CRVS Digitization in Uttar Pradesh

Ms. Sheetal Verma,
Director and Joint Registrar General (CRS),
DCO- Uttar Pradesh
Vital statistics including Registration of Births and Deaths at Sl. No. 30 falls under Concurrent list of the Constitution of India.

The process of compulsory, continuous & permanent recording of the features and events of Birth & Death. It is compulsory under RBD Act 1969. (Other Acts had been in force at various points of time in history)

Each State has own Birth and Death Registration Rules within the framework of the Act
A civil registration system refers to the entire administrative, legal and instructional framework for notifying and certifying vital events. Data for CR system are used to generate Vital Statistics (VS) that are used as evidence for public policy.

**Best Practice**

- Defined responsibilities for notification
- Legal Requirement to register
- No Fees for initial registration
- No Fees for initial certificates

**Work Flow of Civil Registration System**

1. Notification (reporting of vital events)
2. Registration of Vital events
3. Issuance of certificates
Ideally speaking

CRVS

AADHAAR

POPULATION REGISTER

SOCIAL SECURITY ID LINKED TO VARIOUS SCHEMES
DIGITIZATION STEP 1: MAKE DATA COLLECTION PAPERLESS AND FACELESS

CRS Web Portal (crsorgi.gov.in)
Vital statistics in India

Sample Registration System (SRS)
- Report by Part Time Enumerator posted in the enumeration unit
- Cross checking by Supervisors from ORGI In-built system of Verbal Autopsy
- Re-verification by State Offices of ORGI for data mismatches

Civil Registration System (CRS)
- Report based registration (Doesn’t rule out suo-moto registration by Registrars)

Before we forget
SRS Base line Survey
(By Supervisor with the help of enumerator)

- House list (Form 1)
- Household schedule (Form 2)
- Pregnancy status of women (Form 3)

Continuous Enumeration by Part Time Enumerator (PTE)

Updating Forms 1.2&3

Retrospective Survey (Half Yearly Survey) By Supervisor

Matching:
1. Births: Form 4 with Form 9
2. Deaths: Form 5 with Form 10

Centralized Applications

- BIRTHS: Netting of Births-(Form 4)
- Monthly Report-(Form 6)
- DEATHS: Netting of Deaths-(Form 5)
- Monthly Report-(Form 7)

Partially match or unmatched

Correct birth & death

Completely match

- Form 11: Finalised list of births
- Form 12: Finalised list of deaths
- Form 13 Result of HYS for births
- Form 14: Result of HYS for deaths

Transmission of Form 11 to 17 to ORGI

MIS and Analytics Report Generation

RE-VERIFICATION (Independently by another supervisor)
The SRS android App is designed and developed for timely reporting of vital events and faster results of HYS surveys.

App is user friendly and 8,853 Part Time Enumerators, across the country are submitting reports.
Digitization of Records / Add Old Records

- QR based / electronically verifiable certificates are in demand.
- Manually issued old certificate can be re-issued from CRS portal (crsorgi.gov.in)
- This not a delayed registration.

If the Birth / death is not registered in any mode, then it shall be treated as new registration and date of reporting shall be date of entry of event in ward register.
Digital Certificate with facsimile signature

Unique registration no. D-2022: 9-xxxxxxx-xxxxxx

QR Code

Bar Code

Uniform Certificates across the country
Most of us are familiar with the concept of six degrees of separation - the idea is that anyone in the planet can be connected to anyone else in just six steps.
With over 240 million inhabitants, it is the most populated state in India as well as the most populous country subdivision in the world.

The state contributes to 16.2% of India's population.

Every 36\textsuperscript{th} person in the world is from Uttar Pradesh.

- 62000 REGISTRATION UNITS
- 75 DISTRICTS
- 18 DIVISIONS
DIGITIZATION STEP 2: HAVE A ROBUST LEGAL FRAMEWORK TO BUTTRESS DIGITIZATION

Registration of Birth, Death and Marriages Act-1886

Registration of Birth and Death Act-1969

Uttar Pradesh State Birth and Death Registration rules-1977

Uttar Pradesh State Birth and Death Registration rules-2002

Municipality Act-1916

Municipal Corporation Act-1959

Panchayatiraj Act-1974
CRS ARCHITECTURE FOR UTTAR PRADESH

Registrar General of India / Directorate of Census Operations (Act + Portal)

Chief Registrar (Notifications/GO)

District Registrar/ District Magistrate

CMO

Health

District Hospitals / Medical Colleges and All Government Hospitals

Panchayats

ULBs

Municipal Commissioner

DPRO

All Gram Panchayats

All Zonal Officers/ EOs

Informants
1- Head of household
2- Staff Nurse / ANM
3- In-charge of Nursing Homes

Notifiers (ANM/ ASHA/ Anganwadi worker/ Safai karmchari)
Informant id to all private hospitals
Later, we could give such id's to all functionaries notified as informants.
Formats relevant under RBD Act Section 8,9 and 12

• Form 1 - Birth
  • Form 1A - Birth report of adopted child
• Form 2 - Death
• Form 3 - Still Birth

• Form 4 - Deaths
  • 4 - Institutional Deaths
  • 4A - Non-institutional deaths

• Form 5 – Birth Certificate
• Form 6 - Death Certificate
Formats relevant under RBD Act Section 8, 9 and 12

• Form 7- Birth Register
• Form 8- Death Register
• Form 9- Still Birth Register
• Form 10- Non-availability certificate
• Form 11 – Summary monthly report of Births
• Form 12 – Summary monthly report of Deaths
• Form 13 – Summary monthly report of Still Births
PROS

- Historical legacy of CRS
- Unified portal adopted in the year 2020
- Health units designated as Registrars in the extant legislations

CONS

- Huge gaps in registration
- Suo moto clause rarely used
- CRVS data exists in a silo
- Training deficits- officers, registrars, record keeping staff
- Use of National biometric ID (Aadhar) for authentication can't be made mandatory as per legal orders
DIGITIZATION STEP 3: TARGET GAPS IN REGISTRATION

TARGET: TO CREATE AN ORGANIC CRS ARCHITECTURE INSTEAD OF A DEMAND DRIVEN SYSTEM

Representative Map, only for official use by the DCO.
## Birth Registration in Uttar Pradesh (%) – Year (2017-2021)

<table>
<thead>
<tr>
<th>Year</th>
<th>Reported Birth</th>
<th>Registered Birth</th>
<th>% of Birth Registration</th>
<th>Unregistered births</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>57,65,547</td>
<td>35,45,785</td>
<td>61.5</td>
<td>22,19,762</td>
</tr>
<tr>
<td>2018</td>
<td>57,84,576</td>
<td>46,34,084</td>
<td>80.1</td>
<td>11,50,492</td>
</tr>
<tr>
<td>2019</td>
<td>57,84,755</td>
<td>51,31,999</td>
<td>88.7</td>
<td>6,52,756</td>
</tr>
<tr>
<td>2020</td>
<td>61,49,628</td>
<td>48,54,098</td>
<td>79.01</td>
<td>12,95,530</td>
</tr>
<tr>
<td>2021</td>
<td>62,19,222</td>
<td>55,37,828</td>
<td>89.04</td>
<td>6,81,394</td>
</tr>
</tbody>
</table>

**Graph:**

- **Birth Registration**
  - **2017:** 61.5
  - **2018:** 80.1
  - **2019:** 88.7
  - **2020:** 79.01
  - **2021:** 89.04
FLOW CHART OF THE BIRTH AND DEATH REGISTRATION

Event (live birth, still birth and death)

All Events Shall be registered on suo moto basis iff occurred within the premises of concerned Government Hospital

Informant: Health worker (Male/ Female/ Staff nurse/ ANM/ In charge of Health facility (Form 1/2/3)

Registrar: Chief medical Supdt / Supdt/M.O

As registrar and Informant both are govt servants and entering the details in respective registers, so there is no case of delayed registration.

Entry in Birth/ Still birth Register/Death Register (Legal evidence)

Certificate is to be issued from CRS portal and handed over to Parents/family

There is no case of delayed registration in terms of Govt. Hospitals
Events of Birth and Death

Reported Births and Deaths on various schemes

Registered on CRS portal, Suo-moto registration even if nobody applies

Issue of extract of registration (certificate)

Loss of opportunity of registration - AADHAR LINK BIRTH REGISTRATION (ALBR) helped to begin with but couldn't be scaled to every health facility
ALBR Coverage in the State

Status of ALBR across 503 units- 35 districts (As on 31 April, 2023)

- Pilot district (1)
- Phase 1: Aspirational districts (8) - Launched in Nov 2021
- Phase 2: districts (13)
- Phase 3: districts (14)

Graph showing the increase in ALBR coverage from January 2022 to April 2023.
Linking of MaNTrA with CRS Portal

Birth Details are being collected at Labour room by Medical workers by Using MaNTrA App, Details are stored on NHM server which is sent to CRS portal (Govt of India Server) for Registration of Birth.

Registrar at Registration Unit receives birth Details from Mantra NHM Server via API which is used for Registration of Birth. After successful registration BRN is sent back to NHM
As per NFHS report (2019-21), in Uttar Pradesh 83.4% Births are Institutional Births.

Further, 58% of total births takes place in public health facilities. (approx 3.6 million)

This 58 % Birth will be 100% registered with the help of MaNTrA (Maternity ward app)

MaNTrA will also cover and help to register all Neo Natal Death and Maternal deaths.

<table>
<thead>
<tr>
<th>Indicators</th>
<th>NFHS 5 (2020-21)</th>
<th>NFHS 4 (2015-16)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Urban</td>
<td>Rural</td>
</tr>
<tr>
<td>Institutional births (%)</td>
<td>85.5</td>
<td>82.9</td>
</tr>
<tr>
<td>Institutional births in public facility (%)</td>
<td>43.1</td>
<td>61.5</td>
</tr>
<tr>
<td>Home births that were conducted by skilled health personnel10 (%)</td>
<td>5.2</td>
<td>4.6</td>
</tr>
</tbody>
</table>
## Questions in MaNTrA and CRS

<table>
<thead>
<tr>
<th>Q. No.</th>
<th>Legal Information</th>
<th>available on MaNTrA (Yes/No)</th>
<th>Question no. on MaNTrA</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Date of Birth</td>
<td>Yes</td>
<td>question no. 3 in Mantra</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Sex</td>
<td>Yes</td>
<td>question no. 87 in Mantra</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Name of the child if any</td>
<td>Yes</td>
<td>question no. 16 in Mantra</td>
<td>Not mandatory in CRS</td>
</tr>
<tr>
<td>4</td>
<td>Name of the father</td>
<td>Yes</td>
<td>question no. 14 in Mantra</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Name of the mother</td>
<td>Yes</td>
<td>question no. 4 in Mantra</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Address of parents at the time of birth of the child</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Permanent address of parents</td>
<td>Yes</td>
<td>question no. 9-13 in Mantra</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Place of Birth</td>
<td>…</td>
<td></td>
<td>suo moto</td>
</tr>
<tr>
<td>9</td>
<td>Informants name</td>
<td>…</td>
<td></td>
<td>suo moto</td>
</tr>
<tr>
<td>Q. No.</td>
<td>Legal Information</td>
<td>Information Available on MaNTrA (Yes/No)</td>
<td>Question no. on MaNTrA</td>
<td>Remarks</td>
</tr>
<tr>
<td>--------</td>
<td>-------------------</td>
<td>------------------------------------------</td>
<td>------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>10</td>
<td>Age of the mother (In completed years) at the time of this birth</td>
<td>Yes</td>
<td>question no. 15 in Mantra</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Number of children born alive to the mother so far including this child</td>
<td>Yes</td>
<td>question no. 23 in Mantra</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Type of attention at delivery</td>
<td>…</td>
<td></td>
<td>suo moto</td>
</tr>
<tr>
<td>13</td>
<td>Method of Delivery</td>
<td>Yes</td>
<td>question no. 75 in Mantra</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Birth Weight (Kgs)</td>
<td>Yes</td>
<td>question no. 86 in Mantra</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Duration of pregnancy</td>
<td>Yes</td>
<td>question no. 49 in Mantra</td>
<td></td>
</tr>
</tbody>
</table>

100 % Legal data for the Birth registration (under CRS) is available with MaNTrA
API Facility on the CRS Portal to get the verification of birth and death certificates done through online mode is under process, which will speed up the process of providing benefits to the general public by verifying the certificates immediately.

This system has also been implemented by the Uttar Pradesh Building and Other Construction Workers Welfare Board and Women Welfare Department, while this work is in the final stages in the schemes of the Social Welfare Department and health Department.
Online verification of death, birth certs a boon for needy

Isha.Jain@timesgroup.com

Lucknow: A construction labourer was taken by surprise when he received money under a government scheme on the birth of his second baby, merely in a week’s time. On the birth of his first child, he had received the benefit after three months.

The swift execution became possible with the first-of-its-kind online verification of birth and death certificates being carried out in the state to help beneficiaries avail the benefits of government schemes.

The initiative taken by director, Census Operations (DCO), Uttar Pradesh, Sheetal Verma is aimed at ensuring prompt service delivery to beneficiaries through IT-enabled facilities for automated verification of birth and death certificates with minimum human interference.

“Online verification plays a vital role in eliminating fake certificates for benefits under government schemes. It has also reduced the response time in delivery of services,” Verma told TOI.

Citing the example of a physical birth certificate of a baby girl, born to a woman from Chandauli, which exchanged many hands before it was verified from the place where the child was born, she said: “With online system, it is just a one-second interface and the verification is done.”

The need for an online verification system was first felt by the UP Building and Other Construction Workers Welfare Board (UP-BOCW), a unit of the labour department, which approached the DCO. In the absence of an online mechanism for verifying birth and death certificates, it took months before the benefits of government schemes reached the beneficiaries.

UPBOCW secretary Vinod Jain said, “This is a transformational change that has undone the challenges that led to delay in reaching out to beneficiaries.”

He explained how birth and death registration details, available on the Civil Registration System (CRS), run by the Registrar General of India (RGI), were linked to API interface. “Just by entering the number mentioned on the birth certificate, all details can be seen. This has made the massive physical verification exercise easier,” Jain said.
Speedy verification of Certificates of Beneficiaries

- Instant verification
- Benefits are reaching faster to the public
- Eliminates excess workload on government officials
- Eliminates ‘shoe leather costs’ of repeated visits to government office

<table>
<thead>
<tr>
<th>Department /Welfare Scheme</th>
<th>No of Certificates verified via API</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Birth: 84,042</td>
<td>NA</td>
</tr>
<tr>
<td>Mukhyamantri Kanya Sumangla Yojna</td>
<td>Death: NA</td>
<td>Till 05-06-2023</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uttar Pradesh Building and Other Construction Workers Welfare Board (UPBOCW)</td>
<td>Birth: 1,38,253</td>
<td>9018</td>
</tr>
<tr>
<td></td>
<td>Death: 9018</td>
<td>Till 05-06-2023</td>
</tr>
</tbody>
</table>
Process

Health Facilities

MaNTrA Labour Room App

SSID/Family ID

ICDS

Education

Welfare Programs

Civil Registration System

API with welfare programs

AADHAAR
Schemes in which Birth Certificates has been linked:

- Pradhanmantri Matru Vandana Yojna
- Sukanya Samriddhi Yojna
- Janani Suraksha Yojna
- Mukhyamantri Kanya Sumangla Yojna
- For enrolment in Aanganwadi / Pre-Primary/ Schools
- To issue AADHAR card of Children

Deaths Certificates are being linked with:

- Vidhwa Pension Yojna
- Succession Deed
- Insurance claim
- Issuing of Death Certificate is made mandatory for Institutional Deaths
Status of Delayed Registration in Uttar Pradesh in 2022

Birth Registration
- Within 21 Days: 358,990 (7%)
- 21 days to 30 days: 540,611 (1%)
- 1 Months to 1 year: 142,101,292 (29%)
- More than 1 year: 3,090,501,632 (63%)

Death Registration
- Within 21 Days: 3,167,890,27 (27%)
- 21 days to 30 days: 8,190,11 (7%)
- 1 Months to 1 year: 18,737,916 (16%)
- More than 1 year: 5,851,265,50 (50%)

Order from SDM is required

Source: crsorgi.gov.in
Timeline: 1st Jan- 31st Dec, 2022
To prevent fraudulent registrations, Digitized orders are being issued by First Class Magistrate, in case of delayed registration of more than 1 year.
DIGITIZATION STEP 6: INVOLVE EVERYONE WHO MATTERS

- Trained all civil servants, registrars, doctors, health functionaries, local governance functionaries
- Registration Status Report Cards
- Inter Departmental Coordination Committees at State, Divisional and District Levels constituted
- MCCD status Report Cards to Major institutions like Medical Colleges
- Indian Medical Association/ Nursing Home Associations roped in
- State Medical Council requested to make MCCD curriculum mandatory in Medical Colleges as well as for para health staff
- Partnership with Tata Memorial for 4 hr online MCCD module
- In-house rating of registration units by repeated field inspections
### Division, District and Municipal Corporation report cards

#### Sex Ratio of Districts in Birth and Death Registration during 1 Jan to 31 Dec, 2022

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Division</th>
<th>District</th>
<th>Sex Ratio in Birth Registration</th>
<th>Sex Ratio in Death Registration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Agra</td>
<td></td>
<td>900</td>
<td>409</td>
</tr>
<tr>
<td>2</td>
<td>Faizabad</td>
<td></td>
<td>916</td>
<td>430</td>
</tr>
<tr>
<td>3</td>
<td>Mathura</td>
<td></td>
<td>877</td>
<td>516</td>
</tr>
<tr>
<td>4</td>
<td>Moradabad</td>
<td></td>
<td>871</td>
<td>522</td>
</tr>
<tr>
<td>5</td>
<td>Saharanpur</td>
<td></td>
<td>883</td>
<td>541</td>
</tr>
<tr>
<td>6</td>
<td>Shalimar</td>
<td></td>
<td>881</td>
<td>512</td>
</tr>
</tbody>
</table>

#### Status of Delayed Registration of Births and Deaths in Districts during 1 Jan to 31 Dec, 2022

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Division</th>
<th>District</th>
<th>Total Birth Registration</th>
<th>Delayed Birth Registration (After 1 Year)</th>
<th>Total Death Registration</th>
<th>Delayed Death Registration (After 1 Year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Agra</td>
<td></td>
<td>12947</td>
<td>22165</td>
<td>3900</td>
<td>4505</td>
</tr>
<tr>
<td>2</td>
<td>Faizabad</td>
<td></td>
<td>9446</td>
<td>16149</td>
<td>1908</td>
<td>2721</td>
</tr>
<tr>
<td>3</td>
<td>Mathura</td>
<td></td>
<td>7867</td>
<td>14958</td>
<td>1900</td>
<td>15180</td>
</tr>
<tr>
<td>4</td>
<td>Moradabad</td>
<td></td>
<td>7877</td>
<td>14958</td>
<td>1900</td>
<td>15180</td>
</tr>
</tbody>
</table>
Training of 59,000 Panchayat Sahayak
After analysing the sex-wise death registration data of Uttar Pradesh from Jan, 2022 to Dec, 2022 we found that the Number of registered Male deaths are very large in comparison to registered Female deaths (almost double) in all districts of UP.

Source: crsorgi.gov.in
Way Forward/ Challenges

- Mantra phase 2 for all private hospitals
- Death notification system to be developed with the help of Health and Revenue departments
- Suo moto death registration - a very sensitive issue
- Death Registration of Women - only 50% of total death registration
- MCCD data is still sketchy
- Huge legacy data - paper form or different databases - needs to be integrated
- API with State Welfare Databases to be extended
- SRS and CRS units are not co-terminus for comparability
- National ID and CRS are under different ministries
- Still birth and child mortality data needs to be focussed on
Thanks

“Committed to make everyone count”