RMSCL—Central Procurement Agency
“Enhancing Access to Essential Medicines”

Dr. Kalpana Vyas
AGM-Logistics
RMSCL
Alma Ata, 1978

The International Conference on Primary Health Care calls for urgent action by all governments, all health and development workers, and the world community to protect and promote the health of all the people of the world by the year 2000.
Universal Health Coverage

UHC is firmly based on the WHO constitution of 1948 declaring health a fundamental human right and on the Health for All agenda set by the Alma Ata declaration in 1978.

World Health Assembly Resolution 58.33, 2005:
Urged countries to develop health financing systems to:
✓ Ensure all people have access to needed services
✓ Without the risk of financial ruin linked to paying for care

Defined this as achieving Universal Coverage: coverage with health services; with financial risk protection; for all

**Tenets of UHC**

- Prioritize the poor and vulnerable sections of society
- Increase financial risk protection through reliance on public funding
- Reduce, out of pocket expenditure at the point of service
- Increasing efficiency of health systems
Essential medicines

- Essential medicines are *those that satisfy the priority health care needs of the population.*
- They are selected with due regard to *public health relevance, evidence on efficacy and safety, and comparative cost-effectiveness.*
- Essential medicines are intended to be available *within the context of functioning health systems at all times in adequate amounts, in the appropriate dosage forms, with assured quality and adequate information, and at a price the individual and the community can afford.*
KEY FACTORS INFLUENCING ACCESS TO ESSENTIAL MEDICINES

In addition to general problems of health systems performance, four medicines-specific factors have to be in place to ensure that medicines are accessible to people whenever and wherever they are needed -

- **Rational medicines selection processes** should be in use, based on national or local essential drugs lists and treatment guidelines;
- **Prices should be at levels affordable** by governments, health care providers and consumers;
- **Fair and sustainable financing** for the medicines component of health care should be ensured through adequate funding levels and equitable prepayment mechanisms, such as government revenues or social health insurance, to ensure that poor people do not face proportionally higher costs than the better off; and
- **Finally, reliable health and supply systems** need to be in place, incorporating an efficient and locally-appropriate mix of public and private service providers.

Failure in any one of the above processes jeopardizes people’s access to medicines.
Some alarming facts

Issue of access to essential medicines is a big challenge being faced by our country –

• 65% of the Indian population lacks regular access to essential medicines. *(39 percent of the world’s population without access to medicines lives in India)*
• The expenditure on health is the *second most common cause for rural indebtedness*
• Over *23% of the sick don’t seek treatment* because they are *not having enough money* to spend.
• *Expenditure on medicines* constitutes about *70% of the total health care cost*.
• Over *40% of hospitalized patients* have to *borrow money or sell their assets to get themselves treated*.
• As a result of *single hospitalization 24% of people fall below poverty line in India*. 
Govt. Expenditure on Health

• The situation in India is exacerbated by the lack of public spending on health care and the resultant financial burden individuals must bear to pay for care.

• *The government of India spends around 1% of GDP on health, among the lowest levels of public spending in the world (Kumar et al. 2011).* (That figure has not changed significantly with government spending on health care rising to 1.3 percent of GDP according to the Economic Survey of India 2015-16.)

• In the absence of robust public spending, individuals have had to fill the gap with private expenditures accounting for some 78 percent of health spending (Kumar et al. 2011)
Access to medicines: still elusive to a large segment of India’s population

Despite India being referred to as “pharmacy of the global south” access to medicines is still elusive

Position of India Pharmaceutical Industry

In terms of volume - 3rd
In terms of value - 14th
In terms of generic production - 4th
In terms of export value - 17th
Key Barriers to Access to Medicines

1. Gross inadequacy of government spending on healthcare
2. Inefficient procurement systems
3. Inefficient medicine distribution mechanism
4. Unaffordable market prices
5. Irrational prescription and use of medicines
6. Tilt of market mainly towards branded drugs
Promotion of Non essential drugs

Doctor should act as FILTER

THAT'S ALL WE REALLY NEED

For the Patient

NON ESSENTIAL DRUGS

USELESS DRUGS

ESSENTIAL DRUGS
Implications of Unethical Promotion and Irrational Use of Drugs:
THE SUFFERING

1. MEDICINES BECOME UNAFFORDABLE
2. INAPPROPRIATE MEDICATION
3. RISK OF ADVERSE EFFECTS
4. RISK OF ANTIMICROBIAL RESISTANCE
5. TRANSMISSION OF DISEASES THROUGH UNSAFE INJECTIONS
6. DRAIN ON FOREIGN EXCHANGE
SOLUTION ???

- **Low Cost Generic Drugs**: Quality drugs at affordable prices.
- **Essential Drugs List (EDL)**
- **Standard Treatment Guidelines (STG)**
In Rajasthan, the journey towards “Enhancing Access to Essential Medicines” was started in year 2006 by making them available at cheaper prices through opening of –

- Medicine Stores operated by Co-operative department
- Life Line Drug Stores run by Medical Relief Society
• District Collectors tried at their own level to create the awareness among the masses to go for generic drugs. Uniform success was not noticed across the state. Sustenance of the supplies and sale at right prices was an issue.

• In 2010 Jan Aushadhi centres were opened to ensure supplies at the hospitals but they could not succeed and non-availability of drugs led to doctors, not prescribing it any more.

• So “Mission Generic drugs” faced a major setback.

• Doctors/pharmacy shops/company reps were all hands in gloves to make it non-functional.

In all, Generic drugs faced resistance

How to ensure generic drugs for all???.
Ensuring Availability of FREE GENERIC MEDICINES

CHALLENGE was really big and impossible

- 342,239 Sq. Km area
- 70 million population
- 33 Districts/249 blocks
- Approx. 17648 institutions
Way out – To purchase drugs by Generic name & Take price advantage of “Economies of Scale”

• Budget announcement for year 2011-12 talked of “Free Medicine Scheme” for all.

• Formalities were completed and the RMSCL was incorporated under the companies Act of 1956 as fully owned and managed enterprise of the state Govt on 4th May 2011.

• Certificate of Commencement of Business obtained on 13th June, 2011.

• Mukhyamantri Nishulk Dava Yojana was rolled out across the State on 2nd October, 2011.

• Political willingness towards generic drugs continued in the state even after the change of the government – budget allocation has been sustained.
Earlier Scenario – Pre MNDY

- Earlier the Stores Purchase Organization under the Medical and Health Directorate was doing the Rate Contract for Medicines, consumables, equipments and instruments. Out of these, the Rate Contracts of very few items use to get finalized.

- Facility of procurement was decentralized and the purchase orders were given by various Department Heads and purchase officers (PMO/CMHO/CHC in-charge etc)

- Due to lengthy processes in the Rate Contracts, more time, efforts and money were spent as there was no standard procedure for procurement. Lack of transparency in procurement and payments.

- The facility of logistics and distribution was not inbuilt in the system.

- There was a need for computerized inventory management and setting up of Quality Control System.

- There were gaps in the system in assessing the medicine requirement.

- Lack of clearly defined criteria for selection of vendors.

- Lack of accountability at various levels of supply chain Management.
RMSC - Autonomous Centralized Procurement Agency

RAJASTHAN MEDICAL SERVICES CORPORATION – MAY 2011

Procurement Cell
Supply Cell
Logistic Cell
Quality Control Cell
IT Cell
Finance Cell
Equipment Procurement & Maintenance Cell
RMSC Work Flow

**Annual Demand**
- Annual demand received from M&H Dept. and ME Dept

**HeadQuarters**
- Contract signed b/w Suppliers and HQ

**Rate Contract**
- A purchase order is generated for DDWH as consignee

**PO Generation (drug-wise)**
- Sample sent to HQ for Quality assurance
  - Approval from HQ Laboratory

**PO Received**
- A purchase order is generated for DDWH as consignee

**Supplier**
- Challan Generation and Drug send to DDWH

**Drug Received**
- Drug is ready for issue
Work Flow ........(cont’d)

Indent for Issue
Sub-store
DH
SDH
CHC
PHC
Medical College
others

Receive after approval

Drugs Issued to DDC

Drug distribution Centre
Drugs distributed to patients

Final Consumption by Patient

34 District Drug Warehouses
6 Medical College Drug Warehouses

Manpower at DDW/MCDW
Officer in-charge-DDW
2 Pharmacists
2-3 Informatics Assistants
Helpers – need based
Security person – need based
# Essential Medicines List

## Provision of Drugs/Surgical and Sutures

<table>
<thead>
<tr>
<th>Category of Healthcare Institutions</th>
<th>Numbers based on level of care</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Medicines</td>
<td>Surgical Items</td>
</tr>
<tr>
<td>Medical College Hospitals</td>
<td>605</td>
<td>146</td>
</tr>
<tr>
<td>District / Sub-dist / Satellite Hospitals</td>
<td>525</td>
<td>141</td>
</tr>
<tr>
<td>CHCs</td>
<td>446</td>
<td>110</td>
</tr>
<tr>
<td>PHCs/Dispensaries</td>
<td>242</td>
<td>72</td>
</tr>
<tr>
<td>Sub Centers</td>
<td>33</td>
<td>10</td>
</tr>
</tbody>
</table>
## Institutions of M&H and ME Dept. covered under MNDY

<table>
<thead>
<tr>
<th>S. No</th>
<th>Type of Institutions</th>
<th>No. of Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Medical College Hospitals</td>
<td>28</td>
</tr>
<tr>
<td>2</td>
<td>District hospitals</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Satellite Hospitals</td>
<td>60</td>
</tr>
<tr>
<td>4</td>
<td>Sub-Divisional Hospitals</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>CHCs</td>
<td>571</td>
</tr>
<tr>
<td>6</td>
<td>PHCs</td>
<td>2211</td>
</tr>
<tr>
<td>7</td>
<td>UPHCs + Dispensaries</td>
<td>245</td>
</tr>
<tr>
<td>8</td>
<td>Sub Centers</td>
<td>14408</td>
</tr>
<tr>
<td>9</td>
<td>MCWC</td>
<td>118</td>
</tr>
<tr>
<td>10</td>
<td>Mobile surgical units</td>
<td>7</td>
</tr>
</tbody>
</table>

### NHM Procurement

Due to procurement through RMSC, the budget utilization from PIP on various drugs/sanitary napkins/sutures/Asha kit and Equipments for different activities and projects has been encouraging.

Approximately 17648 institutions in total
### Other Institutions/NGOs/Trusts Benefitted

<table>
<thead>
<tr>
<th>S.N</th>
<th>Type of Institutions</th>
<th>S. N</th>
<th>Type of Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Law enforcement agencies</strong></td>
<td></td>
<td><strong>Private Hospital</strong></td>
</tr>
<tr>
<td>1</td>
<td>Jail Dispensary</td>
<td>1</td>
<td>Mahesh Hospital Jaipur</td>
</tr>
<tr>
<td>2</td>
<td>RAC battalion</td>
<td></td>
<td><strong>NGOs/Trusts</strong></td>
</tr>
<tr>
<td>3</td>
<td>Police dispensaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>1</td>
<td>Acharya Shri Nanesh SVT, Chittorgarh</td>
</tr>
<tr>
<td></td>
<td><strong>Others</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>ICDS – Anganwadi</td>
<td>2</td>
<td>Kuhad trust, Jaipur</td>
</tr>
<tr>
<td>2</td>
<td>School Education Department</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>NVBDCP</td>
<td>3</td>
<td>Ma Madhuri Brij Waris Seva Sadan, Apna ghar, Bharatpur</td>
</tr>
<tr>
<td>4</td>
<td>Rajasthan State Mines &amp; Minerals Ltd.</td>
<td>4</td>
<td>Kota Super Thermal Power Station</td>
</tr>
<tr>
<td>5</td>
<td>Rajasthan University</td>
<td>5</td>
<td>Indian Asthma Care Society, Jaipur</td>
</tr>
<tr>
<td>6</td>
<td>Sambhar Salts</td>
<td>6</td>
<td>WISH Foundation</td>
</tr>
<tr>
<td>7</td>
<td>NREGA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Election Department</td>
<td></td>
<td></td>
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</tbody>
</table>
## Price Comparison - Generic V/s Branded
(As on 12.7.2017)

<table>
<thead>
<tr>
<th>USE</th>
<th>NAME OF DRUG</th>
<th>PACK SIZE</th>
<th>EQUIVALENT POPULAR BRAND</th>
<th>MRP (RS.)</th>
<th>RMSC TENDER PRICE (IN RS.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANALGESIC</td>
<td>DICLOFENAC SODIUM TABLET IP 50 MG</td>
<td>10 TAB STRIP</td>
<td>VOVERAN</td>
<td>18.58</td>
<td>1.41</td>
</tr>
<tr>
<td>CHOLESTEROL LOWERING</td>
<td>ATORVASTATIN TABLET IP 10 MG</td>
<td>10 TAB STRIP</td>
<td>ATORVA (ZYDUS)</td>
<td>54.50</td>
<td>2.56</td>
</tr>
<tr>
<td>BLOOD THINNING DRUG</td>
<td>CLOPIDOGREL TABLET IP 75 MG</td>
<td>14 TAB STRIP</td>
<td>PLAVIX (SANOFI AVENTIS)</td>
<td>94.66</td>
<td>5.38 (10 Tab)</td>
</tr>
<tr>
<td>DIABETES</td>
<td>GLIMEPIRIDE TABLET IP 2 MG</td>
<td>10 TAB STRIP</td>
<td>AMARYL (AVENTIS)</td>
<td>56.60</td>
<td>1.17</td>
</tr>
<tr>
<td>ANTI-CANCER</td>
<td>PACLITAXEL 260 MG</td>
<td>VIAL</td>
<td>MITOTAX (Dr. Reddy’s)</td>
<td>10119.00 (250 mg)</td>
<td>637.70</td>
</tr>
</tbody>
</table>

AND MANY MORE ..................
??Acceptance of drugs with brand name

In case of:

- Imported drugs.
- Non-availability of Generic drug.
- Risk purchase through limited tender.
## FUNDS – RECEIVED AND UTILIZED (As on 22.8.2017)

<table>
<thead>
<tr>
<th>F.Y</th>
<th>Budget Received (Rs. in Crores)</th>
<th>Budget Utilized</th>
</tr>
</thead>
</table>
| 2014-15   | • Budget Provision: 295.00 **Revised Provision: 185.00**  
            • State Plan: 185.00  
            • NRHM-MNDY Drugs: 186.83  
            • Others (Police, RAC, Jail, Sambhar salts, KTPS, RSMML, ICDS etc.): 2.36  
            **Total Received: 374.19** | 155.91  
            |                                                                                               | 157.58          | 313.49          |
| 2015-16   | • Budget Provision: 280.00 **Revised Provision: 274.00**  
            • State Plan: 274.00  
            • NRHM-MNDY Drugs: 173.29  
            • Others (Police, RAC, Jail, Sambhar salts, KTPS, RSMML, ICDS etc.): 1.84  
            **Total Received: 449.13** | 251.70  
            |                                                                                               | 135.03          | 386.73          |
| 2016-17   | • Budget Provision: 280.00 **Revised Provision: 210.00**  
            • State Plan: 210.00  
            • NRHM-MNDY Drugs: 164.43  
            • Others: (Police, RAC, Jail, Sambhar salts, KTPS, RSMML, ICDS etc.) 3.31  
            **Total Received: 377.74** | 278.54  
            |                                                                                               | 168.43          | 446.97          |
| 2017-18   | • Budget Provision: 310.00  
            • State Plan: 70.00  
            • NRHM-MNDY Drugs: 57.11  
            • Others: (Police, RAC, Jail, Sambhar salts, KTPS, RSMML, ICDS etc.) 0.55  
            **Total Received: 127.66** | 175.70  
| (Upto 30th June 2017) |                                                                                               | 27.69*          | 203.39          |

*UC is under process*
UNIQUE FEATURES OF MNDY

SAVING LIVES
FREE MEDICINES FOR ALL
(A dream transformed into reality)
Policy entitlement - Universal in nature

Policy entitlement

Essential medicines free of cost to all patients visiting public healthcare institutions

Universal in nature

Entitles the entire 7 Crore population of the state No BPL card, Ration card, ID proof required

So that there is NO BARRIER TO ACCESS TO TREATMENT
Prescription by Generic name

Self Carbonated Prescription Slips by RMSC under CSR

• Medicines routinely prescribed for 3 days and in acute cases permitted up-to 7 days
• For chronic patients of HT/DM/Anemia/long standing disorders can be prescribed for up-to 1 month

As an initiative by the Dept, the prescription slip now also carries message regarding Bhamashah Health Insurance Scheme.
Essential Drug List & Standard Treatment Guidelines

Essential Drug List
• Developed by Technical Advisory Committee after detailed discussions and deliberations with subject experts.
• Based upon WHO and National List of Essential Medicines using explicit, previously agreed criteria, based on efficacy, safety, quality, and cost-effectiveness
• Incorporates generic name of medicine, levels of care and further differentiates drugs to be used in OPD, IPD, Operation Theatre, Injection room, Labour room.
• EDL 2013 comprised of 607 medicines, 73 surgical and 77 suture items.
• Upgraded to 612 medicines in 2014 by addition of 4 Swine Flu medicines & Vit K1 injection in October 2014
• After deletion of some obsolete medicines and addition of some new medicines EDL 2015 comprises of 603 medicines, 137 surgical and 77 suture items.
• Category changed recently for-
  ➢ Tab Mifepristone from DH to PHC (MMA)
  ➢ Inj. Iron Sucrose from CHC to PHC (Anemia management)
  ➢ Inj. Mag. Sulphate from CHC to Sub-Centre (Management of Pre-eclampsia & Eclampsia cases)

Standard Treatment Guidelines
• Standard Treatment Guidelines (STG's) is an important tool for providing the most appropriate treatment through a list of essential medicines, complimented by a list of additional drugs when needed.
• Developed by the Delhi Society for promotion of Rational use of Drugs (DSPRUD) under RHSDP in 2006.
• Revised in 2012 by the Expert committee constituted by the Government comprising of clinical experts from various specialization and DSPRUD.
• Provided to all doctors across the state.
Set up of requisite /unique infrastructure at HC Institutions

DDCs established based on OPD and IPD load of each institution:
Each DDC@ Rs 2.25 lacs

Infrastructure:
- Shelves/Racks
- Refrigerator
- Computer with printer.
- Stationary.

Total Number of DDCs: 15169

All DDCs operate during OPD hours and for IPD/Emergency/Casualty patients 24X7 availability of medicines is ensured by the medical officer in-charge through identified DDCs.
Role of Pharmacist and DEO at the DDC

Each Drug Distribution Centre is managed by a pharmacist who is responsible for:

1. Smooth transaction of medicines at respective DDCs of institutions.
2. Ensuring continuity of medicines by replenishment from Sub-store on a daily basis.
3. Proper storage of medicines as per issued guidelines.
4. Counselling of patients.
5. Informing doctors of drug availability at DDCs on a daily basis.

The Data Entry Operator at the DDC:
- captures the medicine transactions in e-Aushadhi software and
- issues voucher to all patients.
Prescription Record at DDC

• Records for all prescriptions are being maintained at the DDC as RMSC has provisioned for duplicate prescription slips.

• The pharmacist at the DDC takes the signatures of the recipient, issues the medicines and returns the original prescription slip, while retaining the duplicate slip (for a period of 6 months).

• These duplicate slips are provided to the medical officer in-charge, 1% of these are subjected to “Prescription Audit” by the Drug & Therapeutic Committees constituted at the institutional level.
Injectables (except Insulins) are not to be issued from Outdoor DDCs and should be kept exclusively for IPD patients.
Sensitization & Orientation of the Prescribers

FDA ENGAGED IN CREATING AWARENESS, THAT -
1. Generic has same quality /performance
2. Average cost of Generic Vs its Brand-name counterpart is 80-85% less
3. The lower price doesn’t mean inferior
4. Monitors adverse events reports for generic drugs
Constitution of Drug & Therapeutics Committee & Prescription Audit

Drug & Therapeutic Committee’s –

- Facilitate tremendously in curtailing inappropriate drug use;
- Reduce drug expenditures and
- Increase availability and accessibility to essential medicines thus optimizing the value of government funds.
- Supervision in form of "Prescription audit“ (1% of total OPD+IPD) and feedback which consists of - (1) analyzing prescription appropriateness and (2) giving feedback - prescribers are informed of their prescribing compared with accepted guidelines or with that of their peers.

The defaulters are dealt with as follows –

**Step 1** - Counselling by Unit head & DTC members

**Step 2** - Written advice by Supdt./ PMO/MOIc/CM&HO with copy to the dept.

**Step 3** - Case may be referred to Principal Secretary M&H / M.E Dept. for disciplinary action.
Appointment & Training - Pharmacists and Informatics Assistants

About 1400 Pharmacists recruited

Orientation & training of Pharmacists

About 3200 Informatics assistant recruited
Effective Complaint & Feedback system

24x7 Complaint /Enquiry Number
• To resolve the complaint related to availability of drugs.
• To take necessary action according to feedback

91 66 00 55 00
“Not available (NA Hit)” drug reporting system

NA Hit Report:
• Every transaction of drug issued to patients is recorded in e-Aushadhi software.
• Information on prescription like name, age, sex, diagnosis, name & quantity of drugs, duration etc.  
• During this not available “NA” drugs are also recorded.

The Supply Cell monitors these NA reports daily and coordinates between DDW, Sub-store and DDCs to make drug available from DDW to sub-store and DDC .
It also co-ordinates with supplier to expedite the supplies if in pipeline or issues a fresh purchase order if required.

SMS based daily monitoring and feedback system

About 7500 govt. doctors of the state receive SMS everyday after OPD hours –
• contains the number of patient he/she has attended and
• number of available/not available drugs.

Likewise each Officer in-charge – DDW /MCDW CMHO, PMO, MS, Principal Medical College receives message regularly about number of patients served, NA Hits, Near Expiry drugs etc.
Monitoring of “Near expiry” & “Danger zone” drugs

- Tracking of near expiry medicines is one of the best outcomes of online inventory management system.
- Near expiry drugs are arbitrarily classified into two major categories:
  - **Near expiry drugs**: The drugs which are about to expire within next 180 days (6 months).
  - **Danger zone drugs**: The drugs which are about to expire within next 60 days (2 months).
- Monitored closely by supply cell of RMSC which then informs Medical Superintendents, PMOs, CMHOs and OIC DDWs about the above so that the drugs may be consumed within their shelf life period.

Slow moving & Short drug management

- **Slow moving (Excess drugs)**: The stock of the drug at DDW exceeds the requirement for the next one year i.e more than the annual consumption.
  - Shift to another DDW
  - OR
  - “Sensitize doctors for consumption of the excess/slow moving drugs
- **Short drugs**: The stock which is not sufficient for 4 months at DDW keeping in view the estimated demand of that drug for 4 months.
  - Shift from another DDW
  - Sensitize doctors for the alternative prescription
  - **“Not available certificate”** issued by DDW to the respective hospitals so that short drugs are made available through Local Purchase (10% additional budget allotted to each institute for local purchase)
e-Aushadhi Software for Inventory management

- **Complete Supply Chain Management Solution** for drugs, surgical items and sutures, developed by CDAC.
- Provides inventory management at all DDWs and at sub stores / DDCs of Medical college hospitals, District Hospitals, CHCs and PHCs.
- Implemented across 4397 locations (including DDCs) across the state.
- Provides detailed information from the stage of procurement of the drug to its consumption by the end users.

**Key Features of e-Aushadhi**

- Facilitates online annual demand submission
- Online purchase order generation to suppliers
- Provision to maintain expiry date/shelf life
- Provides details of Quality control
- Ability to track drug inventory online
- Ability to generate customized reports
- Facilitates inter warehouse transfer of drugs
- Alert generation in different colours for expired drugs, re-order level
- Maintains daily stock ledger of drugs

RMSC was awarded the e-Governance award for e-Aushadhi application on 12th Feb 2013 in 16th National e-Governance Conference

The e-Aushadhi application has been replicated at the CMSS and various states across the country with requisite customization
General Features of MNDY

1. Procurement
2. Quality control
3. Logistic & Storage
4. Supply chain management
Procurement Criteria
A two-bid open transparent tendering process at RMSC

- Only manufacturer / Importer can participate.
- Annual turnover more than Rs 20 Cr in last 03 financial years
- WHO GMP Certificate mandatory
- 3 years market standing for the product. Bidder should also have manufactured at least three commercial batches of the quoted drug every year in the last 3 years
- Firm or product should not be blacklisted/debarred/convicted.
- Participation in e-procurement is mandatory.

Information of rate contract (RC), tender conditions, supplier contact details etc. are available on website - www.rmsc.health.rajasthan.gov.in
## Rate Contract Status – Medicines
(As on 28.8.2017)

<table>
<thead>
<tr>
<th>S. No</th>
<th>Particulars</th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A)</td>
<td>Total Number of Drugs in EDL</td>
<td>605</td>
</tr>
<tr>
<td>(B)</td>
<td>Status of Rate Contract availability, including Letter of Acceptance</td>
<td>562</td>
</tr>
<tr>
<td>(C)</td>
<td>Remaining items (RC not available)</td>
<td>43</td>
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<tr>
<td>(i)</td>
<td>Agenda in TAC</td>
<td>03</td>
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<tr>
<td>(ii)</td>
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<tr>
<td>(iii)</td>
<td>Demand not received</td>
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<tr>
<td>(iv)</td>
<td>Tender to be floated</td>
<td>03</td>
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</table>
## Rate Contract Status – Surgical & Sutures (As on 28.8.2017)

<table>
<thead>
<tr>
<th>S. No</th>
<th>Particulars</th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A)</td>
<td>Total Number of Surgical and Sutures in EDL</td>
<td>223</td>
</tr>
<tr>
<td>(B)</td>
<td>Status of Rate Contract availability, including Letter of Acceptance</td>
<td>159</td>
</tr>
<tr>
<td>(C)</td>
<td>Remaining items (RC not available)</td>
<td>64</td>
</tr>
<tr>
<td>(i)</td>
<td>Tender under process</td>
<td>49</td>
</tr>
<tr>
<td>(ii)</td>
<td>Tender under process</td>
<td>01</td>
</tr>
<tr>
<td>(iii)</td>
<td>New Tender will be floated</td>
<td>14</td>
</tr>
</tbody>
</table>
Quality control - Three Step quality checking system

1. **Check at procurement level** – Strict parameters for selection of reputed supplier companies.

2. **Check at supply level** – Acceptance of drugs only with QC passed batch release certificate (Certificate of Acceptance)

3. **Check at issue level** – Pre-release quality assurance
   - Stock quarantined
   - Samples sent to QC cell
   - Retesting of all batches of drugs in Govt. approved empanelled labs.
Reassurance of Quality prior to Release of Medicines

**QUALITY TESTING AT RMSC**

Drug receipt at DDW

Medicines shifted from Quarantine Area to Main Storage Area of DDW / MCDW

Medicines issued to Healthcare Institutions

**Sampling**

Samples Sent To RMSC Hqtrs

End Users

Decoding of Tested Samples

Test Report

Tested for Quality Parameters
1. Identity
2. Purity
3. Strength

Coded Samples sent to Empanelled Laboratories

Coding

Concealing Identity

Pooling of common batches

Sorting

**QUALITY CONTROL**

Passed Inspection

Test Report
QUALITY CONTROL TEST REPORTS: YEAR–WISE STATUS
(As on 28.8.2017)

<table>
<thead>
<tr>
<th>S. No</th>
<th>Financial Year</th>
<th>Total Reports Received</th>
<th>No. of Failed Reports (1st Testing &amp; Retesting)</th>
<th>Failure %</th>
<th>No. of Passed Reports (1st Testing &amp; Retesting)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>2011-12</td>
<td>4429</td>
<td>55</td>
<td>1.24</td>
<td>4374</td>
</tr>
<tr>
<td>2.</td>
<td>2012-13</td>
<td>7036</td>
<td>313</td>
<td>4.44</td>
<td>6723</td>
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<tr>
<td>3.</td>
<td>2013-14</td>
<td>9394</td>
<td>351</td>
<td>3.73</td>
<td>9043</td>
</tr>
<tr>
<td>4.</td>
<td>2014-15</td>
<td>9835</td>
<td>249</td>
<td>2.53</td>
<td>9586</td>
</tr>
<tr>
<td>5.</td>
<td>2015 -16</td>
<td>11402</td>
<td>205</td>
<td>1.79</td>
<td>11197</td>
</tr>
<tr>
<td>6.</td>
<td>2016-17</td>
<td>9895</td>
<td>345</td>
<td>3.48</td>
<td>9550</td>
</tr>
<tr>
<td>7.</td>
<td>1.1.2017-23.8.2017</td>
<td>4665</td>
<td>130</td>
<td>2.79</td>
<td>4535</td>
</tr>
</tbody>
</table>

**Number of Empanelled Laboratories** – 2 Private + 2 Government
1. Oasis Test House Ltd. Jaipur
2. Amol Pharmaceuticals Pvt. Ltd. (Analytical Division)

1. National Institute of Biologicals, Noida
2. Central Drugs Laboratory, Kasauli

**Since Inception:**
Firms debarred /blacklisted /banned by Disciplinary Committee – 19
Products debarred by Disciplinary Committee – 83
Storage & Logistics Management-Warehouse in Districts & Medical College

34 DDWs/6 MCDWs

Warehouse Storage & Issuance of Medicines

QUARANTINE AREA
RESTRICTED ACCESS

FeFo
Maintaining Cold Chain at DDWs/MCDWs

Walk in Cooler (WIC) for storing Medicines / Inj / Vaccines requiring temperatures 2-8 degree Celsius

DEEP FREEZER for Ice-packs

ILRs for Back-up
System for transportation of drugs

- Own Vehicles.
- Hired Vehicles.

Cold chain maintained using:
- Cold box
- Ice packs
# IMPACT

## INCREASE IN NUMBER OF PATIENTS IN GOVT. INSTITUTES

<table>
<thead>
<tr>
<th>Year</th>
<th>Beneficiaries (in Crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-12</td>
<td>3.78</td>
</tr>
<tr>
<td>2012-13</td>
<td>6.59</td>
</tr>
<tr>
<td>2013-14</td>
<td>5.81</td>
</tr>
<tr>
<td>2014-15</td>
<td>8.23</td>
</tr>
<tr>
<td>2015-16</td>
<td>9.31</td>
</tr>
<tr>
<td>2016-17</td>
<td>10.33</td>
</tr>
</tbody>
</table>

**Note:**
1. No. of beneficiaries from Jan-Jun 2014 includes Medical College Hospitals
2. From July 2014 onwards the figure is without data of Medical College Hospitals

**Source:**
- From Jan to June 2014 – RMSC&SMS Hospital, Jaipur.
- From July 2014 onwards on the basis of information received from CM&HOs and PMOs at MNDY Cell, DM&HS
IMPACT

SMILING PATIENTS & THOUSANDS OF LIVES SAVED
Role Model for States/Countries and Agencies

Other Team Visits

- BPPI, Gurgaon
- Deloitte, Delhi
- NGO (United Multipurpose Club), Assam, Guwahati
- North Korea Team of Govt. Officials
- Nepal –Centre for Labour and Social Studies
- UNFPA
- WHO & PHFI Team
- USAID
- Grp-B Officers of Central Secretariat Services from Institute of Secretariat Training and Management, Department of Personnel & Training, GoI
- Open Society Foundation
- Students from Indian Universities and Tufft’s University, USA
- Medicines Procurement Department, Nepal Govt.
Timely Procurement of Capsule Oseltamivir in 2014 Handholding Support to States for managing Swine Flu

- 30,000 Cap. of Oseltamivir 30mg supplied to Govt. of Kerala for managing Swine flu outbreak in the State.
- 10,000 Cap. of Oseltamivir 30mg and 5000 Cap. of 75 mg supplied to Govt. of Madhya Pradesh to address shortage.
- 25,000 Cap. of Oseltamivir 30 mg provided to Uttar Pradesh.
- 2000 Cap. Of Oseltamivir 75 mg and 30 mg each supplied to Jammu & Kashmir.
Evaluation by Development Partners/NGOs


3. Photo documentation of RMSC HQ & MNDY by Prayas (students from India & Tufts University, USA) conducted in 05 districts: Bikaner, Banswara, Chittorgarh, Jaipur & Udaipur (report awaited)
Study description

• In total **157 healthcare facilities** sampled of which **112 were public**(various levels) and **45 were private** facilities across **10 districts** of the state

• **160 medicines under different therapeutic category from EDL** were identified and segregated based on availability of such drugs at different levels of care

• Data from a random sample of prescription slips were captured on the day of the facility visit (roughly 20-30 slips per facility) for **prescription audit**
Study findings

- **Reduction in Out of Pocket Expenditure (OOP)** and increased per capita health expenditure: the per capita health expenditure before the free-MNDY scheme was estimated to be Rs. 5.70 which now stands close to Rs. 50.

- **Increased Utilization of Public Health facilities:** Another positive spin-offs from this initiative is the rapid increase in outpatient visits and considerable increase in inpatient admissions.

- **Decreased Absenteeism:** as medicines are available free now, absenteeism appears to have reduced considerably, putting pressure on the health system infrastructure to improve further.

- **Ensured Availability of Medicines**

- **Positive influence on prescription/dispensing patterns**

- **Sound Quality Assurance System**

- **Efficient Procurement Processes and Fair Procurement Prices at RMSC**

- **Robust e-Aushadhi Application Software**
Vital role of Drug Prescription in health-care delivery

During the survey analysis two parameters were estimated:
1. Average number of medicines prescribed per encounter
2. Proportion of generics, antibiotics, injections, fixed drug combinations and syrups prescribed.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Quantity/Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average no. of medicines per encounter (prescription slip)</td>
<td>3.29</td>
</tr>
<tr>
<td><strong>Percentage of medicines prescribed by Generic name</strong></td>
<td><strong>98.29</strong></td>
</tr>
<tr>
<td>Percentage of Antibiotics prescribed</td>
<td>28.9</td>
</tr>
<tr>
<td>Percentage of Injections prescribed</td>
<td>7.1</td>
</tr>
<tr>
<td>Percentage of Prescription slips with Syrup prescribed</td>
<td>9.3</td>
</tr>
<tr>
<td>Percentage of Prescription slips with Vitamins prescribed</td>
<td>3</td>
</tr>
<tr>
<td>Percentage of single drugs prescribed as against fixed drugs</td>
<td>89.02</td>
</tr>
</tbody>
</table>
MNDY…. towards Universal Health Coverage

• Step towards “Right to Treatment” and thereby *promoting Universal Health Coverage* in the state.

• Aims to reduce *Out of pocket expenditure* by decrease in expenditure being incurred on medicines.

• *Health seeking behavior* is *promoted* on account of increased access and affordability to treatment.

• *Optimal utilization of public health resources* – credibility of healthcare services and healthcare providers is enhanced.

• *Improvement in health indicators of the state* is expected- as scheme will aid in early treatment and contribute to reduction in morbidity and mortality trends. IMR, Under 5 mortality rates and MMR are expected to come down.
Challenges of the Journey so far

- Population- 70 million population - longer waiting times (Increase in both OPD IPD patients after MNDY/MNJY schemes)
- Cold chain maintenance (in summer temp rises upto 51°C)
- High patient load in tertiary care centers & shortage of Doctors / Pharmacists/Data Entry Operators.
- Timely Procurement
- Inventory Management
- Quality
- Issues related to pilferage, breakage, deterioration, drugs becoming obsolete etc, leading to adverse media reports at times
- Issue of Drug Expiry
- Incidents of Stock-outs
- Failure to generate realistic annual demand and non submission of timely indent.
- Unforeseen epidemics of swine flu, malaria, dengue, Chickenguinia, scrub typhus, etc
We have covered a long journey towards free-drug scheme for the common man, aiming at UHC

But
We have a long way to go.......

But
We have a long way to go..........
RMSC motto

All essential medicines
At all public health institutions
At all times
so that

No human being dies for want of treatment
a candle loses nothing by lighting other candles
Thankyou!