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# Table of Content

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<b>Tables and Figures .....</b>	<b>v</b>
<b>Acknowledgements .....</b>	<b>xiii</b>
<b>Abbreviations and Acronyms .....</b>	<b>xv</b>
<b>List of Main Indicators .....</b>	<b>xvii</b>
<b>Executive Summary .....</b>	<b>xix</b>
<b>1. Introduction.....</b>	<b>1</b>
1.1 Background of Libya Health System .....	1
1.2 Methodology and Survey Implementation .....	2
1.2.1 Survey tool .....	3
1.2.2 Selection of health facilities .....	3
1.3 Data Collection and Processing .....	3
1.4 Survey Coverage .....	4
<b>2. Service Availability .....</b>	<b>7</b>
2.1 Health Infrastructure.....	7
2.2 Health Workforce .....	10
2.3 Service Utilization .....	12
2.4 Health Services Infrastructure Index .....	14
<b>3. General Service Readiness.....</b>	<b>21</b>
3.1 Basic Amenities.....	21
3.2 Basic Equipment.....	25
3.3 Standard Precautions for Prevention of Infections .....	29
3.4 Diagnostic Capacity.....	32
3.5 Laboratory Equipment Capacity.....	37
3.6 Essential Medicines .....	40
<b>4. Specific Services Availability and Readiness .....</b>	<b>45</b>
4.1 Antenatal Care .....	45
4.1.1 Antenatal care service availability .....	46
4.1.2 Antenatal care service readiness .....	46
4.2 Basic Obstetric Care .....	48

4.2.1	Basic obstetric care service availability .....	48
4.2.2	Basic obstetric care service readiness .....	49
4.3	Child Health Services: Routine Child Immunization .....	49
4.3.1	Child immunization services availability .....	49
4.3.2	Child immunization services readiness .....	50
4.4	Preventive and Curative Care for Children Under Five Services.....	51
4.4.1	Preventive and curative care for children under five service availability .....	51
4.4.2	Preventive and curative care for children under five service readiness .....	53
4.5	Adolescents Health Services .....	58
4.5.1	Adolescents health services availability.....	58
4.5.2	Adolescents health services readiness.....	58
4.6	Tuberculosis Health Services .....	58
4.6.1	Tuberculosis health services availability .....	58
4.6.2	Parasitic infestation .....	60
4.7	Preventing Mother-to-Child Transmission of HIV .....	60
4.7.1	Preventing mother-to-child transmission of HIV (PMTCT) services availability .....	60
4.7.2	Preventing mother-to-child transmission of HIV (PMTCT) services readiness .....	62
4.8	Diabetes .....	62
4.8.1	Diabetes services availability .....	62
4.8.2	Diabetes services readiness .....	62
4.9	Cardiovascular Diseases .....	65
4.9.1	Cardiovascular diseases services availability.....	65
4.9.2	Cardiovascular diseases services readiness.....	66
4.10	Basic Surgery Services .....	68
4.10.1	Basic surgery services availability .....	68
4.10.2	Basic surgery services readiness .....	70
4.11	Comprehensive Obstetric Care.....	71
4.11.1	Comprehensive obstetric care availability .....	71
4.12	Blood Transfusion Services.....	72
4.12.1	Blood transfusion services readiness .....	72
4.13	Service Specific Availability .....	74
4.13.1	Basic services provided by health facilities .....	74

4.13.2 Availability of imaging equipment .....	76
4.14 Sexual Violence Services .....	78
4.15 School Health Services.....	78
4.16 Oral Health Services.....	83
4.17 Nutrition Services.....	87
4.18 Mental Health Care.....	89
4.19 Cancer Diagnosis and Management Services.....	90
<b>5. Conclusion .....</b>	<b>93</b>
5.1 General Service Availability .....	93
5.2 General Service Readiness .....	93
5.3 Specific Services Availability and Readiness .....	94
5.3.1 Service specific availability .....	94
5.3.2 Service specific readiness .....	95
<b>Annex Tables .....</b>	<b>99</b>
<b>Annex Questionnair .....</b>	<b>159</b>



## Tables and Figures

---

### 1. Introduction

Table 1.1	Distribution of health facilities according to the result of the interview .....	4
Table 1.2	Distribution of health facilities according to the status .....	5
Table 1.3	Distribution of health facilities according to the result of the interview and the status .....	5

### 2. Service Availability

Figure 2.1	Total PHC facilities per1,0000 population by district .....	8
Figure 2.2	Inpatient beds per10,000 population - Pre and post conflict .....	9
Figure 2.3	Maternity beds per 1,000 pregnant women - Pre and post conflict .....	9
Figure 2.4	Maternity beds per 1,000 pregnant women - Pre and post conflict .....	10
Figure 2.5	Core health personnel per 10,000 population - Pre and post conflict.....	11
Figure 2.6	Core health personnel per 10,000 population - Pre conflict .....	11
Figure 2.7	Health workforce density per 10,000 population - Pre and post conflict .....	12
Figure 2.8	Number of outpatient visits per capita per year - Pre and post conflict by facility type .....	12
Figure 2.9	Number of outpatient visits per capita per year - Pre and post conflict by district .....	13
Figure 2.10	Number of HF discharges per 100 population per year - Pre and post conflict by district .....	14
Figure 2.11	Facility density score total - Pre and post conflict.....	15
Figure 2.12	Inpatient beds score total - Pre and post conflict .....	15
Figure 2.13	Maternity beds score - Pre and post conflict .....	16
Figure 2.14	Health infrastructure index total - Pre and post conflict.....	16
Figure 2.15	Health workforce index total - Pre and post conflict.....	17
Figure 2.16	Outpatient service utilization - Post conflict .....	18
Figure 2.17	Inpatient service utilization total - Pre and post conflict .....	19
Figure 2.18	Service utilization index total - Pre and post conflict.....	19
Figure 2.19	Service availability index - Pre and post conflict .....	20

### 3. General Service Readiness

Figure 3.1	Availability of facilities with basic amenities elements by facility type (Power Source) .....	21
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Figure 3.2	Availability of facilities with basic amenities elements by district (Power source).....	22
Figure 3.3	Availability of facilities with basic amenities elements by facility type (Improved Water).....	22
Figure 3.4	Availability of facilities with basic amenities elements by facility type (Toilet Patients).....	23
Figure 3.5	Availability of facilities with basic amenities elements by facility type (Communication Equipment).....	23
Figure 3.6	Availability of facilities with basic amenities elements by facility type (Computers Internet).....	24
Figure 3.7	Availability of facilities with basic amenities elements by facility type (Emergency Transportation).....	24
Figure 3.8	Basic amenities elements mean score by district.....	25
Figure 3.9	Availability of basic equipment by facility type (Adult Paediatric Scale).....	26
Figure 3.10	Availability of basic equipment by facility type (Thermometer).....	26
Figure 3.11	Availability of basic equipment by facility type (Stethoscope).....	27
Figure 3.12	Availability of basic equipment by facility type (Blood Pressure Apparatus).....	27
Figure 3.13	Availability of basic equipment by District (Light Source).....	28
Figure 3.14	Availability of all 5 basic equipment by facility type.....	28
Figure 3.15	Basic equipment mean score by district.....	29
Figure 3.16	Availability of standard precautions for infection prevention elements by district (Sterilizer Autoclave).....	30
Figure 3.17	Availability of standard precautions for infection prevention elements by facility type (Appropriate Storage Infectious Waste).....	30
Figure 3.18	Availability of standard precautions for infection prevention elements by facility type (Latex Gloves).....	31
Figure 3.19	Availability of standard precautions for infection prevention elements by facility type (Gowns).....	31
Figure 3.20	Standard precautions mean score by district.....	32
Figure 3.21	Diagnostic capacity by district (Blood Sugar Test).....	33
Figure 3.22	Availability of standard precautions for infection prevention elements by district (Pregnancy Test).....	34
Figure 3.23	Availability of standard precautions for infection prevention elements by facility type (Hemoglobin).....	34
Figure 3.24	Availability of standard precautions for infection prevention elements by facility type (Blood Coagulation Time).....	35
Figure 3.25	Availability of standard precautions for infection prevention elements by facility type (Bleeding Time).....	35

Figure 3.26	Diagnostic capacity mean score by district .....	36
Figure 3.27	Laboratory equipment capacity by facility type (Microscope).....	37
Figure 3.28	Laboratory equipment capacity by facility type (Refrigerator Temperature Control) .....	37
Figure 3.29	Laboratory equipment capacity by facility type (Spectrophotometer)...	38
Figure 3.30	Laboratory equipment capacity by facility type (Centrifuge) .....	38
Figure 3.31	Laboratory equipment capacity by district (Haematocrite Centrifuge).....	39
Figure 3.32	Laboratory equipment capacity by district (Mean Score) .....	40
Figure 3.33	Availability of essential tracer medicines by facility type (Antibiotics Adults) .....	41
Figure 3.34	Availability of essential tracer medicines by facility type (Analgesics Antipyretics Nonsteroidal Antiinflammator).....	41
Figure 3.35	Availability of essential tracer medicines by district (Anti Hypertensive).....	42
Figure 3.36	Availability of essential tracer medicines by facility type (Antiasthmatic Therapy).....	42
Figure 3.37	Availability of essential tracer medicines by district (Oral Diabetic Pills) .....	43
Figure 3.38	Availability of essential tracer medicines by facility type (Medicines Mean Score).....	43

#### **4. Service Specific Availability and Readiness**

Figure 4.1	Availability of antenatal care services by facility type.....	46
Figure 4.2	Availability of tetanus toxoid vaccination by facility type.....	46
Figure 4.3	Availability of at least one trained staff antenatal care by facility type .....	47
Figure 4.4	Availability of at least one trained staff antenatal care by district .....	47
Figure 4.5	Available of basic obstetric care service .....	48
Figure 4.6	Received any training MCH by type of facility.....	49
Figure 4.7	Availability of child immunization services by district.....	50
Figure 4.8	Child immunization services readiness .....	51
Figure 4.9	Availability of safety box by type of facility .....	51
Figure 4.10	Availability of preventative and curative care for children under 5 service .....	52
Figure 4.11	Diagnose and/or treat child malnutrition by district.....	53
Figure 4.12	IMCI Training in the last two years by district.....	54
Figure 4.13	Availability of IMCI guidelines by facility type .....	54
Figure 4.14	Availability of adult pediatric scale by facility type.....	55

Figure 4.15	Availability of length height measuring by facility type .....	55
Figure 4.16	Availability of thermometer by facility type .....	56
Figure 4.17	Availability of stethoscope by facility type .....	56
Figure 4.18	Availability of hemoglobin tests by facility type .....	57
Figure 4.19	Availability of general Stool Examination by facility type .....	57
Figure 4.20	Provide ORS and zinc supplementation to children with diarrhea by type of facility .....	58
Figure 4.21	Availability of adolescent health service by facility type.....	58
Figure 4.22	Availability of tuberculosis (TB) health services by district .....	59
Figure 4.23	Availability of Anthelmintic and Antiprotozoal Drugs for treatment of parasitic infestations .....	60
Figure 4.24	Availability of g preventing mother-to-child transmission of HIV (PMTCT) services by facility type .....	61
Figure 4.25	Availability of HIV counselling and testing services to HIV positive pregnant women by facility type.....	61
Figure 4.26	Availability of diabetes diagnosis and/or managing services by district .....	62
Figure 4.27	Availability of national guidelines on diagnosis and treatment of diabetes by district .....	63
Figure 4.28	Availability of national guidelines on diagnosis and treatment of diabetes by facility type.....	63
Figure 4.29	Availability of BP apparatus by facility type .....	64
Figure 4.30	Availability of adult-paediatric scale by facility type.....	64
Figure 4.31	Availability of blood sugar test by facility type .....	65
Figure 4.32	Availability of cardiovascular disease diagnosis and/or managing services by district.....	65
Figure 4.33	Availability of national guidelines for diagnosis and/or treatment of cardiovascular diseases by district .....	66
Figure 4.34	Availability of stethoscope by facility type .....	67
Figure 4.35	Availability of BP Apparatus by facility type .....	67
Figure 4.36	Availability of adult-paediatric scale by facility type.....	68
Figure 4.37	Availability of oxygen Cylinders or concentrators by facility type .....	68
Figure 4.38	Availability of basic surgical services by district .....	69
Figure 4.39	The most commonly available surgical interventions by facility type .....	69
Figure 4.40	Providing basic surgery services by facility type .....	70
Figure 4.41	Availability of Oxygen by district .....	70

Figure 4.42	Availability of comprehensive Obstetric Care by type of service by district.....	71
Figure 4.43	Availability of caesarean section services by facility type.....	72
Figure 4.44	Availability of Blood transfusion services by facility type .....	72
Figure 4.45	Training in the appropriate use of blood and safe transfusion practices by district .....	73
Figure 4.46	Safe transfusion practice by facility type.....	73
Figure 4.47	Basic services provided by health facilities.....	74
Figure 4.48	Availability of X-Ray machines by district .....	76
Figure 4.49	Availability of ultrasound machine b y district .....	77
Figure 4.50	Availability of CT scan machines by facility type .....	77
Figure 4.51	Availability of MRI machines by facility type.....	78
Figure 4.52	Availability of a specialist doctor (s) by district.....	79
Figure 4.53	Availability of a trained medical staff by district .....	80
Figure 4.54	Providing school health services by the facility throughout the week by district.....	81
Figure 4.55	Providing periodic visits to the schools to provide health education services by facility type.....	81
Figure 4.56	Providing health promotion services for oral health by district .....	82
Figure 4.57	Conduct regular screening to school students by district .....	83
Figure 4.58	Providing screening of children for dental caries by district.....	84
Figure 4.59	Conducting oral health promotion activities by facility type .....	84
Figure 4.60	Providing medical services for dental diseases by district .....	85
Figure 4.61	Providing surgical services for dental problems by facility type .....	85
Figure 4.62	Availability of national guidelines for the diagnosis and management of oral health problems by facility type .....	86
Figure 4.63	Availability of health services trained staff by district.....	86
Figure 4.64	Providing screening of under nutrition/malnutrition by district.....	87
Figure 4.65	Screening of malnutrition (MUAC) for pregnant & lactating women by facility type .....	88
Figure 4.66	Providing OTP (Outpatient Therapeutic Feeding Programme) service by district.....	88
Figure 4.67	Providing advise/counsel on nutrition & breastfeeding by district .....	89
Figure 4.68	Providing MHPSS services by facility type .....	90
Figure 4.69	Providing support of acute distress, anxiety, mood and stress related disorders and first line management of severe and common mental disorder by facility type .....	90

Figure 4.70	Availability of cancer diagnosis and management services by district .....	91
Figure 4.71	Availability of cancer diagnosis and management services by facility type .....	91
Figure 4.72	Availability of guidelines for diagnosis and management of cancer by district.....	92
Figure 4.73	Availability of guidelines for diagnosis and management of cancer by facility type.....	92
<b>Annex Tables .....</b>		<b>99</b>

## 2. Service Availability

Table A 2a	Density of health facilities by facility type- Pre Conflict.....	101
Table A 2b	Distribution of health facilities by facility type.....	102
Table A 2.1	Density of beds and breakdown by type- Pre Conflict.....	103
Table B 2.1	Density of beds and breakdown by type - Post Conflict .....	104
Table A 2.2	Health workforce density- Pre Conflict.....	105
Table B 2.2	Health workforce density - Post Conflict .....	106
Table A 2.3	Service utilization- Pre Conflict .....	107
Table B 2.3	Service utilization - Post Conflict.....	108
Table A 2.4	Health services infrastructure index- Pre Conflict.....	109
Table B 2.4	Health services infrastructure index - Post Conflict.....	110
Table A 2.5	Health workforce index- Pre Conflict.....	111
Table B 2.5	Health workforce index - Post Conflict .....	112
Table A 2.6	Service utilization index- Pre Conflict .....	113
Table B 2.6	Service utilization index - Post Conflict.....	114
Table A 2.7	Service availability index- Pre Conflict.....	115
Table B 2.7	Service availability index - Post Conflict.....	116

## 3. General Service readiness

Table A 3.1	Availability of facilities with basic amenities elements .....	117
Table A 3.2	Availability of basic equipment.....	118
Table A 3.3	Availability of standard precautions for infection prevention elements .....	119
Table A 3.4	Diagnostic capacity.....	120
Table A 3.5	Laboratory equipment capacity .....	121
Table A 3.6	Availability of essential tracer medicines.....	122
Table A 3.7	General service readiness .....	123

#### 4. Specific Services Availability and Readiness

Table A 4.1.1	Antenatal care service availability .....	125
Table A 4.1.2	Antenatal care services.....	126
Table A 4.2.1	Basic obstetric care service availability .....	127
Table A 4.2.2	Basic obstetric care .....	128
Table A 4.3.1	Child immunization service availability .....	129
Table A 4.3.2	Child immunization services.....	130
Table A 4.4.1	Preventative and curative care for children under 5 service availability.....	131
Table A 4.4.2	Preventative and curative care services for children under 5.....	132
Table A 4.5.1	Adolescent health service availability.....	133
Table A 4.5.2	Adolescent health services .....	134
Table A 4.6.1a	Tuberculosis service availability.....	135
Table A 4.6.1b	Tuberculosis service availability.....	136
Table A 4.6.2	Tuberculosis services .....	137
Table A 4.7.1	Preventing mother-to-child transmission of HIV.....	138
Table A 4.7.2	Preventing mother-to-child transmission of HIV.....	139
Table A 4.8.1	Diabetes diagnosis and/or management .....	140
Table A 4.8.2	Diabetes services .....	141
Table A 4.9.1	Cardiovascular disease diagnosis and/or management .....	142
Table A 4.9.2	Cardiovascular disease services .....	143
Table A 4.10.1	Basic surgery.....	144
Table A 4.10.2	Basic surgical services .....	145
Table A 4.11.1	Comprehensive obstetric care .....	146
Table A 4.11.2	Comprehensive obstetric care services .....	147
Table A 4.12.1a	Blood transfusion .....	148
Table A 4.12.1b	Blood transfusion services .....	149
Table A 4.13.1	Basic services provided by health facilities .....	150
Table A 4.13.2	Availability of Imaging equipment by District .....	151
Table A 4.14	Sexual violence by District and type of facility.....	152
Table A 4.15	School health by District and type of facility.....	153
Table A 4.16	Oral health by District and type of facility.....	154
Table A 4.17	Nutrition by District and type of facility.....	155
Table A 4.18	Mental health care by District.....	156
Table A 4.19	Cancer diagnosis and management by District .....	157



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## Abbreviations and Acronyms

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AIDS	Acquired Immuno Deficiency Syndrome
ANC	Antenatal Care
ARV	Anti Retroviral
BEmONC	Basic Emergency Obstetric and Newborn Care
DOTS	Directly Observed Treatment Short course
EmOC	Emergency Obstetric Care
EPI	Expanded Programme on Immunization
HDR	Human Development Report
HIV	Human Immuno Virus
IEC	Information Education Communication
IMCI	Integrated Management of Childhood Illnesses
IMPAC	Integrated Management of Pregnancy and Childbirth
MDGs	Millennium Development Goals
MHL	Ministry of Health of Libya
MMR	Maternal Mortality Rate
NCCD	The National Center for Central diseases
ORS	Oral Rehydration Solution
PMTCT	Prevention of Mother to Child Transmission
PHC	Primary Health Care
SARA	Service Availability and Readiness Assessment
TB	Tuberculosis
UNICEF	United Nations International Children's Emergency Fund
WHO	World Health Organization



## List of Main Indicators

<b>List of main indicators</b>								
Background characteristic	Core health personnel post conflict <sup>(1)</sup>	Toilet for patient use <sup>(2)</sup>	Basic amenities mean score <sup>(3)</sup>	Basic equipment mean score <sup>(4)</sup>	Standard precautions mean score <sup>(5)</sup>	Diagnostic capacity mean score <sup>(6)</sup>	Laboratory equipment mean score <sup>(7)</sup>	General services readiness index <sup>(8)</sup>
<b>Type of facility</b>								
PHC unit	12.21	71.6	47	37	34	49	21	60
PHC center	25.16	91.9	60	57	49	56	31	64
Other PHC facilities	9.14	90.3	75	47	63	75	49	71
<b>District</b>								
Albetnan	53.99	80.8	50	32	40	39	16	54
Derna	81.56	100	60	14	48	79	34	67
Al-Gebal-Alakhdar	34.04	81.5	51	10	53	48	34	51
Almarege	53.46	93.6	49	48	40	79	55	71
Benghazi	20.22	52.1	51	35	48	65	34	63
Al-Wahat	104.33	100	57	64	59	80	33	85
Ajdabia	32.3	94.7	65	3	51	68	0	51
Al-Kufra	15.22	100	53	72	49	48	61	64
Sirte	71.96	95.5	46	40	36	62	35	60
Joufara	45.52	88.7	54	37	36	57	34	66
Morzig	162.28	85.1	56	52	38	73	42	68
Sebha	57.98	100	85	66	73	77	40	82
Ghat	170.87	100	70	92	49	63	52	73
Wadi-Alhiat	73.77	95.8	70	58	52	55	32	70
Wadi-Alshati	77.72	85.7	51	40	29	53	34	64
Misurata	34.46	95.4	62	55	60	68	37	66
Al-Merghip	49.18	87	52	64	43	51	35	65
Tripoli	26.59	81.1	66	51	55	43	26	60
Al-Jufra	32.16	76.9	60	69	52	74	54	77
Alzawea	49.21	100	62	62	53	62	27	68
Al-Nequt-Alghmis	68.48	89.5	51	45	38	53	36	65
Al-Gebal-Elgharbi	88.65	34.2	43	39	21	54	25	59
Naloot	41.7	91.4	58	49	43	55	29	63
<b>Total</b>	<b>46.51</b>	<b>81.9</b>	<b>55</b>	<b>46</b>	<b>43</b>	<b>58</b>	<b>33</b>	<b>64</b>

Note:

(1): Core health personnel include Generalist medical doctors, Specialist medical doctors, Non physician, Qualified Nurse, Qualified Midwife.

(2): Sanitation facilities including flush/pour flush to piped sewer system or septic tank or pit latrine, pit latrine (ventilated improved pit (VIP) or Other PHC facilities) with slab, or composting toilet.

(3): The mean percentage of basic amenities items available (power source + improved water source + improved sanitation facilities + communication equipment + computer with internet/email + emergency transport)/6.

(4): The mean percentage of basic equipment items available (adult scale + thermometer + stethoscope + BP apparatus + light source)/5.

(5): The mean percentage of standard precautions items available (sterilization equipment + Appropriate storage infectious waste + Disposable or auto disable syringes + latex gloves + Medical masks + gowns + guidelines for standard precautions)/7.

(6): The mean percentage of basic diagnostic tests available (haemoglobin + white blood cell count + blood coagulation time + bleeding time + packed cell volume + sedimentation rate + general urine examination + general stool examination + blood sugar test + pregnancy test)/10.

(7): The mean score of laboratory equipment capacity (Microscope + Centrifuge+ Electric Oven + Refrigerator temperature control + Haematocrite Centrifuge + Spectrophoto Meter + Sensitive Balance)/7.

(8): The mean of the five domain scores (basic amenities mean score, basic equipment mean score, standard precautions for infection prevention mean score, diagnostics capacity mean score, and essential medicines mean score) (a + b+ c +d +e)/5.

**List of main indicators**

Background characteristic	Offers antenatal care services <sup>1</sup>	At least one trained staff antenatal care among facilities offer antenatal care services <sup>2</sup>	Child immunization Overall readiness <sup>3</sup>	Cardiovascular disease services overall readiness <sup>4</sup>	Does this facility provide periodic visits to the schools to provide health education services <sup>5</sup>	visits/physician per year post conflict <sup>6</sup>	visits/physician per year pre conflict <sup>7</sup>
<b>Type of facility</b>							
PHC unit	9.1	8.7	13.7	10.9	19.3	89.64	100.82
PHC center	31.1	22.5	13.9	32.9	36.8	206.31	214.45
Other PHC facilities	52.7	32.7	25.8	47.3	52.2	188.74	290.99
<b>District</b>							
Albetnan	3.8	0	7.1	33.3	36.4	186.85	848.41
Derna	27.6	25	100	17.6	90.9	427.11	588.08
Al-Gebal-Alakhdar	44.4	0	0	10	100	.00	373.87
Almarege	25.5	8.3	0	13.3	26.7	570.68	1442.34
Benghazi	52.1	44	11.1	47.4	36.1	215.04	379.94
Al-Wahat	25	0	66.7	42.9	77.8	218.77	280.48
Ajdabia	26.3	60	16.7	0	8.3	83.80	72.73
Al-Kufra	0	NA	25	60	50	119.09	187.56
Sirte	13.6	16.7	18.8	27.8	50	115.24	174.68
Joufara	7	20	31.6	28.6	40	166.82	185.96
Morzig	12.8	33.3	16.7	33.3	7.3	115.38	138.06
Sebha	52.2	16.7	13.3	53.8	42.9	77.03	115.49
Ghat	40	50	0	75	60	302.87	388.53
Wadi-Alhiat	12.5	33.3	20	45.5	27.8	128.39	241.43
Wadi-Alshati	7.1	0	4.3	4.8	29.2	726.63	424.54
Misurata	50.8	30.3	0	29.5	26.7	222.70	320.24
Al-Merghip	12	8.3	7.1	38.5	17.9	587.51	173.81
Tripoli	46.3	18.2	16.7	16.7	17.9	107.28	108.57
Al-Jufra	15.4	50	14.3	66.7	66.7	202.25	134.97
Alzawea	38.6	13.6	50	29.3	25	76.88	136.64
Al-Nequt-Alghmis	11.8	11.1	6.3	25	25	61.43	78.15
Al-Gebal-Elgharbi	5	33.3	0	25	80	159.10	195.90
Naloot	2.9	0	6.7	36.4	30.8	71.29	56.82
<b>Total</b>	22.4	21.9	14.7	28.2	32.4	180.32	217.31

<sup>1</sup> Percentage of health facilities offering antenatal care services.

<sup>2</sup> Percentage of health facilities which at least one trained staff antenatal care among those offering antenatal care services

<sup>3</sup> Percentage of health facilities having all 9 items mentioned in table A 4.3.2 (offer child immunization services)

<sup>4</sup> Percentage of health facilities having all 10 items mentioned in table A 4.4.2 (offer cardiovascular disease diagnosis and/or management services)

<sup>5</sup> Percentage of health facility provides periodic visits to the schools among those offering school health services.

<sup>6</sup> Number of outpatient visits/physician per year pre conflict.

<sup>7</sup> Number of outpatient visits/physician per year post conflict.

## Executive Summary

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Post conflict context often poses significant challenges for the health system and for the new government, including its Ministry of Health. Urgent interventions need to be undertaken to alleviate the conflict impact on the system and to restore its pre-conflict functionality. Then the system needs to be reset in conformity with new post conflict realities.

WHO is playing a major role in coordination with essential stakeholders and partners to assess the health system in Libya for the conflict impact and how to plan for the restoration and development of the health system in order to resume and maintain provision of quality health services to the Libyan population.

The 2012 Service Availability and Readiness Assessment (SARA) for Libya was conducted to: assess the current status of infrastructure, service delivery and system resources including human resources, supply-chain system, technologies and financial resources, assess facilities readiness and any damage which could have been sustained during the conflict, and measure system outputs, service utilization and their adequacy.

The assessment findings will be used in the first place to identify Immediate Post conflict interventions which will be implemented to restore system functionality by relieving bottlenecks such as redeployment of essential staff and maintaining logistics supply chains etc.

SARA Libya Survey covered all primary health care (PHC) facilities in Libya from each of the 23 District were included in the survey. It was decided that all facilities will be covered in this assessment as the impact of the conflict is expected to be uneven across the country. On the other hand the census coverage will provide a solid baseline which will enable monitoring and the tracing over time of the progress made in these facilities during the restoration phase. The SARA can also be used to assess data quality of the routine HMIS data. Overall, the SARA aims to inform the country progress and

performance review process. The outcome of this assessment should be used to provide input into the annual health review as well as the annual planning process.

A total of 1402 facility were identified for the survey and contacted. Out of those 23 facilities were found to be general or specialized hospitals and were excluded during the analysis so, a total of 1379 primary health facilities were visited where 736 of them are primary health care unit and 496 are primary health care center and 147 represent other primary facility type.

The assessment provides key information on the state of the health system with regards to accessibility of services (e.g. density of health facilities and hospital beds, core health workers, service utilization), as well as the readiness of the facilities to provide an adequate level of services (measured by the availability of trained staff, diagnostics equipment and medicines), both for general health services and for specific key health interventions (e.g. maternal and newborn health, Prevention of Mother to Child Transmission (PMTCT), TB, Diabetes diagnosis and treatment).

### General Service Availability

Overall, the service availability pre and post conflict index was 52.77 out of 100 pre-conflict and 54.58 out of 100 post conflict. Primary health care centers had a score of 41.32 out of 100 pre conflict and 42.45 post conflict. Primary health care units had a score of 20.58 out of 100 pre conflict and 22.42 post-conflict, while other health facilities had a score of 19.40 out of 100 pre conflict and 20.65 out of 100 post-conflict. By District, pre conflict Albetnan had the highest service availability score of 74 out of 100, while post conflict Wadi-Alshati had the highest score of 71.01 out of 100.

### General Service Readiness

General service readiness refers to the capacity of health facilities to provide general health services. It measures the availability of infrastructure, equipment and

supplies necessary to provide services within the following five aspects: basic amenities, basic equipment, standard precautions, diagnostic testing, and essential medicines. The general service readiness index is a composite score summarizing information from the five domains.

The overall readiness score is 64%, it's higher among other PHC facilities (71 %). Among all 23 District the readiness score tends from 51% to 85%. Basic equipment scores tend to be (67%), whereas diagnostic capacity and essential medicines scores tend to be (58%) low across District.

### **1. Basic Amenities**

An overall readiness score was computed by taking the mean availability of the basic amenities tracer items for each of the 23 District. On average, PHC facilities had slightly more than 3 out of the 6 tracer items for an overall basic amenities readiness score of 55 out of 100. The highest mean score was in Sebha District which has an overall basic amenities readiness score of 85 out of 100, while the lowest mean score was in Al-Gebal-Elgharbi District which has an overall basic amenities readiness score of 43 out of 100. Results disaggregated by type of facility showed that other health facilities have an overall basic amenities readiness score of 75 out of 100, compared with a score of 60 out of 100 among primary health care centers and 47 out of 100 among primary health care units. The previous result indicated that the basic amenities are not fully available at the PHC in Libya

### **2. Basic Equipment**

An overall mean score was computed by taking the mean availability of the basic equipment tracer items for each of the 23 District as well as for the 23 District combined. Generally, to provide the service all basic equipment must be available. On average, health facilities had slightly more than 2 out of the 5 tracer items for an overall basic equipment mean score of 46 out of 100. Results disaggregated by type of facility showed that primary health care centers had overall basic equipment mean score of 57 out of 100, compared with a score of 47 out of 100 among other health facilities and 37 out of 100 among primary health care units. The

highest mean score was in Ghat District which has an overall basic equipment mean score of 92 out of 100, while the lowest mean score was in Ajdabia District which has an overall basic equipment mean score of 3 out of 100.

### **3. Standard precautions for prevention of infections**

On average, health facilities had about 3 out of the 7 tracer items for overall standard precautions mean score of 43 out of 100. Results disaggregated by type of facility showed that other health facilities had overall standard precautions mean score of 63 out of 100, compared with a score of 49 out of 100 among primary health care centers and 34 out of 100 among primary health care units. The highest mean score was observed in Sebha District which has an overall basic equipment mean score of 73 out of 100, while the lowest mean score was in Wadi-Alshati District which has an overall basic equipment mean score of 21 out of 100.

Overall, only 2% of the PHC facilities have all 7 elements available with 12% of other health facilities having all 7 elements available compared with only 3% of primary health care centers and less than one percent of primary health care units. By District, Derna had the highest percentage of the availability of all 7 elements (10%), while in 8 Districts none of the health facilities had all 7 elements available.

### **4. Diagnostic Capacity**

On average, PHC facilities had about 6 out of the 10 lab test with an overall diagnostic capacity mean score of 58 out of 100. Results disaggregated by type of facility showed that other PHC facilities had overall diagnostic capacity mean score of 75 out of 100, compared with a score of 56 out of 100 among primary health care centers and 49 out of 100 among PHC units. The highest mean score was in Al-Wahat District which has an overall diagnostic capacity mean score of 80 out of 100, while the lowest mean score was in Albetnan District which has an overall mean score of 39 out of 100.

### **5. Laboratory Equipment Capacity**

The mean score for the capacity of the 7

laboratory equipment was calculated. Overall the laboratory equipment mean score was 33 out of 100. Reflecting the previous results, the other PHC facilities had the highest mean score (49 out of 100) followed by PHC centres (31 out of 100) and PHC units (21 out of 100). By District, Al-Kufra had the highest mean score (61 out of 100) followed by Almarege (55 out of 100).

**6. Essential Medicine**

The mean score for the availability of the essential tracer medicines was calculated. Overall the medicines mean score was 49 out of 100. Reflecting the previous results, the PHC centres had the highest mean score (65 out of 100) followed by other PHC facilities (56 out of 100) and PHC units (35 out of 100). By District, both Sebha and Wadi-Alhiat had the highest mean score (83 out of 100) while Morzig had the lowest mean score (30 out of 100).

**Service specific availability and readiness**

**Service Specific Availability**

The following table shows that the percentage of facilities providing maternal and child health services was low across services. The table shows that less than a quarter of the facilities provided ante-natal care services post conflict. Only 4% of the facilities provided normal delivery and/or newborn care services- post-conflict. Comprehensive emergency obstetric care-post-conflict services were available in only 3% of the facilities. Child immunization services- post-conflict were available in only four in ten facilities and curative care for under five services post-conflict were available only in one third of the facilities.

Types of Basic Health Services	% of facilities providing the service	No. Of Facilities
1. Antenatal care- post conflict	22.4%	233
2. PMTCT Services- post-conflict	0.6%	6
3. Normal delivery and/or newborn care services post-conflict	3.9%	41
4. Comprehensive emergency obstetric care- post-conflict	3.2%	33
5. Child immunization services- post-conflict	41.1%	428
6. Curative care for under 5- post-conflict	33.1%	345
<i>PMTCT services post – conflict were available in less than one percent of the facilities.</i>		

The following table shows that percentage of facilities providing diagnostic and treatment for infectious and non-communicable diseases varied considerably. More than four in ten facilities provided diagnosis or management of non-communicable diseases- post conflict, oral health services - post-conflict more were available in more than three in ten facilities and adolescent health & school Health services- post-conflict were available in a quarter of the facilities and nutrition services - post-conflict were available in 7% of the facilities. However, HIV counseling and testing services- post-conflict were available in 6% of the facilities, diagnosis or treatment of STIs, excluding HIV- post-conflict were available in 4% of the facilities, diagnosis or treatment of Leishmaniasis - post-conflict were available also in 4% of the facilities, while diagnosis, treatment prescription of TB- post-conflict were available in 2% of the facilities and HIV & AIDS antiretroviral prescription - post-conflict were available in only 0.5% of the facilities.

Types of Basic Health Services	% of facilities providing the service	No. Of Facilities
1. Adolescent health & School Health services- post-conflict	24.8%	258
2. Nutrition services - post-conflict	6.9%	72
3. Oral health services - post-conflict	31.5%	328
4. HIV counseling and testing services- post-conflict	6.1%	64
5. HIV & AIDS antiretroviral prescription - post-conflict	0.5%	5
6. Diagnosis or treatment of STIs, excluding HIV- post-conflict	3.6%	37
7. Diagnosis, treatment prescription of TB- post-conflict	2.0%	21
8. Diagnosis or treatment of Leishmaniasis - post-conflict	3.7%	38
9. Diagnosis or management of non-communicable diseases- post conflict	41.4%	431

The following table shows that seven in ten facilities provided pharmaceutical service- post-conflict and more than one third of the facilities provided laboratory diagnostic services post - conflict. Surgical services- post-conflict were available in more than one third of the facilities as well. Blood transfusion services- post-conflict were available in only 2% of the facilities.

Types of Basic Health Services	% of facilities providing the service	No. Of Facilities
1. Surgical services- post-conflict	36.5%	380
2. Blood transfusion services- post-conflict	2.0%	21
3. Laboratory diagnostics- post-conflict	35.8%	373
4. Pharmaceutical service- post-conflict	70.5%	734

### **Service Specific Readiness**

#### **Antenatal Care Service Readiness**

Slightly less than a quarter of service providers received at least one trained staff antenatal care. ANC Guidelines were found only in 21 out of 373 health facilities. Almost three quarters of the health facilities had Blood Pressure Apparatus and provide Haemoglobin test. However the overall Antenatal care service readiness is low (2%), it's higher among Other PHC facilities (6%) while no readiness<sup>1</sup> observed in all 46 PHC unit which provide the antenatal care service.

#### **Basic Obstetric Care Service Readiness**

No Obstetric Care service readiness is found although, slightly less than a quarter of service providers received any MCH training in the last two years. Integrated Management of Pregnancy and Childbirth (IMPAC) Guidelines were found only in 12% of health facilities. 61% of the health facilities had emergency transport. More than 90% of facilities had latex gloves.

#### **Child Immunization Services Readiness**

The overall Child Immunization Services Readiness is (15%), however almost all of facilities had refrigerators (99.8%). Most of the facilities (more than 94%) had: ice packs vaccine carriers, syringes (standard disposable or auto-destruct), registration vaccination books. Less than 80% of the facilities had safety boxes.

#### **Preventive and Curative Care for Children Under Five Service Readiness**

No facility among the 345 facilities which providing Preventive and Curative Care for

<sup>1</sup> Readiness include information on: basic amenities, basic equipment, standard precautions, diagnostic capacity, and essential medicines(see page 21).

Children Under Five had overall readiness score, while only 8% of facilities had trained staff in IMCI in the last 2 years. Slightly more than one fifth of the facilities had IMCI Guidelines. No growth monitoring guidelines were available in 17 out of the 23 District. More than half of the facilities had adult pediatric scale. Length – height measuring was only provided in 37% of health facilities. Thermometers were available in almost three quarters of health facilities. Stethoscopes were available in more than three quarters of health facilities. Hemoglobin tests were available only in less than two thirds of all health facilities. Stool examination was provided in 58% of all health facilities. 84% of all health facilities provide ORS and zinc supplementation to children with diarrhea.

#### **Adolescents Health Services Readiness**

In general, the readiness of the facilities to provide adolescents' health services is poor (less than 1%). Readiness of all 5 tracers is provided in only two District (Sebha: 8%, and Alzawea: 9%). Trained staff is available only in less than 2% of the facilities and the guidelines were available only in less than 6% of the facilities.

#### **Preventing mother-to-child transmission of HIV (PMTCT) services Readiness**

Only 6 facilities (3 PHC Unites & 3 PHC Centers) offering PMTCT services were assessed on their readiness to provide PMTCT services based on the availability of PMTCT National Guidelines. No single facility had the guidelines.

#### **Diabetes Services Readiness**

In general, the readiness of the facilities to provide diabetes services is poor (4%). National guidelines were available only in 9% of the facilities. The BP Apparatus was available in three quarters of the facilities. The adult-pediatric scale was available in almost half of the facilities (54%). Nine in ten of the facilities provide blood sugar testing.

#### **Cardiovascular Diseases Services Readiness**

Among health facilities providing Cardiovascular Diseases Services there are

28% had overall readiness. However national guidelines were available only in 87% of the facilities. The stethoscope was available in almost three quarters of the facilities. The BP Apparatus was available in slightly less than three quarters of the facilities. Adult – paediatric scales and oxygen cylinders were available only in half of the facilities.

### **Basic Surgery Services Readiness**

Facilities offering surgical services (380 facilities) were assessed on service readiness based on the availability of the oxygen. Less than half of the facilities had oxygen.

### **Blood Transfusion Services Readiness**

There is no facility among 21 health facilities which providing the blood transfusion service had the overall readiness. Although one third of the facilities had staff trained in appropriate use of blood and safe transfusion practice in the past two years. Most facilities providing blood transfusion (89.5%) had a working refrigerator; however, this indicates that one in ten transfusion outlets did not have an appropriate means of storing blood.

One fifth only of transfusion outlets had a safe blood supply, and slightly less than three quarters (71%) had a sufficient supply of blood. Only two in ten facilities had guidelines on the appropriate use of blood and safe transfusion practices.

### **School Health Services Readiness**

There was a specialist doctor (s) to provide school health service in a total of 16% of the facilities. There was a trained medical staff helping to provide school health service in almost three quarter (72.2%) of all facilities. Less than one third (32%) of the facilities provided school health services throughout the week. Less than one third (32%) of the facilities provided periodic visits to the schools to provide health education services. Slightly more than one in four facilities

(27%) provided health promotion services for oral health. less than half (44.5%) of the facilities conducted regular screening to school students. However, the overall School Health Services Readiness is 15%.

### **Oral Health Services Readiness**

Screening of children for dental caries was provided in almost ninety percent of all facilities. More than half of the facilities (55%) conducted oral health promotion activities for increasing public awareness. Medical services for dental diseases were provided in 83% of all facilities. Only four in every ten facilities (40.5%) provided surgical services for dental problems. National guidelines for the diagnosis and management of oral health problems were available in only 8.5% of the facilities. Oral Health services trained staff was available in only 8.5% of the facilities. However the overall Oral Health Services Readiness is poor (4%).

### **Mental Health Care Readiness**

The survey showed that there was no single facility that had trained staff or had any national guidelines. So that no facility had the overall Mental Health Care Readiness.

### **Cancer Diagnosis and Management Services Readiness**

Cancer diagnosis and management health services were assessed for their readiness based on the availability of guidelines for diagnosis and management of cancer. The guidelines were available in only 7% of the facilities. The guidelines were NOT available in any of the health facilities of 13 District. The guidelines were available in 50% of the facilities of Wadi-Alshati and 75% of facilities of Misurata. None of the facilities of the other District had acces to guidelines on cancer diagnosis and management.



# 1. Introduction

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Libya is located in north Africa on the southern coast of the Mediterranean sea between 18° and 33° north latitude and 9° and 25° east longitude, with total land area of 1 665 000 square kilometres,. It is surrounded by six African countries, namely Tunisia, Algeria, Niger, Chad, Sudan and Egypt, and has a coastline of around 1900 kilometres along the Mediterranean sea.

The total estimated population at mid year of 2010 was 5,702,000 Male 50.7 % Female 49.3 % which makes the population density rates, at 3.3 persons per km<sup>2</sup>.

Libya has been ranked in the 2009 Human Development Report 55 out of 174 countries, with HDI 0.847 in 2007 with an annual growth rate 0.44. Life expectancy of the population was 72.3 years in 2009{76.8 years for females, and 71.6 for males (HDR 2009)}. According to the 2009 Statistical Year Report for Health and Environment sector, the natural rate of increase decreased from 4.2% to 2.9% between 1984 and 1995, and by year 2006 it reaches 1.8%. In 2010, the total fertility rate is 5.2 children per woman, with crude birth rate 24.9 per 1,000 population, crude death rate 4.1 per 1,000 population. The maternal mortality ratio (MMR) is high at an estimated 23 per 100000 live births in 2010. Within year 2010 registered positive 321 case of AIDS, 145 cases from foreign population. The total number of cases of Hepatitis (B) which reported cases within year 2010 reached (2437 case) out of them 927 case for foreigners and majority of aging categories is between 15 to 40 years being the active ages, and remarked that injury is very small in ages less than 15 years, and expected on the long range decrease of injuries rates to minimum ratio after injection all Libyans with normal vaccination which started on 1993 and program of immunology activating campaign ( annual campaigns) for aging categories before year 1993.

Ministry of Health of Libya (MHL) has been implementing health sector reforms aimed at improving health service delivery. The vision of these reforms is “to ensure equity of access to assured quality, cost-effective and affordable health care services, as close to the family as possible, so as to significantly contribute to the human and socio-economic development of the nation.” With the implementation of Health Sector Reforms, notable achievements have been made in the delivery of health services in Libya.

## 1.1 Background of Libya Health System

Libya provide universal coverage of health and education and free of charge. There have been impressive improvements in health and education standards over the past decennia. So, Libya’s health system is a mix of public and private health care, where the welfare is highly dependent on oil production, with other economic sectors as well as private sector less developed. Over the years the PHC services deteriorated and finally collapsed during the conflict, resulting in people seeking health services in hospitals. In addition, a comprehensive health workforce strategy needs to be developed, particularly for highly trained nurses and techniques, as well as on medical specialists in some highly specialized service areas.

Health information and management systems are an area of concern. Consequently, training in management for hospital and facility managers and basic training for all responsible staff in management is a priority to eliminate the weaknesses which include lack of population and facility based information, surveillance and performance monitoring and analytical capacity.

Before the conflict, already there has been a decrease in critical supplies for diabetes, HIV, surgery and anaesthesiology has had life threatening consequences. In addition, maintenance of medical equipment. Because of the procurement and supply of drugs, laboratory supplies and medical equipment.

Financing of the health system has been mainly from the state, funds flowing through regional administrations and hospitals. There is considerable<sup>2</sup> out-of-pocket expenditure, including buying health services abroad. The blockage of funding flows contributed to the disruption of peripheral services during the conflict, in addition to disruption of supplies and staff shortages.

Health services are delivered through primary health care (PHC) centres, polyclinics, rehabilitation centres and general hospitals in urban and rural areas, as well as tertiary care specialized hospitals. In February 2009, according to a report released by the MOH. Libya had 96 hospitals with 20,289 beds, 25 specialized units with 5,970 beds, 1,355 primary health centres, 37 polyclinics and 17 quarantine units. Libya had 10,230 doctors of whom 8,612 (84%) were Libyan and 1,618 (16%) were foreign. This amounts to 17 doctors for every 10,000 citizens and 19 nurses/midwives per 10,000 citizens. According to official figures, 100% of the population had access to health care services. Around 90% pregnant women were cared for by trained health personnel, and 99% of all deliveries were attended by trained personnel. Routine immunization coverage was more than 90%. All of which is due to the large number of health facilities.

Because the conflict, the country immediate needs for restructuration of essential health services. Moreover, the physical condition of hospitals and of other civilian infrastructure which led to the departure of health workers. In addition to, the lack of reliable drug supply and the availability of funds to pay basic salaries throughout the country.

A challenge for the government is to restore health services to full capacity based on primary health care principles, to address the systemic weaknesses and strengthen health system, to improve service delivery and to guarantee equal and universal access to services, and to respond to emergencies and health challenges, such as HIV, hepatitis C and other communicable diseases.

Health service infrastructure come on top of a number of systemic challenges hampering the performance of service delivery, including weak priority setting, planning, and budgetary processes; uneven assignment of social benefits; the need to rationalize the civil service.

## 1.2 Methodology and Survey Implementation

The Service Availability and Readiness Assessment (SARA) provides key information on the state of the health system in terms of service accessibility (e.g. density of health facilities and beds, core health workers, service utilization), as well as the readiness of the facilities to provide an adequate level of service (e.g. availability of trained staff, diagnostics, equipment and medicines), both for general health services and for specific key health interventions (e.g. maternal and newborn health, HIV/AIDS, TB, malaria diagnosis and treatment). Monitoring facility-level performance provides information on whether health services are present and are being provided at the expected level, and gives an indication of how investments in the formal health sector are resulting in changes at the level of service delivery. This affects utilization of services and ultimately impacts population-level outcome measures. The SARA can also be used to assess data quality of the routine HMIS data. Overall, the SARA aims to inform the country progress and performance review process. The outcome of this assessment should be used to provide input into the annual health review as well as the annual planning process.

The 2012 SARA for Libya was conducted at the facility level and at the central and sub central levels. The overall objectives of the exercise are:

- Assessing the current status of infrastructure, service delivery and system resources including human resources, supply-chain system, technologies and financial resources.
- Assessing facilities readiness and any damage which could have been sustained during the conflict.
- Measuring system outputs, service utilization and their adequacy

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<sup>2</sup>WHO/WHO stat

- Assessing the system functions governance including the level of organization management and administrative capacities.

SARA for Libya was conducted to assist the health sector in assessing and monitoring service readiness and capacity at district and health facility levels; assessing the equitable and appropriate distribution of services and resources as well as providing the sector with skills and tools for monitoring service and resource availability on a regular basis. It has to mention that SARA assess the supply side only and don't measure the demand side (consumer view).

### 1.2.1 Survey tool

The survey utilize the tools developed through SARA and modified to Libya context. The SARA is designed to provide key information on the state of the health system in Libya in the following areas:

- General service availability (accessibility of health services): health infrastructure (density of facilities and inpatient beds), core health personnel, and inpatient/outpatient services utilization.
- General service readiness (capacity of health facilities to provide general health services): presence of infrastructure/amenities, basic equipment, standard precautions for prevention of infections, laboratory diagnostic capacity, and essential medicines.
- Specific service availability and readiness (proportion of facilities providing specific key health interventions and their capacity to provide these services): availability of guidelines, trained staff, equipment, diagnostics, and medicines and commodities required to provide the service<sup>3</sup>.

The SARA questionnaire consisted of a set of questions measuring service availability and readiness that can be used to detect change and measure progress in health system strengthening over time (Pre and Post conflict).

### 1.2.2 Selection of health facilities

The 2012 Libya SARA was a census of all public primary health care facilities (PHC) in Libya. All public primary health care facilities (PHC) in Libya from each of the 23 District were included in the survey. It was decided that all facilities will be covered in this assessment as the impact of the conflict is expected to be uneven across the country. On the other hand the census coverage will provide a solid baseline which will enable monitoring and the tracing over time of the progress made in these facilities during the restoration phase.

Due to the absence of a comprehensive Master Facility List (MFL), a preliminary list of facilities was provided by Health Information Center on time.

A total of 1402 facility were identified for the survey and contacted. Out of those 23 facilities were found to be general or specialized hospitals and were excluded during the analysis

## 1.3 Data Collection and Processing

Planning for Libya SARA activities started in late 2011 with developing the questionnaires and manuals for the field staff.

Training took place in Libya – Benghazi with a trainer expert from El-Zanaty participated with WHO/EMRO staff in conduction of a Post-conflict Facility Assessment Workshop, in Benghazi, Libya from 15–19 January 2012. The first three days of the workshop was to train trainers on using the tool and to get consensus on its contents. The tool was also tested by using it in some pilot facilities.

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<sup>3</sup> Pre-conflict dates was up to December 2010, while Post-fonflict covered all 2011.

A total number of 26 staff from the District Health Offices were trained in data collection and 81 field staff as interviewing teams carried out the data collection between February and April 2012. Data were entered using CSPro software using 10 PC and the clean tap was available by July 2012.

## 1.4 Survey Coverage

As mentioned previously SARA Libya Survey covered all public primary health care facilities (PHC). A total of 1379 public primary health care facilities were visited with 736 are PHC units and 496 are PHC centers and 147 represent other PHC facilities. Out of those a total of 1208 were totally completed and 9 were partially completed (Table 1.1). Over one hundred facilities (111 facilities) couldn't be interviewed because they were closed which represent around 8% of the facilities. The distribution of facilities per District differ greatly, ranging from 148 facility in Al-Gebal El gharbi to only 13 facility in Al-Jufra and Ghat. Al-Gebal El gharbi has the highest number of completed facilities (127 completed and 1 partially completed) .

**Table 1.1 Distribution of health facilities according to the result of the interview**

Number of health facilities according to the result of the interview by type of facility, according to District, Libya 2012.

Background characteristic	Completed	Partially completed	Respondent not available	Refused	Facility is closed	Other	Number of facilities
<b>Type of facility</b>							
PHC unit	618	4	7	2	86	19	736
PHC center	474	2	0	0	16	4	496
Other PHC facility*	116	3	1	13	9	5	147
<b>District</b>							
Albetnan	60	0	0	0	7	0	67
Derna	45	0	0	0	0	0	45
Al-Gebal-Alakhdar	41	2	5	0	6	5	59
Almarege	54	1	0	0	9	7	71
Benghazi	51	0	0	0	2	3	56
Al-Wahat	16	0	0	0	8	0	24
Ajdabia	24	0	0	0	0	0	24
Al-Kufra	14	0	0	0	1	0	15
Sirte	46	0	0	0	5	1	52
Joufara	92	0	0	2	1	0	95
Morzig	59	0	0	0	0	0	59
Sebha	24	0	0	0	3	0	27
Ghat	12	0	0	1	0	0	13
Wadi-Alhiat	26	0	0	0	3	1	30
Wadi-Alshati	42	0	1	0	13	6	62
Misurata	68	1	1	4	13	2	89
Al-Merghip	118	0	1	0	6	0	125
Tripoli	98	1	0	8	5	0	112
Al-Jufra	13	0	0	0	0	0	13
Alzawea	62	2	0	0	0	0	64
Zwara	80	0	0	0	1	3	84
Al-Gebal-Elgharbi	126	1	0	0	21	0	148
Naloot	37	1	0	0	7	0	45
<b>Total</b>	<b>1208</b>	<b>9</b>	<b>8</b>	<b>15</b>	<b>111</b>	<b>28</b>	<b>1379</b>

\* Other PHC facilities include (Poly clinic, Rural Hospital, Communicable diseases center, Inpatient clinics, Other primary health care facilities)

As Table 1.2 shows, only one third of interviewed facilities (total of 453) are fully functioning, and 44% partially functioning (604 facility). Around 23% of facilities either not functioning or under re-habitation, the PHC units show higher percentage of not functioning or re-habitation (30%).

The distribution of functioning health facilities per District differ greatly. However, Al-Gebal El gharbi has the highest number of facilities but all of them are either partially functioning or not functioning. Only one PHC facility is fully functioning. Tripoli has the highest number of fully functioning facilities (91 fully function and 5 partially functioning).

<b>Table 1.2 Distribution of health facilities according to the status</b>					
Number of health facilities according to the status by type of facility, according to District, Libya 2012					
Background characteristic	Fully functioning	Partially functioning	Not-functioning	Under rehabilitation	Number of facilities
<b>Type of facility</b>					
PHC unit	183	331	187	35	736
PHC center	214	233	36	13	496
Other PHC	56	40	34	17	147
<b>District</b>					
Albetnan	10	16	38	3	67
Derna	6	23	12	4	45
Al-Gebal-Alakhdar	6	26	24	3	59
Almarege	16	33	21	1	71
Benghazi	33	15	8	0	56
Al-Wahat	12	4	7	1	24
Ajdabia	9	10	5	0	24
Al-Kufra	2	10	1	2	15
Sirte	34	10	6	2	52
Joufara	22	50	11	12	95
Morzig	13	34	3	9	59
Sebha	13	10	2	2	27
Ghat	3	2	5	3	13
Wadi-Alhiat	8	16	2	4	30
Wadi-Alshati	18	25	19	0	62
Misurata	22	44	20	3	89
Al-Merghip	68	32	23	2	125
Tripoli	91	5	7	9	112
Al-Jufra	2	11	0	0	13
Alzawea	45	14	5	0	64
Zwara	14	63	4	3	84
Al-Gebal-Elgharbi	0	121	27	0	148
Naloot	6	30	7	2	45
<b>Total</b>	<b>453</b>	<b>604</b>	<b>257</b>	<b>65</b>	<b>1379</b>

Table 1.3 shows the distribution of facilities by facility function status and result code. The analysis in the following chapter will be based on the facilities with completed interview whatever functioning or Partially functioning. Accordingly, a total of 1041 completed primary facilities will be included in the analysis with 449 facilities fully functioning and 592 are partially functioning.

<b>Table 1.3 Distribution of health facilities according to the result of the interview and the status</b>					
Number of health facilities according to the result of the interview and the status by result code, Libya 2012					
	Fully functioning	Partially functioning	Not-functioning	Under rehabilitation	Number of facilities
Completed	449	592	125	42	1208
Partially completed	3	6	0	0	9
Respondent not available	0	1	6	1	8
Refused	0	1	5	9	15
Facility is closed	0	0	105	6	111
Other	1	4	16	7	28
<b>Total</b>	<b>453</b>	<b>604</b>	<b>257</b>	<b>65</b>	<b>1379</b>

Has to mentioned that all the analysis in the following chapters will be based on post conflict, however, in chapter 2 which presents results for the service availability, results will be shown for pre and post conflict.



## 2 Service Availability

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Health services must be physically accessible for the population to benefit from them. General service availability refers to the physical presence of health service delivery components within a district. This is computed as a density of health services per unit population. General service availability is measured by the following tracer indicators and will be covered in this chapter:

- Health infrastructure density
  - Facilities per 10,000 population
  - Inpatient beds per 10,000 population
  - Maternity beds per 1,000 pregnant women
- Health workforce density
  - Core health workers per 10,000 population
- Service utilization
  - Outpatient visits per person per year
  - Hospital discharges per 100 persons per year

For General service availability, since the indicators are density measures, SARA data will be supplemented with other data sources such as the health statistics, where possible, to ensure the highest possible accuracy of the results.

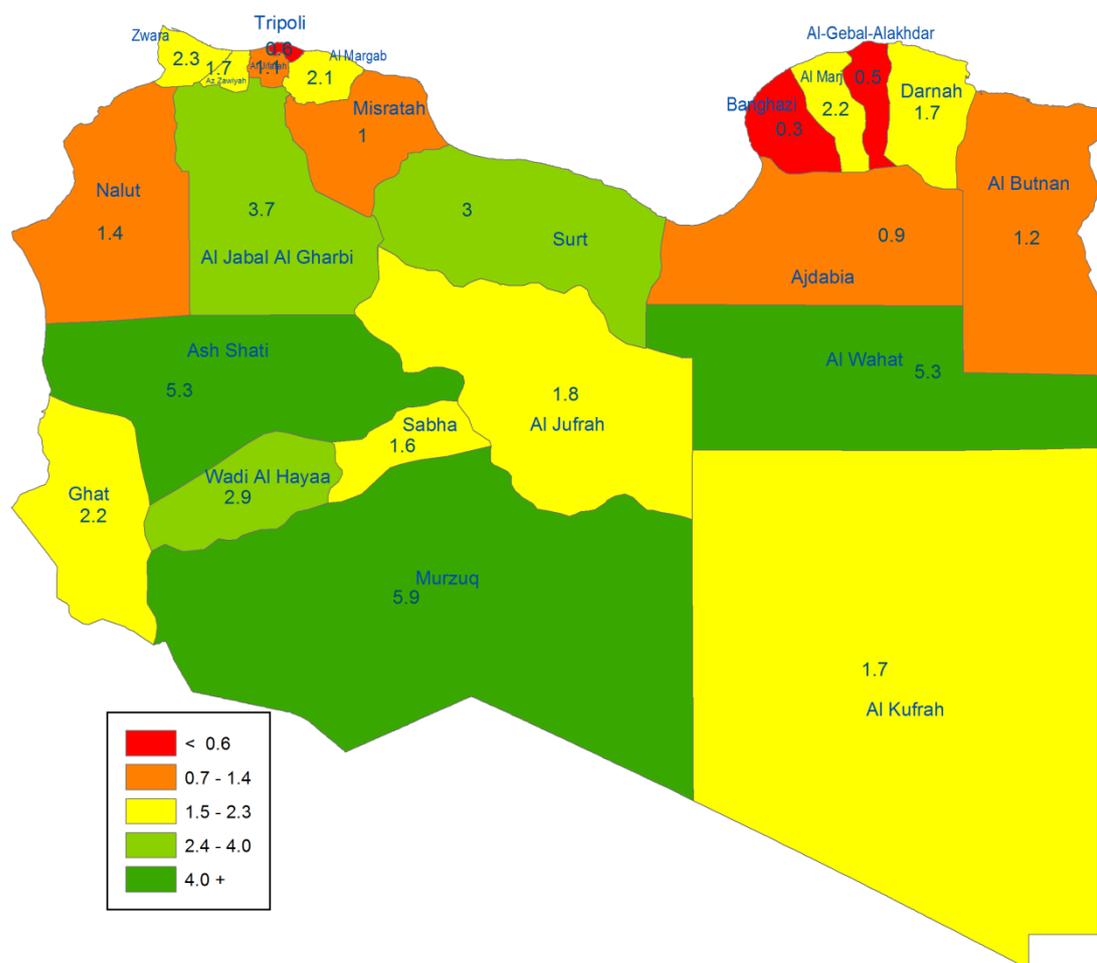
The facility questionnaire included questions to measure the previous mentioned indicators, and pre and post conflict. The analysis in this chapter will include a comparison pre conflict and post conflict. Accordingly, facilities that were established before the conflict (ie..having information pre and post conflict) were included in the analysis in this chapter. A total of 854 PHC facilities were included in the analysis in this chapter, out of those 420 were PHC units, 355 were PHC centers, and 179 were other PHC facilities.

### 2.1 Health Infrastructure

#### Density of health facilities

The facility density is primarily an indicator of outpatient service access. Figure 2.1 presents the density of facilities per 10,000 population. Based on 2010 population there are 1.5 primary facility available per 10,000 population, with 0.74 PHC unit and 0.62 PHC center. The number of facilities available per 10,000 population differ greatly by District. The average ranges from 5.9 facility in Morzig to only 0.3448 per 10,000 population in Benghazi. The low level of health facilities in large District (Benghazi and Tropli) may be due to the fact that the survey covered only PHC facilities and those District include more secondary level facilities.

**Figure 2.1: Total PHC facilities per 1,000 population by district**

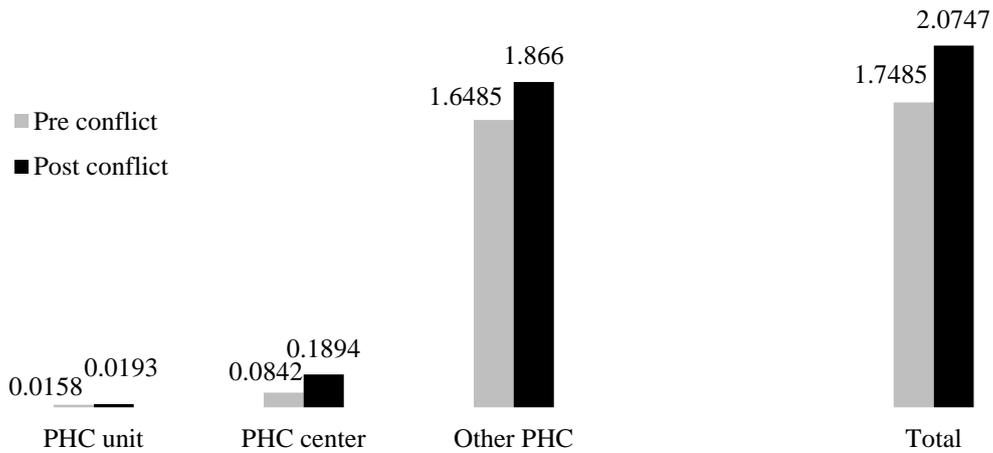


**Inpatient and maternity beds**

Figure 2.2 shows the overall inpatient bed density by facility type and in the 23 District. Overall, there was around 2.0 inpatient beds per 10,000 population post conflict, which represent an increase than the indicator pre- conflict, where there were around 1.7 inpatient beds per 10,000 population. This figure is low due to the fact that this survey include only PHC facilities and not hospitals (Table A 2.1, B 2.1).

The breakdown by facility type shows that pre conflict PHC units had .0158 inpatient beds per 10,000 population, PHC centers had .0842, and other PHC facilities had 1.6485. However, post conflict results were slightly better: PHC units had .0193 inpatient beds per 10,000 population, PHC centers had .1894, and other PHC facilities had 1.8660 (Figure 2.2).

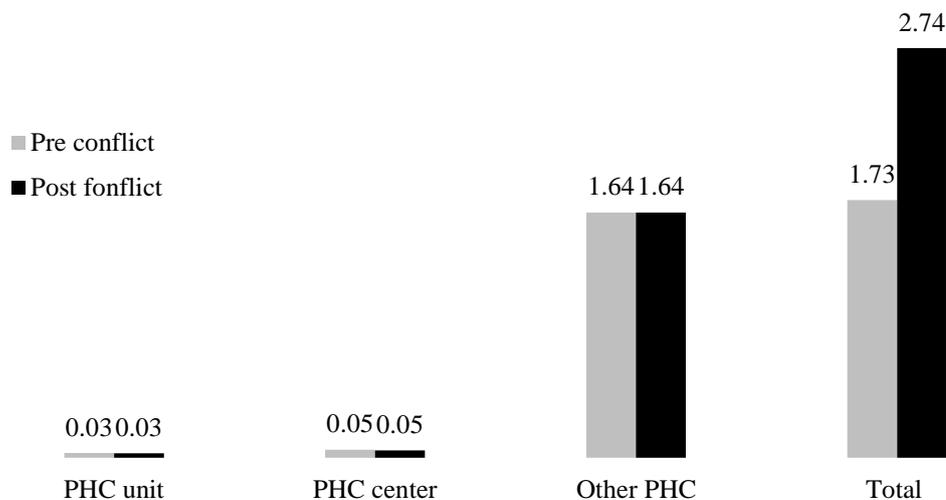
**Figure 2.2: Inpatient beds per 10,000 population - Pre and post conflict**



The highest figure of inpatient beds was observed in Morzig District which had 11.6 inpatient beds per 10,000 population followed by Al-Gebal El gharbi which had 7.8 inpatient beds per 10,000 population. Over half of the District had an inpatient bed density more than 1 per 10,000 and 8 District didn't have any inpatient beds with slight differential between pre and post conflict. However, it has to be noted that Al-Merghip District didn't have any inpatient beds pre conflict while after conflict they had 1.8 inpatient beds per 10,000 population.

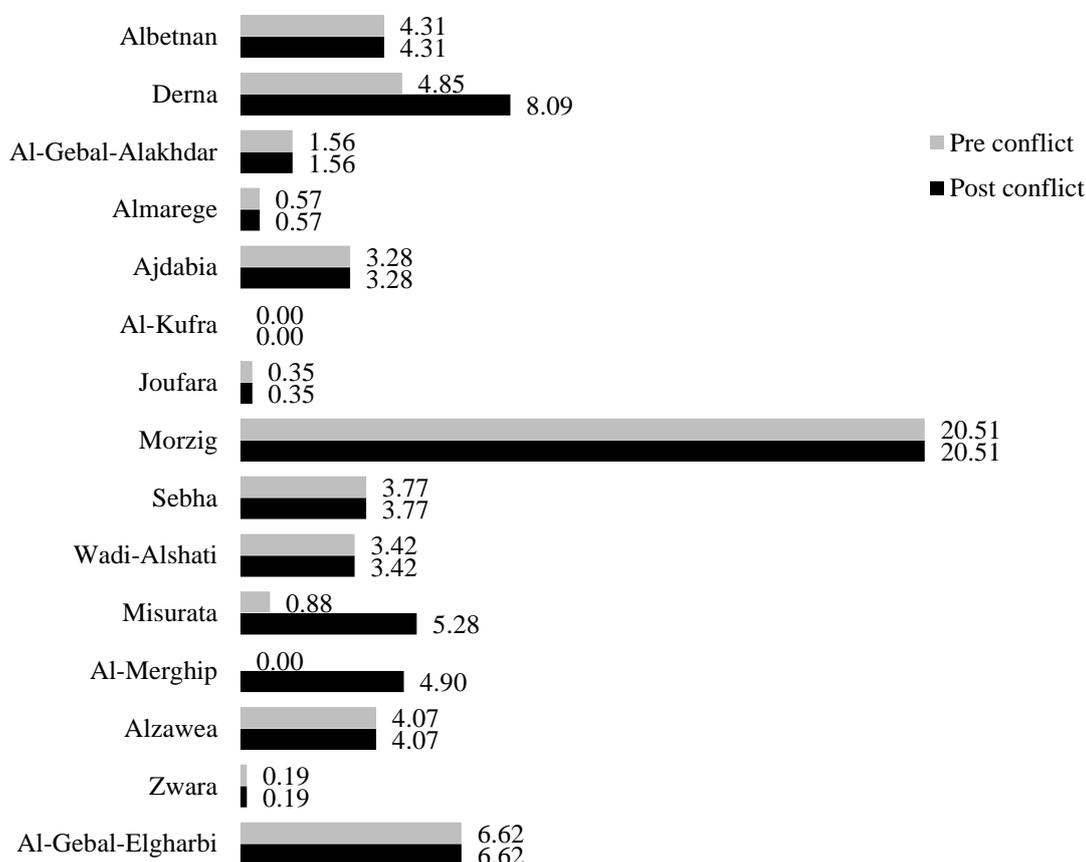
Maternity beds are inpatient beds that are used exclusively by pregnant women before and after delivery. Delivery beds are not included in the indicator. The availability of maternity beds is an important indicator of access to delivery services. Figure 2.3 shows that the overall maternity bed density was 1.7 beds per 1,000 pregnant women pre conflict and surprisingly this figure increased dramatically post conflict to 2.7 beds per 1,000 pregnant women. The breakdown by facility type shows that pre conflict PHC units had .03 beds per 1,000 pregnant women, PHC centers had .05, and other PHC facilities had 1.64. Post conflict, only results changed for the other PHC facilities which increased to be 2.17 beds per 1,000 pregnant women.

**Figure 2.3: Maternity beds per 1,000 pregnant women - Pre and post conflict**



Reflecting the same pattern as the inpatient beds indicator, the highest figure was in Morzig District which had 20.5 beds per 1,000 pregnant women followed by Al-Gebal El gharbi which had 6.6 beds per 1,000 pregnant women (Figure 2.4).

**Figure 2.4: Maternity beds per 1,000 pregnant women - Pre and post conflict**



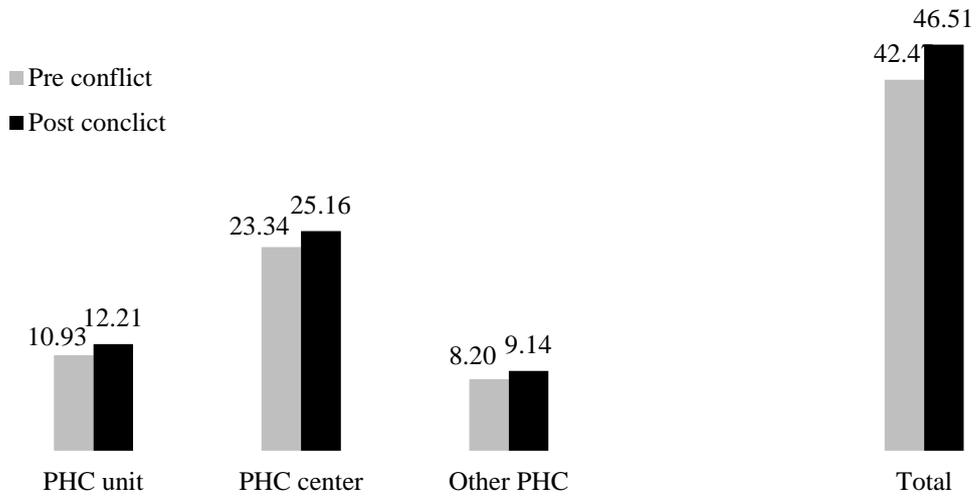
## 2.2 Health Workforce

Access to core health professionals is an essential component of health service delivery. Acute shortages and uneven geographic distribution of health workers are common problems that lead to inaccessibility or unequal access to essential health services. The core health workforce density indicator focuses on the core medical professionals: physicians, medical licentiates, clinical officers, registered nurses and midwives (Table A2.2, B2.2).

Figure 2.5 show the health workforce density by facility type and District. Results showed that the overall density of the core health workers<sup>4</sup> is 46.5 workers per 1,000 population which is more than what reported for pre-conflict (42.5 core health workers). Results by type of facility illustrates that pre conflict PHC units had 10.93 core health personnel per 10,000 population, PHC centers had 23.34, and other PHC facilities had 8.2. However, post conflict results were slightly better: PHC units had 12.21 core health personnel per 10,000 population, PHC centers had 25.16 and other PHC facilities had 9.14.

<sup>4</sup> Core health personnel include Generalist, medical doctors, Specialist medical doctors, Non physician, Qualified Nurse, and Qualified Midwife

**Figure 2.5: Core health personnel per 10,000 population - Pre and post conflict**



By District, the core health worker density is more than 150 per 10,000 population in Ghat and Morzig District compared with a level of less than 20 per 10,000 population in Al-Gebal-Alakhdar, Benghazi, and Al-Kufra District (Figure 2.6).

**Figure 2.6: Core health personnel per 10,000 population - Pre conflict**

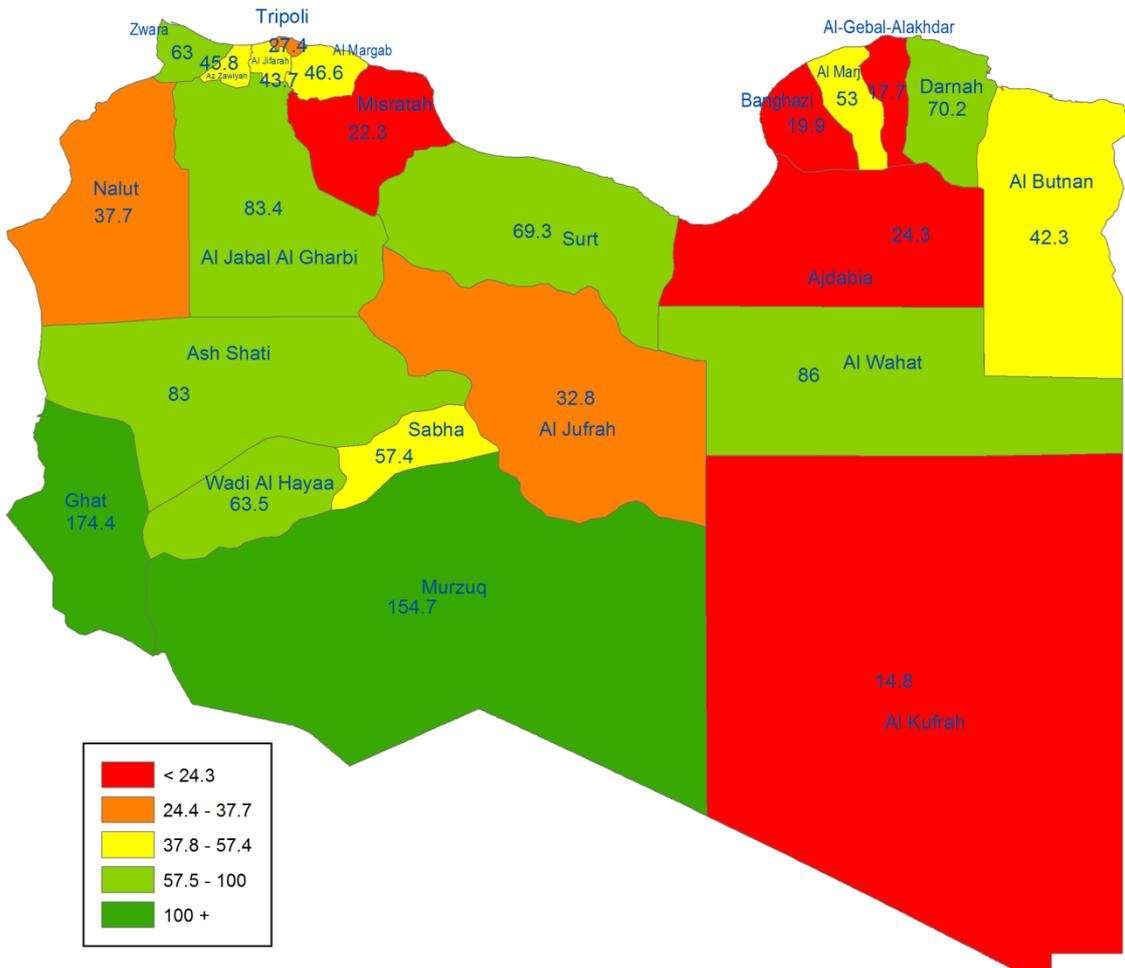
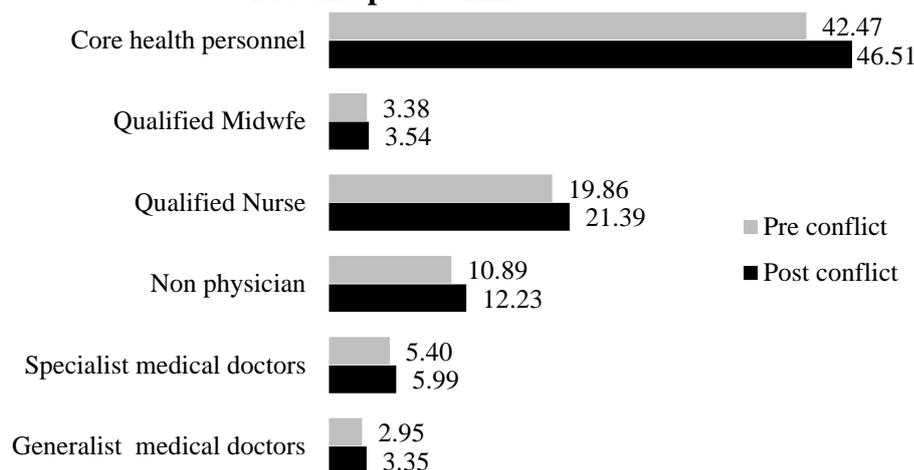


Figure 2.7 show also the disaggregation by health worker cadre. Nurses were the largest cadre of core health workers (19.86 per 10,000), followed by non physicians (10.89 per 10,000), and specialist medical doctors (5.40 per 10,000). Moreover, there is 3.38 qualified midwife per 10,000 and 2.95 generalist medical doctor per 10,000. The highest figure of qualified nursed was observed in Ghat District (140.4 per 10,000), the highest figure of non physicians was observed in Morzig District (42.5 per 10,000), while the highest figure for the specialist medical doctors was observed in Wadi-Alshati District (10.3 per 10,000).

**Figure 2.7: Health workforce density per 10,000 population - Pre and post conflict**

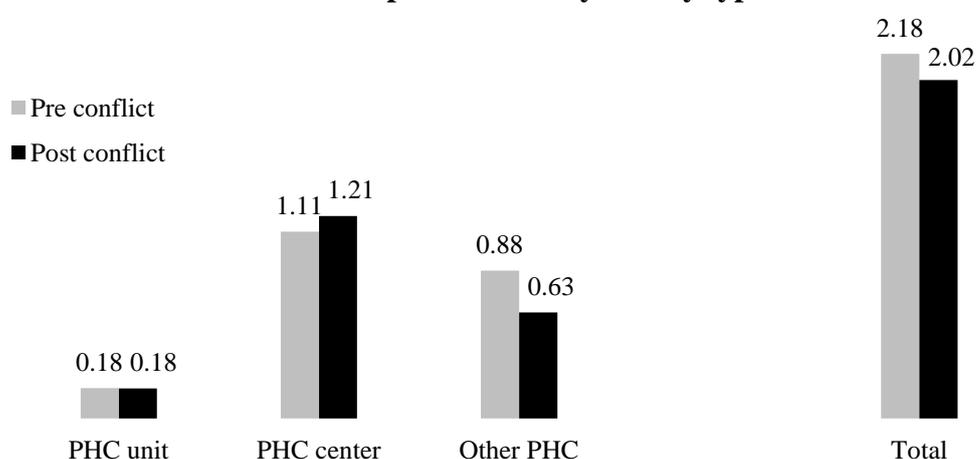


### 2.3 Service Utilization

In populations with poor or suboptimal health infrastructure, the service utilization rate is an indicator of accessibility. Service utilization comprises outpatient visits and inpatient discharges. The number of outpatient visits (excluding immunization) per person per year provides information on the accessibility of outpatient services.

Figure 2.8 show the number of outpatient visits per capita per year pre and post conflict. The figure also show the outpatient visits disaggregated by the facility type. Results show that the number of outpatients visits per capita per year has decreased post conflict with the exception of the PHC centers. Pre conflict there was 0.18 outpatients visits per capita per year in PHC units, 1.11 visit in PHC centers, and .88 in other PHC facilities, while post conflict these results were 0.18, 1.21 and 0.63 respectively (Tables A2.3 and B2.3).

**Figure 2.8: Number of outpatient visits per capita per year - Pre and post conflict by facility type**



Overall, there were 2.17 outpatient visits per capita in the 23 District pre conflict and this figure decreased slightly to 2.02 post conflict. The highest number of outpatient visits was in Wadi-Alshati. On the contrary, four District had less than one outpatient visit per person per year (pre and post conflict) namely: Ajdabia, Al-Kufra, Zwara, and Naloot (Figure 2.9).

**Figure 2.9: Number of outpatient visits per capita per year - Pre and post conflict by district**

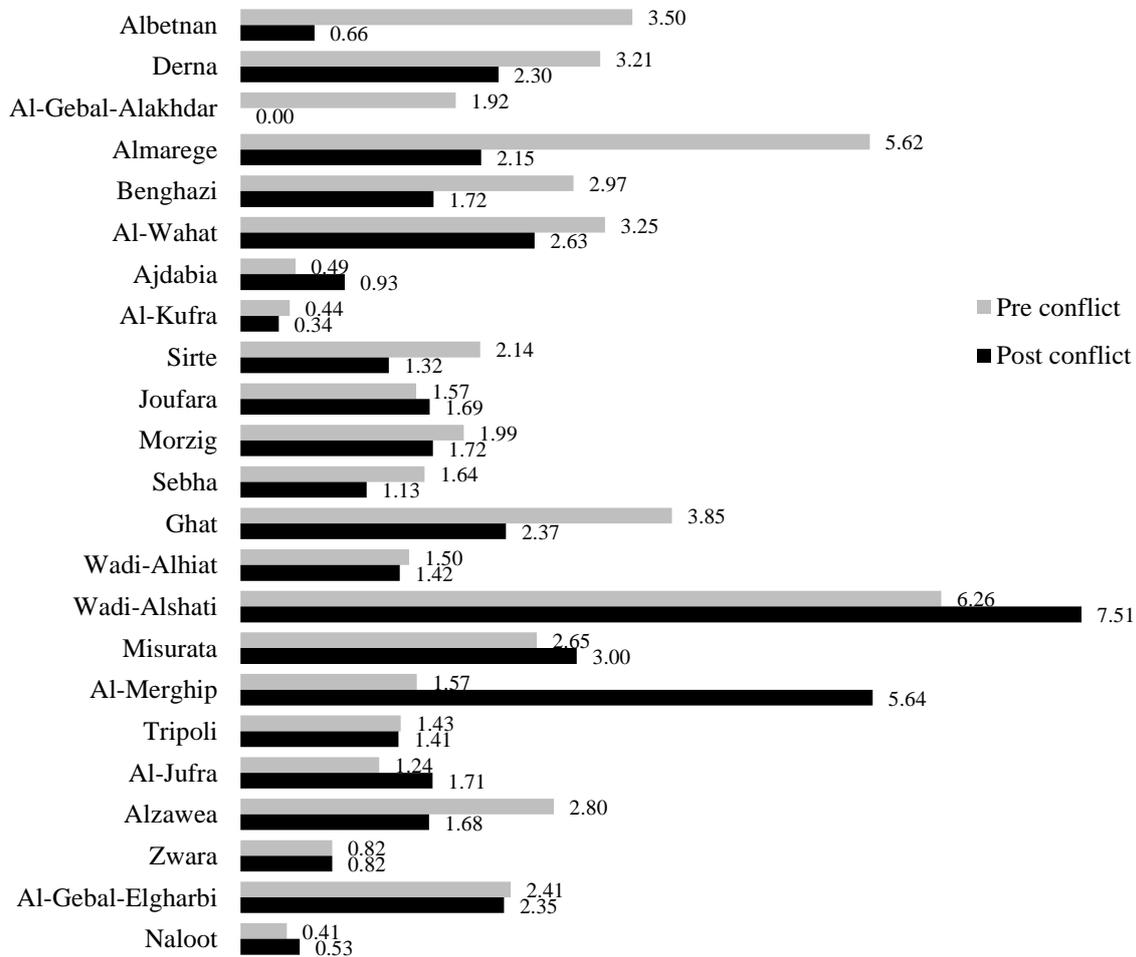
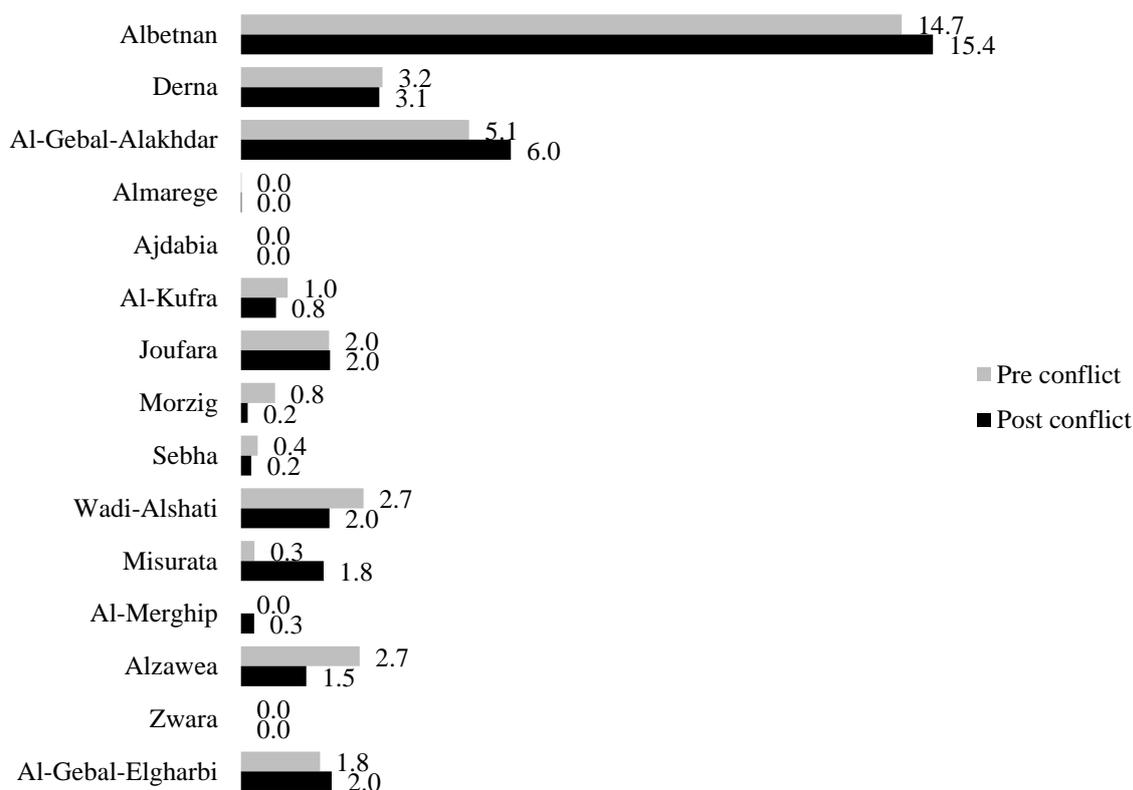


Figure 2.10 present the number of health facilities discharges per 100 population per year. Overall there were 1.2 health facilities discharges per 100 population per year pre conflict which increased slightly to a level of 1.34 post conflict. Looking at results disaggregated by District, data shows that the majority of District had a number of health facilities discharges per 100 population per year less than 1. However, Albetnan District had 14.7 health facilities discharges per 100 population per year pre conflict which even increased to a level of 15.4 post conflict. The tables show also the results of health facilities discharges per 100 population per year by facility type. Overall, the other PHC facilities had the highest number of health facilities discharges per 100 population per year, followed by PHC centers and PHC units.

**Figure 2.10: Number of HF discharges per 100 population per year - Pre and post conflict by district**

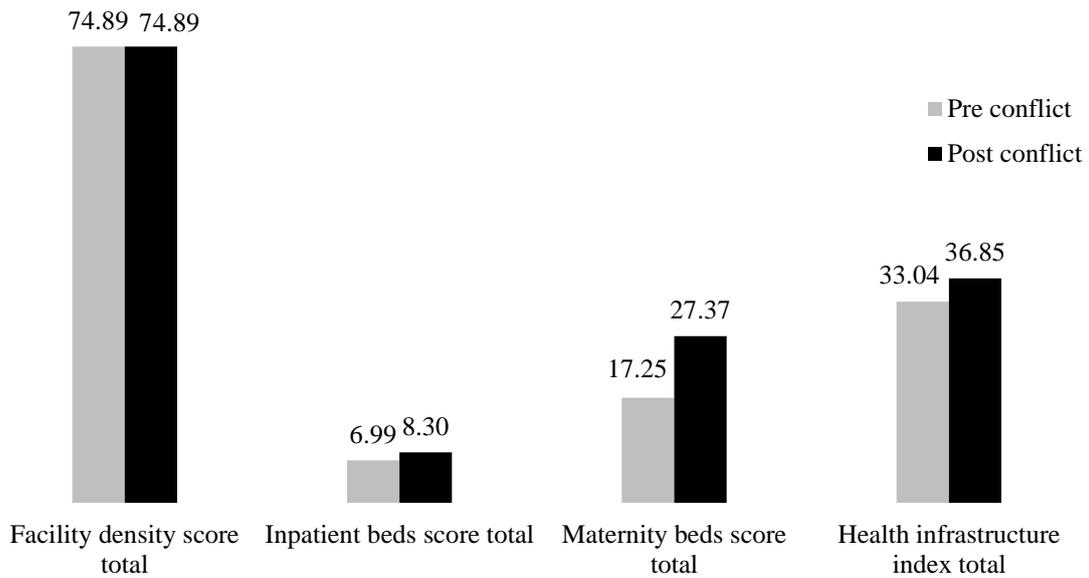


## 2.4 Health Services Infrastructure Index

The service availability index is a composite measure designed to summarize information from the three availability areas: health infrastructure (health facility density and inpatient bed density), health workforce, and service utilization (outpatient visits and inpatient admissions). Tracer indicators are expressed as a percentage relative to the target value in order to make them comparable. Tracer indicators that exceed the target value are given a score of 100%. Indexes are computed by taking the unweighted mean of component indicator scores.

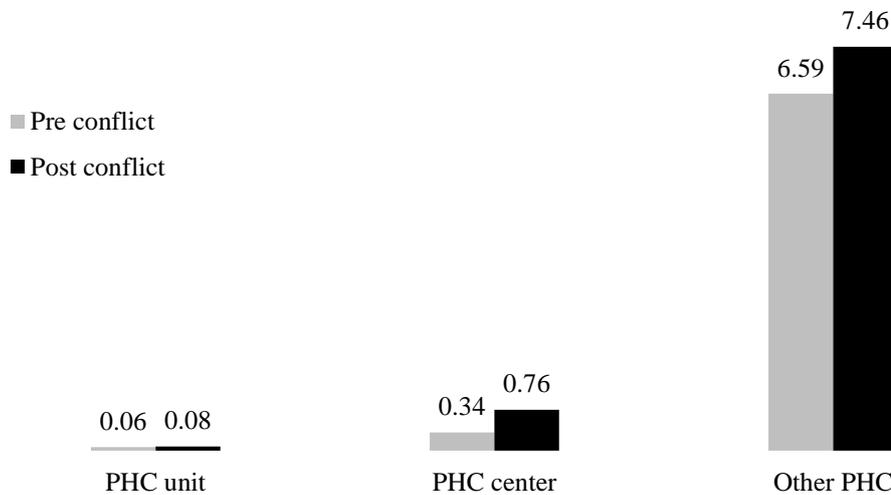
Tables A2.4 and B2.4 show the health services infrastructure index according to facility type and District pre and post conflict. The health infrastructure index was calculated as the mean of the three scores of: facility density, inpatient beds, and maternity beds. In case of missing values in any of the three scores, the health infrastructure index wasn't calculated. Overall, the facility density score was 74.89 out of 100 with no difference pre and post conflict (Figure 2.11). By facility type, PHC units had score of 36.83 out of 100, PHC centers had a score of 31.13 out of 100 and other PHC facilities had a score of 6.93 out of 100. By District, 10 District achieved the maximum mean score of 100 compared with a low of 17.24 out of 100 in Benghazi.

**Figure 2.11: Facility density score total - Pre and post conflict**



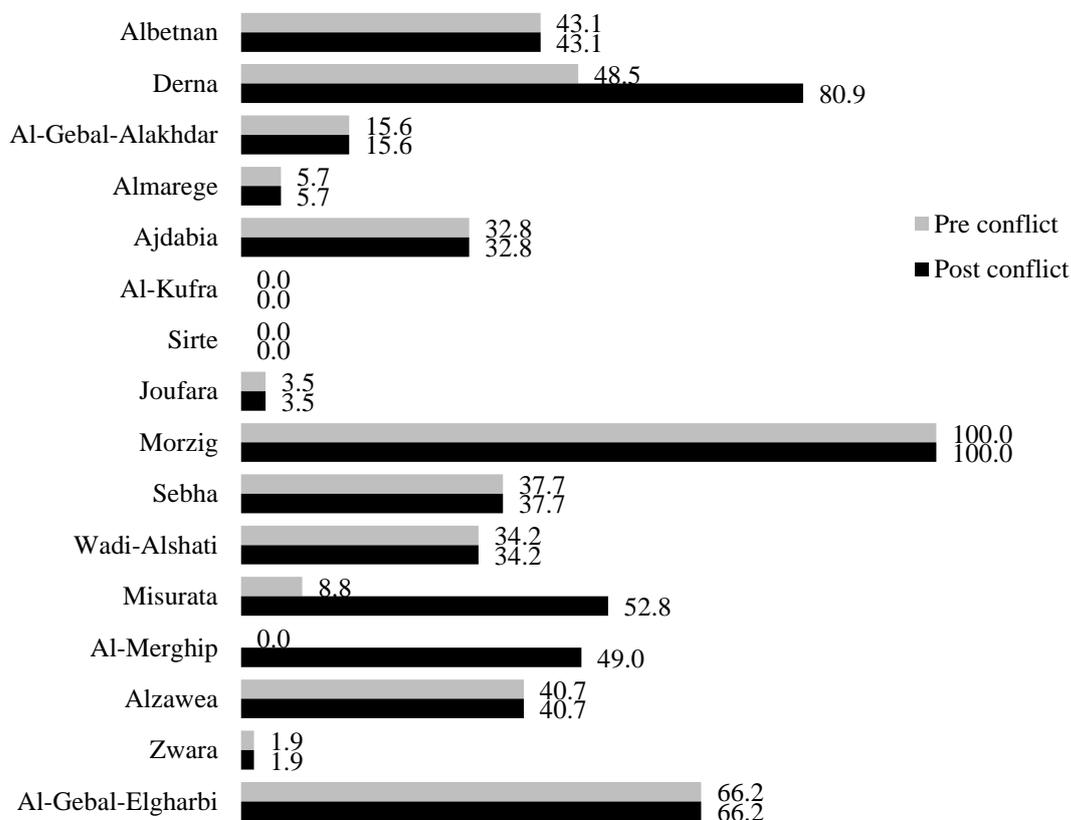
Inpatient beds score was 6.99 out of 100 pre conflict which increased to 8.30 out of 100 post conflict. Generally, the mean score of inpatient beds were much lower among PHC centers and PHC units than other PHC facilities. By District, Morzig had the highest mean score of 46.58 out of 100 pre and post conflict.

**Figure 2.12: Inpatient beds score total - Pre and post conflict**



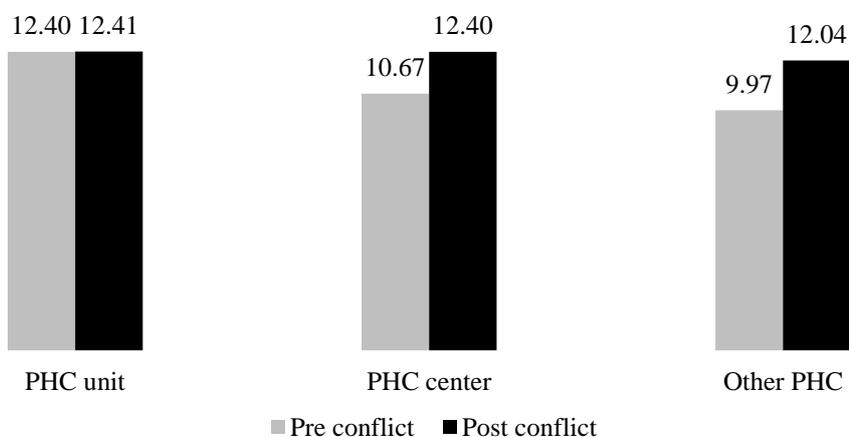
Maternity beds score was 17.25 out of 100 pre conflict which increased significantly to 27.37 out of 100 post conflict. Generally, the mean score of maternity beds was much higher among other PHC facilities than PHC centers and PHC units. By District, Morzig had the highest mean score of 100 pre and post conflict (Figure 2.13).

**Figure 2.13: Maternity beds score - Pre and post conflict**



Looking at the health infrastructure score, overall the score was 33.04 out of 100 pre conflict which increased to 36.85 out of 100 post conflict. By facility type, pre conflict PHC units had infrastructure index score of 12.40 out of 100, PHC centers had a infrastructure index score of 10.67 out of 100 and other PHC facilities had a score of 9.97 out of 100 (Figure 2.14). However, all three facility types had post conflict a mean score of around 12 out of 100. By District, the highest health infrastructure score was 82.19 out of 100 in Morzig.

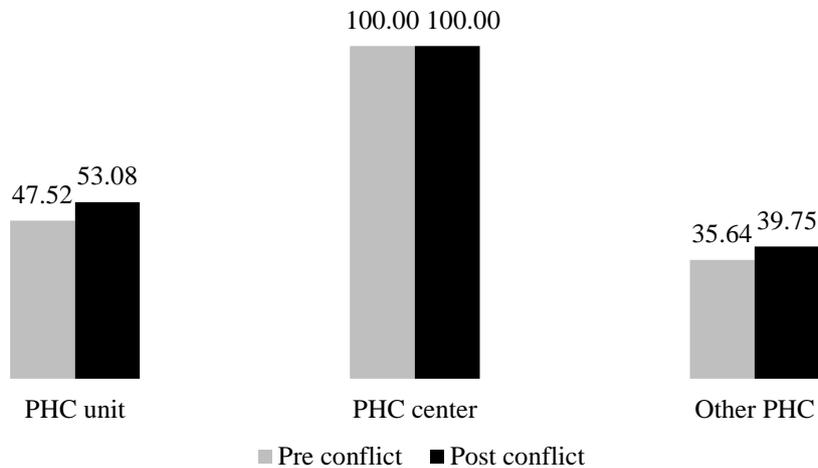
**Figure 2.14: Health infrastructure index total - Pre and post conflict**



Tables A2.5 and B2.5 show the health workforce index by facility type and District pre and post conflict. Overall, the health workforce index was 100 out of 100. By facility type, PHC centers had

a score of 100 out of 100 pre and post conflict (Figure 2.15). However, pre conflict PHC units had a score of 47.52 out of 100 which increased to 53.08 post conflict, while other health PHC had a score of 35.64 out of 100 pre conflict which increased to 39.75 out of 100 post conflict.

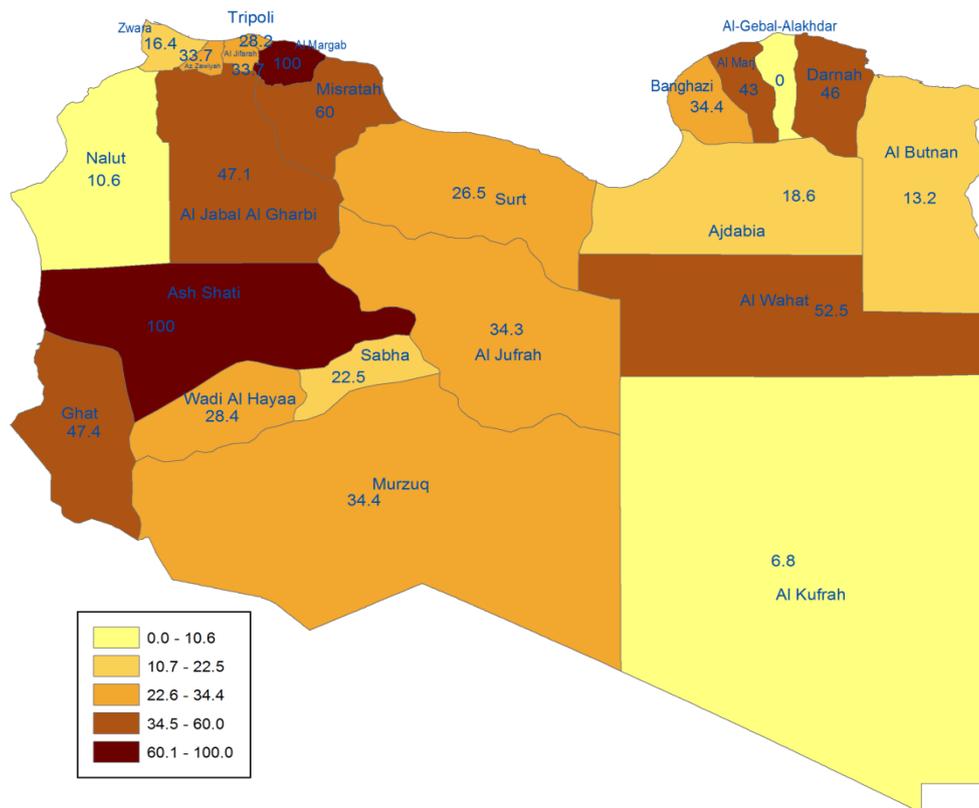
**Figure 2.15: Health workforce index total - Pre and post conflict**



By District, pre conflict all District achieved 100 out of 100 with the exception of Al-Gebal-Alakhdar (77.13 out of 100), Benghazi (86.37 out of 100), Al-Kufra (64.27 out of 100) and Misurata (97.12 out of 100). Post conflict data show that only 2 District didn't achieve a 100 out of 100 mean score: Benghazi (87.93 out of 100) and Al-Kufra (66.16 out of 100) (Table A2.5, B2.5).

Service utilization index was calculated through getting the mean of the outpatient and inpatient service utilization score. Results are shown in Tables A2.6 and B2.6 pre and post conflict by facility type and District. Overall, pre conflict outpatient service utilization score was 43.54 out of 100 which decreased post conflict to become 40.42 out of 100. Generally, by facility type the mean score of outpatient service utilization was much higher among PHC centers than other PHC facilities and PHC units. By District, Wadi-Alshati had a score of 100 out of 100 pre and post conflict. However, in some District results varied significantly before and after conflict. Al-Gebal-Alakhdar had a mean score of 38.39 out of 100 pre conflict which declined dramatically to a score of 0 out of 100 post conflict. On the contrary, Al-Jufra had a mean score of 24.77 out of 100 pre conflict which increased post conflict to reach 33.68 out of 100 (Figure 2.16).

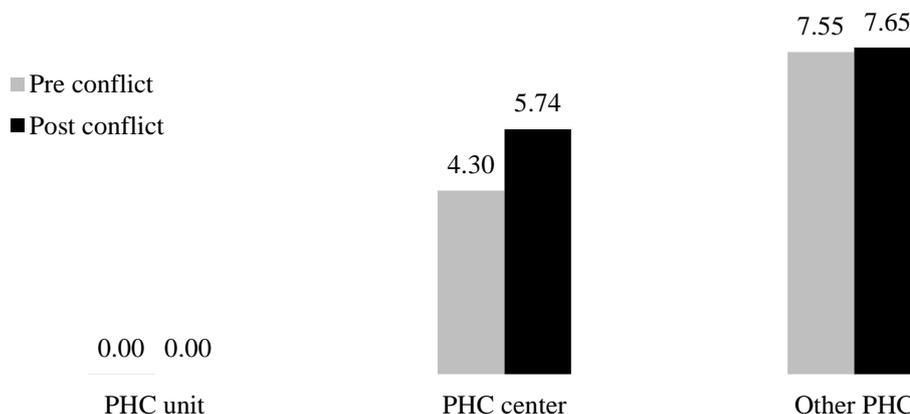
**Figure 2.16: Outpatient service utilization - Post conflict**



Calculating the number of visits/physician per year (Table A 2.3 and B 2.3) showed a decline post conflict (180 visits/physician) compared to pre conflict (217 visits/physician).

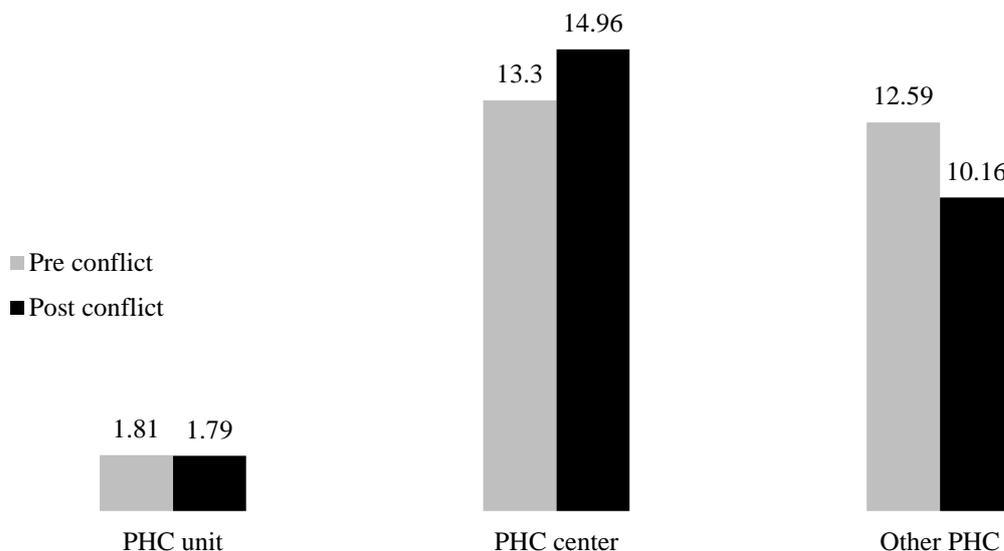
Overall inpatient service utilization score unlike the outpatient service utilization score had improved post conflict compared with pre conflict. The mean score of inpatient service utilization was 6.99 out of 100 pre conflict which almost doubled post conflict to reach a score of 13.39 out of 100. By facility type, PHC units had a mean score of 0 out of 100 pre and post conflict. However, other PHC facilities had a score of 7.55 out of 100 pre conflict which didn't differ much post conflict (7.65 out of 100), while PHC centers had a mean score of 4.30 pre conflict which increased to 5.74 out of 100 post conflict (Figure 2.17). By District, Albetnan had the highest mean score of 100 out of 100 pre and post conflict.

**Figure 2.17: Inpatient service utilization total - Pre and post conflict**



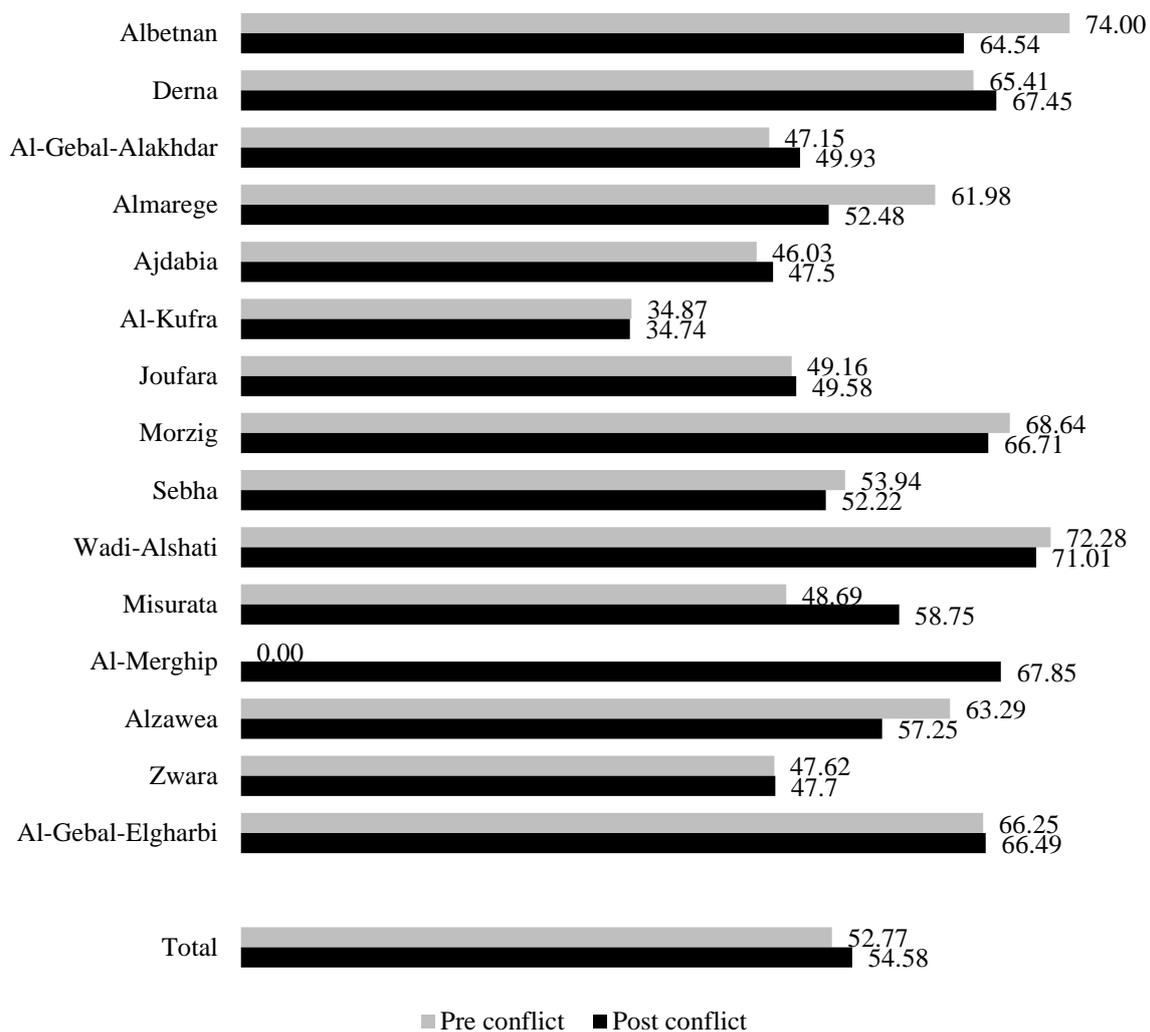
Results show that the mean score of service utilization was 25.27 out of 100 pre conflict and increased to 26.90 out of 100 post conflict. Pre conflict, PHC centers had a mean score of 13.30 out of 100, other PHC facilities had a mean score of 12.59 out of 100, while PHC units had a mean score of 1.81 out of 100. Post conflict, PHC centers had a mean score of 14.96 out of 100, other PHC facilities had a mean score of 10.16 out of 100, while PHC units had a mean score of 1.79 out of 100 (Figure 2.18). By District, pre conflict Albetnan had the highest mean score of 84.98 out of 100 while post conflict Wadi-Alshati had the highest mean score of 59.87 out of 100.

**Figure 2.18: Service utilization index total - Pre and post conflict**



Tables A2.7 and B2.7 show the service availability index by facility type and District pre and post conflict. Overall, the service availability index was 52.77 out of 100 pre conflict which increased to 54.58 out of 100 post conflict. By facility type, PHC centers had a score of 41.32 out of 100 pre conflict which increased to 42.45 post conflict. PHC units had a score of 20.58 out of 100 pre conflict which increased to 22.42 post conflict, while other PHC facilities had a score of 19.40 out of 100 pre conflict which increased to 20.65 out of 100 post conflict. By District, pre conflict Albetnan had the highest service availability score of 74 out of 100, while post conflict Wadi-Alshati had the highest score of 71.01 out of 100 (Figure 2.19).

**Figure 2.19: Service availability index - Pre and post conflict**



### 3 General Service Readiness

General Service Readiness refers to the overall capacity of health facilities to provide general health services.

Readiness is defined as the availability of components required to provide services such as basic infrastructure and amenities, basic equipment, standard precautions for infection control, laboratory tests, and medicines and commodities. This includes information on:

- **Basic amenities:** Power, improved water source, room with privacy, adequate sanitation facilities, communication equipment, access to computer with internet, emergency transportation
- **Basic equipment:** Blood pressure machine and cuff, stethoscope, adult scale, infant scale, child scale, thermometer, light source, neonatal bag and mask
- **Standard precautions:** Sterilization equipment, safe disposal of sharps and infectious wastes, sharps box, waste receptacle, disposable syringes, disinfectant, hand-washing soap, alcohol based hand rub, latex gloves, masks, gowns, eye protection, guidelines
- **Diagnostic capacity:** HIV RDT, haemoglobin, smear, TB microscopy, blood glucose, syphilis RDT, urine pregnancy test.
- **Essential medicines:** 8 essential medicines

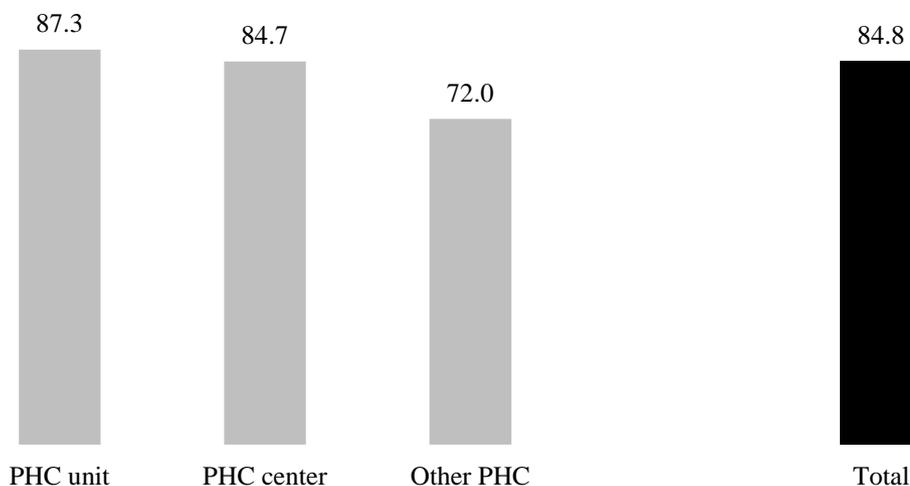
Details of the indicators and their definitions can be found in Measuring Service Availability and Readiness: Service Readiness Indicators.

#### 3.1 Basic Amenities

Basic amenities were assessed in all the facilities in the 23 District based on the availability of the following tracer items: power source, improved water, improved water source, patients sanitation facilities, communication equipment, computers with internet/email, and emergency transportation. Table A 3.1 shows the availability of tracer items by facility types and By District, as well as the percentage of facilities with all basic amenities.

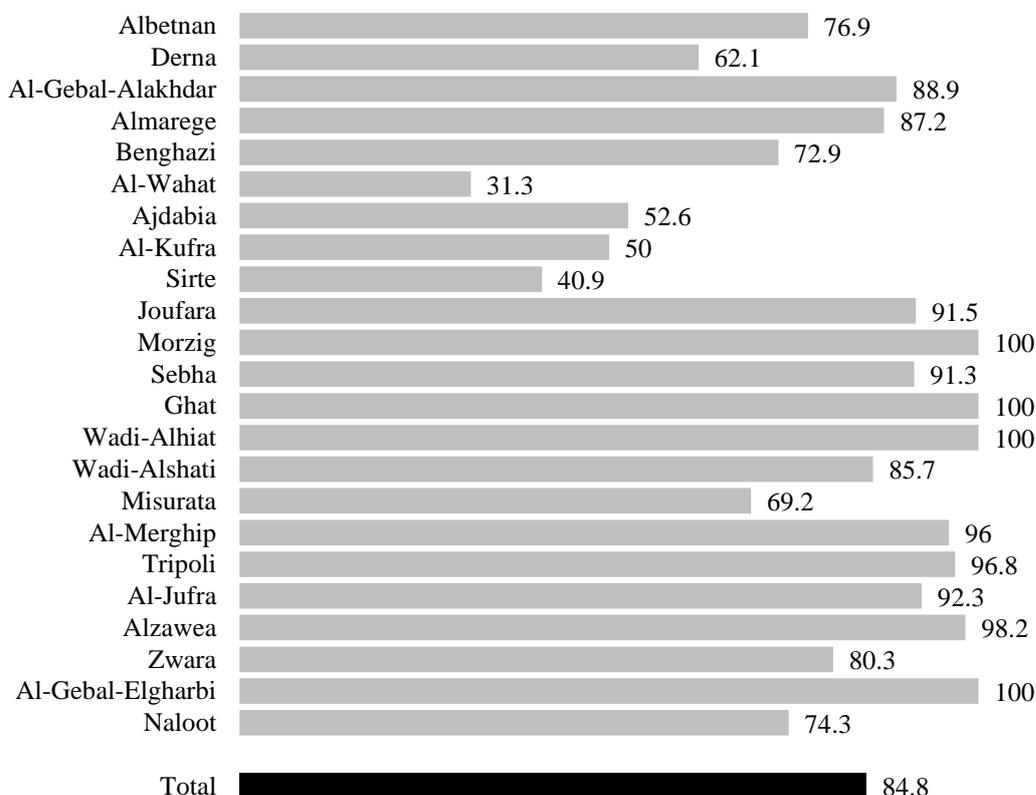
Overall, 85% of the health facilities assessed were found to have a power source. Results disaggregated by type of facility show that 87% of PHC units had a power source compared with a level of 85% among PHC centers, and 72% among other PHC facilities (Figure 3.1).

**Figure 3.1: Availability of facilities with basic amenities elements by facility type (Power Source)**



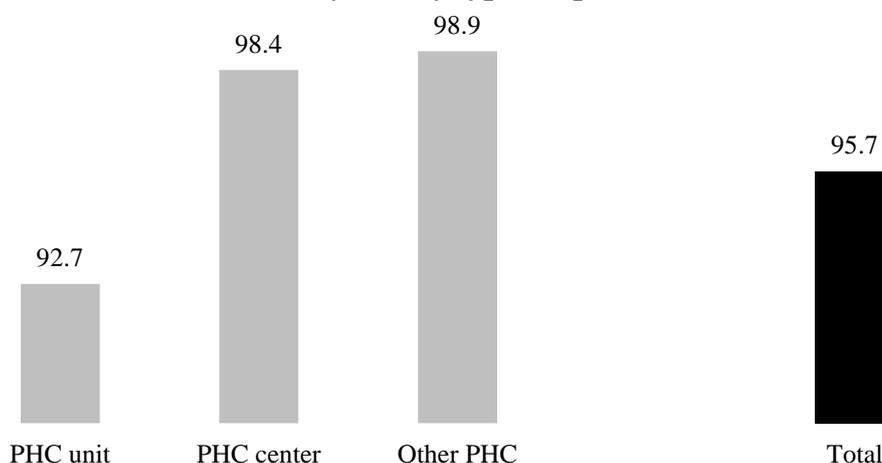
All facilities in Morzig, Ghat, Wadi-alhita, and Al-Gebal Elgharbi District had power source compared with a level of less than half in Sirte (41%) and Al-Wahat (31%). It is however important to note that the indicator did not take into account alternative sources of power supply: the results exclude any form of power other than the national grid and generator (Figure 3.2).

**Figure 3.2: Availability of facilities with basic amenities elements by district (Power source)**



The water source indicator measures whether there is an improved water source onsite or within 500 meters of the facility. Results show that high percentage of all the health facilities had access to an improved water source (96%). By facility type, data showed that 99% of other PHC facilities had access to improved water source compared with 98% of PHC centers and 93% among PHC units (Figure 3.3).

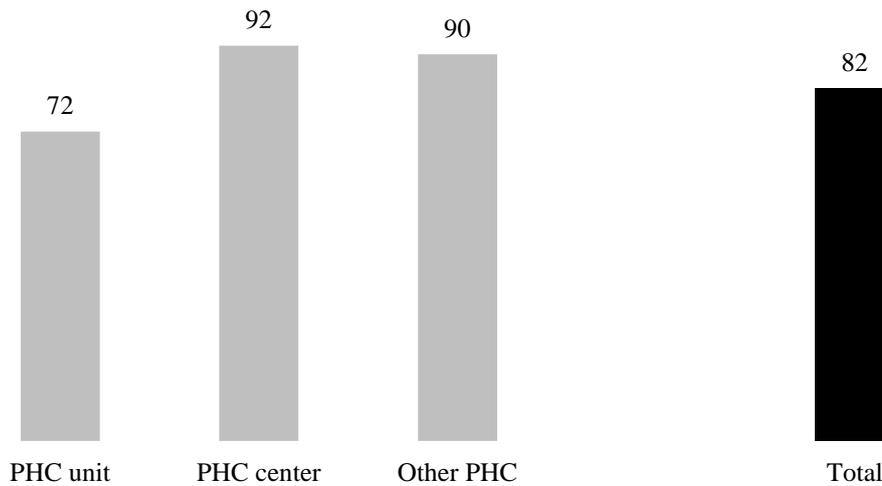
**Figure 3.3: Availability of facilities with basic amenities elements by facility type (Improved Water)**



All facilities in 9 District had access to improved water. The lowest level of access to improved water was observed in Albentan District (77%).

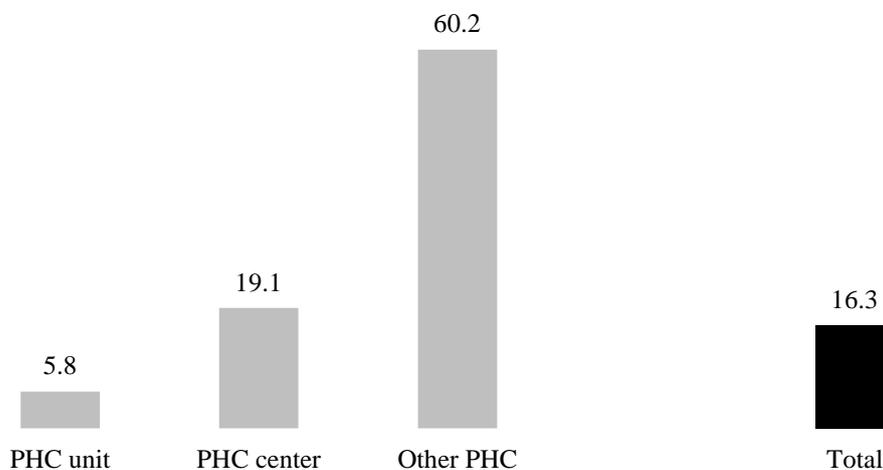
Overall, 95% of the health facilities assessed had adequate sanitation facilities in the form of flush/pour flush to piped sewer system or septic tank or pit latrine, pit latrine (Ventilated Improved Pit latrines (VIP) or other) with slab, or composting toilets. Overall, 82% of health facilities had adequate sanitation facilities. Adequate sanitation facilities was available in more than 9 in 10 health facilities in PHC centers (92%) and other PHC facilities (90%), compared with only 72% of PHC units (Figure 3.4). All facilities in Derna, Al-Wahat, Al-Kufra, Sebha, Ghat, and Alzawea District had adequate sanitation facilities. On the contrary, only 52% of the facilities in Benghazi and 34% of facilities in Al-Gebal-Elgharbi had adequate sanitation facilities.

**Figure 3.4: Availability of facilities with basic amenities elements by facility type (Toilet Patients)**



Communication equipment (phone or shortwave radio) are of importance to health facilities especially in cases of emergency needed, however, the communication equipment was available in only 16% of health facilities. Results by type of facility shows that 60% of other PHC facilities had communication equipment compared with 19% of PHC centers and only 6% of PHC units (Figure 3.5).

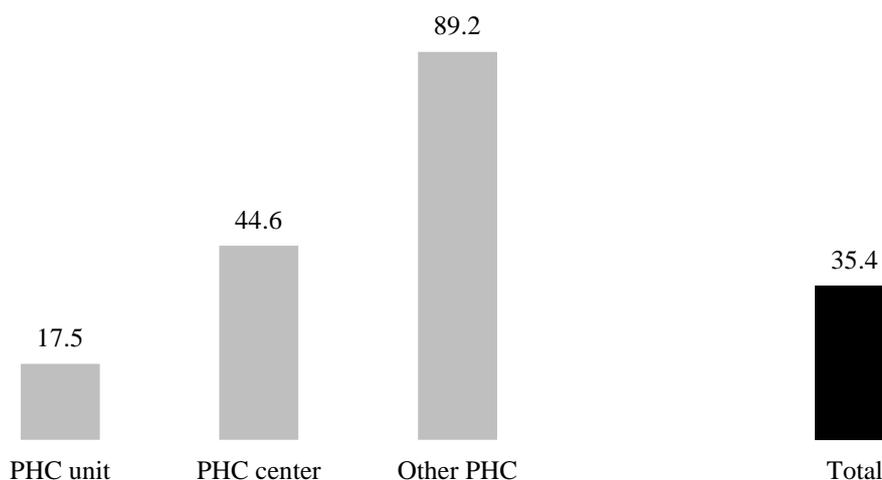
**Figure 3.5: Availability of facilities with basic amenities elements by facility type (Communication Equipment)**



The highest percentage of health facilities with communication equipment was in Ghat (60%), while the lowest percentage was in Al-Gebal-Elgharbi (3%) and Almarege (4%).

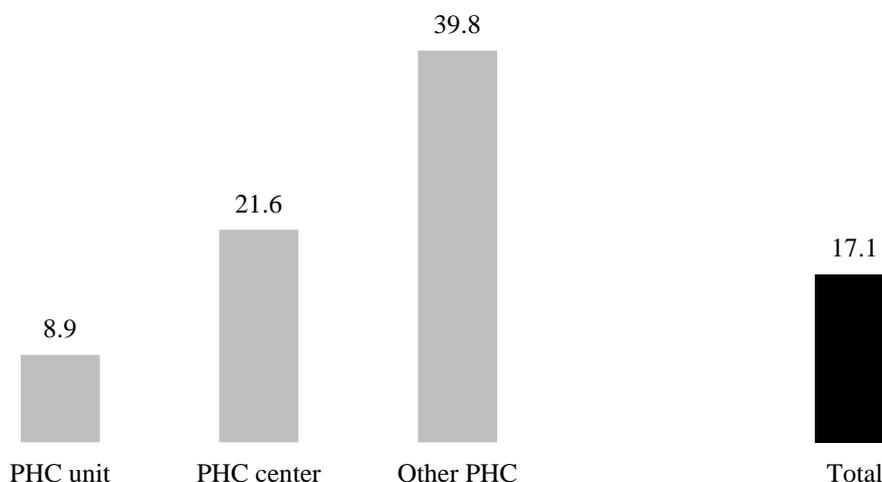
Availability of a computer with email/internet access was more than double the level of communication equipment. Overall, 35% of health facilities had computer with internet access. Looking at results disaggregated by type of facility, other PHC facilities were by far more likely to have a computer with internet access (89%) compared with PHC centers (45%) and PHC units (18%) (Figure 3.6). There were also significant variations by District. Ninety-six percent of facilities in Sebha had computer with internet access which is about 16 times the level in Almarege (6%).

**Figure 3.6: Availability of facilities with basic amenities elements by facility type (Computers Internet)**



The availability of emergency transportation was low, where it was available in only 17% of health facilities. This indicator varied significantly across District from a level of 65% of facilities in Sebha District having emergency transportation, to none of facilities in Al-Gebal-Alakhdar and Ghat district. Emergency transportation was more likely to be available among other PHC facilities (40%) than PHC centers (22%) and PHC units (9%).

**Figure 3.7: Availability of facilities with basic amenities elements by facility type (Emergency Transportation)**

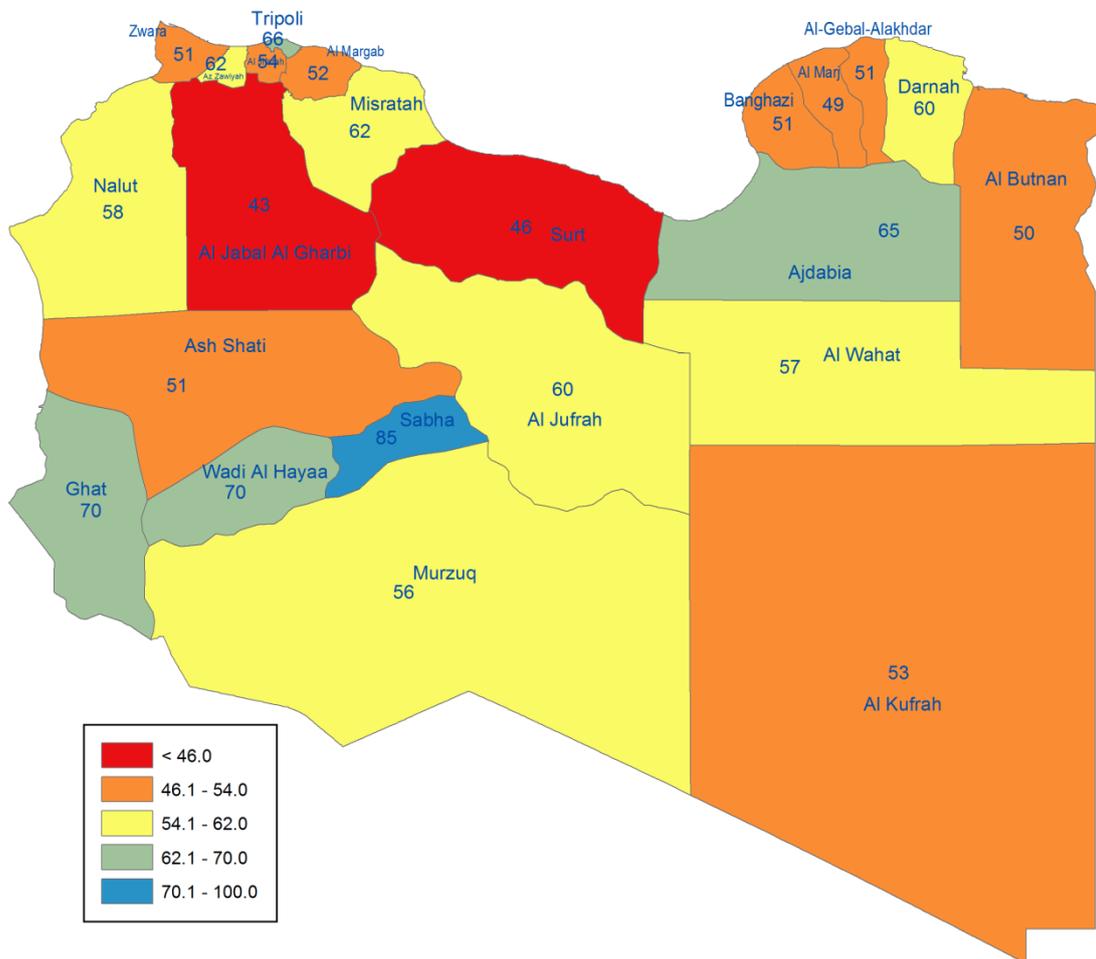


Only 4% of facilities had all 6 basic amenities tracer items with none of the facilities in seven District had all 6 basic amenities tracer items namely: Albetnan, Al-Gebal-Alakhdar, Al-Kufra,

Sirte, Ghat, Wadi-alshati, and Al-Jufra. However, 26% of health facilities in Sebha District had all 6 basic amenities tracer items. Differentials are clear by facility type, where less than 1% of PHC units have all 6 basic amenities items, while around 20% of other PHC facilities, and 5% of PHC centers have all 6 basic amenities items.

An overall readiness score was computed by taking the mean availability of the basic amenities tracer items for each of the 23 District. The basic amenities readiness score is shown also in Table A 3.1. On average, health facilities had slightly more than 3 out of the 6 tracer items for an overall basic amenities readiness score of 55 out of 100. The highest mean score was in Sebha District which had an overall basic amenities readiness score of 85 out of 100, while the lowest mean score was in Al-Gebal-Elgharbi District which had an overall basic amenities readiness score of 43 out of 100. Results disaggregated by type of facility showed that other PHC facilities have an overall basic amenities readiness score of 75 out of 100, compared with a score of 60 out of 100 among PHC centers and 47 out of 100 among PHC units.

**Figure 3.8: Basic amenities elements mean score by district**



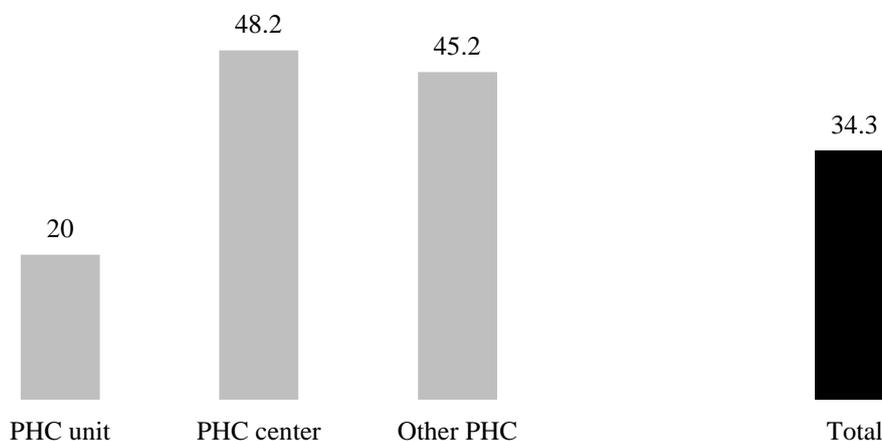
### 3.2 Basic Equipment

For basic equipment, health facilities were assessed on the availability of the following five items: adult scale, stethoscope, thermometer, blood pressure apparatus, and a light source for patient examinations. Table A3.2 shows the availability of tracer items by District and facility type, as well as the percentage of health facilities with all basic equipment items.

Overall, 34% of the health facilities assessed were found to have an adult paediatric scale. Results disaggregated by type of facility show that 48% of PHC centers had adult paediatric scale

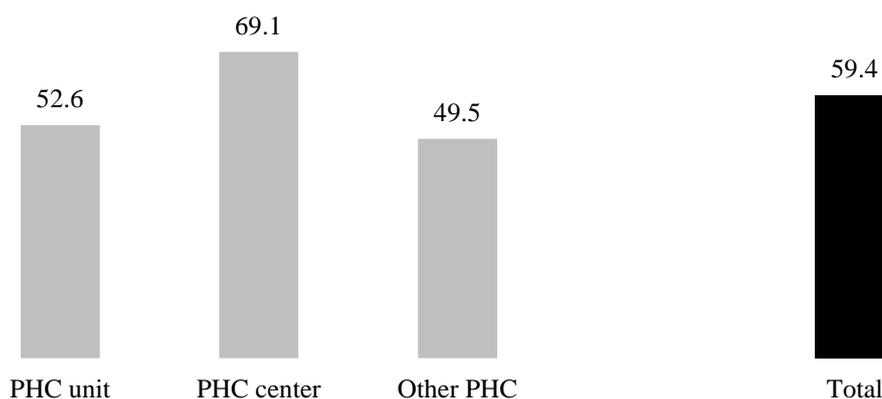
compared with a level of 45% among other PHC facilities, and only 20% among PHC units (Figure 3.9). All facilities in Ghat District had adult paediatric scale compared with a level of less than 10% in Ajdabia (5%).

**Figure 3.9: Availability of basic equipment by facility type (Adult Paediatric Scale)**



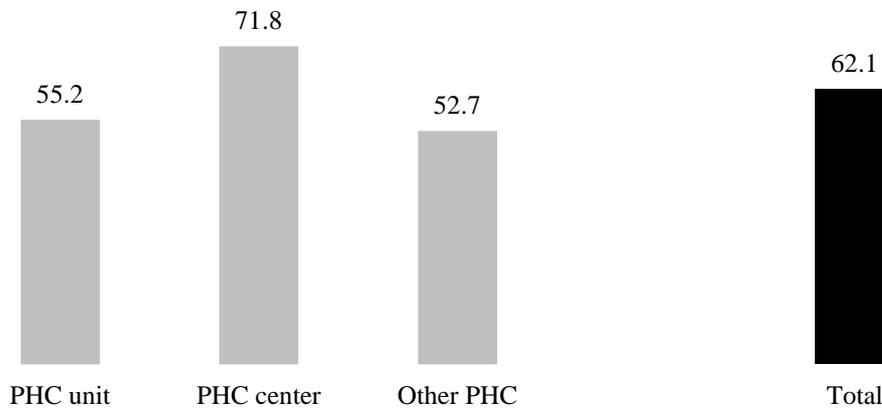
Results show that 59% of the health facilities had a thermometer. Reflecting the same pattern as the adult paediatric scale, 69% of PHC centers had a thermometer which is a higher percentage than PHC units (53%) and other PHC facilities (50%) (Figure 3.10). By District, the situation was the same as the previous item. All facilities in Ghat District had a thermometer compared with none of the facilities in Ajdabia.

**Figure 3.10: Availability of basic equipment by facility type (Thermometer)**



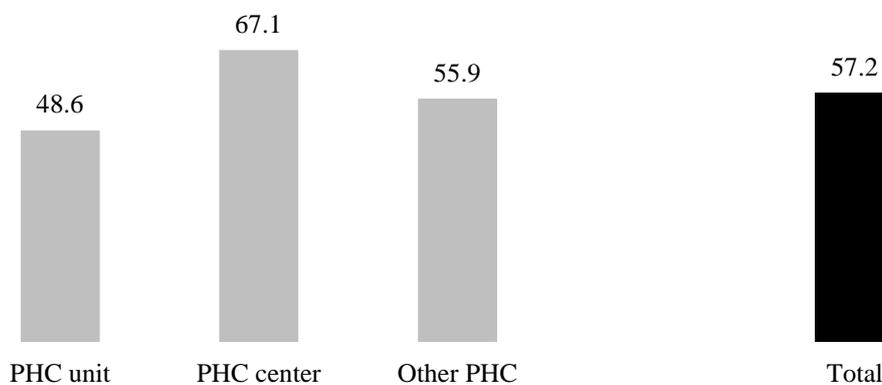
Overall, 62% of the health facilities assessed had a stethoscope. As expected, stethoscope was more likely to be available in PHC centers (72%) than PHC units (55%) and other PHC facilities (53%) (Figure 3.11). By District, as the previous equipments all facilities in Ghat had stethoscope compared with none of the facilities in Ajdabia.

**Figure 3.11: Availability of basic equipment by facility type (Stethoscope)**



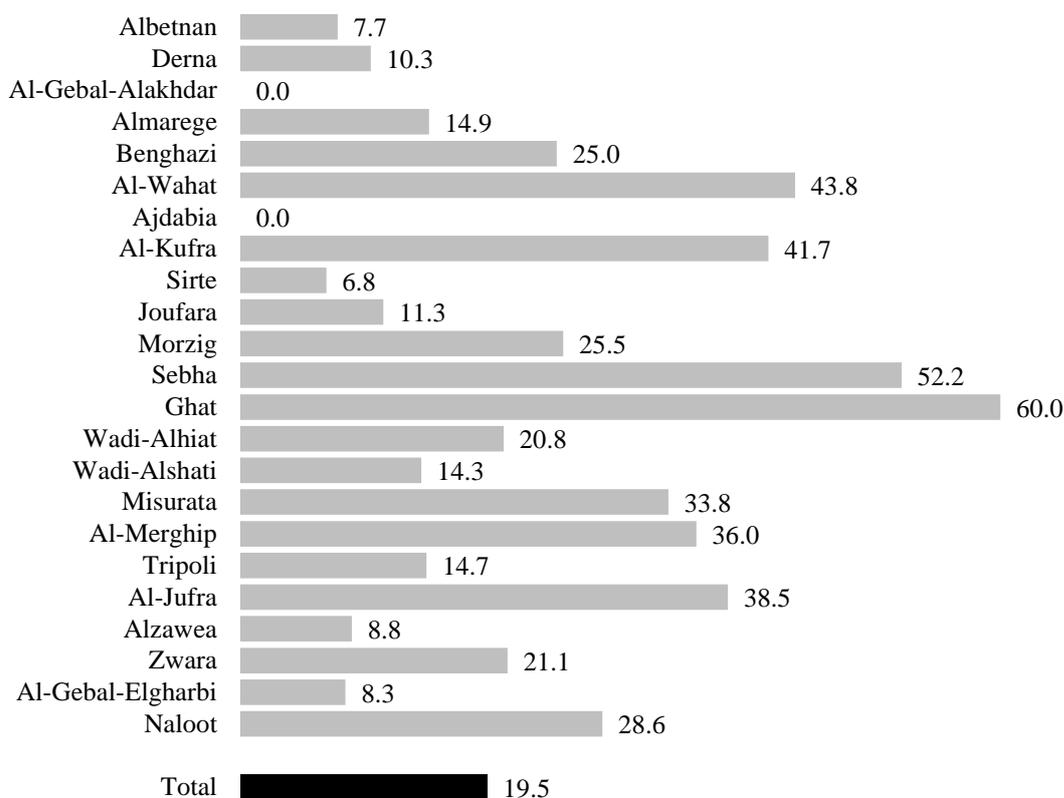
Blood pressure apparatus was available in slightly less than two-third of health facilities (62%). By facility type, 67% of PHC centers had a blood pressure apparatus compared with 56% of other PHC facilities and 49% of PHC units (Figure 3.12). By District, and reflecting the same pattern all facilities in Ghat had a blood pressure apparatus compared with just around 11% in Al-Gebal-Alakhdar and Ajdabia.

**Figure 3.12: Availability of basic equipment by facility type (Blood Pressure Apparatus )**



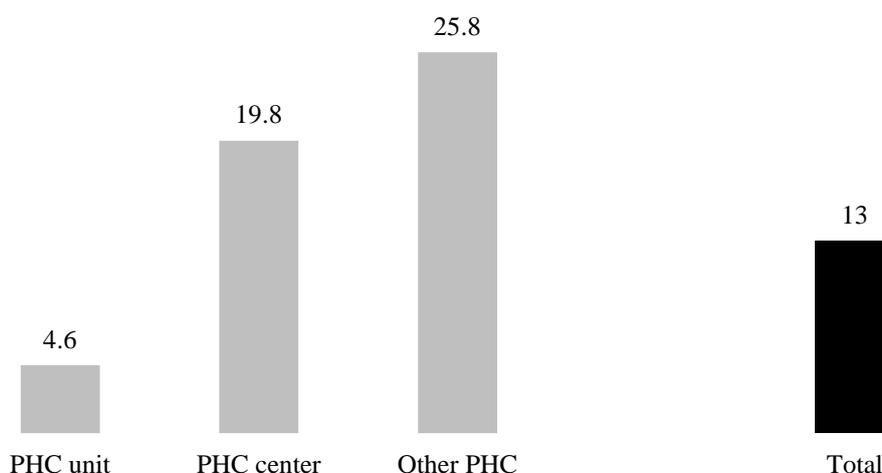
The light source was the least likely equipment available in the health facilities where it was available in only 20% of the health facilities. Other PHC facilities were more likely than PHC centers and PHC units to have a light source (32%, 30% and 8% respectively). By District, 60% of facilities in Ghat had a light source available compared with none of the facilities in Ajdabia (Figure 3.13).

**Figure 3.13: Availability of basic equipment by district (Light Source)**



Only 13% of facilities had all 5 basic equipments. Around one-quarter of other PHC facilities had all 5 basic equipments available compared with 20% of PHC centers and 5% of PHC units (Figure 3.14). However, 60% of the facilities in Ghat and 48% of the facilities in Sebha had all 5 basic equipments available, and none of the facilities in Al-Gebal-Alakhdar and Ajdabia had all 5 basic equipment.

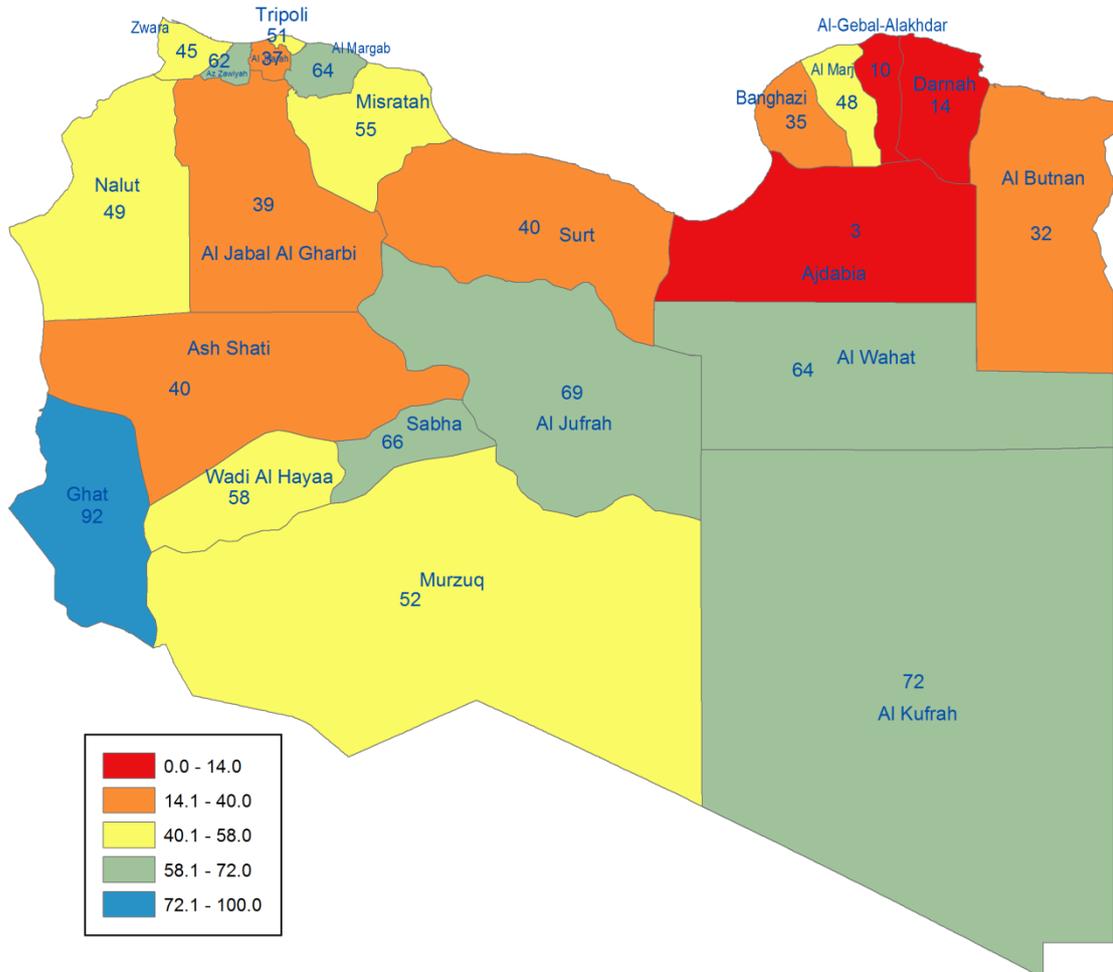
**Figure 3.14: Availability of all 5 basic equipment by facility type**



An overall mean score was computed by taking the mean availability of the basic equipment tracer items for each of the 23 District as well as for the 23 District combined. The basic mean score is shown also in Table A3.2. On average, health facilities had slightly more than 2 out of the 5 tracer

items for an overall basic equipment mean score of 46 out of 100. Results disaggregated by type of facility showed that PHC centers had overall basic equipment mean score of 57 out of 100, compared with a score of 47 out of 100 among other PHC facilities and 37 out of 100 among PHC units. The highest mean score was in Ghat District which has an overall basic equipment mean score of 92 out of 100, while the lowest mean score was in Ajdabia District which has an overall basic equipment mean score of 3 out of 100 (Figure 3.15).

**Figure 3.15: Basic equipment mean score by district**

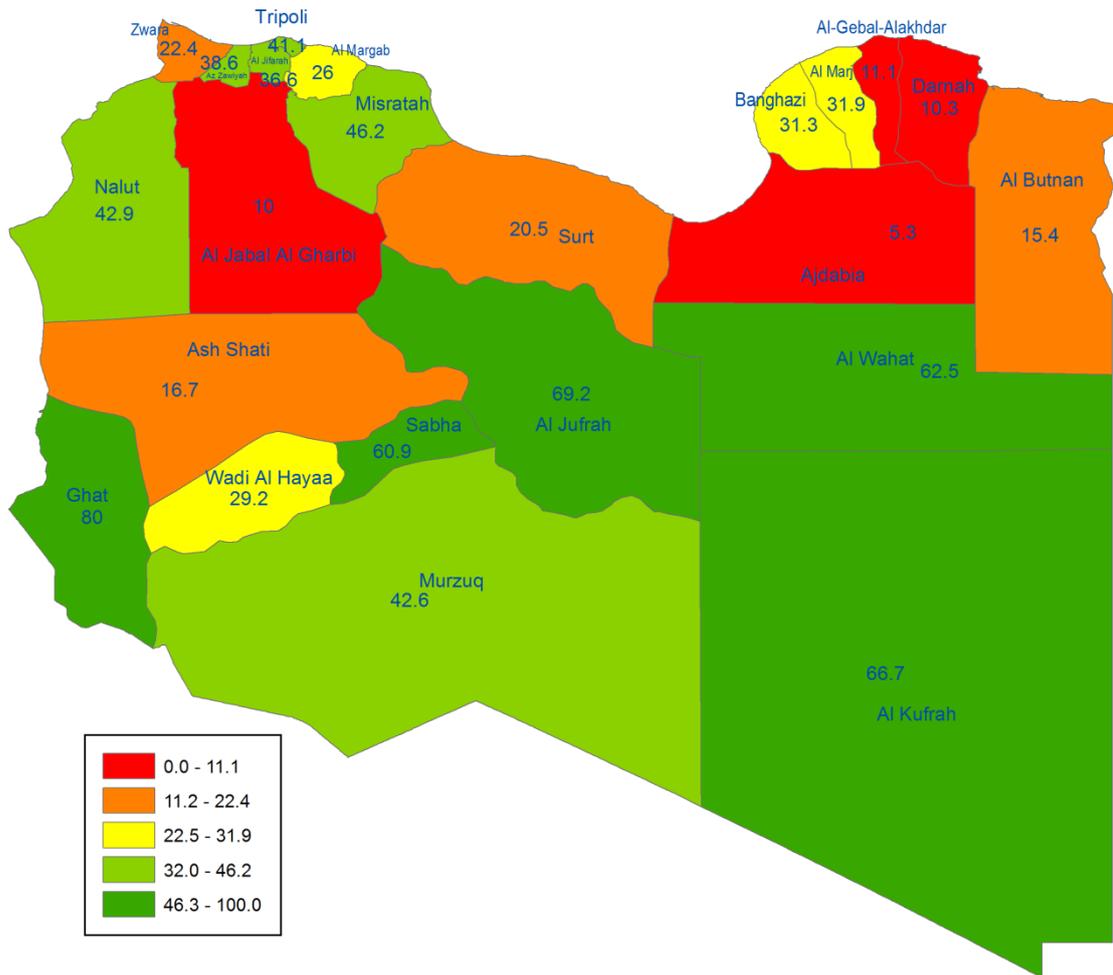


### 3.3 Standard Precautions for Prevention of Infections

The presence of standard precautions indicates implementation of infection control practices. The following seven tracer items were included in this domain: sterilizer autoclave, disposal of sharps and other infectious wastes, single use-standard disposable or auto-disable syringes, latex gloves, medical masks, gowns and guidelines for standard precautions. Table A3.3 shows the availability of tracer items by district, managing authority, and facility type, as well as the percentage of health facilities with all standard precautions items.

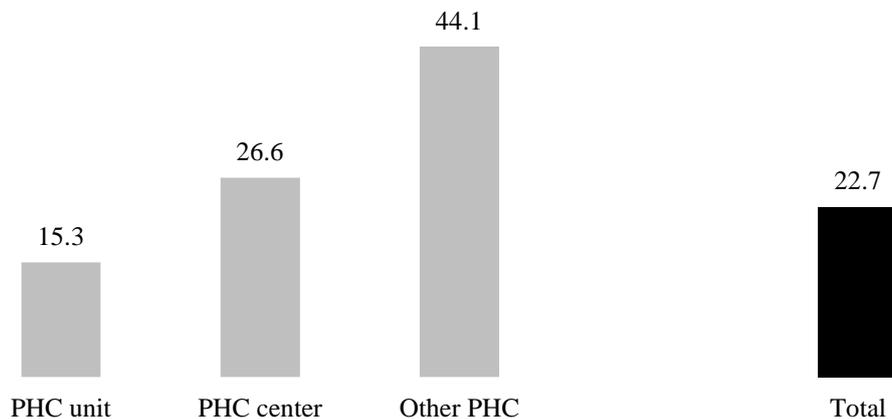
Overall, 30% of the health facilities assessed were found to have a sterilizer autoclave where it was more likely to be available in PHC centers and other PHC facilities (43% each) than PHC units (17%). Results by District show that 80% of facilities in Ghat District had sterilizer autoclave compared with a level of 5% in Ajdabia (Figure 3.16).

**Figure 3.16: Availability of standard precautions for infection prevention elements by district (Sterilizer Autoclave)**



Results showed that less than one-quarter of health facilities had safe disposal of sharps and other infectious wastes (23%). By facility type, 44% of other PHC facilities had safe disposal of sharps and other infectious wastes compared with 27% of PHC centers and 15% of PHC units (Figure 3.17). By District, safe disposal of sharps and other infectious wastes was available in three-quarter of health facilities in Al-Wahat compared with none of the facilities in Ghat.

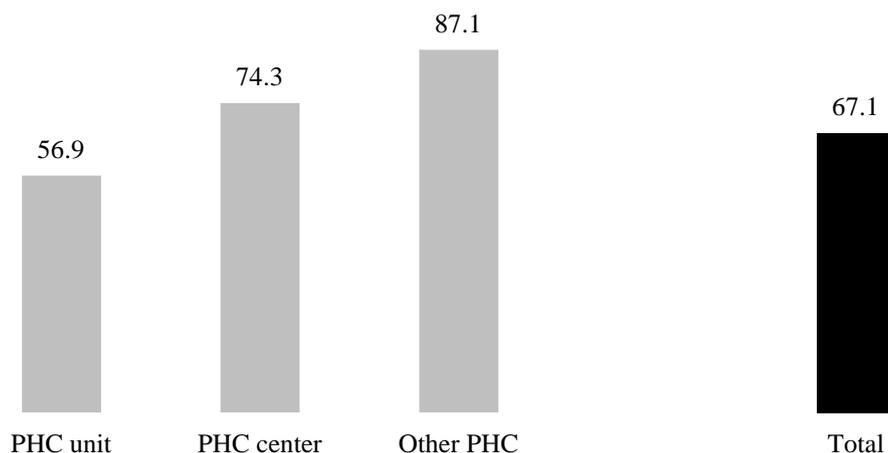
**Figure 3.17: Availability of standard precautions for infection prevention elements by facility type (Appropriate Storage Infectious Waste)**



Single use-standard disposable or auto-disable syringes was available in almost all health facilities (99%) with minor differentials by facility type and District.

Overall, results show that latex gloves were available in around two-third of the health facilities (67%). Other PHC facilities were more likely to have latex gloves (87%) compared with PHC centers (74%) and PHC units (57%) (Figure 3.18). All facilities in Sebha District had latex gloves compared with only 16% of health facilities in Al-Gebal-Elgharbi.

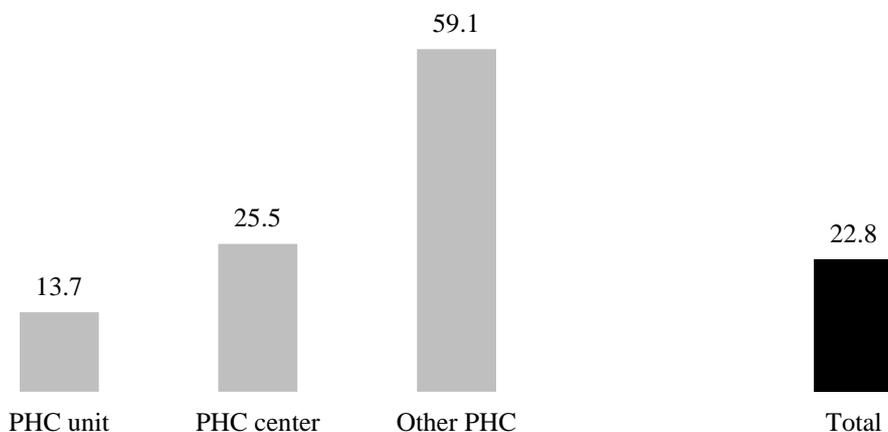
**Figure 3.18: Availability of standard precautions for infection prevention elements by facility type (Latex Gloves )**



Results in Table A3.3 show that medical masks were available in 41% of health facilities. By facility type, data show that 71% of other PHC facilities had medical masks compared with 54% of PHC centers and 26% of PHC units. Similarly to the previous element, all facilities in Sebha District had medical masks compared with only 8% of facilities in Al-Gebal-Elgharbi.

Overall, gowns were available in less than one-quarter of the health facilities (23%). Other PHC facilities were by far more likely to have gowns available than PHC centers and PHC units (59%, 26% and 14% respectively) (Figure 3.19). Slightly less than three-quarter of facilities in Sebha (74%) had gowns available compared with none of the health facilities in Wadi-Alshati.

**Figure 3.19: Availability of standard precautions for infection prevention elements by facility type (Gowns )**

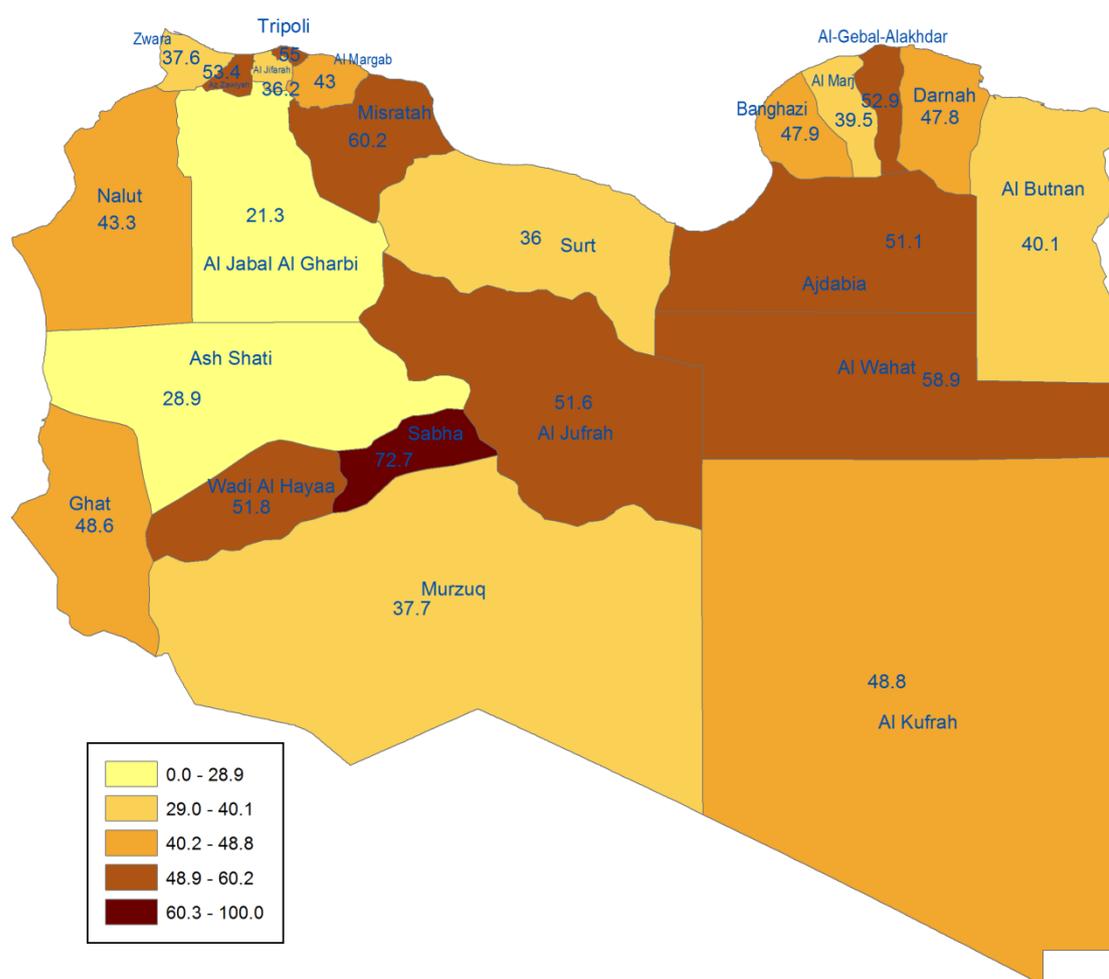


Guidelines for standard precautions were available in only 19% of health facilities where it was available in 38% of other PHC facilities compared with 25% of PHC centers and 11% of PHC

units. By District, guidelines for standard precautions were more likely to be available in Ajdabia (53%) while it was least likely to be available in Ghat and Wadi-Alshati (none of the health facilities).

The overall basic mean score for the availability of the standard precautions for infection prevention elements is shown also in Table A3.3. On average, health facilities had about 3 out of the 7 tracer items for overall standard precautions mean score of 43 out of 100. Results disaggregated by type of facility showed that other PHC facilities had overall standard precautions mean score of 63 out of 100, compared with a score of 49 out of 100 among PHC centers and 34 out of 100 among PHC units. The highest mean score was observed in Sebha District which has an overall basic equipment mean score of 73 out of 100, while the lowest mean score was in Wadi-Alshati District which has an overall basic equipment mean score of 21 out of 100 (Figure 3.20).

**Figure 3.20: Standard precautions mean score by district**



Overall, only 2% of the facilities have all 7 elements available with 12% of other PHC facilities having all 7 elements available compared with only 3% of PHC centers and less than one percent of PHC units. By District, Derna had the highest percentage of the availability of all 7 elements (10%), while in 8 District none of the health facilities had all 7 elements available.

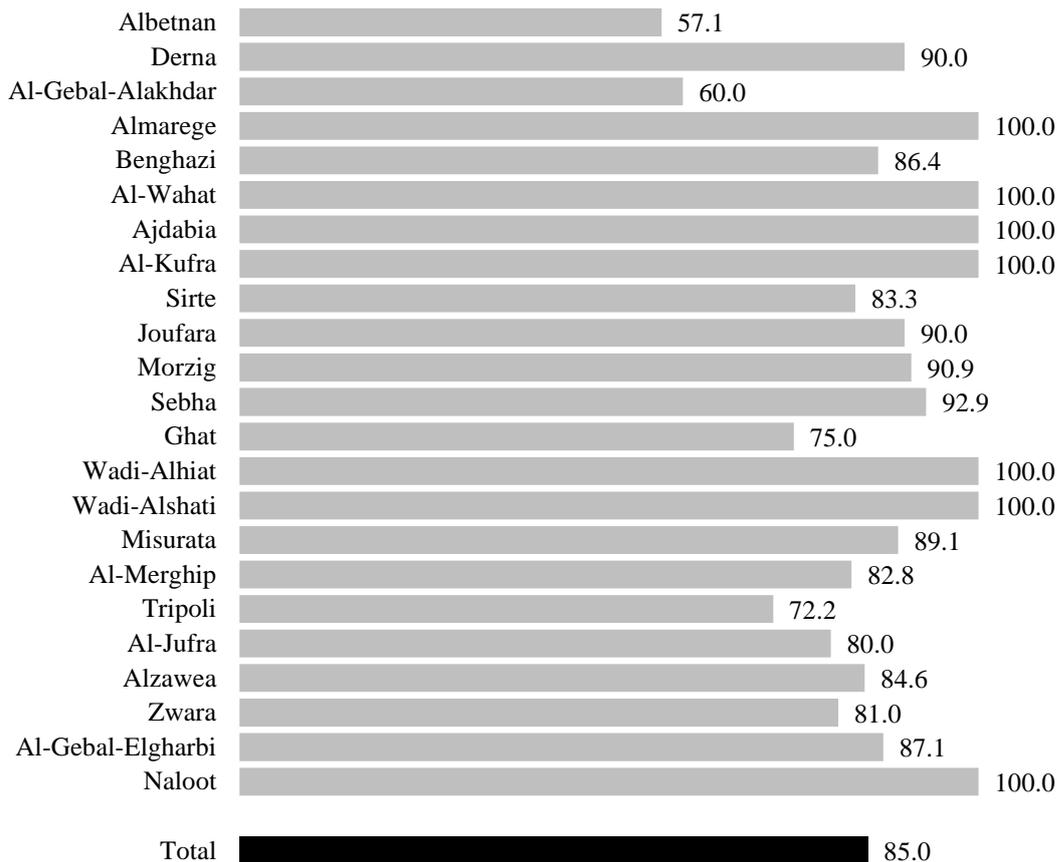
### 3.4 Diagnostic Capacity

Service delivery would not be complete without diagnostic capacities in the health facilities. Facilities were assessed on the capacity to conduct the following 10 diagnostic tests on-site: haemoglobin test, white blood cell count, blood coagulation time, bleeding time, packed cell volume, sedimentation rate, general urine examination, general stool examination, blood sugar test, and pregnancy test. Table A 3.4 shows the on-site diagnostic testing capacity by District and

facility type, as well as the percentage of health facilities that could conduct all ten tests on-site.

Among all tests, data show that the highest capacity was for blood sugar test with 85% of all facilities having the availability to conduct the test on site. Differentials were minor by type of facility. However, By District, all facilities in 7 District had the availability of conducting the test on site namely: Almarege, Al-Wahat, Ajdabia, Al-Kufra, Wadi-Alhiat, Wadi-Alshati, and Naloot. Despite that, only 60% of the facilities in Al-Gebal-Alakhdar had the facility to conduct the test on site (Figure 3.21).

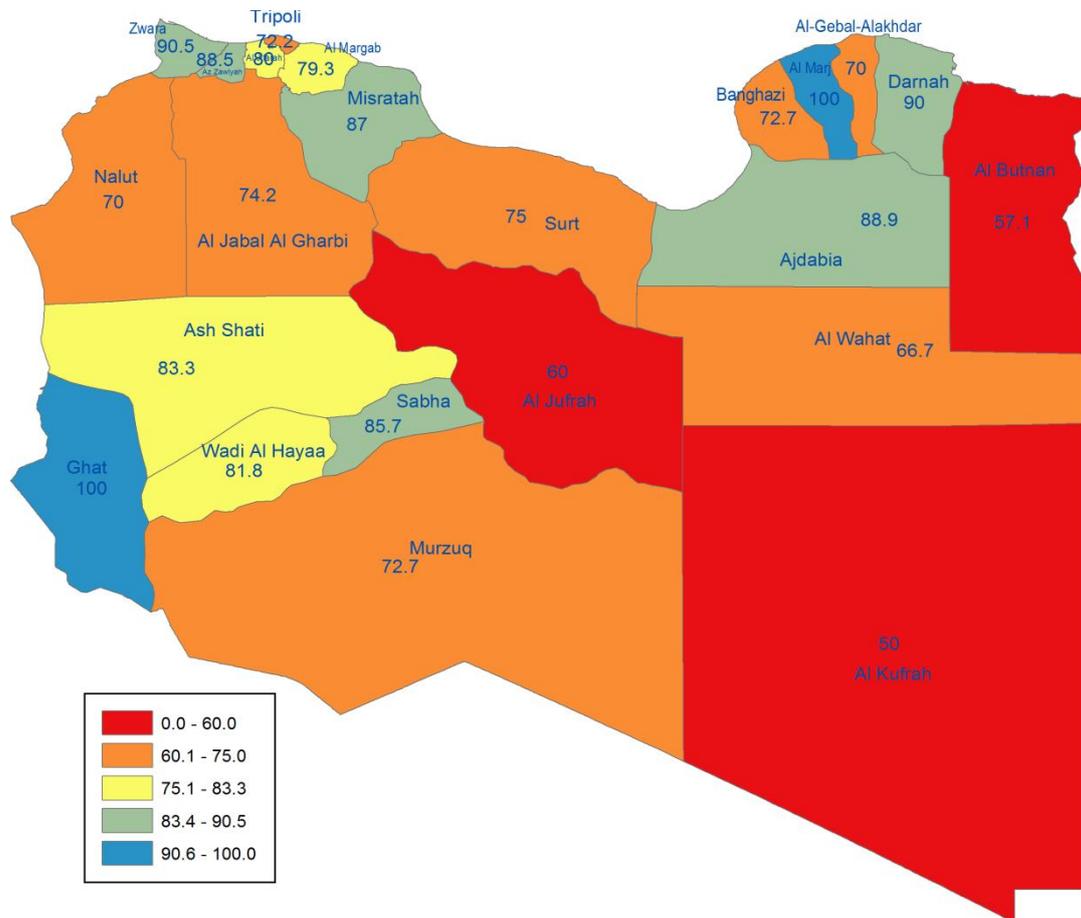
**Figure 3.21: Diagnostic capacity by district (Blood Sugar Test)**



The second most available test was the general urine examination which was available in 82% of health facilities. Nine in 10 of other PHC facilities had the capacity to conduct the test compared with 82% of PHC centers and 75% of PHC units. By District, the test is available in on site in 5 District namely: Derna, Almarege, Al-Wahat, Ghat and Al-Jufra. However, only 60% of the facilities in Al-Gebal-Alakhdar had the facility to conduct the test on site.

Overall, pregnancy test was available in 79% of health facilities with almost no differentials by facility type. By District, all facilities in Almarege and Ghat had the test available compared with only 57% of facilities in Albetnan.

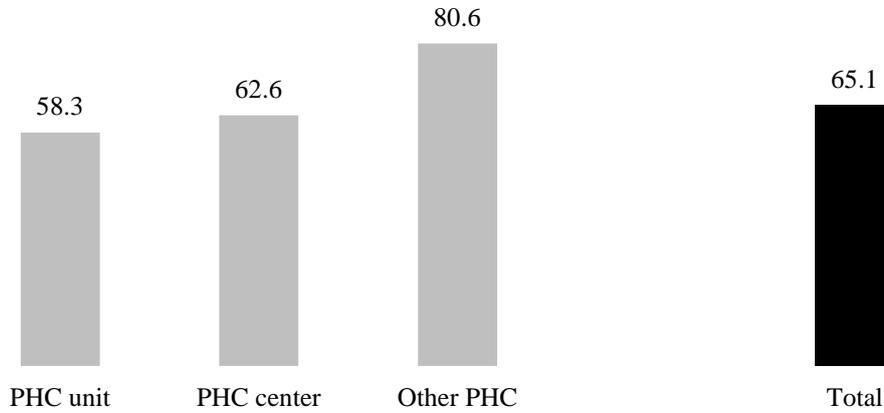
**Figure 3.22: Availability of standard precautions for infection prevention elements by district (Pregnancy Test)**



Sedimentation rate test is available in 74% of health facilities. By facility type, the test is available in 87% of other PHC facilities, 72% of PHC centers and 67% of PHC units. By District, the test is available in all health facilities in Almarege, Al-Wahat, and Al-Jufra, while it is available in less than half the facilities in Albetnan (43%) and Naloot (40%).

Results show that haemoglobin test is available in about two-third of the health facilities (65%). The test was available in 81% of other PHC facilities compared with 63% of PHC centers and 58% of PHC units (Figure 3.23). By District, the test was available in all health facilities in Al-Wahat and Ghat compared with only one-quarter of facilities in Al-Kufra.

**Figure 3.23: Availability of standard precautions for infection prevention elements by facility type (Hemoglobin )**

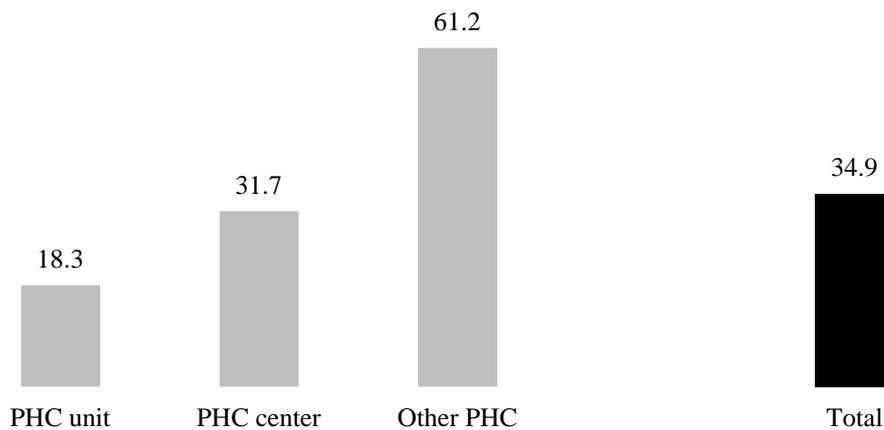


General stool examination test was available in 57% of facilities where it was available in 76% of other PHC facilities, 55% of PHC centers, and 47% of PHC units. By District, the test was available in all health facilities in Al-Wahat compared with none of the facilities in Ghat.

Overall, white blood cell count test was available in almost half health facilities (49%). By facility type, the test was available in 76% of other PHC facilities compared with 44% of PHC centers decreased to 38% of PHC units. The test was available in 86% of health facilities in Sebha which is more than 5 times the percentage reported in Wadi-Alshati (17%).

Blood coagulation time test was available in slightly more than one-third of health facilities (35%). By facility type, the test was available in 61% of other PHC facilities, 32% of PHC centers and only 18% of PHC units (Figure 3.24). Three-quarter of health facilities in Almarege and Ghat had the test available compared with none of the facilities in Albetnan.

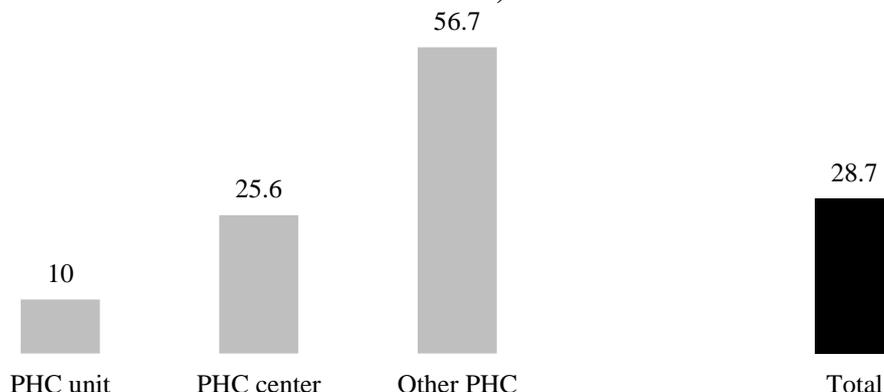
**Figure 3.24: Availability of standard precautions for infection prevention elements by facility type (Blood Coagulation Time)**



Overall, 3 in 10 health facilities had packed cell volume test available where it was available in 63% of other PHC facilities, 24% of PHC centers and 17% of PHC units. By District, the test was available in 70% of the facilities in Derna compared with none of the facilities in Wadi-Alshati.

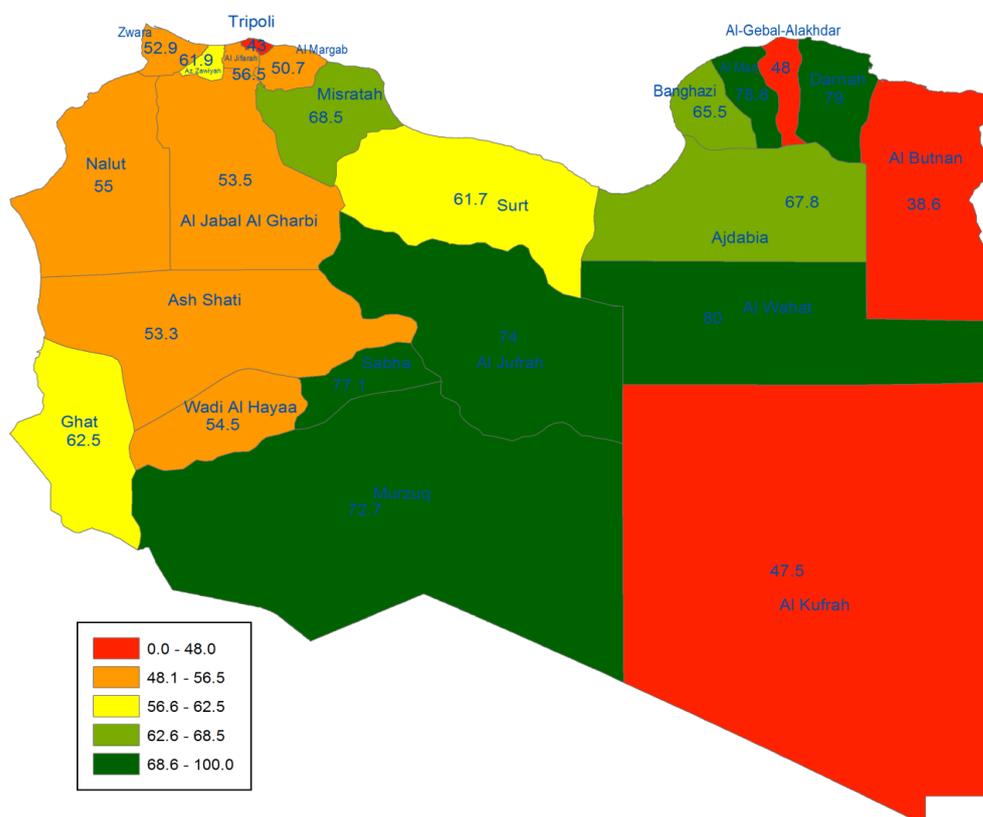
Bleeding time test was available in 29% of health facilities. By facility type, the test was available in 57% of other PHC facilities which is more than 2 times the percentage of PHC centers (26%) and more than 5 times the percentage of PHC units (10%) (Figure 3.25).

**Figure 3.25: Availability of standard precautions for infection prevention elements by facility type (Bleeding Time)**



The overall diagnostic capacity mean score for the availability of the lab test is shown also in Table A3.4. On average, health facilities had about 6 out of the 10 lab test with an overall diagnostic capacity mean score of 58 out of 100. Results disaggregated by type of facility showed that other PHC facilities had overall diagnostic capacity mean score of 75 out of 100, compared with a score of 56 out of 100 among PHC centers and 49 out of 100 among PHC units. The highest mean score was in Al-Wahat District which has an overall diagnostic capacity mean score of 80 out of 100, while the lowest mean score was in Albetnan District which has an overall mean score of 39 out of 100 (Figure 3.26).

**Figure 3.26: Diagnostic capacity mean score by district**

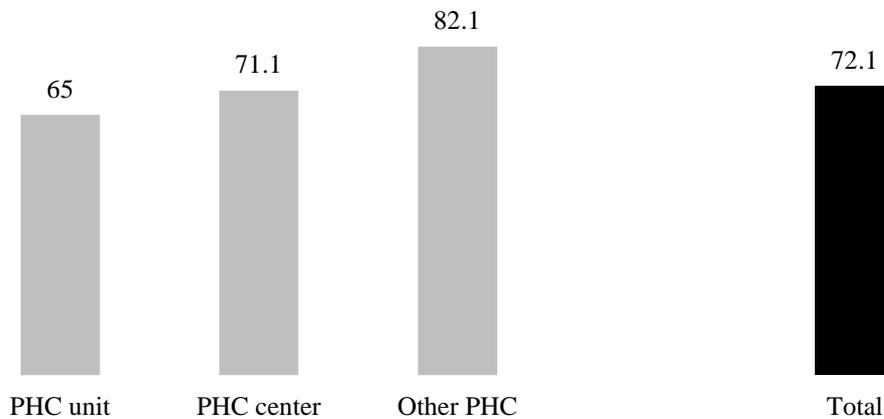


### 3.5 Laboratory Equipment Capacity

Facilities were assessed on the availability of the following 7 equipments: microscope, centrifuge, electric oven, refrigerator temperature control, haematocrite centrifuge, spectrophotometer, and sensitive balance. Table A3.5 show laboratory equipment capacity by District and facility type. It has to be mentioned that all facilities in Ajdabia (9 facilities) didn't have any of the 7 equipments available and thus had a mean score of 0 out of 100 (Figure 3.27).

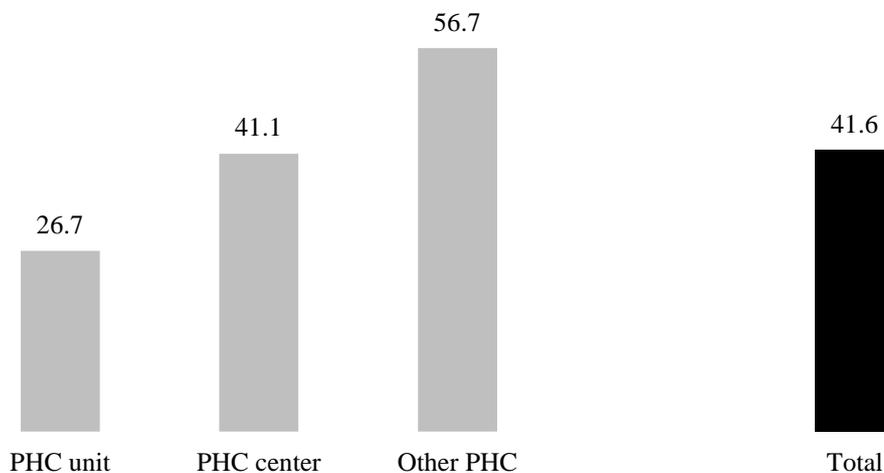
The microscope is the most widely available laboratory equipment as it was available in 72% of the health facilities. By facility type, the microscope was available in 82% of other PHC facilities, 71% of PHC centers and 65% of PHC units (Figure 3.27). The microscope was available in all facilities in Almarege, Al-Kufra, Ghat and Al-Jufra.

**Figure 3.27: Laboratory equipment capacity by facility type (Microscope)**



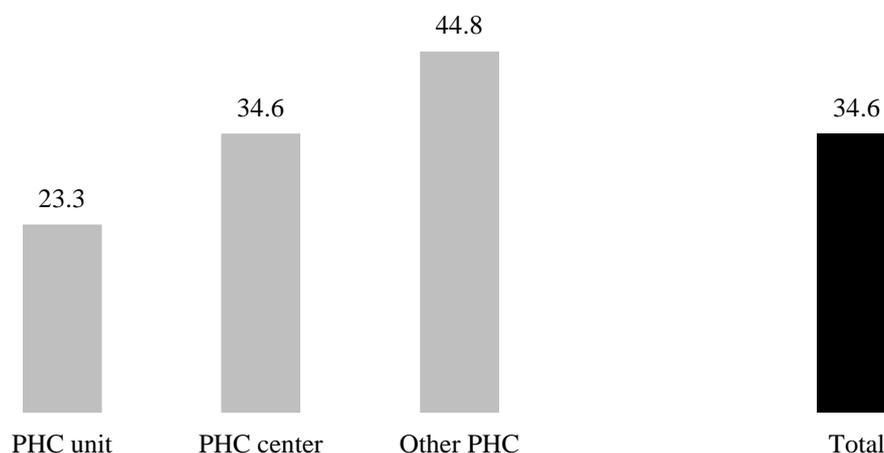
The second most available equipment was the refrigerator temperature control which was available in 42% of the health facilities. The refrigerator temperature control was available in 57% of other PHC facilities, 41% of PHC centers, and 27% of PHC units (Figure 3.28). All facilities in Al-Jufra had the refrigerator temperature control compared with 10% of the facilities in Al-Gebal Elgharbi.

**Figure 3.28: Laboratory equipment capacity by facility type (Refrigerator Temperature Control)**



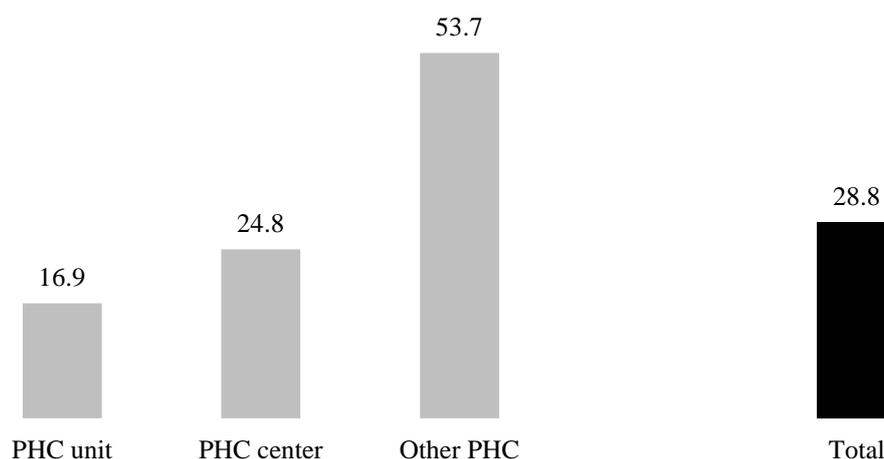
Spectrophotometer was available in around one-third of the health facilities (35%). By facility type, the spectrophotometer was available in 45% of other PHC facilities, 35% of PHC centers, and 23% of PHC units (Figure 3.29). Eighty percent of the facilities in Al-Jufra had this equipment available compared with none of the facilities in Al-Wahat and Wadi-Alshati.

**Figure 3.29: Laboratory equipment capacity by facility type (Spectrophotometer )**



Overall the centrifuge was available in 29% of the health facilities. It was available in 54% of other PHC facilities which is more than twice the percentage reported among PHC centers (25%) and more than three times the percentage reported by PHC units (17%) (Figure 3.30). The centrifuge was available in all health facilities in Al-Kufra compared with only 12% of the facilities in Alzawea.

**Figure 3.30: Laboratory equipment capacity by facility type (Centrifuge )**

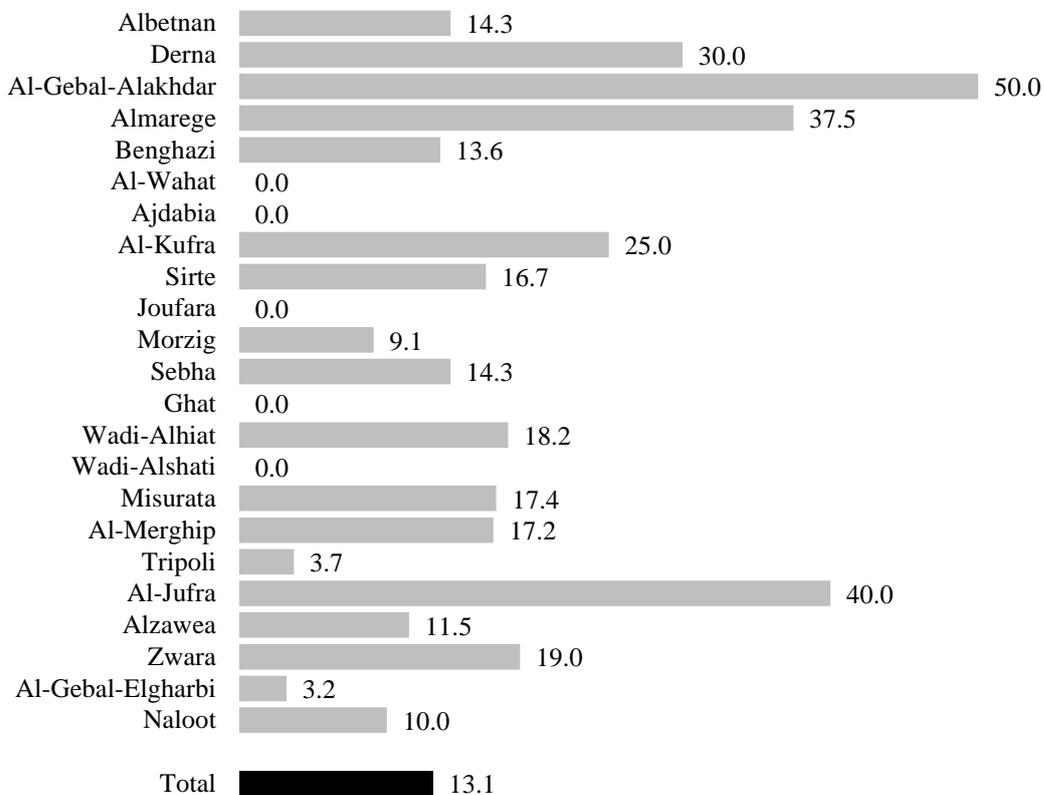


Results showed that the electric oven was available in 28% of the health facilities. By facility type, the electric oven was available in 52% of other PHC facilities which is more than twice the percentage reported among PHC centers (25%) and more than three times the percentage reported by PHC units (15%). All facilities in Al-Kufra had the electric oven available compared with only 10% of the facilities in Naloot.

Haematocrite centrifuge was available in slightly more than 1 in 10 health facilities (13%). Other PHC facilities were by far more likely than PHC centers and PHC units to have the haematocrite

centrifuge available (33%, 10% and 5% respectively). None of the facilities in Al-Wahat, Joufara, Ghat, and Wadi-Alshati had the haematocrite centrifuge available, however it was available in half the facilities in Al-Gebal-Alakhdar (Figure 3.31).

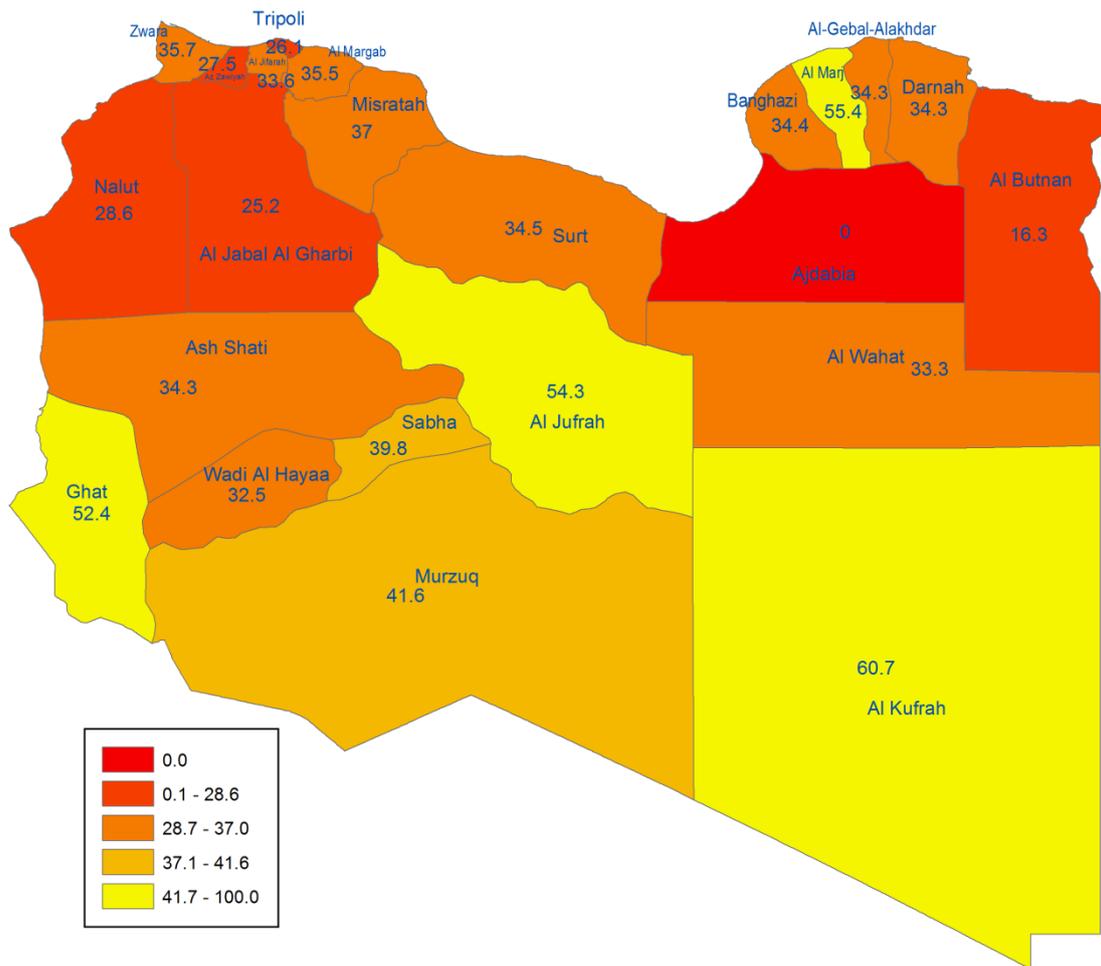
**Figure 3.31: Laboratory equipment capacity by district (Haematocrite Centrifuge)**



Overall, only 9% of the health facilities had a sensitive balance. None of the PHC units had a sensitive balance, however it was available in 24% of other PHC facilities and 7% of PHC centers. By District, one-third of the facilities in Al-Wahat had a sensitive balance compared with none of the facilities in Al-Kufra, Morzig, and Wadi-Alshati.

The mean score for the capacity of the 7 laboratory equipment was calculated and results are shown in Table A3.5. Overall the laboratory equipment mean score was 33 out of 100. Reflecting the previous results, the other PHC facilities had the highest mean score (49 out of 100) followed by PHC centers (31 out of 100) and PHC units (21 out of 100). By District, Al-Kufra had the highest mean score (61 out of 100) followed by Almarege (55 out of 100) (Figure 3.32).

**Figure 3.32: Laboratory equipment capacity by district (Mean Score)**

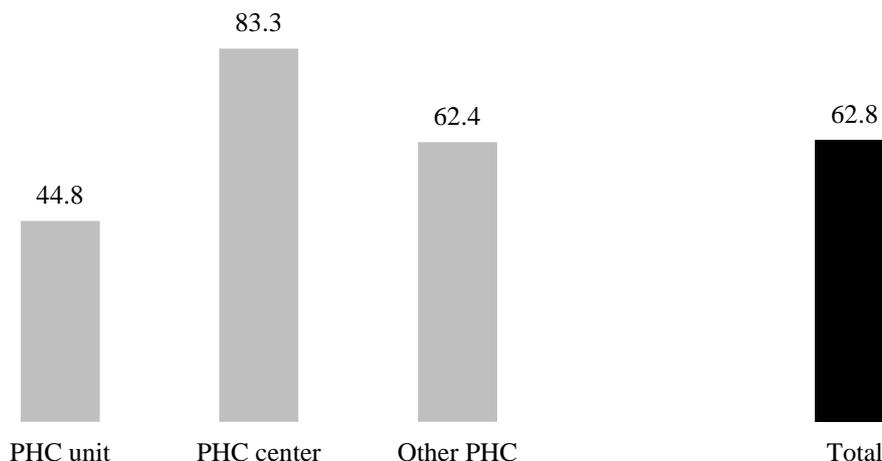


### 3.6 Essential medicines

Health facilities must be well-stocked with essential medicines in order to deliver health services. The essential medicines domain consists of tracer items on 8 essential medicines namely: antibiotics for adults, antibiotics for children, medicines acting gastrointestinal antacids antiulcer, cardiac vascular, anti hypertensive, anti asthmatic therapy, analgesics antipyretics non-steroidal anti inflammatory, and oral diabetic pills. Table A 3.6 shows the availability of essential medicines by District and facility type.

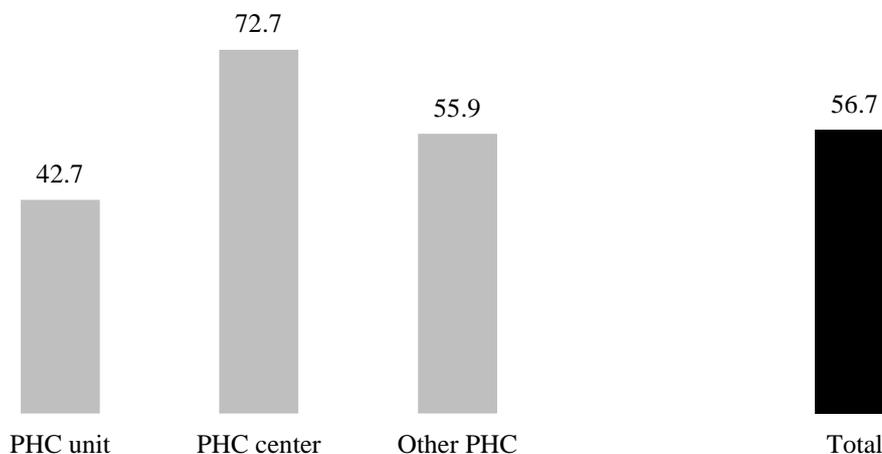
The most widely available medicines were both antibiotics for adults and children (63% each). By facility type, the antibiotics were more likely to be available in PHC centers (more than 80%) than other PHC facilities (around 6 in 10 facilities) or PHC units (less than half the facilities) (Figure 3.33). These two medicines were available in less than half the health facilities in Joufara, Morzig, and Al-Gabal Elgharbi.

**Figure 3.33: Availability of essential tracer medicines by facility type (Antibiotics Adults)**



Data showed that analgesics antipyretics non-steroidal anti inflammatory were available in 57% of the health facilities with the highest percentage reported by PHC centers (73%) followed by other PHC facilities (56%) and PHC units (43%) (Figure 3.34). These medicines were available in more than 9 in 10 health facilities in Al-Wahat, Sebha, and Wadi-Alhiat which is more than three times the percentage in Jofara (31%).

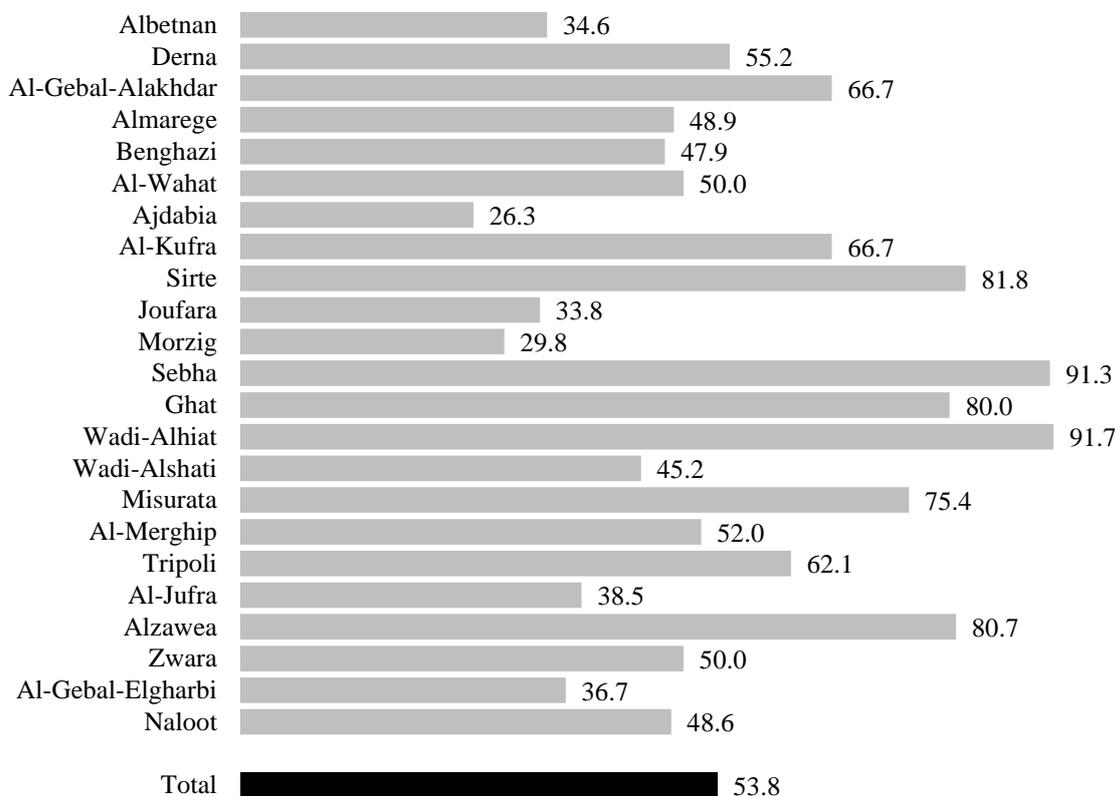
**Figure 3.34: Availability of essential tracer medicines by facility type (Analgesics Antipyretics Nonsteroidal Antiinflammator)**



Overall, medicines acting gastrointestinal antacids antiulcer were available in 55% of the health facilities. By facility type they were available in 71% of the PHC centers compared with 61% of other PHC facilities and only 40% of PHC units. Health facilities in Sebha were the most likely to have these medicines (91%), while health facilities in Morzig were the least likely to have them.

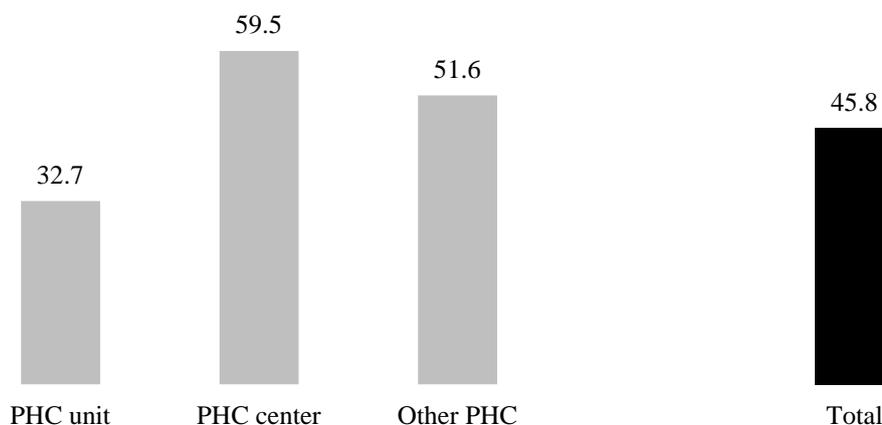
Anti hypertensive was available in 54% of health facilities. This medicine was available in 71% of PHC centers compared with 58% of other PHC facilities, and 38% of PHC units. More than 90% of the health facilities in Sebha and Wadi-Alhiat had anti hypertensive available compared with 26% of the health facilities in Ajdabia (Figure 3.35).

**Figure 3.35: Availability of essential tracer medicines by district (Anti Hypertensive)**



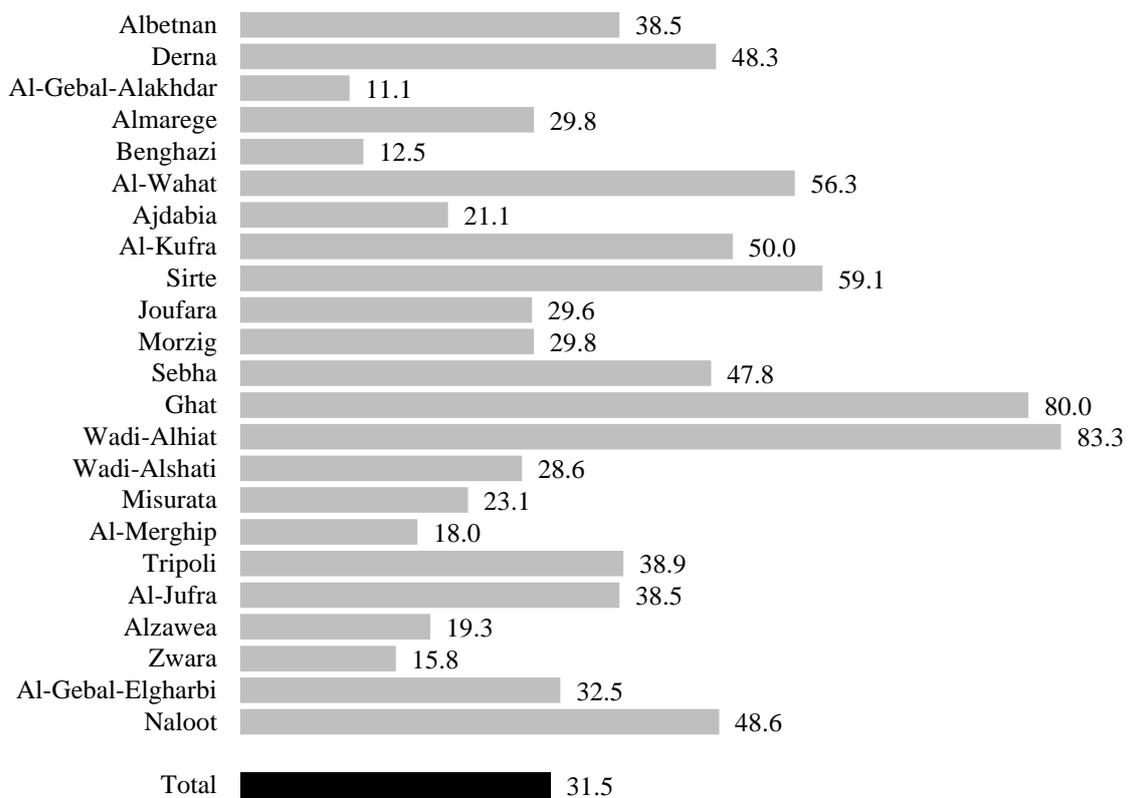
Overall, less than half the health facilities (46%) had anti-asthmatic therapy available. By facility type, it was more likely to be available in PHC centers (60%) than other PHC facilities (52%) and PHC units (33%) (Figure 3.36). More than 90% of the health facilities in Sebha and Wadi-Alhiat had anti hypertensive available compared with only 19% of the health facilities in Al-Gebal-Elgharbi.

**Figure 3.36: Availability of essential tracer medicines by facility type (Antiasthmatic Therapy)**



Oral diabetic pills were available in less than one-third of the health facilities (32%). This medicine was available in 46% of PHC centers compared with 42% of other PHC facilities, and only 17% of PHC units. By District, the highest percentage was in Wadi-Alhiat (83%) while the lowest percentage was in Al-Gebal-Alakhdar (11%) (Figure 3.37).

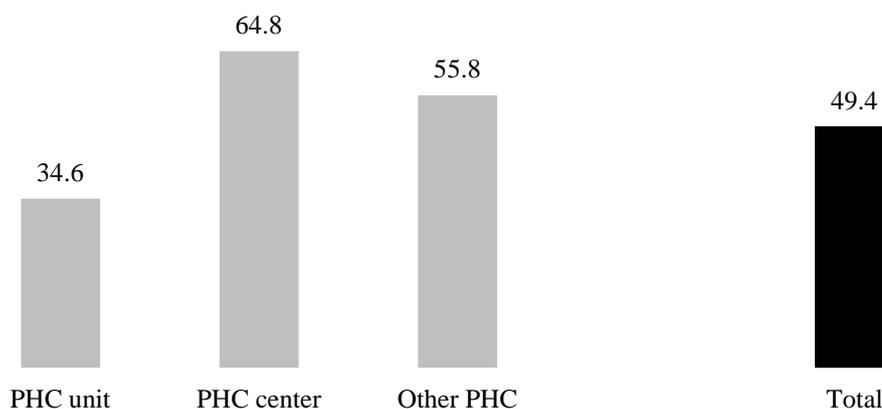
**Figure 3.37: Availability of essential tracer medicines by district (Oral Diabetic Pills)**



Overall, cardiac vascular medicine was available in 27% of the health facilities. By facility type, it was more likely to be available in other PHC facilities (52%) than PHC centers (34%) and PHC units (15%). By District, the highest percentage was in Sebha (61%) while the lowest percentage was in Morzig (9%).

The mean score for the availability of the essential tracer medicines was calculated and results are shown in Table A3.6. Overall the medicines mean score was 49 out of 100. Reflecting the previous results, the PHC centers had the highest mean score (65 out of 100) followed by other PHC facilities (56 out of 100) and PHC units (35 out of 100) (Figure 3.38). By District, both Sebha and Wadi-Alhiat had the highest mean score (83 out of 100) while Morzig had the lowest mean score (30 out of 100).

**Figure 3.38: Availability of essential tracer medicines by facility type (Medicines Mean Score)**





## 4. Specific Services Availability and Readiness

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In addition to assessing the general service readiness of facilities, the SARA measured the availability and readiness of health facilities to offer specific health interventions through consideration of tracer items that include trained staff, guidelines, equipment, diagnostic capacity, and medicines and commodities. For Libya, the following key health services were considered:

1. Maternal, neonatal, and child health
  - Antenatal care
  - Basic emergency obstetric care
  - Comprehensive emergency obstetric care
  - Child curative care and growth monitoring
  - Child immunization
2. HIV/AIDS
  - HIV counselling and testing
  - Preventing mother-to-child transmission (PMTCT)
  - Adolescent health services
  - Tuberculosis
3. TB services
4. Cardiovascular disease
5. Diabetes
6. Surgical services
  - Basic surgery
  - Comprehensive surgery
  - Blood transfusion

For each service, the proportion of facilities offering the service and the density of facilities offering the service per 10,000 population were computed as measures of the availability of the service. In addition, for facilities offering the service, readiness to offer the service was assessed based on the presence of a number of tracer items in the following domains:

- Guidelines and trained staff
- Equipment
- Laboratory capacity
- Medicines and commodities

The tracer items are considered to be a minimum set of items that are a prerequisite for the facility to be able to offer an adequate level of care. As for general service readiness, a readiness score was computed for each health service by taking the mean of the availabilities of the tracer items.

### 4.1 Antenatal Care

Antenatal care (ANC) is vital for optimal health outcomes for the mother and infant. Antenatal care is essential to identify and treat problems during pregnancy such as anemia and hypertension, as well as for preventive care such as folic acid and iron supplementation, and tetanus toxoid vaccination.

The World Health Organization (WHO) recommends that in the absence of complications a woman should have at least four ANC visits, the first during the first trimester.

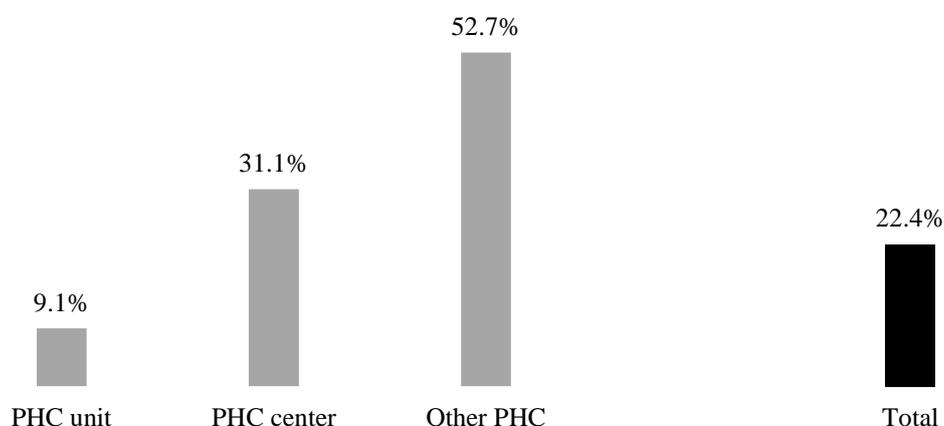
Therefore, all public health facilities at the various levels of health care are mandated to offer ANC services.

#### 4.1.1 Antenatal care service availability

Figure 4.1 shows the percentage of facilities offering antenatal care services by facility type. Key antenatal care services include iron supplementation, folic acid supplementation, tetanus toxoid vaccination, monitoring for hypertensive disorder and health education to increase awareness about ANC.

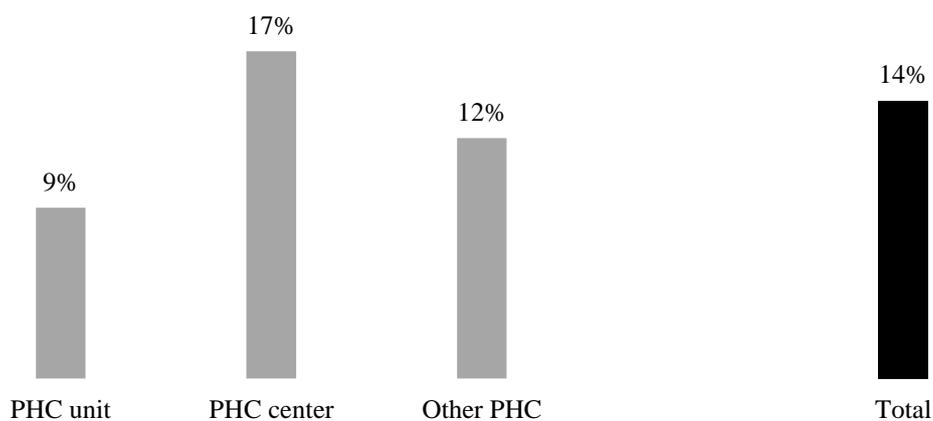
Availability of antenatal care services was generally high. Overall, only 22% of health facilities included in the assessment offered ANC services. The percentage offering antenatal care services was 9% of PHC units and 31% of PHC centers while it is more than 50% among other PHC facilities.

**Figure 4.1: Availability of antenatal care services by facility type**



The percentage of health facilities offering iron and folic acid supplementation was 91% with limited differences by facility type. Percentage of having tetanus toxoid vaccination was much lower (only 14%) as shown in Figure 4.2. The percentage of health facilities monitoring hypertension was 86% and 71% of the health facilities had for health education to increase awareness about ANC (Table A.4.1.1 ).

**Figure 4.2: Availability of tetanus toxoid vaccination by facility type**



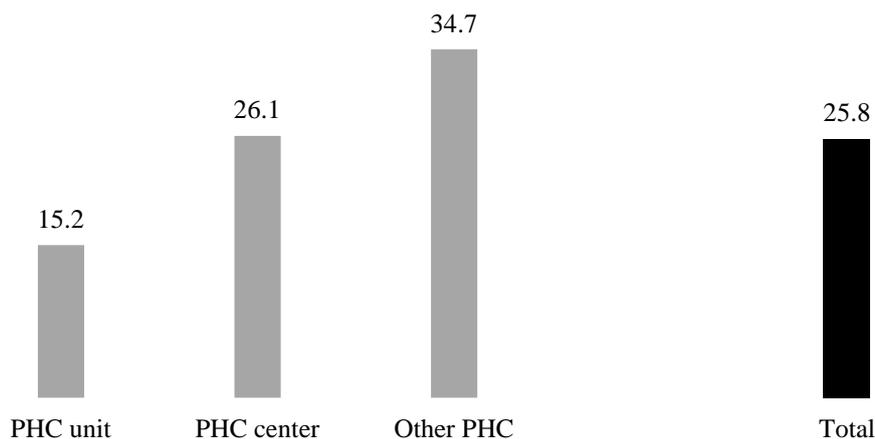
#### 4.1.2 Antenatal care service readiness

Facilities offering ANC services (233 facilities total) were also assessed on their readiness to provide the ANC service based on the availability of: trained service providers, ANC Guidelines

and Blood Pressure Apparatus (Table A.4.1.2 ).

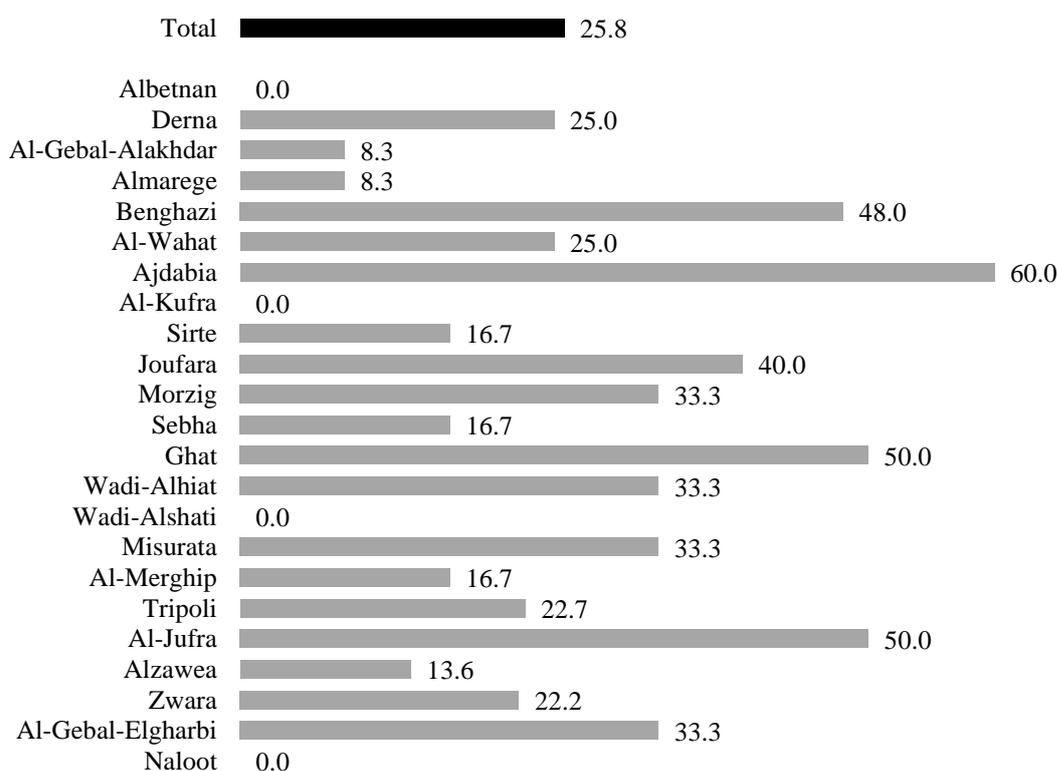
Slightly more than a quarter of service providers (26%) received at least one trained staff antenatal care, this percentage was the highest (35%) among providers of other PHC facilities Figure 4.3. ANC Guidelines were found only in 19 health facilities. Almost three quarters of the health facilities had Blood Pressure Apparatus and this percentage was the highest among PHC units (76%). Additionally, almost three fourths of health facilities provide the Haemoglobin test, the highest percentage is observed among other PHC facilities(87%).

**Figure 4.3: Availability of at least one trained staff antenatal care by facility type**



Percentage of services providers received at least one trained staff antenatal care varies by district from none of providers received training to three fifths of providers in Ajdabia (Figure 4.4).

**Figure 4.4: Availability of at least one trained staff antenatal care by district**



## 4.2 Basic Obstetric Care

Improving access to emergency obstetric care has been shown to be an effective strategy for the reduction of maternal and infant mortality, in which complications of pregnancy and childbirth are identified and referred to a higher level if necessary. Basic emergency obstetric care (BEmOC) includes capacity to provide the following seven signal functions: (1) parenteral administration of antibiotics, (2) parenteral administration of oxytocics, (3) parenteral administration of anticonvulsants, (4) assisted vaginal delivery, (5) manual removal of placenta, (6) manual removal of retained products, and (7) neonatal resuscitation.

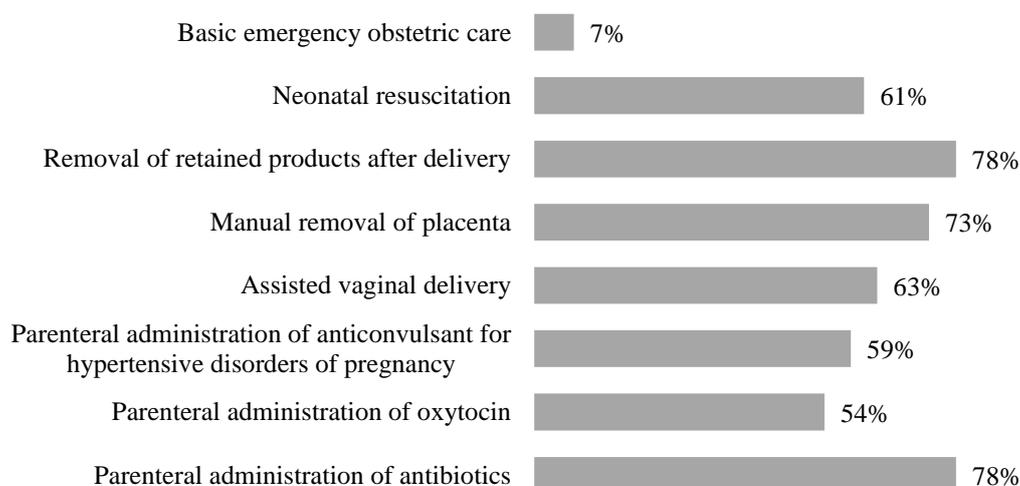
### 4.2.1 Basic obstetric care service availability

Table A 4.2.1 shows the percentage of health facilities offering basic emergency obstetric and newborn care services by district and facility type. Obstetric care services include normal delivery services (not shown in the table A 4.2.1), parenteral administration of antibiotics, parenteral administration of oxytocics, parenteral administration of anticonvulsants, assisted vaginal delivery, manual removal of placenta, manual removal of retained products, and neonatal resuscitation. According to joint WHO/UNFPA/UNICEF guidelines<sup>5</sup>, a facility is considered to offer basic emergency obstetric care if it has offered the last seven signal functions in the past 3 months.

Approximately 4% of health facilities provide delivery care (normal delivery, basic emergency obstetric care and/or newborn care services). Mainly this service is provided in other PHC facilities as around one fourth reported providing delivery care, While 4% of PHC centers and less than one percent of PHC units are providing this care. All the BEmOC signal functions were conducted only by 7.3% of the facilities all of them are "other PHC facilities". None of the PHC units and Centers conduct all the BEmOC signal functions. Of the six BEmOC signal functions that were included in the assessment, parenteral administration of antibiotics was offered at 78% of facilities, whereas parenteral administration of anticonvulsants was less than 60% of facilities and parenteral administration of oxytocin was around 54%. Slightly less than two thirds of the facilities conduct assisted vaginal delivery. Slightly more than 70% conduct manual removal of placenta and slightly less than 80% conduct removal of retained products after delivery. Neonatal resuscitation was available in 61% of the facilities (Figure 4.5).

There was considerable variation across district, with a higher proportion of facilities in Joufara (50%), Sirt (one third) and Sebha (20%) offering obstetric care services compared to those in other district.

**Figure 4.5: Available of basic obstetric care service**



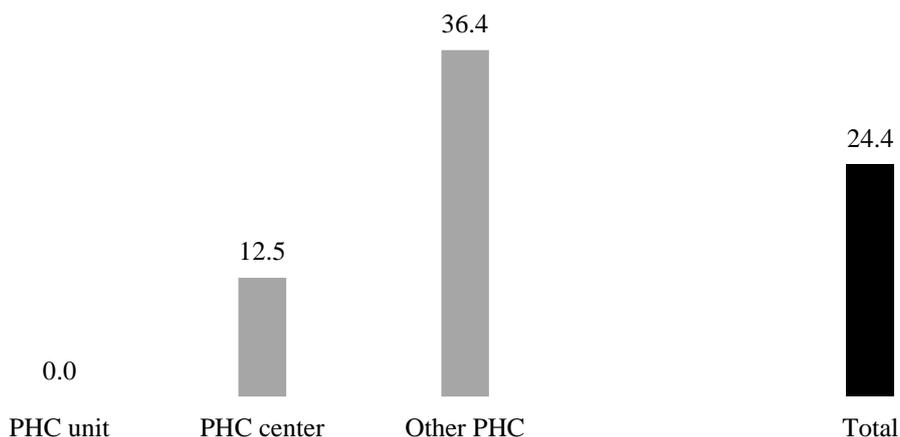
<sup>5</sup> World Health Organization, 2009. Monitoring Emergency Obstetric Care: a handbook. Geneva, World Health Organization. [http://whqlibdoc.who.int/publications/2009/9789241547734\\_eng.pdf](http://whqlibdoc.who.int/publications/2009/9789241547734_eng.pdf)

### 4.2.2 Basic obstetric care service readiness

Facilities offering delivery care (41 facilities total) were assessed on their readiness to offer basic obstetric care services based on the availability of: trained service providers, IMPAC Guidelines, emergency transport and latex gloves.

Slightly less than a quarter of service providers (24%) received any MCH training in the last two years, this percentage was the highest (36%) among providers of other PHC facilities(Figure 4.6). However, none of the PHC units had service provides who received any MCH training in the last two years.

**Figure 4.6: Received any training MCH by type of facility**



IMPAC Guidelines were found only in 12% of health facilities, most of them in PHC Centers. Sixty-one percent of the health facilities had emergency transport and this percentage was the highest among "other PHC facilities" (82%). More than 90% of facilities had latex gloves (Table A 4.2.2).

### 4.3 Child Health Services: Routine Child Immunization

Child immunization is one of the most cost-effective health interventions, providing protection to children against vaccine-preventable diseases. The Expanded Programme on Immunization (EPI) has been notably successful in Libya, achieving high immunization coverage rates for measles, DPT, Polio and BCG.

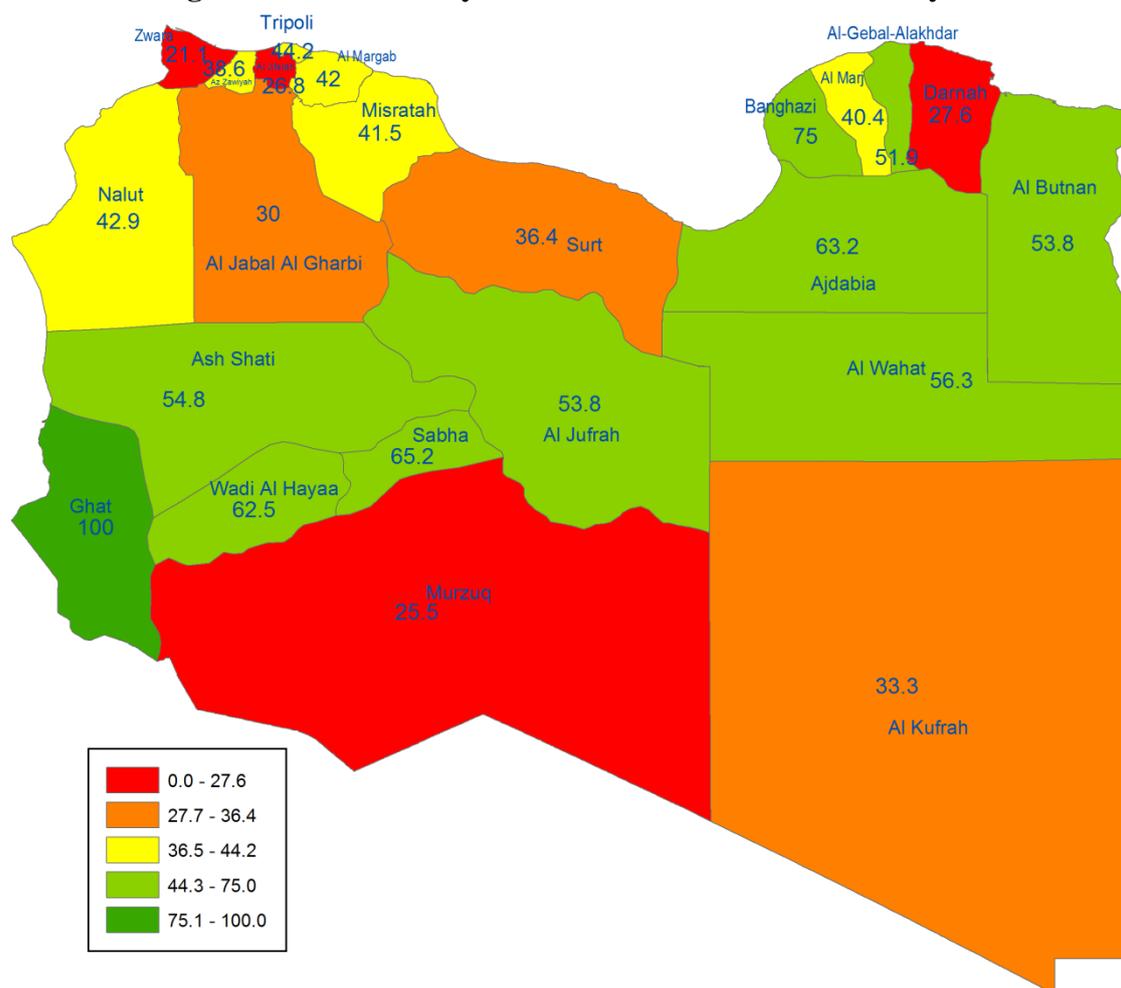
#### 4.3.1 Child immunization services availability

Table A 4.3.1 shows the percentage of facilities offering child immunization services by district and by facility type. Immunization services are provided in slightly more than 40% of health facilities.

All facilities that offered child immunization services offered measles, DPT-HiB-HepB, polio and BCG immunizations, showing a remarkably consistent provision of immunization services that is above 93% for all vaccines except measles which is less than 40%.

The service is provided in more than two thirds of PHC centers and in one third of PHC units and in less than one fifth of PHC units. There is a great variation in the availability of the immunization services among the district. It is the least in Zwara (21%) and highest in Benghazi (75%) (in Ghat it is 100% but the number of facilities in this District is only five) (Figure 4.7) .

**Figure 4.7: Availability of child immunization services by district**



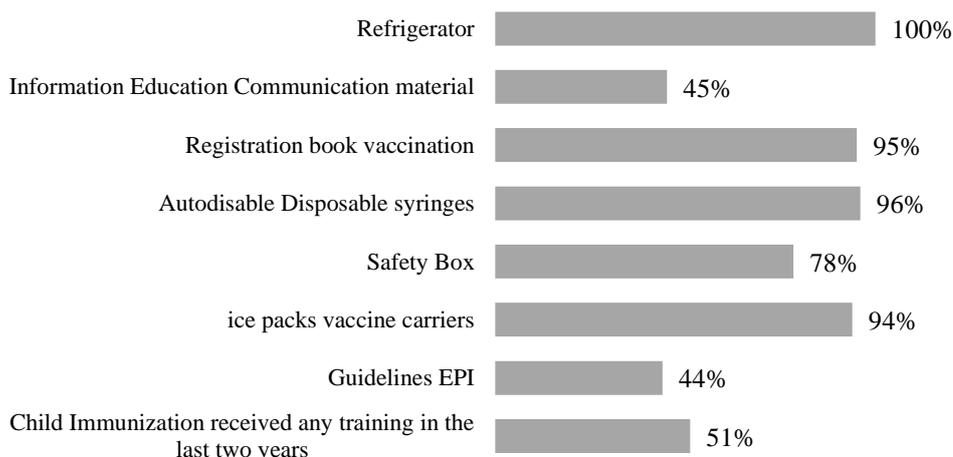
### 4.3.2 Child Immunization Services Readiness

Facilities offering child immunization services (428 facilities) were assessed on their readiness to provide the service based on the availability of: staff trained in EPI, guidelines for EPI, ice packs vaccine carrier, safety box, syringes (standard disposable or auto-destruct), registration vaccination book, Information Education Communication (IEC) materials, refrigerator and vaccine carriers.

Almost all of facilities had refrigerators (99.8%). This is true for all types of facilities.

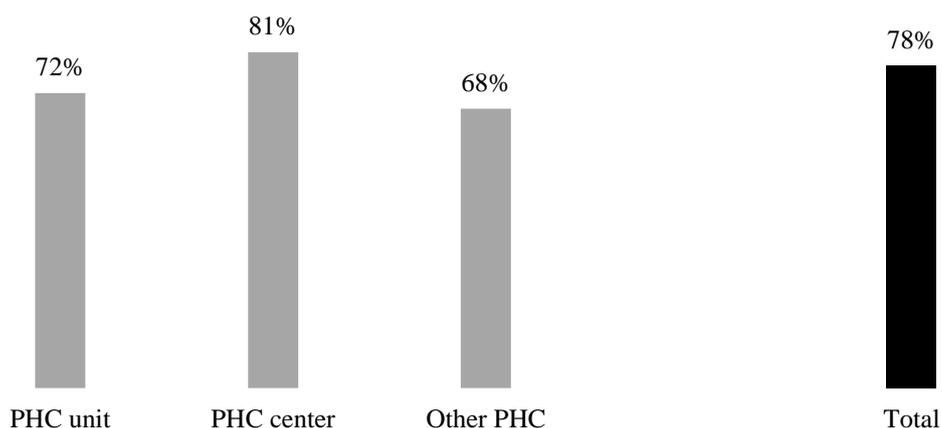
Most of the facilities (more than 94%) had: ice packs vaccine carriers, syringes (standard disposable or auto-destruct), and registration vaccination books. In general, these items are more available in PHC centres than PHC unites and the least in "Other PHC facilities" (Table A 4.3.2).

**Figure 4.8: Child immunization services readiness**



Less than 80% of the facilities had safety boxes. It is more available in PHC centres (81%) than in PHC units (72%) or in "Other PHC facilities" (68%) (Figure 4.9).

**Figure 4.9: Availability of safety box by type of facility**



Only half or less of the facilities had trained staff, guidelines for EPI or IEC materials. Trained staff and EPI guidelines are more available in "Other PHC facilities" than in PHC units and Centres.

#### **4.4 Preventive and Curative Care for Children Under Five Services**

Children under the age of 5 account for the majority of outpatient consultations at public facilities. Diagnosis and management of childhood illnesses as well as growth monitoring should be offered at PHC facilities. Smaller facilities are expected to diagnose and refer severe cases of illness and malnutrition. IMCI is a proven strategy for increasing effective child survival interventions that address the major causes of under-five morbidity and mortality. MOH has intensified efforts towards implementation of IMCI including interventions such as promotion and support for nutrition, immunization, and management of common childhood illnesses.

##### **4.4.1 Preventive and curative care for children under five service availability**

Table A 4.4.1 shows the percentage of facilities offering preventive and curative care for children under five services by district and by facility type. Key child health services include diagnosis and treatment of child malnutrition., vitamin A supplementation, provide ORS and Zinc supplementation to children with diarrhea and child growth monitoring.

Figure 4.10 shows that overall slightly more than half of facilities (55%) provide child growth monitoring, 84% provide ORS and zinc supplementation to children with diarrhea, while 68% provide vitamin A supplementation, and 77% provide diagnostic and/or treatment for child malnutrition.

**Figure 4.10: Availability of preventative and curative care for children under 5 service**



Availability of preventive and curative care child health services was generally very low across district. Services are provided in more than half of the facilities in only 4 district. The best coverage is in Al-Gabal Alakhdar where almost three quarters of facilities provide the service. Services are provided in almost one third of the facilities or less in 16 district.

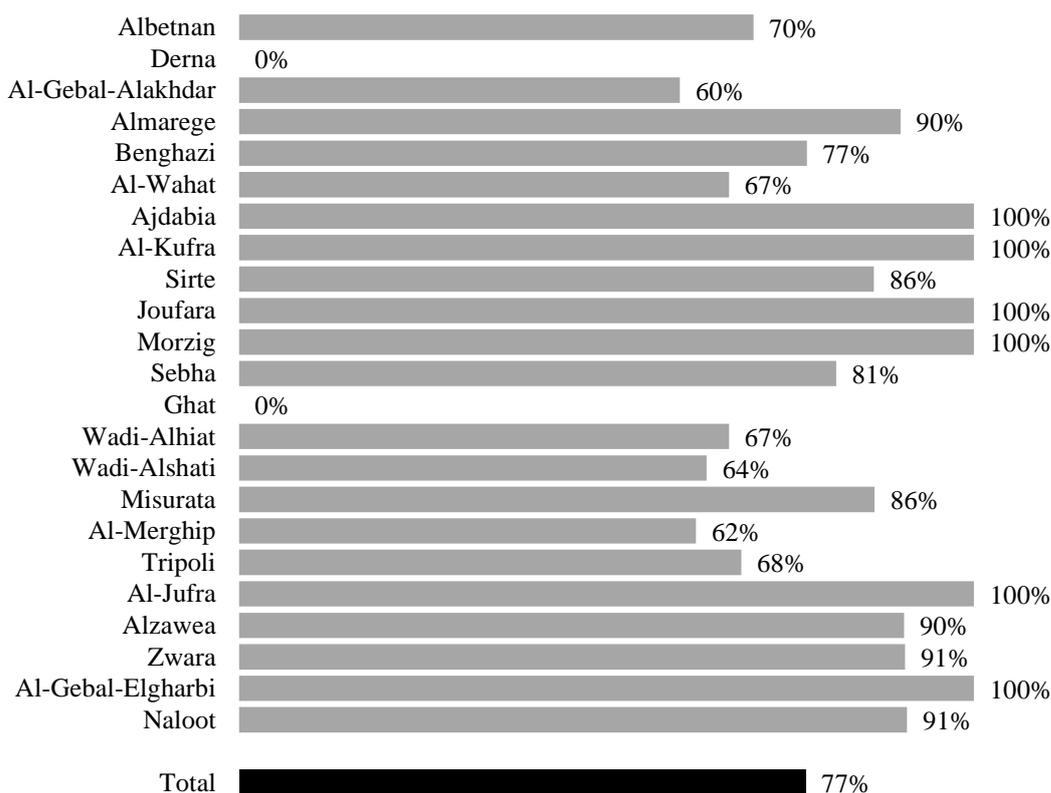
Slightly more than three quarters of facilities provide "diagnosis and treatment of child malnutrition" while 100% of facilities provide this service in six district.

Almost two thirds of facilities provide vitamin A supplementation service, while this service is provided in 100% of facilities in 3 district.

Almost 84% of facilities provide ORS and Zinc supplementation to children with diarrhea, while 100% of facilities provide this service in 5 district.

Slightly more than half of facilities monitor child growth while this service is provided in 100% of facilities in 3 district.

**Figure 4.11: Diagnose and/or treat child malnutrition by district**

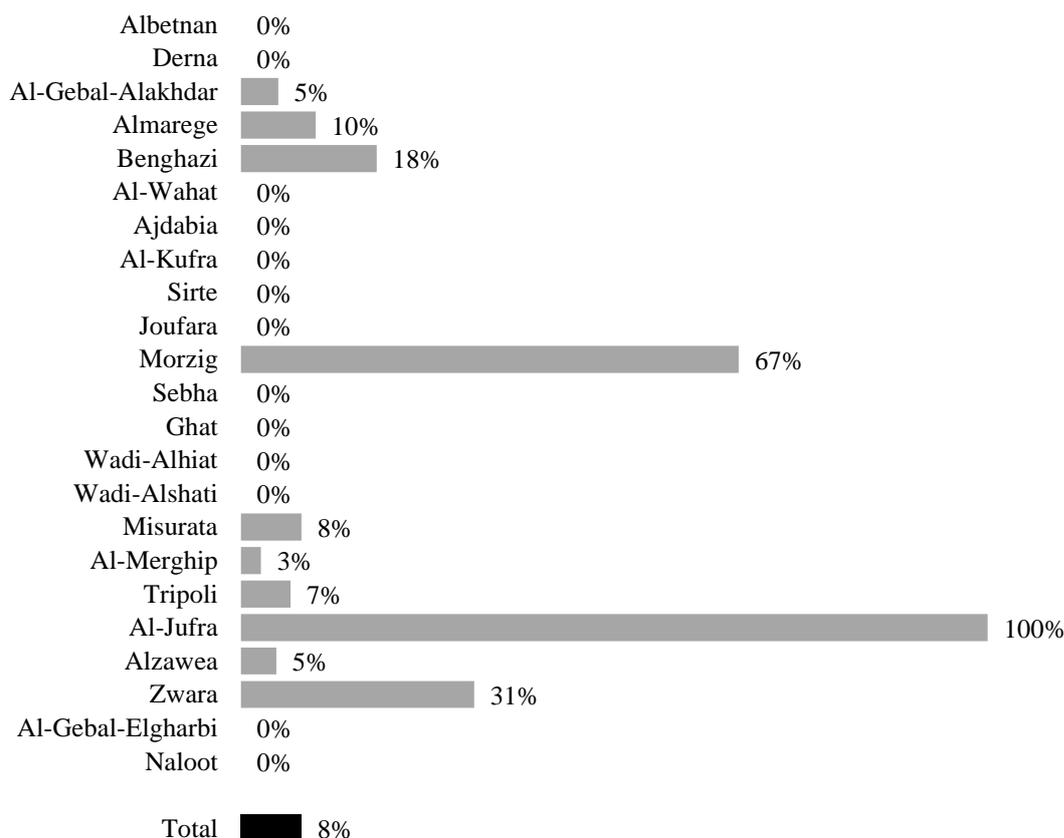


**4.4.2 Preventive and curative care for children under five service readiness**

Facilities offering child health services (345 facilities) were also assessed on their readiness to provide curative care and growth monitoring for children based on the availability of: staff trained in Integrated management of childhood illness (IMCI) in the past two years, guidelines for (IMCI), Guidelines growth monitoring, adult – pediatric scale, length – height measuring, thermometer, stethoscope, hemoglobin test, stool examination, provide ORS and zinc supplementation to children with diarrhea.

Only 8% of facilities had trained staff in IMCI in the last 2 years. The percentage is 9.5 in PHC centers, 8.1 in PHC units and the least among "other PHC facilities" 2.2% (Table A 4.4.2). As Figure 4.12 shows that most of the district had no or less than 10% trained staff.

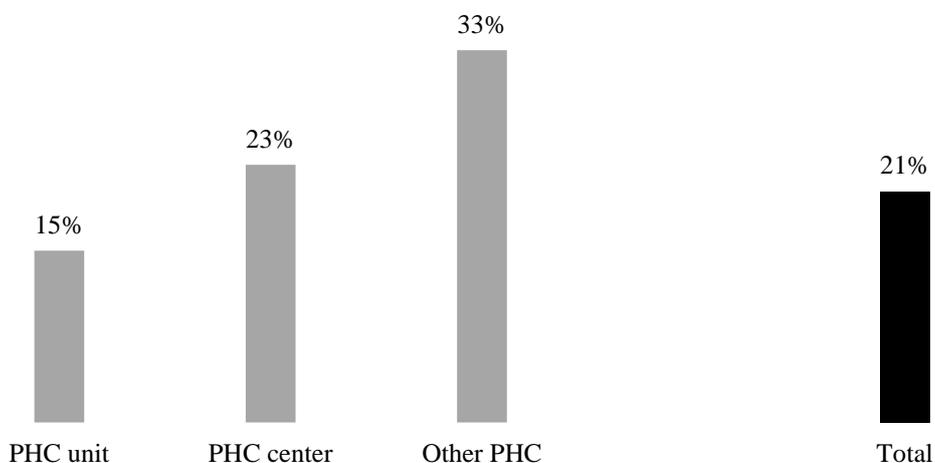
**Figure 4.12: IMCI Training in the last two years by district**



Slightly more than one fifth of the facilities had IMCI Guidelines (Figure 4.13). The guidelines were available in one third of other PHC facilities, in almost one fourth of the PHC centers and in only 15% of the PHC units. IMCI guidelines were not available in 18 district.

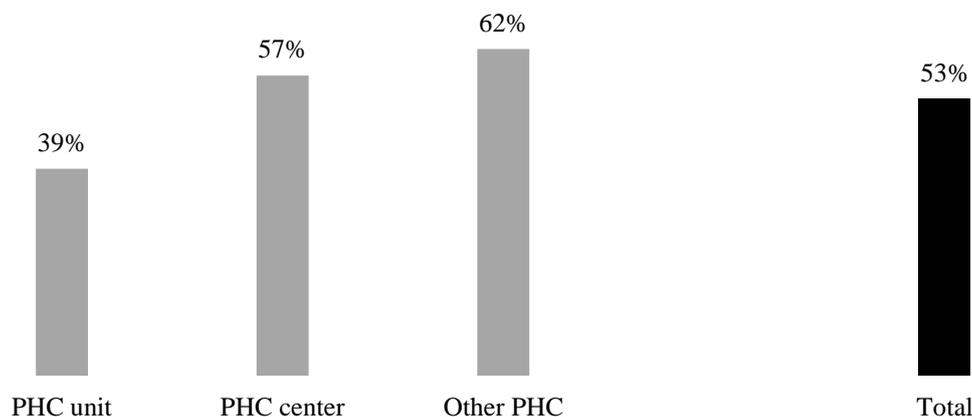
Slightly less than two fifth of the facilities had IMCI Guidelines. All these guidelines were available only in PHC centers (44%) and "Other PHC facilities" (50%), while there were no guidelines in any PHC unit. No growth monitoring guidelines were available in 17 district (Table A 4.4.2).

**Figure 4.13: Availability of IMCI guidelines by facility type**



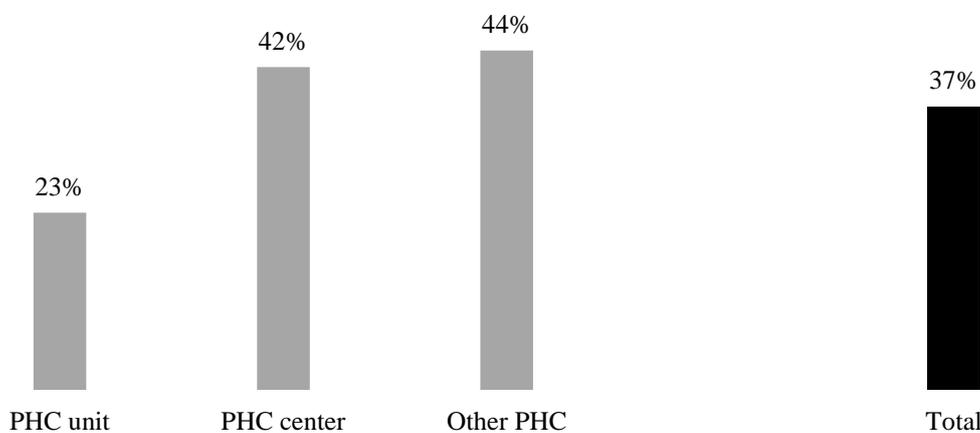
More than half of the facilities had adult pediatric scale. Scales are available in 62% of other PHC facilities; 57% of PHC centers and only in less than 40% of PHC unites (Figure 4.14). Three district had no scales, while 50% or more of the facilities in nine district had no scales.

**Figure 4.14: Availability of adult pediatric scale by facility type**



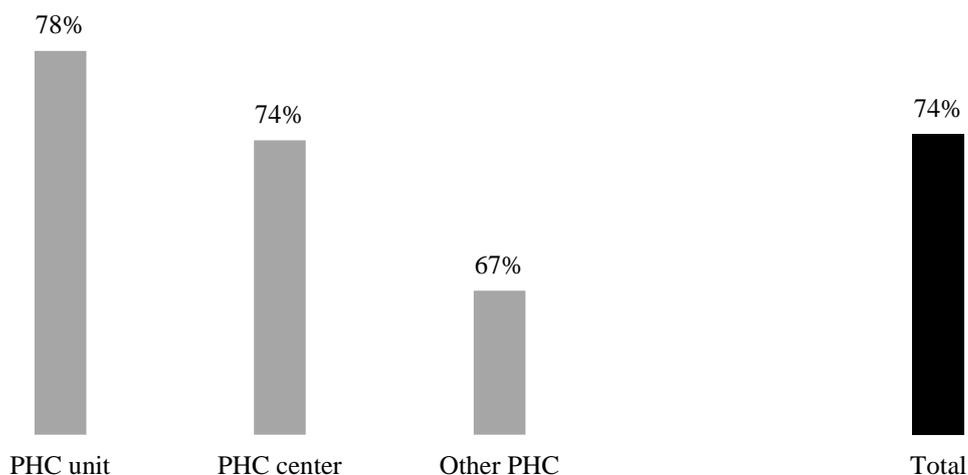
Length – height measuring was only provided in 37% of health facilities (Figure 4.15). This service was provided in 44% of "other PHC facilities", 42% of PHC centers and only 23% of PHC units. This service was not provided in 3 district and in 50% or less of the facilities in 13 district.

**Figure 4.15: Availability of length height measuring by facility type**



Thermometers were available in almost three quarters of health facilities. Thermometers were available in more than three quarters of both PHC unites and PHC centers, while they were available only in two thirds of other PHC facilities (Figure 4.16). Thermometers were available in all the facilities of 4 district and in almost three quarters or more of the facilities of 10 district and less than that in the other district.

**Figure 4.16: Availability of thermometer by facility type**



Stethoscopes were available in more than three quarters of health facilities. Stethoscopes were available in more than three quarters of both PHC unites and PHC centers, while it was available only in less than two thirds of other PHC facilities. Stethoscopes were available in all the facilities of 8 district and in almost three quarters or more of the facilities of 11 district and less than that in the other district (Table A4.4.2).

**Figure 4.17: Availability of stethoscope by facility type**

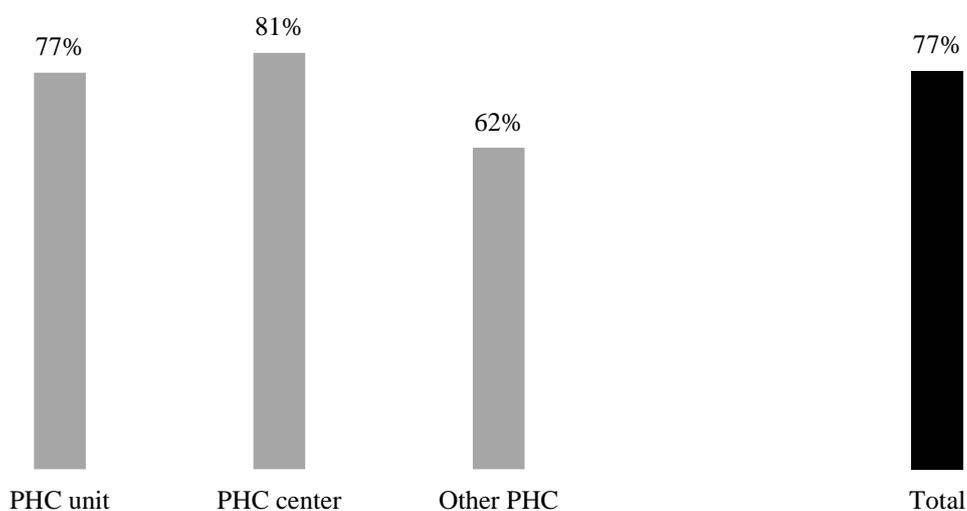
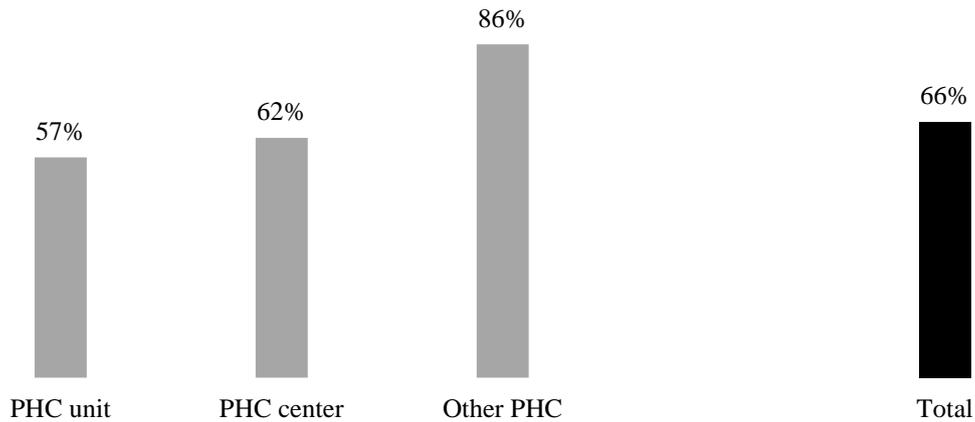


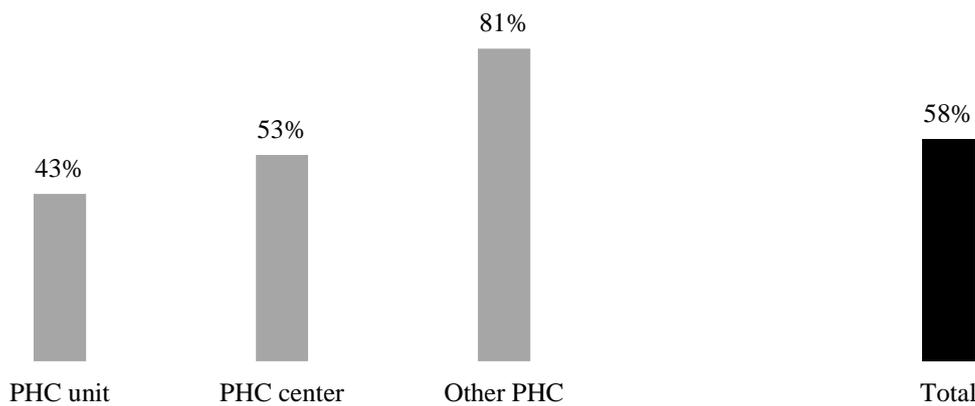
Figure 4.18 shows that hemoglobin tests were available only in less than two thirds of all health facilities. The tests were available in 86% of other PHC facilities, 62% of PHC centers and only 57% of the PHC unites. Hemoglobin tests were available in all facilities of 8 district and in almost two thirds of facilities of 7 district. The test is not available in facilities of 3 district (Table A 4.4.2).

**Figure 4.18: Availability of hemoglobin tests by facility type**



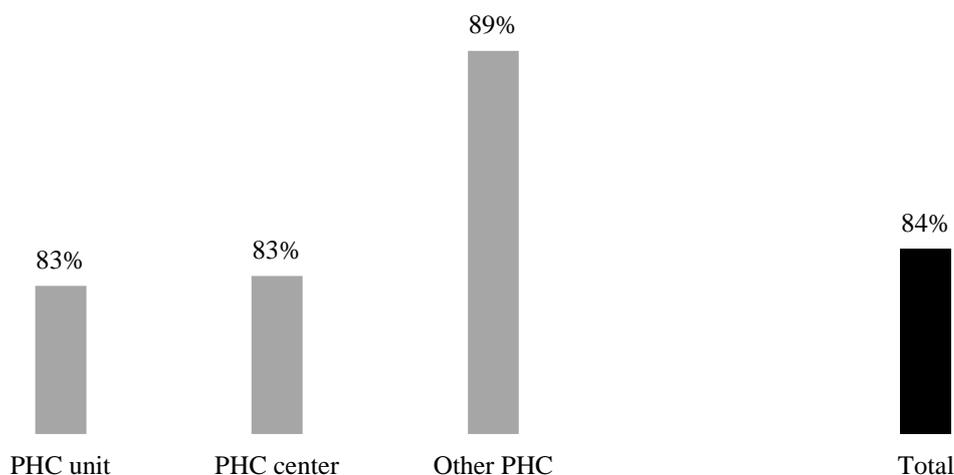
Stool examination was provided in 58% of all health facilities. It was provided in 81% of other PHC facilities, while it was only provided in 53% of PHC centers and 43% of PHC unites (Figure 4.19). Stool examination was provided in all facilities of 8 district and in almost two thirds of facilities of 7 district.

**Figure 4.19: Availability of general Stool Examination by facility type**



Overall, 84% of all health facilities provide ORS and zinc supplementation to children with diarrhea. This service was provided in 89% of other PHC facilities and in 83% of both PHC centers and PHC unites. The service was provided in all facilities of 5 district and in 75% or more of the facilities of the other district except Al-Kufra (1 of 2 facilities) and Derna where the service is not provided in 5 facilities.

**Figure 4.20: Provide ORS and zinc supplementation to children with diarrhea by type of facility**



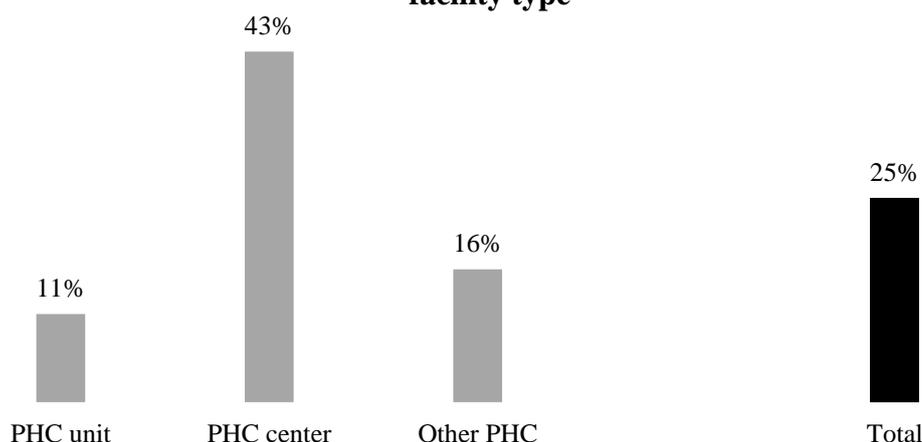
## 4.5 Adolescents Health Services

Young people generally constitute the healthiest demographic group in a population. However, poor health outcomes for young people can result from disease, poor eating habits, and risk behaviors such as smoking, substance abuse, and violence. Health outcomes determine, to a large extent the life opportunities of young people. Health risks facing young people are significantly important to be recognized.

### 4.5.1 Adolescents health services availability

Figure 4.21 shows that adolescents, health services were provided in only one quarter of all health facilities. These services were provided in 43% of PHC centers, 16% of other PHC facilities and only 11% of PHC units. Adolescents, health services are provided in all facilities of Ghat and in almost two thirds of Benghazi facilities and more than half of Sebha facilities, while the percentage is much less in the other District (Table A 4.5.1).

**Figure 4.21: Availability of adolescent health service by facility type**



### 4.5.2 Adolescents health services readiness

Facilities offering adolescents' health services (1041 facilities) were also assessed on their readiness to provide adolescents' health services based on the availability of: staff trained on the provision of adolescents' health services, availability of guidelines on provision of adolescents' health services, staff trained in consent and confidentiality pertaining to adolescent patients,

availability of guidelines on clinical management of adolescents and staff trained in adolescent sexual and reproductive health.

In general, the readiness of the facilities to provide adolescents' health services is poor. Trained staff is available only in less than 2% of the facilities and the guidelines were available only in less than 6% of the facilities. Alzawea, Sebha and Benghazi are relatively the best district in the readiness to provide adolescents' health services (Table A 4.5.2).

### 4.6 Tuberculosis Health Services

Tuberculosis continues to be a major health problem. Considerable progress has been made in recent years in controlling and reducing the spread of TB. The main strategy for TB management and control is the directly observed treatment short course (DOTS). The implementation of DOTS in public health facilities has become an effective way of supporting the monitoring and control of TB.

#### 4.6.1 Tuberculosis health services availability

Table A 4.6.1a shows that Tuberculosis (TB) health services were provided in only 6% of all health facilities. TB health services were provided in 29% of other PHC facilities, 7% of PHC centers and only 1% of PHC unites. In general, TB services are limited all over Libya, however the coverage is relatively better in: Alwahat, Sebha, Alkufra, Ajdabia (between 19% - 16%) (Figure 4.22).

**Figure 4.22: Availability of tuberculosis (TB) health services by district**

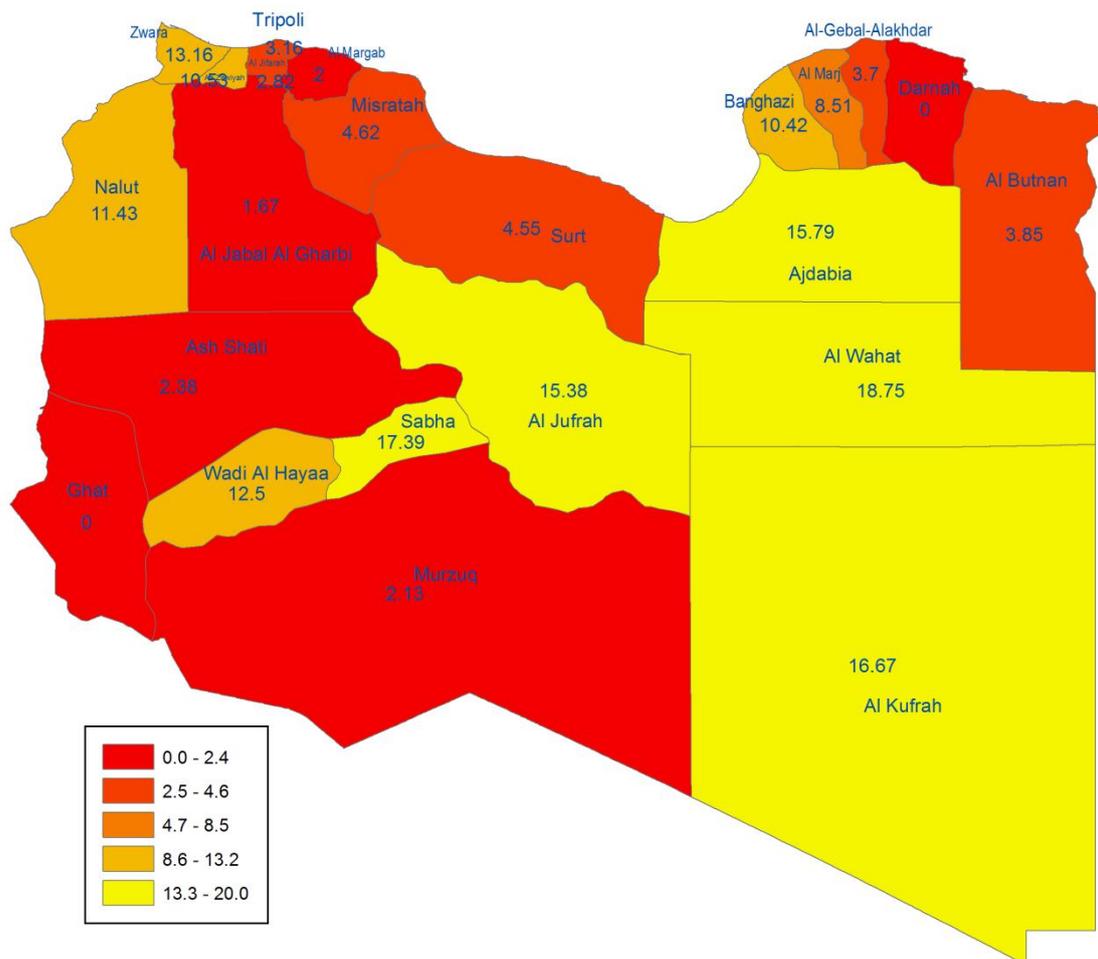


Table A 4.6.1b shows that 75% of providers diagnose TB. All these providers are located only in three district (Al-Kufra, Sebha and Naloot). Providers of Al-Kufra and Sebha use both and X – ray for diagnosing TB, while providers of Naloot use either sputum smear or X – ray for diagnosing TB.

The table shows also that only 25% of providers treat or manage TB patients. All of these providers are working in Al-Kufra. They use the directly observed treatment short course (DOTS) for 2 months and follow up for four months.

#### 4.6.2 Parasitic infestation

Figure 4.23 shows that Anthelmintic and Antiprotozoal Drugs for treatment of parasitic infestations are available only in one third of all health facilities (21 facilities). These drugs are available in 14% of other PHC facilities, 80% of PHC centers and 50% of the PHC unites.

**Figure 4.23: Availability of Anthelmintic and Antiprotozoal Drugs for treatment of parasitic infestations**

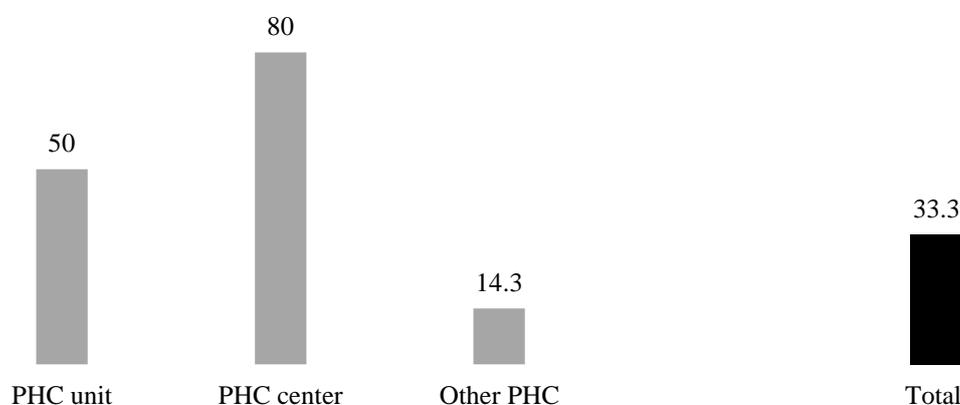


Table A 4.6.2 shows also that Anthelmintic and Antiprotozoal Drugs for treatments of parasitic infestations are available in all facilities of only two District, 75% of the facilities of another two district, two thirds of the facilities of one district and half or less of the facilities of all other District.

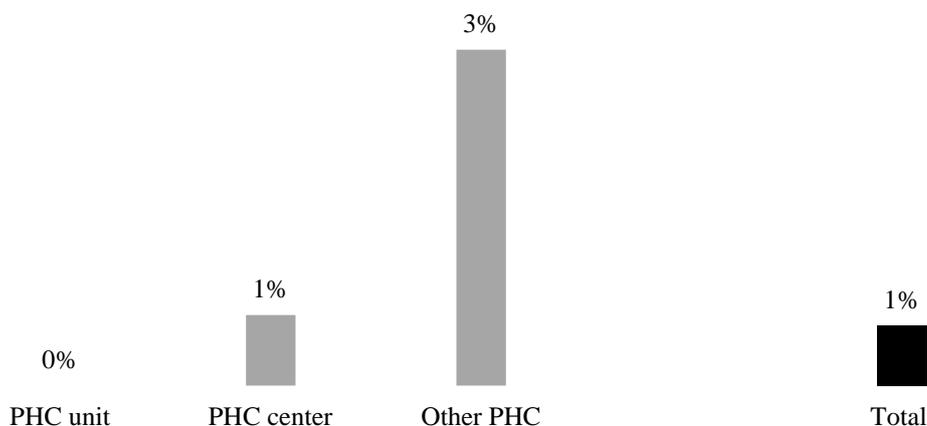
### 4.7 Preventing Mother-to-Child Transmission of HIV

Mother-to-child transmission of HIV can occur during pregnancy, during delivery through infected birth canal, or after birth from breastfeeding. Prevention of Mother-to-Child Transmission of HIV (PMTCT) programme is a priority in the fight against AIDS in children.

#### 4.7.1 Preventing mother-to-child transmission of HIV (PMTCT) services availability

Figure 4.24 shows the percentage of facilities offering PMTCT services by district and by facility type. Overall, only less than one percent of all health facilities offered PMTCT services. These services were provided in 3% of other PHC facilities, less than 1% of PHC centres and no none of PHC units.

**Figure 4.24: Availability of g preventing mother-to-child transmission of HIV (PMTCT) services by facility type**



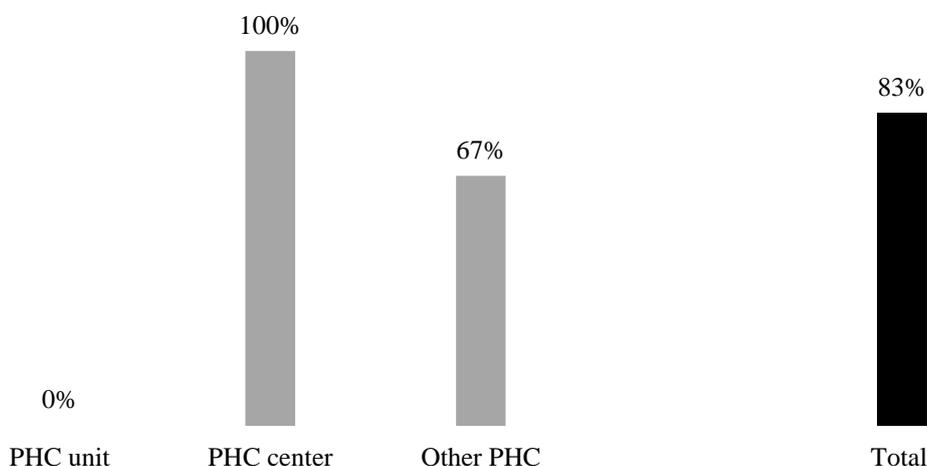
PMTCT services were provided in only 6% of the facilities of Al-Wahat, 4% of the facilities of Alzwea, 2% of the facilities of Sert and 2% of the facilities of Misurata, while no PMTCT services were provided in all other district (Table A 4.7.1).

HIV counselling and testing services to HIV positive pregnant women for PMTCT were provided only in 4 district (Al-Wahat, Misurata, Alzwea and Al-Gebal Elgharbi).

Provide HIV counselling and testing services to infants born to HIV positive pregnant women for PMTCT was provided only in 2 district (Misurata and Al-Gebal Elgharbi). While Providing ARV prophylaxis to HIV positive pregnant women for PMTCT was provided only in one district (Misurata). Providing ARV prophylaxis to newborns of HIV positive pregnant women for PMTCT was provided only in one district (Misurata). Providing infant and young child feeding counselling for PMTCT was provided only in 2 district (Misurata and Alzwea). Providing nutritional counseling for HIV positive pregnant women and their infants for PMTCT was provided only in one district (Misurata). Providing family planning counseling to HIV positive pregnant women for PMTCT was provided only in one district (Misurata).

Misurata is the only district that provided all PMTCT services.

**Figure 4.25: Availability of HIV counselling and testing services to HIV positive pregnant women by facility type**



#### 4.7.2 Preventing mother-to-child transmission of HIV (PMTCT) services Readiness

Table A 4.7.2 shows that only 6 facilities (3 PHC unites & 3 PHC Centers) offering PMTCT services were assessed on their readiness to provide PMTCT services based on the availability of PMTCT National Guidelines. No single facility had the guidelines.

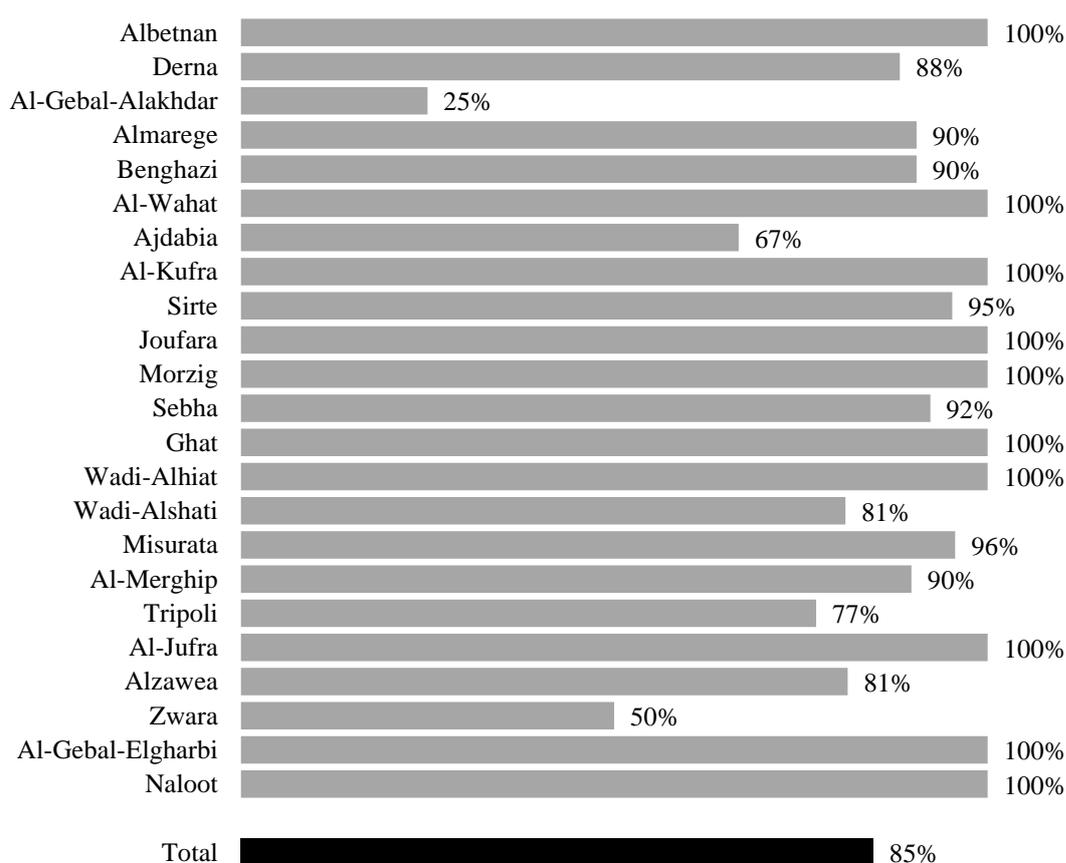
### 4.8 Diabetes

Non-communicable diseases such as cardiovascular disease, chronic respiratory diseases, cancer, and diabetes were responsible for an estimated 60% of all deaths globally in 2005, with more than 75% of these deaths occurring in developing countries. Unhealthy diet, physical inactivity, tobacco and alcohol use are important preventable major risk factors for chronic diseases that are related to lifestyle.

#### 4.8.1 Diabetes services availability

Figure 4.26 shows the percentage of facilities offering diabetes diagnosis and/or managing services by district and by facility type. The table shows that 85% of the facilities reported offering diabetes diagnosis and/or managing services. The services are offered in almost all the facilities of most of the District. The services were provided only in half or less of the facilities of two district (Al-Gebal Alakhdar and Al-Nequt Alghmis). The services were provided through 95% of other PHC facilities, 87% of the PHC centres and 76% of the PHC unites (Table A 4.8.1).

**Figure 4.26: Availability of diabetes diagnosis and/or managing services by district**



#### 4.8.2 Diabetes services readiness

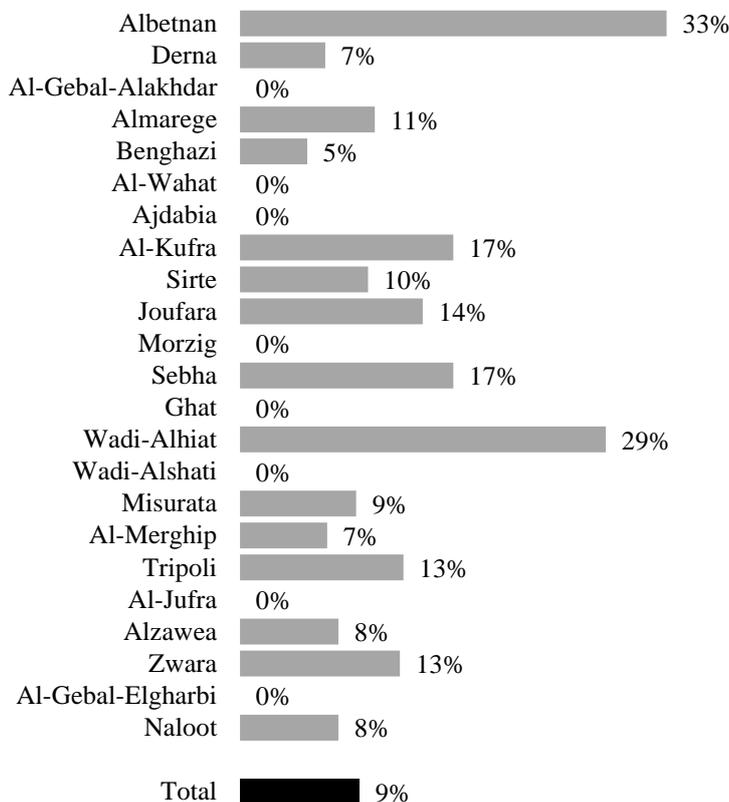
Facilities offering diabetes diagnosis and/or managing services (1041 facilities) were assessed on their readiness to provide the services based on the availability of national guidelines on diagnosis

and treatment of diabetes, blood pressure (BP) apparatus, adult-paediatric scale and blood sugar test.

Table A 4.8.2 shows the availability of these items by district and facility type.

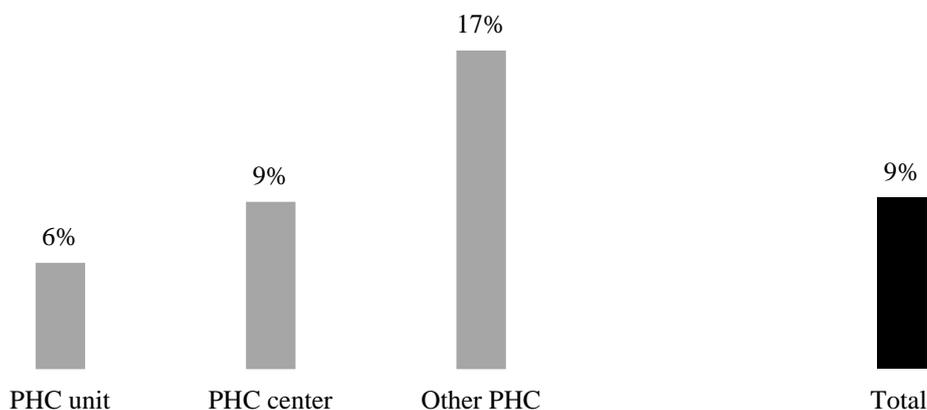
In general, the readiness of the facilities to provide the services is poor.

**Figure 4.27: Availability of national guidelines on diagnosis and treatment of diabetes by district**



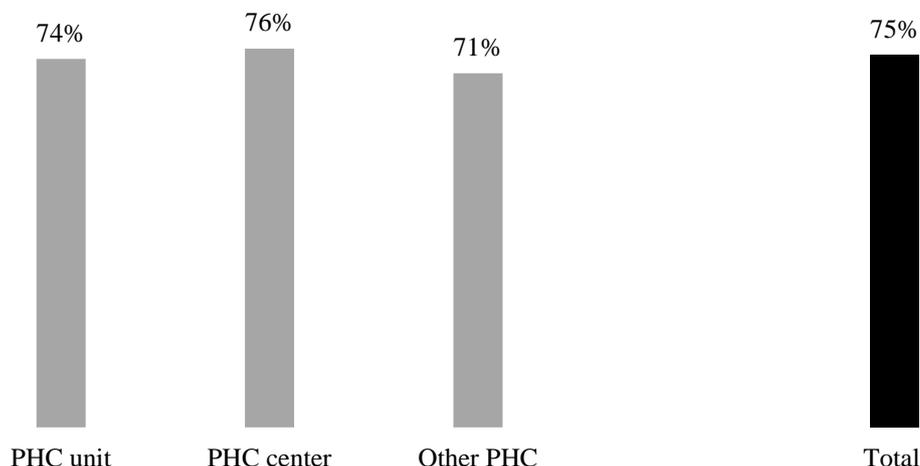
National guidelines were available only in 9% of the facilities. The guidelines were not available in all facilities of 8 district and in 10% or less of the facilities of 9 district. The Guidelines were available in 17% of other PHC facilities, 9% of PHC centres and 6% of the PHC unites (Figure 4.28).

**Figure 4.28: Availability of national guidelines on diagnosis and treatment of diabetes by facility type**



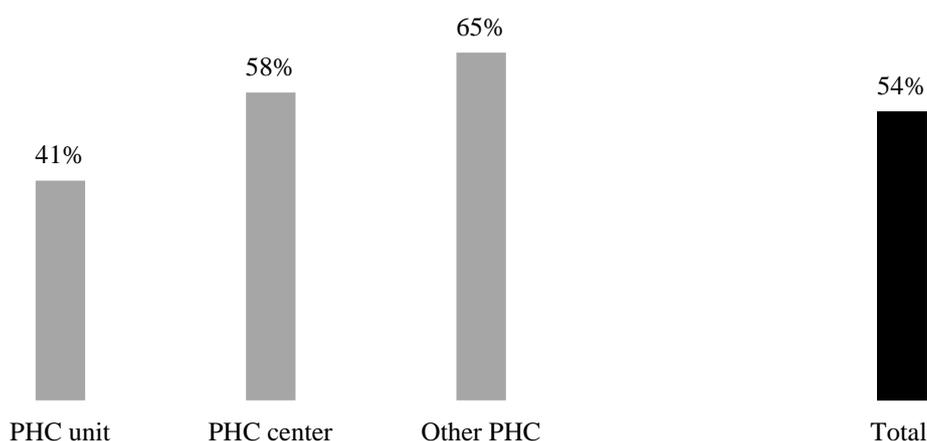
The BP Apparatus was available in three quarters of the facilities. The apparatus is available in almost all facilities of 6 district, in 75% or more of the facilities of 9 district and in 50% or less of the facilities of 3 district. The BP apparatus was not available in all facilities of one district. The BP apparatus was available in 76% of PHC centers, 74% of the PHC unites and 71% of other PHC facilities.

**Figure 4.29: Availability of BP apparatus by facility type**



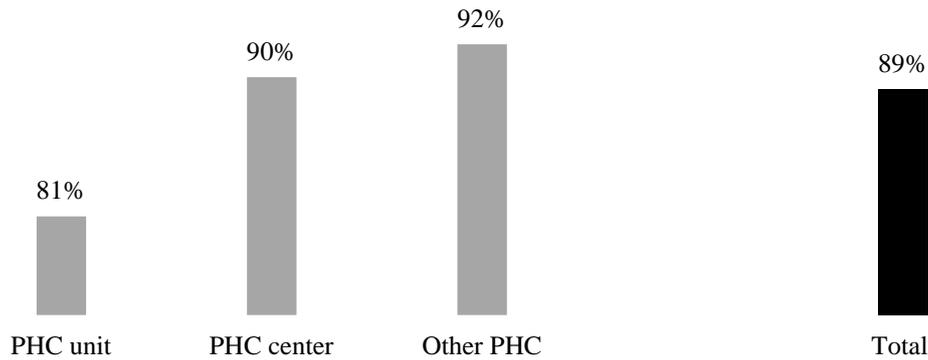
The adult-paediatric scale was available in more than half of the facilities (54%). The scale was available in all facilities of 2 district, in 75% or more of the facilities of 4 district and in 50% or less of the facilities of 7 district. The scale was not available in all facilities of one district. The scale was available in almost two thirds of other PHC facilities, 58% of PHC centers and 41% of the PHC unites.

**Figure 4.30: Availability of adult-paediatric scale by facility type**



The blood sugar test was available in almost 90% of the facilities. The test is available in all facilities of 12 district, and in 75% or more of the facilities of the other 11 district. The blood sugar test was available in 92% of other PHC facilities, 90% of PHC centers, and 81% of the PHC unites.

**Figure 4.31: Availability of blood sugar test by facility type**



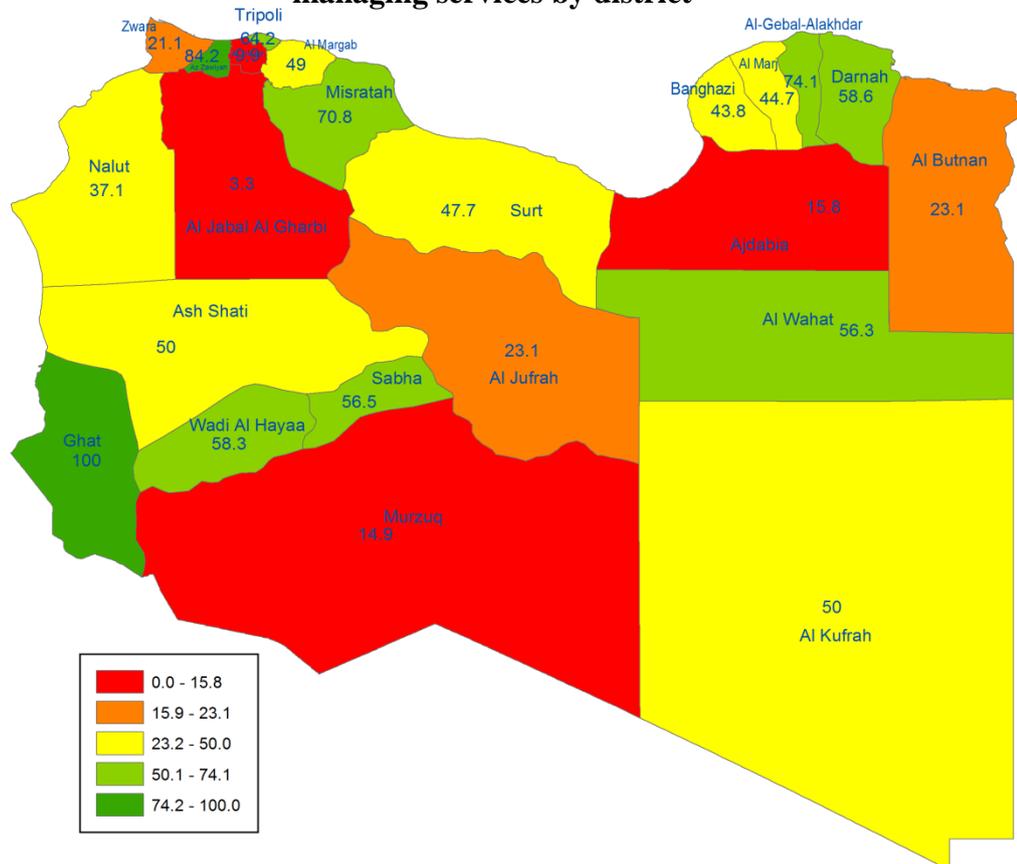
## 4.9 Cardiovascular Diseases

Non-communicable diseases such as cardiovascular disease, chronic respiratory diseases, cancer, and diabetes were responsible for an estimated 60% of all deaths globally in 2005, with more than 75% of these deaths occurring in developing countries. Unhealthy diet, physical inactivity, tobacco and alcohol use are important preventable major risk factors for chronic diseases that are related to lifestyle.

### 4.9.1 Cardiovascular diseases services availability

Figure 4.32 shows the percentage of facilities offering cardiovascular disease diagnosis and/or managing services by district and by facility type. The table shows that only 41% of the facilities reported offering cardiovascular disease diagnosis and/or managing services. The services are offered in half or less of the facilities of 15 District. The services were provided through 59% of other PHC facilities, 54% of the PHC centres and 27% of the PHC unites (Table A 4.9.1).

**Figure 4.32: Availability of cardiovascular disease diagnosis and/or managing services by district**



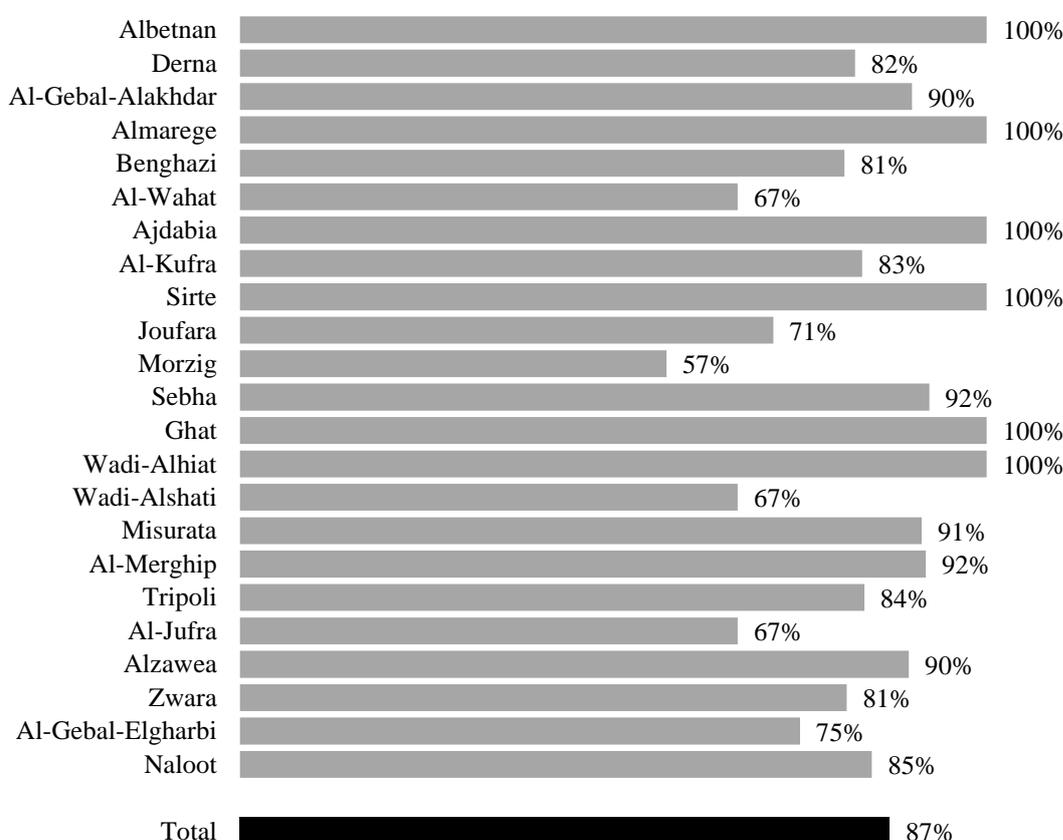
#### 4.9.2 Cardiovascular diseases services readiness

Facilities offering cardiovascular disease diagnosis and/or managing services (1041 facilities) were assessed on their readiness to provide the services based on the availability of national guidelines for diagnosis and/or treatment of cardiovascular diseases (the service to diagnose and or manage CVD???), stethoscope, blood pressure (BP) apparatus, adult-pediatric scale and oxygen.

Table A 4.9.2 shows the availability of these items by district and facility type.

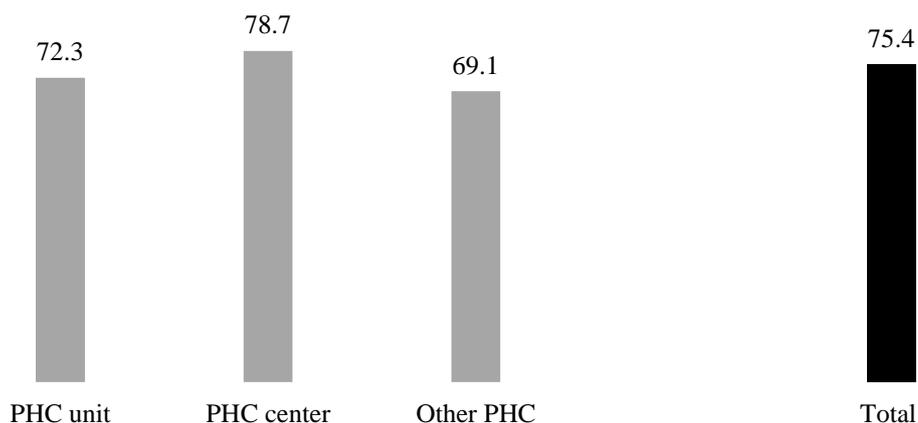
National guidelines (the service to diagnose and or manage CVD???) were available only in 87% of the facilities. The Guidelines (the service to diagnose and or manage CVD???) were available in 92% of other PHC facilities, 89% of PHC unites and 85% of the PHC Centres. The guidelines (the service to diagnose and or manage CVD???) were available in all facilities of 5 district and in two thirds or more of the facilities of all other district (Figure 4.33).

**Figure 4.33: Availability of national guidelines for diagnosis and/or treatment of cardiovascular diseases by district**



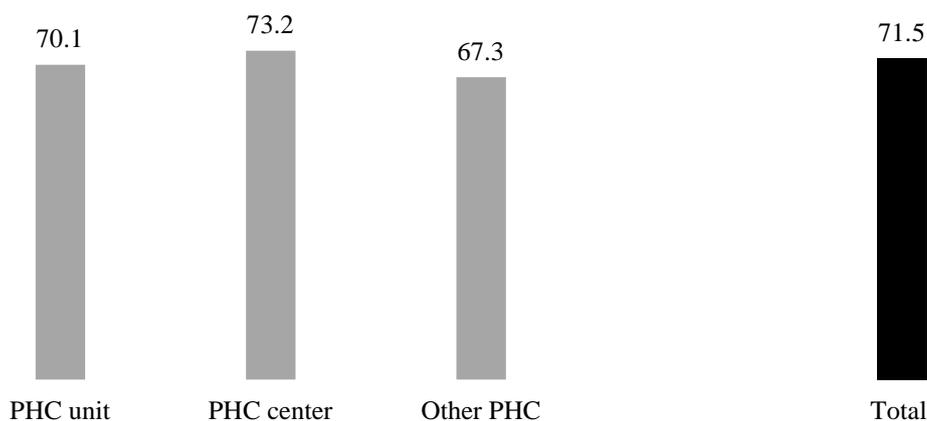
The stethoscope was available in almost three quarters of the facilities. The stethoscope was available in all facilities of 4 district, in 75% or more of the facilities of 11 district and in 50% or less of the facilities of 7 district. The stethoscope was not available in all facilities of 1 district. The stethoscope was available in 79% of PHC centers, 72% of the PHC unites and 69% of other PHC facilities.

**Figure 4.34: Availability of stethoscope by facility type**



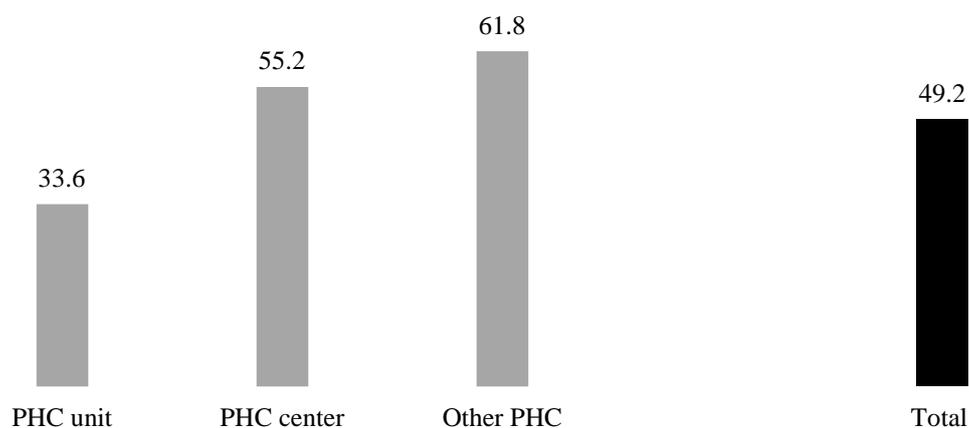
The BP Apparatus was available in slightly less than three quarters of the facilities. The apparatus was available in all facilities of 1 district, in 75% or more of the facilities of 2 district and in 50% or less of the facilities of 15 district. The BP apparatus was not available in all facilities of 5 district. The BP apparatus was available in 73% of PHC centers, 70% of the PHC unites and 67% of other PHC facilities.

**Figure 4.35: Availability of BP Apparatus by facility type**



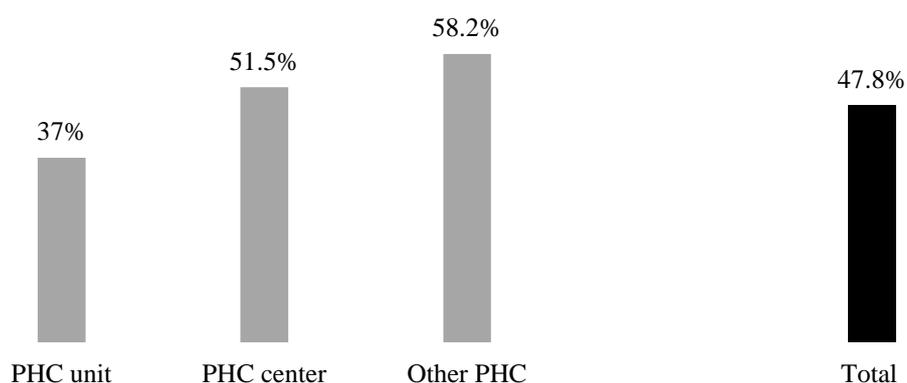
The adult-paediatric scale was available in slightly less than half of the facilities (49%). The scale is available in all facilities of 2 district, in 75% or more of the facilities of 3 district and in 50% or less of the facilities of 17 district. The scale was not available in all facilities of 1 district. The scale was available in 62% of other PHC facilities, 55% of PHC centers and 34% of the PHC unites.

**Figure 4.36: Availability of adult-paediatric scale by facility type**



Almost half of facilities (48%) had Oxygen cylinders or oxygen concentrators. Figure 4.37 shows that more than half of PHC units and other facilities had Oxygen cylinders or oxygen concentrators, compared to 37% of PHC centres. In addition Table (4.10.2) shows that all facilities in three district (Ghat, Al-Jufra, and Al-Gebal-Elgharbi) had Oxygen cylinders or oxygen concentrators, while one District (Ajdabia) had none.

**Figure 4.37: Availability of oxygen Cylinders or concentrators by facility type**



## 4.10 Basic Surgery Services

Improving efficacy, safety, and equity in the provision of surgical care, particularly at the primary healthcare facility level is an increasingly recognized priority. Basic surgical care for minor procedures can be performed at the primary care level, whereas more comprehensive surgical care requiring a well-equipped major operating theatre is generally performed only at the district hospital level or above. On-going efforts are being directed at improving day-to-day practice, training, and policy decisions surrounding surgical care with the ultimate aim of reducing death and disability.

### 4.10.1 Basic surgery services availability

Figure 4.38 shows the percentage of facilities offering basic surgical services by district and by facility type. The figure shows that only 37% of the facilities reported offering basic surgical services. The services were offered in less than half of the facilities of 17 district. Also the basic surgery services were provided through more than three quarters of the facilities of Alzawea, Benghazi and Al-Nequt Alghmis and through two thirds of the facilities of Sebha, Misurata and Naloot (Table A 4.10.1).

**Figure 4.38: Availability of basic surgical services by district**

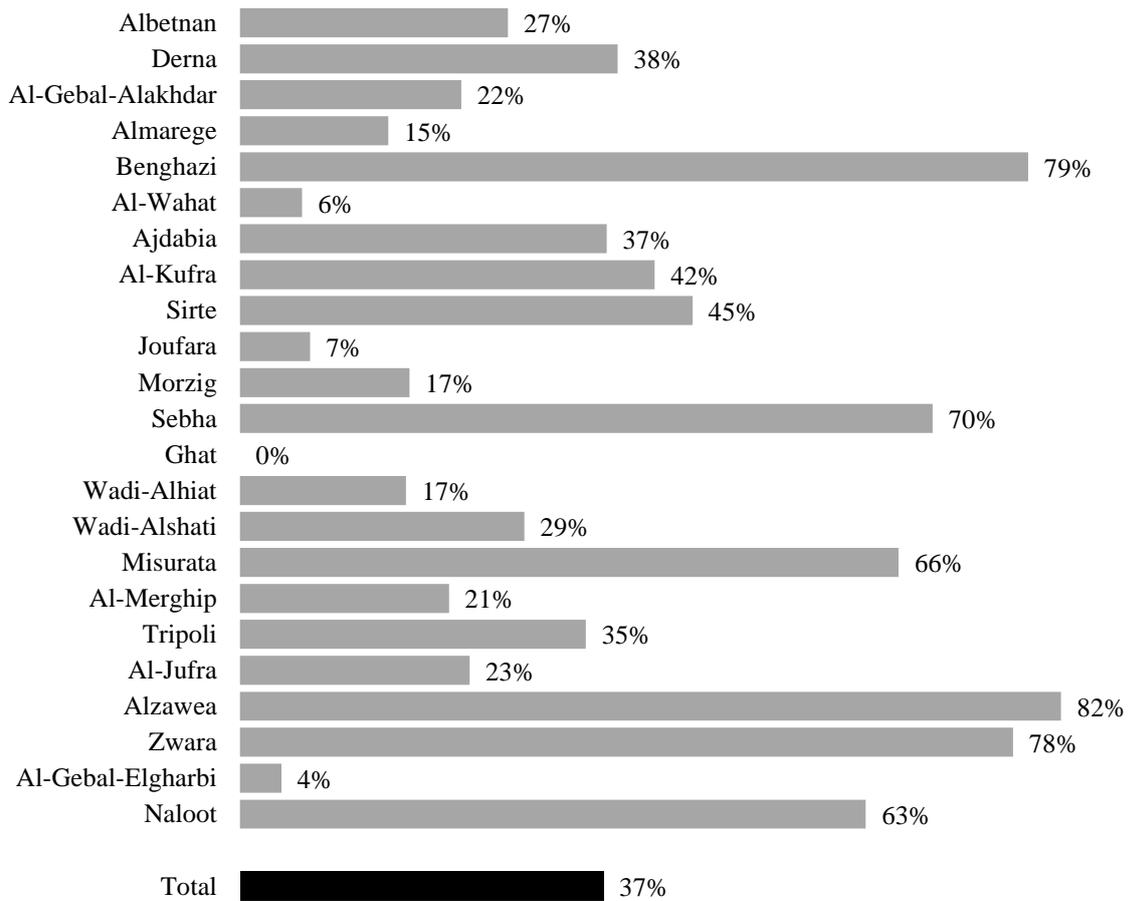
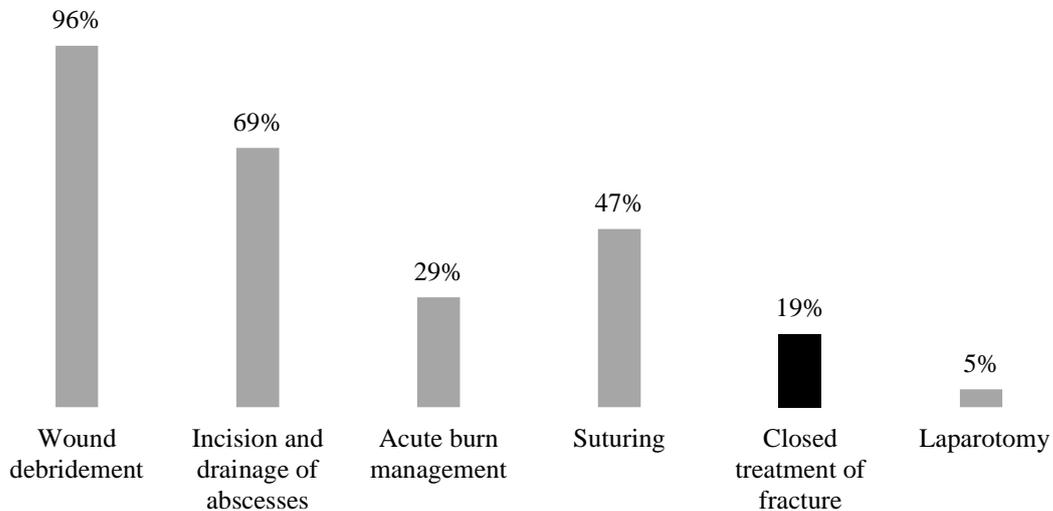


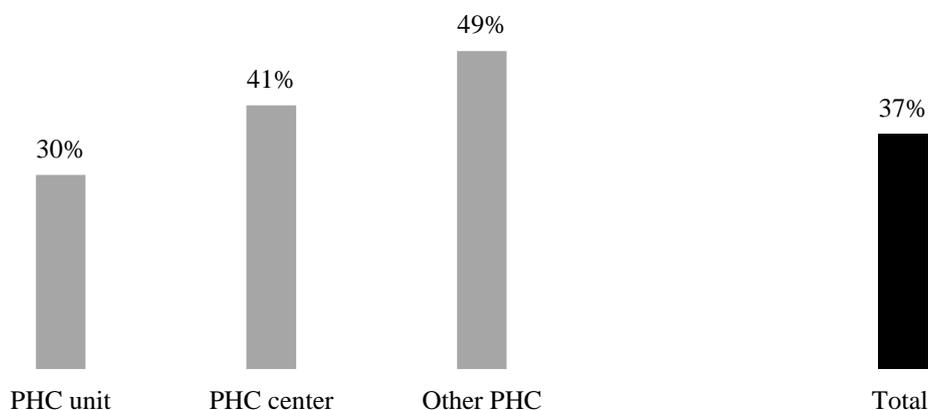
Figure 4.39 shows that the most commonly available surgical interventions were wound debridement (96%) and incision and drainage of abscesses (69%). Less than half of facilities provide suturing (47%), while 29% of facilities provided treatment of acute burns. Only one in five facilities (19%) provided closed treatment of fractures, and less than 5% of facilities provided laparotomy, were most of them were other PHC facilities.

**Figure 4.39: The most commonly available surgical interventions by facility type**



The basic surgery services were provided through 37% of facilities (Figure 4.40). By facility type it was available in about half of other PHC facilities, 41% of the PHC centres and 30% of the PHC unites.

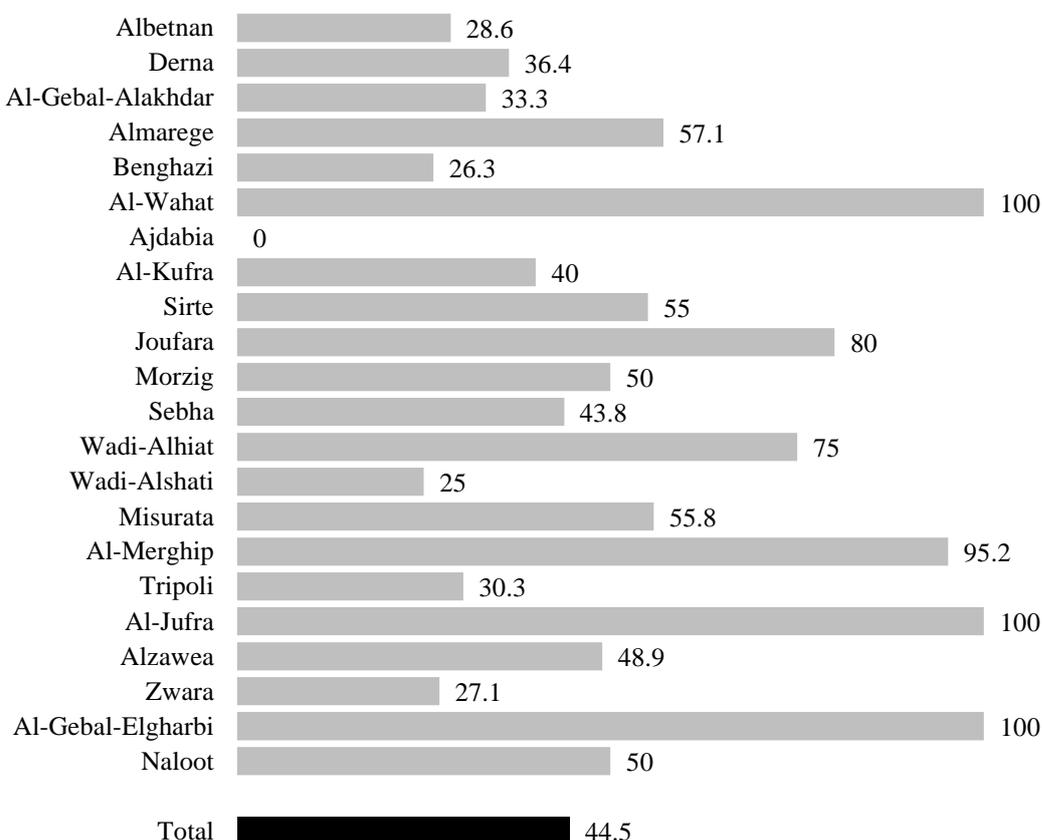
**Figure 4.40: Providing basic surgery services by facility type**



#### 4.10.2 Basic surgery services readiness

Facilities offering surgical services (380 facilities) were assessed on service readiness based on the availability of the oxygen. Table A 4.10.2 shows the availability of oxygen for basic surgical care by district and facility type. The table shows that oxygen was available in less than half of the facilities. Oxygen was available in all facilities of 3 district, in 75% or more of the facilities of three District and in 50% or less of the facilities of 13 district. Oxygen was not available in all facilities of District Ajdabia. Oxygen was available in almost half (61%) of other PHC facilities, 52% of PHC centers and 30% of the PHC unites.

**Figure 4.41: Availability of Oxygen by district**



## 4.11 Comprehensive Obstetric Care

In general, approximately half of maternal deaths can be directly attributed to postpartum hemorrhage, sepsis, obstructed labor, post-abortive complications, and eclampsia. Contributing factors include delays in accessing care when complications arise. It is thought that increasing accessibility to high quality emergency obstetric care will lead to reduced maternal and infant mortality. To be able to manage obstetric complications, a health facility must have a surgeon and anesthetist available or on call at all times, with the required equipment, supplies, and trained support staff to administer blood transfusions and anesthesia. Comprehensive emergency obstetric care (CEmOC) is generally offered at the district hospital level, and consists of the 7 functions of basic emergency obstetric care plus Caesarean section and safe blood transfusion. Guidelines jointly issued by WHO, UNICEF, and UNFPA recommend four health facilities offering basic and one facility offering comprehensive care for every 500,000 people.

### 4.11.1 Comprehensive obstetric care availability

Table A 4.11.1 shows the percentage of facilities offering Comprehensive Emergency Obstetric Care (CEmOC) by district and facility type. The table shows that CEmOC services were provided in only 3% of the facilities. CEmOC services are not provided in the facilities of 10 district, while the services are provided in less than 20% of the facilities of the rest of the district.

**Figure 4.42: Availability of comprehensive Obstetric Care by type of service by district**

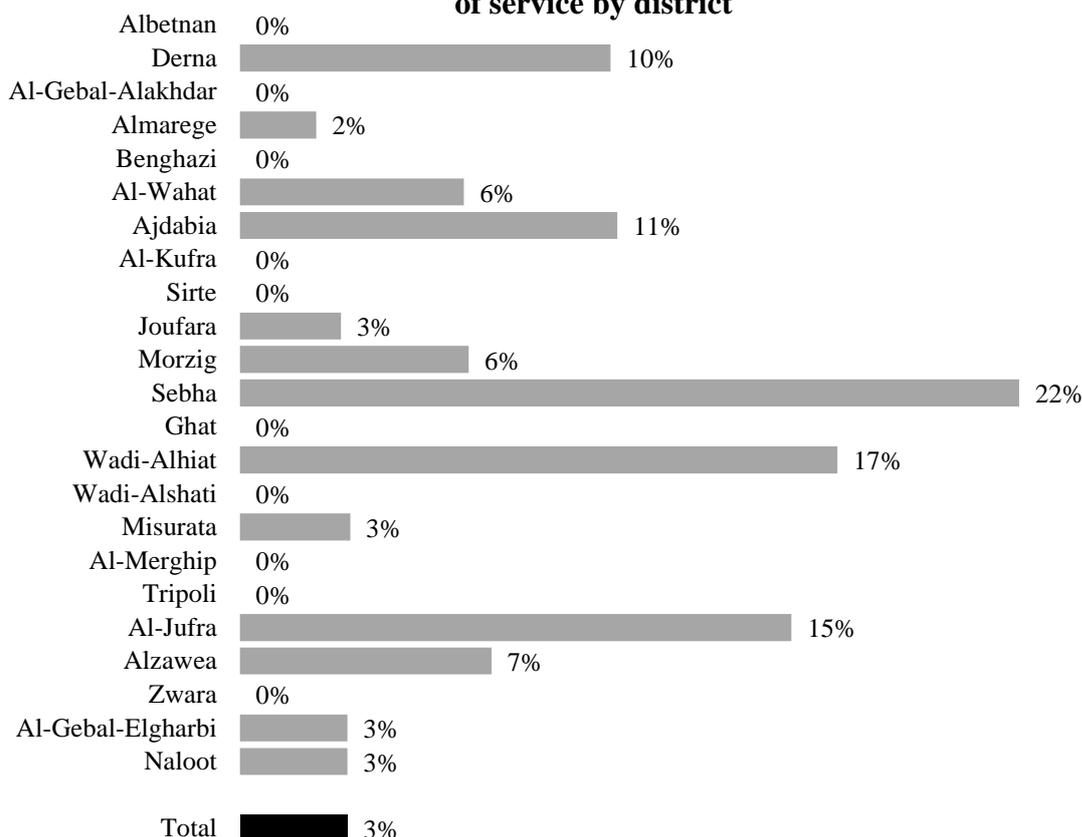
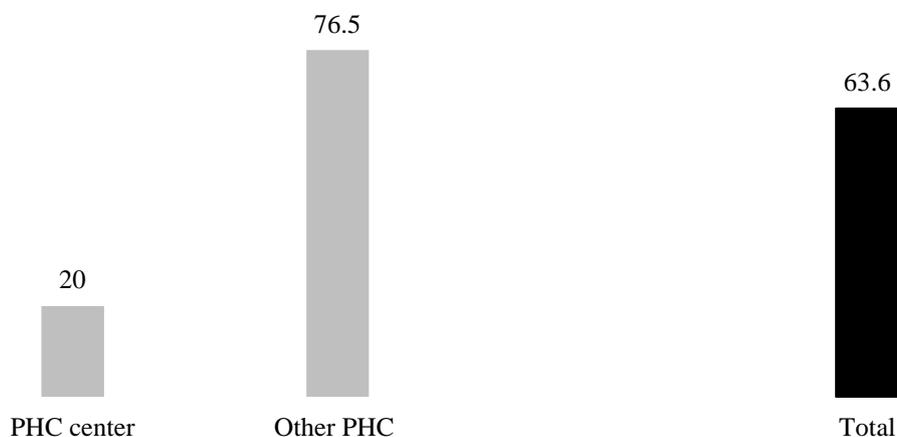


Table A 4.11.1 shows the percentage of facilities offering advanced delivery services (Caesarean section and blood transfusion) by district and facility type. The table shows that the Caesarean section services were offered in 64% of the facilities, all of these facilities are located only in 6 district. Blood transfusion services as well, were offered in 39% of the facilities and all of these facilities are located only in 7 district.

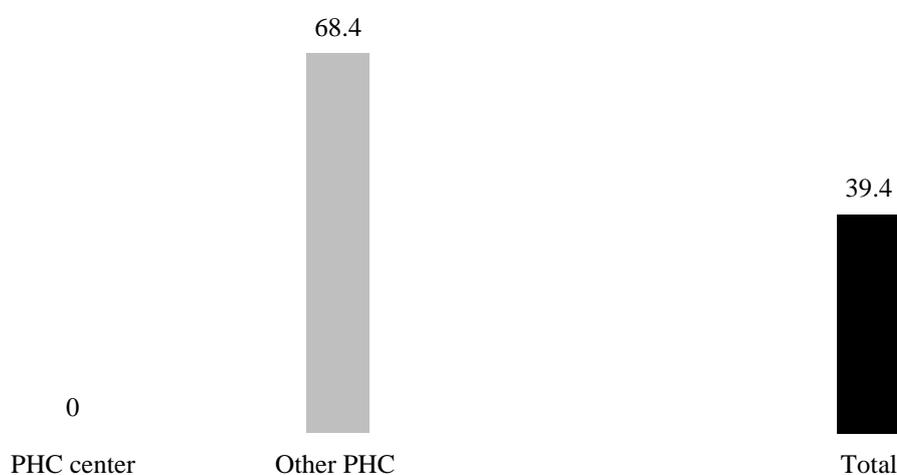
Cesarean section services were provided through more than two thirds (76.5%) of other PHC facilities, 20% of the PHC Centres, while no CS services were offered through the PHC unites (Figure 4.43).

**Figure 4.43: Availability of caesarean section services by facility type**



Blood transfusion services were provided only through more than two thirds (68.4%) of other PHC facilities, while no blood transfusion services were offered through the PHC centres nor the PHC unites (Figure 4.44).

**Figure 4.44: Availability of Blood transfusion services by facility type**



## 4.12 Blood Transfusion Services

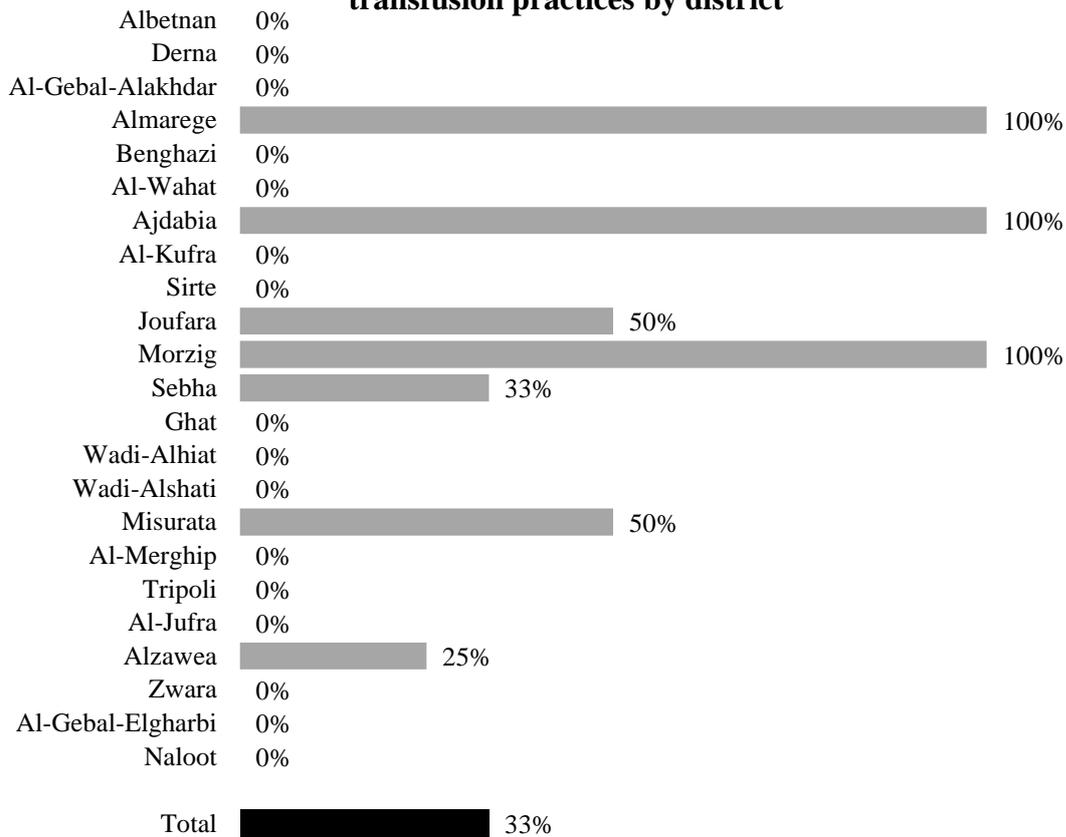
Blood transfusion services contribute to the achievement of MDGs 4, 5, and 6. The National Blood Transfusion Service is responsible for the collection, testing, processing and distribution of safe blood and blood products to all medical facilities providing blood transfusion therapy to patients.

### 4.12.1 Blood transfusion services readiness

Facilities offering blood transfusion services (21 facilities) were assessed on readiness to provide the service based on the availability of the trained staff in appropriate use of blood and safe transfusion practice in the past two years, Guidelines on appropriate use of blood and safe transfusion practice, Blood storage refrigerator, Blood supply safety, Blood supply sufficiency.

Table A 4.12.1a and A 4.12.1b shows the availability of these items for blood transfusions by district and facility type.

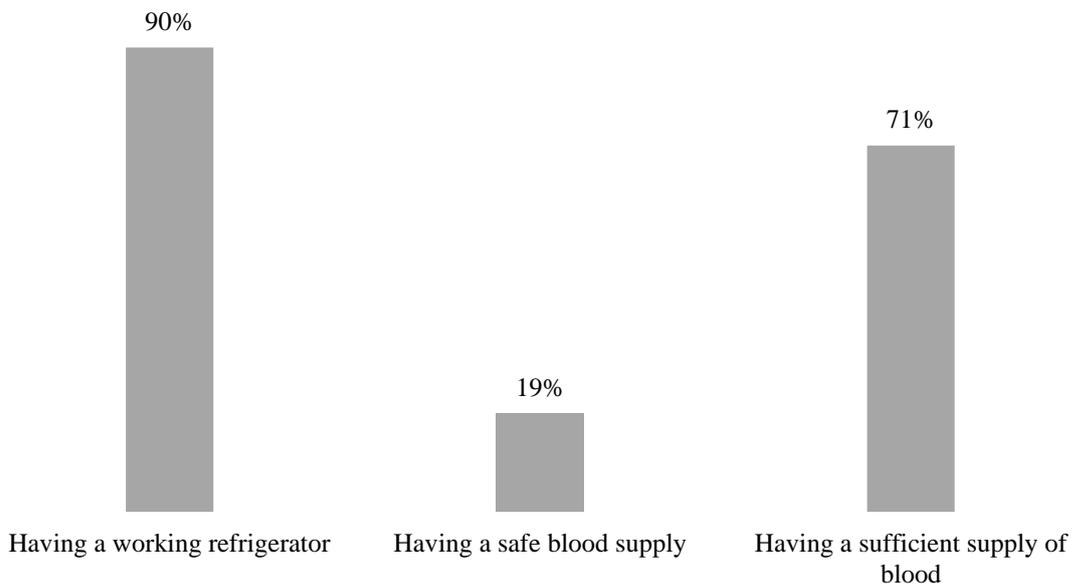
**Figure 4.45: Training in the appropriate use of blood and safe transfusion practices by district**



Most facilities providing blood transfusion (90%) had a working refrigerator; however, this indicates that one in ten transfusion outlets did not have an appropriate means of storing blood.

One fifth only of transfusion outlets (19%) had a safe blood supply, and slightly less than three quarters (71%) had a sufficient supply of blood. Only two in ten facilities had guidelines on the appropriate use of blood and safe transfusion practices, while one third had a staff member trained in the past two years.

**Figure 4.46: Safe transfusion practice by facility type**



Percentage of the trained staff was equally divided between types of facilities. The guidelines were available in one third of PHC centers and 17% of other PHC facilities, while there were no guidelines in any of the PHC unites.

Blood storage refrigerators were available in all other PHC facilities, one third of PHC centers, while there were no refrigerators in any of the PHC unites. Blood supply was safe only in 22% of other PHC facilities and the supply was sufficient in all PHC centers and two thirds of other PHC facilities.

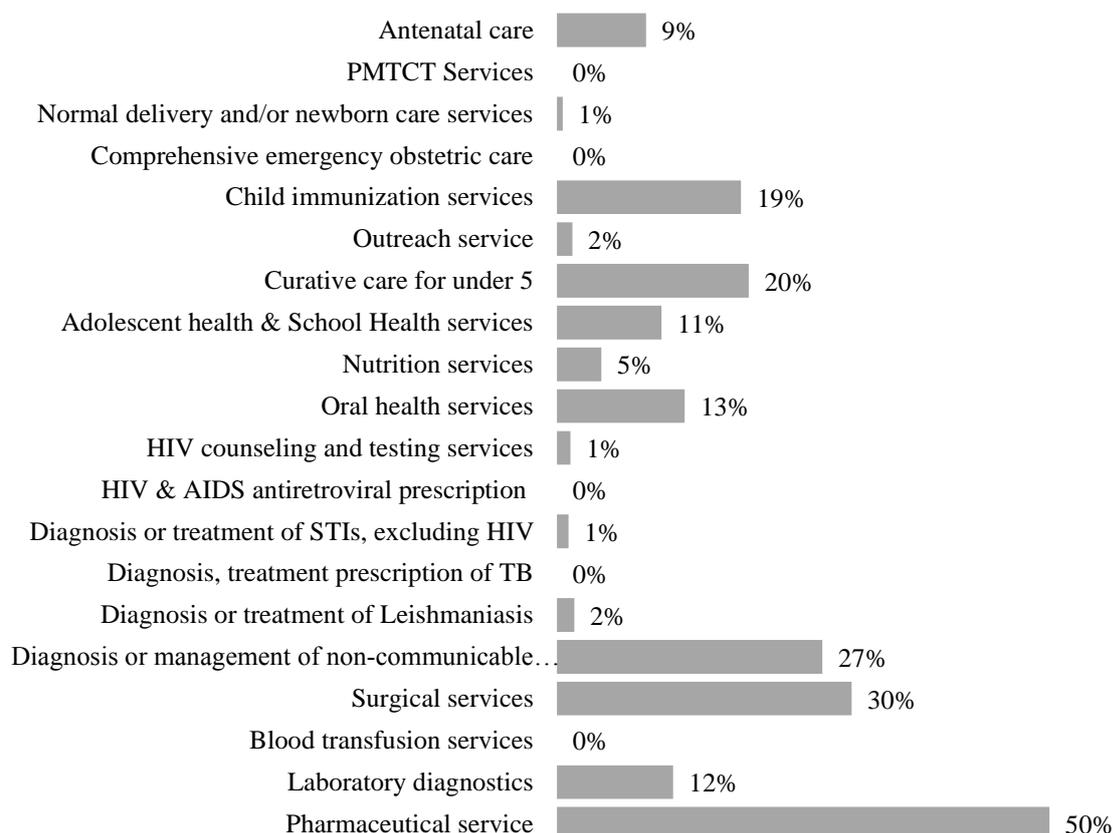
### 4.13 Service Specific Availability

Comparing service specific availability and readiness across health interventions can provide additional insight in to the relative accessibility and service delivery capacity.

#### 4.13.1 Basic services provided by health facilities

Figure 4.47 shows the percentage of facilities, in all District providing various health services. In general, the percentage of facilities providing the different basic health services is low (Table 4.13.1).

**Figure 4.47: Basic services provided by health facilities**



Pharmaceutical service- post-conflict shows the highest percentage (70.5%), followed by Diagnosis or management of non-communicable diseases- post-conflict (41.4%) and then Child immunization services- post-conflict (41.1%).

The following table shows the percentage of facilities providing various health services by district and facility type. The table shows the low coverage of all the basic health services post conflict.

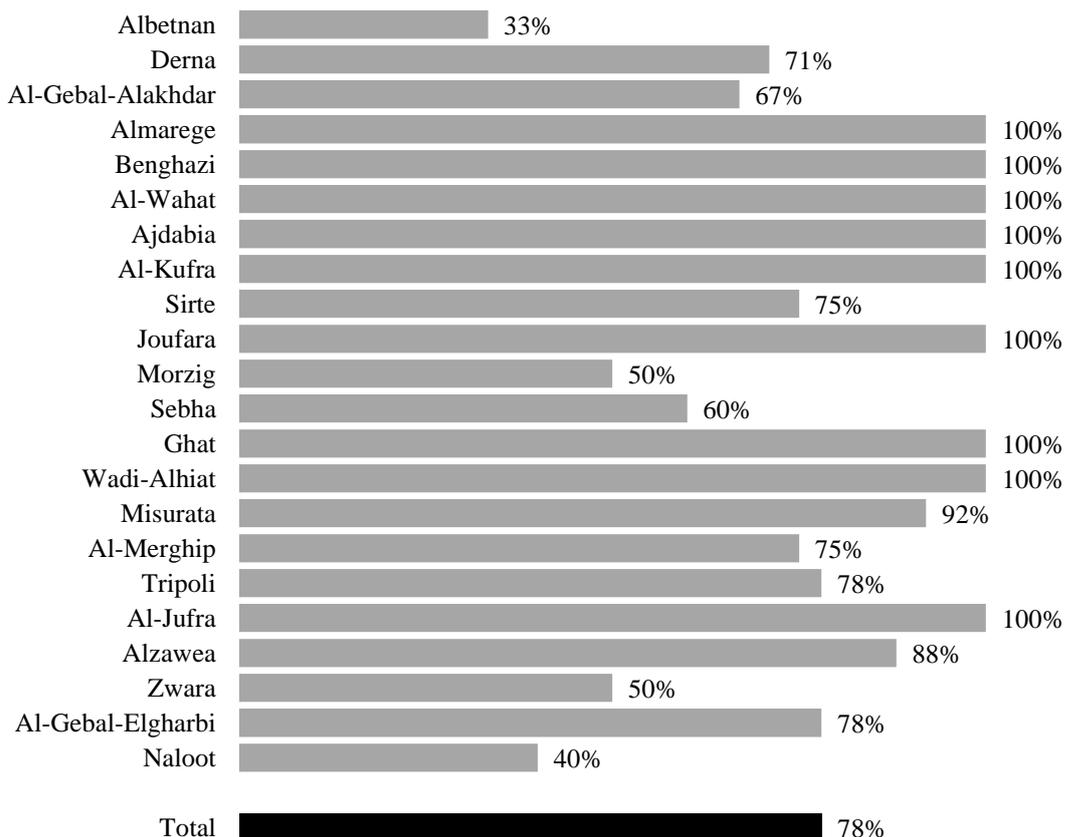
Types of Basic Health Services	% of facilities provide the service	District	Type of Facilities		
			PHC Unit	PHC Center	Other PHC Facilities
1. Antenatal care- post conflict	22.4%	52% in Benghazi & Sebha. Less than 25% in 14 district	9%	31%	52%
2. PMTCT Services- post-conflict	0.6%	Service provided only in 4 district.	0%	0.7%	3%
3. Normal delivery and/or newborn care services- post-conflict	3.9%	22% in Sabha & 19% in Alwahas. 10% or less in all other district.	0.6%	4%	23%
4. Comprehensive emergency obstetric care- post-conflict	3.2%	22% in Sabha, 16% in 2 district, 10% or less in all other district.	0%	3%	20%
5. Child immunization services- post-conflict	41.1%	75% in Benghazi. 50% and less in most of the other district.	19%	68%	33%
6. Outreach service - post-conflict	3.7%	31% in Al-Wahas, no service in 9 district & less than 10% in the rest.	2%	5%	9%
7. Curative care for under 5- post-conflict	33.1%	75% in one district and less than 50% in 20 district.	20%	45%	48%
8. Adolescent health & School Health services- post-conflict	24.8%	65% in Benghazi and less than 50% in most of the other district.	11%	43%	16%
9. Nutrition services - post-conflict	6.9%	no service in 6 district, 10% or less in all other district.	5%	7%	17%
10. Oral health services - post-conflict	31.5%	Around 50% or less of the facilities of most of the district.	13%	47%	56%
11. HIV counseling and testing services- post-conflict	6.1%	Between 20% - 10% of facilities of 10 district and less than 10% in the rest.	1%	7%	29%
12. HIV & AIDS antiretroviral prescription - post-conflict	.5%	Services provided in 4% or less of facilities of 5 district, no services in the rest.	0.2%	0.2%	3%
13. Diagnosis or treatment of STIs, excluding HIV- post-conflict	3.6%	Services provided in 8% or less of facilities of most of the district.	1%	3%	18%
14. Diagnosis, treatment prescription of TB- post-conflict	2.0%	No service in 7 district, 8% or less in all other district.	0.4%	1%	15%
15. Diagnosis or treatment of Leishmaniasis - post-conflict	3.7%	No service in 13 district, 10% or less in most of the other district.	2%	4%	11%
16. Diagnosis or management of non-communicable diseases- post conflict	41.4%	Provided in more than 75% of facilities in only 3 district and in less than 50% of facilities in half of the district.	27%	54%	59%
17. Surgical services- post-conflict	36.5%	Provided in more than 75% of facilities in only 3 district and in less than 50% of facilities in most of the other district.	30%	41%	50%
18. Blood transfusion services- post-conflict	2.0%	No service in 10 district, 5% or less in most of the other district.			
19. Laboratory diagnostics- post-conflict	35.8%	Provided in more than 60% of facilities in only 3 district and in less than 50% of facilities in most of the other district.	12%	55%	72%
20. Pharmaceutical service- post-conflict	70.5%	Provided in more than 75% of facilities in 13 district and in between 75 and 60% of facilities in most of other district.	50%	93%	74%

### 4.13.2. Availability of imaging equipment

Table 4.13.2 shows the availability of the imaging equipment by district and facility type. The imaging equipment that were assessed for their availability are: X-Ray machine, ultrasound machine, CT scan and MRI.

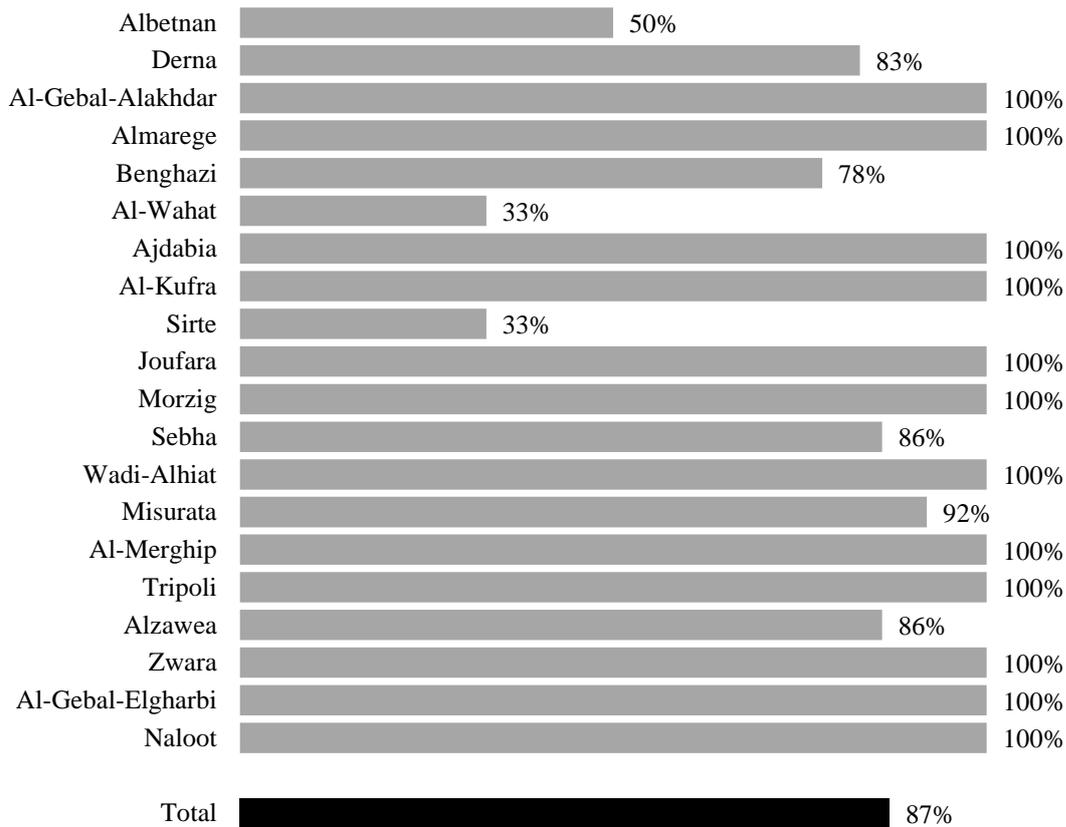
The X-Ray machines were available in 78% of the facilities of all district. The machine was available in all facilities of 9 district, in half or more of the facilities of 11 district and in less than 50% of the facilities in only two district. According to the facility type, X-ray machines were available in 86% of other PHC facilities, 80% of PHC unites and 68% of the PHC Centers.

**Figure 4.48: Availability of X-Ray machines by district**



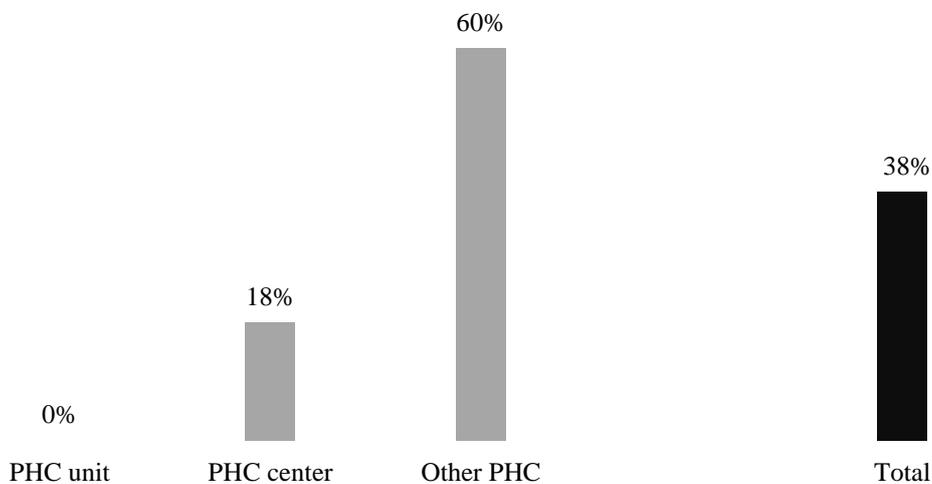
Around nine in every ten facilities had ultrasound machine. The ultrasound machines were available in all facilities of 12 district. Ultrasound machines were available in half or more of the facilities of 6 district and less than half of the facilities in the rest of the district (2 district). According to the facility type, ultrasound machines were available in all PHC Unites, 87% of the PHC centers and 85% of other PHC facilities.

**Figure 4.49: Availability of ultrasound machine by district**



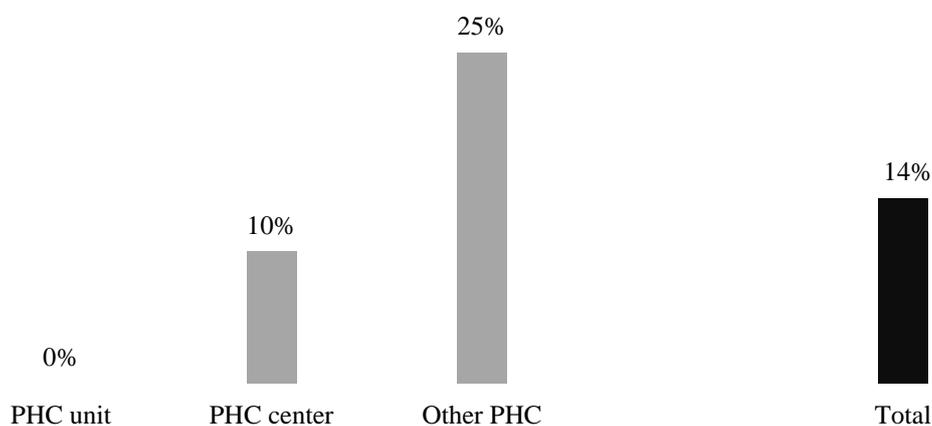
CT scan machines were available in 38% of the facilities of all district. CT Scan machines were available in all facilities of 3 district, 60% of the facilities of one district (Alzawea) and one third of the facilities of another one district (Misurata) . No CT Scan machines were available in the rest of the district. According to the facility type, CT scan machines were available in 60% of other PHC facilities, 18% of the PHC centers, while there were no CT scan machines in any of the PHC unites.

**Figure 4.50: Availability of CT scan machines by facility type**



MRI machines were available in less than one fifth of all facilities. The MRI machines were available in all facilities of one district (Joufara), and in 50% of the facilities of another district (Alzawea). No MRI machines available in any of the other district. According to the facility type, MRI machines were available in 25% of other PHC facilities, 10% of PHC centers, while there were no MRI machines in any of the PHC unites.

**Figure 4.51: Availability of MRI machines by facility type**



#### 4.14 Sexual Violence Services

Table A 4.14 shows the availability of sexual violence services by district and by facility type.

Sexual violence services were assessed for their readiness based on the ability of the facility to provide any of the following services:

1. Clinical management of rape survivors,
2. Emergency contraception and
3. Post-exposure prophylaxis (PEP) for STI & HIV infections.

In all facilities that were assessed (1041) in all district of Libya and from the different types of health facilities, no sexual violence services were provided.

#### 4.15 School Health Services

Table A 4.15 shows the availability of school health services by district and by facility type.

School health services were assessed for their readiness based on the ability of the facility to provide any of the following health services:

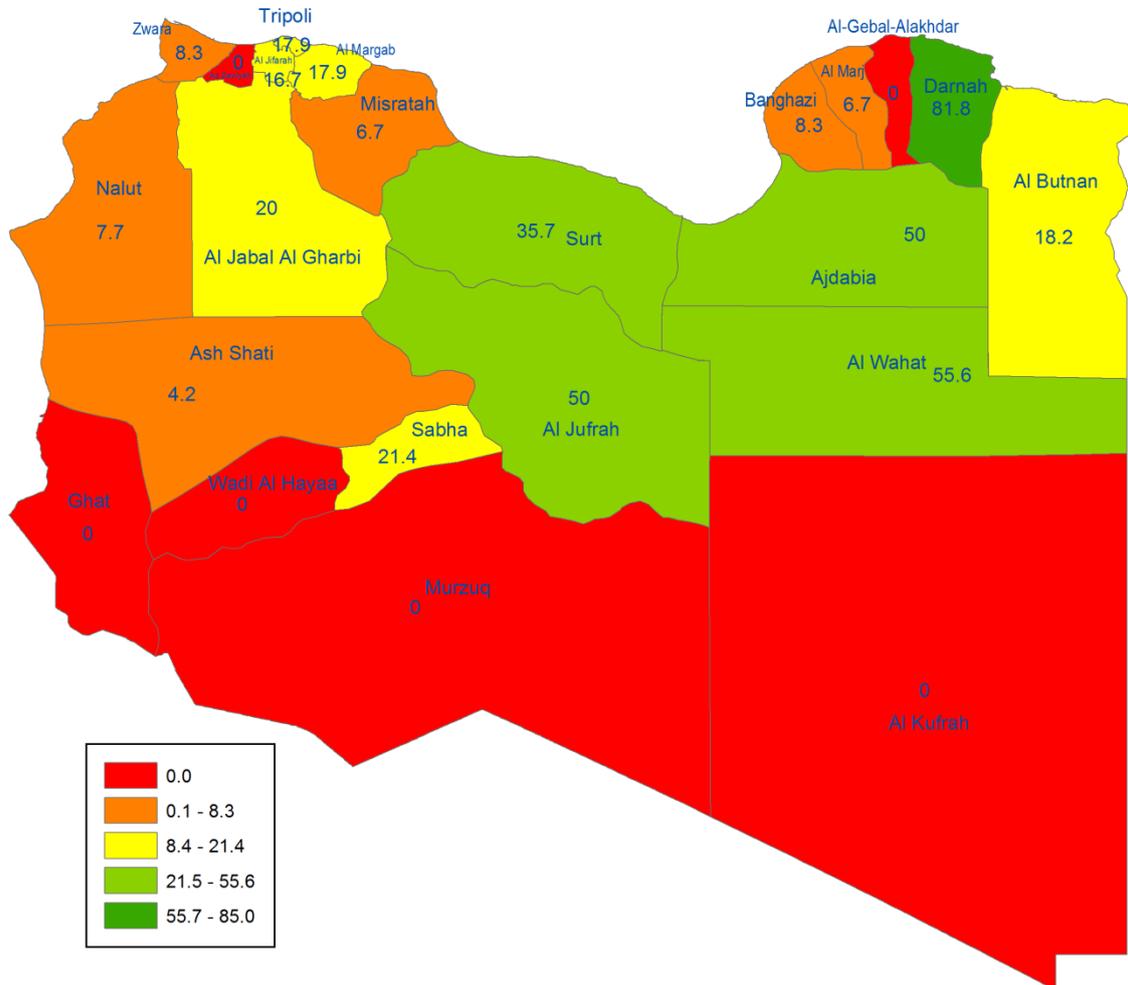
1. Is there a specialist doctor (s) to provide school health service?
2. Is there a trained medical staff helping to provide school health service?
3. Does this facility provide school health services throughout the week?
4. Does this facility provide periodic visits to the schools to provide health education services?
5. Does this facility provide health promotion services for oral health?
6. Does this facility conduct regular screening to school students?

In all facilities that were assessed (389) the results were as follows:

There was a specialist doctor (s) to provide school health service in a total of 16% of the facilities. This service was provided through half or more of the facilities in 4 district and less than that in

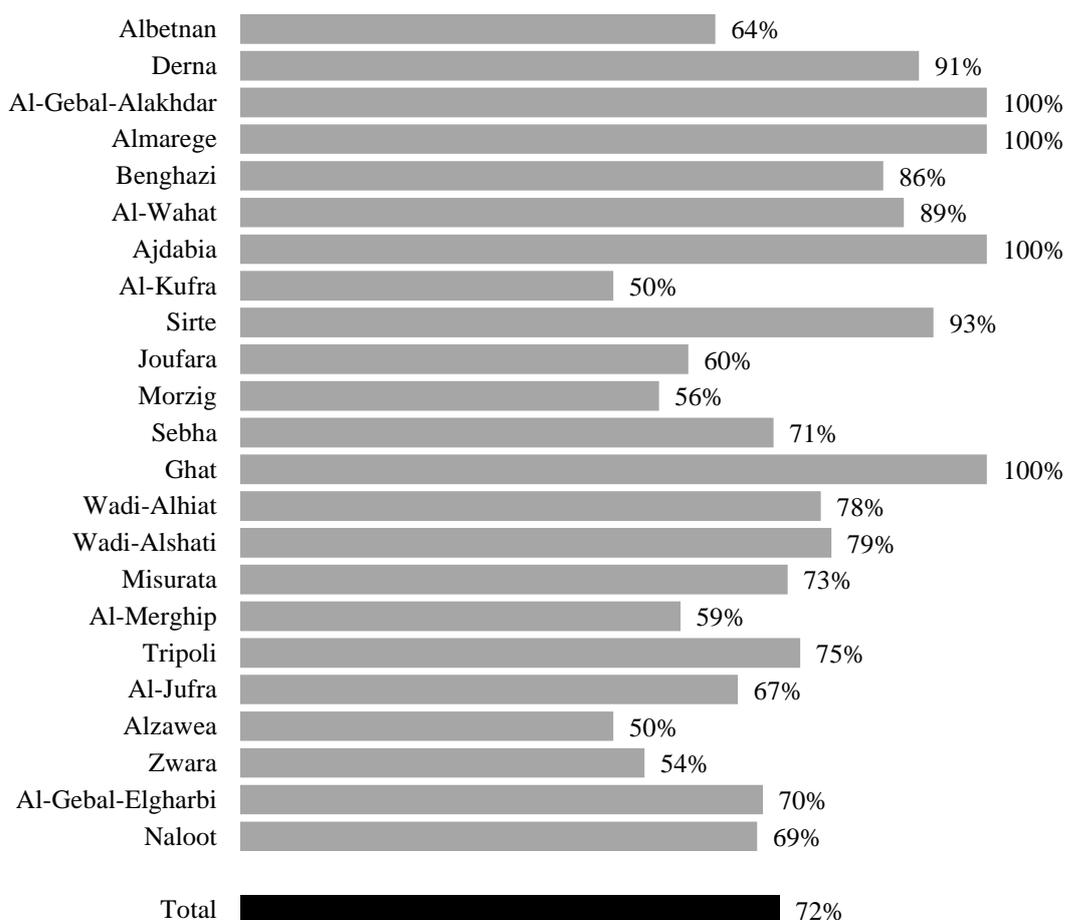
the rest of the district. This service was not provided through any of the facilities of 6 district. According to the facility type, the service was provided through 22% of other PHC facilities, 17% of PHC centers and 11% of PHC unites.

**Figure 4.52: Availability of a specialist doctor (s) by district**



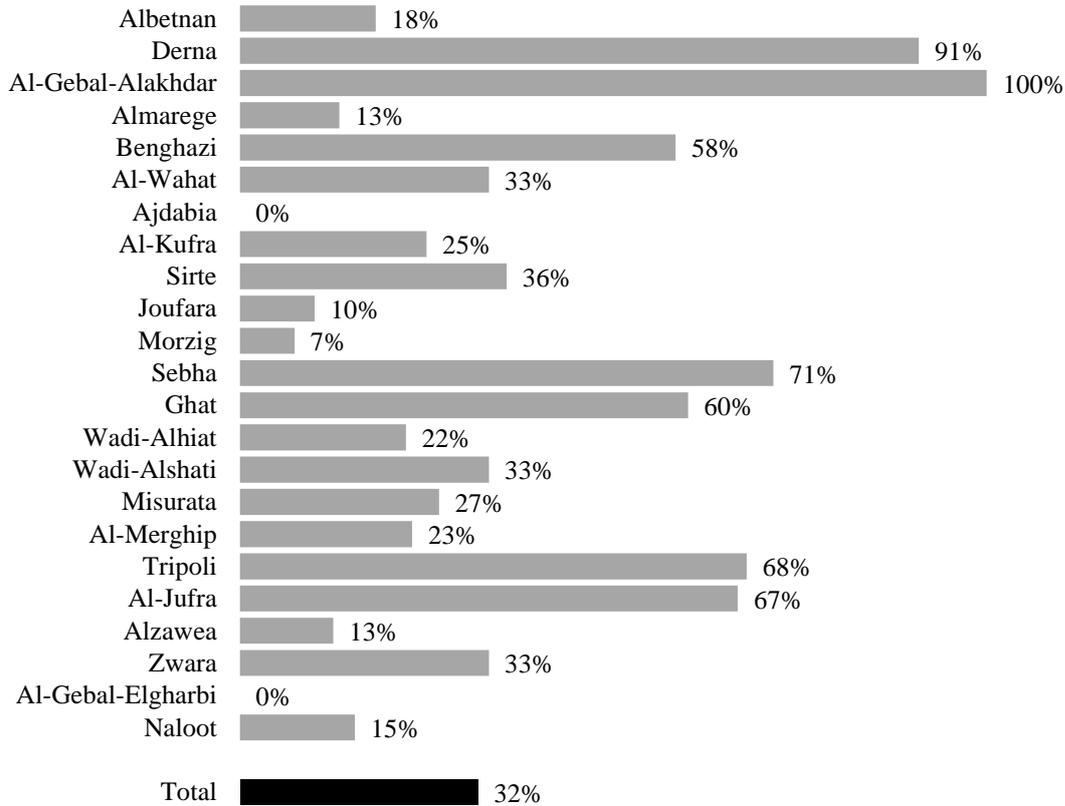
There was a trained medical staff helping to provide school health service in almost three quarter (72%) of all facilities. This service was provided through all the facilities in 4 district, through almost 75% or more of the facilities of 7 district and less than that in the rest of the district. According to the facility type, the service was provided through 78% of other PHC facilities, 78% of PHC centers, and 58% of PHC unites.

**Figure 4.53: Availability of a trained medical staff by district**



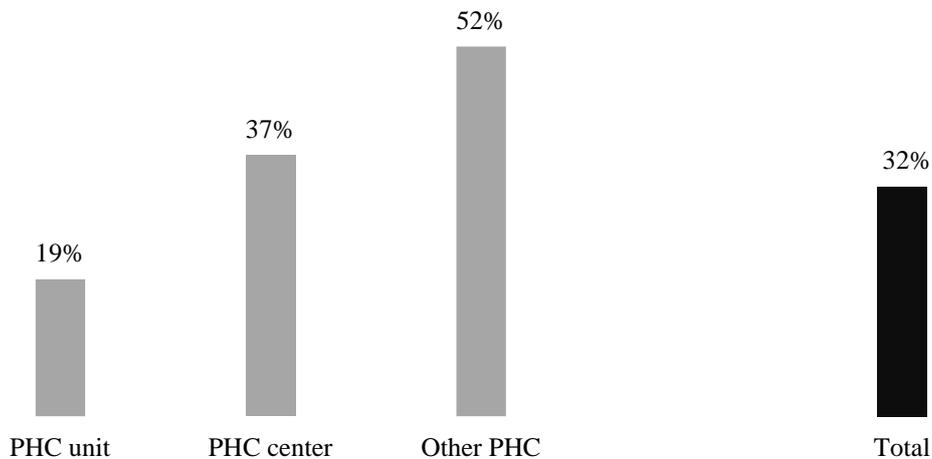
Less than one third (32%) of the facilities provided school health services throughout the week. This service was provided through all of the facilities in only one district, and between 90% to 50% of the facilities of six district and less than that in the rest of the district. According to the facility type, the service was provided through 39% of other PHC facilities, 35% of PHC centers and 24% of PHC unites.

**Figure 4.54: Providing school health services by the facility throughout the week by district**



Less than one third (32%) of the facilities provided periodic visits to the schools to provide health education services. This service was provided through all of the facilities in only one district, and between 90% to 50% of the facilities of seven district and less than that in the rest of the district. According to the facility type, the service was provided through 52% of other PHC facilities, 37% of PHC centers and 19% of PHC unites.

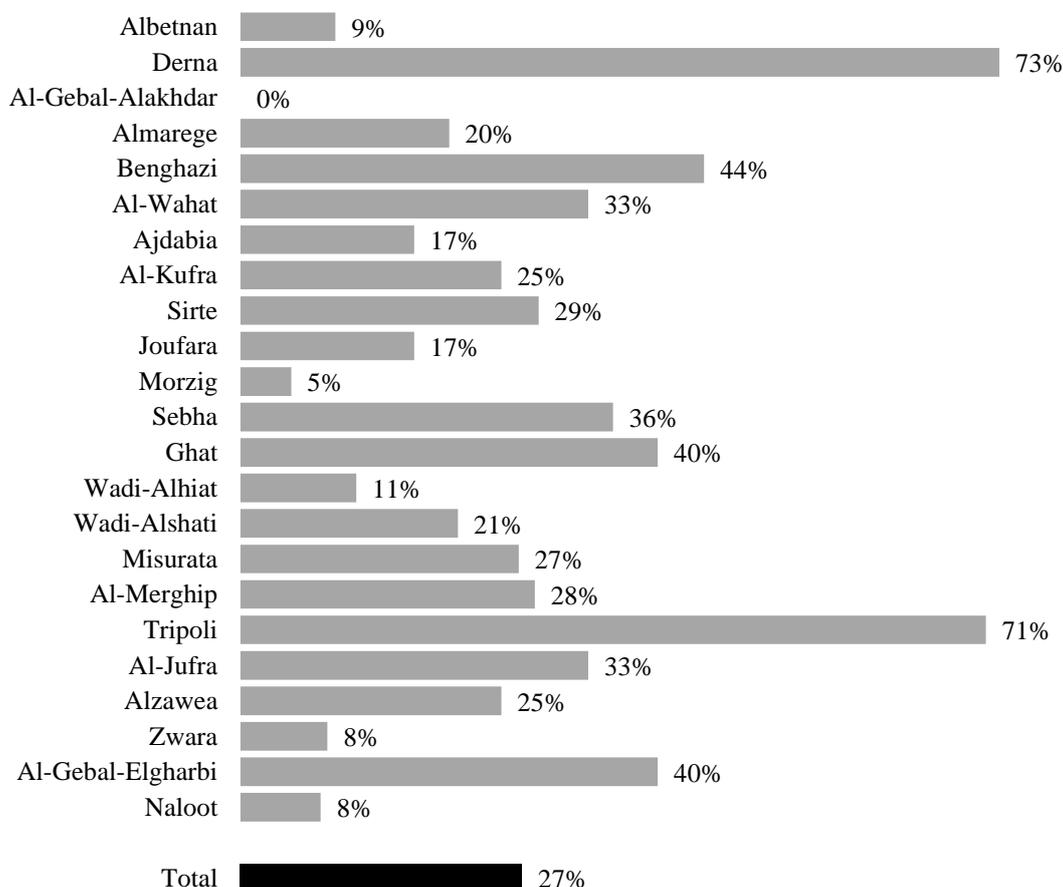
**Figure 4.55: Providing periodic visits to the schools to provide health education services by facility type**



Slightly more than one in four facilities (27%) provided health promotion services for oral health. The service was provided in around 70% of the facilities of 2 district and in 40% or less of the

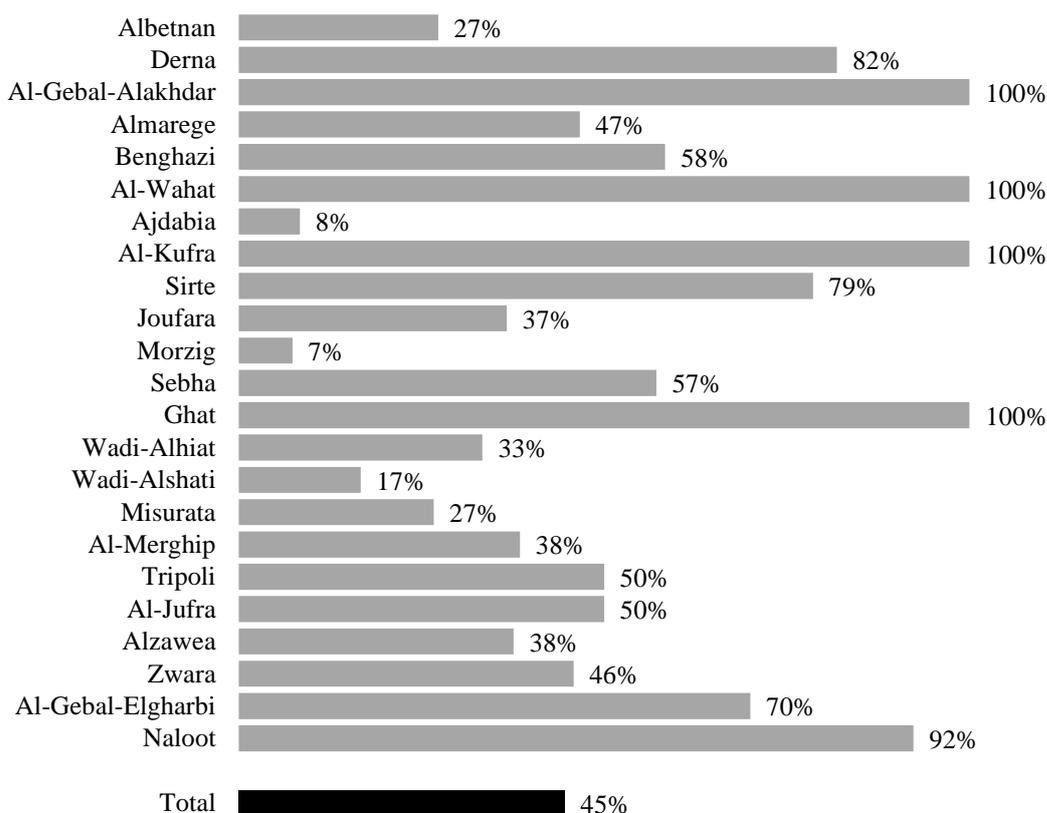
facilities of most of the other district. According to the facility type, the service was provided through 44% of other PHC facilities, 32% of PHC centers and 13% of PHC unites.

**Figure 4.56: Providing health promotion services for oral health by district**



Less than half (45%) of the facilities conducted regular screening to school students. This service was provided through all of the facilities in 4 district, and through 75% or more of the facilities of other 4 district and the percentage was less than that in the rest of the district. According to the facility type, the service was provided through 57% of other PHC facilities, 51% of PHC centers and 29% of PHC unites.

**Figure 4.57: Conduct regular screening to school students by district**



### 4.16 Oral Health Services

Table A 4.16 Oral health services by district shows the availability of services by district and by facility type.

The table shows that oral health services are available in more than two thirds (69%) of all facilities. The services were available in more than three quarters of the facilities of 13 district and less than that in the rest of the district. The highest coverage was in Wadi-Alshati district (91%) and the lowest coverage was in Sebha district (30%).

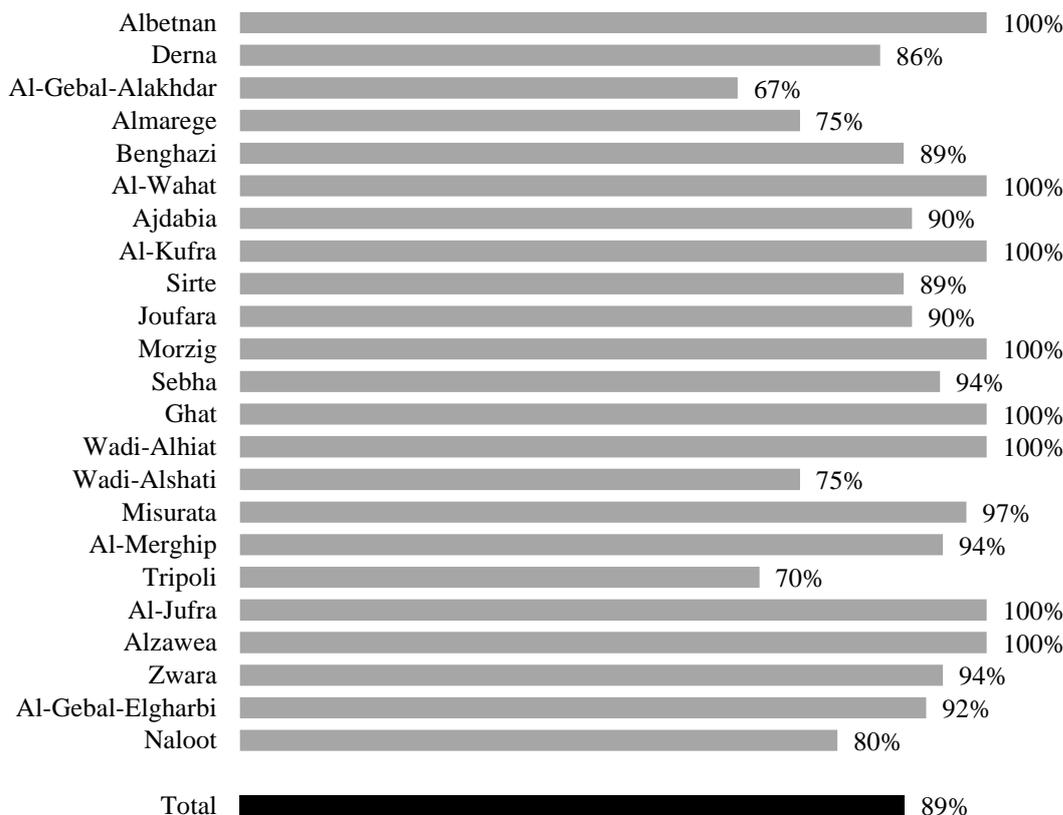
According to the facility type, oral health services were provided through 87% of PHC Unites, 53% of PHC centers and 44% of other PHC facilities.

Oral health services were assessed for their readiness based on the ability of the facility to provide any of the following oral health services:

1. Screening of children for dental caries
2. Oral health promotion activities for increasing public awareness
3. Medical services for dental diseases
4. Surgical services for dental problems
5. National guidelines for the diagnosis and management of oral health problems available
6. Oral health services training

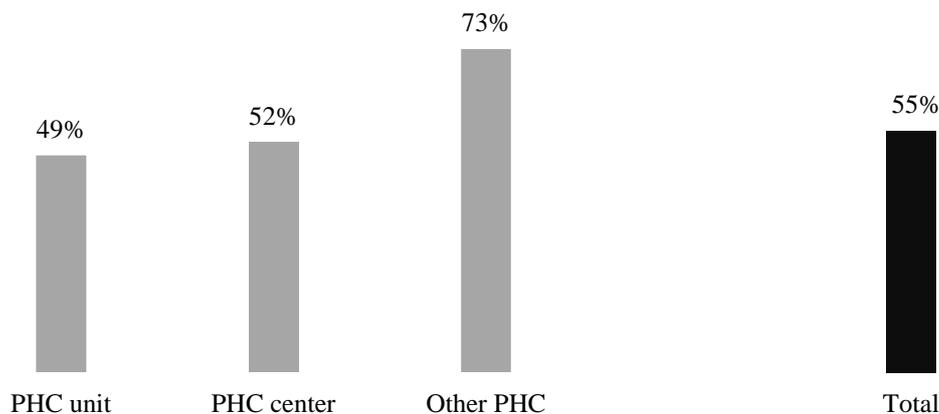
Screening of children for dental caries was provided in almost ninety percent of all facilities. This service was provided through all of the facilities in 8 district, and through 75% or more of the facilities of 14 district and the percentage was less than that in the rest of the district. According to the facility type, the service was provided through 92% of PHC unites and Other PHC facilities, while it was provided through 87% of the facilities of the PHC Centers.

**Figure 4.58: Providing screening of children for dental caries by district**



More than half of the facilities (55%) conducted oral health promotion activities for increasing public awareness. This service was provided through all of the facilities in only one district, and through 75% or more of the facilities of 6 district, while the percentage was less than that in the rest of the district. According to the facility type, this service was provided through 73% of other PHC facilities, 52% of PHC centers and 49% of PHC unites.

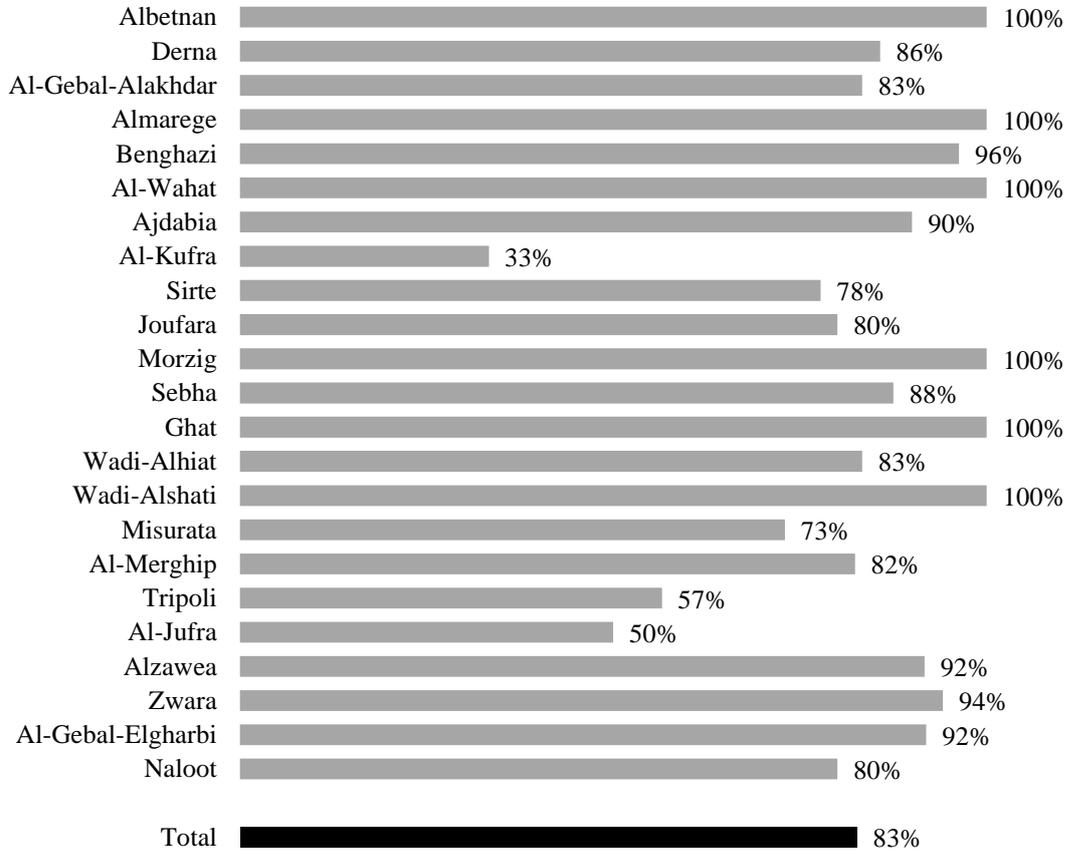
**Figure 4.59: Conducting oral health promotion activities by facility type**



Medical services for dental diseases were provided in 83% of all facilities. This service was provided through all the facilities in 6 district, and through 75% or more of the facilities of 14 district and the percentage was less than that in the rest of the district. According to the facility

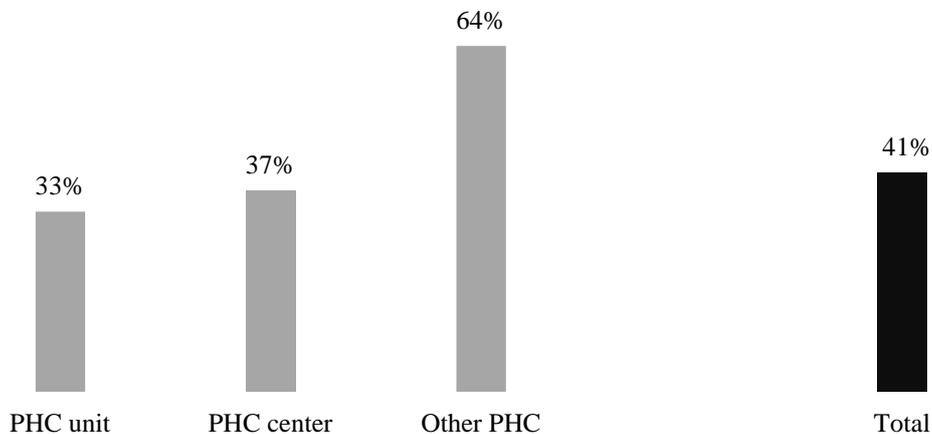
type, the services were provided through 87% of other PHC facilities, 82% of PHC centers and 80% of PHC unites.

**Figure 4.60: Providing medical services for dental diseases by district**



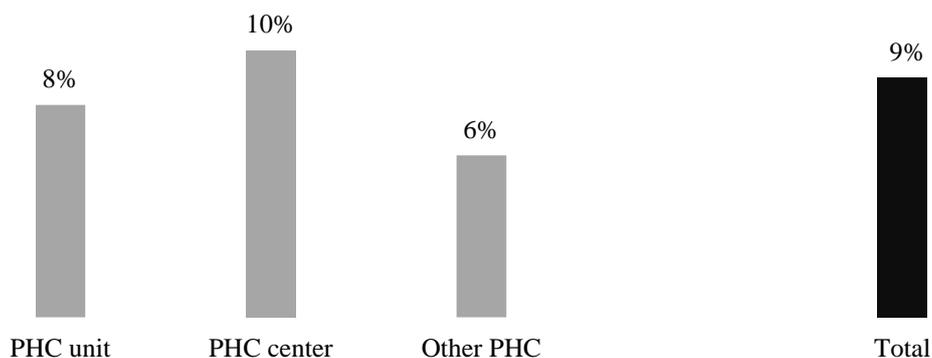
Only four in every ten facilities (41%) provided surgical services for dental problems. This service was provided through 75% or more of the facilities of only 3 district, and between 75% and 50% of the facilities 7 district, while the percentage was less than that in the rest of the district. According to the facility type, this service was provided through 64% of other PHC facilities, 37% of PHC centers and one third of PHC unites.

**Figure 4.61: Providing surgical services for dental problems by facility type**



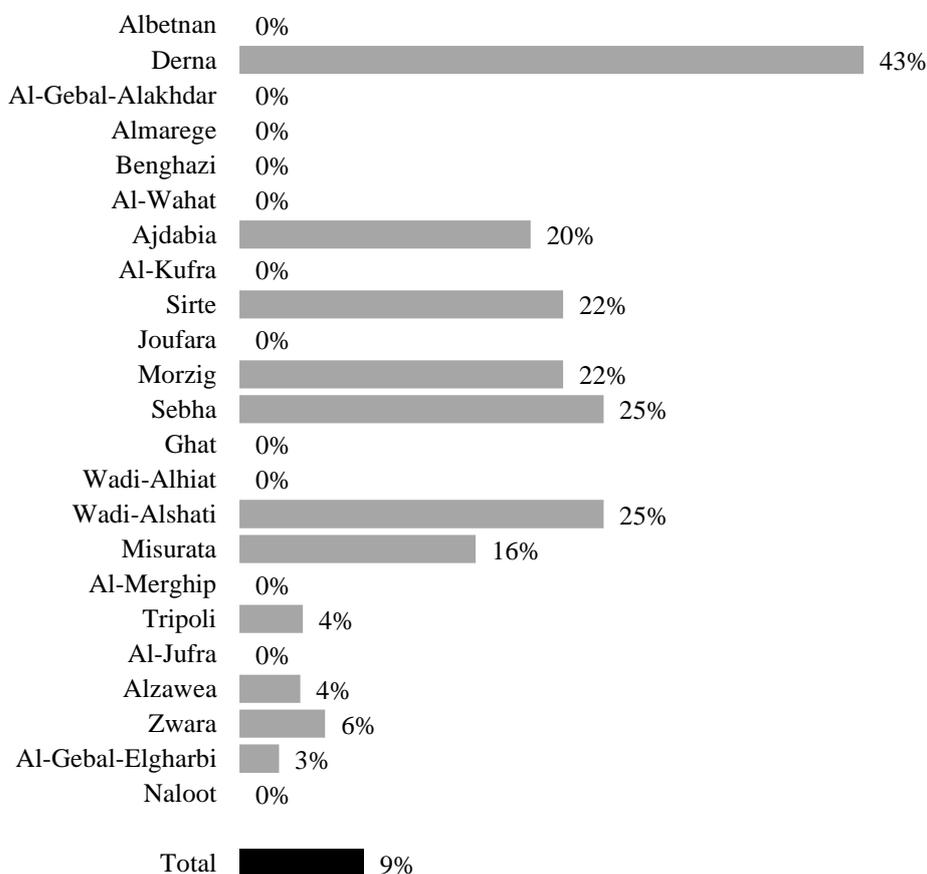
National guidelines for the diagnosis and management of oral health problems were available in only 9% of the facilities. The guidelines were not available in all facilities of 11 district and in less than 25% of the facilities of 8 district. According to the facility type, the guidelines were available in 10% of PHC centers, 8% of PHC unites and 6% of other PHC facilities.

**Figure 4.62: Availability of national guidelines for the diagnosis and management of oral health problems by facility type**



Oral Health services trained staff was available in only 9% of the facilities. Trained staff was not available in all facilities of 12 district and in 25% or less of the facilities of 11 district. According to the facility type, the trained staff was available in 12% of PHC Unites, 10% of other PHC facilities and 7% of PHC Centers.

**Figure 4.63: Availability of health services trained staff by district**



### 4.17 Nutrition Services

Table A 4.17 shows the availability of nutrition services by district and by facility type.

The table shows that nutrition services were not available in almost all facilities (only available in 7%) of all district. The services were not available in all facilities of five district. Nutrition services were available in 10% or less of the facilities of 12 district. The highest coverage was in Al-Jufra district (85%).

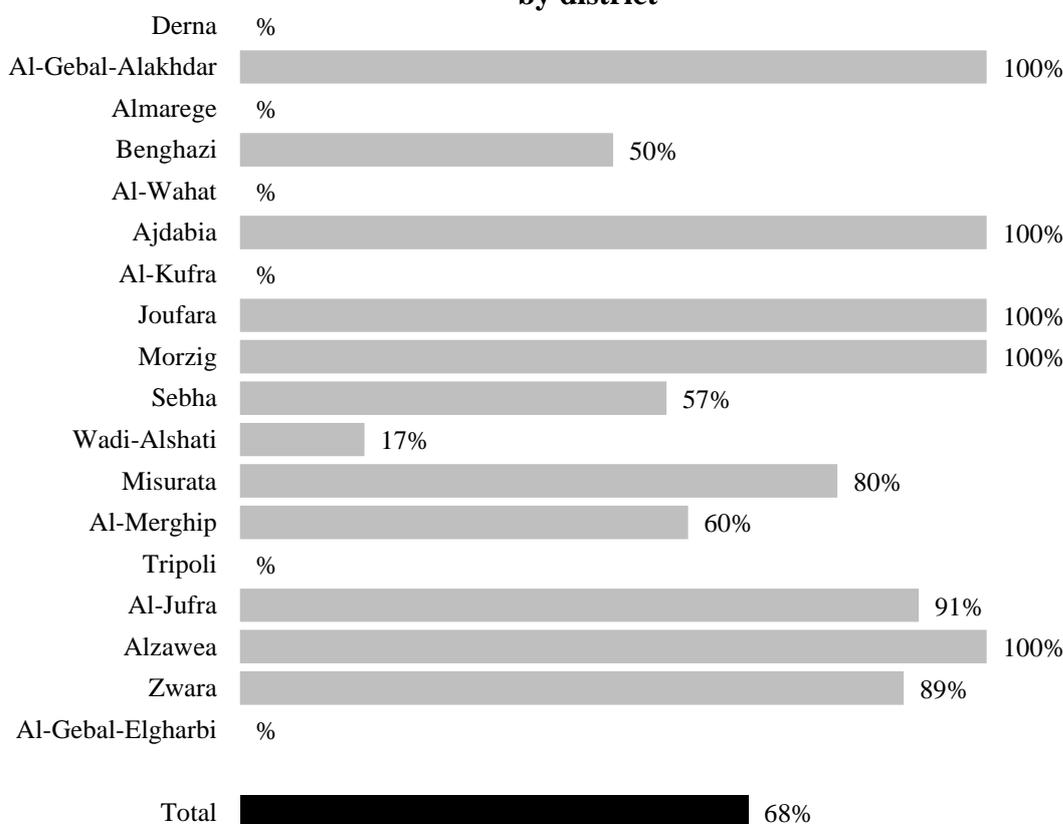
According to the facility type, nutrition services were provided through 17% of other PHC facilities, 7% of PHC centers and 5% of PHC unites.

Nutrition services were assessed for their readiness based on the ability of the facility to provide any of the following services:

1. Screening of under nutrition/malnutrition (growth monitoring or MUAC or W/H, H/A)
2. Screening of malnutrition (MUAC) for pregnant & lactating women
3. OTP (Outpatient Therapeutic Feeding Programme)
4. Advise/counsel on nutrition & breastfeeding

Screening of under nutrition/malnutrition was provided in more than two third (68%) of all facilities. This service was provided through all of the facilities in 5 district, and through 50% or more of the facilities of 6 district. Screening was not provided in any of the facilities of 11 district. According to the facility type, the service was provided through 75% of other PHC facilities, 70% of PHC Unite, while it was provided through 64% of the facilities of the PHC Centers.

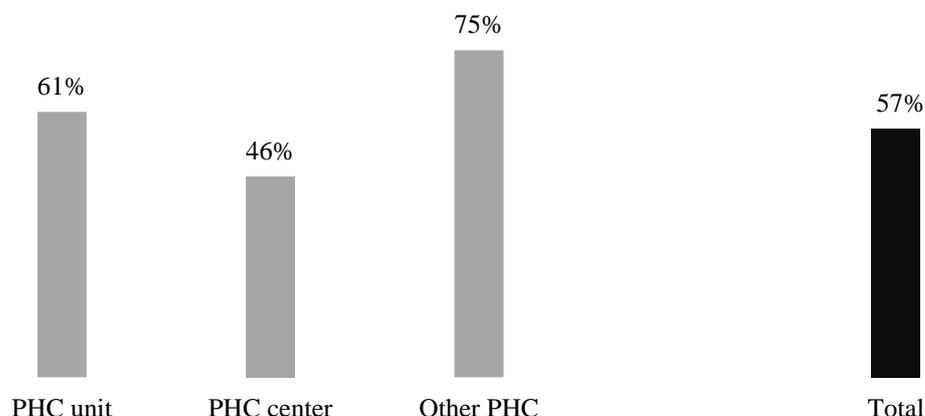
**Figure 4.64: Providing screening of under nutrition/malnutrition by district**



Screening of malnutrition (MUAC) for pregnant & lactating women was provided in more than half (57%) of all facilities. This service was provided through all of the facilities in 3 district, and through 50% or more of the facilities of 4 district. Screening was not provided in any of the

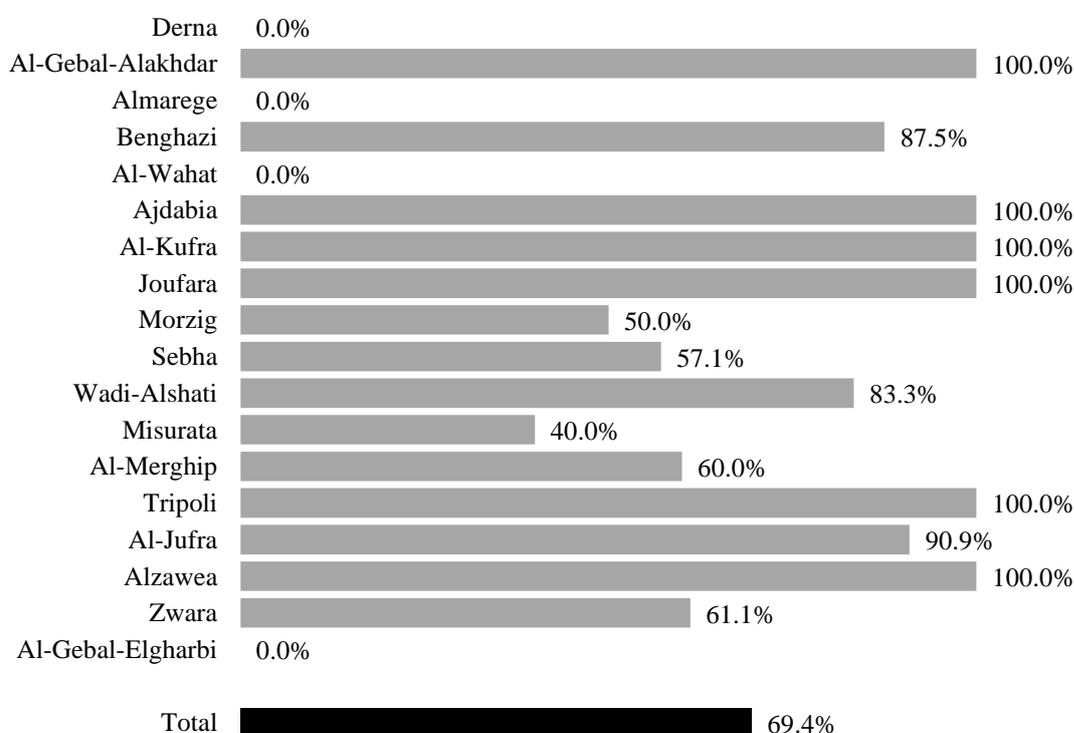
facilities of 13 district. According to the facility type, the service was provided through 75% of other PHC facilities, 61% of PHC Unites, while it was provided through 46% of the facilities of the PHC Centers.

**Figure 4.65: Screening of malnutrition (MUAC) for pregnant & lactating women by facility type**



OTP (Outpatient Therapeutic Feeding Programme) service was provided in more than two third (69%) of all facilities. This service was provided through all of the facilities in 6 district, and through 50% or more of the facilities of 7 district. OTP was not provided in any of the facilities of 9 district. According to the facility type, the service was provided through 81% of other PHC facilities, 78% of PHC Unites, while it was provided through 58% of the facilities of the PHC Centers.

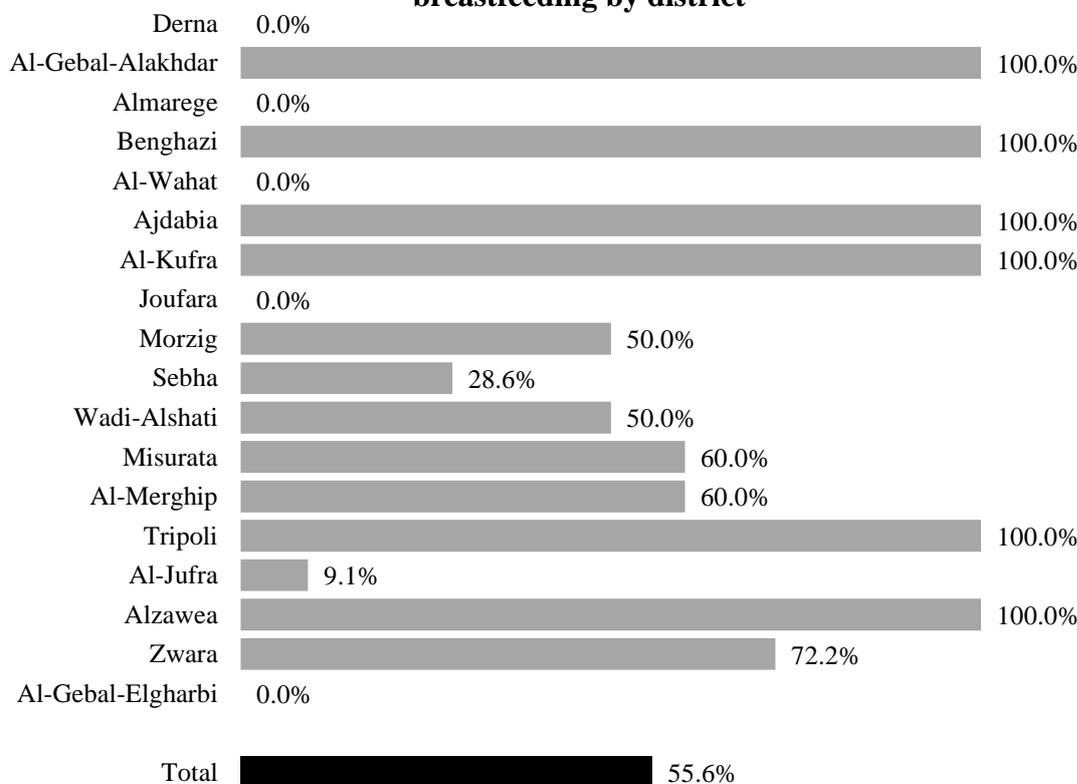
**Figure 4.66: Providing OTP (Outpatient Therapeutic Feeding Programme) service by district**



More than half (56%) of all facilities provided advise/counsel on nutrition & breastfeeding. This service was provided through all of the facilities in 6 district, and through 50% or more of the

facilities of 5 district. The service was not provided in any of the facilities of 10 district. According to the facility type, the service was provided through 81% of other PHC facilities, 49% of PHC centers, while it was provided through 48% of the facilities of the PHC unites.

**Figure 4.67: Providing advise/counsel on nutrition & breastfeeding by district**



Nutrition services were provided in only 7% of the facilities, but the readiness of the different nutrition services was HIGH .

### 4.18 Mental Health Care

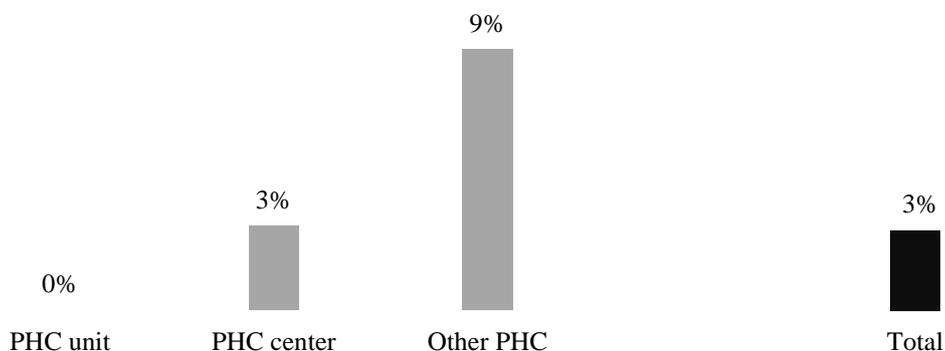
Table A 4.18 shows the availability of mental health care services by district and by facility type.

Mental health care were assessed for their readiness based on the ability of the facility to provide any of the following mental health services:

1. Does this facility provide MHPSS services?
2. Does this facility provide: support of acute distress, anxiety, mood and stress related disorders and first line management of severe and common mental disorders (e.g. psychosis, Epilepsy)?
3. Has the PHC staff been trained on provision of MHPSS and management of common Mental, Neurological and Substance use disorders (MNS)?
4. Are there any national guidelines for diagnosis and management of MNS disorders?

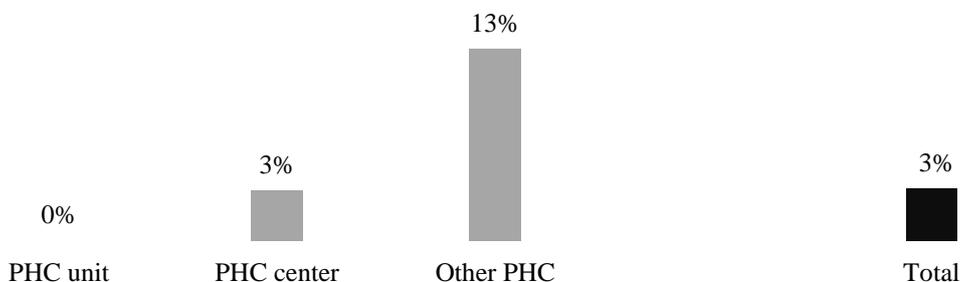
Less than three percent of all facilities provided MHPSS services. This service was provided through less than 10% of the facilities of 10 district. The service was not provided in any of the facilities of 13 district. According to the facility type, the service was provided through 9% of other PHC facilities, 3% of PHC centers, while it was not provided through any of the PHC unites.

**Figure 4.68: Providing MHPSS services by facility type**



Less than four percent of all facilities provided support of acute distress, anxiety, mood and stress related disorders and first line management of severe and common mental disorders (e.g. psychosis, Epilepsy). This service was provided through less than 10% of the facilities of 7 district. The service was not provided in any of the facilities of 12 district. According to the facility type, the service was provided through 13% of other PHC facilities, 3% of PHC centers, while it was not provided through any of the PHC unites.

**Figure 4.69: Providing support of acute distress, anxiety, mood and stress related disorders and first line management of severe and common mental disorder by facility type**



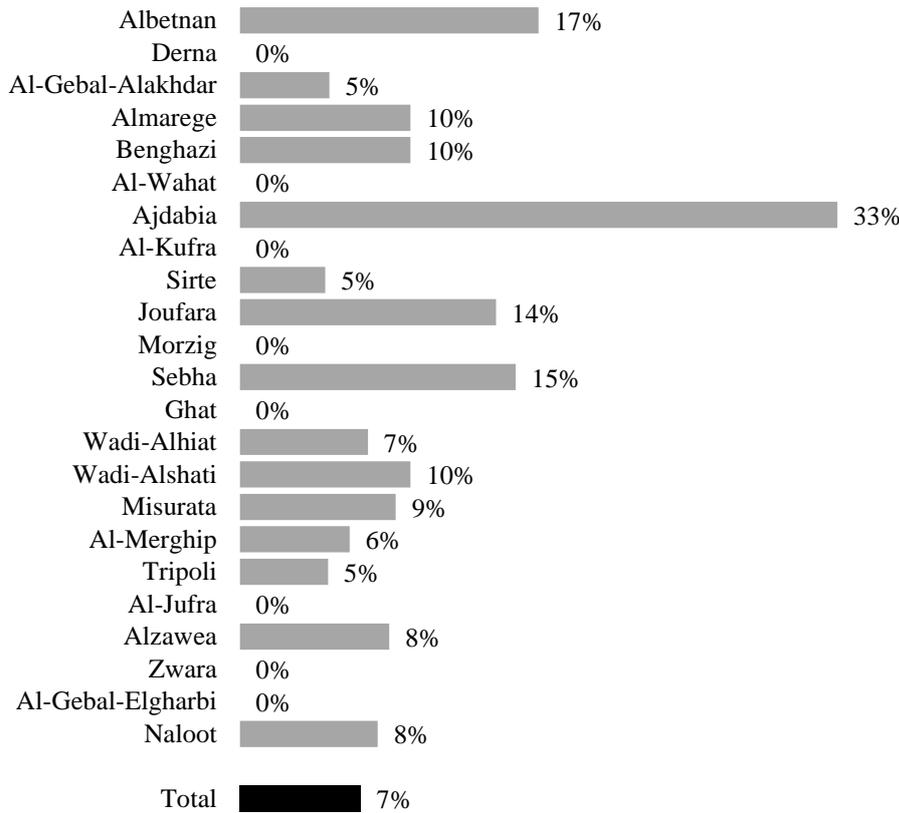
The survey showed that there was no single facility that had trained staff or had any national guidelines.

#### **4.19 Cancer Diagnosis and Management Services**

Table A 4.19 show the availability of cancer diagnosis and management services by district and by facility type.

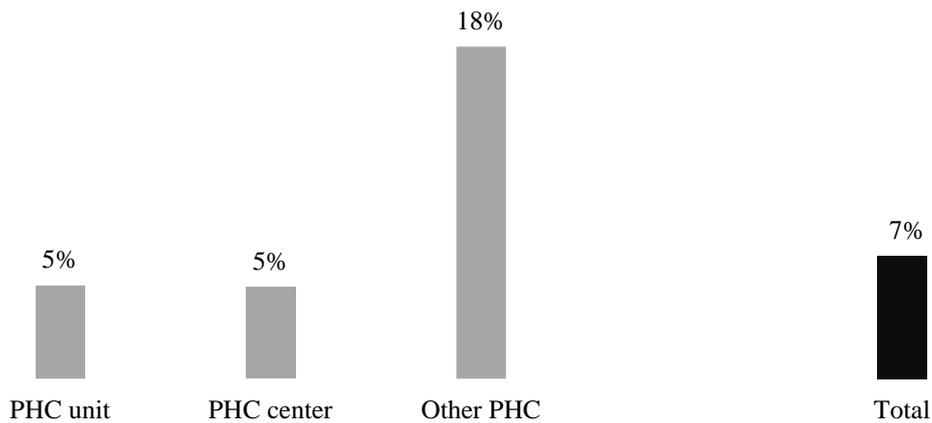
The table shows that cancer diagnosis and management services are available in less than 7% of all facilities. The services were available in less than one fifth of the facilities of most of the district. The service was not available in any of the facilities of 8 district

**Figure 4.70: Availability of cancer diagnosis and management services by district**



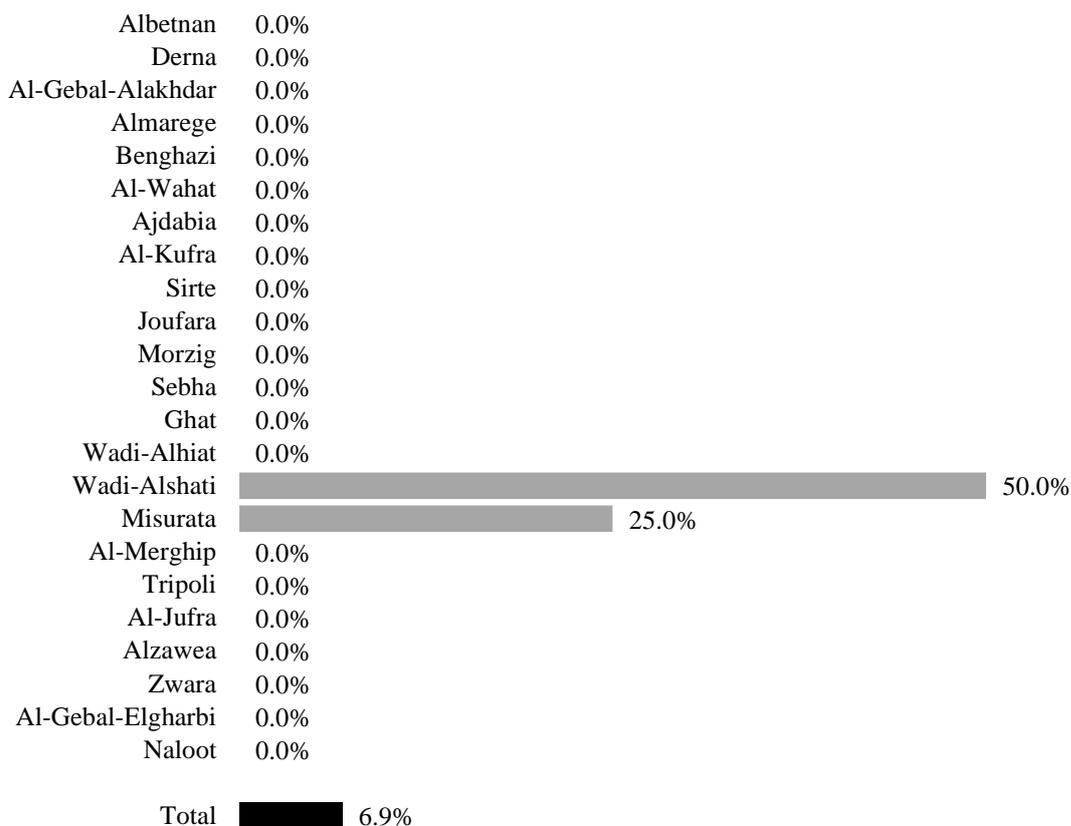
According to the facility type, cancer diagnosis and management health services were provided through 18% of other PHC facilities and 5% of both PHC units and PHC Centers.

**Figure 4.71: Availability of cancer diagnosis and management services by facility type**



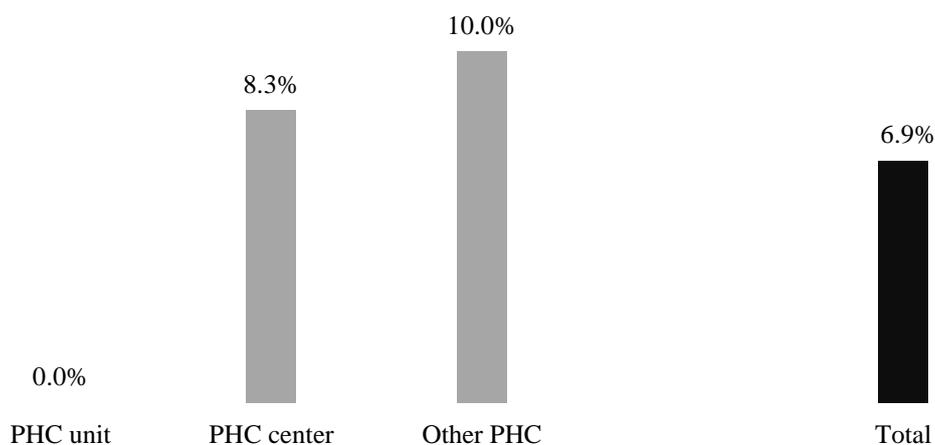
Cancer diagnosis and management health services were assessed for their readiness based on the availability of guidelines for diagnosis and management of cancer. The guidelines were available in all facilities of 2 district. The guidelines were available in 50% of the facilities of Wadi-Alshati and 25% of facilities of Misurata. All the facilities of the other district had no guidelines.

**Figure 4.72: Availability of guidelines for diagnosis and management of cancer by district**



According to the facility type, guidelines for diagnosis and management of cancer were available through 10% of other PHC facilities and 8% of PHC centers, while it wasn't availability in any PHC units.

**Figure 4.73: Availability of guidelines for diagnosis and management of cancer by facility type**



## 5 Conclusion

Post conflict context often poses significant challenges for the health system and for the new government, including its Ministry of Health. Urgent interventions need to be undertaken to alleviate the conflict impact on the system and to restore its pre-conflict functionality. Then the system needs to be reset in conformity with new post conflict realities.

The 2012 Service Availability and Readiness Assessment (SARA) for Libya was conducted to: Assess the current status of infrastructure, service delivery and system resources including human resources, supply-chain system, technologies and financial resources, Assess facilities readiness and any damage which could have been sustained during the conflict ,and measure system outputs, service utilization and their adequacy

/Libya Survey covered all primary health care (PHC)facilities in Libya from each of the 23 District were included in the survey. A total of of 1379 primary health facilities were visited with 736 are primary health care unit and 496 are primary health care center and 147 represent other primary facility type.

The assessment provides key information on the state of the health system with regards to accessibility of services (e.g. density of health facilities and beds, core health workers, service utilization), as well as the readiness of the facilities to provide an adequate level of service (measured by the availability of trained staff, diagnostics equipment and medicines), both for general health services and for specific key health interventions (e.g. maternal and newborn health, PMTCT, TB, Diabetes diagnosis and treatment).

### 5.1 General Service Availability

Overall, the service availability pre and post conflict index was 52.77 out of 100 pre-conflict which increased to 54.58 out of 100 post conflict. Primary health care centers had a score of 41.32 out of 100 pre conflict which increased to 42.45 post conflict. Primary health care units had a score of 20.58 out of 100 pre conflict which increased to 22.42 post-conflict, while other health facilities had a score of 19.40 out of 100 pre conflict which increased to 20.65 out of 100 post-conflict. By District, pre conflict Albetnan had the highest service availability score of 74 out of 100, while post conflict Wadi-Alshati had the highest score of 71.01 out of 100.

### 5.2 General Service Readiness

General service readiness refers to the capacity of health facilities to provide general health services. It measures the availability of infrastructure, equipment and supplies necessary to provide services within the following five domains: basic amenities, basic equipment, standard precautions, diagnostic testing, and essential medicines.The general service readiness index is a composite score summarizing information from the five domains.

The overall readiness score is 64%, it's higher among Other PHC facilities (71 %). Among all 23 District the readiness score tends from 51% to 85%. Basic equipment scores tend to be (67%), whereas diagnostic capacity and essential medicines scores tend to be (58%) low across District.

**Basic Amenities.** An overall readiness score was computed by taking the mean availability of the basic amenities tracer items for each of the 23 District. On average, PHC facilities had slightly more than 3 out of the 6 tracer items for an overall basic amenities readiness score of 55 out of 100. The highest mean score was in Sebha District which has an overall basic amenities readiness score of 85 out of 100, while the lowest mean score was in Al-Gebal-Elgharbi District which has an overall basic amenities readiness score of 43 out of 100. Results disaggregated by type of facility showed that other health facilities have an overall basic amenities readiness score of 75 out of 100, compared with a score of 60 out of 100 among primary health care centers and 47 out of 100 among primary health care units.

**Basic Equipment.** An overall mean score was computed by taking the mean availability of the basic equipment tracer items for each of the 23 District as well as for the 23 District combined. On average, health facilities had slightly more than 2 out of the 5 tracer items for an overall basic equipment mean score of 46 out of 100. Results disaggregated by type of facility showed that primary health care centers had overall basic equipment mean score of 57 out of 100, compared with a score of 47 out of 100 among other health facilities and 37 out of 100 among primary health care units. The highest mean score was in Ghat District which has an overall basic equipment mean score of 92 out of 100, while the lowest mean score was in Ajdabia District which has an overall basic equipment mean score of 3 out of 100.

**Standard precautions for prevention of infections.** On average, health facilities had about 3 out of the 7 tracer items for overall standard precautions mean score of 43 out of 100. Results disaggregated by type of facility showed that other health facilities had overall standard precautions mean score of 63 out of 100, compared with a score of 49 out of 100 among primary health care centers and 34 out of 100 among primary health care units. The highest mean score was observed in Sebha District which has an overall basic equipment mean score of 73 out of 100, while the lowest mean score was in Wadi-Alshati District which has an overall basic equipment mean score of 21 out of 100.

Overall, only 2% of the PHC facilities have all 7 elements available with 12% of other health facilities having all 7 elements available compared with only 3% of primary health care centers and less than one percent of primary health care units. By District, Derna had the highest percentage of the availability of all 7 elements (10%), while in 8 Districts none of the health facilities had all 7 elements available.

**Diagnostic Capacity.** On average, PHC facilities had about 6 out of the 10 lab test with an overall diagnostic capacity mean score of 58 out of 100. Results disaggregated by type of facility showed that other PHC facilities had overall diagnostic capacity mean score of 75 out of 100, compared with a score of 56 out of 100 among primary health care centers and 49 out of 100 among PHC units. The highest mean score was in Al-Wahat District which has an overall diagnostic capacity mean score of 80 out of 100, while the lowest mean score was in Albetnan District which has an overall mean score of 39 out of 100.

**Laboratory Equipment Capacity.** The mean score for the capacity of the 7 laboratory equipment was calculated. Overall the laboratory equipment mean score was 33 out of 100. Reflecting the previous results, the other PHC facilities had the highest mean score (49 out of 100) followed by PHC centres (31 out of 100) and PHC units (21 out of 100). By District, Al-Kufra had the highest mean score (61 out of 100) followed by Almarege (55 out of 100).

**Essential Medicine.** The mean score for the availability of the essential tracer medicines was calculated. Overall the medicines mean score was 49 out of 100. Reflecting the previous results, the PHC centres had the highest mean score (65 out of 100) followed by other PHC facilities (56 out of 100) and PHC units (35 out of 100). By District, both Sebha and Wadi-Alhiat had the highest mean score (83 out of 100) while Morzija had the lowest mean score (30 out of 100).

## 5.3 Specific Services Availability and Readiness

### 5.3.1 Service specific availability

The following table shows that the percentage of facilities providing maternal and child health services was low across services. The table shows that less than a quarter of the facilities provided ante-natal care services post conflict. Only 4% of the facilities provided normal delivery and/or newborn care services- post-conflict. Comprehensive emergency obstetric care- post-conflict services were available in only 3% of the facilities. Child immunization services- post-conflict were available in only four in ten facilities and curative care for under five services post-conflict were available only in one third of the facilities.

The following table shows that percentage of facilities providing diagnostic and treatment for infectious and non-communicable diseases varied considerably. More than four in ten facilities provided diagnosis or management of non-communicable diseases- post conflict, oral health services - post-conflict more were available in more than three in ten facilities and adolescent health & school Health services- post-conflict

Types of Basic Health Services	% of facilities providing the service	No. Of Facilities
Adolescent health & School Health services- post-conflict	24.8%	258
Nutrition services - post-conflict	6.9%	72
Oral health services - post-conflict	31.5%	328
HIV counseling and testing services- post-conflict	6.1%	64
HIV & AIDS antiretroviral prescription - post-conflict	0.5%	5
Diagnosis or treatment of STIs, excluding HIV- post-conflict	3.6%	37
Diagnosis, treatment prescription of TB- post-conflict	2.0%	21
Diagnosis or treatment of Leishmaniasis - post-conflict	3.7%	38
Diagnosis or management of non-communicable diseases- post conflict	41.4%	431

The following table shows that seven in ten facilities provided pharmaceutical service- post-conflict and more than one third of the facilities provided laboratory diagnostic services post - conflict. Surgical services- post-conflict were available in more than one third of the facilities as well. Blood transfusion services- post-conflict were available in only 2% of the facilities.

Types of Basic Health Services	% of facilities providing the service	No. Of Facilities
Antenatal care- post conflict	22.4%	233
PMTCT Services- post-conflict	0.6%	6
Normal delivery and/or newborn care services- post-conflict	3.9%	41
Comprehensive emergency obstetric care- post-conflict	3.2%	33
Child immunization services- post-conflict	41.1%	428
Curative care for under 5- post-conflict	33.1%	345
<i>PMTCT services post – conflict were available in less than one percent of the facilities.</i>		

were available in a quarter of the facilities and nutrition services - post-conflict were available in 7% of the facilities. However, HIV counseling and testing services- post-conflict were available in 6% of the facilities, diagnosis or treatment of STIs, excluding HIV- post-conflict were available in 4% of the facilities, diagnosis or treatment of Leishmaniasis - post-conflict were available also in 4% of the facilities, while diagnosis, treatment prescription of TB- post-conflict were available in 2% of the facilities and HIV & AIDS antiretroviral prescription - post-conflict were available in only 0.5% of the facilities.

Types of Basic Health Services	% of facilities providing the service	No. Of Facilities
Surgical services- post-conflict	36.5%	380
Blood transfusion services- post-conflict	2.0%	21
Laboratory diagnostics- post-conflict	35.8%	373
Pharmaceutical service- post-conflict	70.5%	734

### 5.3.2 Service specific readiness

**Antenatal Care.** Slightly less than a quarter of service providers received at least one trained staff antenatal care. ANC Guidelines were found only in 21 out of 373 health facilities. Almost three quarters of the health facilities had Blood Pressure Apparatus and provide Haemoglobin test. However the overall Antenatal care service readiness is low (2%), it's higher among Other PHC facilities (6%) while no readiness observed in all 46 PHC unit which provide the antenatal care service.

**Basic Obstetric Care.** No Obstetric Care service readiness is found although, slightly less than a quarter of service providers received any MCH training in the last two years. IMPAC Guidelines were found only in 12% of health facilities. 61% of the health facilities had emergency transport. More than 90% of facilities had latex gloves.

**Child Immunization.** The overall Child Immunization Services Readiness is (15%), however almost all of facilities had refrigerators (99.8%). Most of the facilities (more than 94%) had: ice packs vaccine carriers, syringes (standard disposable or auto-destruct), registration vaccination books. Less than 80% of the facilities had safety boxes.

**Preventive and Curative Care for Children Under Five .** No facility among the 345 facilities which providing Preventive and Curative Care for Children Under Five had overall readiness score, while only 8% of facilities had trained staff in IMCI in the last 2 years. Slightly more than one fifth of the facilities had IMCI Guidelines No growth monitoring guidelines were available in 17 out of the 23 District. More than half of the facilities had adult pediatric scale. Length – height measuring was only provided in 37% of health facilities. Thermometers were available in almost three quarters of health facilities. Stethoscopes were available in more than three quarters of health facilities. Hemoglobin tests were available only in less than two thirds of all health facilities. Stool examination was provided in 58% of all health facilities. 84% of all health facilities provide ORS and zinc supplementation to children with diarrhea.

**Adolescents Health .** In general, the readiness of the facilities to provide adolescents' health services is poor (less than 1%). Readiness of all 5 tracers is provided in only two District (Sebha: 8%, and Alzawea: 9%). Trained staff is available only in less than 2% of the facilities and the guidelines were available only in less than 6% of the facilities.

**Preventing mother-to-child transmission of HIV (PMTCT).** Only 6 facilities (3 PHC Unites & 3 PHC Centers) offering PMTCT services were assessed on their readiness to provide PMTCT services based on the availability of PMTCT National Guidelines. No single facility had the guidelines.

**Diabetes .** In general, the readiness of the facilities to provide diabetes services is poor (4%). National guidelines were available only in 9% of the facilities. The BP Apparatus was available in three quarters of the facilities. The adult-pediatric scale was available in almost half of the facilities (54%). Nine in ten of the facilities provide blood sugar testing.

**Cardiovascular Diseases .** Among health facilities providing Cardiovascular Diseases Services there are 28% had overall readiness. However national guidelines were available only in 87% of the facilities. The stethoscope was available in almost three quarters of the facilities. The BP Apparatus was available in slightly less than three quarters of the facilities. Adult – paediatric scales and oxygen cylinders were available only in half of the facilities.

**Basic Surgery.** Facilities offering surgical services (380 facilities) were assessed on service readiness based on the availability of the oxygen. Less than half of the facilities had oxygen.

**Blood Transfusion .** There is no facility among 21 health facilities which providing the blood transfusion service had the overall readiness. Although one third of the facilities had staff trained in appropriate use of blood and safe transfusion practice in the past two years. Most facilities providing blood transfusion (89.5%) had a working refrigerator; however, this indicates that one in ten transfusion outlets did not have an appropriate means of storing blood.

One fifth only of transfusion outlets had a safe blood supply, and slightly less than three quarters (71%) had a sufficient supply of blood. Only two in ten facilities had guidelines on the appropriate use of blood and safe transfusion practices.

**School Health .** There was a specialist doctor (s) to provide school health service in a total of 16% of the facilities. There was a trained medical staff helping to provide school health service in almost three quarter (72.2%) of all facilities. Less than one third (32%) of the facilities provided school health services throughout the week. Less than one third (32%) of the facilities provided periodic visits to the schools to provide health education services. Slightly more than one in four facilities (27%) provided health promotion services for oral health. less than half (44.5%) of the facilities conducted regular screening to school students. However, the overall School Health Services Readiness is 15%.

**Oral Health.** Screening of children for dental caries was provided in almost ninety percent of all facilities. More than half of the facilities (55%) conducted oral health promotion activities for increasing public awareness. Medical services for dental diseases were provided in 83% of all facilities. Only four in every ten facilities (40.5%) provided surgical services for dental problems.

National guidelines for the diagnosis and management of oral health problems were available in only 8.5% of the facilities. Oral Health services trained staff was available in only 8.5% of the facilities. However the overall Oral Health Services Readiness is poor (4%).

**Mental Health .** The survey showed that there was no single facility that had trained staff or had any national guidelines. So that no facility had the overall Mental Health Care Readiness

**Cancer diagnosis and management health services** were assessed for their readiness based on the availability of guidelines for diagnosis and management of cancer. The guidelines were available in only 7% of the facilities. The guidelines were NOT available in all facilities of 13 District. The guidelines were available in 50% of the facilities of Wadi-Alshati and 75% of facilities of Misurata. All the facilities of the other District had no guidelines.



## **Annex Tables**



## 2 Service Availability

### 2.1 Health Infrastructure

#### Density of health facilities

<b>Table A 2a Density of health facilities by facility type- Pre Conflict</b>					
Number of PHC units per 10,000 population; PHC centers per 10,000 population; other PHC facilities per 10,000 population; total number of PHC facilities per 10,000 population, by type of facility, according to District, Libya 2012.					
Background characteristic	Population year 2010	PHC unit per 10,000 population	PHC center per 10,000 population	Other PHC facilities per 10,000 population	Total PHC facilities per 1,000 population
<b>District</b>					
Albetnan	163000	0.4294	0.6748	0.1227	1.227
Derna	167000	0.0599	1.4371	0.2395	1.7365
Al-Gebal-Alakhdar	208000	0.0962	0.1923	0.2404	0.5288
Almarege	188000	0.6915	1.4362	0.1064	2.234
Benghazi	667000	0.015	0.2249	0.1049	0.3448
Al-Wahat	30000	3	2	0.3333	5.3333
Ajdabia	148000	0.0676	0.6757	0.2027	0.9459
Al-Kufra	46000	0.6522	0.8696	0.2174	1.7391
Sirte	143000	1.958	0.6993	0.3497	3.007
Joufara	458000	0.6332	0.393	0.0655	1.0917
Morzig	79000	3.9241	1.6456	0.3797	5.9494
Sebha	129000	0.6977	0.5426	0.3876	1.6279
Ghat	23000	0	2.1739	0	2.1739
Wadi-Alhiat	77000	1.5584	1.2987	0	2.8571
Wadi-Alshati	79000	2.4051	2.7848	0.1266	5.3165
Misurata	552000	0.308	0.471	0.2174	0.9964
Al-Merghip	441000	0.9524	1.0658	0.068	2.0862
Tripoli	1067000	0.2062	0.2812	0.0656	0.553
Al-Jufra	51000	0.9804	0.7843	0	1.7647
Alzawea	292000	1.3699	0.137	0.2397	1.7466
Zwara	290000	1.2759	0.9655	0.0345	2.2759
Al-Gebal-Elgharbi	310000	2.7742	0.8065	0.1613	3.7419
Naloot	94000	0.6383	0.5319	0.2128	1.383
<b>Total</b>	<b>5702000</b>	<b>0.74</b>	<b>0.6226</b>	<b>0.1385</b>	<b>1.4977</b>

**Table A 2b Distribution of health facilities by facility type**

Number of facilities by type of facility, according to District, Libya 2012.

Background characteristic	Primary Health Care (PHC) unit	Primary Health Care (PHC) centre	Other Primary Health care (PHC) Facilities <sup>1</sup>	Total <sup>2</sup>
<b>District</b>				
Albetnan	7	11	2	20
Derna	1	24	4	29
Al-Gebal-Alakhdar	2	4	5	11
Almarege	13	27	2	42
Benghazi	1	15	7	23
Al-Wahat	9	6	1	16
Ajdabia	1	10	3	14
Al-Kufra	3	4	1	8
Sirte	28	10	5	43
Joufara	29	18	3	50
Morzig	31	13	3	47
Sebha	9	7	5	21
Ghat	0	5	0	5
Wadi-Alhiat	12	10	0	22
Wadi-Alshati	19	22	1	42
Misurata	17	26	12	55
Al-Merghip	42	47	3	92
Tripoli	22	30	7	59
Al-Jufra	5	4	0	9
Alzawea	40	4	7	51
Zwara	37	28	1	66
Al-Gebal-Elgharbi	86	25	5	116
Naloot	6	5	2	13
<b>Total</b>	<b>420</b>	<b>355</b>	<b>79</b>	<b>854</b>

Notes: <sup>1</sup> Other Primary health care facilities include (Poly clinic, Rural Hospital, Communicable diseases center, Inpatient clinics, Other primary health care facilities)

<sup>2</sup> These facilities are those have been established before conflict (2011), so a comparison between the situation of these health facilities pre and post the conflict could be done.

## Inpatient and maternity beds

**Table A 2.1 Density of beds and breakdown by type- Pre Conflict**

Number of inpatient beds per 10,000 population and number of maternity beds per 1,000 pregnant women, by type of facility, according to District Libya 2012.

Background characteristic	Population year 2010	Number of inpatient beds per 10,000 population	Number of maternity beds per 1,000 pregnant women (1)
<b>Type of facility</b>			
PHC unit	5702000	0.0158	0.03
PHC center	5702000	0.0842	0.05
Other PHC Facilities	5702000	1.6485	1.64
<b>District</b>			
Albetnan	163000	1.6564	4.31
Derna	167000	2.3952	4.85
Al-Gebal-Alakhdar	208000	4.2308	1.56
Almarege	188000	0.4787	0.57
Benghazi	667000	NA	NA
Al-Wahat	30000	NA	NA
Ajdabia	148000	4.8649	3.28
Al-Kufra	46000	1.3043	0
Sirte	143000	NA	NA
Joufara	458000	1.9214	0.35
Morzig	79000	11.6456	20.51
Sebha	129000	2.8682	3.77
Ghat	23000	NA	NA
Wadi-Alhiat	77000	NA	NA
Wadi-Alshati	79000	6.3291	3.42
Misurata	552000	1.0688	0.88
Al-Merghip	441000	NA	NA
Tripoli	1067000	NA	NA
Al-Jufra	51000	NA	NA
Alzawea	292000	4.4863	4.07
Zwara	290000	0.5517	0.19
Al-Gebal-Elgharbi	310000	7.8065	6.62
Naloot	94000	4.2553	NA
<b>Total</b>	<b>5702000</b>	<b>1.7485</b>	<b>1.73</b>

(1) Use the following steps to determine the % of total population pregnant at a given period:

- Estimated number of live births = (CBR per 1,000 \* total population)
- Estimated live births expected per month = (a / 12)
- Estimated number of pregnancies ending in stillbirths or miscarriages = (a \* 0.15)
- Estimated pregnancies expected in the year = (a + c)
- Estimated number of women pregnant in a given month = (0.70 \* d)
- Estimated % of total population who are pregnant at a given period = (e / total population \* 100)  
(Equation from: <http://www.unfpa.org/emergencies/manual/9a5.htm>)

**Table B 2.1 Density of beds and breakdown by type - Post Conflict**

Number of inpatient beds per 10,000 population and number of maternity beds per 1,000 pregnant women, by type of facility, according to District Libya 2012.

Background characteristic	Population year 2010	Number of inpatient beds per 10,000 population	Number of maternity beds per 1,000 pregnant women (1)
<b>Type of facility</b>			
PHC unit	5702000	0.02	0.03
PHC center	5702000	0.19	0.53
Other PHC Facilities	5702000	1.8660	2.17
<b>District</b>			
Albetnan	163000	1.6564	4.31
Derna	167000	5.9880	8.09
Al-Gebal-Alakhdar	208000	4.2308	1.56
Almarege	188000	.4787	0.57
Benghazi	667000	NA	NA
Al-Wahat	30000	NA	NA
Ajdabia	148000	4.8649	3.28
Al-Kufra	46000	1.3043	0.00
Sirte	143000	0.00	0.00
Joufara	458000	1.9214	0.35
Morzig	79000	11.6456	20.51
Sebha	129000	3.4109	3.77
Ghat	23000	NA	NA
Wadi-Alhiat	77000	NA	NA
Wadi-Alshati	79000	6.3291	3.42
Misurata	552000	2.1014	5.28
Al-Merghip	441000	1.8141	4.90
Tripoli	1067000	NA	NA
Al-Jufra	51000	NA	NA
Alzawea	292000	3.6986	4.07
Zwara	290000	.7241	0.19
Al-Gebal-Elgharbi	310000	7.8065	6.62
Naloot	94000	4.2553	NA
<b>Total</b>	<b>5702000</b>	<b>2.0747</b>	<b>2.74</b>

(1) Use the following steps to determine the % of total population pregnant at a given period:

- Estimated number of live births = (CBR per 1,000 \* total population)
- Estimated live births expected per month = (a / 12)
- Estimated number of pregnancies ending in stillbirths or miscarriages = (a \* 0.15)
- Estimated pregnancies expected in the year = (a + c)
- Estimated number of women pregnant in a given month = (0.70 \* d)
- Estimated % of total population who are pregnant at a given period = (e / total population \* 100)  
(Equation from: <http://www.unfpa.org/emergencies/manual/9a5.htm>)

## 2.2 Health Workforce

**Table A 2.2 Health workforce density- Pre Conflict**

Density of core health professionals per 10,000 population, by type of facility, according to District, Libya 2012.

Background characteristic	Population year 2010	Generalist Specialist		Non physician	Qualified Nurse	Qualified Midwife	Core health personnel <sup>(1)</sup>
		medical doctors	medical doctors				
<b>Type of facility</b>							
PHC unit	5702000	0.61	0.88	2.80	5.71	0.92	10.93
PHC center	5702000	1.72	2.61	6.12	10.97	1.92	23.34
Other PHC Facilities	5702000	0.62	1.90	1.96	3.18	0.53	8.20
<b>District</b>							
Albetnan	163000	0.92	2.52	6.93	30.74	1.23	42.33
Derna	167000	1.38	3.17	18.32	39.16	8.14	70.18
Al-Gebal-Alakhdar	208000	0.67	3.61	2.79	10	0.67	17.74
Almarege	188000	1.44	1.81	8.99	38.19	2.61	53.03
Benghazi	667000	1.14	5.38	5.95	7.24	0.15	19.87
Al-Wahat	30000	5.67	4	7	64.67	4.67	86
Ajdabia	148000	1.49	4.12	2.97	13.38	2.3	24.26
Al-Kufra	46000	1.52	0.43	6.96	5.65	0.22	14.78
Sirte	143000	2.45	7.76	34.62	21.05	3.43	69.3
Joufara	458000	1.51	5.52	14.32	18.76	3.56	43.67
Morzig	79000	4.3	7.72	42.53	93.29	6.84	154.68
Sebha	129000	3.1	8.76	10.78	30.62	4.11	57.36
Ghat	23000	0.87	7.39	9.57	140.43	16.09	174.35
Wadi-Alhiat	77000	1.17	4.03	18.96	36.1	3.25	63.51
Wadi-Alshati	79000	2.03	10.25	26.84	24.05	19.87	83.04
Misurata	552000	2.68	4.2	6.38	7.37	1.7	22.34
Al-Merghip	441000	3.92	3.63	9.37	23.04	6.6	46.55
Tripoli	1067000	4.65	6.34	6.68	8.1	1.63	27.39
Al-Jufra	51000	2.35	5.29	14.51	8.43	2.16	32.75
Alzawea	292000	7.29	9.76	9.93	15.38	3.46	45.82
Zwara	290000	3.38	5.34	17.69	30.9	5.72	63.03
Al-Gebal-Elgharbi	310000	4.13	6.13	21.61	43.35	8.13	83.35
Naloot	94000	0.96	5.11	4.04	25.43	2.13	37.66
<b>Total</b>	5702000	2.95	5.4	10.89	19.86	3.38	42.47

<sup>(1)</sup>: Core health personnel include Generalist medical doctors, Specialist medical doctors, Non physician, Qualified Nurse, Qualified Midwife.

**Table B 2.2 Health workforce density - Post Conflict**

Density of core health professionals per 10,000 population, by type of facility, according to district, Libya 2012.

Background characteristic	Population year 2010	Generalist medical doctors	Specialist medical doctors	Non physician	Qualified Nurse	Qualified Midwife	Core health personnel <sup>(1)</sup>
<b>Type of facility</b>							
PHC unit	5702000	0.69	0.97	3.12	6.51	0.92	12.21
PHC center	5702000	1.96	2.93	6.72	11.50	2.06	25.16
Other PHC Facilities	5702000	0.71	2.09	2.39	3.38	0.57	9.14
<b>District</b>							
Albetnan	163000	.74	2.21	7.18	41.90	1.96	53.99
Derna	167000	1.38	3.11	23.53	45.33	8.20	81.56
Al-Gebal-Alakhdar	208000	.96	4.57	5.38	14.52	8.61	34.04
Almarege	188000	1.33	1.81	9.10	38.62	2.61	53.46
Benghazi	667000	1.14	5.53	6.16	7.24	.15	20.22
Al-Wahat	30000	5.00	5.00	10.33	79.33	4.67	104.33
Ajdabia	148000	1.96	7.30	4.93	16.22	1.89	32.30
Al-Kufra	46000	1.30	1.09	6.96	5.65	.22	15.22
Sirte	143000	2.17	7.41	38.32	22.73	1.33	71.96
Joufara	458000	1.77	6.66	15.15	19.37	2.58	45.52
Morzig	79000	4.43	7.97	45.06	97.09	7.72	162.28
Sebha	129000	2.95	9.22	10.85	30.39	4.57	57.98
Ghat	23000	.87	5.65	7.83	140.43	16.09	170.87
Wadi-Alhiat	77000	1.17	8.05	21.30	40.00	3.25	73.77
Wadi-Alshati	79000	1.39	7.22	26.84	24.18	18.10	77.72
Misurata	552000	4.64	6.59	12.19	9.28	1.76	34.46
Al-Merghip	441000	4.29	3.72	9.75	24.40	7.03	49.18
Tripoli	1067000	4.69	6.27	6.77	7.69	1.18	26.59
Al-Jufra	51000	1.76	5.29	14.51	8.43	2.16	32.16
Alzawea	292000	7.88	10.38	10.99	16.34	3.63	49.21
Zwara	290000	4.59	6.52	18.14	33.17	6.07	68.48
Al-Gebal-Elgharbi	310000	5.55	6.77	23.23	44.68	8.42	88.65
Naloot	94000	.96	5.21	3.94	29.26	2.34	41.70
<b>Total</b>	<b>5702000</b>	<b>3.35</b>	<b>5.99</b>	<b>12.23</b>	<b>21.39</b>	<b>3.54</b>	<b>46.51</b>

<sup>(1)</sup>: Core health personnel include Generalist medical doctors, Specialist medical doctors, Non physician, Qualified Nurse, Qualified Midwife.

## 2.3 Service Utilization

**Table A 2.3 Service utilization- Pre Conflict**

Number of outpatient visits per capita per year, and number of hospital discharges per 100 population, by type of facility, according to District, Libya 2012.

Background characteristic	Population year 2010	Outpatient visits	visits/ rphysian conflict per year	Facility discharges - post-conflict	Number of outpatient visits per capita per year	Number of HF discharges per 100 population per year
<b>Type of facility</b>						
PHC unit	5702000	85699	89.64	2	0.1804	0.0004
PHC center	5702000	529692	206.31	2043	1.1147	0.4300
Other PHC Facilities	5702000	419020	188.74	3587	0.8818	0.7549
<b>District</b>						
Albetnan	163000	47511	186.85	2003	3.4977	14.7460
Derna	167000	44694	427.11	440	3.2115	3.1617
Al-Gebal-Alakhdar	208000	33274	0.00	883	1.9197	5.0942
Almarege	188000	87983	570.68	2	5.6159	0.0128
Benghazi	667000	165274	215.04	NA	2.9734	NA
Al-Wahat	30000	8134	218.77	NA	3.2536	NA
Ajdabia	148000	6037	83.80	0	0.4895	0.0000
Al-Kufra	46000	1688	119.09	40	0.4403	1.0435
Sirte	143000	25503	115.24	NA	2.1401	NA
Joufara	458000	59879	166.82	752	1.5689	1.9703
Morzig	79000	13116	115.38	50	1.9923	0.7595
Sebha	129000	17670	77.03	40	1.6437	0.3721
Ghat	23000	7382	302.87	NA	3.8515	NA
Wadi-Alhiat	77000	9657	128.39	NA	1.5050	NA
Wadi-Alshati	79000	41180	726.63	180	6.2552	2.7342
Misurata	552000	121693	222.70	141	2.6455	0.3065
Al-Merghip	441000	57878	587.51	NA	1.5749	NA
Tripoli	1067000	127241	107.28	NA	1.4310	NA
Al-Jufra	51000	5264	202.25	NA	1.2386	NA
Alzawea	292000	68046	76.88	645	2.7964	2.6507
Zwara	290000	19773	61.43	0	0.8182	0.0000
Al-Gebal-Elgharbi	310000	62295	159.10	456	2.4114	1.7652
Naloot	94000	3239	71.29	NA	0.4135	NA
<b>Total</b>	<b>5702000</b>	<b>1034411</b>	<b>180.32</b>	<b>5632</b>	<b>2.1769</b>	<b>1.1853</b>

**Table B 2.3 Service utilization - Post Conflict**

Number of outpatient visits per capita per year, and number of hospital discharges per 100 population, by type of facility, according to District, Libya 2012.

Background characteristic	Population year 2010	Outpatient visits	Visits/ rphysian conflict per year	Total number of hospital discharges in the last month	Number of outpatient visits per capita per year	Number of hospital discharges per 100 population per year
<b>Type of facility</b>						
PHC unit	5702000	84798	100.82	2	0.18	0.00
PHC center	5702000	574357	214.45	2728	1.21	0.57
Other PHC Facilities	5702000	301042	290.99	3633	0.63	0.76
<b>District</b>						
Albetnan	163000	8969	848.41	2098	0.66	15.45
Derna	167000	32033	588.08	430	2.30	3.09
Al-Gebal-Alakhdar	208000	0	373.87	1045	0.00	6.03
Almarege	188000	33670	1442.34	2	2.15	0.01
Benghazi	667000	95695	379.94	NA	1.72	NA
Al-Wahat	30000	6563	280.48	NA	2.63	NA
Ajdabia	148000	11481	72.73	0.0	0.93	0.00
Al-Kufra	46000	1310	187.56	30	0.34	0.78
Sirte	143000	15788	174.68	NA	1.32	NA
Joufara	458000	64394	185.96	759	1.69	1.99
Morzig	79000	11307	138.06	10	1.72	0.15
Sebha	129000	12094	115.49	25	1.13	0.23
Ghat	23000	4543	388.53	NA	2.37	NA
Wadi-Alhiat	77000	9116	241.43	NA	1.42	NA
Wadi-Alshati	79000	49411	424.54	130	7.51	1.97
Misurata	552000	138075	320.24	848	3.00	1.84
Al-Merghip	441000	207392	173.81	108	5.64	0.29
Tripoli	1067000	125407	108.57	NA	1.41	NA
Al-Jufra	51000	7281	134.97	NA	1.71	NA
Alzawea	292000	40975	136.64	355	1.68	1.46
Zwara	290000	19782	78.15	0.0	0.82	0.00
Al-Gebal-Elgharbi	310000	60776	195.90	523	2.35	2.02
Naloot	94000	4135	56.82	NA	0.53	NA
<b>Total</b>	5702000	960197	217.31	6363	2.02	1.34

## 2.4 Health Services Infrastructure Index

<b>Table A 2.4 Health services infrastructure index- Pre Conflict</b>				
Facility density score, inpatient beds score, maternity beds score, and overall health services infrastructure index, by type of facility, according to District, Libya 2012.				
Background characteristic	Facility density score (a)	Inpatient beds score (b)	Maternity beds score (c)	Health services infrastructure index (1)
<b>Type of facility</b>				
PHC unit	36.83	0.06	0.32	12.40
PHC center	31.13	0.34	0.53	10.67
Other PHC Facilities	6.93	6.59	16.40	9.97
<b>District</b>				
Albetnan	61.35	6.63	43.08	37.02
Derna	86.83	9.58	48.51	48.31
Al-Gebal-Alakhdar	26.44	16.92	15.58	19.65
Almarege	100.00	1.91	5.75	35.89
Benghazi	17.24	NA	NA	NA
Al-Wahat	100.00	NA	NA	NA
Ajdabia	47.30	19.46	32.84	33.20
Al-Kufra	86.96	5.22	.00	30.72
Sirte	100.00	NA	NA	NA
Joufara	54.59	7.69	3.54	21.94
Morzig	100.00	46.58	100.00	82.19
Sebha	81.40	11.47	37.68	43.52
Ghat	100.00	NA	NA	NA
Wadi-Alhiat	100.00	NA	NA	NA
Wadi-Alshati	100.00	25.32	34.18	53.17
Misurata	49.82	4.28	8.81	20.97
Al-Merghip	100.00	NA	NA	NA
Tripoli	27.65	NA	NA	NA
Al-Jufra	88.24	NA	NA	NA
Alzawea	87.33	17.95	40.69	48.66
Zwara	100.00	2.21	1.86	34.69
Al-Gebal-Elgharbi	100.00	31.23	66.21	65.81
Naloot	69.15	17.02	NA	NA
<b>Total</b>	<b>74.89</b>	<b>6.99</b>	<b>17.25</b>	<b>33.04</b>
Notes:				
(a) The indicator is scored as number of facilities per 10,000 population / 2 * 100% (max. 100)				
(b) The indicator is scored as number of inpatient beds per 10,000 population / 25 * 100% (max. 100)				
(c) The indicator is scored as number of maternity beds per 1,000 pregnant women / 10 * 100% (max. 100)				
(1) The indicator is scored as the mean of the facility density score, inpatient beds score, and maternity beds score ((a) + (b) + (c)) / 3				

**Table B 2.4 Health services infrastructure index - Post Conflict**

Facility density score, inpatient beds score, maternity beds score, and overall health services infrastructure index, by type of facility, according to District, Libya 2012.

Background characteristic	Facility density score (a)	Inpatient beds score (b)	Maternity beds score (c)	Health services infrastructure index (1)
<b>Type of facility</b>				
PHC unit	36.83	0.08	0.32	12.41
PHC center	31.13	0.76	5.32	12.40
Other PHC Facilities	6.93	7.46	21.72	12.04
<b>District</b>				
Albetnan	61.35	6.63	43.08	37.02
Derna	86.83	23.95	80.85	63.88
Al-Gebal-Alakhdar	26.44	16.92	15.58	19.65
Almarege	100.00	1.91	5.75	35.89
Benghazi	17.24	NA	NA	NA
Al-Wahat	100.00	NA	NA	NA
Ajdabia	47.30	19.46	32.84	33.20
Al-Kufra	86.96	5.22	0.00	30.72
Sirte	100.00	0.00	0.00	33.33
Joufara	54.59	7.69	3.54	21.94
Morzig	100.00	46.58	100.00	82.19
Sebha	81.40	13.64	37.68	44.24
Ghat	100.00	NA	NA	NA
Wadi-Alhiat	100.00	NA	NA	NA
Wadi-Alshati	100.00	25.32	34.18	53.17
Misurata	49.82	8.41	52.84	37.02
Al-Merghip	100.00	7.26	48.99	52.08
Tripoli	27.65	NA	NA	NA
Al-Jufra	88.24	NA	NA	NA
Alzawea	87.33	14.79	40.69	47.61
Zwara	100.00	2.90	1.86	34.92
Al-Gebal-Elgharbi	100.00	31.23	66.21	65.81
Naloot	69.15	17.02	NA	NA
<b>Total</b>	<b>74.89</b>	<b>8.30</b>	<b>27.37</b>	<b>36.85</b>

## Notes:

(a) The indicator is scored as number of facilities per 10,000 population / 2 \* 100% (max. 100)

(b) The indicator is scored as number of inpatient beds per 10,000 population / 25 \* 100% (max. 100)

(c) The indicator is scored as number of maternity beds per 1,000 pregnant women / 10 \* 100% (max. 100)

(1) The indicator is scored as the mean of the facility density score, inpatient beds score, and maternity beds score ((a) + (b) + (c)) / 3

<b>Table A 2.5 Health workforce index- Pre Conflict</b>	
Health workforce index, by type of facility, according to District, Libya 2012.	
Background characteristic	Health workforce index (d)
<b>Type of facility</b>	
PHC unit	47.52
PHC center	100.00
Other PHC Facilities	35.64
<b>District</b>	
Albetnan	100.00
Derna	100.00
Al-Gebal-Alakhdar	77.13
Almarege	100.00
Benghazi	86.37
Al-Wahat	100.00
Ajdabia	100.00
Al-Kufra	64.27
Sirte	100.00
Joufara	100.00
Morzig	100.00
Sebha	100.00
Ghat	100.00
Wadi-Alhiat	100.00
Wadi-Alshati	100.00
Misurata	97.12
Al-Merghip	100.00
Tripoli	100.00
Al-Jufra	100.00
Alzawea	100.00
Zwara	100.00
Al-Gebal-Elgharbi	100.00
Naloot	100.00
<b>Total</b>	<b>100.00</b>
Notes:	
(d) The indicator is scored as the number of core health personnel per 10,000 population / 23 * 100% (max. 100)	

<b>Table B 2.5 Health workforce index - Post Conflict</b>	
Health workforce index, by type of facility, according to District, Libya 2012.	
Background characteristic	Health workforce index (d)
<b>Type of facility</b>	
PHC unit	53.08
PHC center	100.00
Other PHC Facilities	39.75
<b>District</b>	
Albetnan	100.00
Derna	100.00
Al-Gebal-Alakhdar	100.00
Almarege	100.00
Benghazi	87.93
Al-Wahat	100.00
Ajdabia	100.00
Al-Kufra	66.16
Sirte	100.00
Joufara	100.00
Morzig	100.00
Sebha	100.00
Ghat	100.00
Wadi-Alhiat	100.00
Wadi-Alshati	100.00
Misurata	100.00
Al-Merghip	100.00
Tripoli	100.00
Al-Jufra	100.00
Alzawea	100.00
Zwara	100.00
Al-Gebal-Elgharbi	100.00
Naloot	100.00
<b>Total</b>	<b>100.00</b>
Notes:	
(d) The indicator is scored as the number of core health personnel per 10,000 population / 23 * 100% (max. 100)	

**Table A 2.6 Service utilization index- Pre Conflict**

Outpatient service utilization score, inpatient service utilization score, and overall service utilization index, by type of facility, according to District, Libya 2012.

Background characteristic	Outpatient service utilization (e)	Inpatient service utilization (f)	Service utilization index (2)
<b>Type of facility</b>			
PHC unit	3.61	0.00	1.81
PHC center	22.29	4.30	13.30
Other PHC Facilities	17.64	7.55	12.59
<b>District</b>			
Albetnan	69.95	100.00	84.98
Derna	64.23	31.62	47.92
Al-Gebal-Alakhdar	38.39	50.94	44.67
Almarege	100.00	0.13	50.06
Benghazi	59.47	NA	NA
Al-Wahat	65.07	NA	NA
Ajdabia	9.79	0.00	4.89
Al-Kufra	8.81	10.43	9.62
Sirte	42.80	NA	NA
Joufara	31.38	19.70	25.54
Morzig	39.85	7.59	23.72
Sebha	32.87	3.72	18.30
Ghat	77.03	NA	NA
Wadi-Alhiat	30.10	NA	NA
Wadi-Alshati	100.00	27.34	63.67
Misurata	52.91	3.07	27.99
Al-Merghip	31.50	NA	NA
Tripoli	28.62	NA	NA
Al-Jufra	24.77	NA	NA
Alzawea	55.93	26.51	41.22
Zwara	16.36	0.00	8.18
Al-Gebal-Elgharbi	48.23	17.65	32.94
Naloot	8.27	NA	NA
<b>Total</b>	<b>43.54</b>	<b>6.99</b>	<b>25.27</b>
Notes:			
(e) The indicator is scored as the number of outpatient visits per person/year / 5 * 100 (max. 100)			
(f) The indicator is scored as the number of hospital discharges per 100/year / 10 * 100 (max. 100)			
(2) The indicator is scored as the mean of outpatient service utilization and inpatient service utilization ((e) + (f)) / 2			

**Table B 2.6 Service utilization index - Post Conflict**

Outpatient service utilization score, inpatient service utilization score, and overall service utilization index, by type of facility, according to District, Libya 2012.

Background characteristic	Outpatient service utilization (e)	Inpatient service utilization (f)	Service utilization index (2)
<b>Type of facility</b>			
PHC unit	3.57	0.00	1.79
PHC center	24.17	5.74	14.96
Other PHC Facilities	12.67	7.65	10.16
<b>District</b>			
Albetnan	13.21	100.00	56.60
Derna	46.04	30.90	38.47
Al-Gebal-Alakhdar	0.00	60.29	30.14
Almarege	42.98	0.13	21.56
Benghazi	34.43	NA	NA
Al-Wahat	52.50	NA	NA
Ajdabia	18.62	0.00	9.31
Al-Kufra	6.83	7.83	7.33
Sirte	26.50	NA	NA
Joufara	33.74	19.89	26.82
Morzig	34.35	1.52	17.93
Sebha	22.50	2.33	12.41
Ghat	47.41	NA	NA
Wadi-Alhiat	28.41	NA	NA
Wadi-Alshati	100.00	19.75	59.87
Misurata	60.03	18.43	39.23
Al-Merghip	100.00	2.94	51.47
Tripoli	28.21	NA	NA
Al-Jufra	34.26	NA	NA
Alzawea	33.68	14.59	24.13
Zwara	16.37	0.00	8.19
Al-Gebal-Elgharbi	47.05	20.25	33.65
Naloot	10.56	NA	NA
<b>Total</b>	<b>40.42</b>	<b>13.39</b>	<b>26.90</b>
Notes:			
(e) The indicator is scored as the number of outpatient visits per person/year / 5 * 100 (max. 100)			
(f) The indicator is scored as the number of hospital discharges per 100/year / 10 * 100 (max. 100)			
(2) The indicator is scored as the mean of outpatient service utilization and inpatient service utilization ((e) + (f)) / 2			

**Table A 2.7 Service availability index- Pre Conflict**

Mean of health services infrastructure index, health workforce index, and service utilization index, by type of facility, according to District, Libya 2012.

Background characteristic	Service availability index (1)
<b>Type of facility</b>	
PHC unit	20.58
PHC center	41.32
Other PHC Facilities	19.40
<b>District</b>	
Albetnan	74.00
Derna	65.41
Al-Gebal-Alakhdar	47.15
Almarege	61.98
Benghazi	NA
Al-Wahat	NA
Ajdabia	46.03
Al-Kufra	34.87
Sirte	NA
Joufara	NA
Morzig	68.64
Sebha	53.94
Ghat	NA
Wadi-Alhiat	NA
Wadi-Alshati	72.28
Misurata	48.69
Al-Merghip	NA
Tripoli	NA
Al-Jufra	NA
Alzawea	63.29
Zwara	47.62
Al-Gebal-Elgharbi	66.25
Naloot	NA
<b>Total</b>	<b>52.77</b>
Notes:	
(1) The indicator is scored as the mean of the health services infrastructure index, health workforce index, and service utilization index $[(a + b + c) / 3] + d + [(e + f) / 2] / 3$	

**Table B 2.7 Service availability index - Post Conflict**

Mean of health services infrastructure index, health workforce index, and service utilization index, by type of facility, according to District, Libya 2012.

Background characteristic	Service availability index (1)
<b>Type of facility</b>	
PHC unit	22.42
PHC center	42.45
Other PHC Facilities	20.65
<b>District</b>	
Albetnan	64.54
Derna	67.45
Al-Gebal-Alakhdar	49.93
Almarege	52.48
Benghazi	NA
Al-Wahat	NA
Ajdabia	47.50
Al-Kufra	34.74
Sirte	NA
Joufara	49.58
Morzig	66.71
Sebha	52.22
Ghat	NA
Wadi-Alhiat	NA
Wadi-Alshati	71.01
Misurata	58.75
Al-Merghip	67.85
Tripoli	NA
Al-Jufra	NA
Alzawea	57.25
Zwara	47.70
Al-Gebal-Elgharbi	66.49
Naloot	NA
<b>Total</b>	<b>54.58</b>

Notes:

(1) The indicator is scored as the mean of the health services infrastructure index, health workforce index, and service utilization index  $[(a + b + c) / 3] + d + [(e + f) / 2] / 3$

### 3 General Service Readiness

#### 3.1 Basic Amenities

**Table A 3.1 Availability of facilities with basic amenities elements**

Percentage of health facilities with power, improved water source, room with auditory and visual privacy, sanitation facilities, communication equipment, computer with internet, and emergency transportation, by type of facility, according to District, Libya 2012.

Background characteristic	Power source (1)	Improved water source (2)	Toilet for patient use (3)	Communication equipment (4)	Computer with internet/ email (5)	Emergency transportation (6)	Basic amenities mean score (a)	Total number of facilities
<b>Type of facility</b>								
PHC unit	87.3	92.7	71.6	5.8	17.5	8.9	47.0	504
PHC center	84.7	98.4	91.9	19.1	44.6	21.6	60.0	444
Other PHC facilities	72.0	98.9	90.3	60.2	89.2	39.8	75.0	93
<b>District</b>								
Albetnan	76.9	76.9	80.8	19.2	38.5	7.7	50.0	26
Derna	62.1	100.0	100.0	24.1	37.9	34.5	60.0	29
Al-Gebal-Alakhdar	88.9	92.6	81.5	25.9	18.5	.0	51.0	27
Almarege	87.2	91.5	93.6	4.3	6.4	12.8	49.0	47
Benghazi	72.9	95.8	52.1	8.3	64.6	12.5	51.0	48
Al-Wahat	31.3	100.0	100.0	31.3	37.5	43.8	57.0	16
Ajdabia	52.6	100.0	94.7	57.9	63.2	21.1	65.0	19
Al-Kufra	50.0	91.7	100.0	25.0	33.3	16.7	53.0	12
Sirte	40.9	100.0	95.5	9.1	18.2	11.4	46.0	44
Joufara	91.5	97.2	88.7	4.2	25.4	15.5	54.0	71
Morzig	100.0	95.7	85.1	21.3	14.9	21.3	56.0	47
Sebha	91.3	100.0	100.0	56.5	95.7	65.2	85.0	23
Ghat	100.0	100.0	100.0	60.0	60.0	0.0	70.0	5
Wadi-Alhiat	100.0	100.0	95.8	41.7	41.7	41.7	70.0	24
Wadi-Alshati	85.7	90.5	85.7	7.1	9.5	28.6	51.0	42
Misurata	69.2	100.0	95.4	27.7	67.7	12.3	62.0	65
Al-Merghip	96.0	96.0	87.0	7.0	16.0	10.0	52.0	100
Tripoli	96.8	96.8	81.1	28.4	76.8	13.7	66.0	95
Al-Jufra	92.3	100.0	76.9	7.7	69.2	15.4	60.0	13
Alzawea	98.2	89.5	100.0	17.5	57.9	10.5	62.0	57
Zwara	80.3	98.7	89.5	7.9	17.1	11.8	51.0	76
Al-Gebal-Elgharbi	100.0	95.0	34.2	3.3	10.8	16.7	43.0	120
Naloot	74.3	94.3	91.4	20.0	40.0	28.6	58.0	35
<b>Total</b>	<b>84.8</b>	<b>95.7</b>	<b>81.9</b>	<b>16.3</b>	<b>35.4</b>	<b>17.1</b>	<b>55.0</b>	<b>1041</b>

**Notes:**

1) Facility is connected to a grid, facility routinely has had power during normal working hours, there has not been a break in power for more than 2 hours in the past 7 days OR facility has functional generator with fuel/battery

(2) Water source via piped, public tap/standpipe, tube well/borehole, protected dug well, protected spring, or rainwater, onsite or within 500 meters

(3) Sanitation facilities including flush/pour flush to piped sewer system or septic tank or pit latrine, pit latrine (ventilated improved pit (VIP) or Other PHC facilities) with slab, or composting toilet

(4) Functioning communication equipment such as landline telephone, cellular telephone, or shortwave radio available at all times onsite. This will not include private cell phones unless the facility reimburses for cost of phone calls or payphones outside the facility.

(5) Functioning computer and access to email/internet within the facility working on the day of the survey.

(6) Functioning vehicle with fuel routinely available for emergency transportation.

(a) The mean percentage of basic amenities items available (power source + improved water source + improved sanitation facilities + communication equipment + computer with internet/email + emergency transport) / 6

### 3.2 Basic Equipment

**Table A 3.2 Availability of basic equipment**

Percentage of health facilities with functional basic equipment on day of interview, by type of facility, according to District, Libya 2012.

Background characteristic	Adult/ pediatric scale	Ther mo- meter	Stetho- scope	Blood pressure apparatus	Light source	Basic equip- ment mean score (b)	Percent of facilities with all 5 elements	Total number of facilities
<b>Type of facility</b>								
PHC unit	20.0	52.6	55.2	48.6	8.1	37.0	4.6	504
PHC center	48.2	69.1	71.8	67.1	29.7	57.0	19.8	444
Other PHC facilities	45.2	49.5	52.7	55.9	32.3	47.0	25.8	93
<b>District</b>								
Albetnan	34.6	42.3	34.6	42.3	7.7	32.0	3.8	26
Derna	10.3	17.2	17.2	13.8	10.3	14.0	10.3	29
Al-Gebal-Alakhdar	14.8	11.1	14.8	11.1	0.0	10.0	0.0	27
Almarege	38.3	70.2	61.7	53.2	14.9	48.0	8.5	47
Benghazi	39.6	33.3	37.5	41.7	25.0	35.0	20.8	48
Al-Wahat	50.0	75.0	75.0	75.0	43.8	64.0	31.3	16
Ajdabia	5.3	0.0	0.0	10.5	0.0	3.0	0.0	19
Al-Kufra	66.7	83.3	83.3	83.3	41.7	72.0	41.7	12
Sirte	29.5	56.8	61.4	47.7	6.8	40.0	2.3	44
Joufara	28.2	46.5	52.1	46.5	11.3	37.0	8.5	71
Morzig	44.7	63.8	63.8	61.7	25.5	52.0	19.1	47
Sebha	60.9	69.6	78.3	69.6	52.2	66.0	47.8	23
Ghat	100.0	100.0	100.0	100.0	60.0	92.0	60.0	5
Wadi-Alhiat	45.8	70.8	83.3	66.7	20.8	58.0	16.7	24
Wadi-Alshati	9.5	66.7	57.1	50.0	14.3	40.0	7.1	42
Misurata	50.8	64.6	66.2	61.5	33.8	55.0	20.0	65
Al-Merghip	48.0	80.0	82.0	74.0	36.0	64.0	27.0	100
Tripoli	32.6	61.1	74.7	69.5	14.7	51.0	4.2	95
Al-Jufra	69.2	76.9	84.6	76.9	38.5	69.0	38.5	13
Alzawea	50.9	84.2	84.2	84.2	8.8	62.0	8.8	57
Zwara	17.1	63.2	65.8	57.9	21.1	45.0	9.2	76
Al-Gebal-Elgharbi	20.8	55.0	59.2	53.3	8.3	39.0	4.2	120
Naloot	31.4	62.9	62.9	60.0	28.6	49.0	11.4	35
<b>Total</b>	<b>34.3</b>	<b>59.4</b>	<b>62.1</b>	<b>57.2</b>	<b>19.5</b>	<b>46.0</b>	<b>13.0</b>	<b>1041</b>

Notes:  
(b) The mean percentage of basic equipment items available (adult scale + thermometer + stethoscope + BP apparatus + light source) / 5

### 3.3 Standard Precautions for Prevention of Infections

**Table A 3.3 Availability of standard precautions for infection prevention elements**

Percentage of health facilities with basic standard precautions for infection prevention elements on day of interview, by type of facility, according to District, Libya 2012.

Background characteristic	Sterilizer/ autoclave (1)	Appropriate storage infectious waste (2)	Disposable or auto-disable syringes (3)	Latex gloves	Medical masks	Gowns	Guidelines for standard precautions	Standard precautions mean score (c)	Total number of facilities
<b>Type of facility</b>									
PHC unit	16.9	15.3	99.4	56.9	26.0	13.7	10.9	34.0	504
PHC center	43.0	26.6	98.9	74.3	50.7	25.5	25.2	49.0	444
Other PHC facilities	43.0	44.1	98.9	87.1	71.0	59.1	37.6	63.0	93
<b>District</b>									
Albetnan	15.4	19.2	100.0	65.4	46.2	7.7	26.9	40.0	26
Derna	10.3	41.4	100.0	51.7	48.3	44.8	37.9	48.0	29
Al-Gebal-Alakhdar	11.1	37.0	100.0	92.6	63.0	25.9	40.7	53.0	27
Almarege	31.9	12.8	100.0	74.5	31.9	17.0	8.5	40.0	47
Benghazi	31.3	25.0	97.9	52.1	62.5	37.5	29.2	48.0	48
Al-Wahat	62.5	75.0	100.0	93.8	37.5	18.8	25.0	59.0	16
Ajdabia	5.3	26.3	100.0	68.4	84.2	21.1	52.6	51.0	19
Al-Kufra	66.7	50.0	100.0	66.7	33.3	8.3	16.7	49.0	12
Sirte	20.5	6.8	97.7	86.4	20.5	13.6	6.8	36.0	44
Joufara	36.6	12.7	98.6	43.7	16.9	15.5	29.6	36.0	71
Morzig	42.6	25.5	100.0	48.9	19.1	21.3	6.4	38.0	47
Sebha	60.9	34.8	100.0	100.0	100.0	73.9	39.1	73.0	23
Ghat	80.0	0.0	100.0	80.0	80.0	0.0	0.0	49.0	5
Wadi-Alhiat	29.2	20.8	100.0	70.8	58.3	58.3	25.0	52.0	24
Wadi-Alshati	16.7	14.3	97.6	50.0	23.8	.0	.0	29.0	42
Misurata	46.2	32.3	98.5	93.8	66.2	52.3	32.3	60.0	65
Al-Merghip	26.0	35.0	99.0	92.0	27.0	14.0	8.0	43.0	100
Tripoli	41.1	16.8	100.0	81.1	77.9	31.6	36.8	55.0	95
Al-Jufra	69.2	7.7	100.0	76.9	53.8	23.1	30.8	52.0	13
Alzawea	38.6	15.8	98.2	87.7	70.2	35.1	28.1	53.0	57
Zwara	22.4	36.8	100.0	65.8	18.4	11.8	7.9	38.0	76
Al-Gebal-Elgharbi	10.0	6.7	98.3	15.8	7.5	6.7	4.2	21.0	120
Naloot	42.9	20.0	100.0	82.9	37.1	14.3	5.7	43.0	35
<b>Total</b>	<b>30.4</b>	<b>22.7</b>	<b>99.1</b>	<b>67.1</b>	<b>40.5</b>	<b>22.8</b>	<b>19.4</b>	<b>43.0</b>	<b>1041</b>
Notes:									
(1) Autoclave or dry heat sterilizer and heat source available and functioning if machine is not electric (e.g., wood or gas present for the autoclave).									
(2) Sharps box									
(3) Waste receptacle (pedal bin) with lid and plastic bin liner									
(c) The mean percentage of standard precautions items available (sterilization equipment + Appropriate storage infectious waste + Disposable or autolisable syringes + latex gloves + Medical masks + gowns + guidelines for standard precautions) / 7									

### 3.4 Diagnostic Capacity

**Table A 3.4 Diagnostic capacity**

Percentage of health facilities with capacity to conduct the test onsite and with appropriate equipment, by type of facility, according to District, Libya 2012.

Background characteristic	Haemoglobin (1)	White Blood cell count	Blood Coagulation Time	Bleeding Time	Packed Cell Volume	Sedimentation Rate	General Urine Examination	General Stool Examination	Blood Sugar Test (2)	Pregnancy Test (3)	Diagnostic capacity mean score (d)	Total number of facilities
<b>Type of facility</b>												
PHC unit	58.3	38.3	18.3	10.0	16.7	66.7	75.0	46.7	80.0	80.0	49.0	60
PHC center	62.6	43.9	31.7	25.6	24.4	71.5	81.7	54.9	86.6	79.3	56.0	246
Other PHC facilities	80.6	76.1	61.2	56.7	62.7	86.6	89.6	76.1	83.6	79.1	75.0	67
<b>District</b>												
Albetnan	42.9	28.6	0.0	0.0	28.6	42.9	71.4	57.1	57.1	57.1	39.0	7
Derna	70.0	70.0	60.0	60.0	70.0	90.0	100.0	90.0	90.0	90.0	79.0	10
Al-Gebal-Alakhdar	60.0	60.0	30.0	10.0	20.0	60.0	60.0	50.0	60.0	70.0	48.0	10
Almarege	87.5	50.0	75.0	62.5	25.0	100.0	100.0	87.5	100.0	100.0	79.0	8
Benghazi	72.7	59.1	59.1	50.0	40.9	86.4	81.8	45.5	86.4	72.7	65.0	22
Al-Wahat	100.0	66.7	66.7	66.7	33.3	100.0	100.0	100.0	100.0	66.7	80.0	3
Ajdabia	66.7	44.4	55.6	55.6	33.3	66.7	88.9	77.8	100.0	88.9	68.0	9
Al-Kufra	25.0	25.0	25.0	0.0	50.0	50.0	75.0	75.0	100.0	50.0	48.0	4
Sirte	50.0	41.7	41.7	50.0	41.7	66.7	83.3	83.3	83.3	75.0	62.0	12
Joufara	55.0	40.0	20.0	20.0	40.0	85.0	80.0	55.0	90.0	80.0	57.0	20
Morzig	81.8	54.5	63.6	54.5	45.5	81.8	90.9	90.9	90.9	72.7	73.0	11
Sebha	92.9	85.7	57.1	50.0	50.0	92.9	92.9	71.4	92.9	85.7	77.0	14
Ghat	100.0	50.0	75.0	50.0	25.0	50.0	100.0	0.0	75.0	100.0	63.0	4
Wadi-Alhiat	72.7	36.4	36.4	27.3	18.2	63.6	72.7	36.4	100.0	81.8	55.0	11
Wadi-Alshati	66.7	16.7	16.7	16.7	0.0	66.7	83.3	83.3	100.0	83.3	53.0	6
Misurata	80.4	63.0	45.7	37.0	34.8	82.6	91.3	73.9	89.1	87.0	68.0	46
Al-Merghip	58.6	41.4	24.1	6.9	17.2	79.3	79.3	37.9	82.8	79.3	51.0	29
Tripoli	44.4	38.9	13.0	13.0	25.9	57.4	63.0	29.6	72.2	72.2	43.0	54
Al-Jufra	80.0	80.0	60.0	60.0	40.0	100.0	100.0	80.0	80.0	60.0	74.0	5
Alzawea	69.2	50.0	30.8	30.8	34.6	76.9	80.8	73.1	84.6	88.5	62.0	26
Zwara	57.1	23.8	28.6	14.3	14.3	71.4	95.2	52.4	81.0	90.5	53.0	21
Al-Gebal-Elgharbi	67.7	51.6	19.4	12.9	12.9	71.0	87.1	51.6	87.1	74.2	54.0	31
Naloot	60.0	50.0	40.0	40.0	30.0	40.0	70.0	50.0	100.0	70.0	55.0	10
<b>Total</b>	65.1	48.8	34.9	28.7	30.0	73.5	82.0	57.4	85.0	79.4	58.0	373

Notes:

(1) Ability to conduct test onsite and presence of colorimeter, haemoglobinometer, or hemocue.  
(2) Ability to conduct test onsite and presence of glucometer and glucometer test strips.  
(3) Ability to conduct test onsite and presence of urine pregnancy RDT test kit.  
(d) The mean percentage of basic diagnostic tests available (haemoglobin + white blood cell count + blood coagulation time + bleeding time + packed cell volume + sedimentation rate + general urine examination + general stool examination + blood sugar test + pregnancy test)/10

### 3.5 Laboratory Equipment Capacity

<b>Table A 3.5 Laboratory equipment capacity</b>									
Percentage of Laboratory equipment capacity, by type of facility, according to District, Libya 2012.									
Background characteristic	Microscope	Centrifuge	Electric Oven	Refrigerator temperature control	Haematocrite Centrifuge	Spectrophoto Meter	Sensitive Balance	Laboratory equipment meanscore (1)	Number of facilities
<b>Type of facility</b>									
PHC unit	65.0	16.9	15.0	26.7	5.0	23.3	0.0	21.0	60
PHC center	71.1	24.8	24.8	41.1	9.8	34.6	7.3	31.0	246
Other PHC facilities	82.1	53.7	52.2	56.7	32.8	44.8	23.9	49.0	67
<b>District</b>									
Albetnan	28.6	14.3	14.3	14.3	14.3	14.3	14.3	16.0	7
Derna	50.0	30.0	30.0	50.0	30.0	30.0	20.0	34.0	10
Al-Gebal-Alakhdar	60.0	30.0	30.0	40.0	50.0	20.0	10.0	34.0	10
Almarege	100.0	50.0	50.0	75.0	37.5	62.5	12.5	55.0	8
Benghazi	59.1	31.8	31.8	54.5	13.6	45.5	4.5	34.0	22
Al-Wahat	66.7	33.3	33.3	66.7	0.0	0.0	33.3	33.0	3
Ajdabia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9
Al-Kufra	100.0	100.0	100.0	75.0	25.0	25.0	0.0	61.0	4
Sirte	66.7	33.3	33.3	41.7	16.7	41.7	8.3	35.0	12
Joufara	90.0	30.0	30.0	25.0	0.0	55.0	5.0	34.0	20
Morzig	90.9	45.5	45.5	63.6	9.1	36.4	0.0	42.0	11
Sebha	78.6	35.7	35.7	57.1	14.3	42.9	14.3	40.0	14
Ghat	100.0	66.7	75.0	75.0	0.0	25.0	25.0	52.0	4
Wadi-Alhiat	81.8	27.3	27.3	36.4	18.2	18.2	18.2	32.0	11
Wadi-Alshati	83.3	60.0	66.7	16.7	0.0	0.0	0.0	34.0	6
Misurata	69.6	45.7	43.5	37.0	17.4	32.6	13.0	37.0	46
Al-Merghip	79.3	37.9	34.5	31.0	17.2	34.5	13.8	35.0	29
Tripoli	63.0	17.0	16.7	48.1	3.7	35.2	1.9	26.0	54
Al-Jufra	100.0	20.0	20.0	100.0	40.0	80.0	20.0	54.0	5
Alzawea	76.9	11.5	11.5	50.0	11.5	23.1	7.7	27.0	26
Zwara	76.2	15.0	14.3	66.7	19.0	42.9	9.5	36.0	21
Al-Gebal-Elgharbi	83.9	16.7	16.1	9.7	3.2	35.5	6.5	25.0	31
Naloot	80.0	20.0	10.0	20.0	10.0	40.0	20.0	29.0	10
<b>Total</b>	<b>72.1</b>	<b>28.8</b>	<b>28.2</b>	<b>41.6</b>	<b>13.1</b>	<b>34.6</b>	<b>9.1</b>	<b>33.0</b>	<b>373</b>
Notes:									
(d) The mean score of laboratory equipment capacity (Microscope + Centrifuge+ Electric Oven + Refrigerator temperature control + Haematocrite Centrifuge + Spectrophoto Meter + Sensitive Balance ) / 7									

### 3.6 Essential Medicines

**Table A 3.6 Availability of essential tracer medicines**

Percentage of health facilities with core essential medicines in stock on day of interview, by type of facility, according to District, Libya 2012.

Background characteristic	Antibiotics Adults	Antibiotics Children	Medicines acting Gastrointestinal/Antacids	Cardiac Vascular	Antihypertensive	Anti-asthmatic Therapy	Analgesics/antipyretics/nonsteroidal anti-inflammatory	Oral Diabetic Pills	Medicines means core (e)	Total number of facilities
<b>Type of facility</b>										
PHC unit	44.8	47.6	39.7	15.3	37.9	32.7	42.7	16.5	35.0	504
PHC center	83.3	80.9	70.7	34.2	70.9	59.5	72.7	46.4	65.0	444
Other PHC facilities	62.4	63.4	61.3	51.6	58.1	51.6	55.9	41.9	56.0	93
<b>District</b>										
Albetnan	57.7	65.4	57.7	15.4	34.6	61.5	57.7	38.5	49.0	26
Derna	82.8	62.1	55.2	37.9	55.2	24.1	65.5	48.3	54.0	29
Al-Gebal-Alakhdar	74.1	70.4	59.3	29.6	66.7	33.3	70.4	11.1	52.0	27
Almarege	59.6	61.7	51.1	21.3	48.9	34.0	57.4	29.8	45.0	47
Benghazi	68.8	68.8	58.3	18.8	47.9	52.1	70.8	12.5	50.0	48
Al-Wahat	81.3	75.0	62.5	50.0	50.0	37.5	93.8	56.3	63.0	16
Ajdabia	68.4	52.6	63.2	21.1	26.3	31.6	47.4	21.1	41.0	19
Al-Kufra	75.0	83.3	66.7	25.0	66.7	41.7	83.3	50.0	61.0	12
Sirte	75.0	79.5	77.3	31.8	81.8	68.2	63.6	59.1	67.0	44
Joufara	46.5	42.3	33.8	16.9	33.8	32.4	31.0	29.6	33.0	71
Morzig	31.9	31.9	29.8	8.5	29.8	36.2	40.4	29.8	30.0	47
Sebha	91.3	95.7	91.3	60.9	91.3	91.3	95.7	47.8	83.0	23
Ghat	100.0	80.0	80.0	40.0	80.0	60.0	80.0	80.0	75.0	5
Wadi-Alhiat	95.8	87.5	79.2	33.3	91.7	95.8	95.8	83.3	83.0	24
Wadi-Alshati	64.3	59.5	52.4	9.5	45.2	47.6	76.2	28.6	48.0	42
Misurata	70.8	73.8	72.3	56.9	75.4	63.1	53.8	23.1	61.0	65
Al-Merghip	58.0	60.0	48.0	14.0	52.0	44.0	58.0	18.0	44.0	100
Tripoli	74.7	74.7	63.2	38.9	62.1	45.3	47.4	38.9	56.0	95
Al-Jufra	53.8	53.8	38.5	23.1	38.5	38.5	53.8	38.5	42.0	13
Alzawea	86.0	89.5	77.2	29.8	80.7	61.4	78.9	19.3	65.0	57
Zwara	48.7	57.9	44.7	39.5	50.0	52.6	48.7	15.8	45.0	76
Al-Gebal-Elgharbi	40.0	42.5	37.5	14.2	36.7	19.2	34.2	32.5	32.0	120
Naloot	74.3	74.3	60.0	20.0	48.6	54.3	68.6	48.6	56.0	35
<b>Total</b>	<b>62.8</b>	<b>63.2</b>	<b>54.9</b>	<b>26.6</b>	<b>53.8</b>	<b>45.8</b>	<b>56.7</b>	<b>31.5</b>	<b>49.0</b>	<b>1041</b>

Notes:  
(e) The mean percentage of medicines available (antibiotics for adults + antibiotics for children + acting gastrointestinal + antiacids cardiac + vascular + antihypertensive + anti-asthmatic therapy + oral diabetic pills) / 8

**Table A 3.7 General service readiness**

Percentage of health facilities general service readiness standards, by type of facility, according to District, Libya 2012.

Background characteristic	Basic amenities mean score	Basic equipment mean score	Standard precautions mean score	Diagnostic capacity mean score	Medicines mean score	General services readiness index (1)	Total number of facilities
<b>Type of facility</b>							
PHC unit	63.0	64.0	52.0	49.0	70.0	60.0	60
PHC center	65.0	67.0	56.0	56.0	74.0	64.0	246
Other PHC facilities	78.0	59.0	69.0	75.0	72.0	71.0	67
<b>District</b>							
Albetnan	67.0	34.0	55.0	39.0	77.0	54.0	7
Derna	73.0	30.0	76.0	79.0	76.0	67.0	10
Al-Gebal-Alakhdar	55.0	20.0	57.0	48.0	76.0	51.0	10
Almarege	63.0	68.0	66.0	79.0	81.0	71.0	8
Benghazi	61.0	56.0	64.0	65.0	66.0	63.0	22
Al-Wahat	83.0	93.0	76.0	80.0	92.0	85.0	3
Ajdabia	78.0	2.0	52.0	68.0	54.0	51.0	9
Al-Kufra	67.0	80.0	39.0	48.0	88.0	64.0	4
Sirte	54.0	60.0	49.0	62.0	76.0	60.0	12
Joufara	69.0	68.0	64.0	57.0	71.0	66.0	20
Morzig	73.0	84.0	47.0	73.0	66.0	68.0	11
Sebha	89.0	79.0	77.0	77.0	88.0	82.0	14
Ghat	71.0	95.0	54.0	63.0	81.0	73.0	4
Wadi-Alhiat	80.0	64.0	64.0	55.0	89.0	70.0	11
Wadi-Alshati	69.0	73.0	55.0	53.0	67.0	64.0	6
Misurata	66.0	62.0	67.0	68.0	68.0	66.0	46
Al-Merghip	61.0	88.0	51.0	51.0	74.0	65.0	29
Tripoli	71.0	60.0	57.0	43.0	72.0	60.0	54
Al-Jufra	73.0	100.0	46.0	74.0	90.0	77.0	5
Alzawea	69.0	72.0	64.0	62.0	71.0	68.0	26
Zwara	63.0	73.0	60.0	53.0	75.0	65.0	21
Al-Gebal-Elgharbi	59.0	74.0	31.0	54.0	75.0	59.0	31
Naloot	72.0	66.0	53.0	55.0	70.0	63.0	10
<b>Total</b>	67.0	65.0	58.0	58.0	73.0	64.0	373

Notes:  
 (1) The mean of the five domain scores (basic amenities mean score, basic equipment mean score, standard precautions for infection prevention mean score, diagnostics capacity mean score, and essential medicines mean score)  $(a + b + c + d + e) / 5$



## 4. Specific Services Availability and Readiness

### 4.1 Antenatal Care

#### 4.1.1 Antenatal care service availability

**Table A 4.1.1 Antenatal care service availability**

Percentage of health facilities offering antenatal care services, by type of facility, according to District, Libya 2012.

Background characteristic	Iron supplementation	Folic acid supplementation	Tetanus toxoid vaccination	Monitoring for hypertensive disorder of pregnancy	Offers antenatal care services	Total number of facilities
<b>Type of facility</b>						
PHC unit	89.1	91.3	8.7	84.8	9.1	504
PHC center	91.3	91.3	16.7	84.8	31.1	444
Other PHC facilities	91.8	91.8	12.2	89.8	52.7	93
<b>District</b>						
Albetnan	100.0	100.0	0.0	100.0	3.8	26
Derna	62.5	62.5	12.5	75.0	27.6	29
Al-Gebal-Alakhdar	83.3	91.7	8.3	75.0	44.4	27
Almarege	91.7	91.7	0.0	91.7	25.5	47
Benghazi	92.0	92.0	12.0	92.0	52.1	48
Al-Wahat	75.0	75.0	0.0	75.0	25.0	16
Ajdabia	80.0	80.0	20.0	80.0	26.3	19
Al-Kufra	NA	NA	NA	NA	0.0	12
Sirte	100.0	100.0	50.0	100.0	13.6	44
Joufara	80.0	60.0	0.0	80.0	7.0	71
Morzig	83.3	100.0	16.7	100.0	12.8	47
Sebha	100.0	100.0	33.3	83.3	52.2	23
Ghat	100.0	100.0	0.0	100.0	40.0	5
Wadi-Alhiat	100.0	100.0	0.0	100.0	12.5	24
Wadi-Alshati	66.7	100.0	33.3	66.7	7.1	42
Misurata	97.0	97.0	18.2	97.0	50.8	65
Al-Merghip	75.0	75.0	16.7	75.0	12.0	100
Tripoli	95.5	93.2	0.0	79.5	46.3	95
Al-Jufra	100.0	100.0	50.0	100.0	15.4	13
Alzawea	100.0	100.0	13.6	77.3	38.6	57
Zwara	77.8	77.8	22.2	88.9	11.8	76
Al-Gebal-Elgharbi	100.0	100.0	50.0	100.0	5.0	120
Naloot	100.0	100.0	100.0	100.0	2.9	35
<b>Total</b>	91.0	91.4	14.2	85.8	22.4	1041

## 4.1.2 Antenatal care service readiness

<b>Table A 4.1.2 Antenatal care services</b>						
Among health facilities offering antenatal care services, the percentage with trained staff, guidelines, equipment, diagnostics, and medicines and commodities, by type of facility, according to District, Libya 2012.						
Background characteristic	At least one trained staff antenatal care	Guidelines available antenatal care	Blood pressure apparatus	Haemoglobin test	Overall readiness	Total number of facilities offering antenatal care services
<b>Type of facility</b>						
PHC unit	15.2	8.7	76.1	71.4	0.0	46
PHC center	26.1	8.0	71.7	69.1	2.9	138
Other PHC facilities	34.7	12.2	71.4	87.0	6.1	49
<b>District</b>						
Albetnan	0.0	0.0	100.0	0.0	0.0	1
Derna	25.0	0.0	25.0	100.0	0.0	8
Al-Gebal-Alakhdar	8.3	0.0	25.0	83.3	0.0	12
Almarege	8.3	0.0	83.3	66.7	0.0	12
Benghazi	48.0	16.0	72.0	72.2	8.0	25
Al-Wahat	25.0	0.0	100.0	100.0	0.0	4
Ajdabia	60.0	0.0	0.0	60.0	0.0	5
Al-Kufra	0.0	0.0	0.0	0.0	0.0	0
Sirte	16.7	16.7	50.0	83.3	0.0	6
Joufara	40.0	20.0	40.0	80.0	20.0	5
Morzig	33.3	16.7	100.0	75.0	16.7	6
Sebha	16.7	0.0	75.0	100.0	0.0	12
Ghat	50.0	0.0	100.0	100.0	0.0	2
Wadi-Alhiat	33.3	33.3	66.7	66.7	0.0	3
Wadi-Alshati	0.0	33.3	66.7	50.0	0.0	3
Misurata	33.3	6.1	66.7	80.0	0.0	33
Al-Merghip	16.7	16.7	100.0	40.0	0.0	12
Tripoli	22.7	2.3	79.5	52.9	2.3	44
Al-Jufra	50.0	50.0	100.0	100.0	50.0	2
Alzawea	13.6	4.5	86.4	93.3	0.0	22
Zwara	22.2	33.3	88.9	60.0	0.0	9
Al-Gebal-Elgharbi	33.3	33.3	100.0	100.0	16.7	6
Naloot	0.0	0.0	100.0	0.0	0.0	1
<b>Total</b>	25.8	9.0	72.5	74.0	3.0	233

## 4.2 Basic Obstetric Care

### 4.2.1 Basic obstetric care service availability

**Table A 4.2.1 Basic obstetric care service availability**

Percentage of health facilities offering Normal delivery, basic emergency obstetric care, and/or newborn care services, by type of facility, according to District, Libya 2012.

Background characteristic	Parenteral administration of antibiotics (a)	Parenteral administration of oxytocic drugs (b)	Parenteral administration of anti-convulsants (c)	Assisted vaginal delivery (d)	Manual removal of placenta (e)	Manual removal of retained products (f)	Neonatal resuscitation (g)	Basic emergency obstetric care (1)	Offers Normal delivery, basic emergency obstetric care, and/or newborn care services	Total number of facilities
<b>Type of facility</b>										
PHC unit	33.3	0.0	0.0	0.0	0.0	66.7	0.0	0.0	0.6	504
PHC center	68.8	25.0	37.5	37.5	56.3	56.3	31.3	0.0	3.6	444
Other PHC facilities	90.9	81.8	81.8	90.9	95.5	95.5	90.9	13.6	23.7	93
<b>District</b>										
Albetnan	NA	NA	NA	NA	0.0	.0	NA	NA	0.0	26
Derna	50.0	50.0	100.0	100.0	100.0	100.0	50.0	0.0	6.9	29
Al-Gebal-Alakhdar	100.0	100.0	0.0	0.0	0.0	.0	100.0	0.0	3.7	27
Almarege	50.0	0.0	50.0	100.0	100.0	100.0	100.0	0.0	4.3	47
Benghazi	NA	NA	NA	NA	0.0	.0	NA	NA	0.0	48
Al-Wahat	100.0	33.3	33.3	66.7	66.7	33.3	33.3	0.0	18.8	16
Ajdabia	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	10.5	19
Al-Kufra	NA	NA	NA	NA	0.0	.0	NA	NA	0.0	12
Sirte	100.0	33.3	66.7	66.7	100.0	66.7	66.7	33.3	6.8	44
Joufara	100.0	100.0	50.0	100.0	100.0	100.0	100.0	50.0	2.8	71
Morzig	0.0	0.0	0.0	100.0	100.0	.0	0.0	0.0	2.1	47
Sebha	80.0	80.0	80.0	80.0	100.0	80.0	80.0	20.0	21.7	23
Ghat	NA	NA	NA	NA	0.0	.0	NA	NA	0.0	5
Wadi-Alhiat	100.0	0.0	100.0	0.0	100.0	100.0	100.0	0.0	4.2	24
Wadi-Alshati	50.0	25.0	0.0	0.0	0.0	50.0	0.0	0.0	9.5	42
Misurata	100.0	50.0	75.0	50.0	50.0	75.0	50.0	0.0	6.2	65
Al-Merghip	100.0	100.0	100.0	0.0	100.0	100.0	100.0	0.0	1.0	100
Tripoli	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	1.1	95
Al-Jufra	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	7.7	13
Alzawea	100.0	66.7	100.0	100.0	100.0	100.0	100.0	0.0	5.3	57
Zwara	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	2.6	76
Al-Gebal-Elgharbi	100.0	100.0	66.7	100.0	100.0	100.0	66.7	0.0	2.5	120
Naloot	NA	NA	NA	NA	0.0	.0	NA	NA	0.0	35
<b>Total</b>	78.0	53.7	58.5	63.4	73.2	78.0	61.0	7.3	3.9	1041

Notes: (1) Basic emergency obstetric care facilities are those that offer interventions a-g.

#### 4.2.2 Basic Obstetric Care Service Readiness

<b>Table A 4.2.2 Basic obstetric care</b>						
Among health facilities offering Offers Normal delivery, basic emergency obstetric care, and/or newborn care services, the percentage with trained staff, guidelines, equipment, and medicines and commodities, by type of facility, according to District, Libya 2012.						
Background characteristic	At least one trained staff IMPAC	Guidelines available IMPAC	emergency _transpot	Latex_ gloves	Overall readiness	Total number of facilities Offers Normal delivery, basic emergency obstetric care, and/or newborn care services
<b>Type of facility</b>						
PHC unit	0.0	0.0	0.0	100.0	0	3
PHC center	12.5	31.3	43.8	75.0	0	16
Other PHC facilities	36.4	0.0	81.8	100.0	0	22
<b>District</b>						
Albetnan	NA	NA	NA	NA	NA	0
Derna	50.0	0.0	100.0	100.0	0	2
Al-Gebal-Alakhdar	0.0	0.0	0.0	100.0	0	1
Almarege	0.0	0.0	100.0	100.0	0	2
Benghazi	NA	NA	NA	NA	NA	0
Al-Wahat	0.0	33.3	100.0	100.0	0	3
Ajdabia	100.0	0.0	100.0	100.0	0	2
Al-Kufra	NA	NA	NA	NA	NA	0
Sirte	33.3	0.0	33.3	100.0	0	3
Joufara	50.0	0.0	100.0	100.0	0	2
Morzig	0.0	0.0	100.0	0.0	0	1
Sebha	20.0	0.0	80.0	100.0	0	5
Ghat	NA	NA	NA	NA	NA	0
Wadi-Alhiat	0.0	100.0	100.0	100.0	0	1
Wadi-Alshati	0.0	25.0	0.0	100.0	0	4
Misurata	25.0	25.0	25.0	75.0	0	4
Al-Merghip	0.0	0.0	0.0	100.0	0	1
Tripoli	0.0	0.0	0.0	100.0	0	1
Al-Jufra	100.0	100.0	0.0	0.0	0	1
Alzawea	33.3	0.0	100.0	100.0	0	3
Zwara	0.0	0.0	0.0	50.0	0	2
Al-Gebal-Elgharbi	33.3	0.0	100.0	100.0	0	3
Naloot	NA	NA	NA	NA	NA	0
<b>Total</b>	24.4	12.2	61.0	90.2	0	41

## 4.3 Child Health Services: Routine Child Immunization

### 4.3.1 Child immunization services availability

<b>Table A 4.3.1 Child immunization service availability</b>						
Percentage of health facilities offering child immunization services either in the facility or as outreach, by type of facility, according to District, Libya 2012.						
Background characteristic	Routine measles immunization	Routine DPT-Hib+HepB immunization	Routine polio immunization	Routine BCG immunization	Offers child immunization services	Total number of facilities
<b>Type of facility</b>						
PHC unit	29.5	97.9	93.7	94.7	18.8	504
PHC center	41.7	97.7	94.0	93.7	68.0	444
Other PHC facilities	51.6	87.1	80.6	83.9	33.3	93
<b>District</b>						
Albetnan	42.9	92.9	85.7	92.9	53.8	26
Derna	75.0	100.0	100.0	100.0	27.6	29
Al-Gebal-Alakhdar	42.9	92.9	92.9	92.9	51.9	27
Almarege	36.8	94.7	89.5	89.5	40.4	47
Benghazi	11.1	94.4	88.9	91.7	75.0	48
Al-Wahat	44.4	100.0	100.0	100.0	56.3	16
Ajdabia	25.0	100.0	100.0	91.7	63.2	19
Al-Kufra	75.0	100.0	100.0	100.0	33.3	12
Sirte	37.5	93.8	87.5	93.8	36.4	44
Joufara	63.2	94.7	94.7	94.7	26.8	71
Morzig	75.0	100.0	100.0	100.0	25.5	47
Sebha	20.0	100.0	100.0	100.0	65.2	23
Ghat	80.0	100.0	100.0	100.0	100.0	5
Wadi-Alhiat	46.7	100.0	100.0	100.0	62.5	24
Wadi-Alshati	26.1	91.3	43.5	43.5	54.8	42
Misurata	44.4	100.0	100.0	96.3	41.5	65
Al-Merghip	19.0	97.6	97.6	97.6	42.0	100
Tripoli	45.2	97.6	97.6	97.6	44.2	95
Al-Jufra	71.4	85.7	85.7	85.7	53.8	13
Alzawea	22.7	100.0	95.5	100.0	38.6	57
Zwara	62.5	100.0	100.0	100.0	21.1	76
Al-Gebal-Elgharbi	47.2	100.0	100.0	97.2	30.0	120
Naloot	53.3	93.3	93.3	93.3	42.9	35
<b>Total</b>	<b>39.7</b>	<b>97.0</b>	<b>93.0</b>	<b>93.2</b>	<b>41.1</b>	<b>1041</b>

## 4.3.2 Child immunization services readiness

<b>Table A 4.3.2 Child immunization services</b>											
Among health facilities offering child immunization services, the percentage with trained staff, guidelines, equipment, and medicines, by type of facility, according to District, Libya 2012.											
Background characteristic	At least one trained staff EPI	Guidelines available EPI	Cold box with ice packs	Safety_Box	Autodisable_Disposable_syringes	Registration_book_vaccination	Information_Education_Communication_material	Refrigerator	vaccine_carriers	Overall readiness	Total number of facilities offering child immunization services
<b>Type of facility</b>											
PHC unit	46.3	47.4	92.6	71.6	95.8	93.7	37.9	100.0	93.7	13.7	95
PHC center	51.3	42.1	94.7	81.5	96.0	95.7	46.7	99.7	96.4	13.9	302
Other PHC facilities	64.5	51.6	87.1	67.7	93.5	90.3	51.6	100.0	93.5	25.8	31
<b>District</b>											
Albetnan	71.4	57.1	92.9	71.4	100.0	92.9	35.7	100.0	100.0	7.1	14
Derna	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	8
Al-Gebal-Alakhdar	7.1	21.4	92.9	92.9	92.9	92.9	50.0	100.0	92.9	0.0	14
Almarege	10.5	47.4	100.0	94.7	100.0	94.7	36.8	100.0	100.0	0.0	19
Benghazi	47.2	58.3	97.2	38.9	100.0	94.4	38.9	100.0	100.0	11.1	36
Al-Wahat	66.7	88.9	100.0	100.0	100.0	100.0	88.9	100.0	100.0	66.7	9
Ajdabia	100.0	25.0	100.0	91.7	100.0	100.0	58.3	100.0	100.0	16.7	12
Al-Kufra	50.0	75.0	100.0	100.0	100.0	100.0	75.0	100.0	100.0	25.0	4
Sirte	68.8	62.5	81.3	62.5	93.8	93.8	56.3	100.0	81.3	18.8	16
Joufara	42.1	73.7	94.7	84.2	94.7	94.7	73.7	100.0	94.7	31.6	19
Morzig	75.0	33.3	100.0	75.0	100.0	100.0	58.3	100.0	100.0	16.7	12
Sebha	60.0	40.0	80.0	86.7	93.3	93.3	20.0	100.0	100.0	13.3	15
Ghat	80.0	0.0	100.0	100.0	100.0	100.0	40.0	100.0	100.0	0.0	5
Wadi-Alhiat	40.0	86.7	100.0	80.0	100.0	100.0	46.7	100.0	100.0	20.0	15
Wadi-Alshati	34.8	26.1	39.1	47.8	47.8	47.8	21.7	91.7	60.9	4.3	23
Misurata	63.0	37.0	100.0	77.8	100.0	100.0	29.6	100.0	100.0	0.0	27
Al-Merghip	59.5	19.0	100.0	78.6	97.6	100.0	50.0	100.0	100.0	7.1	42
Tripoli	76.2	31.0	100.0	90.5	100.0	100.0	97.6	45.2	100.0	16.7	42
Al-Jufra	14.3	14.3	85.7	57.1	85.7	85.7	28.6	100.0	71.4	14.3	7
Alzawea	59.1	100.0	100.0	100.0	100.0	100.0	86.4	100.0	100.0	50.0	22
Zwara	25.0	43.8	93.8	87.5	100.0	100.0	50.0	100.0	87.5	6.3	16
Al-Gebal-Elgharbi	8.3	19.4	97.2	77.8	100.0	100.0	8.3	100.0	97.2	0.0	36
Naloot	73.3	26.7	100.0	80.0	100.0	100.0	46.7	100.0	100.0	6.7	15
<b>Total</b>	51.2	43.9	93.7	78.3	95.8	94.9	45.1	99.8	95.6	14.7	428

## 4.4 Preventive and Curative Care for Children Under Five Services

### 4.4.1 Preventive and curative care for children under five service availability

<b>Table A 4.4.1 Preventative and curative care for children under 5 service availability</b>						
Percentage of health facilities offering preventative and curative care services for children under 5, by type of facility, according to District, Libya 2012.						
Background characteristic	Diagnosis/ treat malnutrition	Vitamin A supplemen- tation	ORS and zinc supplemen- tation to children with diarrhea	Child growth monitoring	Offers preventative and curative care for U-5s	Total number of facilities
<b>Type of facility</b>						
PHC unit	77.8	63.6	82.8	53.5	19.6	504
PHC center	74.6	67.2	83.1	51.7	45.3	444
Other PHC facilities	86.7	77.8	88.9	68.9	48.4	93
<b>District</b>						
Albetnan	70.0	60.0	90.0	60.0	38.5	26
Derna	0.0	0.0	0.0	0.0	17.2	29
Al-Gebal-Alakhdar	60.0	85.0	85.0	60.0	74.1	27
Almarege	90.0	80.0	100.0	40.0	21.3	47
Benghazi	77.3	40.9	81.8	59.1	45.8	48
Al-Wahat	66.7	66.7	83.3	50.0	37.5	16
Ajdabia	100.0	85.7	85.7	71.4	36.8	19
Al-Kufra	100.0	100.0	50.0	100.0	16.7	12
Sirte	86.4	77.3	90.9	59.1	50.0	44
Joufara	100.0	75.0	75.0	75.0	5.6	71
Morzig	100.0	100.0	100.0	100.0	6.4	47
Sebha	81.3	75.0	93.8	56.3	69.6	23
Ghat	0.0	0.0	0.0	0.0	0.0	5
Wadi-Alhiat	66.7	33.3	100.0	66.7	12.5	24
Wadi-Alshati	63.6	54.5	90.9	36.4	26.2	42
Misurata	86.5	81.1	86.5	70.3	56.9	65
Al-Merghip	62.2	45.9	83.8	35.1	37.0	100
Tripoli	68.3	88.3	75.0	35.0	63.2	95
Al-Jufra	100.0	100.0	100.0	100.0	7.7	13
Alzawea	90.5	38.1	85.7	95.2	36.8	57
Zwara	90.6	68.8	84.4	53.1	42.1	76
Al-Gebal-Elgharbi	100.0	40.0	100.0	80.0	4.2	120
Naloot	90.9	54.5	90.9	63.6	31.4	35
<b>Total</b>	<b>77.1</b>	<b>67.5</b>	<b>83.8</b>	<b>54.5</b>	<b>33.1</b>	<b>1041</b>

## 4.4.2 Preventive and Curative Care for Children Under Five Service Readiness

**Table A 4.4.2 Preventative and curative care services for children under 5**

Among facilities offering preventative and curative care services for children under 5, the percentage with trained staff, guidelines, equipment, diagnostics, and medicines, by type of facility, according to District, Libya 2012.

Background characteristic	At least one trained staff IMCI	Guidelines available IMCI	Guidelines available growth monitoring	Adult/pediatric scale	Length/height measuring equipment	Thermometer	Stethoscope	Haemoglobin (l)	General Stool Examination	Provide ORS and zinc supplementation to children with diarrhea	Overall readiness	Total number of facilities offering preventative and curative care for U5s
<b>Type of facility</b>												
PHC unit	8.1	15.4	0.0	39.4	23.2	77.8	76.8	56.7	43.3	82.8	0	99
PHC center	9.5	23.1	43.8	57.2	42.3	73.6	80.6	61.7	53.4	83.1	0	201
Other PHC facilities	2.2	33.3	50.0	62.2	44.4	66.7	62.2	85.7	81.0	88.9	0	45
<b>District</b>												
Albetnan	0.0	50.0	50.0	50.0	40.0	60.0	50.0	0.0	66.7	90.0	0	10
Derna	0.0	0.0	0.0	0.0	0.0	20.0	20.0	100.0	100.0	0.0	0	5
Al-Gebal-Alakhdar	5.0	0.0	0.0	20.0	10.0	15.0	20.0	66.7	55.6	85.0	0	20
Almarege	10.0	0.0	0.0	60.0	40.0	90.0	100.0	100.0	100.0	100.0	0	10
Benghazi	18.2	0.0	0.0	81.8	63.6	68.2	72.7	68.8	50.0	81.8	0	22
Al-Wahat	0.0	0.0	0.0	66.7	50.0	83.3	83.3	100.0	100.0	83.3	0	6
Ajdabia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83.3	83.3	85.7	0	7
Al-Kufra	0.0	0.0	0.0	100.0	50.0	100.0	100.0	0.0	100.0	50.0	0	2
Sirte	0.0	0.0	0.0	40.9	18.2	77.3	72.7	55.6	88.9	90.9	0	22
Joufara	0.0	0.0	0.0	100.0	75.0	75.0	100.0	100.0	75.0	75.0	0	4
Morzig	66.7	0.0	0.0	100.0	100.0	100.0	100.0	50.0	100.0	100.0	0	3
Sebha	0.0	0.0	0.0	75.0	43.8	81.3	81.3	100.0	70.0	93.8	0	16
Ghat	NA	0.0	NA	0.0	0.0	0.0	0.0	NA	NA	NA	NA	0
Wadi-Alhiat	0.0	0.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0	3
Wadi-Alshati	0.0	0.0	0.0	9.1	9.1	90.9	81.8	66.7	100.0	90.9	0	11
Misurata	8.1	0.0	33.3	51.4	40.5	67.6	73.0	86.2	72.4	86.5	0	37
Al-Merghip	2.7	50.0	0.0	81.1	54.1	97.3	100.0	54.2	45.8	83.8	0	37
Tripoli	6.7	33.3	100.0	43.3	21.7	75.0	88.3	46.7	26.7	75.0	0	60
Al-Jufra	100.0	0.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0	1
Alzawea	4.8	40.0	75.0	71.4	61.9	95.2	85.7	69.2	76.9	85.7	0	21
Zwara	31.3	14.3	0.0	37.5	28.1	78.1	78.1	60.0	60.0	84.4	0	32
Al-Gebal-Elgharbi	0.0	0.0	0.0	60.0	60.0	100.0	100.0	100.0	60.0	100.0	0	5
Naloot	0.0	0.0	0.0	45.5	45.5	72.7	81.8	50.0	25.0	90.9	0	11
<b>Total</b>	8.1	20.7	38.5	52.8	37.1	73.9	77.1	65.9	57.6	83.8	0	345

## 4.5 Adolescents Health Services

### 4.5.1 Adolescents health services availability

<b>Table A 4.5.1 Adolescent health service availability</b>		
Percentage of health facilities offering adolescent health services, by type of facility, according to District, Libya 2012.		
Background characteristic	Offers adolescent health services	Total number of facilities
<b>Type of facility</b>		
PHC unit	10.7	504
PHC center	42.6	444
Other PHC facilities	16.1	93
<b>District</b>		
Albetnan	11.5	26
Derna	27.6	29
Al-Gebal-Alakhdar	11.1	27
Almarege	10.6	47
Benghazi	64.6	48
Al-Wahat	37.5	16
Ajdabia	36.8	19
Al-Kufra	25.0	12
Sirte	9.1	44
Joufara	28.2	71
Morzig	10.6	47
Sebha	56.5	23
Ghat	100.0	5
Wadi-Alhiat	41.7	24
Wadi-Alshati	35.7	42
Misurata	20.0	65
Al-Merghip	36.0	100
Tripoli	22.1	95
Al-Jufra	46.2	13
Alzawea	19.3	57
Zwara	15.8	76
Al-Gebal-Elgharbi	6.7	120
Naloot	37.1	35
<b>Total</b>	<b>24.8</b>	<b>1041</b>

## 4.5.2 Adolescents health services readiness

**Table A 4.5.2 Adolescent health services**

Among health facilities offering adolescent health services, the percentage with trained staff, guidelines, medicines, and adolescent health services, by type of facility, according to District, Libya 2012.

Background characteristic	At least one trained staff provision of adolescent health services	Guidelines available service provision to adolescents	At least one trained staff consent and confidentiality	Guidelines available clinical management of adolescents	Staff trained adol sexual and reproductive health	Overall readiness	Total number of facilities offering adolescent health services
<b>Type of facility</b>							
PHC unit	3.7	9.3	1.9	7.4	3.7	1.9	54
PHC center	1.1	5.3	1.1	5.8	1.6	.5	189
Other PHC facilities	0.0	0.0	0.0	0.0	0.0	.0	15
<b>District</b>							
Albetnan	0.0	0.0	0.0	0.0	0.0	.0	3
Derna	0.0	0.0	0.0	0.0	0.0	.0	8
Al-Gebal-Alakhdar	0.0	0.0	0.0	0.0	0.0	.0	3
Almarege	0.0	0.0	0.0	0.0	0.0	.0	5
Benghazi	3.2	6.5	3.2	6.5	0.0	.0	31
Al-Wahat	0.0	0.0	0.0	0.0	0.0	.0	6
Ajdabia	0.0	0.0	0.0	0.0	0.0	.0	7
Al-Kufra	0.0	0.0	0.0	0.0	0.0	.0	3
Sirte	0.0	0.0	0.0	0.0	0.0	.0	4
Joufara	0.0	5.0	0.0	10.0	5.0	.0	20
Morzig	0.0	40.0	0.0	40.0	0.0	.0	5
Sebha	7.7	7.7	7.7	7.7	7.7	7.7	13
Ghat	0.0	0.0	0.0	0.0	0.0	.0	5
Wadi-Alhiat	0.0	10.0	0.0	0.0	0.0	.0	10
Wadi-Alshati	0.0	0.0	0.0	6.7	0.0	.0	15
Misurata	0.0	0.0	0.0	0.0	0.0	.0	13
Al-Merghip	0.0	0.0	0.0	0.0	2.8	.0	36
Tripoli	0.0	4.8	0.0	4.8	0.0	.0	21
Al-Jufra	0.0	0.0	0.0	0.0	0.0	.0	6
Alzawea	18.2	54.5	9.1	45.5	9.1	9.1	11
Zwara	0.0	0.0	0.0	0.0	0.0	.0	12
Al-Gebal-Elgharbi	0.0	0.0	0.0	0.0	0.0	.0	8
Naloot	0.0	7.7	0.0	7.7	7.7	.0	13
<b>Total</b>	1.6	98.4	1.2	5.8	1.9	.8	258

## 4.6 Tuberculosis Health Services

### 4.6.1 Tuberculosis health services availability

Background characteristic	TB diagnosis	TB diagnostic method						Providers Treat or Manage TB patients	Offers Diagnosis, treatment prescription, or treatment follow-up of tuberculosis	Total number of facilities
		Sputum Smear Only	X-Ray only	Either Sputum OR X-Ray	Both Sputum AND X-Ray	Clinical Symptoms only	Other PHC facilities			
<b>Type of facility</b>										
PHC unit	50.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.4	504
PHC center	60.0	33.3	0.0	0.0	66.7	0.0	0.0	0.0	1.1	444
Other PHC facilities	92.9	15.4	7.7	7.7	53.8	7.7	7.7	64.3	15.1	93
<b>District</b>										
Albetnan	100.0	0.0	0.0	0.0	100.0	0.0	0.0	100.0	3.8	26
Derna	NA	NA	NA	NA	NA	NA	NA	NA	3.4	29
Al-Gebal-Alakhdar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27
Almarege	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	47
Benghazi	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	48
Al-Wahat	100.0	0.0	100.0	0.0	0.0	0.0	0.0	100.0	6.3	16
Ajdabia	100.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	5.3	19
Al-Kufra	100.0	0.0	0.0	0.0	100.0	0.0	0.0	100.0	8.3	12
Sirte	100.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	2.3	44
Joufara	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71
Morzig	100.0	0.0	0.0	0.0	100.0	0.0	0.0	100.0	2.1	47
Sebha	100.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	4.3	23
Ghat	NA	NA	NA	NA	NA	NA	NA	NA	0.0	5
Wadi-Alhiat	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24
Wadi-Alshati	100.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	2.4	42
Misurata	100.0	0.0	0.0	0.0	100.0	0.0	0.0	100.0	3.1	65
Al-Merghip	100.0	0.0	33.3	0.0	66.7	0.0	0.0	0.0	3.0	100
Tripoli	50.0	0.0	0.0	0.0	0.0	0.0	100.0	50.0	2.1	95
Al-Jufra	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13
Alzawea	50.0	100.0	0.0	0.0	0.0	0.0	0.0	50.0	3.5	57
Zwara	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	76
Al-Gebal-Elgharbi	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	120
Naloot	100.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	2.9	35
<b>Total</b>	81.0	17.6	11.8	5.9	52.9	5.9	5.9	42.9	2.0	1041

**Table A 4.6.1b Tuberculosis service availability**

Percentage of health facilities offering tuberculosis services and providing treatment or managing TB patients, according to treatment strategy for newly diagnosed TB by type of facility, according to District, Libya 2012.

Background characteristic	treatment strategy for newly diagnosed TB							Providers Treat or Manage TB patients	Total number of facilities
	Direct Observe 2M, FU 4M	Direct Observe 6M	Follow up clients only after first 2M direct observation elsewhere	Diagnosis and treat while inpatient discharge elsewhere for F/UP	Provide full treatment, with no routine direct observe phase	Diagnose, prescribe/provide medicines only, NO F/UP	Diagnose only, no treatment or prescription of medicines		
<b>Type of facility</b>									
PHC unit	NA	NA	NA	NA	NA	NA	NA	0.0	2
PHC center	NA	NA	NA	NA	NA	NA	NA	0.0	5
Other PHC facilities	44.4	11.1	0.0	33.3	0.0	11.1	0.0	64.3	14
<b>District</b>									
Albetnan	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1
Derna	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	1
Al-Gebal-Alakhdar	NA	NA	NA	NA	NA	NA	NA	0.0	0
Almarege	NA	NA	NA	NA	NA	NA	NA	0.0	1
Benghazi	NA	NA	NA	NA	NA	NA	NA	0.0	1
Al-Wahat	0.0	0.0	0.0	0.0	0.0	100.0	0.0	100.0	1
Ajdabia	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1
Al-Kufra	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1
Sirte	NA	NA	NA	NA	NA	NA	NA	0.0	1
Joufara	NA	NA	NA	NA	NA	NA	NA	0.0	0
Morzig	0.0	0.0	0.0	100.0	0.0	0.0	0.0	100.0	1
Sebha	NA	NA	NA	NA	NA	NA	NA	0.0	1
Ghat	NA	NA	NA	NA	NA	NA	NA	NA	0
Wadi-Alhiat	NA	NA	NA	NA	NA	NA	NA	0.0	0
Wadi-Alshati	NA	NA	NA	NA	NA	NA	NA	0.0	1
Misurata	0.0	0.0	0.0	100.0	0.0	0.0	0.0	100.0	2
Al-Merghip	NA	NA	NA	NA	NA	NA	NA	0.0	3
Tripoli	100.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	2
Al-Jufra	NA	NA	NA	NA	NA	NA	NA	0.0	0
Alzawea	0.0	100.0	0.0	0.0	0.0	0.0	0.0	50.0	2
Zwara	NA	NA	NA	NA	NA	NA	NA	0.0	0
Al-Gebal-Elgharbi	NA	NA	NA	NA	NA	NA	NA	0.0	0
Naloot	NA	NA	NA	NA	NA	NA	NA	0.0	1
<b>Total</b>	44.4	11.1	.0	33.3	.0	11.1	0.0	42.9	21

## 4.6.2 Parasitic infestation

**Table A 4.6.2 Tuberculosis services**

Among health facilities offering tuberculosis services according to HIV rapid diagnostic testing and the availability of Anthelmintic Drugs Anti-protozoal , by type of facility, according to District, Libya 2012.

	HIV rapid diagnostic testing	Anthelmintic Drugs Anti-protozoal	Overall readiness	Total number of facilities offering Diagnosis, treatment prescription, or treatment follow-up of tuberculosis
<b>Type of facility</b>				
PHC unit	0.0	50.0	0.0	2
PHC center	0.0	80.0	0.0	5
Other PHC facilities	35.7	14.3	7.1	14
<b>District</b>				
Albetnan	0.0	100.0	0.0	1
Derna	0.0	100.0	0.0	1
Al-Gebal-Alakhdar	NA	NA	0.0	0
Almarege	0.0	100.0	0.0	1
Benghazi	0.0	0.0	0.0	1
Al-Wahat	0.0	0.0	0.0	1
Ajdabia	0.0	0.0	0.0	1
Al-Kufra	100.0	0.0	0.0	1
Sirte	100.0	100.0	100.0	1
Joufara	NA	NA	0.0	0
Morzig	0.0	0.0	0.0	1
Sebha	100.0	0.0	0.0	1
Ghat	NA	NA	0.0	0
Wadi-Alhiat	NA	NA	0.0	0
Wadi-Alshati	0.0	100.0	0.0	1
Misurata	0.0	0.0	0.0	2
Al-Merghip	0.0	33.3	0.0	3
Tripoli	50.0	50.0	0.0	2
Al-Jufra	NA	NA	0.0	0
Alzawea	50.0	0.0	0.0	2
Zwara	NA	NA	0.0	0
Al-Gebal-Elgharbi	NA	NA	0.0	0
Naloot	0.0	0.0	0.0	1
<b>Total</b>	23.8	33.3	4.8	21

## 4.7 Preventing Mother-to-Child Transmission of HIV

### 4.7.1 Preventing mother-to-child transmission of HIV (PMTCT) services availability

**Table A 4.7.1 Preventing mother-to-child transmission of HIV**

Percentage of health facilities offering prevention of mother-to-child transmission of HIV services, by type of facility, according to District, Libya 2012.

Background characteristic	HIV counselling and testing to HIV+ pregnant women	HIV counselling and testing to infants born to HIV+ pregnant women	ARV prophylaxis to HIV+ pregnant women	ARV prophylaxis to newborns born to HIV+ pregnant women	Infant and young child feeding counselling	Nutritional counselling for HIV+ women and their infants	Family planning counselling to HIV+ women	Offers services for the prevention of mother-to-child transmission of HIV	Total number of facilities
<b>Type of facility</b>									
PHC unit	NA	NA	NA	NA	0.0	NA	NA	0.0	504
PHC center	100.0	33.3	33.3	33.3	33.3	33.3	33.3	0.7	444
Other PHC facilities	66.7	33.3	0.0	0.0	66.7	0.0	0.0	3.2	93
<b>District</b>									
Albetnan	NA	NA	NA	NA	0.0	NA	NA	0.0	26
Derna	NA	NA	NA	NA	0.0	NA	NA	0.0	29
Al-Gebal-Alakhdar	NA	NA	NA	NA	0.0	NA	NA	0.0	27
Almarege	NA	NA	NA	NA	0.0	NA	NA	0.0	47
Benghazi	NA	NA	NA	NA	0.0	NA	NA	0.0	48
Al-Wahat	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16
Ajdabia	NA	NA	NA	NA	0.0	NA	NA	0.0	19
Al-Kufra	NA	NA	NA	NA	0.0	NA	NA	0.0	12
Sirte	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	44
Joufara	NA	NA	NA	NA	0.0	NA	NA	0.0	71
Morzig	NA	NA	NA	NA	0.0	NA	NA	0.0	47
Sebha	NA	NA	NA	NA	0.0	NA	NA	0.0	23
Ghat	NA	NA	NA	NA	0.0	NA	NA	0.0	5
Wadi-Alhiat	NA	NA	NA	NA	0.0	NA	NA	0.0	24
Wadi-Alshati	NA	NA	NA	NA	0.0	NA	NA	0.0	42
Misurata	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	65
Al-Merghip	NA	NA	NA	NA	0.0	NA	NA	0.0	100
Tripoli	NA	NA	NA	NA	0.0	NA	NA	0.0	95
Al-Jufra	NA	NA	NA	NA	0.0	NA	NA	0.0	13
Alzawea	100.0	0.0	0.0	0.0	50.0	0.0	0.0	3.5	57
Zwara	NA	NA	NA	NA	0.0	NA	NA	0.0	76
Al-Gebal-Elgharbi	100.0	100.0	100.0	0.0	0.0	0.0	0.0	0.8	120
Naloot	NA	NA	NA	NA	0.0	NA	NA	0.0	35
<b>Total</b>	<b>83.3</b>	<b>33.3</b>	<b>16.7</b>	<b>16.7</b>	<b>50.0</b>	<b>16.7</b>	<b>16.7</b>	<b>16.7</b>	<b>1041</b>

## 4.7.2 Preventing mother-to-child transmission of HIV (PMTCT) services Readiness

**Table A 4.7.2 Preventing mother-to-child transmission of HIV**

Among health facilities offering prevention of mother-to-child transmission of HIV services, the percentage with guidelines PMTCT, by type of facility, according to District, Libya 2012.

Background characteristic	Guidelines available PMTCT	Total number of facilities offering prevention of mother-to-child transmission of HIV
<b>Type of facility</b>		
PHC unit	NA	0
PHC center	0	3
Other PHC facilities	0	3
<b>District</b>		
Albetnan	NA	0
Derna	NA	0
Al-Gebal-Alakhdar	NA	0
Almarege	NA	0
Benghazi	NA	0
Al-Wahat	0	1
Ajdabia	NA	0
Al-Kufra	NA	0
Sirte	0	1
Joufara	NA	0
Morzig	NA	0
Sebha	NA	0
Ghat	NA	0
Wadi-Alhiat	NA	0
Wadi-Alshati	NA	0
Misurata	0	1
Al-Merghip	NA	0
Tripoli	NA	0
Al-Jufra	NA	0
Alzawea	0	2
Zwara	NA	0
Al-Gebal-Elgharbi	0	1
Naloot	NA	0
<b>Total</b>	<b>0</b>	<b>6</b>

## 4.8 Diabetes

### 4.8.1 Diabetes services availability

<b>Table A 4.8.1 Diabetes diagnosis and/or management</b>		
Percentage of health facilities those Diagnosis or management of non-communicable diseases, such as diabetes, cardiovascular disease, or chronic respiratory disease according to having diabetes diagnosis and/or management services, by type of facility, according to District, Libya 2012.		
Background characteristic	Diabetes diagnosis and/or management	Total number of facilities
<b>Type of facility</b>		
PHC unit	75.9	137
PHC center	87.4	239
Other PHC facilities	94.5	55
<b>District</b>		
Albetnan	100.0	6
Derna	88.2	17
Al-Gebal-Alakhdar	25.0	20
Almarege	90.5	21
Benghazi	90.5	21
Al-Wahat	100.0	9
Ajdabia	66.7	3
Al-Kufra	100.0	6
Sirte	95.2	21
Joufara	100.0	7
Morzig	100.0	7
Sebha	92.3	13
Ghat	100.0	5
Wadi-Alhiat	100.0	14
Wadi-Alshati	81.0	21
Misurata	95.7	46
Al-Merghip	89.8	49
Tripoli	77.0	61
Al-Jufra	100.0	3
Alzawea	81.3	48
Zwara	50.0	16
Al-Gebal-Elgharbi	100.0	4
Naloot	100.0	13
<b>Total</b>	<b>84.7</b>	<b>431</b>

## 4.8.2 Diabetes services readiness

<b>Table A 4.8.2 Diabetes services</b>							
Among health facilities offering diabetes diagnosis and/or management services, the percentage with trained staff, guidelines, equipment, diagnostics, and medicines, by type of facility, according to District, Libya 2012.							
Background characteristic	Guideline diagnosis management diabetes	BP Apparatus	Adult pediatric scale	Blood glucose (1)	Overall readiness	Offering Diabetes diagnosis and/or management	Number of facilities
<b>Type of facility</b>							
PHC unit	5.8	74.0	41.3	81.3	1.0	75.9	137
PHC center	9.1	76.1	57.9	90.1	3.4	87.4	239
Other PHC facilities	17.3	71.2	65.4	92.2	11.5	94.5	55
<b>District</b>							
Albetnan	33.3	50.0	50.0	80.0	33.3	100.0	6
Derna	6.7	20.0	20.0	100.0	.0	88.2	17
Al-Gebal-Alakhdar	0.0	40.0	60.0	100.0	.0	25.0	20
Almarege	10.5	84.2	42.1	100.0	.0	90.5	21
Benghazi	5.3	78.9	84.2	86.7	5.3	90.5	21
Al-Wahat	0.0	77.8	66.7	100.0	.0	100.0	9
Ajdabia	0.0	0.0	0.0	100.0	.0	66.7	3
Al-Kufra	16.7	100.0	83.3	100.0	.0	100.0	6
Sirte	10.0	60.0	45.0	90.0	.0	95.2	21
Joufara	14.3	57.1	57.1	85.7	.0	100.0	7
Morzig	0.0	100.0	71.4	83.3	.0	100.0	7
Sebha	16.7	75.0	58.3	100.0	8.3	92.3	13
Ghat	0.0	100.0	100.0	75.0	.0	100.0	5
Wadi-Alhiat	28.6	71.4	57.1	100.0	15.4	100.0	14
Wadi-Alshati	0.0	70.6	17.6	100.0	.0	81.0	21
Misurata	9.1	56.8	52.3	91.7	4.5	95.7	46
Al-Merghip	6.8	97.7	75.0	82.6	4.7	89.8	49
Tripoli	12.8	76.6	38.3	82.9	2.1	77.0	61
Al-Jufra	0.0	100.0	100.0	100.0	.0	100.0	3
Alzawea	7.7	87.2	61.5	85.7	7.7	81.3	48
Zwara	12.5	75.0	37.5	100.0	.0	50.0	16
Al-Gebal-Elgharbi	0.0	100.0	75.0	75.0	.0	100.0	4
Naloot	7.7	84.6	46.2	100.0	.0	100.0	13
<b>Total</b>	9.3	74.8	54.2	89.3	3.9	84.7	431
Notes:							
(1) Ability to conduct test onsite and presence of glucometer and glucometer test strips.							

## 4.9 Cardiovascular Diseases

### 4.9.1 Cardiovascular diseases services availability

<b>Table A 4.9.1 Cardiovascular disease diagnosis and/or management</b>		
Percentage of health facilities cardiovascular disease diagnosis and/or management services, by type of facility, according to District, Libya 2012.		
Background characteristic	Cardiovascular disease diagnosis and/or management	Total number of facilities
<b>Type of facility</b>		
PHC unit	27.2	504
PHC center	53.8	444
Other PHC facilities	59.1	93
<b>District</b>		
Albetnan	23.1	26
Derna	58.6	29
Al-Gebal-Alakhdar	74.1	27
Almarege	44.7	47
Benghazi	43.8	48
Al-Wahat	56.3	16
Ajdabia	15.8	19
Al-Kufra	50.0	12
Sirte	47.7	44
Joufara	9.9	71
Morzig	14.9	47
Sebha	56.5	23
Ghat	100.0	5
Wadi-Alhiat	58.3	24
Wadi-Alshati	50.0	42
Misurata	70.8	65
Al-Merghip	49.0	100
Tripoli	64.2	95
Al-Jufra	23.1	13
Alzawea	84.2	57
Zwara	21.1	76
Al-Gebal-Elgharbi	3.3	120
Naloot	37.1	35
<b>Total</b>	<b>41.4</b>	<b>1041</b>

## 4.9.2 Cardiovascular diseases services readiness

**Table A 4.9.2 Cardiovascular disease services**

Among health facilities offering cardiovascular disease diagnosis and/or management services, the percentage with trained staff, guidelines, equipment, and medicines, by type of facility, according to District, Libya 2012.

Background characteristic	Guidelines available cardiovascular disease diagnosis and management	Stethoscope	Blood pressure apparatus	Adult scale	Oxygen	Overall readiness	Offers cardiovascular disease diagnosis and/or management services	Total number of facilities
<b>Type of facility</b>								
PHC unit	89.1	72.3	70.1	33.6	37.2	10.9	27.2	504
PHC center	84.5	78.7	73.2	55.2	51.5	32.9	53.8	444
Other PHC facilities	92.7	69.1	67.3	61.8	58.2	47.3	59.1	93
<b>District</b>								
Albetnan	100.0	33.3	50.0	50.0	16.7	33.3	23.1	26
Derna	82.4	23.5	17.6	17.6	23.5	17.6	58.6	29
Al-Gebal-Alakhdar	90.0	20.0	15.0	20.0	10.0	10.0	74.1	27
Almarege	100.0	81.0	81.0	42.9	38.1	13.3	44.7	47
Benghazi	81.0	66.7	71.4	76.2	57.1	47.4	43.8	48
Al-Wahat	66.7	77.8	77.8	66.7	55.6	42.9	56.3	16
Ajdabia	100.0	0.0	0.0	0.0	0.0	.0	15.8	19
Al-Kufra	83.3	83.3	100.0	83.3	50.0	60.0	50.0	12
Sirte	100.0	76.2	61.9	47.6	52.4	27.8	47.7	44
Joufara	71.4	71.4	57.1	57.1	71.4	28.6	9.9	71
Morzig	57.1	100.0	100.0	71.4	57.1	33.3	14.9	47
Sebha	92.3	76.9	76.9	61.5	38.5	53.8	56.5	23
Ghat	100.0	100.0	100.0	100.0	100.0	75.0	100.0	5
Wadi-Alhiat	100.0	92.9	71.4	57.1	50.0	45.5	58.3	24
Wadi-Alshati	66.7	71.4	76.2	14.3	9.5	4.8	50.0	42
Misurata	91.3	67.4	58.7	52.2	65.2	29.5	70.8	65
Al-Merghip	91.8	95.9	93.9	67.3	71.4	38.5	49.0	100
Tripoli	83.6	78.7	72.1	32.8	37.7	16.7	64.2	95
Al-Jufra	66.7	100.0	100.0	100.0	100.0	66.7	23.1	13
Alzawea	89.6	87.5	85.4	56.3	47.9	29.3	84.2	57
Zwara	81.3	87.5	81.3	43.8	43.8	25.0	21.1	76
Al-Gebal-Elgharbi	75.0	100.0	100.0	75.0	100.0	25.0	3.3	120
Naloot	84.6	92.3	84.6	46.2	53.8	36.4	37.1	35
<b>Total</b>	<b>87.0</b>	<b>75.4</b>	<b>71.5</b>	<b>49.2</b>	<b>47.8</b>	<b>28.2</b>	<b>41.4</b>	<b>1041</b>

## 4.10 Basic Surgery Services

### 4.10.1 Basic surgery services availability

**Table A 4.10.1 Basic surgery**

Percentage of health facilities offering basic surgery services, by type of facility, according to District, Libya 2012.

Background characteristic	Incision and drainage of abscesses	Wound debridement	Acute burn management	Suturing	Closed treatment of fracture	Laparotomy (uterine rupture, ectopic pregnancy, acute abdomen, intestinal obstruction, perforation, injuries)	Offers basic surgical services	Total number of facilities
<b>Type of facility</b>								
PHC unit	60.5	95.4	15.1	28.9	8.6	0.0	30.2	504
PHC center	71.4	96.7	34.1	53.8	19.8	1.6	41.0	444
Other PHC facilities	87.0	95.7	56.5	82.6	54.3	32.6	49.5	93
<b>District</b>								
Albetnan	100.0	100.0	85.7	100.0	28.6	0.0	26.9	26
Derna	90.9	100.0	81.8	90.9	36.4	0.0	37.9	29
Al-Gebal-Alakhdar	66.7	66.7	50.0	66.7	16.7	0.0	22.2	27
Almarege	85.7	85.7	14.3	71.4	14.3	0.0	14.9	47
Benghazi	39.5	89.5	5.3	15.8	23.7	0.0	79.2	48
Al-Wahat	100.0	100.0	100.0	100.0	0.0	0.0	6.3	16
Ajdabia	57.1	71.4	14.3	57.1	28.6	28.6	36.8	19
Al-Kufra	40.0	100.0	40.0	60.0	0.0	0.0	41.7	12
Sirte	45.0	100.0	25.0	70.0	5.0	0.0	45.5	44
Joufara	60.0	100.0	40.0	100.0	60.0	40.0	7.0	71
Morzig	87.5	100.0	75.0	100.0	50.0	12.5	17.0	47
Sebha	75.0	93.8	31.3	62.5	62.5	25.0	69.6	23
Ghat	NA	NA	NA	NA	NA	NA	0.0	5
Wadi-Alhiat	100.0	100.0	75.0	75.0	0.0	0.0	16.7	24
Wadi-Alshati	91.7	100.0	50.0	75.0	25.0	0.0	28.6	42
Misurata	72.1	97.7	34.9	46.5	9.3	9.3	66.2	65
Al-Merghip	85.7	100.0	28.6	81.0	14.3	0.0	21.0	100
Tripoli	54.5	97.0	33.3	33.3	6.1	0.0	34.7	95
Al-Jufra	66.7	100.0	33.3	66.7	0.0	0.0	23.1	13
Alzawea	100.0	100.0	14.9	36.2	6.4	6.4	82.5	57
Zwara	49.2	94.9	20.3	18.6	32.2	0.0	77.6	76
Al-Gebal-Elgharbi	100.0	100.0	40.0	100.0	60.0	40.0	4.2	120
Naloot	77.3	100.0	22.7	36.4	0.0	0.0	62.9	35
<b>Total</b>	<b>68.9</b>	<b>96.1</b>	<b>29.2</b>	<b>47.4</b>	<b>19.5</b>	<b>4.7</b>	<b>36.5</b>	<b>1041</b>

#### 4.10.2 Basic surgery services readiness

<b>Table A 4.10.2 Basic surgical services</b>		
Among health facilities offering basic surgical services, the percentage with trained staff, guidelines, equipment, and medicines, by type of facility, according to District, Libya 2012.		
Background characteristic	Oxygen	Total number of facilities offering basic surgical services
<b>Type of facility</b>		
PHC unit	30.3	152
PHC center	52.2	182
Other PHC facilities	60.9	46
<b>District</b>		
Albetnan	28.6	7
Derna	36.4	11
Al-Gebal-Alakhdar	33.3	6
Almarege	57.1	7
Benghazi	26.3	38
Al-Wahat	100.0	1
Ajdabia	.0	7
Al-Kufra	40.0	5
Sirte	55.0	20
Joufara	80.0	5
Morzig	50.0	8
Sebha	43.8	16
Ghat	NA	0
Wadi-Alhiat	75.0	4
Wadi-Alshati	25.0	12
Misurata	55.8	43
Al-Merghip	95.2	21
Tripoli	30.3	33
Al-Jufra	100.0	3
Alzawea	48.9	47
Zwara	27.1	59
Al-Gebal-Elgharbi	100.0	5
Naloot	50.0	22
<b>Total</b>	44.5	380

## 4.11 Comprehensive Obstetric Care

### 4.11.1 Comprehensive obstetric care availability

<b>Table A 4.11.1 Comprehensive obstetric care</b>				
Percentage of facilities offering comprehensive obstetric care services, by type of facility, according to District, Libya 2012.				
Background characteristic	Caesarean section	Blood transfusion	Offers comprehensive obstetric care	Total number of facilities
<b>Type of facility</b>				
PHC unit	NA	NA	0.0	504
PHC center	20.0	0.0	3.2	444
Other PHC facilities	76.5	68.4	20.4	93
<b>District</b>				
Albetnan	NA	NA	0.00	26
Derna	0.00	0.00	10.30	29
Al-Gebal-Alakhdar	0.00	0.00	0.00	27
Almarege	0.00	0.00	2.10	47
Benghazi	0.00	0.00	0.00	48
Al-Wahat	0.00	0.00	6.30	16
Ajdabia	100.00	50.00	10.50	19
Al-Kufra	NA	NA	0.00	12
Sirte	NA	NA	0.00	44
Joufara	100.00	100.00	2.80	71
Morzig	0.00	33.30	6.40	47
Sebha	75.00	60.00	21.70	23
Ghat	NA	NA	0.00	5
Wadi-Alhiat	0.00	0.00	16.70	24
Wadi-Alshati	NA	NA	0.00	42
Misurata	100.00	50.00	3.10	65
Al-Merghip	NA	NA	0.00	100
Tripoli	NA	NA	0.00	95
Al-Jufra	0.00	0.00	15.40	13
Alzawea	100.00	75.00	7.00	57
Zwara	NA	NA	0.00	76
Al-Gebal-Elgharbi	66.70	66.70	2.50	120
Naloot	0.00	0.00	2.90	35
<b>Total</b>	<b>63.60</b>	<b>39.40</b>	<b>3.20</b>	<b>1041</b>

**Table A 4.11.2 Comprehensive obstetric care services**

Among facilities offering comprehensive obstetric care services, the percentage with trained staff, guidelines, equipment, diagnostics, and medicines, by type of facility, according to District, Libya 2012.

Background characteristic	At least one trained staff CEmOC	Guidelines available CEmOC	At least one trained staff surgery	At least one trained staff anaesthesia	Blood supply sufficiency (1)	Blood supply safety (2)	Overall readiness	Total number of facilities offering comprehensive obstetric care services
<b>Type of facility</b>								
PHC unit	NA	NA	NA	NA	NA	NA	NA	0
PHC center	100.0	0.0	100.0	100.0	0.0	0.0	0.0	14
Other PHC facilities	30.8	0.0	92.3	92.3	53.8	30.8		19
<b>District</b>								
Albetnan	NA	NA	NA	NA	NA	NA	NA	0
Derna	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
Al-Gebal-Alakhdar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Almarege	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
Benghazi	NA	NA	NA	NA	NA	NA	NA	0
Al-Wahat	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
Ajdabia	100.0	0.0	100.0	100.0	0.0	0.0	0.0	2
Al-Kufra	NA	NA	NA	NA	NA	NA	NA	0
Sirte	NA	NA	NA	NA	NA	NA	NA	0
Joufara	50.0	0.0	100.0	100.0	50.0	0.0	0.0	2
Morzig	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
Sebha	0.0	0.0	100.0	100.0	66.7	66.7	0.0	5
Ghat	NA	NA	NA	NA	NA	NA	NA	0
Wadi-Alhiat	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
Wadi-Alshati	NA	NA	NA	NA	NA	NA	NA	0
Misurata	50.0	.0	100.0	100.0	100.0	0.0	0.0	2
Al-Merghip	NA	NA	NA	NA	NA	NA	NA	0
Tripoli	NA	NA	NA	NA	NA	NA	NA	0
Al-Jufra	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
Alzawea	0.0	0.0	100.0	100.0	66.7	66.7	0.0	4
Zwara	NA	NA	NA	NA	NA	NA	NA	0
Al-Gebal-Elgharbi	50.0	0.0	50.0	50.0	50.0	0.0	0.0	3
Naloot	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
<b>Total</b>	<b>35.7</b>	<b>0.0</b>	<b>92.9</b>	<b>92.9</b>	<b>53.8</b>	<b>30.8</b>	<b>0.0</b>	<b>33</b>

Notes:

(1) Blood supply sufficiency is defined as no interruption of blood availability in last three months

(2) Blood supply safety is defined as blood obtained ONLY from national or Districtal blood bank, OR blood obtained from other sources but screened for HIV, Syphilis, Hepatitis B, and Hepatitis C.

## 4.12 Blood Transfusion Services

### 4.12.1 Blood transfusion services readiness

<b>Table A 4.12.1a Blood transfusion</b>		
Percentage of facilities offering blood transfusion services, by type of facility, according to District, Libya 2012.		
Background characteristic	Blood transfusion	Total number of facilities
<b>Type of facility</b>		
PHC unit	0.0	504
PHC center	0.7	444
Other PHC facilities	19.4	93
<b>District</b>		
Albetnan	0.0	26
Derna	3.4	29
Al-Gebal-Alakhdar	3.7	27
Almarege	2.1	47
Benghazi	0.0	48
Al-Wahat	0.0	16
Ajdabia	5.3	19
Al-Kufra	0.0	12
Sirte	2.3	44
Joufara	2.8	71
Morzig	2.1	47
Sebha	13.0	23
Ghat	0.0	5
Wadi-Alhiat	0.0	24
Wadi-Alshati	2.4	42
Misurata	3.1	65
Al-Merghip	0.0	100
Tripoli	1.1	95
Al-Jufra	0.0	13
Alzawea	7.0	57
Zwara	0.0	76
Al-Gebal-Elgharbi	1.7	120
Naloot	0.0	35
<b>Total</b>	2.0	1041

**Table A 4.12.1b Blood transfusion services**

Among facilities offering blood transfusion services, the percentage with trained staff, guidelines, equipment, diagnostics, and medicines, by type of facility, according to District, Libya 2012.

Background characteristic	At least one trained staff appropriate use of blood and safe blood transfusion	Guidelines available appropriate use of blood and safe blood transfusion	Blood storage refrigerator	Blood supply sufficiency (1)	Blood supply safety (2)	Overall readiness	Total number of facilities offering blood transfusion services
<b>Type of facility</b>							
PHC unit	NA	NA	NA	NA	NA	NA	0
PHC center	33.3	33.3	33.3	0.0	100.0	0.0	3
Other PHC facilities	33.3	16.7	100.0	22.2	66.7	0.0	18
<b>District</b>							
Albetnan	NA	NA	NA	NA	NA	NA	0
Derna	0.0	0.0	0.0	0.0	100.0	0.0	1
Al-Gebal-Alakhdar	0.0	0.0	100.0	0.0	100.0	0.0	1
Almarege	100.0	0.0	100.0	0.0	100.0	0.0	1
Benghazi	NA	NA	NA	NA	NA	NA	0
Al-Wahat	NA	NA	NA	NA	NA	NA	0
Ajdabia	100.0	0.0	100.0	0.0	0.0	0.0	1
Al-Kufra	NA	NA	NA	NA	NA	NA	0
Sirte	0.0	100.0	100.0	0.0	100.0	0.0	1
Joufara	50.0	0.0	100.0	0.0	50.0	0.0	2
Morzig	100.0	0.0	100.0	0.0	0.0	0.0	1
Sebha	33.3	0.0	100.0	66.7	66.7	0.0	3
Ghat	NA	NA	NA	NA	NA	NA	0
Wadi-Alhiat	NA	NA	NA	NA	NA	NA	0
Wadi-Alshati	0.0	0.0	0.0	0.0	100.0	0.0	1
Misurata	50.0	50.0	100.0	0.0	100.0	0.0	2
Al-Merghip	NA	NA	NA	NA	NA	NA	0
Tripoli	0.0	100.0	100.0	0.0	100.0	0.0	1
Al-Jufra	NA	NA	NA	NA	NA	NA	0
Alzawea	25.0	25.0	75.0	50.0	75.0	0.0	4
Zwara	NA	NA	NA	NA	NA	NA	0
Al-Gebal-Elgharbi	0.0	0.0	100.0	0.0	50.0	0.0	2
Naloot	NA	NA	NA	NA	NA	NA	0
<b>Total</b>	33.3	19.0	89.5	19.0	71.4	0.0	21

## Notes:

(4) Blood supply safety is defined as blood obtained ONLY from national or Districtal blood bank, OR blood obtained from other sources but screened for HIV, Syphilis, Hepatitis B, and Hepatitis C.

## 4.13 Service Specific Availability

### 4.13.1 Basic services provided by health facilities

**Table A 4.13.1 Basic services provided by health facilities**

Percentage of health facilities providing specific basic services, according to District, Libya 2012.

Background characteristic	Albetnan	Derna	Al-Gebal-Alakhdar	Almarege	Benghazi	Al-Wahat	Ajdabia	Al-Kufra	Sirte	Joufara	Morzig	Sebha	Ghat	Wadi-Alhiat	Wadi-Alshati	Misurata	Al-Merghip	Tripoli	Al-Jufra	Alzawea	Zwara	Al-Gebal-Elgharbi	Naloot	Total
Antenatal care- post-conflict	3.8	27.6	44.4	25.5	52.1	25.0	26.3	0.0	13.6	7.0	12.8	52.2	40.0	12.5	7.1	50.8	12.0	46.3	15.4	38.6	11.8	5.0	2.9	22.4
PMTCT Services- post-conflict	0.0	0.0	0.0	0.0	0.0	6.3	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	3.5	0.0	0.8	0.0	73.6
Normal delivery and/or newborn care services- post-conflict	0.0	6.9	3.7	4.3	0.0	18.8	10.5	0.0	6.8	2.8	2.1	21.7	0.0	4.2	9.5	6.2	1.0	1.1	7.7	5.3	2.6	2.5	0.0	4.0
Comprehensive emergency obstetric care- post-conflict	0.0	10.3	0.0	2.1	0.0	6.3	10.5	0.0	0.0	2.8	6.4	21.7	0.0	16.7	0.0	3.1	0.0	0.0	15.4	7.0	0.0	2.5	2.9	.6
Child immunization services- post-conflict	53.8	27.6	51.9	40.4	75.0	56.3	63.2	33.3	36.4	26.8	25.5	65.2	100.0	62.5	54.8	41.5	42.0	44.2	53.8	38.6	21.1	30.0	42.9	90.8
Outreach service - post-conflict	0.0	0.0	0.0	2.1	4.2	31.3	10.5	0.0	9.1	1.4	6.4	13.0	0.0	0.0	4.8	3.1	11.0	0.0	0.0	1.8	1.3	0.0	2.9	8.6
Curative care for under 5- post-conflict	38.5	17.2	74.1	21.3	45.8	37.5	36.8	16.7	50.0	5.6	6.4	69.6	0.0	12.5	26.2	56.9	37.0	63.2	7.7	36.8	42.1	4.2	31.4	3.9
Adolescent health & School Health services- post-conflict	11.5	27.6	11.1	10.6	64.6	37.5	36.8	25.0	9.1	28.2	10.6	56.5	100.0	41.7	35.7	20.0	36.0	22.1	46.2	19.3	15.8	6.7	37.1	86.2
Nutrition services - post-conflict	0.0	3.4	3.7	2.1	16.7	0.0	10.5	8.3	0.0	1.4	4.3	30.4	0.0	0.0	14.3	7.7	5.0	1.1	84.6	1.8	23.7	0.8	0.0	9.9
Oral health services - post-conflict	11.5	48.3	22.2	17.0	56.3	37.5	52.6	25.0	20.5	28.2	19.1	69.6	40.0	25.0	9.5	56.9	17.0	48.4	15.4	42.1	22.4	30.8	14.3	3.2
HIV counseling and testing services- post-conflict	3.8	0.0	3.7	8.5	10.4	18.8	15.8	16.7	4.5	2.8	2.1	17.4	0.0	12.5	2.4	4.6	2.0	3.2	15.4	10.5	13.2	1.7	11.4	86.9
HIV & AIDS antiretroviral prescription - post-conflict	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	2.4	0.0	0.0	0.0	0.0	1.8	0.0	0.0	2.9	9.9
Diagnosis or treatment of STIs, excluding HIV- post-conflict	0.0	6.9	0.0	0.0	6.3	6.3	26.3	8.3	4.5	0.0	2.1	13.0	0.0	4.2	4.8	3.1	4.0	1.1	7.7	8.8	0.0	1.7	2.9	41.1
Diagnosis, treatment prescription of TB- post-conflict	3.8	3.4	0.0	2.1	2.1	6.3	5.3	8.3	2.3	0.0	2.1	4.3	0.0	0.0	2.4	3.1	3.0	2.1	0.0	3.5	0.0	0.0	2.9	57.0
Diagnosis or treatment of Leishmaniasis - post-conflict	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.1	0.0	0.0	8.7	0.0	0.0	2.4	4.6	6.0	3.2	0.0	14.0	7.9	0.8	11.4	1.9
Diagnosis or management of non-communicable diseases- post-conflict	23.1	58.6	74.1	44.7	43.8	56.3	15.8	50.0	47.7	9.9	14.9	56.5	100.0	58.3	50.0	70.8	49.0	64.2	23.1	84.2	21.1	3.3	37.1	3.7
Surgical services- post-conflict	26.9	37.9	22.2	14.9	79.2	6.3	36.8	41.7	45.5	7.0	17.0	69.6	0.0	16.7	28.6	66.2	21.0	34.7	23.1	82.5	77.6	4.2	62.9	91.6
Blood transfusion services- post-conflict	0.0	3.4	3.7	2.1	0.0	0.0	5.3	0.0	2.3	2.8	2.1	13.0	0.0	0.0	2.4	3.1	0.0	1.1	0.0	7.0	0.0	1.7	0.0	4.6
Laboratory diagnostics- post-conflict	26.9	34.5	37.0	17.0	45.8	18.8	47.4	33.3	27.3	28.2	23.4	60.9	80.0	45.8	14.3	70.8	29.0	56.8	38.5	45.6	27.6	25.8	28.6	33.1
Pharmaceutical service- post-conflict	69.2	93.1	81.5	72.3	77.1	68.8	84.2	66.7	84.1	45.1	44.7	91.3	100.0	91.7	88.1	89.2	60.0	80.0	61.5	94.7	67.1	41.7	82.9	65.1
<b>Total number of health facilities</b>	26	29	27	47	48	16	19	12	44	71	47	23	5	24	42	65	100	95	13	57	76	120	35	1041

### 4.13.2. Availability of imaging equipment

**Table A 4.13.2 availability of Imaging equipment by District**

Among facilities performing diagnostic x-rays, ultrasound, or computerized tomography, the percentage with the functioning Xray\_machine, Ultrasound\_equipment, CT\_scan, MRI, and Imaging\_mean\_score, by type of facility, according to District, Libya 2012.

Background characteristic	Xray machine	Ultrasound equipment	CT scan	MRI	Imaging mean score	performing diagnostic x-rays, ultrasound, or computerized tomography	Number of facilities
<b>Type of facility</b>							
PHC unit	80.0	100.0	NA	NA	NA	1.2	504
PHC center	68.1	86.8	18.2	10.0	45.8	13.3	444
Other PHC facilities	86.0	85.4	60.0	25.0	64.1	64.5	93
<b>District</b>							
Albetnan	33.3	50.0	0.0	0.0	0.0	11.5	26
Derna	71.4	83.3	0.0	0.0	NA	31.0	29
Al-Gebal-Alakhdar	66.7	100.0	0.0	0.0	0.5	25.9	27
Almarege	100.0	100.0	0.0	0.0	NA	4.3	47
Benghazi	100.0	77.8	0.0	0.0	NA	22.9	48
Al-Wahat	100.0	33.3	0.0	0.0	0.3	25.0	16
Ajdabia	100.0	100.0	0.0	0.0	NA	10.5	19
Al-Kufra	100.0	100.0	0.0	0.0	.	16.7	12
Sirte	75.0	33.3	0.0	0.0	0.0	9.1	44
Joufara	100.0	100.0	100.0	100.0	1.0	5.6	71
Morzig	50.0	100.0	0.0	0.0	NA	10.6	47
Sebha	60.0	85.7	100.0	0.0	NA	34.8	23
Ghat	100.0	0.0	0.0	0.0	NA	20.0	5
Wadi-Alhiat	100.0	100.0	0.0	0.0	0.5	8.3	24
Wadi-Alshati	NA	NA	NA	NA	NA	.0	42
Misurata	91.7	91.7	33.3	0.0	0.5	24.6	65
Al-Merghip	75.0	100.0	0.0	0.0	NA	4.0	100
Tripoli	77.8	100.0	0.0	0.0	NA	10.5	95
Al-Jufra	100.0	0.0	0.0	0.0	NA	7.7	13
Alzawea	87.5	85.7	60.0	50.0	0.5	14.0	57
Zwara	50.0	100.0	0.0	0.0	0.4	9.2	76
Al-Gebal-Elgharbi	77.8	100.0	100.0	0.0	NA	7.5	120
Naloot	40.0	100.0	0.0	0.0	NA	17.1	35
<b>Total</b>	<b>78.0</b>	<b>86.7</b>	<b>38.1</b>	<b>14.3</b>	<b>54.3</b>	<b>12.0</b>	<b>1041</b>

#### 4.14 Sexual Violence Services

<b>Table A 4.14 Sexual violence by District and type of facility</b>				
Percentage of health facilities with Clinical management of rape survivors, Emergency contraception, Post-exposure prophylaxis (PEP) for STI & HIV infectio , according to District, Libya 2012.				
Background characteristic	Clinical management of rape survivors	Emergency contraception	Post-exposure prophylaxis (PEP) for STI & HIV infections	Number of facilities
<b>Type of facility</b>				
PHC unit	0.0	0.0	0.0	504
PHC center	0.0	0.0	0.0	444
Other PHC facilities	0.0	0.0	0.0	93
<b>District</b>				
Albetnan	0.0	0.0	0.0	26
Derna	0.0	0.0	0.0	29
Al-Gebal-Alakhdar	0.0	0.0	0.0	27
Almarege	0.0	0.0	0.0	47
Benghazi	0.0	0.0	0.0	48
Al-Wahat	0.0	0.0	0.0	16.0
Ajdabia	0.0	0.0	0.0	19
Al-Kufra	0.0	0.0	0.0	12
Sirte	0.0	0.0	0.0	44
Joufara	0.0	0.0	0.0	71
Morzig	0.0	0.0	0.0	47
Sebha	0.0	0.0	0.0	23
Ghat	0.0	0.0	0.0	5
Wadi-Alhiat	0.0	0.0	0.0	24
Wadi-Alshati	0.0	0.0	0.0	42
Misurata	0.0	0.0	0.0	65
Al-Merghip	0.0	0.0	0.0	100
Tripoli	0.0	0.0	0.0	95
Al-Jufra	0.0	0.0	0.0	13
Alzawea	0.0	0.0	0.0	57
Zwara	0.0	0.0	0.0	76
Al-Gebal-Elgharbi	0.0	0.0	0.0	120
Naloot	0.0	0.0	0.0	35
<b>Total</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1041</b>

## 4.15 School Health Services

**Table A 4.15 School health by District and type of facility**

Among facilities providing school health services, percentage of facilities with trained doctor, trained medical staff, providing school health services throughout the week, providing health promotion services for oral health, and conducting regular screening to school students by type of facility, according to District, Libya 2012.

Background characteristic	Is there a specialist doctor (s) to provide school health service	Is there trained medical staff helping to provide school health service	Overall readiness	Does this facility provide school health services throughout the week	Does this facility provide periodic visits to the schools to provide health education services	Does this facility provide health promotion services for oral health	Does this facility conduct regular screening to school students	Number of facilities
<b>Type of facility</b>								
PHC unit	10.9	58.0	10.1	24.4	19.3	13.4	28.6	119.0
PHC center	17.4	78.5	16.6	34.8	36.8	32.0	51.0	247.0
Other PHC facilities	21.7	78.3	21.7	39.1	52.2	43.5	56.5	23.0
<b>District</b>								
Albetnan	18.2	63.6	18.2	18.2	36.4	9.1	27.3	11.0
Derna	81.8	90.9	81.8	90.9	90.9	72.7	81.8	11.0
Al-Gebal-Alakhdar	0.0	100.0	0.0	100.0	100.0	0.0	100.0	2.0
Almarege	6.7	100.0	6.7	13.3	26.7	20.0	46.7	15.0
Benghazi	8.3	86.1	8.3	58.3	36.1	44.4	58.3	36.0
Al-Wahat	55.6	88.9	55.6	33.3	77.8	33.3	100.0	9.0
Ajdabia	50.0	100.0	50.0	0.0	8.3	16.7	8.3	12.0
Al-Kufra	0.0	50.0	0.0	25.0	50.0	25.0	100.0	4.0
Sirte	35.7	92.9	35.7	35.7	50.0	28.6	78.6	14.0
Joufara	16.7	60.0	16.7	10.0	40.0	16.7	36.7	30.0
Morzig	0.0	56.1	0.0	7.3	7.3	4.9	7.3	41.0
Sebha	21.4	71.4	21.4	71.4	42.9	35.7	57.1	14.0
Ghat	0.0	100.0	0.0	60.0	60.0	40.0	100.0	5.0
Wadi-Alhiat	0.0	77.8	0.0	22.2	27.8	11.1	33.3	18.0
Wadi-Alshati	4.2	79.2	4.2	33.3	29.2	20.8	16.7	24.0
Misurata	6.7	73.3	6.7	26.7	26.7	26.7	26.7	15.0
Al-Merghip	17.9	59.0	10.3	23.1	17.9	28.2	38.5	39.0
Tripoli	17.9	75.0	17.9	67.9	17.9	71.4	50.0	28.0
Al-Jufra	50.0	66.7	50.0	66.7	66.7	33.3	50.0	6.0
Alzawea	0.0	50.0	0.0	12.5	25.0	25.0	37.5	8.0
Zwara	8.3	54.2	8.3	33.3	25.0	8.3	45.8	24.0
Al-Gebal-Elgharbi	20.0	70.0	20.0	0.0	80.0	40.0	70.0	10.0
Naloot	7.7	69.2	7.7	15.4	30.8	7.7	92.3	13.0
<b>Total</b>	15.7	72.2	14.9	31.9	32.4	27.0	44.5	389.0

## 4.16 Oral Health Services

**Table A 4.16 Oral health by District and type of facility**

Among facilities offering oral health service, the percentage of health facilities with Screening of children for dental caries, Oral health promotion activities for increasing public awareness, Medical services for dental diseases, Surgical services for dental problems, National guidelines for the diagnosis and management of oral health problems available, oral health services training, by facility type according to District, Libya 2012.

Background characteristic	National guidelines for the diagnosis and management of oral health problems available	oral health services training	Overall readiness	Screening of children for dental caries	Oral health promotion activities for increasing public awareness	Medical services for dental diseases	Surgical services for dental problems	Offers oral health	Number of facilities
<b>Type of facility</b>									
PHC unit	7.6	12.1	4.5	92.4	48.5	80.3	33.3	13.1	504
PHC center	9.5	7.1	3.8	87.1	51.9	82.4	37.1	47.3	444
Other PHC facilities	5.8	9.6	1.9	92.3	73.1	86.5	63.5	55.9	93
<b>District</b>									
Albetnan	0.0	0.0	0.0	100.0	0.0	100.0	0.0	11.5	26
Derna	7.1	42.9	7.1	85.7	85.7	85.7	85.7	48.3	29
Al-Gebal-Alakhdar	0.0	0.0	0.0	66.7	16.7	83.3	66.7	22.2	27
Almarege	0.0	0.0	0.0	75.0	62.5	100.0	50.0	17.0	47
Benghazi	7.4	0.0	0.0	88.9	74.1	96.3	14.8	56.3	48
Al-Wahat	33.3	0.0	0.0	100.0	83.3	100.0	83.3	37.5	16
Ajdabia	0.0	20.0	0.0	90.0	90.0	90.0	80.0	52.6	19
Al-Kufra	0.0	0.0	0.0	100.0	66.7	33.3	33.3	25.0	12
Sirte	0.0	22.2	0.0	88.9	88.9	77.8	44.4	20.5	44
Joufara	10.0	0.0	0.0	90.0	65.0	80.0	65.0	28.2	71
Morzig	33.3	22.2	22.2	100.0	100.0	100.0	22.2	19.1	47
Sebha	12.5	25.0	12.5	93.8	81.3	87.5	56.3	69.6	23
Ghat	0.0	0.0	0.0	100.0	0.0	100.0	50.0	40.0	5
Wadi-Alhiat	0.0	0.0	0.0	100.0	16.7	83.3	33.3	25.0	24
Wadi-Alshati	50.0	25.0	25.0	75.0	25.0	100.0	25.0	9.5	42
Misurata	10.8	16.2	8.1	97.3	54.1	73.0	54.1	56.9	65
Al-Merghip	0.0	0.0	0.0	94.1	35.3	82.4	17.6	17.0	100
Tripoli	2.2	4.3	2.2	69.6	41.3	56.5	23.9	48.4	95
Al-Jufra	0.0	0.0	0.0	100.0	50.0	50.0	50.0	15.4	13
Alzawea	12.5	4.2	0.0	100.0	66.7	91.7	37.5	42.1	57
Zwara	23.5	5.9	5.9	94.1	70.6	94.1	23.5	22.4	76
Al-Gebal-Elgharbi	5.4	2.7	2.7	91.9	8.1	91.9	37.8	30.8	120
Naloot	0.0	0.0	0.0	80.0	60.0	80.0	20.0	14.3	35
<b>Total</b>	<b>8.5</b>	<b>8.5</b>	<b>3.7</b>	<b>89.0</b>	<b>54.6</b>	<b>82.6</b>	<b>40.5</b>	<b>31.5</b>	<b>1041</b>

## 4.17 Nutrition Services

**Table A 4.17 Nutrition by District and type of facility**

Among facilities offering nutrition service, the percentage of health facilities with Screening of under nutrition/malnutrition (growth monitoring or MUAC or W/H, H/A), Screening of malnutrition (MUAC) for pregnant & lactating women, OTP (Outpatient Therapeutic Feeding Programme), Advise/counsel on nutrition & breastfeeding, by facility type according to District, Libya 2012.

Background characteristic	Screening of under nutrition/malnutrition (growth monitoring or MUAC or W/H, H/A)	Screening of malnutrition (MUAC) for pregnant & lactating women	OTP (Outpatient Therapeutic Feeding Programme)	Advise/counsel on nutrition & breastfeeding	Offers Nutrition service	Number of facilities
<b>Type of facility</b>						
PHC unit	69.6	60.9	78.3	47.8	4.6	504.0
PHC center	63.6	45.5	57.6	48.5	7.4	444.0
Other PHC facilities	75.0	75.0	81.3	81.3	17.2	93.0
<b>District</b>						
Albetnan	NA	NA	NA	NA	0.0	26.0
Derna	0.0	0.0	0.0	0.0	3.4	29.0
Al-Gebal-Alakhdar	100.0	100.0	100.0	100.0	3.7	27.0
Almarege	0.0	0.0	0.0	0.0	2.1	47.0
Benghazi	50.0	37.5	87.5	100.0	16.7	48.0
Al-Wahat	0.0	0.0	0.0	0.0	0.0	16.0
Ajdabia	100.0	100.0	100.0	100.0	10.5	19.0
Al-Kufra	0.0	0.0	100.0	100.0	8.3	12.0
Sirte	NA	NA	NA	NA	0.0	44.0
Joufara	100.0	0.0	100.0	0.0	1.4	71.0
Morzig	100.0	50.0	50.0	50.0	4.3	47.0
Sebha	57.1	57.1	57.1	28.6	30.4	23.0
Ghat	NA	NA	NA	NA	0.0	5.0
Wadi-Alhiat	NA	NA	NA	NA	0.0	24.0
Wadi-Alshati	16.7	0.0	83.3	50.0	14.3	42.0
Misurata	80.0	60.0	40.0	60.0	7.7	65.0
Al-Merghip	60.0	40.0	60.0	60.0	5.0	100.0
Tripoli	0.0	0.0	100.0	100.0	1.1	95.0
Al-Jufra	90.9	90.9	90.9	9.1	84.6	13.0
Alzawea	100.0	100.0	100.0	100.0	1.8	57.0
Zwara	88.9	77.8	61.1	72.2	23.7	76.0
Al-Gebal-Elgharbi	0.0	0.0	0.0	0.0	0.8	120.0
Naloot	NA	NA	NA	NA	0.0	35.0
<b>Total</b>	68.1	56.9	69.4	55.6	6.9	1041.0

## 4.18 Mental Health Care

**Table A 4.18 Mental health care by District**

Among facilities offering Diagnosis or management of non-communicable diseases, such as diabetes, cardiovascular disease, or chronic respiratory disease service, the percentage of health facilities providing MHPSS services, providing/supporting of acute distress, anxiety, mood and stress related disorders and first line management of severe and common mental disorders, trained on provision of MHPSS and management of common Mental, (MNS) disorders, and Guidelines of diagnosis and management MNS disorders, by facility type according to District, Libya 2012.

Background characteristic	Trained on provision of MHPSS and management of common Mental, (MNS) disorders	Guidelines of diagnosis and management MNS disorders	Overall readiness	providing MHPSS services	provide: support of acute distress, anxiety, mood and stress related disorders and first line management of severe and common mental disorders	Number of facilities
<b>Type of facility</b>						
PHC unit	0.0	0.0	0.0	0.0	0.0	137.0
PHC center	0.0	0.8	0.0	2.9	3.3	239.0
Other PHC facilities	0.0	0.0	0.0	9.1	12.7	55.0
<b>District</b>						
Albetnan	0.0	0.0	0.0	16.7	33.3	6.0
Derna	0.0	0.0	0.0	0.0	0.0	17.0
Al-Gebal-Alakhdar	0.0	0.0	0.0	0.0	0.0	20.0
Almarege	0.0	0.0	0.0	0.0	0.0	21.0
Benghazi	0.0	9.5	0.0	0.0	4.8	21.0
Al-Wahat	0.0	0.0	0.0	0.0	0.0	9.0
Ajdabia	0.0	0.0	0.0	33.3	33.3	3.0
Al-Kufra	0.0	0.0	0.0	0.0	0.0	6.0
Sirte	0.0	0.0	0.0	4.8	4.8	21.0
Joufara	0.0	0.0	0.0	0.0	0.0	7.0
Morzig	0.0	0.0	0.0	0.0	0.0	7.0
Sebha	0.0	0.0	0.0	7.7	7.7	13.0
Ghat	0.0	0.0	0.0	0.0	0.0	5.0
Wadi-Alhiat	0.0	0.0	0.0	7.1	14.3	14.0
Wadi-Alshati	0.0	0.0	0.0	0.0	4.8	21.0
Misurata	0.0	0.0	0.0	2.2	2.2	46.0
Al-Merghip	0.0	0.0	0.0	4.1	4.1	49.0
Tripoli	0.0	0.0	0.0	1.6	1.6	61.0
Al-Jufra	0.0	0.0	0.0	0.0	0.0	3.0
Alzawea	0.0	0.0	0.0	4.2	4.2	48.0
Zwara	0.0	0.0	0.0	0.0	0.0	16.0
Al-Gebal-Elgharbi	0.0	0.0	0.0	0.0	0.0	4.0
Naloot	0.0	0.0	0.0	7.7	0.0	13.0
<b>Total</b>	0.0	0.5	0.0	2.8	3.5	431.0

## 4.19 Cancer Diagnosis and Management Services

**Table A 4.19 Cancer diagnosis and management by District**

Among facilities offering Diagnosis or management of non-communicable diseases, such as diabetes, cardiovascular disease, or chronic respiratory disease service, the percentage of health facilities providing Diagnostics and/or management cancer patients, and with Guidelines diagnosis and management of cancer , by facility type according to District, Libya 2012.

Background characteristic	Guidelines diagnosis and management of cancer	Diagnostics and/or management cancer patients	Number of facilities
<b>Type of facility</b>			
PHC unit	0.0	5.1	137.0
PHC center	8.3	5.0	239.0
Other PHC facilities	10.0	18.2	55.0
<b>District</b>			
Albetnan	0.0	16.7	6.0
Derna	NA	0.0	17.0
Al-Gebal-Alakhdar	0.0	5.0	20.0
Almarege	0.0	9.5	21.0
Benghazi	0.0	9.5	21.0
Al-Wahat	NA	0.0	9.0
Ajdabia	0.0	33.3	3.0
Al-Kufra	NA	0.0	6.0
Sirte	0.0	4.8	21.0
Joufara	0.0	14.3	7.0
Morzig	NA	0.0	7.0
Sebha	0.0	15.4	13.0
Ghat	NA	0.0	5.0
Wadi-Alhiat	0.0	7.1	14.0
Wadi-Alshati	50.0	9.5	21.0
Misurata	25.0	8.7	46.0
Al-Merghip	0.0	6.1	49.0
Tripoli	0.0	4.9	61.0
Al-Jufra	NA	0.0	3.0
Alzawea	0.0	8.3	48.0
Zwara	NA	0.0	16.0
Al-Gebal-Elgharbi	NA	0.0	4.0
Naloot	0.0	7.7	13.0
<b>Total</b>	<b>6.9</b>	<b>6.7</b>	<b>431.0</b>



## **Annex Questionnaire**



# Hospitals Assessment in Post Conflict Situation

**Libya**

**April 2012**

**Ministry of Health**

**Information & Documentation Center**

**In collaboration with**

**Division of Health Systems & Services**

**Eastern Mediterranean Regional Office**

**World Health Organization**





## TABLE OF CONTENTS

		Page
<b>0000</b>	<b>General Information .....</b>	<b>3</b>
0100	Facility Identification .....	3
0200	Interviewer visits .....	4
0300	Geographic coordinates .....	4
0400	Respondent consent .....	5
<b>1000</b>	<b>Service Availability .....</b>	<b>6</b>
1100	Services Available .....	6
1200	Staffing .....	7
1300	Service Utilization .....	9
<b>2000</b>	<b>Service Readiness .....</b>	<b>10</b>
2100	Infrastructure .....	10
	Available Service .....	12
2200	General Outpatient Service Area.....	12
2300	Maternal & Newborn Health.....	13
2400	Child & Adolescent Health and School Health.....	16
2500	Nutrition .....	18
2550	Oral Health.....	18
2600	Communicable Diseases.....	19
2700	Non-communicable Diseases.....	20
2800	Surgery.....	21
2900	Imaging.....	22
2920	Laboratory diagnostics.....	22
2950	Laboratories' Equipment.....	23
3000	Essential Equipment and Supplies .....	23
3100	Essential Medicines.....	24
<b>3200</b>	<b>Respondent's Observations.....</b>	<b>25</b>
<b>3300</b>	<b>Interviewer's Observations.....</b>	<b>26</b>





<b>0400 RESPONDENT CONSENT</b>											
<p><b>FIND THE MANAGER, THE PERSON IN-CHARGE OF THE FACILITY, OR MOST SENIOR HEALTH WORKER RESPONSIBLE FOR OUTPATIENT SERVICES WHO IS PRESENT AT THE FACILITY. READ THE FOLLOWING GREETING:</b></p> <p>Good day! My name is _____. We are here on behalf of the Ministry of Health of Libya, conducting an assessment of health facilities to assist in knowing more about health services availability and readiness after the conflict.</p> <p>Neither your name nor that of any other health worker respondents participating in this study will be included in the dataset or in any report; however, there is a small chance that any of these respondents may be identified later. Still, we are asking for your help to ensure that the information we collect is accurate.</p> <p>If there are questions for which someone else is the most appropriate person to provide the information, we would appreciate if you introduce us to that person to help us collect that information.</p>											
<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px; text-align: center;">1</td> <td style="width: 20px; height: 20px; text-align: center;">2</td> </tr> </table>						1	2				
				1	2						
<p>_____</p> <p><b>INTERVIEWER'S SIGNATURE INDICATING CONSENT OBTAINED</b> <span style="float: right;"><b>DAY MONTH YEAR</b></span></p>											
<b>0401</b>	<b>INTERVIEW START TIME</b> (use the 24 hour-clock system; HH:MM) <table border="1" style="display: inline-table; border-collapse: collapse; margin-left: 10px;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 10px; text-align: center;">:</td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>			:							
		:									
<b>0402</b>	Name of the respondent .....										
<b>0403</b>	Position .....										
<b>0404</b>	Number of years serving in this facility ..... <table border="1" style="display: inline-table; border-collapse: collapse; margin-left: 10px;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>										
<b>0405</b>	Nationality .....										
<b>0406</b>	Phone number ..... <table border="1" style="display: inline-table; border-collapse: collapse; margin-left: 10px;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>										
<b>0407</b>	Other contact (i.e., e-mail, Fax,... etc) .....										
<b>0408</b>	Health facility status <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">Fully Functioning .....</td> <td style="width: 20%; text-align: center;">1</td> </tr> <tr> <td>Partially Functioning .....</td> <td style="text-align: center;">2</td> </tr> <tr> <td><b>If 3 or 4 selected, then don't conduct the assessment</b></td> <td></td> </tr> <tr> <td>Not-functioning .....</td> <td style="text-align: center;">3</td> </tr> <tr> <td>Under Rehabilitation .....</td> <td style="text-align: center;">4</td> </tr> </table>	Fully Functioning .....	1	Partially Functioning .....	2	<b>If 3 or 4 selected, then don't conduct the assessment</b>		Not-functioning .....	3	Under Rehabilitation .....	4
Fully Functioning .....	1										
Partially Functioning .....	2										
<b>If 3 or 4 selected, then don't conduct the assessment</b>											
Not-functioning .....	3										
Under Rehabilitation .....	4										
<b>0409</b>	Managing Authority (Ownership) <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">Government/Public .....</td> <td style="width: 20%; text-align: center;">1</td> </tr> <tr> <td>Private-for-Profit .....</td> <td style="text-align: center;">2</td> </tr> <tr> <td>OTHER (SPECIFY) .....</td> <td style="text-align: center;">96</td> </tr> </table>	Government/Public .....	1	Private-for-Profit .....	2	OTHER (SPECIFY) .....	96				
Government/Public .....	1										
Private-for-Profit .....	2										
OTHER (SPECIFY) .....	96										

<b>1000 MODULE 1: SERVICE AVAILABILITY</b>							
<b>1100 SECTION 1.1: SERVICES AVAILABLE</b>							
	I would like to begin by asking about the services that are offered and available in this facility. Does this facility offer any of the following client services? In other words, is there any location in this facility where clients can receive any of the following services?	Post-conflict			Pre-conflict: Were the following services available before the conflict?		
		YES	NO	NA	YES	NO	NA
<b>1101</b>	Antenatal care (ANC) services	1	2	3	1	2	3
<b>1102</b>	Prevention of mother-to-child transmission of HIV (PMTCT) Services	1	2	3	1	2	3
<b>1103</b>	Normal delivery, basic emergency obstetric care, and/or newborn care services	1	2	3	1	2	3
<b>1104</b>	Comprehensive emergency obstetric care	1	2	3	1	2	3
<b>1105</b>	Child immunization services, either at the facility or as outreach	1	2	3	1	2	3
<b>1106</b>	Outreach service is available in the catchment area of this Health Facility (i.e.; TB, vaccination, ANC ....)	1	2	3	1	2	3
<b>1107</b>	Curative care services for children under 5	1	2	3	1	2	3
<b>1108</b>	Adolescent health services and School Health	1	2	3	1	2	3
<b>1109</b>	Nutrition services	1	2	3	1	2	3
<b>1110</b>	Oral health services	1	2	3	1	2	3
<b>1111</b>	HIV counseling and testing services	1	2	3	1	2	3
<b>1112</b>	HIV & AIDS antiretroviral prescription or antiretroviral treatment follow-up services	1	2	3	1	2	3
<b>1113</b>	Diagnosis or treatment of STIs, excluding HIV	1	2	3	1	2	3
<b>1114</b>	Diagnosis, treatment prescription, or treatment follow-up of tuberculosis	1	2	3	1	2	3
<b>1115</b>	Diagnosis or treatment of Leishmaniasis	1	2	3	1	2	3
<b>1116</b>	Diagnosis or management of non-communicable diseases, such as diabetes, cardiovascular disease, or chronic respiratory disease	1	2	3	1	2	3
<b>1117</b>	Surgical services	1	2	3	1	2	3
<b>1118</b>	Blood transfusion services	1	2	3	1	2	3
<b>1119</b>	Laboratory diagnostics, including any rapid diagnostic testing	1	2	3	1	2	3
<b>1120</b>	Pharmaceutical care /service	1	2	3	1	2	3

1200	SECTION 1.2: STAFFING	Post-conflict				Pre-conflict: Number of staff before the conflict?			
	Please tell me how many staff with each of the following qualifications, are full-time in this facility. Please count each staff member only once, on the basis of the highest technical or professional qualification.	National		Non-national		National		Non-national	
		M	F	M	F	M	F	M	F
1201	Generalist (non-specialist) medical doctors								
1202	Internal Medicine Specialist (Internist)								
1203	Obstetric and gynecological specialists								
1204	Pediatric specialists								
1205	Ophthalmologist								
1206	ENT Specialist								
1207	Psychiatric specialist								
1208	Surgeons								
1209	Dentists								
1210	Specialist medical doctors (Other Specialties)								
1211	Qualified Nurse								
1212	Qualified Midwife								
1213	Assistant Nurse								
1214	Nutritionist								
1215	Dental Technician								
1216	Psychology								
1217	Sociology								
1218	Public Health (Bachelor of Public Health, Diploma, Intermediate Diploma)								
1219	X-Ray technician								
1220	Pharmacists								
1221	Pharmaceutical technicians/Assistant								
1222	Laboratory specialists								
1223	Laboratory technicians								
	Please tell me how many staff with each of the following qualifications, are full-time in this facility. Please count each staff member only once, on the basis of the highest technical or professional qualification.	Post-conflict				Pre-conflict: Number of staff before the conflict?			
1224	Administration/ management staff								
1225	Medics/ Ambulance Workers								
1226	Health workers not classified elsewhere								
1227	Other non-technical workers (i.e., cleaners, drivers, etc)								
1228	<b>Ask the facility manager about the total number of staff mentioned above (Make sure that mentioned number matches the total)</b>								

1300	SECTION 1.3: SERVICE UTILIZATION	POST-CONFLICT		PRE-CONFLICT Were the following services available before the conflict?		Skip
		Yes	No	Yes	No	
1301	Does this facility routinely provide inpatient care?	1	2	1	2	If No →1303
1302	Does this facility have beds for overnight observation?	1	2	1	2	If No →1306
<b>Please provide the number</b>						
1303	Excluding any delivery beds, how many inpatient beds in total does this facility have, both for adults and children?	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>		
1304	Of the inpatient beds in this facility, how many are dedicated maternity beds? <b>THIS DOES NOT INCLUDE DELIVERY BEDS</b>	<input type="text"/> <input type="text"/>		<input type="text"/> <input type="text"/>		
1305	How many discharges were made in the last completed calendar month [MONTH] for both adults and children?	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>		
1306	How many outpatient client visits were made to this facility in the last completed calendar month [MONTH] for both adults and children?	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>		

1307	<b>TIME END</b>	<b>HH:MM</b> <input type="text"/> <input type="text"/> : <input type="text"/> <input type="text"/>
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<b>2000</b>	<b>MODULE 2: SERVICE READINESS</b>			
	<b>SECTION 2.1: INFRASTRUCTURE</b>			
<b>This section will focus on questions related to infrastructure.</b>				
<b>2100</b>	<b>PHYSICAL CONDITION</b>	<b>POST-CONFLICT</b>	<b>PRE-CONFLICT: Were the following services available before the conflict?</b>	<b>SKIP</b>
<b>2101</b>	Building Type	Permanent .....1 Temporary .....2	Permanent .....1 Temporary .....2	
<b>2102</b>	Building condition	Acceptable .....1 Needs partial maintenance .....2 Needs complete maintenance.....3		
<b>2103</b>	Number of rooms for services (health and admin)	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>	
<b>2104</b>	source of water	Tap water/ national piped water.....1 Storage tank.....2 Tanker Truck.....3 Protected dug well.....4 Others: specify.....9 -----	Tap water/ national piped water.....1 Storage tank.....2 Tanker Truck.....3 Protected dug well.....4 Others: specify.....9 -----	
<b>2105</b>	Is this facility connected to the central supply electricity grid?	Yes .....1 No .....2 Don't Know .....8	Yes .....1 No .....2 Don't Know .....8	If No → <b>2107</b> If Don't Know → <b>2107</b>
<b>2106</b>	During the past 7 days, was electricity (excluding any back-up generator) available at all times when the facility was open for services or interrupted for less than two hours at a time?	Yes .....1 No .....2 Don't Know .....8	Yes .....1 No .....2 Don't Know .....8	
<b>2107</b>	Does this facility have any of the following other sources of electricity?	Fuel operated generator .....1 Battery operated generator.....2 Solar system .....3 Others: (specify).....9 -----	Fuel operated generator .....1 Battery operated generator.....2 Solar system .....3 Others: (specify).....9 -----	
<b>2108</b>	Total number of available toilets	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	
<b>2109</b>	How many toilets are available for patients use?	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	
	<b>INFECTION CONTROL</b>	<b>POST-CONFLICT</b>	<b>PRE-CONFLICT: Were the following services available before the conflict?</b>	
<b>2121</b>	What is the main type of needle and syringes for general health services (apart from immunization) used in this facility?	Disposable .....1 Re-usable .....2 Auto-disable .....3 Other, specify .....4	Disposable .....1 Re-usable .....2 Auto-disable .....3 Other, specify .....4	
	For the care of patients requiring specific isolation precautions, is there:	<b>Yes</b>	<b>No</b>	<b>Yes</b>
<b>2122</b>	Designated area (e.g. single room or ward)	1	2	1
<b>2123</b>	Defined procedures	1	2	1
<b>2124</b>	Adequate number of staff	1	2	1
<b>2125</b>	Appropriate equipment	1	2	1

INFORMATION TECHNOLOGY & COMMUNICATIONS (ITC)		POST-CONFLICT			PRE-CONFLICT: Were the following services available before the conflict?		
		Yes	No	NA	Yes	No	NA
2141	Does this facility have a <u>functioning land line telephone</u> that is available to call outside at all times client services are offered? <b>CLARIFY THAT IF FACILITY OFFERS 24-HOUR EMERGENCY SERVICES, THEN THIS REFERS TO 24-HOUR AVAILABILITY.</b>	1	2	3	1	2	3
2142	Does this facility have a <u>functioning cellular telephone or a private cellular phone</u> that is supported by the facility?	1	2	3	1	2	3
2143	Does this facility have a <u>functioning short-wave radio</u> for radio calls?	1	2	3	1	2	3
2144	Does this facility have a <u>functioning computer</u> ?	1	2	3	1	2	3
2145	Is there access to <u>email or internet</u> within the facility?	1	2	3	1	2	3
<b>HEALTH INFORMATION SYSTEM</b>		<b>Yes</b>	<b>No</b>	<b>NA</b>	<b>Yes</b>	<b>No</b>	<b>NA</b>
2161	Is there any trained staff on the health information system, at this facility?	1	2	3	1	2	3
2162	Does this facility have a Patient registry system?	1	2	3	1	2	3
2163	Does the facility maintain files for families or individuals who visit it?	1	2	3	1	2	3
2164	Does this facility issue a Death Report?	1	2	3	1	2	3
2165	Does this facility report periodically (monthly or every 3 months)?	1	2	3	1	2	3
2166	Does this facility have an <i>ICD coder</i> ?	1	2	3	1	2	3
<b>AMBULANCE/TRANSPORT FOR EMERGENCIES</b>		<b>Yes</b>	<b>No</b>	<b>NA</b>	<b>Yes</b>	<b>No</b>	<b>NA</b>
2181	Does this facility have a <u>functional ambulance</u> or other vehicle for emergency transportation for clients that is stationed at this facility or operates from this facility?	1	2	3	1	2	3
2182	Does this facility have access to an ambulance or other vehicle for emergency transport for clients that is stationed at another facility or that operates from another facility?	1	2	3	1	2	3
2183	<b>END TIME</b>	<b>HH:MM</b> <input type="text"/> <input type="text"/> : <input type="text"/> <input type="text"/>					

<b>SECTION 2.2: AVAILABLE SERVICES</b>				
<b>This section will focus on questions related to available services in the POST-CONFLICT Context</b>				
<b>2200</b>	<b>A. GENERAL OUTPATIENT SERVICE AREA</b>			
	<b>ASK TO BE SHOWN THE GENERAL OUTPATIENT SERVICE AREA WHERE MOST CLIENT SERVICES ARE PROVIDED. EXPLAIN TO YOUR RESPONDENT THAT YOU WILL BE ASKING SOME GENERAL QUESTIONS ABOUT SERVICES, FOLLOWED BY SEVERAL QUESTIONS SPECIFIC TO THOSE CLIENT SERVICES AVAILABLE IN THE FACILITY.</b>			
	<b>INFECTION CONTROL PRECAUTIONS</b>			
	I am interested in knowing if the following resources/supplies used for infection control are available in the general outpatient area of this facility. For each resource or supply, please tell me if it is available today or not available today. <b>ASK TO SEE THE ITEMS.</b>	<b>Observed</b>	<b>Reported not Seen</b>	<b>Not Available</b>
<b>2201</b>	Disposable latex gloves	1	2	3
<b>2202</b>	Waste receptacle (pedal bin) with lid and plastic bin liner	1	2	3
<b>2203</b>	Gowns	1	2	3
<b>2204</b>	Medical (surgical or procedural) masks	1	2	3
<b>2205</b>	Guidelines on standard precautions	1	2	3
<b>2206</b>	Safety Box	1	2	3
<b>2207</b>	Guidelines on isolation/additional transmission-based precautions	1	2	3
		<b>December 2010</b>	<b>December 2011</b>	
<b>2207</b>	Number of outpatient visits	<input type="text"/>	<input type="text"/>	
<b>2208</b>	Number of males visitors	<input type="text"/>	<input type="text"/>	
<b>2209</b>	Number of females visitors	<input type="text"/>	<input type="text"/>	
<b>2210</b>	Number of children less than 5 (less than 14 years old)	<input type="text"/>	<input type="text"/>	
<b>2300</b>	<b>MATERNAL AND NEWBORN HEALTH-</b>			
<b>ANTENATAL CARE SERVICES</b>				
	<b>CHECK Q-1101:</b> <b>ANTENATAL CARE SERVICES OFFERED</b>		<b>ANTENATAL CARE SERVICES NOT OFFERED</b>	 <b>Q-2321</b>
<b>Ask to be shown the location in the facility where Antenatal care services are provided. Find the person most knowledgeable about the Antenatal care services in the facility. Introduce yourself, explain the purpose of the ASSESSMENT and ask the following questions:</b>				
<b>Name of respondent</b>	.....	<b>Title</b>	.....	<b>Code</b>
	Do ANC providers provide any of the following services to pregnant women as part of routine ANC services?	<b>YES</b>	<b>NO</b>	
<b>2301</b>	Iron supplementation	1	2	
<b>2302</b>	Folic acid supplementation	1	2	
<b>2303</b>	Tetanus toxoid vaccination	1	2	
<b>2304</b>	Monitoring for hypertensive disorder of pregnancy	1	2	
<b>2305</b>	Have you or any provider(s) of ANC services received any ANC training in the last two years?	1	2	
<b>2306</b>	Comprehensive abortion care: safe induced abortion for all legal indications, uterine evacuation using MVA or medical methods, antibiotic prophylaxis, treatment of abortion complications, counseling for abortion and post-abortion contraception	1	2	
<b>2307</b>	Health Education services to increase awareness about ANC	1	2	
<b>2308</b>	Is there any national ANC guideline available in this facility today? IF YES, ASK TO SEE THE GUIDELINES.	<b>Yes, observed</b>	<b>Yes, reported not seen</b>	<b>No</b>
		1	2	3

<b>OBSTETRIC AND NEWBORN CARE SERVICES</b>			
<b>2321</b>	<b>CHECK Q-1103:</b> DELIVERY/NEWBORN CARE SERVICES OFFERED 	DELIVERY/NEWBORN CARE SERVICES NOT OFFERED <b>Q-2361</b> 	
<b>2322</b>	Does this facility provide any facility-based normal delivery services?	<b>YES</b>	<b>NO</b>
		1	2
	Please tell me if any of the following interventions are carried out by providers of delivery services as part of their work in this facility.	<b>YES</b>	<b>NO</b>
<b>2323</b>	Parenteral administration of antibiotics (IV or IM)	1	2
<b>2324</b>	Parenteral administration of oxytocin (IV or IM)	1	2
<b>2325</b>	Parenteral administration of anticonvulsant for hypertensive disorders of pregnancy (IV or IM)	1	2
<b>2326</b>	Assisted vaginal delivery	1	2
<b>2327</b>	Manual removal of placenta	1	2
<b>2328</b>	Removal of retained products after delivery	1	2
<b>2329</b>	Neonatal resuscitation	1	2
<b>2330</b>	Cesarean section	1	2
<b>2331</b>	Blood transfusion	1	2
<b>2332</b>	Is there any national guideline for Integrated Management of Pregnancy and Childbirth (IMPAC) available in this facility today?	1	2
<b>2333</b>	Have you or any provider(s) of delivery service received any training MCH in the last two years?	1	2
<b>2334</b>	Family Planning Services	1	2

		<b>December 2010</b>	<b>December 2011</b>
<b>2335</b>	Total number of Antenatal Visits in the last month [MONTH]	<input type="text"/>	<input type="text"/>
<b>2336</b>	Total number of Postnatal Visits in the last month [MONTH]	<input type="text"/>	<input type="text"/>
<b>2337</b>	Total number of births	<input type="text"/>	<input type="text"/>

<b>CESAREAN SECTION</b>			
<b>2341</b>	<b>CHECK Q-2331</b> CESAREAN SECTION OFFERED 	CESAREAN SECTION NOT OFFERED <b>Q-2361</b> 	
<b>2342</b>	Is there any national guidelines for Comprehensive Emergency Obstetric Care (CEmOC) available in this facility? <b>IF YES, ASK TO SEE THE GUIDELINES.</b>	<b>Yes, observed</b>	<b>Yes, reported not seen</b> <b>No</b>
		1	2      3
		<b>YES</b>	<b>NO</b>
<b>2343</b>	Have you or any provider(s) of delivery service received any training in Comprehensive Emergency Obstetric Care (CEmOC) in the last two years?	1	2
<b>2344</b>	Does this facility have a health worker who can perform cesarean section present in the facility or on call 24 hours a day (including weekends and on public holidays)?	1	2
<b>2345</b>	Does this facility have an anesthetist present in the facility or on call 24 hours a day (including weekends and on public holidays)?	1	2

<b>PREVENTION OF MOTHER-TO-CHILD TRANSMISSION</b>			
<b>2361</b>	CHECK <b>Q-1102:</b> PMTCT SERVICES OFFERED		PMTCT SERVICES NOT OFFERED  <b>Q-2381</b>
<b>ASK TO BE SHOWN THE LOCATION IN THE FACILITY WHERE PMTCT SERVICES ARE PROVIDED. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT PMTCT SERVICES IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE ASSESSMENT AND ASK THE FOLLOWING QUESTIONS.</b>			
<b>Name of respondent</b>	..... ..... ..... .....	<b>Title</b>	..... ..... ..... .....
		<b>Code</b>	<input type="text"/> <input type="text"/>
	As part of PMTCT services, please tell me if providers in this facility provide the following services to clients:	<b>YES</b>	<b>NO</b>
<b>2362</b>	Provide HIV counseling and testing services to HIV positive pregnant women for PMTCT	1	2
<b>2363</b>	Provide HIV counseling and testing services to infants born to HIV positive pregnant women for PMTCT	1	2
<b>2364</b>	Provide ARV prophylaxis to HIV positive pregnant women for PMTCT	1	2
<b>2365</b>	Provide ARV prophylaxis to newborns of HIV positive pregnant women for PMTCT	1	2
<b>2366</b>	Provide infant and young child feeding counseling for PMTCT	1	2
<b>2367</b>	Provide nutritional counseling for HIV positive pregnant women and their infants for PMTCT	1	2
<b>2368</b>	Provide family planning counseling to HIV positive pregnant women for PMTCT	1	2
<b>2369</b>	Have you or any provider(s) of PMTCT services received any training in PMTCT in the last two years?	1	2
<b>2370</b>	Is there any national guideline for PMTCT available in this facility? <b>IF YES, ASK TO SEE THE GUIDELINES.</b>	Yes, observed.....1 Yes, reported not see.....2 No.....3	

<b>Sexual Violence</b>		<b>YES</b>	<b>NO</b>
	Please tell me if this facility provides the following services:		
<b>2381</b>	Clinical management of rape survivors (including psychological support)	1	2
<b>2382</b>	Emergency contraception	1	2
<b>2383</b>	Post-exposure prophylaxis (PEP) for STI & HIV infections	1	2

<b>2400</b>	<b>CHILD AND ADOLESCENT HEALTH</b>						
<b>CHILD IMMUNIZATION</b>							
<b>2401</b>	CHECK <b>Q-1105</b> : CHILD IMMUNIZATION SERVICES OFFERED	CHILD IMMUNIZATION SERVICES NOT OFFERED				<b>Q-24</b>	
<b>ASK TO BE SHOWN THE LOCATION IN THE FACILITY WHERE CHILD IMMUNIZATION SERVICES ARE PROVIDED. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT CHILD IMMUNIZATION SERVICES IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE ASSESSMENT AND ASK THE FOLLOWING QUESTIONS.</b>							
<b>Name of respondent</b>	..... ..... .....	<b>Title</b>	..... ..... .....	<b>Code</b>	[ ] [ ] [ ]		
	Does this facility provide any of the following immunization services for children under 5 years of age: IF YES, ASK: Is the service provided in the facility only, as outreach only, or both?	<b>(A) IN FACILITY</b>		<b>(B) OUTREACH</b>			
		<b>YES</b>	<b>NO</b>	<b>YES</b>	<b>NO</b>		
<b>2402</b>	BCG immunization	1	2	1	2		
<b>2403</b>	Routine polio immunization	1	2	1	2		
<b>2404</b>	Routine DPT-Hib+HepB immunization (pentavalent)	1	2	1	2		
<b>2405</b>	Routine measles immunization	1	2	1	2		
<b>2406</b>	Is there any national guideline for child immunizations available in this facility? <b>IF YES, ASK TO SEE THE GUIDELINES</b>	<b>Yes, observed</b>	<b>Yes, reported not seen</b>	<b>No</b>			
		1	2	3			
	I would like to know if the following items for immunization are available in this service area. <b>ASK TO SEE THE ITEMS.</b>	<b>Observed</b>	<b>Reported not Seen</b>	<b>Not Available</b>			
<b>2407</b>	Registration book for vaccination	1	2	3			
<b>2408</b>	Auto-disable syringes or Disposable syringes	1	2	3			
<b>2409</b>	Safety Box	1	2	3			
<b>2410</b>	Vaccine carrier(s)	1	2	3			
<b>2411</b>	Set of ice packs for vaccine carriers (Note: 4-5 ice packs make one set)	1	2	3			
<b>2412</b>	Information, Education and Communication material for child immunization to increase awareness	1	2	3			
<b>2413</b>	Is there any service provider(s) of Child Immunization received any training in the last two years?	<b>Yes</b>		<b>No</b>			
		1		2			
<b>2414</b>	Does this facility have a refrigerator for the storage of vaccines?  <b>IF YES, ASK TO SEE THE REFERIGERATOR.</b>	<b>A) AVAILABLE</b>			<b>B) FUNCTIONING</b>		
		<b>Observed</b>	<b>Reported not Seen</b>	<b>Not Available</b>	<b>YES</b>	<b>NO</b>	<b>Don't Know</b>
		1 → b	2 → b	3 2415	1	2	8

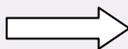
<b>CHILD CURATIVE CARE SERVICES</b>			
<b>2415</b>	CHECK <b>Q-1107</b> : CHILD CURATIVE CARE SERVICES OFFERED	CHILD CURATIVE CARE SERVICES NOT OFFERED	<b>Q-2430</b>
<p><b>ASK TO BE SHOWN THE LOCATION IN THE FACILITY WHERE CHILD CURATIVE CARE SERVICES ARE PROVIDED. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT CHILD CURATIVE CARE SERVICES IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE ASSESSMENT AND ASK THE FOLLOWING QUESTIONS.</b></p>			
<b>Name of respondent</b>	..... ..... .....	<b>Title</b>	..... ..... .....
		<b>Code</b>	<input type="text"/> <input type="text"/>
	Please tell me if this facility provides the following services :	<b>YES</b>	<b>NO</b>
<b>2416</b>	Diagnose and/or treat child malnutrition	1	2
<b>2417</b>	Provide vitamin A supplementation	1	2
<b>2418</b>	Provide ORS and zinc supplementation to children with diarrhea	1	2
<b>2419</b>	Child growth monitoring	1	2
<b>2420</b>	Is there any <b>IMCI</b> (Integrated Management of Childhood Illnesses) guideline for the diagnosis and management of childhood illnesses available in this facility today? <b>IF YES, ASK TO SEE THE GUIDELINES.</b>	Yes, observed.....1 Yes, reported not seen.....2 No.....3	
<b>2421</b>	Is there any national guideline for growth monitoring available in this facility? <b>IF YES, ASK TO SEE THE GUIDELINES.</b>	Yes, observed.....1 Yes, reported not seen.....2 No.....3	
<b>2422</b>	Is any provider(s) of curative care services for sick children received any training in the IMCI in the last two years?	Yes .....1 No.....2	

<b>ADOLESCENT HEALTH SERVICES</b>			
<b>2430</b>	CHECK <b>Q-1108</b> : ADOLESCENT HEALTH SERVICES OFFERED	ADOLESCENT HEALTH SERVICES NOT OFFERED	<b>Q-2436</b>
<p><b>ASK TO BE SHOWN THE LOCATION IN THE FACILITY WHERE ADOLESCENT HEALTH SERVICES ARE PROVIDED. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT ADOLESCENT HEALTH SERVICES IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE SURVEY AND ASK THE FOLLOWING QUESTIONS.</b></p>			
<b>Name of respondent</b>	..... ..... .....	<b>Title</b>	..... ..... .....
		<b>Code</b>	<input type="text"/> <input type="text"/>
<b>2431</b>	Is there any national guideline for service provision to adolescents and young people available in this facility? <b>IF YES, ASK TO SEE THE GUIDELINES.</b>	Yes, observed.....1 Yes, reported not seen.....2 No.....3	
<b>2432</b>	Is there any national guideline for clinical management of adolescents available in this facility? <b>IF YES, ASK TO SEE THE GUIDELINES.</b>	Yes, observed.....1 Yes, reported not seen.....2 No.....3	
<b>2433</b>	Is any provider(s) of adolescent health services received any training in consent and confidentiality pertaining to adolescent patients in the last three years?	Yes .....1 No.....2	
<b>2434</b>	Is any providers received any training on the provision of adolescent health services in the last three years?	Yes .....1 No.....2	
<b>2435</b>	Is any provider(s) of adolescent health services received any training in adolescent sexual and reproductive health including on family planning or HIV testing for adolescents in the last three years?	Yes .....1 No.....2	

<b>School Health</b>			
<b>2436</b>	How many schools that are supervised by this facility	<input type="text"/>	<input type="text"/>
		<b>YES</b>	<b>NO</b>
<b>2437</b>	Is there a specialist doctor (or more) to provide school health service?	1	2
<b>2438</b>	Is there trained medical staff helping to provide school health service?	1	2
<b>2439</b>	Does this facility provide school health services throughout the week?	1	2
<b>2440</b>	Does this facility provide periodic visits to the schools to provide health education services?	1	2
<b>2441</b>	Does this facility provide health promotion services for oral health?	1	2
<b>2442</b>	Does this facility conduct regular screening to school students?	1	2

<b>2500 NUTRITION</b>			
<b>2501</b>	Check Q -1109: NUTRITION SERVICES OFFERED		NUTRITION SERVICES NOT OFFERED 
<b>Q-2550</b>			
<b>ASK TO BE SHOWN THE LOCATION IN THE FACILITY WHERE NUTRITION SERVICES ARE PROVIDED. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT NUTRITION SERVICES IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE ASSESSMENT AND ASK THE FOLLOWING QUESTIONS.</b>			
<b>Name of respondent</b>	..... ..... .....	<b>Title</b>	..... ..... .....
		<b>Code</b>	<input type="text"/> <input type="text"/>
	Please tell me if this facility provides any of the following Nutrition services	<b>YES</b>	<b>NO</b>
<b>2502</b>	Screening of under nutrition/malnutrition (growth monitoring or MUAC (Mid Upper Arm Circumference) or W/H (Weight/ Height), H/A (Height/ Age))	1	2
<b>2503</b>	Screening of malnutrition (MUAC) for pregnant & lactating women	1	2
<b>2504</b>	OTP (Outpatient Therapeutic Feeding Programme)	1	2
<b>2505</b>	Advise/counsel on nutrition & breastfeeding	1	2

<b>2550 ORAL HEALTH</b>			
<b>2551</b>	Check Q 1110: ORAL HEALTH SERVICES OFFERED		ORAL HEALTH SERVICES NOT OFFERED 
<b>Q-2600</b>			
<b>ASK TO BE SHOWN THE LOCATION IN THE FACILITY WHERE ORAL HEALTH SERVICES ARE PROVIDED. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT ORAL HEALTH SERVICES IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE ASSESSMENT AND ASK THE FOLLOWING QUESTIONS.</b>			
<b>Name of respondent</b>	..... ..... .....	<b>Title</b>	..... ..... .....
		<b>Code</b>	<input type="text"/> <input type="text"/>
	Please tell me if this facility provides any of the following Oral Health services	<b>YES</b>	<b>NO</b>
<b>2552</b>	Screening of children for dental caries	1	2
<b>2553</b>	Oral health promotion activities for increasing public awareness	1	2
<b>2554</b>	Medical services for dental diseases	1	2
<b>2555</b>	Surgical services for dental problems	1	2
<b>2556</b>	Is there any national guideline for the diagnosis and management of oral health problems available in this facility?	1	2
<b>2557</b>	Is any provider(s) of oral health services received any training in the last two years?	1	2

<b>2600</b>	<b>COMMUNICABLE DISEASES: TUBERCULOSIS</b>			
<b>2601</b>	CHECK Q-1114: TB SERVICES OFFERED 	TB SERVICES NOT OFFERED 	Q-2700	
<b>ASK TO BE SHOWN THE LOCATION IN THE FACILITY WHERE TUBERCULOSIS SERVICES ARE PROVIDED. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT TUBERCULOSIS SERVICES IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE ASSESSMENT AND ASK THE FOLLOWING QUESTIONS.</b>				
<b>Name of respondent</b>	..... ..... .....	<b>Title</b>	..... ..... .....	<b>Code</b> <input type="text"/> <input type="text"/>
				<b>SKIP</b>
<b>2602</b>	Do providers in this facility diagnose TB?	Yes .....	1	If NO →2604
		No .....	2	
<b>2603</b>	What is the most common method used by providers in this facility for diagnosing TB? <b>PROBE TO DETERMINE METHOD USED.</b>	Sputum smear only.....	1	
		X-Ray only.....	2	
		Either sputum or x-ray.....	3	
		Both sputum and x-ray.....	4	
		Clinical Symptoms only.....	5	
<b>2604</b>	Do providers in this facility prescribe treatment for TB or manage patients who are on TB treatment?	Yes .....	1	If NO →2606
		No .....	2	
<b>2605</b>	What treatment strategy is followed by providers in this facility for <i>newly diagnosed</i> TB?  <b>PROBE TO ARRIVE AT CORRECT RESPONSE.</b>	Direct observe 2m, fu 4m.....	1	
		Direct observe 6m .....	2	
		Follow up clients only after first 2M direct observ elsewhere.....	3	
		Diagnosis and treat while inpatient discharge elsewhere for F/U.....	4	
		Provide full treatment, with no routine direct observephase.....	5	
		Diagnose, prescribe/provide medicines only, NO F/UP.....	6	
		Diagnose only, no treatment or prescription of medicines.....	7	
<b>2606</b>	Does this facility offer HIV rapid diagnostic testing in this service site?	Yes .....	1	
		No .....	2	

2700 NON-COMMUNICABLE DISEASES					
2701	CHECK Q-1116: NCD SERVICES OFFERED		NCD SERVICES NOT OFFERED	Q-2800	
<p><b>ASK TO BE SHOWN THE LOCATION IN THE FACILITY WHERE NON-COMMUNICABLE DISEASE SERVICES ARE PROVIDED. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT NCD SERVICES IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE ASSESSMENT AND ASK THE FOLLOWING QUESTIONS.</b></p>					
Name of respondent	..... ..... .....	Title	..... ..... .....	Code	<input type="text"/> <input type="text"/>
2702	Do providers in this facility diagnose and/or manage diabetes in patients?	Yes .....	1	<b>SKIP</b>	
		No .....	2	If NO →2704	
2703	Is there any national guideline for the diagnosis and management of diabetes available in this facility? <b>IF YES, ASK TO SEE THE GUIDELINES.</b>	Yes, observed.....	1		
		YES, Reported not Seen.....	2		
		No.....	3		
2704	Do providers in this facility diagnose and/or manage cardiovascular diseases such as hypertension in patients?	Yes .....	1		
		No .....	2	If NO →2706	
2705	Is there any national guideline for the diagnosis and management of cardiovascular diseases available in this facility? <b>IF YES, ASK TO SEE THE GUIDELINES.</b>	Yes, observed.....	1		
		YES, Reported not Seen.....	2		
		No.....	3		
2706	Do providers in this facility diagnose and/or manage chronic respiratory diseases in patients?	Yes .....	1		
		No .....	2	If NO →2708	
2707	Is there any national guideline for the diagnosis and management of chronic respiratory disease available in this facility? <b>IF YES, ASK TO SEE THE GUIDELINES.</b>	Yes, observed.....	1		
		YES, Reported not Seen.....	2		
		No.....	3		
2708	Do providers in this facility diagnose and/or manage cancer among the patients?	Yes .....	1		
		No .....	2	If NO → 2710	
2709	Is there any national guideline for the diagnosis and management of cancer available in this facility? <b>IF YES, ASK TO SEE THE GUIDELINES.</b>	Yes, observed.....	1		
		YES, Reported not Seen.....	2		
		No.....	3		
2710	Does this facility maintain files of patients of non-communicable diseases?	Yes, observed.....	1		
		YES, Reported not Seen.....	2		
		No.....	3		
2711	Does this health facility support Mass casualty management including Road Traffic accidents and injuries	Yes .....	1		
		No .....	2		

<b>Mental Health care</b>			
<b>ASK TO BE SHOWN THE LOCATION IN THE FACILITY WHERE MENTAL HEALTH CARE IS PROVIDED. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT MENTAL HEALTH CARE IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE ASSESSMENT AND ASK THE FOLLOWING QUESTIONS.</b>			
<b>Name of respondent</b>	..... ..... .....	<b>Title</b>	..... ..... .....
		<b>Code</b>	<input type="text"/> <input type="text"/>
	Does this health facility provide any of the following mental health services:	<b>YES</b>	<b>NO</b>
<b>2712</b>	Does this facility provide MHPSS services	1	2
<b>2713</b>	Does this facility provide: support of acute distress, anxiety, mood and stress related disorders and first line management of severe and common mental disorders ( e.g. psychosis, Epilepsy)	1	2
<b>2714</b>	Has the PHC staff been trained on provision of MHPSS and management of common Mental, Neurological and Substance use disorders (MNS)	1	2
<b>2715</b>	Is there any national guidelines for diagnosis and management of MNS disorders	Yes, observed.....1 Yes, reported not seen....2 No.....3	

<b>2800 SURGERY</b>	
<b>SURGICAL SERVICES</b>	
<b>2801</b>	CHECK Q-1117 OR Q-2341: ANY SURGICAL SERVICES OFFERED INCLUDING CESAREAN SECTION 
	SURGICAL SERVICES NOT OFFERED  <b>Q-2808</b>
<b>ASK TO BE SHOWN THE LOCATION IN THE FACILITY WHERE SURGICAL SERVICES ARE PROVIDED. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT SURGICAL SERVICES IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE ASSESSMENT AND ASK THE FOLLOWING QUESTIONS.</b>	
<b>Name of respondent</b>	..... ..... .....
	<b>Title</b> .....
	<b>Code</b> <input type="text"/> <input type="text"/>
	Please tell me if providers in this facility provide the following services:
	<b>YES</b> <b>NO</b>
<b>2802</b>	Incision and drainage of abscesses
<b>2803</b>	Wound debridement
<b>2804</b>	Acute burn management
<b>2805</b>	Suturing
<b>2806</b>	Closed treatment of fracture
<b>2807</b>	Laparotomy (uterine rupture, ectopic pregnancy, acute abdomen, intestinal obstruction, perforation, injuries)

<b>BLOOD TRANSFUSION</b>							
<b>2808</b>	CHECK Q-1118 OR Q-2321: BLOOD TRANSFUSION SERVICES OFFERED	BLOOD TRANSFUSION SERVICES NOT OFFERED <b>Q-2900</b>					
<p><b>ASK TO BE SHOWN THE LOCATION IN THE FACILITY WHERE BLOOD IS COLLECTED, PROCESSED, TESTED, STORED, OR HANDLED PRIOR TO TRANSFUSION. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT BLOOD TRANSFUSION SERVICES IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE ASSESSMENT AND ASK THE FOLLOWING QUESTIONS.</b></p>							
<b>Name of respondent</b>	..... ..... .....	<b>Title</b>	..... ..... .....	<b>Code</b>	<input type="text"/> <input type="text"/>		
	Which of the following types of blood donors does this facility use?	<b>YES</b>	<b>NO</b>	<b>SKIP</b>			
<b>2809</b>	Replacement	1	2				
<b>2810</b>	Voluntary	1	2				
<b>2811</b>	Have there been any interruptions in blood availability during the past 3 months?	1	2				
<b>2812</b>	Does this facility obtain blood from a national or regional blood center?	1	2				
<b>2813</b>	Does any place in this facility do blood screening for infectious diseases prior to transfusion?	1	2	If NO → 2819			
<b>2814</b>	Is the blood that is transfused in the facility screened for any of the following infectious diseases? <i>IF YES, ASK: Is the blood "always", "sometimes", or "rarely" screened?</i>	<b>ALWAYS</b>	<b>SOMETIMES</b>	<b>RARELY</b>	<b>NEVER</b>		
<b>2815</b>	HIV	1	2	3	4		
<b>2816</b>	Syphilis	1	2	3	4		
<b>2817</b>	Hepatitis B	1	2	3	4		
<b>2818</b>	Hepatitis C	1	2	3	4		
<b>2819</b>	Is there a refrigerator available for blood storage in this service area? <b>IF YES, PLEASE ASK TO SEE REFRIGERATOR.</b>	<b>A) AVAILABLE</b>			<b>B) FUNCTIONING</b>		
		<b>Observed</b>	<b>Reported not Seen</b>	<b>Not Available</b>	<b>YES</b>	<b>NO</b>	<b>DON'T KNOW</b>
		1	2	3 2820 ↗	1	2	8
<b>2820</b>	Is there any national guideline on the appropriate use of blood and safe transfusion practices? <b>IF YES, ASK TO SEE THE GUIDELINES.</b>	<b>YES, Observed</b>		<b>YES, Reported</b>		<b>NO</b>	
		1		2		3	
<b>2821</b>	Have any provider(s) of blood transfusion services received any training in the appropriate use of blood and safe transfusion practices in the last two years?	<b>YES</b>			<b>NO</b>		
		1			2		

<b>2900 IMAGING</b>							
<b>ASK TO BE SHOWN THE LOCATION IN THE FACILITY WHERE IMAGING SERVICE IS PROVIDED. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT THIS SERVICE IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE ASSESSMENT AND ASK THE FOLLOWING QUESTIONS.</b>							
<b>Name of respondent</b>		<b>Title</b>		<b>Code</b>			
<b>2901</b>	Does this facility perform diagnostic x-rays, ultrasound, or computerized tomography?  <b>IF YES, ASK TO GO WHERE THE EQUIPMENT IS LOCATED.</b>	<b>YES</b>  1	<b>NO</b>  2	<b>NA</b>  3	<b>SKIP</b>  IF NO → 2920		
	I would like to know if the following imaging equipment items are available and functional today or not available or not functioning today. <b>ASK TO SEE THE ITEMS.</b>	<b>A) AVAILABLE</b>			<b>B) FUNCTIONING</b>		
		<b>Observed</b>	<b>Reported not Seen</b>	<b>Not Available</b>	<b>YES</b>	<b>NO</b>	<b>DON'T KNOW</b>
<b>2902</b>	X-ray machine	1 → b	2 → b	3 2903	1	2	8
<b>2903</b>	Ultrasound equipment	1 → b	2 → b	3 2904	1	2	8
<b>2904</b>	CT scan	1 → b	2 → b	3 2905	1	2	8
<b>2905</b>	MRI	1 → b	2 → b	3 2920	1	2	8

<b>2920 LABORATORY DIAGNOSTICS</b>							
<b>2551</b>	Check Q 1119: Laboratory diagnostics SERVICES OFFERED	Laboratory diagnostics SERVICES NOT OFFERED			Q-3000		

**ASK TO BE SHOWN THE LOCATION IN THE FACILITY WHERE ORAL HEALTH SERVICES ARE PROVIDED. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT ORAL HEALTH SERVICES IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE ASSESSMENT AND ASK THE FOLLOWING QUESTIONS.**

<b>Name of respondent</b>		<b>Title</b>		<b>Code</b>				
	Please tell me if this facility provides any of the following Laboratory diagnostics services:						<b>YES</b>	<b>NO</b>
<b>2922</b>	Hemoglobin						1	2
<b>2923</b>	White Blood cell count						1	2
<b>2924</b>	Blood Coagulation Time						1	2
<b>2925</b>	Bleeding Time						1	2
<b>2926</b>	Packed Cell Volume (PCV)						1	2
<b>2927</b>	Sedimentation Rate						1	2
<b>2928</b>	General Urine Examination						1	2
<b>2929</b>	General Stool Examination						1	2
<b>2930</b>	Blood Sugar Test						1	2
<b>2931</b>	Pregnancy Test						1	2

<b>950</b>	<b>LABORATORY EQUIPMENT</b>	<b>No. of available equipment</b>	<b>No. of partially functioning</b>	<b>No. of fully functioning</b>
	Please tell me about the number of Laboratory equipment available:			
<b>2951</b>	Microscope			
<b>2952</b>	Centrifuge			
<b>2953</b>	Electric Oven			
<b>2954</b>	Refrigerator with temperature control			
<b>2955</b>	Haematocrite Centrifuge			
<b>2956</b>	Spectrophoto Meter			
<b>2957</b>	Sensitive Balance			

<b>3000</b>	<b>ESSENTIAL EQUIPMENT &amp; SUPPLIES</b>	<b>No. of available equipment</b>	<b>No. of partially functioning</b>	<b>No. of fully functioning</b>
	Please tell me about the number of Laboratory equipment available:			
<b>3001</b>	Pulse Oximeter			
<b>3002</b>	Oxygen concentrators			
<b>3003</b>	Oxygen cylinders			
<b>3004</b>	Light source (flashlight acceptable)			
<b>3005</b>	Voltage Stabilizer			
<b>3006</b>	Refrigerator/ Freezer			
<b>3007</b>	Safe delivery kit			
<b>3008</b>	Clean delivery assistance kit			
<b>3009</b>	Vaginal examination set			
<b>3010</b>	Fetoscope			
<b>3011</b>	Delivery table			
<b>3012</b>	Safety Box			
<b>3013</b>	Thermometer			
<b>3014</b>	B.P Apparatus			
<b>3015</b>	Weight Machine Adult/Pediatric			
<b>3016</b>	Needle Cutter			
<b>3017</b>	Sterilizer/ Autoclave			
<b>3018</b>	Nebulizer			
<b>3019</b>	DC Shock machine			
<b>3020</b>	Ambu bag (Pediatric and Adult)			
<b>3021</b>	Mucus extractor with suction tube			
<b>3022</b>	ECG Monitor			
<b>3023</b>	Stethoscope			
<b>3024</b>	Length Measurement Device			
<b>3025</b>	Height Measurement Device			

<b>3100</b>	<b>ESSENTIAL MEDICINES</b>				
	<b>Availability of medicines for at least one month:</b>	<b>Fully available</b>	<b>Partially available</b>	<b>Not available</b>	<b>Stock out days/ last month</b>
<b>3101</b>	Local Anesthetics/preoperative medication/Anaphylactic shock	1	2	3	<input type="text"/>
<b>3102</b>	Anti-allergics and drugs used in anaphylaxis	1	2	3	<input type="text"/>
<b>3103</b>	Parenterals (Injectables)	1	2	3	<input type="text"/>
<b>3104</b>	Antidots for Poisoning	1	2	3	<input type="text"/>
<b>3105</b>	Anti venom and anti scorpion and snake serums	1	2	3	<input type="text"/>
<b>3106</b>	Anti-leishmaniasis	1	2	3	<input type="text"/>
<b>3107</b>	Antibiotics for Adults	1	2	3	<input type="text"/>
<b>3108</b>	Antibiotics for Children	1	2	3	<input type="text"/>
<b>3109</b>	Scabicides and /Pediculicides	1	2	3	<input type="text"/>
<b>3110</b>	Disinfectants and antiseptics	1	2	3	<input type="text"/>
<b>3111</b>	Antifungal Preparations	1	2	3	<input type="text"/>
<b>3112</b>	Anti-rabies	1	2	3	<input type="text"/>
<b>3113</b>	Anthelmintic Drugs Anti-protozoal	1	2	3	<input type="text"/>
<b>3114</b>	Anti-tuberculosis	1	2	3	<input type="text"/>
<b>3115</b>	Topical antibiotics	1	2	3	<input type="text"/>
<b>3116</b>	Water Chlorination/Purification	1	2	3	<input type="text"/>
<b>3117</b>	Medicines acting on Gastrointestinal /Antacids and other anti-ulcer	1	2	3	<input type="text"/>
<b>3118</b>	Antiemetic Preparations	1	2	3	<input type="text"/>
<b>3119</b>	Oral Rehydration salt	1	2	3	<input type="text"/>
<b>3120</b>	Micro Nutrient (i.e., Zinc Sulfate, Vit A)	1	2	3	<input type="text"/>
<b>3121</b>	Cardiac and /or Vascular Drugs	1	2	3	<input type="text"/>
<b>3122</b>	Anti-hypertensive Drugs	1	2	3	<input type="text"/>
<b>3123</b>	Antiasthmatic Therapy	1	2	3	<input type="text"/>
<b>3124</b>	Ophthalmic Preparations	1	2	3	<input type="text"/>
<b>3125</b>	Ear Preparations	1	2	3	<input type="text"/>
<b>3126</b>	Analgesics, antipyretics, non steroidal anti-inflammatory Medicines	1	2	3	<input type="text"/>
<b>3127</b>	Diuretics	1	2	3	<input type="text"/>
<b>3128</b>	Iron Supplement	1	2	3	<input type="text"/>
<b>3129</b>	Folic Acid	1	2	3	<input type="text"/>
<b>3130</b>	Insulin	1	2	3	<input type="text"/>
<b>3131</b>	Oral Diabetic Pills	1	2	3	<input type="text"/>
<b>3132</b>	Contraceptive (Family Planning Methods)	1	2	3	<input type="text"/>



