

Innovative software solution to fast track maternal death review (MDR) - Lessons from India -

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Acknowledgements

- ✦ **Government of India MOHFW**
 - ✦ **NRHM, NHM, Maternal Health Division**
 - ✦ **National Informatics Cell**
 - ✦ **Statistics Division**
- ✦ **GMNHC 2015**
- ✦ **The Federation of Obstetric and Gynaecological Societies of India (FOGSI)**
- ✦ **Cognic Systems**
- ✦ **International Federation of Gynecology and Obstetric – Leadership in Obstetric and Gynecology for Impact and Change (FIGO – LOGIC)**

India

- ✦ **World's Largest Democracy**
- ✦ **1.27 Billion + population (estimated), 17.5% of world Population**
- ✦ **29 States, 7 Union Territories, 675 Districts**
- ✦ **GDP Growth Forecast 7.5% in 2015 (Higher than World growth of 2.8%)**
- ✦ **22+ Languages, 763 Pvt. Television Channels (385 news channels), 99,660 registered publications, 980 mio Mobile Subscribers, Digital India initiative, 108 mio Broadband Users** TRAI (Press Release No. 47/2015)
- ✦ **25% people between ages of 18-25 (approx), 65% below 35 yrs**

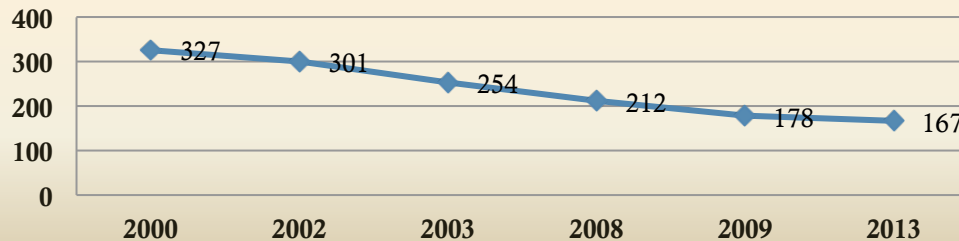
Maternal Health – India

27 mio women deliver per year

15 % develop complications, resulting in 44,000 maternal deaths/ year

MMR is 167/1,00,000 LB (MMR Bulletin 2011-13)

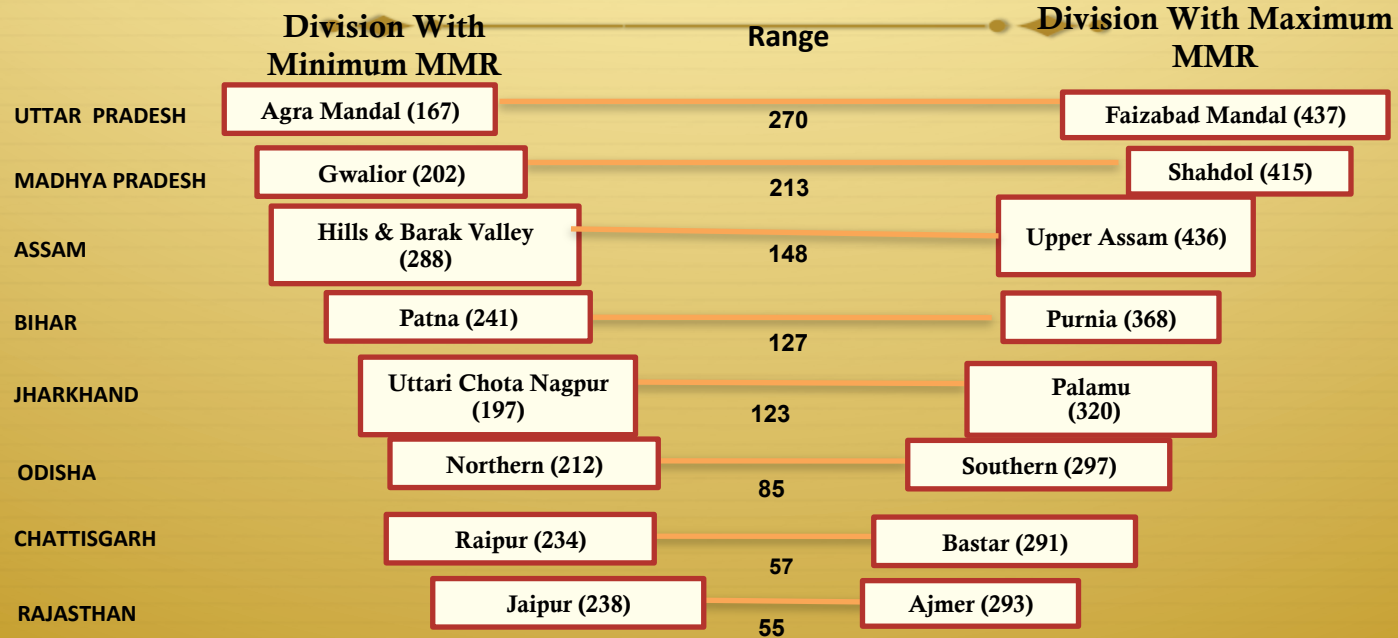
Decline in Maternal Mortality Ratio



SRS 2001/04/07, MMR Bulletin 2010-12,2011-13

MMR Reduction Goals - MDG 5 - 150 by 2015 and 12th plan - 100 by 2017

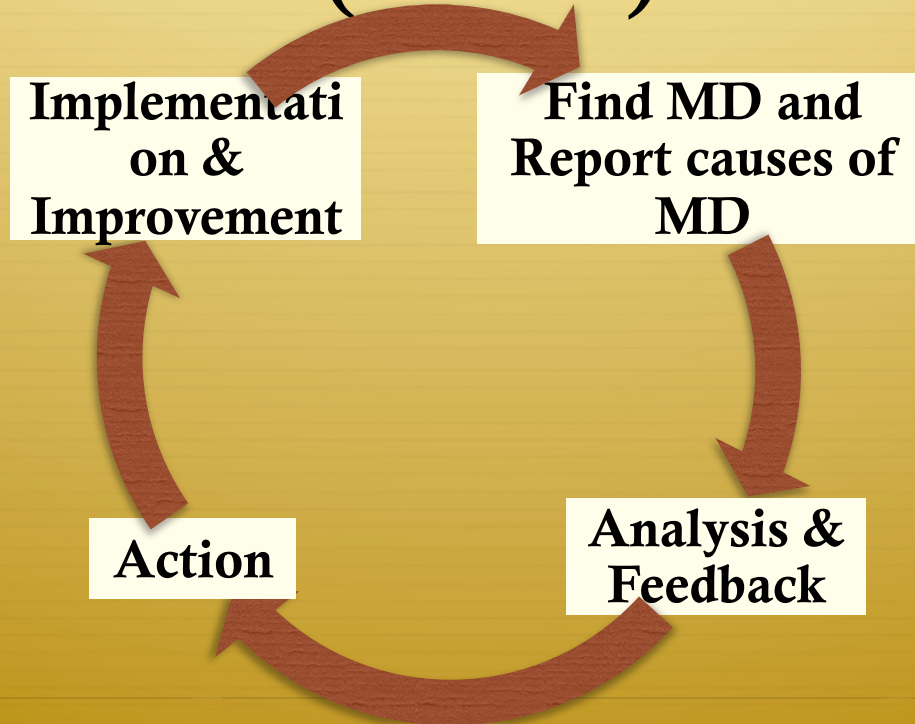
State averages mask wide intrastate disparities



Maternal Death Reviews - India

- ✦ **Launched in 2010**
- ✦ **Facility Based Reviews**
- ✦ **Community Based Reviews**
- ✦ **Incorporates Surveillance and Reporting Components**

Maternal Death Reviews (MDR)



MDR Software Launched

Reporting tools capture information on several items on each maternal death case (**Quick Analysis across Large database**)

Many Formats (FB - 8 pages, CB – 15 pages)

Repetition of information across the formats managed

Paper based Data is digitized

**Timely Analysis/Reporting/Action/Surveillance/
Programmatic Interventions**

Development and deployment of
Software is KEY

MDR Software.....Process

Expert Group Meetings

MDR Software Tools developed

Tools synchronised with MDR Guidelines Tools

Software Compatibility with NIC Specifications

Integration of Software with MCTS through the Mother ID

Completion of Security Audit

Testing of software with State Data on maternal deaths

MDR software is ready, deployed on the NIC server

&

Software website link is

www.nrhm-mdr.nic.in

Software Highlights

- **Linked to MCTS database**
- **User Name/Password linked - State/District**
- **Pre-defined level of access**
- **User Interface similar to paper formats**
- **Format dependencies (Only after filling the key formats will the other formats get activated)**

Software Highlights

- **Key Compulsory Fields**
- **Repetition is AUTO filled**
- **Drop down menu's to ensure uniformity**
- **Auto Save every page**
- **Training Dummy Site**
- **Multiple choice parameter for reports**

PROGRESS as on 30/9/15

NUMBER OF PERSONNEL TRAINED, MATERNAL DEATHS REPORTED AND DATA ENTRY COMPLETED

SR No.	STATES	COMMUNITY FORM	FACILITY FORM	NUMBER OF PERSONNEL TRAINED
1	ANDHRA PRADESH	1253	420	257
2	ASSAM	616	222	240
3	BIHAR	157	0	25
4	MP	568	349	883
5	MAHARASHTRA	510	669	413
6	GUJARAT	0	0	38
7	RAJASTHAN	29	8	60
8	CHATTISGARH	11	2	42
9	TELANGANA	182	115	148
10	ARUNACHAL PRADESH	0	0	16
	TOTAL	3326	1785	2122

Open MDR Link on
NIC

Login with Secure Name/Password
Page Opens to Allow Data Feeding

Select FB or CB case and Feed MOTHER ID of MCTS to commence data
feeding

FBMDR

CBMDR

ANNEX 1

(Data Feeding For the Registered
Pregnant Mother is facilitated)

ANNEX 4

(Data Feeding For the Registered
Pregnant Mother is facilitated)

ANNEX 6

(Auto Fill from Data fed in Annex 1)

ANNEX 2

(Auto Fill from Data
fed in Annex 4)

ANNEX 3

(Auto Fill from Data fed in
Annex 4 & 2)

ANNEX 5

(Auto Fill from Data fed
in Annex 4,2 & 3)

ANNEX 6

(Auto Fill from Data fed in
Annex 4,2,3 & 5)

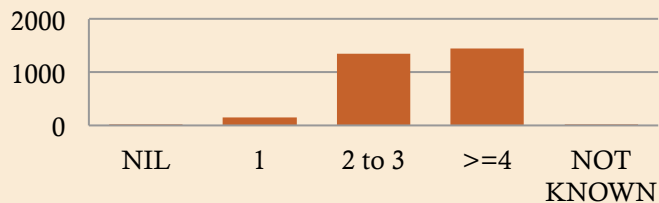
ANNEX 4

(Auto Fill from Data fed in Annex 1 & 6)

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Y

Report Outputs

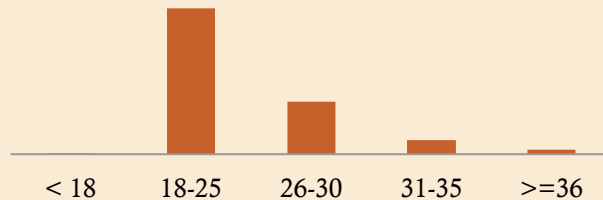
No. of ANC Checkups



94 % of the women who died had > 2 ANC

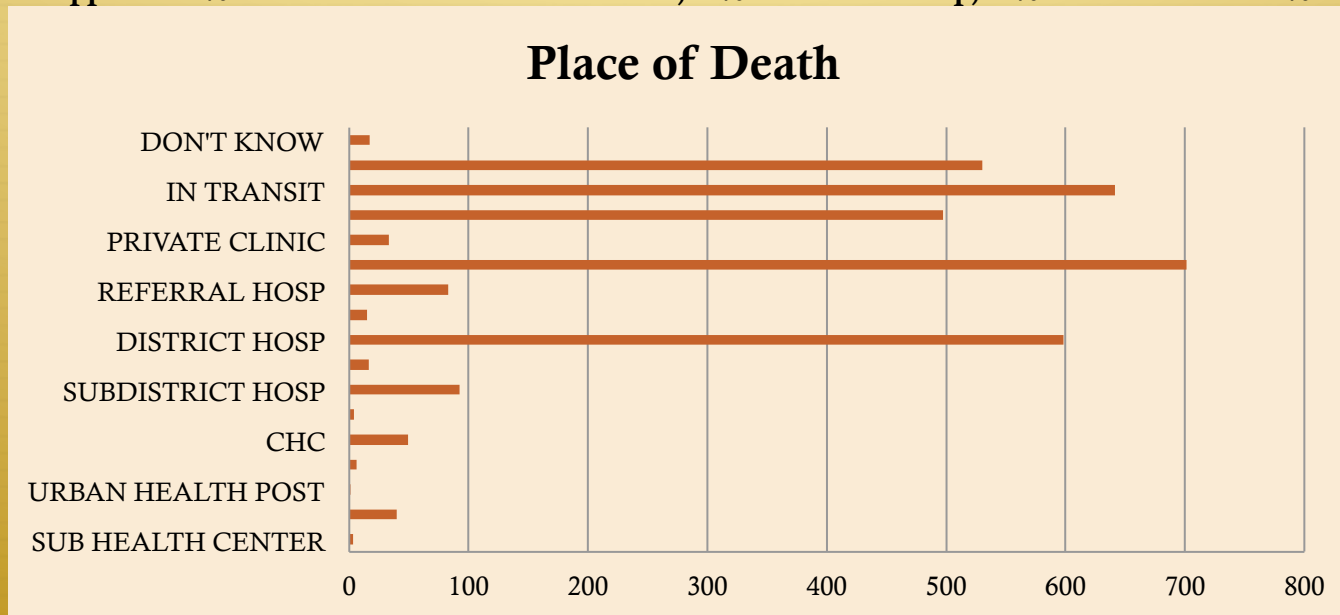
67% deaths in Age group 15-25 years

Age at Death in years



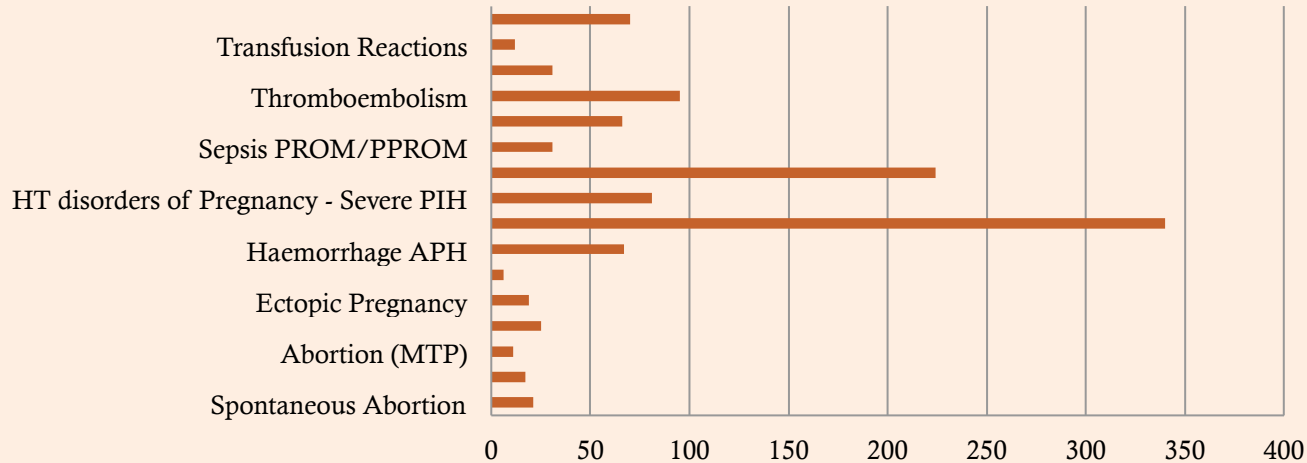
Report Outputs

Approx. 42% deaths occur in Level3 facilities, 16% in Private setup, 19% in Transit and 16% at Home



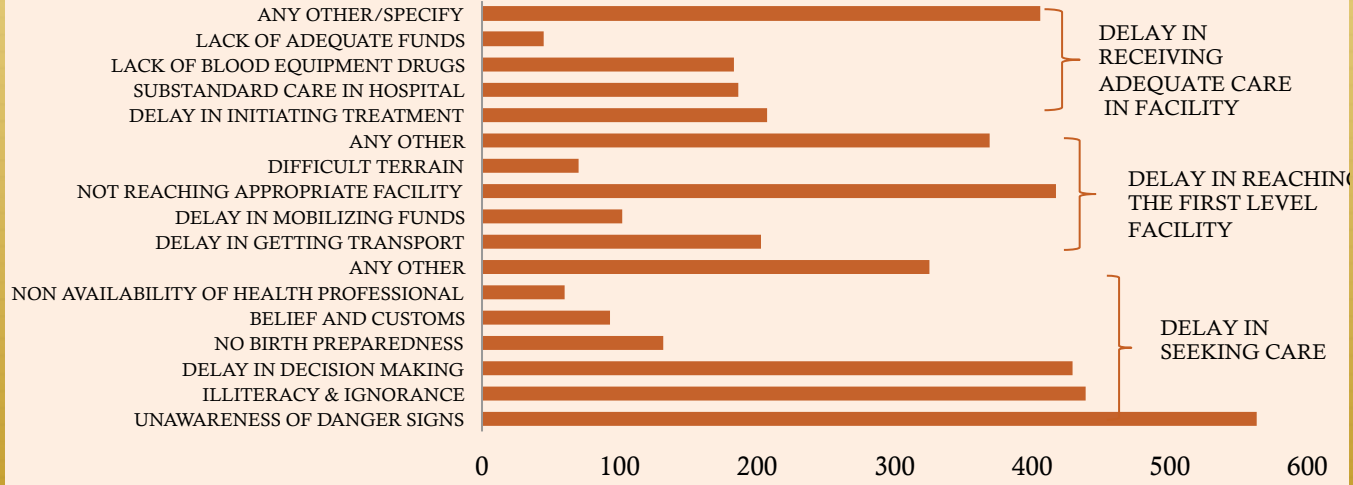
Report Outputs

Probable direct obstetric Cause of death (FB)



Report Outputs

Delays leading to Maternal deaths



Challenges/Learning's

Challenges/Learning's

System Requirement (Servers/Coding/Location/Speed/Storage/
Update Maintenance/Security)

Platform Requirement (Open Source/Closed)

Managing Teams

Agreement on Reporting Formats

Linking Other Databases

Last Minute Changes/New Information

Change in Leadership

TAKE HOME

BE THE CHAMPION

CONTEXTUALIZE

LEVERAGE WHAT YOU HAVE - AVAILABLE RESOURCE

CLARITY ON ROLE & RESPONSIBILITY

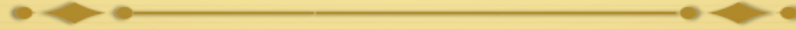
ADAPTABILITY AND FLEXIBILITY

CHALLENGES WILL BE THERE – BUT THERE ARE SOLUTIONS TOO

TEAM WORK

COMMUNICATION - SUCCESS AND FAILURE

Thank you



For more information write to us at avnihealth@yahoo.com