**PROGRAMME IMPLEMENTATION PLAN FOR FREE DIAGNOSTIC INITIATIVE (FDI), 2021-2022**

Free Diagnostic Initiative programme was implemented in Mizoram in 2016. Due to limited resources, it was rolled out only in Mamit DH during FY 2018-19. In FY 2019-20, the programme was expanded to cover all public health facilities in Mamit district and in FY 2020-2021, it covers the whole state of Mizoram. In FY 2021-2022 also, it is proposed to cover the whole state of Mizoram.

The objective of this programme is to ensure availability of basic diagnostic services in public health facilities for smooth delivery of healthcare and also reduce high out of pocket expenditure on diagnostics. Since the existing health insurance schemes in the state do not cover the expenses for outdoor patients, the out of pocket expenditure of outdoor patients is not met. In order to cover these drawbacks, it is essential that basic diagnostic services are available in all public health facilities.

Proposal is prepared to cover the essential Pathological diagnostic requirements of 242 SCs, 9 Community Health Centres, 9 District Hospitals and 2 Sub District Hospitals. For financial year 2021-22, proposal for Pathological diagnostics for 128 Sub Centres and PHCs are not included under Free Diagnostic Initiative Programme as diagnostic requirements of these facilities will be provided under Health and Wellness Centre Programme.

Proposal for Radiological consumables for 15 PHCs, 9 CHCs, 9 DH and 2 SDH is also included. Out of the total 57 PHCs, there are only 15 PHCs with fully functional X-ray machines.

The proposed amount for purchase of essential diagnostics under Free Diagnostic Initiative for FY 2021-2022 is **Rs. 32.01 lakhs.**

**Public Health Facilities in Mizoram**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **S/No** | **Name of District** | **Population** | **No of**  **DH** | **No of SDH** | **No of CHC** | **No of PHC** | **No of SC** |
| 1 | Aizawl East | 274340 | 1 | 0 | 2 | 6 | 57 |
| 2 | Aizawl West | 188282 | 1 | 1 | 0 | 6 | 37 |
| 3 | Champhai | 149887 | 1 | 0 | 2 | 11 | 59 |
| 4 | Kolasib | 92270 | 1 | 0 | 1 | 5 | 26 |
| 5 | Lawngtlai | 140822 | 1 | 0 | 1 | 5 | 37 |
| 6 | Lunglei | 161600 | 1 | 1 | 1 | 9 | 70 |
| 7 | Mamit | 95700 | 1 | 0 | 1 | 6 | 33 |
| 8 | Saiha | 66478 | 1 | 0 | 0 | 4 | 24 |
| 9 | Serchhip | 70486 | 1 | 0 | 1 | 5 | 27 |
| 10 | **TOTAL** | **1239865** | **9** | **2** | **9** | **57** | **370** |

1. **Estimated cost of Essential Diagnostics for Sub – Centre**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S/ No.** | **Name of item** | **Cost of 1 unit in ₹** | **Specifications** | **Requirement for 1 Sub Centre** | **Total** |
| 1 | N/10 Hydrochloric acid | 200 | 500ml | 1 | 200 |
| 1 | Dengue rapid test | 2100 | 10 tests | 1 | 2100 |
| 2 | Glucometer strips | 1182 | 100 strips | 1 | 1182 |
| 3 | Urine pregnancy test kit | 8.5 | 1 kit | 50 | 425 |
| 4 | Uristix | 135 | 100 strips | 1 | 135 |
|  |  |  |  | **TOTAL** | 4042 |

Cost of Pathological diagnostics for 1 SC = Rs. 4,042

**Proposed cost of pathological diagnostics for 242 SCs = Rs. 9,78,164**

1. **Estimated cost of Essential Diagnostics for Community Health Centre/Sub District Hospital**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S/ No.** | **Name of item** | **Cost of 1 unit in ₹** | **Specifications** | **Requirement for 1 CHC/SDH** | **Total** |
| 1 | Drabkin's solution | 400 | 1 L | 4 | 1600 |
| 2 | Micropipette | 3500 | 100-1000microL | 2 | 7000 |
| 3 | Microtips | 325 | 200-1000microL (500/pack) | 1 | 325 |
| 4 | TLC diluting fluid | 125 | 500ml/bot | 2 | 250 |
| 5 | Cover slip | 1300 | (18x18mm) 20 packets of 10 gms each | 1 | 1300 |
| 6 | Cover slip | 1980 | (22x50mm) 20 packets of 10gms each | 1 | 1980 |
| 7 | Leishman's stain | 570 | 25g | 2 | 1140 |
| 8 | Methanol | 830 | 2.5L/bot | 2 | 1660 |
| 9 | Oil immersion | 1740 | 125ml/bot | 2 | 3480 |
| 10 | Platelet diluting fluid | 100 | 125ml/bot | 2 | 200 |
| 11 | ESR pipette (disposable) | 620 | 100pieces/pack | 1 | 620 |
| 12 | Lancet | 150 | 200 pieces/pack | 1 | 150 |
| 13 | Filter paper | 80 | 100 sheets/pack | 1 | 80 |
| 14 | Blood group reagent | 475 | 3x10 ml | 2 | 950 |
| 15 | RBC diluting fluid | 125 | 500 ml/bot | 2 | 250 |
| 16 | Potassium oxalate solution | 290 | 500ml/bot | 1 | 290 |
| 17 | Ammonium oxalate solution | 300 | 500ml/bot | 1 | 300 |
| 18 | Distilled water | 200 | 5L/bot | 2 | 400 |
| 19 | Blood urea reagent | 615 | 6x100ml | 3 | 1845 |
| 20 | S. Creatinine reagent | 640 | 2x50ml | 3 | 1920 |
| 21 | S. Bilirubin (Total&Direct) reagent | 553 | 75ml | 3 | 1659 |
| 22 | SGOT reagent | 250 | 5ml/bot | 3 | 750 |
| 23 | SGPT reagent | 250 | 5ml/bot | 3 | 750 |
| 24 | S. Alkaline phosphatase reagent | 432 | 75ml | 3 | 1296 |
| 25 | S. Total protein reagent | 298 | 2x50ml | 3 | 894 |
| 26 | S. Albumin reagent | 585 | 2x150ml | 3 | 1755 |
| 27 | S. Total cholesterol reagent | 1200 | 2x250ml | 3 | 3600 |
| 28 | S. Triglyceride reagent | 1100 | 2x150ml | 3 | 3300 |
| 29 | S. HDL reagent | 230 | 160ml/bot | 2 | 460 |
| 30 | S. LDL reagent | 1850 | 50ml | 2 | 3700 |
| 31 | S. Amylase reagent | 2129 | 2x10ml | 3 | 6387 |
| 32 | Rapid plasma reagin (RPR) kit | 250 | 100 tests/pack | 1 | 250 |
| 33 | Dengue rapid test kit | 2100 | 10 tests/pack | 1 | 2100 |
| 34 | Urine pregnancy test kit | 8.5 | 1 kit/pack | 100 | 850 |
| 35 | Urine reagent strip | 830 | 100strips/pack | 1 | 830 |
| **TOTAL** | | | | | 54321 |

Cost of Pathological diagnostics for 1 CHC/SDH = Rs. 54,321

**Proposed cost of Pathological diagnostics for 9 CHCs & 2 SDHs = Rs. 5,97,531**

**3.Estimated cost of Essential Diagnostics for District Hospital**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S/ No.** | **Name of item** | **Cost of 1 unit in ₹** | **Specifications** | **Requirement for 1 DH** | **Total** |
| 1 | Drabkin's solution | 400 | 1L | 6 | 2400 |
| 2 | Micropipette | 3500 | 100-1000microL | 1 | 3500 |
| 3 | Microtips | 325 | 200-1000microL (500/pack) | 1 | 325 |
| 4 | ESR pipette (disposable) | 620 | 100 pieces/box | 1 | 620 |
| 5 | Oil immersion | 1740 | 125ml | 2 | 3480 |
| 6 | Blood group reagent | 475 | 3x10ml | 3 | 1425 |
| 7 | Cover slip | 1300 | (18x18mm) 20 packets of 10 gms each | 1 | 1300 |
| 8 | Cover slip | 1980 | (22x50mm) 20 packets of 10gms each | 1 | 1980 |
| 9 | Giemsa powder | 635 | 25g | 4 | 2540 |
| 10 | Methanol | 275 | 500ml | 3 | 825 |
| 11 | Papanicolau stain | 1960 | 250 test/box | 1 | 1960 |
| 12 | Glucose kit | 900 | 5x100ml | 2 | 1800 |
| 13 | Microprotein | 715 | 1x50ml | 2 | 1430 |
| 14 | Blood urea reagent | 615 | 6x100ml | 5 | 3075 |
| 15 | S. Creatinine reagent | 640 | 2X50ml | 5 | 3200 |
| 16 | S. Bilirubin (Total & direct) reagent | 553 | 75ml | 5 | 2765 |
| 17 | SGOT reagent | 250 | 5ml | 5 | 1250 |
| 18 | SGPT reagent | 250 | 5ml | 5 | 1250 |
| 19 | S. Alkaline phosphatase reagent | 432 | 75ml | 5 | 2160 |
| 20 | S. Total protein reagent | 298 | 2X50ml | 5 | 1490 |
| 21 | S. Albumin reagent | 585 | 2x150ml | 5 | 2925 |
| 22 | S. Sodium/potassium reagent | 1500 | 15tests/kit | 5 | 7500 |
| 23 | S. Calcium reagent | 690 | 2x75ml | 2 | 1380 |
| 24 | Troponin I | 2380 | 10 tests/pack | 5 | 11900 |
| 25 | S. Amylase reagent | 2129 | 2x10ml | 5 | 10645 |
| 26 | S. Uric acid reagent | 430 | 5x25ml | 5 | 2150 |
| 27 | S. Total cholesterol reagent | 1200 | 2x250ml | 5 | 6000 |
| 28 | S. Triglyceride reagent | 1100 | 2x150ml | 5 | 5500 |
| 29 | S. HDL reagent | 230 | 160ml/bot | 2 | 460 |
| 30 | S. LDL reagent | 1850 | 50ml | 2 | 3700 |
| 31 | RPR test kit | 250 | 100tests/pack | 1 | 250 |
| 32 | Dengue rapid test kit | 2100 | 10tests/pack | 2 | 4200 |
| 33 | Rheumatoid factor test | 518 | 20 tests/box | 3 | 1554 |
| 34 | Antistreptolysin factor test | 1040 | 20 tests/box | 3 | 3120 |
| 35 | S. CRP | 830 | 20 tests/box | 3 | 2490 |
| 36 | Urine reagent strips | 830 | 100strips/box | 2 | 1660 |
| 37 | Urine pregnancy test | 8.5 | 1piece/pack | 150 | 1275 |
| 38 | Urine vial | 11 |  | 70 | 770 |
|  |  |  |  | **TOTAL** | **106254** |

Cost of Pathological diagnostics for 1 DH = Rs. 1,06,254

**Proposed cost of Pathological diagnostics for 8 DHs = Rs.8,50,032**

**4. Proposed estimate for radiological diagnostics for PHCs, CHCs, DH and SDH**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S/ No.** | **Items** | **Rate/unit in ₹** | **Requirement** | **TOTAL** |
| 1 | X-Ray film (12x15 inch) | 2598 | 4 | 10392 |
| 2 | X-Ray film (10x12 inch) | 1734 | 4 | 6936 |
| 3 | X-Ray film (8x12 inch) | 1154 | 4 | 4616 |
| 4 | Developer powder (1kg) | 45 | 2 | 90 |
| 5 | Fixer (1kg) | 45 | 2 | 90 |
|  |  |  | **TOTAL** | **22124** |

Cost of radiological diagnostics for 1 facility = Rs. 22,124

**Proposed cost of radiological diagnostics for 35 facilities = Rs. 7,74,340**

**SUMMARY**

|  |  |
| --- | --- |
| Proposed cost of pathological diagnostics for 242 Sub Centres | Rs. 9.78 |
| Proposed cost of pathological diagnostics for 9 CHCs and 2 SDH | Rs. 5.97 |
| Proposed cost of pathological diagnostics for 8 DH | Rs. 8.50 |
| **Total proposed for Pathological diagnostics (A)** | **Rs. 24.25** |
| **Total proposed for Radiological diagnostics for 35 facilities (B)** | **Rs.7.74** |
| **GRAND TOTAL (A)+(B)** | **Rs. 31.99** |