



NISHULK JANCH YOJNA
Scheme for Free Basic Diagnostic Services
at
Public Health Institutions in Rajasthan

MNJY CONCEPT : BRIDGING THE MISSING LINK IN ACCESS TO HEALTH CARE

Essential Components of Public Health services	Provision
Hospital infrastructure	Provided free
Consultation by a doctor & nursing care	Provided free
Medicines, Surgical and sutures items	Provided free
Diagnostic Services	Paid

•Services available at the token money for registration in OPD at Rs.2/- or Rs.5/- and for IPD at Rs. 10/-.

Tests were free for BPL and other identified categories only.
All other patients paid only for tests whereas other components were provided free of cost.

MNJY - FREE DIAGNOSTICS SCHEME

Vision

To provide quality essential diagnostic services in all the government health care institutions and contribute to fundamental right to health.



Objective

- To strengthen the existing laboratories and other diagnostic facilities (and to create additional facilities if required) in all the public health institutions so as to provide the essential diagnostic services free of cost to all patients visiting government hospitals.
- To meet gaps and to provide adequately equipped quality diagnostic services as package at various levels of health care.



GROUPING OF DIAGNOSTIC TESTS



<p align="center"><u>BASIC TESTS (FREE)</u></p> <p align="center">Required for diagnosis of common illnesses by >90% of patients at Primary , Secondary and Tertiary care hospitals.</p>	<p align="center"><u>SPECIALISED TESTS (PAID)</u></p> <p align="center">Required for <10% of patients at Tertiary care hospitals</p>
<p>Pathology – Blood for HB, TLC, DLC, TEC, T-RBC, ESR, PBF, Malaria AG, Platelet Count, BT, CT, PCV, CBC, etc .</p>	<p align="center">CT Scan</p>
<p>Bio-Chemistry –B Sugar, Creatinine, Urea, Uric Acid, S-phosphorus, Calcium, Total Protein, Bilirubin, SGOT, SGPT, S. Alk-phosphatase, LDHCPK,CPKMB, GGT, Amylase, Lipase, Total lipid Profile, S. Electrolyte.</p>	<p align="center">MRI</p>
<p>Microbiology – Widal test, VDRL, ASLO Titer, CRP, RF, Pregnancy Test, HBS – AG, etc.</p>	<p align="center">ECHO Cardiography</p>
<p>Urine Complete, Stool examination, CSF, Pleural fluid etc.</p>	<p align="center">EEG</p>
<p>X-Ray</p>	
<p>ECG</p>	

MNJY IMPLEMENTATION & TEST PACKAGES



S. No	PHASE & DATE OF IMPLEMENTATION	LEVEL OF CARE	NUMBER OF TESTS
1	PHASE I 7.4.2013 World Health Day	Medical Colleges Hospitals	57 → 70
		District /Sub-Divisional & Satellite Hospitals	44 → 56
2	PHASE II 1.7.2013 Doctors Day	Community Health Centers	28 → 37
3	PHASE III 15.8.2013 Independence Day	Primary Health Centers & City Dispensaries	15

Scheme details can be visited at <http://www.rmhc.nic.in/mnjy/home.html>



HOW WE PROCEEDED

BASIC COMPONENTS FOR STRENGTHENING AND MODERNIZATION OF LABORATORIES TAKEN UP

1. Infrastructure
2. Manpower
3. Equipment & instruments
4. Supply of essential reagents and consumables.



1. CIVIL WORKS



S. No.	Civil work Renovation/Up-gradation
1	Repairs & renovation of existing laboratories , X-ray and ECG Rooms
2	Need based additional civil work/space at DH/MCH
3	Construction of shelves & cabinets to store reagents
4	Platform, Basin ,sink and other sanitary fittings
5	Counters for registration ,sample collection and report dispatch
6	Equipment installation work
7	Office furniture – chair, table, rack, almirah etc.
8	Electric fitting and appliances - Refrigerator, Incubator, ups etc.
9	Creation of adequate Waiting Area with chairs or patients in waiting at all labs and X-Ray and ECG Rooms
10	Display of names of Officer in-charge, Lab technicians, etc outside the laboratories and list of tests undertaken at the institution with timings for sample collection and reporting

2. MANPOWER



S. No.	Manpower
1	Utilization of existing staff after sensitization & training (MOs and LTs).
2	New recruitment (need based) & training.
3	Contractual recruitment through RMRS.
4	Computer operators as per FD circular through RMRS one at CHC lab and three at SH/SDH/DH for data collection recording and reporting.
5	Technical staff <ul style="list-style-type: none">GNM for SC, LT for others and trained nurses for radiology and ECG Supervisory & Monitoring staff <ul style="list-style-type: none">SS/JS/MOPG or Six months trained pathologist, microbiologist/radiologist/biochemist etc.
6	Training of other cadres like ANMs, MOs and LTs



Norms for Contractual Manpower



S. No	Manpower	Per Visit Consultation payment
1	Radiologist/Pathologist (PG)	Rs. 2500/- day for a visit of 6 hours/day
2	LT (Recognized degree)	Rs. 400/- day for a visit of 8 hours/day
3	Radiographer (Recognized degree)	Rs. 500/- day for a visit of 8 hours/day
4	Data Entry Operator	Man with machine model of FD
5	LA/Guards	From placement agency/ex-servicemen

To address non –availability of recognized degree holders circular was issued :

- to hire experienced Lab technology diploma holders as Lab Assistants and
- experienced diploma holders in radiography as ARG through placement agency to fill the gaps.

This is in accordance with Labour Act Rules in the category of skilled /high skilled manpower(based on availability)

3. EQUIPMENTS & INSTRUMENTS. – Contd..



S. No	Equipment & Instruments.	S. No	Equipment	Numbers Procured
1	Ensure availability of all equipments in laboratories, X-Ray and ECG Rooms in working condition and need based repair if any to be taken up	1	X ray machines -271	
			100 MA	204
			300 MA	55
2	Ensure availability of back-up equipments in working condition		500 MA	12
		2	ECG Machines - 372	
			Single Channel	366
3	EPM cell executed annual R/C for equipments and Other regularly required materials		3 Channel	1
			12 Channel	5
4	Gap analysis and procurement of new equipments	3	Sonography Machines - 27	
			B&W USG Machine	9
5	Repair and maintenance management through Equipment Maintenance & Repair Workshops of RMSC created at Zonal DDWs		Sonography Colored Doppler System	18
		4	Semi Auto-analyzers	374
		5	Fully automated Analyzer	32
		6	3 Part Blood Cell Counters	460
		8	Elisa Reader with Washer Multiscan	60
		9	Digital Haemoglobinometer	482

3. EQUIPMENTS & INSTRUMENTS. - *Contd..*



271 X-Ray Machines



372 ECG Machines

3. EQUIPMENTS & INSTRUMENTS.- *Contd..*



374 Semi Auto Analyzer



460 Three part hematology Analyzer (CBC)

3. EQUIPMENTS & INSTRUMENTS. - *Contd..*



Incubator



51 Centrifuge machine(16 &36 tubes)

4. REAGENTS & CONSUMABLES



S. No	Reagents and Consumables
1	Ensure availability of all reagents , consumables, diagnostic kits to be used in laboratories, X-ray Rooms
2	EPM cell executes annual R/C for all regularly required materials and procured by institutions to maintain regular supply
3	Ensure availability of disposable syringes, gloves, needles, cotton, glass collection vials
4	Ensure regular availability of X-ray films, Sonography print films, EGG Rolls, EGC, USG Jelly,



Funds provided for local purchase of reagents and consumables

OTHER ACTIVITIES ADDRESSED FOR IMPLEMENTATION



S. No	Other Activities
1	Ensuring Stationary such as – <ul style="list-style-type: none">• Investigation Request Form• Report Form• Record Keeping Register• Equipment Log Book
2	Ensuring availability of different coloured bins and bags for bio-medical waste management
3	Ensuring adherence to bio-safety guidelines for staff deployed in labs and X-ray Dept. - Caps, Mask, Apron, Lead Apron, Gloves, Slippers, Thermo luminescent Dosimeter X-ray Badge etc.
4	Ensure 24x7 lab services for ICUs, IPD, Emergency/Casualty and other serious patients
5	Booklet developed for facilitating implementation of Phase I and Phase II & III with all issued orders/circulars , processes to be adopted, bio safety guidelines, lay-out plan for labs and X-ray rooms, radiation protection and work practices



Investigation & Reporting Formats

Type of investigation	Paper colour
Pathology	Light Pink
Microbiology	Light Yellow
Biochemistry	Light Blue
Urine, Stool, Cardiology & Radiology	White

मुख्यमंत्री निःशुल्क जांच योजना
राजकीय चिकित्सालय.....
INVESTIGATION REQUEST FORM

Patient Name.....Date.....
Age.....Sex.....Referred by Dr.....
OPD/Ward Unit.....Bed No.....

PATHOLOGY (पैथोलॉजी)

S.No.	Name of tests
1	Hb-Hemoglobin - हीमोग्लोबिन
2	TLC-Total Leukocyte Count - टी एल सी
3	DLC-Differential Leukocyte Count - डी एल सी
4	MP Slide method-Malaria Parasite Slide Method एम पी स्लाइड पद्धति
5	ESR-Erythrocytic Sedimentation Rate - ई एस आर
6	BT-Bleeding Time - ब्लडिंग टाइम (बी टी)
7	CT-Clotting Time - क्लॉटिंग टाइम (सी टी)
8	PBF-Peripheral Blood Film - पी बी एफ
9	CBC- Complete Blood Count - सी बी सी
10	Blood group (ABO-RH Typing) - ब्लड ग्रुप
11	TEC - Total Eosinophilic Count - टी ई सी

Mention S.No. of The Advised Test
Signature & Name MO/Consultant

मुख्यमंत्री निःशुल्क जांच योजना
राजकीय चिकित्सालय.....
REPORT FORM OF INVESTIGATION

Patient Name.....Date.....
Age.....Sex.....Referred by Dr.....
OPD/Ward Unit.....Bed No.....

PATHOLOGY (पैथोलॉजी)

S.No.	Name of tests	Result	Normal Range
1	Hb-Hemoglobin - हीमोग्लोबिन		12-18gm%
2	TLC-Total Leukocyte Count - टी एल सी		4.8-10.6/mm ³
3	DLC-Differential Leukocyte Count - डी एल सी P....% L....% E....% M....% B....%		P(42-56%) L(25-40%) E(0-4%) M(1-3%)
4	MP Slide method-Malaria Parasite Slide Method एम पी स्लाइड पद्धति		Negative
5	ESR-Erythrocytic Sedimentation Rate - ई एस आर		5-15mm/1hrs
6	BT-Bleeding Time - ब्लडिंग टाइम (बी टी)		1.5-4 minutes
7	CT-Clotting Time - क्लॉटिंग टाइम (सी टी)		3-5 minutes
8	PBF-Peripheral Blood Film - पी बी एफ		
9	CBC- Complete Blood Count - सी बी सी		
10	Blood group (ABO-RH Typing) - ब्लड ग्रुप		
11	TEC - Total Eosinophilic Count - टी ई सी		50-200/mm ³

Date.....
Signature & Name MO/IC LAB

मुख्यमंत्री निःशुल्क जांच योजना
राजकीय चिकित्सालय.....
INVESTIGATION REQUEST FORM

Patient Name.....Date.....
Age.....Sex.....Referred by Dr.....
OPD/Ward Unit.....Bed No.....

BIOCHEMISTRY (बायोकैमिस्ट्री)

S.No.	Name of tests
1	Blood sugar - ब्लड शुगर (F) (PP)
2	Blood Urea - ब्लड यूरिया
3	Serum Creatinine - सीरम क्रियाटिनिन
4	Serum Bilirubin (T) - सीरम बिलिरुबिन (टी)
5	Serum Bilirubin (D) - सीरम बिलिरुबिन (डी)
6	SGOT - एस जी ओ टी
7	SGPT - एस जी पी टी
8	Serum Alk. Phosphatase - सीरम अल्क फॉस्फेट
9	Serum Total Protein - सीरम टोटल प्रोटीन
10	Serum Albumin - सीरम एल्बुमिन
11	Serum Calcium - सीरम कैल्शियम
12	Serum CK-NAC - सीरम सी के-एन सी
13	Serum CK-MB - सीरम सी के-एम बी
14	Serum LDH - सीरम एल डी एच
15	Serum Amylase - सीरम एमाइलेज
16	Serum Uric Acid - सीरम यूरिक एसिड

Mention S.No. of The Advised Test
Signature & Name MO/Consultant

मुख्यमंत्री निःशुल्क जांच योजना
राजकीय चिकित्सालय.....
REPORT FORM OF INVESTIGATION

Patient Name.....Date.....
Age.....Sex.....Referred by Dr.....
OPD/Ward Unit.....Bed No.....

BIOCHEMISTRY (बायोकैमिस्ट्री)

S.No.	Name of tests	Result	Normal Range
1	Blood sugar - ब्लड शुगर (F) (PP)		70-110 mg % 120-140mg%
2	Blood Urea - ब्लड यूरिया		15-45 mg %
3	Serum Creatinine - सीरम क्रियाटिनिन		0.6-1.6 mg %
4	Serum Bilirubin (T)-सीरम बिलिरुबिन (टी)		0.2-1.0 mg %
5	Serum Bilirubin (D) - सीरम बिलिरुबिन (डी)		0.1-0.4 mg %
6	SGOT - एस जी ओ टी		5-40 U/L
7	SGPT - एस जी पी टी		5-36 U/L
8	Serum Alk. Phosphatase - सीरम अल्क फॉस्फेट		3000 25-140 U/L
9	Serum Total Protein - सीरम टोटल प्रोटीन		6-8.5 gm %
10	Serum Albumin - सीरम एल्बुमिन		3.5-5.0 gm %
11	Serum Calcium - सीरम कैल्शियम		7-11 mg %
12	Serum CK-NAC - सीरम सी के-एन सी		20-200 U/L
13	Serum CK-MB - सीरम सी के-एम बी		0-20 U/L
14	Serum LDH - सीरम एल डी एच		160-430 U/L
15	Serum Amylase - सीरम एमाइलेज		< 90 U/L
16	Serum Uric Acid - सीरम यूरिक एसिड		2.6 mg %

Date.....
Signature & Name MO/IC LAB

मुख्यमंत्री निःशुल्क जांच योजना
राजकीय चिकित्सालय.....
SONOGRAPHY FOR FOETAL WELL BEING

Patient Name.....W/O.....Date.....
Age.....Sex.....Referred by Dr.....
OPD/Ward Unit.....Bed No.....

RADIOLOGY (रेडियोलॉजी)

LMP..... Edd.....
Uterus : Gravid / Non gravid
No. of Foetus : Single / Twin
Presentation : Cephalic/Breech/Transverse/Oblique
FHS.....
Foetal Movements.....
Placenta.....Grade.....
G.Sac.....mm.....Wk
CRL.....mm.....Wk
BPD.....mm.....Wk
FL.....mm.....Wk
AC.....mm.....Wk
HC.....mm.....Wk
Liquor.....
No obvious congenital abnormality detected.
Internal OS.....Diameter.....
Comporite EDD (By USG).....
Approx Foetal weight.....gms.

यहां भ्रूण का लिंग परीक्षण नहीं किया जाता है।
Disclosure of the sex of the foetus is prohibited under the law.

Date.....
Signature & Name MO/IC Radiology

मुख्यमंत्री निःशुल्क जांच योजना
राजकीय चिकित्सालय.....
INVESTIGATION REQUEST FORM

Patient Name.....Date.....
Age.....Sex.....Referred by Dr.....
OPD/Ward Unit.....Bed No.....

RADIOLOGY (रेडियोलॉजी)

S.No.	Name of tests
1	X-Ray - एक्स रे Body part..... View.....
2	USG - सोनोग्राफी <ul style="list-style-type: none"> Whole Abdomen Upper Abdomen Lower Abdomen KUB Pelvis Small Parts..... Foetal well being

Mention S.No. of The Advised Test
Signature & Name MO/Consultant

DISPLAY BOARDS –PATHOLOGY & RADIOLOGY



सेम्पल संग्रहण समय (MCH)	रिपोर्ट प्राप्ति समय (MCH)	एक्स-रे एवं सोनोग्राफी पंजीकरण समय
प्रातः 8:00 से 12:00 बजे तक ग्रीष्मकाल (1 अप्रैल से 30 सितम्बर) प्रातः 9:00 से 1:00 बजे तक शीतकाल (1 अक्टूबर से 31 मार्च)	सायं 5:00 से 8:00 बजे तक	प्रातः 8:00 से 12:00 बजे तक ग्रीष्मकाल (1 अप्रैल से 30 सितम्बर) प्रातः 9:00 से 1:00 बजे तक शीतकाल (1 अक्टूबर से 31 मार्च)
सेम्पल संग्रहण समय (DH/SDH/SH)	रिपोर्ट प्राप्ति समय (DH/SDH/SH)	एक्स-रे एवं सोनोग्राफी रिपोर्ट प्राप्ति समय
प्रातः 8:00 से 11:00 बजे तक ग्रीष्मकाल (1 अप्रैल से 30 सितम्बर) प्रातः 9:00 से 12:00 बजे तक शीतकाल (1 अक्टूबर से 31 मार्च)	दोपहर 2 बजे से सायं 6 बजे तक ग्रीष्मकाल (1 अप्रैल से 30 सितम्बर) दोपहर 3: बजे से सायं 6 बजे तक शीतकाल (1 अक्टूबर से 31 मार्च)	दोपहर 12:00 से 2:00 बजे तक ग्रीष्मकाल (1 अप्रैल से 30 सितम्बर) दोपहर 1:00 से 3:00 बजे तक शीतकाल (1 अक्टूबर से 31 मार्च)

सूचना (एक्स-रे)

- * एक्स-रे हानिकारक है, मरीज के साथ अनावश्यक प्रवेश न करें।
- * एक्स-रे अत्यधिक आवश्यकता होने पर ही करवायें।
- * एक्स-रे गर्भवती महिलायें व बच्चे कम से कम एवं अतिआवश्यक होने पर ही करवायें।
- * एक्स-रे करवाते समय सामान्य एवं सूती कपड़े पहनें 1 आभूषण व अन्य सामान उतार लें।

सूचना (सोनोग्राफी)

- * सोनोग्राफी जाँच ध्वनि तरंगों पर आधारित है, जो कि विकिरण सहित है।
 - * सोनोग्राफी जाँच गर्भवती महिलाओं व बच्चों के लिए हानिरहित है।
 - * पेट की सोनोग्राफी हेतु भूखे पेट व पेशाब रोक कर आना चाहिए।
 - * गर्भवती महिलाओं को सोनोग्राफी हेतु भूखे पेट आना आवश्यक नहीं है। प्रथम तीन माह तब ही पेशाब रोककर आना चाहिए।
- गर्भवती महिलाओं को सोनोग्राफी जाँच हेतु पहचान पत्र की प्रतिलिपि लाना आवश्यक है।

यहां भ्रूण का लिंग परिक्षण नहीं किया जाता है। यह कानूनन प्रतिबन्धित है तथा दण्डनीय अपराध है।

FOETAL SEX DETERMINATION IS NOT DONE HERE. THIS IS PROHIBITED UNDER LAW & A PUNISHABLE OFFENCE

CAUTION

X-RAY
RADIATION





Since April 2013 till 31.07.2017

Total number of Diagnostic Tests conducted

15,19,83,998

1.00 lac lab test per day

Total number of Beneficiaries

8,03,50,572

FINANCIAL OUTLAY - MNJY



(Rs. in crore)

S.No.	Financial year	Total allotted Amount	Expenditure (July2017)
1	2012-13	28.56	21.55
2	2013-14	107.09 (State Budget) 20.00 (NHM)	82.35 (State Budget) 20.00(NHM)
3	2014-15	83.84 (State Budget) 20.00 (NHM)	71.76 (State Budget) 20.00(NHM)
4	2015-16	87.94 (State Budget) 0.96(NHM)	81.86 (State Budget) 0.56 (NHM)
5	2016-17	93.30(State Budget) 5.60(NHM)	90.76(State Budget) 2.49(NHM)
6	2017-18	105.91 (State Budget) 27-00(NHM)	27.76(State Budget) 0.00(NHM)
	Total Amount	580.21	418.34

Role of Biomedical Engineers in MNJY Scheme



For strengthening of activities under MNJY
Three Biomedical Engineers are working at
Head Office of RMSCL, Jaipur and Seven
Biomedical Engineers for Seven Divisions in
the state of Rajasthan.



Role of BMEs (cont'd)



- Monitoring of up-dation of daily online investigation reporting (total nos. of investigations carried out under MNJY Scheme) from individual healthcare facilities upto PHC level in e-Aushadhi application.
- Online up-dation of inventory (Equipments & Instruments) including guarantee & maintenance contract of all the available equipments and equipment at the individual healthcare facilities upto PHC level.



- Resolution of technical issues related to software & guidance thereof.
- Monitoring & management of equipment Installation, demand & gap analysis.
- Monitoring & management of equipment, breakdown complaint / service & repair / preventive maintenance (PM) services.
- Training Program for Newly Installed Equipments.
- Quality assurance / calibration program for installed equipments.
- Inspection & Physical verifications of the supplied equipments.

e-Aushadhi – Capturing MNJY Data



- Provision for daily online investigation reporting from individual healthcare facilities upto PHC level in e-Aushadhi application.
- Non-reporting institutions informed on daily basis through sms message

e-Aushadhi
An Advanced Drug Warehouse Management System

Welcome, Pathology District Hospital Baran Dh Wednesday, 10-Dec-2014 14:54

DWH Services
 Services
 E M S
 Investigation
 Investigation Process
 Reports
 My Services

INVESTIGATION STATISTICS FORM

Investigation Statistics Form >> Modify

*Store Name: District Hospital Baran Dh *Laboratory Name: PATHOLOGY DE
 *Investigation Date: 10-Dec-2014 *Total No. of Patients Registered in Lab:

Test List(s)		
S. No.	Test Name	No. of Test
1	Hb-Hemoglobin	
2	TLC-Total Leukocyte Count	
3	DLC-Differential Leukocyte Count	
4	ESR-Erythrocytic Sedimentation Rate	
5	MP Slide method-Malaria Parasite Slide Method	
6	BT-Bleeding Time	
7	CT-Clotting Time	
8	CBC- Complete Blood Count	
9	PBF-Peripheral Blood Film	
10	TEC - Total Eosinophilic Count	
11	Blood group (ABO-RH Typing)	
12	Prothrombin time test INR	
13	Urine Complete	
14	Urine Microscopy	
15	Urine Pregnancy Test (UPT)	
16	Stool for OVA & CYST	
17	VDRL rapid test	
18	HIV rapid test	

ALERT DESK

Advantages of the Scheme



- Step towards “Right to Treatment” and thereby promoting Universal Health Coverage in the state.
- Decrease in out of pocket expenditure on health by decrease in expenditure being incurred on diagnostics.
- Optimal utilization of public health resources – credibility of healthcare services and healthcare providers is enhanced.
- Essential/Basic diagnostic services are available to the patients of the state.
- Health seeking behavior is promoted on account of increased access and affordability to treatment.
- Improvement in health indicators of the state is expected- as scheme will be helpful in early diagnosis and contribute to reduction in morbidity and mortality trends. IMR, Under 5 mortality rates and MMR are expected to come down.



Thanks