in the event of delayed MCDCs.

Section 7 – Medicinal products, equipment and infrastructure.

7.1 Pharmacy Indicator

7.1.1 Medicine Stock-Out Comparative report



The above table shows the percentage of Medicine Stock Out by divisions. During 2nd Quarter, 2015, the Northern Division had the most medicine stock outs with 13% across all Medical Areas. The Central Division had the lowest percentage (6%). When compared with the results of the same period last year it was recorded that the Eastern Division had the most medicine stock outs with 21% across all Medical Areas and the Western Division had the lowest percentage (20%). The tracer items include vaccines, contraceptives, amoxicillin elixir, paracetamol elixir, paracetamol tabs and ORS and the nursing station level; and amoxicillin capsules, flucloxacillin, soluble insulin, ranitidine, metformin and glipizide at the health

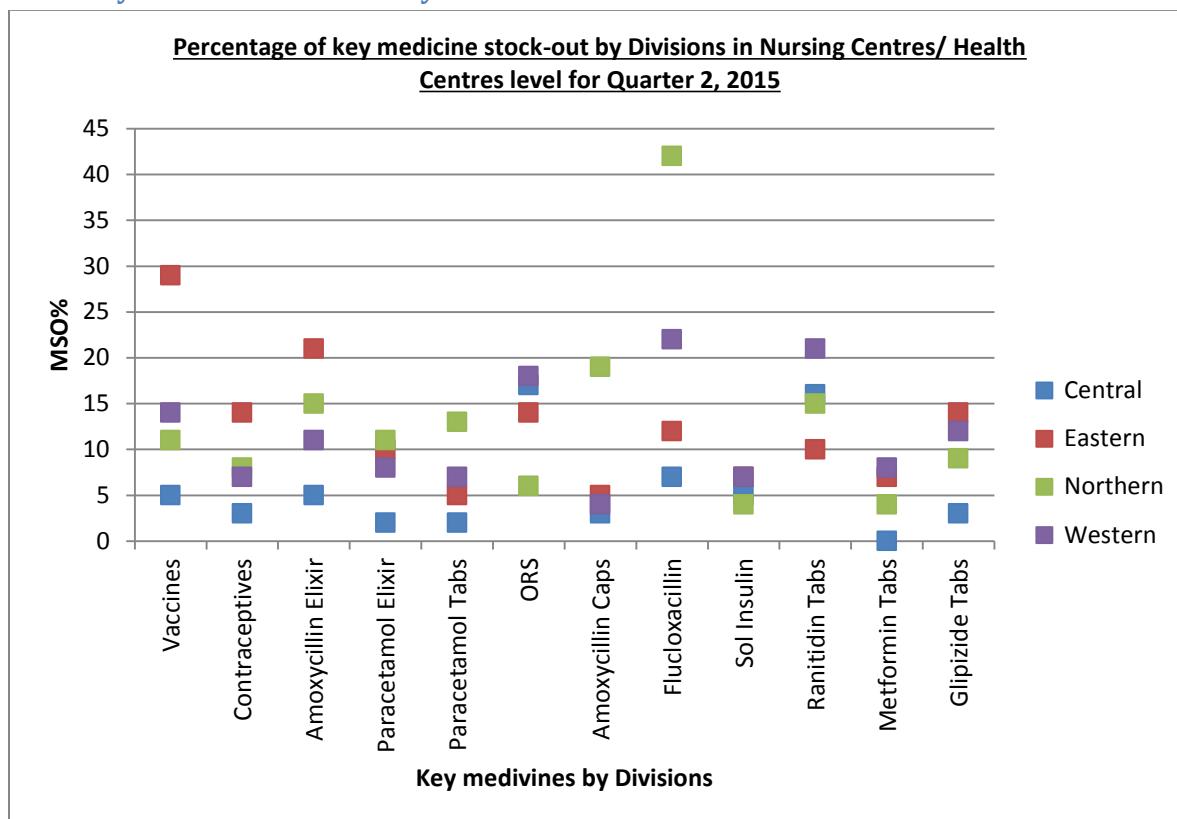
center level. Source: CMRIS Online [PHIS]

7.1.2 Medicine Stock out Rate by Sub-Division

Division	Sub Division	Overall Stock out Rate (%)
Central	Tailevu	14
	Rewa	8
	Serua/Namosi	5
	Naitasiri	3
	Suva	3
Eastern	Lakeba	20
	Lomaiviti	12
	Kadavu	10
	Lomaloma	3
	Rotuma	0
Northern	Cakaudrove	17
	Bua	12
	Macuata	11
	Taveuni	7
Western	Ba	16
	Lautoka/Yasawa	14
	Nadroga/Navosa	14
	Ra	6
	Tavua	3
	Nadi	0

Source: CMRIS Online [PHIS]

7.1.3 Key medicine stock-out by Division



Source: CMRIS Online [PHIS]

The commonest stock out were Flucloxacillin (21%), Ranitidine Tabs (16%), ORS (16%), Vaccines (16%), Amoxycillin Elixir (12%) and Glipizide Tabs (10%) in this quarter. According to the graph above, the Northern Division recorded the highest stock-out followed by the Eastern and the Western Division, while Central Division recorded the lowest.

Overall, there was a decrease in medicine stock of 7% in the 2nd quarter, 2015 when compared to the same period last year (18%).

It was reported Beqa, Navua, Kabara, Matuku, Rotuma, Kamikamica, Natabua, Tavua, Vatukoula and Namarai Medical Areas had zero stock out.

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.

References:

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<http://globalnutritionreport.org/2014/11/13/global-nutrition-report-2014/>



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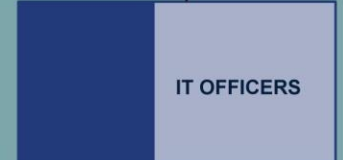
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