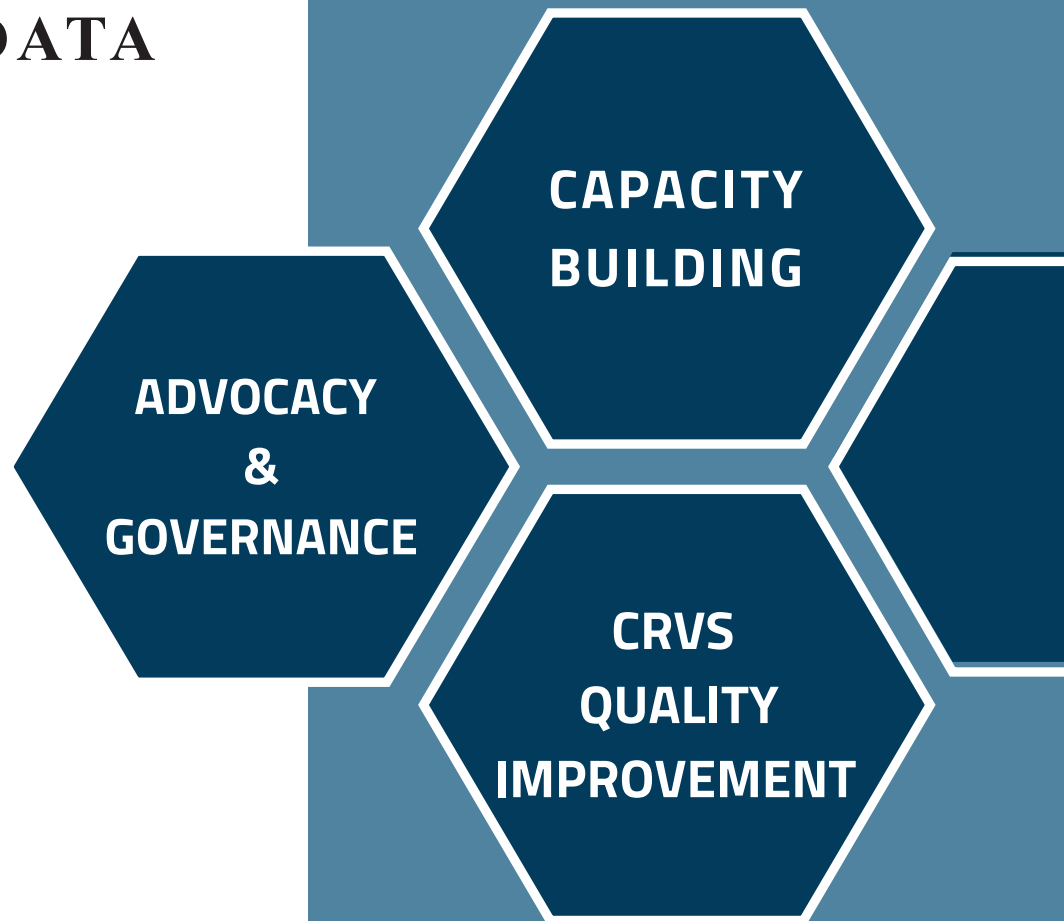




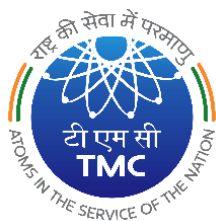
PROJECT REPORT AUG 2021 - MAR 2025 UNIT FOR STRENGTHENING CAUSE OF DEATH DATA



TATA MEMORIAL CENTRE

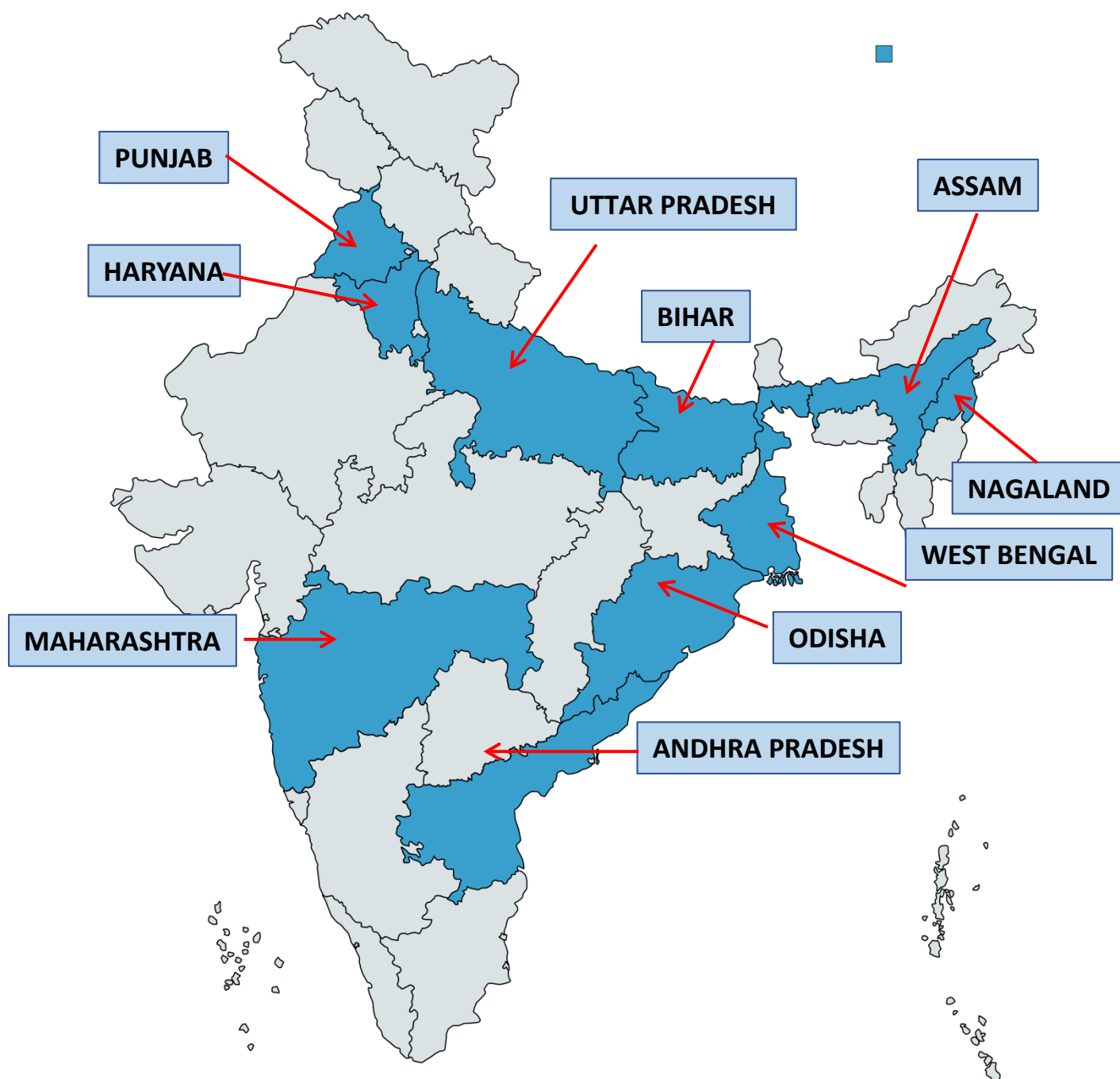
A GRANT-IN- AID INSTITUTION UNDER THE DEPARTMENT OF ATOMIC ENERGY, GOVT. OF INDIA

Centre For Cancer Epidemiology



2021 – 2025 INTERIM PROJECT REPORT

UNIT FOR STRENGTHENING CAUSE OF DEATH DATA (USCOD)



LEADERSHIP TEAM-INDIA

NAME	DESIGNATION
Dr Sudeep Gupta	Director Tata Memorial Centre- Mumbai
Dr Pankaj Chaturvedi	Director-ACTREC Tata Memorial Centre, Mumbai
Dr Rajesh Dikshit	Director-Centre for Cancer Epidemiology Tata Memorial Centre, Mumbai
Dr Rajendra A. Badwe	Professor Emeritus

USCOD TEAM

USCOD ORGANONGRAM

NAME	DESIGNATION
Dr. Yagnik Vaza	Country Coordinator
Dr. Sharvari Mhapankar	Liaison Officer
Mr. Amitkumar Madhukar Talekar	Administrative Officer
Dr. Vinay Omprakash Sharma	Research Coordinator
Dr. Tanuja Kathane	MCCD Trainer
Dr. Deepika Thakur	Project Coordinator, Haryana & Punjab
Ms Sudeshna Bakshi	Research Associate
Mr Shubham Dixit	Research Associate
Mr. Santosh Shabade	Coder Supervisor
Ms. Yukta Bothra	Coder Supervisor
Mr. Rushikesh Purarkar	Coder Supervisor
Mr. Mangesh Maruti Malekar	Administrative Assistant
Ms Meera Gaikwad	Web Developer
Mrs Jyoti Keshari	Data Entry Operator
Mr Yogesh Chandra	Data Entry Operator

Dr. Yagnik Vaza
Country Coordinator

Dr. Sharvari Mhapankar
Liaison Officer

Mr. Amitkumar Madhukar Talekar
Administrative Officer

Dr. Vinay Omprakash Sharma
Research Coordinator

Dr. Tanuja Kathane
MCCD Trainer

Ms. Sudeshna Bakshi
Research Associate

Mr. Shubham Dixit
Research Associate

Mr. Santosh Shabade
Coder Supervisor

Ms. Yukta Bothra
Coder Supervisor

Mr. Rushikesh Purarkar
Coder Supervisor

Mr. Mangesh Maruti Malekar
Administrative Assistant

Ms Meera Gaikwad
Web Developer

Mrs Jyoti Keshari
Data Entry Operator

Mr Yogesh Chandra
Data Entry Operator

NATIONAL ADVISORY COMMITTEE MEMBERS

NAME	DESIGNATION
Dr Jayesh Thakur	Professor of Community Medicine and School of Public Health, PGIMER Chandigarh
Dr Mangala Gomare	Ex- Executive Health Officer, Public Health Department, MCGM
Dr Ravikant Singh	Officer In-charge, Homi Bhabha Cancer Hospital and Research Centre, Muzaffarpur, Bihar
Prof.(Dr) Umesh Kumar Bhadani	Professor, AIIMS, Patna

INTERNATIONAL ADVISORY COMMITTEE MEMBERS

NAME	DESIGNATION
Dr Chalapati Rao	Associate Professor, National Centre for Epidemiology and Population Health, Australian National University, Canberra
Dr Kayla Laserson	Director, Centers for Disease Control and Prevention, India
Dr Pamela Groenewald	South African Medical Research Council, South Africa
Dr Prabhat Jha	Faculty Member, Centre for Global Health Research St. Michael's Hospital, Canada

CONTRIBUTORS FROM CDC Foundation, USA

NAME	DESIGNATION
Dr Sam Notzon	Senior Technical Advisor, CDC Foundation
Dr Erin Nichols	Director, Non-communicable Disease
Ms April McCoy	Director, Non-communicable Disease
Dr Rohina Joshi	Aus-Hub/Asia-Pacific Lead
Dr Saman Gamage	Senior Technical Advisor, CDC Foundation
Dr Hafizur Chaudhary	Technical Advisor, CDC Foundation
Ms Debra Prosnitz	Gender Equity Advisor, CDC Foundation
Mr Jean-Edgard Nguessan	India Country Lead, CDC Foundation
Ms Jalisa Hinkle	Senior Program Manager, CDC Foundation
Mrs Swati Sangle	IT Consultant, CDC Foundation
Mrs Ankita Sangle	IT Consultant, CDC Foundation

USCOD MASTER TRAINERS

NAME	DESIGNATION
Dr Subita Patil	Associate Professor, Preventive Oncology Tata Memorial Hospital
Dr Amey Oak	Officer In-Charge, HBCR, POCSS CCE, Tata Memorial Centre
Dr Sivaranjini K	Medical Officer- D, CCE, Tata Memorial Centre
Dr Akash Anand	Medical Superintendent & Registrar for Births and Deaths, MPMMCC/ HBCH, Tata Memorial Centre, Varanasi
Dr Divya Khanna	Associate Professor, Preventive Oncology MPMMCC/ HBCH, Tata Memorial Centre, Varanasi
Dr Ruchi Pathak	Medical Officer, Dept. of Epidemiology and Community Screening, MPMMCC/ HBCH, Tata Memorial Centre, Varanasi
Dr.Burhannudin Quayyumi	Assistant Professor, Head and Neck Surgical Oncology HBCH&RC, Tata Memorial Centre, Muzaffarpur
Dr Tulika Gupta	Assistant Medical Superintendent, HBCH&RC, Tata Memorial Centre, Muzaffarpur
Dr Nishant Kumar	Assistant Professor, Preventive Oncology HBCH&RC, Tata Memorial Centre, Muzaffarpur
Dr Olga Joos	Consultant, PAHO
Dr Vandita Pahwa	Officer In Charge, Preventive Oncology, Homi Bhabha Cancer Hospital and Research Centre, Punjab

CONTRIBUTORS

NAME	DESIGNATION
Dr Shailesh Mohite	Dean, HBT Medical College and R N Cooper Municipal Hospital, Mumbai
Dr.Rosemarie deSouza	Head of Department of Medicine, Topiwala National Medical College and BYL Nair Municipal Hospital, Mumbai
Dr Harish Pathak	Dean (Academics), Seth GS Medical College and KEM Municipal Hospital, Mumbai
Dr Nizara Baishya	Department of Cancer Registry & Epidemiology, BBCL, Assam
Dr.Debanjana Barman	Department of Cancer Registry & Epidemiology, BBCL, Assam
Dr Vandita Pahwa	Officer In Charge, Preventive Oncology, Homi Bhabha Cancer Hospital and Research Centre, Punjab

LIST OF ABBREVIATIONS

AYUSH	Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homeopathy
CCE	Centre for Cancer Epidemiology
CDC	Centre for disease control
CDCF	Centre for disease control foundation
CME	Continued medical education
CRS	Civil registration system
CRVS	Civil registration & vital statistics
DCO	Director of Census Operation
DGCO	Director General of Census Operation
DHS	Directorate of Health Services
IAS	Indian Administrative Service
ICD	International Classification of Diseases
IMA	Indian Medical Association
MBBS	Bachelor of Medicine and Bachelor of Surgery
MCCD	Medical Certification of Cause of Death
MLDI	Medico-legal death investigation
NaStaCon	National Stakeholders Conference
PSM	Preventive and Social Medicine
RBD	Registration of births & deaths
RGI	Registrar General of India
SBHIVS	State Bureau of Health Intelligence and Vital Statistics
TMC	Tata Memorial Centre
TMH	Tata Memorial Hospital
ToT	Training of Trainers
USCOD	Unit for Strengthening Cause of Death Data
UT	Union Territory
WHO	World Health Organisation

INDEX

Sr. No.	CONTENT
1	Introduction
2	Importance of Cause of Reporting
3	Unit for Strengthening Cause of Death Data
4	USCOD YouTube Channel
5	USCOD Activities in India
	Prominent States
5.1	Maharashtra
5.2	Uttar Pradesh
5.3	Bihar
5.4	West Bengal
	Upcoming States
5.5	Assam
5.6	Punjab
5.7	Haryana
5.8	Nagaland
5.9	Andhra Pradesh
5.10	Odisha
6	Gender Equity Project
7	USCOD International Representation
8	Impact Analysis for MCCD Training
9	USCOD Research
10	Challenges & Lessons Learnt
11	Way forward

INTRODUCTION

In India, the Births and Deaths Registration Act (RBD) 1969 requires that all deaths be certified by a medical practitioner. Deaths are certified through the process of identifying the cause of death and reporting it on forms 4 and 4A (Appendices A & B). These forms are official documents utilized by families to record deaths, yet they also fulfil a broader function. These results on the underlying causes of death inform policy makers and program managers in identifying where funds should be allocated. Therefore, the physician responsibility of correctly identifying and reporting the cause of death is very important for health policy and planning. Under the Civil Registration System, the scheme of MCCD is required to be notified under Section 10(2) of the RBD Act, 1969, for its implementation in any area by the respective States and UTs, subject to the availability of requisite facilities therein. As per the 2020 Annual Report on Medical Certification of Cause of Death (MCCD) published by the Registrar General of India (RGI), a total of 1,811,688 medically certified deaths (11,60,119 males and 6,51,569 females) represented 22.5% of all registered deaths in the 34 States/UTs that provided data.

MEDICAL CERTIFICATION OF CAUSE OF DEATH FIGURES			
Registration of Deaths		2019	2020
Total Number of Registered Deaths (Source: CRS Report 2020)		76,41,076	81,15,882
Number of Registered Deaths in MCCD reporting States*			
(i)	MALE	45,26,022	48,49,373
	FEMALE	30,70,467	32,12,444
	TOTAL	75,96,849	80,62,070
Number of medically certified deaths			
(ii)	MALE	9,77,199	11,60,119
	FEMALE	5,94,341	6,51,569
	TOTAL	15,71,540	18,11,688
Percentage of medically certified deaths			
(iii)	MALE	21.6%	23.9%
	FEMALE	19.4%	20.3%
	TOTAL	20.7%	22.5%

In January 2016 the Registrar General of India implemented an online birth and death registration system at www.crsorgi.gov.in (Appendix C) that medical practitioners can use to register a birth or death instead of using the 4 or 4A paper forms. With this online registration system, the correct documentation of the cause of death is even more important because of the automated coding of the underlying cause of death. Even a small mistake in entering the cause of death may affect the count of the main causes of death in India. This can have crucial implications to policy makers and program managers.

IMPORTANCE OF CAUSE OF REPORTING

According to the Registration of Birth and Death Act 1969, it is mandatory to document the cause of death before burial or cremation of the deceased. The cause of death is a permanent record of the fact of death that provides important information about the deceased, such as age, sex, date of death, and cause of death. This information allows the public health department to issue a death certificate and a burial or cremation order.

Death reporting is a source of statistical information on mortality and causes of death that is needed for several purposes, including:

1. Evaluating, monitoring, and improving the health of the population
2. Informing decisions on health policy and strategy
3. Comparing health across different regions.
4. Mortality data supports medical and health research such as disease etiology and the evaluation of diagnostic and therapeutic techniques. The result of this research is important in informing advancement of clinical practice.

Because statistical data derived from death reporting depends on the accuracy of the information on the certificate, it is very important that all persons concerned with the registration of deaths strive not only for complete registration of events, but also to accurately and timely report death events. Quality statistical data derived from death reporting on forms 4, 4A, and <https://dc.crsorgi.gov.in/crs/> depends on the accuracy of the information reported.

PUBLIC HEALTH IMPORTANCE OF MORTALITY DATA

Mortality data collected through death reports- forms 4, 4A, and <https://dc.crsorgi.gov.in/crs/> - are analysed to produce essential statistics required by countries to monitor health status of populations. These include indicators to track the Millennium Development Goals such as under-5 mortality rate, infant mortality rate, and maternal mortality ratio as well as other important indices such as the life expectancy. Information on the leading causes of death provides insight into the health problems of the population. For example, Figure 1 presents the top 10 causes of death in India as represented in the RGI Annual Report on MCCD 2019 and 2020. This data can also be presented by gender, area of residence, socio-economic status to assess differences between groups. It can also be assessed over time to evaluate changes in the major causes of death over, for example, 10 or 20-year periods

Top leading causes of deaths by major group			
		2019	2020
(i)	Diseases of the Circulatory System	5,13,390	5,80,751
(ii)	Diseases of the Respiratory System	1,52,311	1,81,160
(iii)	Codes for Special Purposes – COVID 19	N.A.	1,60,618
(iv)	Certain Infectious and Parasitic Diseases	1,54,576	1,27,933
(v)	Endocrine, Nutritional and metabolic Diseases	89,410	1,04,665
(vi)	Injury, Poisoning and Certain Other Consequences of External Causes	79,135	1,00,588
(vii)	Neoplasms	87,315	85,257
(viii)	Certain Conditions Originating in the Perinatal Period	85,024	74,488
(ix)	Symptom Signs & Abnormal Clinical Findings NEC	2,08,327	1,91,609
(x)	Diseases of the digestive system	69,835	61,955
(xi)	Diseases of the genitourinary system	55,125	59,301
(xii)	Diseases of the nervous system	30,788	32,300
(xiii)	Diseases of the blood and blood forming organs and certain disorders involving the immune mechanism	19,683	18,215
(xiv)	Congenital malformation, deformation and chromosomal abnormalities	9,942	9,945
(xv)	Pregnancy, childbirth and the puerperium	6,595	8,356
(xvi)	Mental and behavioural disorders	2,764	4,283
(xvii)	Diseases of the musculoskeletal system and connective tissue	2,661	4,002

(xviii)	Diseases of the skin and subcutaneous tissue	4,349	3,350
(xix)	Diseases of the eye and Adnexa	185	2,630
(xx)	Diseases of the ear and mastoid process	125	282

These statistics have a broad audience. Politicians may use this data to determine the health issues to prioritize in health policy and support through health programs. Hospitals may use this data to determine which services may need to be expanded. Journalists may be interested in these results to notify the public of changes in the past decade. Data timeliness is important since policymakers, health facilities, and communities want to respond to health issues as quickly as possible. That is why reporting of events, analysis of data, and dissemination of results is important to do in a reasonable time frame.

Practices Currently Limiting Accurate Cause of Death Data

- Non-standard Medical certificate of cause of death
- Concept of underlying cause of death not used
- Admission diagnoses recorded instead of eventual causes of death
- Lack of awareness of the importance of correct death certification
- Lack of monitoring of death certification accuracy
- Lack of feedback to certifiers on the quality of the death certificates they write.

UNIT FOR STRENGTHENING CAUSE OF DEATH DATA

- The Centre for Cancer Epidemiology, Tata Memorial Centre established the USCOD on the 6th of August 2021
- **Supports, promotes, and advocates** for best practices in cause of death quality in civil registration and vital statistics in India.
- For more information on medical certification of cause of death (MCCD), civil registration and vital statistics (CRVS) and the overall activities of the unit please visit- <https://tmcepi.gov.in/USCOD>

VISION & MISSION OF USCOD



MCCD e-Learning Course on Omnicuris

MCCD e-Learning Course

Course Length	4-hour course
Module Length	Module ~20 minutes
Background Modules	3 background modules
Specialty Modules	8 specialty modules

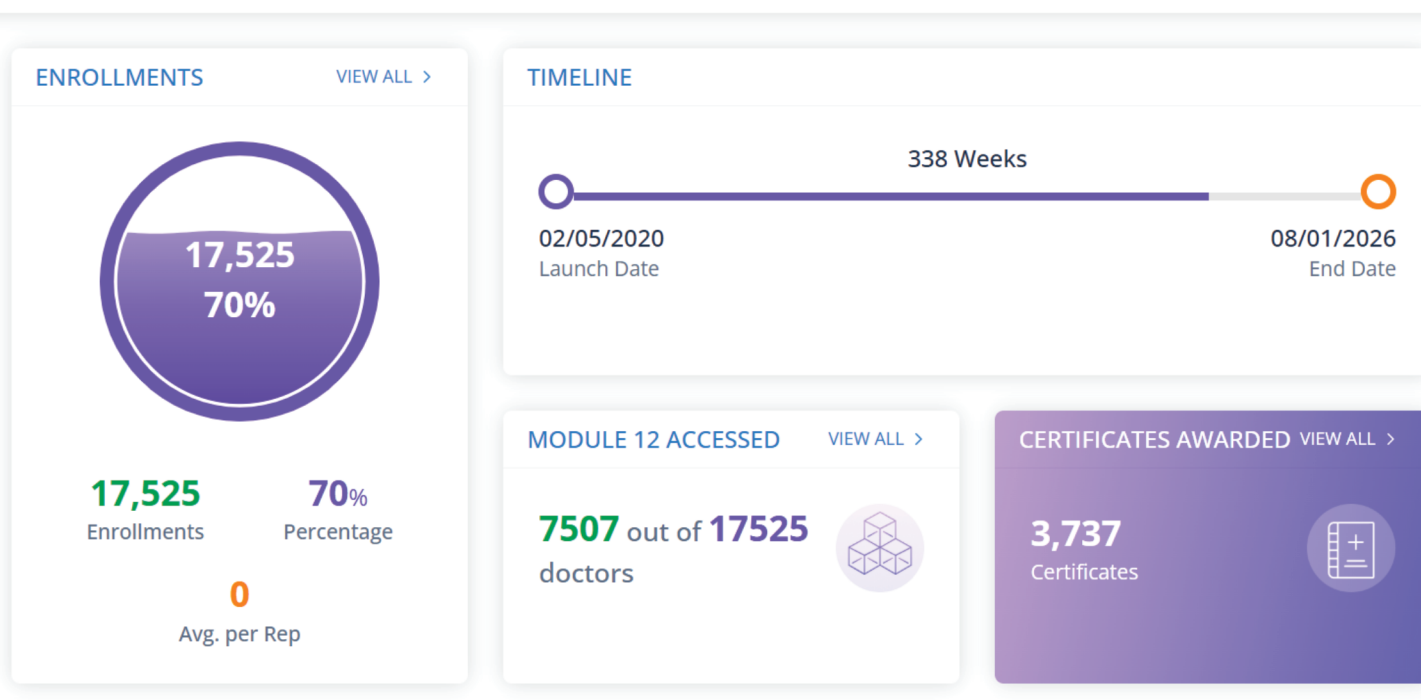
The unit has developed a Medical Certification of Cause of Death e-Learning Course on Omnicuris Platform.

- <https://www.omnicuris.com/academics/medical-certification-of-cause-of-death>
- In case if doctors require any support while taking the course, they can contact Omnicuris at info@omnicuris.com or +91-8061932737.
- Provides CME point from respective state medical council
- Free and accessible
- 4-hour course

The MCCD e-Learning course is made mandatory within the following-

1. All government and private doctors under the jurisdiction of the Municipal Corporation of Greater Mumbai are required take the course in order to issue the DC book
2. Darbhanga Medical College and Hospital, Bihar has included the course as a mandatory requirement into the intern's curriculum.
3. The course is supported and advocated by Shri Dr Pradeep Vyas, former Additional Chief Secretary, Public Health Department, Govt. of Maharashtra
4. The unit's training resources including the e-learning course have received extensive support from Shri Vivek Joshi, IAS, former Registrar General of India.

MCCD e-Learning Course Dashboard



भारत का राजपत्र
The Gazette of India

सं.जी.-डी.एल.-अ.-12082023-248044
CG-DL-E-12082023-248044

असाधारण
EXTRAORDINARY
भाग II—खण्ड 1

PART II—Section 1
प्राधिकार से प्रकाशित

PUBLISHED BY AUTHORITY

सं. 23] नई दिल्ली, बुधवार, अगस्त 11, 2023/श्रावण 20, 1945 (सक)
No. 23] NEW DELHI, FRIDAY, AUGUST 11, 2023/SRAVANA 20, 1945 (Saka)
इस भाग में पिछले पृष्ठ संख्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके।
Separate paging is given to this Part in order that it may be filed as a separate compilation.

MINISTRY OF LAW AND JUSTICE
(Legislative Department)

New Delhi, the 11th August, 2023/Sravana 20, 1945 (Saka)

The following Act of Parliament received the assent of the President on the 11th August, 2023 and is hereby published for general information:—

THE REGISTRATION OF BIRTHS AND DEATHS (AMENDMENT)
ACT, 2023
No. 20 of 2023

[11th August, 2023.]

An Act further to amend the Registration of Births and Deaths Act, 1969.

BE it enacted by Parliament in the Seventy-fourth Year of the Republic of India as follows:—

1. (1) This Act may be called the Registration of Births and Deaths (Amendment) Act, 2023.

Short title and commencement.

(2) It shall come into force on such date as the Central Government may, by notification in the Official Gazette, appoint.

18 of 1969.

2. Throughout the Registration of Births and Deaths Act, 1969 (hereinafter referred to as the principal Act), for the word "Registrar-General", wherever it occurs, the words "Registrar General of India" shall be substituted.

Construction of references of certain expressions by certain authorities.

4 THE GAZETTE OF INDIA EXTRAORDINARY [PART II—

(db) in respect of an orphan or abandoned child or surrendered child in any child care institution, the person in-charge or caretaker of the child care institution.

Explanation.—For the purposes of this clause, the expressions "abandoned child" or "child care institution" or "orphan" or "surrendered child" shall have the same meanings as respectively assigned to them in clauses (1), (2), (4) and (6) of section 2 of the Juvenile Justice (Care and Protection of Children) Act, 2015;

2 of 2016.

(dc) in respect of birth of a child through surrogacy in a surrogacy clinic, the person in-charge of the surrogacy clinic.

Explanation.—For the purposes of this clause, the expressions "surrogacy" and "surrogacy clinic" shall have the same meanings as respectively assigned to them in clauses (zd) and (ze) of sub-section (1) of section 2 of the Surrogacy (Regulation) Act, 2021;.

47 of 2021.

Amendment of section 10. 8. In section 10 of the principal Act, for sub-sections (2) and (3), the following sub-sections shall be substituted, namely:—

"(2) Where death occurs in any medical institution providing specialised treatment or general treatment, every such institution, irrespective of ownership, shall, free of charge, provide a certificate of the cause of death, including the history of illness, if any, signed by the medical practitioner who attended that person during his recent illness to the Registrar in such form as may be prescribed and provide a copy of such certificate to the nearest relative.

(3) In the event of death of any person occurring in any place other than medical institution, and such person was, during his recent illness, attended to by a medical practitioner, such medical practitioner shall, after the death of that person, free of charge, forthwith issue, a certificate of the cause of death, including the history of illness, if any, to the person required under this Act to give information concerning the death in such form as may be prescribed, and the person, on receipt of the certificate, shall deliver the same to the Registrar at the time of giving information of the death as required under this Act."

Amendment of section 11. 9. In section 11 of the principal Act, for the words "place of abode, and, if he cannot write", the words "place of abode and put his signature thereto, and, if he cannot write" shall be substituted.

Substitution of new section for section 12. 10. For section 12 of the principal Act, the following section shall be substituted, namely:—

"12. The Registrar shall, as soon as the registration of a birth or death has been completed, but not later than seven days, give, free of charge, electronically or otherwise under his signature, to the person who gives information under section 8 or section 9, a certificate extracted from the register relating to such birth or death in such form and manner as may be prescribed."

Amendment of section 13. 11. In section 13 of the principal Act, for sub-sections (2) and (3), the following sub-sections shall be substituted, namely:—

"(2) Any birth or death of which delayed information is given to the Registrar after thirty days but within one year of its occurrence, shall be registered only with the written permission of the District Registrar or such other authority, on payment of

The Registration of Births and Deaths (Amendment) Act, 2023 <https://dc.crsorgi.gov.in/crs/>

Important Links



USCOD YouTube Channel

<https://www.youtube.com/@unitforstrengtheningcauser9427>



USCOD Website

<https://tmc.gov.in/USCOD/>



MCCD e-Learning Course

<https://www.omnicuris.com/academics/medical-certification-of-cause-of-death>

USCOD ACTIVITIES IN INDIA

STATE	NUMBER OF TRAINED MCCD PARTICIPANTS
Maharashtra	3691
Bihar	1277
Uttar Pradesh	2742
West Bengal	1575
Andhra Pradesh	72
Nagaland	50
Punjab	272
Odisha	315
Haryana	150
Assam	72
TOTAL	10216

[Unit for Strengthening Cause of Death Data - Tata Memorial Centre \(tmcepi.gov.in\)](http://tmcepi.gov.in)

USCOD MCCD Training Dashboard

Training Year ▾

Training Month ▾

Type of Training ▾

State ▾

	State ▾	Name of Institute	No of Participants
1.	West Bengal	CALCUTTA NATIONAL MEDICAL COLLEGE & HOSPITAL	190
2.	West Bengal	MEDICAL COLLEGE KOLKATA	255
3.	West Bengal	Mo&HFW, West Bengal	0
4.	West Bengal	North Bengal Medical College	69
5.	West Bengal	RG KAR MC& HOSPITAL BENGAL	0
6.	West Bengal	MALDA MEDICAL COLLEGE & HOSPITAL WEST BENGAL	99
7.	West Bengal	NIL RATAN SARKAR MEDICAL COLLEGE & HOSPITAL	224
8.	West Bengal	AIIMS KALYANI, WEST BENGAL	48
9.	West Bengal	Mo&HFW, West Bengal	57
10.	West Bengal	North Bengal Medical College	74

1 - 100 / 100 < >



PROMINENT STATES

STATE 01: MAHARASHTRA



Maharashtra, a major state located on the western coast of India, is renowned for its economic significance and cultural diversity. It is home to bustling urban centers like Mumbai, Pune, and Nashik, and boasts a population exceeding 120 million, making it one of the most populous states in the country. This vast and diverse population requires a robust and efficient system for managing vital statistics, including death registrations.

In recent years, Maharashtra has made significant progress in improving its death registration processes. One of the most notable achievements is the high coverage rate of death registrations across the state. This progress is attributed to the establishment of a comprehensive and streamlined system that ensures the timely and accurate issuance of death certificates. The state has effectively integrated technology into this process, implementing digital platforms that facilitate online death registration. This shift towards digitalization has reduced bureaucratic delays and made the registration process more accessible and efficient for both officials and the public.

Another key aspect of Maharashtra's success in death registration is the focus on training and capacity building. The state government has invested in training

field workers and officials involved in the registration process, which has led to improvements in the accuracy of recorded data, particularly concerning the causes of death. This enhanced accuracy is critical for public health planning and policy-making, as it provides a clearer picture of mortality trends and health issues within the state.

Public awareness campaigns have also played a crucial role in the success of death registration efforts in Maharashtra. These campaigns aim to educate the public about the importance of timely and accurate death registration, leading to higher compliance rates. By highlighting the benefits of registration and the legal requirements, the government has fostered a greater understanding and acceptance of the registration process among residents.

ACTIVITIES UNDERTAKEN

❖ ICD 10 Mortality Coding Team and Iris Automated Mortality Coding System in Mumbai

As a part of the cause of death project, Tata Memorial Centre has supported the implementation of the ICD 10 Mortality Coding team within the Municipal Corporation of Greater Mumbai (MCGM). This coding team carried out mortality coding and cause of death data reporting for the 24 wards of Mumbai. Further the team was trained by experts from WHO and the Iris Institute, Germany for the use of the Iris Automated Mortality Coding System. Following the establishment of USCOD, the mortality coding team was institutionalised and the staff was absorbed as employees of MCGM in January 2022. This major achievement has aided the MCGM to improve the CRVS data and further utilise this data to impact the policies and programming.

❖ Medical Certification of Cause of Death (MCCD) Training of Trainers (ToT) Workshop- 8th to 11th February 2022

The MCCD ToT training workshop was launched on 8th February 2022. This launch session commenced with a welcome address by Dr Rajesh Dikshit, Director, Centre for Cancer Epidemiology followed by an overview of the unit's activities and mission. Dr Pankaj Chaturvedi, Deputy Director, Centre for Cancer Epidemiology formally inaugurated the training of trainers in MCCD workshop by providing a brief on the importance of MCCD and the combined efforts of the medical community for strengthening the cause of death data in the country. Dr Olga Joos provided a brief background on the Data for Health initiative and the work carried out by USCOD thus far. Further, Dr Avinash Supe, Director - Clinical Governance & Head, P. D Hinduja Hospital, addressed the responsibility of physicians in the correct certification of cause of death and in improving the quality of mortality data in India. Dr Supe paid special attention to proposing a MCCD training module for the medical interns in India. The launch session was concluded by Dr Rajendra Badwe, Director, Tata Memorial Centre who provided everyone with great encouragement and outlined the importance of creating a cadre of trainers for MCCD from

across India to disseminate the resources of USCOD and aid in strengthening the cause of death data in the country.

The aim of this 4-day workshop were to build the in-country capacity of doctors and create a pool of master trainers. Following were the objectives of the workshop-

- Improving understanding of MCCD – Use of cause of death data, factor affect, MCCD Form, definitions, and guidelines how to fill up etc
- Organising, preparing and teaching a MCCD workshop for doctors.



❖ **Medical Certification of Cause of Death Hybrid Orientation Training for Resident Doctors of Tata Memorial Centre, 30th April 2022**

The Unit for Strengthening Cause of Death Data organized a Medical Certificate of Cause of Death (MCCD) Orientation Training for the junior residents of Tata Memorial Hospital and Homi Bhabha Cancer Hospital, Vishakhapatnam on 30th April 2022. The conceptualization of this training was led by Dr Shripad Banavali, Director of Academics, Tata Memorial Centre along with Dr Pankaj Chaturvedi and Dr Rajesh Dikshit from USCOD supported by the staff of USCOD. This training was aimed at getting the newly inducted junior resident doctors oriented with the best practices in MCCD, the importance of cause of death data and a physician's responsibility towards the correct medical certification of cause of death. The idea behind this training was to train these novice doctors and create a pool of advocates for MCCD practices, who would carry forward the information on cause of death certification and inculcate the same at the foundation level. The induction of all the new junior doctors has not yet taken place hence it is proposed that another round of this MCCD training would be organized in TMH when the next batch of doctors are inducted. These MCCD trainings as a part of the orientation program of junior residents would be carried out on a continuous basis in Tata Memorial Hospital annually.



❖ **Medical Certification of Cause of Death Online Refresher Training- 6th to 7th June 2022**

The first batch of MCCD trainers were trained in a four-day trainer of trainers (ToT) course in February 2022. Following this training the trainers have been engaged in several MCCD trainings across India. The agenda behind organising a MCCD ToT Refresher course was to address the difficulties, challenges, technical queries of the trainers that they have encountered during their training experiences. The doctors who were trained in February were requested to share their experiences, questions as well as their expectations from the ToT Refresher course. The training agenda was designed around the requests and suggestions from the doctors. 21 doctors attended this two-day refresher course.

❖ **MCCD Quality Assessment Hybrid Training- 4th July to 5th July 2022**

As the Unit for Strengthening Cause of Death Data, conducts MCCD trainings as well as builds the capacity of doctors to become MCCD trainers across India, evaluating the efficiency of the training programs is of utmost importance. The training also allowed introducing the participants to a MCCD quality assessment toll designed by experts at the Melbourne University and CDC Foundation. A total of 32 participants attended this training over the course of two days.

❖ **MCCD E-Learning Course Circular from MCGM- July 2022**

In the month of July 2022, the Municipal Corporation of Greater Mumbai (MCGM) issued a circular to all 24 wards of Mumbai stating that all doctors working in hospitals, nursing homes, primary healthcare centres, private practitioners, medical colleges must mandatorily take the USCOD MCCD E-Learning course. In Mumbai doctors do not receive the blank MCCD forms from MCGM unless they produce the certificate of completion of the e-learning course.

❖ **One Year Anniversary of the Unit for Strengthening Cause of Death Data - 6th August 2022**

On 6th August 2022 the unit completed its successful year as a robust and reliable resource centre for MCCD and CRVS in India. On this occasion the unit posted a video highlighting its background and activities from its first year on its YouTube channel. The unit also organised a One Year Anniversary celebration program at the Tata Memorial Hospital, Mumbai. Dr Avinash Supe,

Director Clinical Governance and Head, P D Hinduja Hospital and a member of the USCOD National Advisory Committee graced this occasion with his presence as a Chief Guest. The program witnessed excellent words of wisdom and encouragement from Dr Rajesh Dikshit, Director, USCOD and Centre for Cancer Epidemiology; Dr Pankaj Chaturvedi, Dy. Director, USCOD and Centre for Cancer Epidemiology; Dr Siddhartha Laskar, Dy. Director, Academics, Tata Memorial Hospital; Dr Yusuf Hemed, Dr Hafiz Chowdhury and Dr Saman Gamage from the CDC Foundation. The program was attended virtually by the USCOD master trainers and in person by the resident doctors of the Tata Memorial Hospital. During the program the first look of the 2nd Volume of the Newsletter was unveiled and is scheduled for its launch shortly after. The unit's new and updated website was also showcased during the program, which is to go live very soon. The anniversary program was followed by an educational training in MCCD for the junior and senior resident doctors of Tata Memorial Hospital. 74 doctors participated in this training.



❖ **Medical Certification of Cause of Death Training for Interns at Topiwala National Medical College & BYL Nair Hospital**

The unit has collaborated with the Topiwala National Medical College and Nair Hospital, Mumbai. The institute has also nominated key personnel who would be a part of the steering committee in Mumbai. USCOD has proposed the following phase-wise structured program for implementation in this institute-

1. MCCD Orientation training of medical interns
2. MCCD Orientation training of resident doctors
3. MCCD ToT for nominated medical faculty who would ensure institutionalised sustainability of the MCCD training program
4. Advise to the medical interns and residents to take the MCCD E-Learning course on Omnicuris as a adjunct to the face-to-face training
5. Assessment of MCCD Quality pre and post training of a cohort of resident doctors



❖ **Medical Certification of Cause of Death Training of Trainers with Public Health Department, Govt. of Maharashtra**

USCOD has collaborated with the Public Health Department, Govt. of Maharashtra to create a pool of master trainers for MCCD across the state. The unit has received approval from the Public Health Department, Maharashtra to carry out a Medical Certification of Cause of Death Training of Trainers for state government doctors. The Public Health Department have nominated 5 doctors from each of the 34 districts to participate in this training. The MCCD ToT will further conduct a cascade of trainings for the doctors in their district. The goal of this collaboration is to ensure the sustainability of MCCD capacity building in Maharashtra in an institutionalised manner.

❖ **Nagpur Division- 11th November 2022**

As a part of this initiative the first MCCD ToT workshop was conducted in Nagpur at the Public Health Institute where 24 nominated doctors were trained. This training accomplished capacity building for 6 districts under Nagpur Division- Nagpur, Gondia, Chandrapur, Wardha, Gadchiroli, Bhandara.



❖ **Thane Division- 21st November 2022**

The second MCCD ToT was conducted in Thane at the Health and Family Welfare Training Centre where 13 nominated doctors were trained. This training accomplished capacity building for 3 districts under Thane Division- Thane, Raigad, Palghar



❖ **Pune Division- 23rd November 2022**

The third MCCD Tot was conducted in Pune at the Health and Family Welfare Training Centre where 13 nominated doctors were trained. This training accomplished capacity building for 3 districts under Pune Division- Pune, Satara, Solapur



❖ **Aurangabad Division- 1st March 2023**

The fourth MCCD ToT was conducted in Aurangabad at the Health and Family Welfare Training Centre where 40 nominated doctors were trained. This training accomplished capacity building for 8 districts under Aurangabad Division- Aurangabad, Beed, Jalna, Parbhani, Latur, Hingoli, Nanded, Osmanabad

❖ **Training in Collaboration with Indian Medical Association MCCD Orientation Training for doctors at Indian Medical Association Mumbai West- 24th November 2022**

USCOD organised a MCCD CME session in collaboration with the Indian Medical Association (Mumbai West) and the MCGM. This session was attended by 140 participants including government doctors and private practitioners.



❖ **MCCD Orientation Training for doctors at Indian Medical Association Mumbai West- 22nd December 2022**

USCOD organised a MCCD CME session in collaboration with the Indian Medical Association (Haji Ali) and the MCGM. This session was attended by 130 participants including government doctors and private practitioners. The session was chaired by the President of Maharashtra Medical Council.



❖ **USCOD 1st International Workshop for Strengthening Cause of Death Data Quality**

Considering that the importance of good quality cause of death data and the timely registration and medical certification of all deaths is the need of the hour, USCOD has organised a one-day 1st International Level Workshop on “**Strengthening Cause of Death Data Quality**”

on **10th December 2022 in Mumbai**. The theme of this workshop was to discuss the challenges and strategies for implementation of training programs to improve the CRVS and Death Certification systems by collating national and international perspectives. The workshop was a great success from being graced by the presence of the National and International advisory members for USCOD, technical experts from the CDC Foundation, MCCD, CRVS, MLDI subject experts from India and global, government stakeholders from the state health department and municipal corporation, representatives from eminent medical colleges. The highlight of the workshop was the attendance of around 130 delegates combined from the Municipal Corporation of Greater Mumbai, Public Health Department Maharashtra, Medical colleges under MCGM, CDC India, Bill and Melinda Gates Foundation. The one-day workshop was an excellent amalgamation of keynote lectures, training for MCCD and ICD Coding, Panel discussions, case discussions and important addresses from leaders to boost collaborative efforts beyond silos for strengthening of cause of death data quality

❖ **MCCD Orientation Training for Medical Officers at Ratnagiri**



- ❖ USCOD organized a short orientation training for state government medical officers at Ratnagiri. Around 200 doctors attended this training.

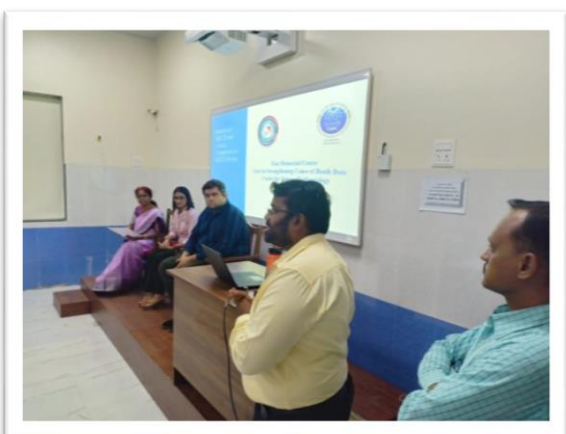


❖ **MCCD Capacity Building for AYUSH Doctors**

In India deaths are medically certified using the Medical Certification of Cause of Death (MCCD) forms. Along with allopathic physicians, doctors practicing alternative medicine including Ayurved, Homeopathy and Unani are also eligible to medically certify deaths. For the training and capacity building of these alternative medicine doctors, USCOD has engaged with the Directorate of AYUSH, Govt. of Maharashtra. The AYUSH Director has issued a circular to 7 government AYUSH Medical Colleges to implement MCCD training programs. This initiative outlines capacity building for MCCD in 3 steps- orientation of interns, education of resident doctors, training of trainers for faculty. In the next phase of this initiative training will take place for private and semi-government AYUSH medical colleges in Maharashtra.

❖ **MCCD Orientation Training for Interns at R A Podar Ayurved Medical College, Mumbai (6th July 2023)**

Face-to-face AYUSH doctors training have begun with the R A Podar Ayurved Medical College in Mumbai. Orientation training in MCCD for interns was conducted at R A Podar Ayurved Medical College, Mumbai on 6th July 2023. 63 interns participated in this training.



❖ **MCCD Educational Training for PG Residents at R A Podar Ayurved Medical College, Mumbai (11th July 2023)**

The post graduate resident doctors from R A Podar Ayurved Medical College were trained in correctly certifying deaths 11th July 2023. 55 doctors participated in this training.



❖ **MCCD Training of Trainers for Faculty at R A Podar Ayurved Medical College, Mumbai (12th July 2023)**

USCOD conducted a MCCD Training of Trainers (ToT) session for the faculty to ensure institutionalised capacity for MCCD. These trained faculty would carry out further MCCD sessions for their doctors and students. 40 faculty members participated in this training.



❖ **MCCD educational training for the post graduate resident doctors at Govt. Ayurved College, Nagpur on 26th July 2023 by USCOD. 124 doctors attended this training.**

❖ **MCCD Training of Trainers for Faculty at Govt. Ayurved College, Nagpur was conducted on 28th July 2023 by USCOD. 36 members of faculty and consultants were trained as trainers.**

❖ **MCCD Training workshop for AYUSH doctors, MBBS interns and resident doctors in Mumbai at the Rustom Choksi Auditorium, Tata Memorial Hospital, Parel, Mumbai-(10th August 2023)**

On 10th August, the face-to-face MCCD training workshop was attended 151 participants including general practitioners, AYUSH doctors, AYUSH and MBBS interns and resident doctors, consultants from medical colleges in Mumbai, MCGM, IMA

❖ **MCCD ToT workshop for doctors at Health and Family Welfare Training Centre in Nashik division of Mumbai-(31st August 2023)**

The fifth MCCD ToT was conducted in Nashik at the Health and Family Welfare Training Centre where 22 nominated doctors were trained. This training accomplished capacity building for 5 districts under Nashik Division- Nashik, Nandurbar, Dhule, Ahmednagar, Jalgaon.



❖ **MCCD orientation and IRIS demonstration for SMPT Medical College, Nashik, Mumbai-(1st September 2023)**

The higher authorities of the institute were keen on understanding the work done and activities supported by USCOD to improve the cause of death data at an institutional level. Particular interest was shown. USCOD arranged for an orientation session to sensitize 37 participants including the head of departments and consultant doctors on MCCD and a MCCD education session for the resident doctors towards the Iris Automated Coding system and research around assessing the quality of medical certification of cause of death.



❖ **Medical Certification of Cause of Death Capacity Building of doctors and consultants at HBT Medical College and R N Cooper General Hospital Medical in Mumbai-(13th and 14th September 2023)**

There are 4 medical colleges under the Municipal Corporation of Greater Mumbai. USCOD



has conducted training programs for educating doctors in M CCD at these colleges and continues to do so. On 13th and 14th September, the unit conducted two trainings at the HBT Medical College and R N Cooper General Hospital that is one of these 4 institutions in Mumbai. 128 resident doctors and consultants participated on these two days. A pre and post-test M CCD knowledge assessment as well as a pre and post-test assessment of M CCD form filling was including as a part of this training.

❖ **Training of interns at HBT Medical College (HBTMC) for M CCD-27th September and 3rd October 2023**

Further to the units' plan of training doctors in the 4 medical colleges under the Municipal Corporation of Greater Mumbai, trainings were conducted in HBT Medical College & RN Cooper General Hospital and GS Medical College & KEM Hospital. At HBTMC, following the last training of resident doctors and consultants, training for 150 medical interns was done.



❖ **M CCD training program for resident doctors, interns and consultants at GS Medical College & KEM Hospital (GSMC & KEMH) -(16th October 2023)**

The unit has also implemented a batch-wise M CCD training program at GS Medical College & KEM Hospital for resident doctors, interns and consultants. 26 out of 60 residents from the community medicine department were training for M CCD on 16th October. GSMC & KEMH has a total of 160 interns at present. Out of which 60 interns were trained on 18th October.

To evaluate the impact of the training on the knowledge of M CCD amongst the trained doctors and interns, a google form-based knowledge assessment was conducted at both these institutes. The doctors and interns were also given a pre and post assessment for evaluating their practice of filling M CCD forms. Both these assessments are continuously getting evaluated at the unit. The reports of the assessments shall be reviewed by the respective institute and potentially published.

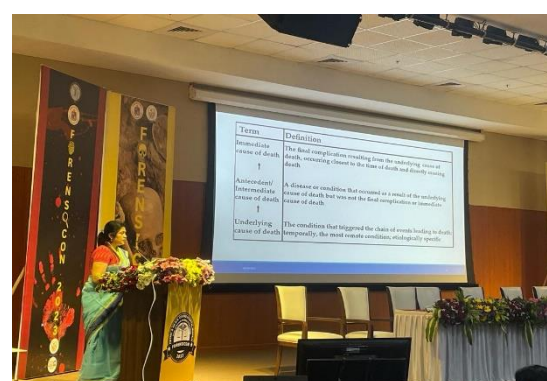


❖ **MCCD training program for interns and at GS Medical College & KEM Hospital (GSMC & KEMH) – 18th, 19th, 20th & 25th October 2023)**

The USCOD unit has implemented a batch-wise MCCD training program at GS Medical College & KEM Hospital for 182 interns. Two kinds of assessments were provided to the residents and interns during the training.

❖ **Presentation and brief of USCOD MCCD work and best practices at state level Medicolegal conference held at HBT Medical College & Dr R.N. Cooper Hospital, Mumbai-(28th and 29th October 2023)**

The Department of Forensic Medicine, HBT Medical College & Dr R.N. Cooper Hospital, Mumbai conducted a state level Medicolegal conference this year 2023 under the aegis of Medicolegal Association of Maharashtra. This conference was a great academic feast for the delegates attending from all over the state & national level too and act as means of advocacy and outreach for USCOD work. The approx. attendees (Forensic faculty, government medical officers, Forensic Science experts, Police officers & lawyers) were around 300. The unit presented its work, a brief session on MCCD best practices. This served as a great platform for the unit's outreach amongst prestigious government hospitals and reputed government medical colleges.



❖ **Training of resident doctors regarding the USCOD MCCD work and best practices at Seth G S Medical College & KEM Hospital, Mumbai- (30th October 2023)**

On 30th October, 31 resident doctors were trained and sensitized regarding the USCOD MCCD work and functioning at Seth G S Medical College & KEM Hospital, Mumbai.

❖ **ICD Coding and iris automated coding at Directorate of Census Operations (DCO), Maharashtra- (22nd November 2023)**

The Directorate of Census Operations (DCO), Maharashtra approached the USCOD with an interest in learning about the Iris Automated Mortality Coding Software. The officials were keen on implementing the Iris software at the Health Intelligence and Vital Statistics, Directorate of Health Services, Pune. In this regard the DCO office invited the unit to orient the staff responsible for maintaining CRVS in Maharashtra on 22nd November. This session aimed at preparing the technical staff in the use of ICD-10 Mortality Coding and the Iris Automated Coding Software through training. 133 participants were trained.



❖ **Meeting with Executive Health Officer, Public Health Department, MCGM, May 2024**

USCOD, supported by the Data for Health, has been working with the Municipal Corporation of Greater Mumbai for strengthening MCCD and Coding in the city of Mumbai. USCOD and CDC Foundation met the Executive Health Officer, Public Health Department, MCGM to discuss the future of the collaborative work. This meeting resulted in the agreement that USCOD would technically support the assessment of quality and completeness of MCCD in wards of Mumbai on a pilot basis as well as an assessment of quality of mortality coding in Mumbai. Following are the updates on the same-

1. **Assessment of MCCD Quality and Completeness-** This assessment was initiated for 8 wards in Mumbai where the MCCD Form 4 and 4A were analysed using specialised validated tools for their quality and completeness. A total of 2000 forms were assessed. This assessment would guide the MCGM in planning training and capacity building programs for MCCD as well as for policy level decision making around MCCD and CRVS.

2. **Assessment of Mortality Coding Quality-** The quality of manual ICD 10 mortality coding was assessed against automated coding systems that are institutionalised within MCGM Registration of Births and Deaths Department. A total of 500 MCCD forms were assessed for this activity.

❖ **MCCD Research Project at KEM Hospital- July 2024**

USCOD is technically supporting the post-graduate thesis of forensic medicine and toxicology resident doctor from KEM Hospital, Mumbai. This study will evaluate the impact of MCCD education on the quality of MCCD filled in this tertiary care hospital. A meeting was conducted between the KEM resident doctor and USCOD with Dr Rajesh Dikshit to discuss the study design on 23rd July.

❖ **Supporting adoption of Iris Mortality Coding Software and ICD 10 Coding at State Bureau of Health Intelligence and Vital Statistics, Directorate of Health Services, Pune**

USCOD has had a long-term collaboration with the State Bureau of Health Intelligence and Vital Statistics, Directorate of Health Sciences, Pune for strengthening cause of death data and improving the generation of vital statistics for vital statistics. Taking this collaboration further, USCOD is supporting SBHIVS in the following capacity-

1. **Capacity building for ICD 10 mortality coding-** Officials from SBHIVS along with data entry operators have been trained by USCOD in ICD 10 Mortality Coding in Varanasi at the National Coding Workshop. Also, a hands-on session was conducted at the SBHIVS Pune office for use of Iris Automated Coding System and solving the day-to-day challenges of the staff carrying out coding.
2. **Assessment of MCCD quality and completeness-** USCOD has supported SBHIVS in conducting an assessment of quality and completeness of MCCD forms for 27 districts. A sample of 1350 forms was assessed by USCOD for the same and the report is shared with SBHIVS for guiding the training and capacity building activities and policies. This assessment will also guide in prioritizing the districts for training that show a relatively poor quality of forms.
3. **Coding of MCCD Forms for year 2023-** USCOD supported SBHIVS in completion of coding of around 100,000 MCCD forms from the year 2023 that was required for generation and submission of mortality data reports to Registrar General of India
4. **MCCD capacity building for doctors-** USCOD has an ongoing Training of Trainers program for government doctors in Maharashtra. A division wise pool of master trainers has been created. Continuing this program a new calendar of training has been created for phase 2 of these training that will begin from September 2024.
5. **ICD Coding and Iris Automated Coding System Capacity Building-** in order to reduce the overburden of coding MCCD forms from 34 districts in Maharashtra at the SBHIVS Pune office, a plan for district level coding is mapped. USCOD will technically support the capacity building of nominated staff from each district who will be responsible for coding of MCCD forms and sending them to Pune for compilation.

❖ **On-going training of Resident Doctors at ACTREC, Mumbai, April to August 2024**

The Medical Certification of Cause of Death training for the resident doctors at Tata Memorial Hospital & The Advanced Centre for Treatment, Research and Education in Cancer (ACTREC) along with Nursing staff of ACTREC.

❖ **Medical Certification of Cause of Death (MCCD) orientation training program for resident doctors of Tata Memorial Hospital, Mumbai**

USCOD has carried out a MCCD orientation training program for resident doctors of Tata Memorial Hospital, Mumbai. As a part of this training junior and senior resident doctors from various clinical departments of TMH were trained in MCCD in batches conducted on every Saturday from 27th July to 26th October 2024. During the training period, 10 trainings were conducted, where a total of 344 resident doctors were trained.

❖ **USCOD 3rd Year Anniversary Celebration**

On the occasion of the unit's third anniversary a celebratory program was organised that was attended by guests online and offline. The unit released its triennial work report and quarterly newsletter on this occasion. The occasion was graced by the hybrid presence of the key stakeholders of USCOD from India and overseas including health departments, directors of census operations, chief registrars for births and deaths, CDC Foundations team members, USCOD leadership, USCOD staff.

❖ **Training Of Trainers (TOT) for State level Government Doctors at Pune, 25th and 26th September 2024**

As a part of the collaboration with the State Bureau of Health Intelligence and Vital Statistics, Directorate of Health Services for capacity building of trainers at division level in Maharashtra, the Unit for Strengthening Cause of Death Data (USCOD), conducted a two-day MCCD, CRVS Legal Aspect and Civil Registration System (CRS) Portal training for doctors and data entry personnel from Pune and Thane Division. A total 78 participants took part in this training. The goal of this training was to create capacity of doctors within Pune division to further train doctors at district hospital and government hospital level in MCCD. The data entry staff were a part of this training to get oriented on the use of Iris Automated Coding Software and ICD 10 Mortality Coding.

❖ **Medical Certification of Cause of Death (MCCD) trainings at Nair Hospital, 15th October**

At Nair Hospital, the training was conducted, targeted assistant medical officers and mortuary staff, both of whom have the authority to call on the certifying resident doctor to rectify any errors made in MCCD forms. This training challenged embedded practices which often led to errors in the cause of death forms and focused on improving the quality of MCCD forms certified by resident doctors.

❖ **MCCD training program for Nurses of Advanced Centre for Treatment, Research and Education in Cancer, Navi Mumbai (8th November 2024)**

In the Advanced Centre for Treatment, Research and Education in Cancer (ACTREC) MCCD training for the nursing staff was conducted on November 8, 2024, with 55 participants from various clinical departments. A total of 52 participants submitted their respective pre & post knowledge-based assessment tests.

❖ **MCCD training program for residents of Advanced Centre for Treatment, Research and Education in Cancer, Navi Mumbai (9th November 2024)**

USCOD conducted MCCD training for resident of ACTREC, total 14 participants attended the training out of which 12 participants submitted pre & post knowledge-based assessment tests.

❖ **Medical Certification of Cause of Death (MCCD) Training of Trainers at AIIMS, Nagpur (January 2025)**

The Unit for Strengthening Cause of Death Data, Tata Memorial Centre in Collaboration with State Bureau of Health Intelligence & Vital Statistics, Pune and All India Institute of Medical Sciences (AIIMS), Nagpur has organized a Medical Certificate of Cause of Death (MCCD) Training of the trainers for the medical Partitioners of Maharashtra on 6th, 7th, & 8th January 2025 at AIIMS, Nagpur. The training aimed to orient medical practitioners across both government and private institutions in Maharashtra with best practices in MCCD. It emphasized the importance of cause of death data and the physician's responsibility in ensuring accurate medical certification of the cause of death. The idea behind this training was to train these doctors and create a pool of Master trainers for MCCD, who would carry forward the information on cause of death certification and inculcate the same at their Institutional level. The training focused on strengthening the quality of Medical Certification of Cause of Death (MCCD) Forms and Basics of International Classification of Diseases (ICD-10). A total of 459 participants attended the training sessions, which included doctors and Medical Records Department (MRD) staff.

❖ **MCCD training program for residents of Advanced Centre for Treatment, Research and Education in Cancer, Navi Mumbai (27th December 2024)**

In The Advanced Centre for Treatment, Research and Education in Cancer (ACTREC) MCCD training for the Resident doctors was conducted on 27/12/2024 with a total participation of 10 participants from various clinical departments. Out of which all participants had submitted their respective pre & post knowledge-based assessment test.

❖ **A Gender Equity study for Maharashtra state**

Gender Equity study initiated at The Advanced Centre for Treatment, Research & Education in Cancer, Navi Mumbai. Wherein, data under the variables like age, gender, type & stage of cancer-causing death, patients place of residence will be observed for all the mortality cases registered within the institute from 2021 onwards.

❖ **Training Of Trainers (TOT) for State level Government Doctors at Pune, 29th & 30th January 2025**

On 29th & 30th January, 2025 a Training of the Trainers (TOT) was organised by The Unit for Strengthening Cause of Death Data, Tata Memorial Centre in collaboration with State Bureau of Health Intelligence & Vital Statistics, Maharashtra. There was a total of 86 participants including the Government Medical & Statistical Officers across various districts of Nashik, Nandurbar, Dhule, Jalgaon & Ahilyanagar. It is the part of the six Maharashtra state division wise Training of the Trainers from various Government institutes. This training of the trainers will facilitate the Civil Registration process across the state of Maharashtra

❖ **MCCD training program for Nurses of Tata Memorial Centre (13th February 2025)**

MCCD orientation training was conducted for 295 plus nurses from Tata Memorial Centre. This included attendance of 295 nurses in person at Tata Memorial Hospital, Parel and the rest joined virtually from the other units of TMC in India. This training was done with the aim of training the nurses as a key quality check modality when MCCD forms are filled by doctors at hospital ward level. Nurses are responsible for collection and forwarding of forms to the medical records hence they could possibly get gross errors if any modified in real time from the doctor.

❖ **Municipal Corporation of Greater Mumbai Medical Certification of Cause of Death (MCCD) Quality assessment**

The assessment was conducted to comprehend the baseline quality of MCCD forms certified within the most vital eight wards of Municipal Corporation of Greater Mumbai on Pilot basis. This study includes sample MCCD forms of equal quantity from both Institutional & Non-institutional deaths. As per the phase 1 MCGM quality assessment, the baseline quality of MCCD forms certified within selected wards of MCGM on pilot bases was achieved. Further MCGM Phase II study was initiated and report compilation where stratification of Poor quality MCCD forms of

selected wards under the Municipal Corporation of Greater Mumbai were studied. Data like number of Governmental & Private Hospitals and Private Practitioners from various qualifications assigning Poor quality of MCCD forms was evaluated. The outcome was shared and presented to the MCGM authorities. The Impact of the assessment- A Letter to be issued by government health authorities to all city government medical colleges to include MCCD training as a part of orientation program for all the interns and resident's doctors.

❖ Training of the Trainers at Konkan State division

As part of the collaborative effort of USCOD with the Maharashtra State Bureau of Health Intelligence & Vital Statistics (SBHIVS) conducting the Training of the Trainers (TOT) across the Maharashtra state as per the six divisions, the last phase of the TOT was conducted for the nominated Konkan divisional Government Medical Officers, Statistical Officers & Medical Records Staff members at Kolhapur, on 19th & 20th March, 2025. There were a total of 92 attendees with 45 participants completing the Conceptual Knowledge based Pre & Post test questionnaire. As part of the Training of Trainers (TOT) conducted in Kolhapur for the Kolhapur Division MCCD Training, sessions on the Basics of ICD-10 were introduced to statistical officers. The objective was to sensitize them to ICD-10 coding, enabling them to effectively implement the coding process in their respective institutions.

STATE 02: UTTAR PRADESH



Uttar Pradesh, India's most populous state, faces significant health challenges, reflected in its high infant and maternal mortality rates and underdeveloped healthcare

infrastructure, especially in rural areas. The state carries a high disease burden, with both communicable and non-communicable diseases prevalent. Efforts to strengthen the Civil Registration and Vital Statistics (CRVS) system are underway, aiming to improve the accuracy and completeness of death registration. Initiatives like Project Kiran Kaaran focus on enhancing the quality of Medical Certification of Cause of Death (MCCD) through training and capacity-building programs for medical practitioners and registrars. Increasing community awareness and involvement in the death registration process is also a key focus to improve health outcomes and registration rates in the state.

ACTIVITIES UNDERTAKEN

❖ Medical Certification of Cause of Death Training of Trainers for Government Medical Colleges in Uttar Pradesh

The unit has collaborated with the Department of Medical Education, Govt. of Uttar Pradesh to implement a MCCD Capacity building program across all 24 medical colleges across the state. The Department of Medical Education, Uttar Pradesh issued a circular to 24 government medical colleges in Uttar Pradesh to nominate up to 3 doctors from each institute to participate in the MCCD Training of Trainers in the state as well as a focal person from each college to steer the training programs.

❖ Face-to-face MCCD Training Workshop in Varanasi with support of the State Government Medical Education Department, UP, March 2022

A one-day MCCD educational workshop was organized by the unit at Mahamana Pandit Madan Mohan Malaviya Cancer Centre (MPMMCC), Varanasi on 15th March 2022. 54 Doctors participated in this workshop including those nominated by the Directorate General of Medical Education and the Indian Medical Association, Varanasi as well as a few from private medical hospitals in Varanasi.



❖ **Face-to-face MCD Orientation Training of Junior Resident Doctors at King George's Medical University, Uttar Pradesh**

The King George's Medical University (KGMU), Lucknow invited the unit to orient their newly joined junior resident doctors for MCD. In March 2022, 300 junior residents were educated on the best practices in MCD and the importance of cause of death data over a span of 2 days. KGMU has also agreed to introduce the MCD E-Learning course as a mandatory course to take for their medical interns and resident doctors.



❖ **Talk on introduction to USCOD training programs and activities along with importance of Cause of Death Data at SGPGIMS, Lucknow- 26TH March 2022**

USCOD was invited to speak at the State Level Seminar on The Registration of Birth and Death Act at SGPGIMS, Lucknow. The unit presented a talk on the general MCD guidelines and common errors made in MCD.



❖ **National Workshop for Strengthening of Cause of Death Data, 16-17 December 2022, Varanasi**

USCOD has been working in the state of Uttar Pradesh for implementing training programs and strategies to improve the cause of death data in collaboration with the Department of Medical

Education, Directorate General of Medical Education, Directorate General of Census Operations in a systematic collaboration manner. As a part of these efforts the unit organized a two-day National Workshop for Strengthening of Cause of Death Data, 16-17 December 2022, in Varanasi, Uttar Pradesh. The workshop witnessed successful brainstorming between key national stakeholders from the field of MCCD and CRVS along with the expertise from international speakers from CDC Foundation, WHO India office. A total of 60 delegates from private medical college in Varanasi, nominated delegates from Chief Medical Officer Varanasi, MPMMCC doctors attended the workshop.



❖ **Training of nurses at Mahamana Pandit Madan Mohan Cancer Centre (MPMMCC) and Homi Bhabha Cancer Centre (HBCH), January 2023**

67 nursing officers from MPMMCC and HBCH were trained in batches for MCCD Form 2 (death report) across the month of January.



❖ **MCCD Orientation training for medical officers posted in Primary Health Centers, Community Health Centers, and District hospitals in the Varanasi district, 18th March 2023**

20 nominated medical officers posted in Primary health centers, Community health centers and District hospitals in Varanasi district were nominated with the support of the Assistant Chief Medical Officer, Varanasi. USCOD arranged for a one-day orientation training for these doctors



on 18th March 2023 at Mahamana Pandit Madan Mohan Malaviya Cancer Hospital (MPMMCC).

❖ **MCCD Orientation training for the junior residents, senior residents, and faculties in Uma Nath Singh Autonomous Medical College, Jaunpur, Uttar Pradesh, 29th April 2023**

USCOD was able to organize a face-to-face MCCD orientation workshop for the junior residents, senior residents, and faculties representing the Preventive and Social Medicine (PSM), Pathology, Pediatrics, and General Surgery department at Uma Nath Singh Autonomous Medical College, Jaunpur, Uttar Pradesh on 29th April 2023. A total of 100 participants attended this workshop.



- ❖ **Reaching out MCCD training sessions for the junior residents, senior residents, consultants, and faculties at Mahamana Pandit Madan Mohan Malaviya Cancer Centre (MPMMCC) and Homi Bhabha Cancer Hospital (HBCH), Varanasi, Uttar Pradesh, June-July 2023**

USCOD was able to conduct reaching out MCCD training sessions for the junior residents, senior residents, consultants, and faculties posted at medical oncology, Radiation oncology, and Surgical Oncology who are directly involved in filling out the MCD forms (4 & 4A). The main objective of this type of training was to provide the sessions to the doctors at MPMMCC & HBCH in small group or batches by reaching out to them at their respective workstation i.e. in outpatient department, in patient department and operation pre and post room (for surgeons) based on their availability without interrupting the patient care services. A total of 60 participants from the above-mentioned departments have been trained. The unit is planning to provide training for the all the doctors in both the units of TMC, Varanasi in the coming months.



- ❖ **MCCD training of doctors in collaboration with Joint Director of Vital Statistics and State Health Training Institute, Uttar Pradesh-(10th August 2023)**

On 10th August the unit conducted a MCCD training for 20 state government doctors in collaboration the Joint Director of Vital Statistics and State Health Training Institute, Govt. of UP.

- ❖ **Training of government doctors for MCCD by USCOD in collaboration with Joint Director of Vital Statistics and State Health Training Institute**

USCOD in collaboration with Joint Director of Vital Statistics and State Health Training Institute conducted a comprehensive MCCD training for 125 government doctors in Varanasi at the office of Chief Medical Officer, Varanasi Division.



❖ **MCCD Training for Residents, Interns, head of departments and consultant doctors of Sarojini Naidu Medical College, Agra, Uttar Pradesh-19th and 20th January 2024**

As a part of the MCCD training programs that the unit has planned in collaboration with the Directorate Census Operations, Govt. of Uttar Pradesh, face-to-face trainings are conducted in SNMC, Agra, Uttar Pradesh. This is the first ever training that was conducted here in two batches first on 19th and second on 20th January 2024 which included medical interns, resident doctors from the medical college, few doctors from the district hospital attended the training, head of departments, consultant doctors who actively certify deaths within the institution. The number of participants were almost 270. Two kinds of assessments were provided to the residents and interns during the training.



❖ **Medical Certification of Cause of Death (MCCD) Training for medical interns, resident doctors from the medical college, head of departments, consultant doctors and doctors from the district hospital at Jawaharlal Nehru Medical College, Aligarh, Uttar Pradesh**

As a part of the MCCD training programs that the unit has planned in collaboration with the Directorate Census Operations, Govt. of Uttar Pradesh, face-to-face trainings are conducted in Sarojini Naidu Medical College, Agra, Uttar Pradesh. This is the first ever training that was conducted here in two batches first on 23rd and second on 24th January 2024 which included medical interns, resident doctors from the medical college, head of departments, consultant doctors and few doctors from the district hospitals, who actively certify deaths within the institution. The number of participants were almost 250. Two kinds of assessments pre and post were provided to the residents and interns during the training.



In collaboration with the Directorate of Census Operations, Uttar Pradesh, the Unit for Strengthening Cause of Death initiated **Project Kiran Kaaran** to fortify civil registration, vital statistics, and medical certification of causes of death in Uttar Pradesh. As part of this collaboration, the National Conference for Strengthening Cause of Death (NaStaCon 2024) was jointly organized by the Unit for Strengthening Cause of Death, Centre for Cancer Epidemiology, Mahamana Pandit Madan Mohan Malaviya Cancer Centre (MPMMCC), Homi Bhabha Cancer Hospital (HBCH), and Directorate of Census Operations, Uttar Pradesh, in Varanasi on 13th February 2024.

The conference provided a unified platform for administrative leaders, clinicians, and academic stakeholders involved in Civil Registration and Vital Statistics and Medical Certification of Cause of Death in India to exchange ideas, suggest strategies, and brainstorm best practices for strengthening cause-of-death reporting nationwide.

Key Deliberations from NaStaCon 2024:

1. **Project Kiran Kaaran:** A collaborative effort aimed at capacity building across 18 government medical colleges and high-case-load district hospitals in Uttar Pradesh. This initiative aims to establish a sustainable institutionalized model for the training of doctors in medical certification of causes of death, with potential replication in other states.

Training in 18 Medical Colleges of Uttar Pradesh and 100 % implementation of MCCD By August, 2024

**Training in high case load units and 100% By December, 2024
Implementation of MCCD**

Similar support from Directorate of Census Operations of other states is envisioned for the improvement in cause of death data.

2. **Continuous Training Program:** Continuous training and awareness programs to enhance the quality of certification of causes of death by doctors. A pool of 300 master trainers for MCCD would be created within the state of Uttar Pradesh to disseminate continuous training within their respective institutions and other institutions as well. A session on MCCD would be conducted in each and every training schedule in SIHFU, UP (State Institute of Health and Family Welfare, UP)
3. **Adoption of MCCD eLearning Course:** The adoption of an e-learning course for MCCD in all participating states.
4. **Creation of a Focus Group in Varanasi:** Establishment of a focus group comprising medical superintendents from government hospitals in Varanasi to address challenges in death notification and certification, conduct regular training sessions, and ensure the use of standard MCCD forms.
5. **Baseline Assessment of MCCD Quality:** Conducting baseline assessments of MCCD and CRVS within institutions to identify loopholes and design strengthening programs.

6. **Implementation of Mortality Coding Teams:** Organizing workshops to train data entry and medical records officers in mortality coding, with the aim of improving health status descriptions and identifying prevention strategies.
7. **Advocacy for One Nation, One Software:** Advocating for a nationwide common software for CRVS to strengthen standardized death registration and generation of quality vital statistics.
8. **Monitoring:** Continuous monitoring by the Directorate of Census Operations, Uttar Pradesh and the Office of the Chief Registrar (Birth & Death) would be in place. There would be a mechanism to monitor the implementation and quality of MCCD along with birth and death registration monitoring through district and divisional level Inter Departmental Coordination Committee meetings. These meetings are scheduled to take place in Uttar Pradesh once in every two months.
9. **Second Phase-** The second phase of Project Kiran Kaaran would focus on improvement the community cause of death. This may include capacity building of community health care workers in Verbal Autopsy techniques.

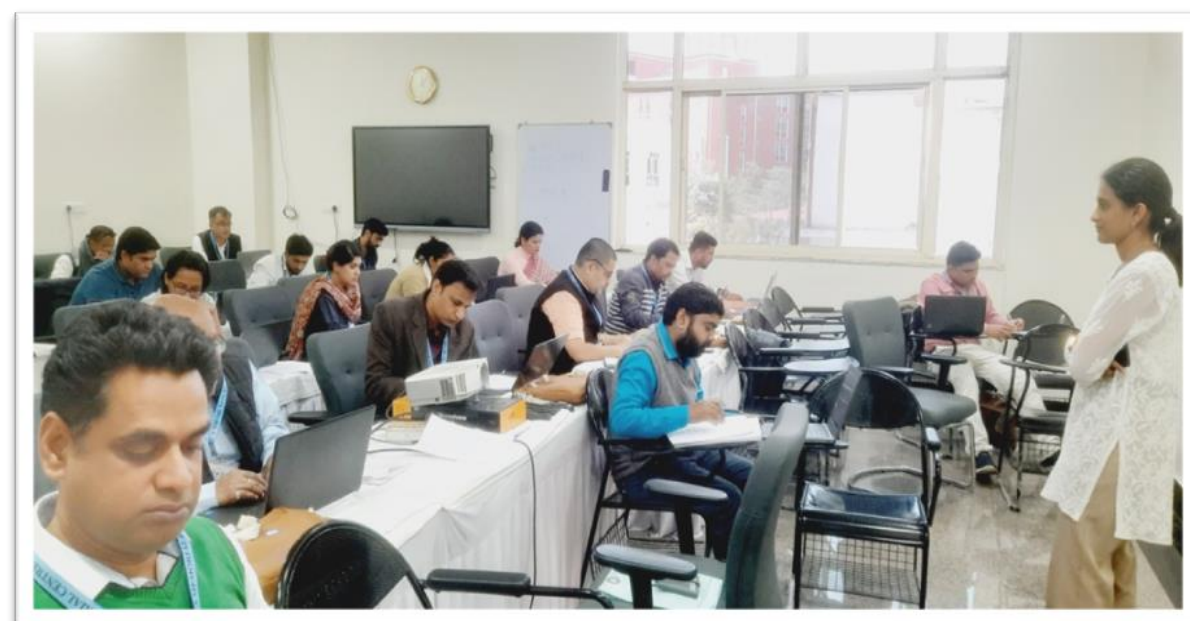
In conclusion, the Varanasi Declaration underscores the commitment of stakeholders to improve the accuracy and reliability of cause-of-death data in India. Through collaborative efforts and strategic initiatives outlined in NaStaCon 2024, we aim to enhance public health policies and interventions for the betterment of society.



Inaugural session led by Tata Memorial Centre, the Directorate of Census Operations, and other prominent institutions. Notable participants included directors of census operations from six states, chief registrars of births and deaths, state health department officials.



In picture (right): CDC members at NaSTACON conference Dr Hafizur Chaudhary, Mr Jean-Edgard Nguessan, Dr Erin Nichols and Dr Saman Gamage (left to right)



Six-day training on ICD-10 Mortality coding workshop led by Dr. Saman Gamage

Following the conference, a two-day Medical Certification of Cause of Death training workshop was held on February 14th and 15th, 2024, to train over 60 doctors from various government medical colleges in Uttar Pradesh. The USCOD also conducted a survey on state preparedness for ICD Mortality Coding and organized a six-day ICD Coding training workshop led by Dr. Saman Gamage.

The USCOD and CDC/CDC Foundation teams visited key stakeholders in Varanasi, including the Chief Medical Officer, district hospitals (Shri Shiv Prasad Gupt Divisional District Hospital, Deen Dayal Upadhyay District Hospital, Community Health Centre Chokha Ghat) and other health institutions. These visits aimed to understand current practices and advocate for best practices

in death notification and certification. They also supported the formation of a committee of medical superintendents to address challenges and strategies for improving death certification in the region.

March 2024

The DCO of Uttar Pradesh is continuing the MCCD training program to ensure sustainability, utilizing Master Trainers nominated by the DCO. Additional training sessions were held at MLB Medical College & District Hospital in Jhansi from March 14th to March 16th, 2024, with a total of 132 participants. MCCD training at District Hospital, Sadar, was facilitated by Dr. Nishant Kumar and Dr. Kamlesh Kumar, involving 30 participants. This training was conducted through both offline and online sessions.

April 2024

To ensure continuity, the MCCD training initiated by DCO, Uttar Pradesh, is ongoing with the support of Master Trainers selected by the DCO. On April 19th and 20th, 2024, a training session was held at Rani Durgavati Medical College in Banda, attended by 86 participants.

Medical Certification of cause of death Training- June & July 2024

Ensuring sustainability and institutionalization of these efforts, the DCO organized an online MCCD orientation training for state government doctors from Jalaun, Jhansi and Banda over three days between 12 to 14 June 2024. Around 150 doctors attended this training. Continuing the efforts to improve MCCD in Up under Project Kiran Kaaran, MCCD training was conducted at BRD Medical College, Gorakhpur, Uttar Pradesh on 20th and 21st June. This training was led by USCOD master trainer and supported by the trainer for the medical college who were trained by USCOD previously. Around 250 doctors including interns, residents, consultants attended this training.



❖ **MCCD training was conducted at BRD Medical College, Gorakhpur, Uttar Pradesh on 20th and 21st June, 2024 under DCO, Uttar Pradesh**

Further the DCO UP is also conducting meetings with major medical colleges to promote following WHO ICD 10 coding techniques for mortality coding of MCCD forms within the institution. These meetings are a follow up of the ICD 10 Coding Workshop that was organised by USCOD in Varanasi earlier in February where nominated participants from few medical colleges of UP were trained along with staff of DCO UP.

Continuing the efforts to form a committee of medical superintendents in Varanasi, USCOD had previously met with officials from Pandit Deen Dayal University Hospital in February. Following these efforts further orientation training in MCCD was conducted at DDU for doctors on 20th July 2024. Around 30 doctors participated in this training. Further discussion was done with the medical superintendent for his inputs on the agenda of the medical superintendent committee

❖ **Medical Certificate of Cause of Death Data Training for two medical colleges in Uttar Pradesh, 17th September**

As a part of USCOD's continuous collaboration with Directorate of Census Operations, Uttar Pradesh, MCCD training was conducted for two medical colleges in Uttar Pradesh namely Ganesh Shankar Vidyarthi Medical College in Kanpur and One day training at Motilal Nehru Medical College in Prayagraj. A total of 183 and 55 doctors participated in this training respectively. A two-day MCCD training at Ganesh Shankar Vidyarthi Memorial Medical College, Kanpur, which was attended by 117 participants. Results showed that 65 participants improved in the knowledge-based assessment.

❖ **Medical Certificate of Cause of Death Data Training for residents of Mahamana Pandit Madan Mohan Malviya Cancer Centre and Homi Bhabha Cancer Centre, Varanasi**

USCOD conducted MCCD training for resident doctors of Mahamana Pandit Madan Mohan Malviya Cancer Centre (MPMMCC) and Homi Bhabha Cancer Centre (HBCH) from 31st August till 12th December 2024. A total of 58 residents from various departments has been trained.

STATE 03: BIHAR



Bihar, located in eastern India, is one of the country's most populous states, with Patna as its capital. The state's economy is largely agrarian, and it faces significant development challenges. Despite recent advancements in infrastructure and education, Bihar continues to grapple with issues such as poverty and underdevelopment. In terms of health, the state encounters several challenges, including high maternal and child mortality rates, malnutrition, and communicable diseases like tuberculosis and malaria.

While there have been improvements in healthcare services and access, particularly in rural areas, disparities remain. The death registration system in Bihar has seen progress, yet issues like incomplete registration and inaccurate cause-of-death documentation persist. Enhancing the accuracy and completeness of death certification is crucial, necessitating better training for field workers and healthcare professionals. Overall, Bihar's health status and death registration system show both progress and areas needing continued attention and improvement.

ACTIVITIES UNDERTAKEN

❖ Hybrid MCCD Sensitization Workshop at SKMHC, Muzaffarpur, Bihar

A one-day educational training for MCCD was organised at the Shri Krishna Medical College and Hospital, Muzaffarpur where around 90 doctors from their institute were trained. Considering that Bihar is the lowest performing state for MCCD in India this training was an excellent ice-breaker to introduce the resources of the unit in the state and begin the process of advocacy for best practices in MCCD to the state health authorities.



❖ Second Round of MCCD Training at SKMCH and Form 2 Training of Nurses at HBCHRC Muzaffarpur, Bihar

The unit conducted two one-day trainings at Shri Krishna Medical College and Hospital in Muzaffarpur Bihar. 95 interns from the department of Preventive and Social Medicine attended this workshop. Along with this a training for Form 2 (Death Report) was also conducted for the nurses of Homi Bhabha Cancer Hospital and Research Centre, Muzaffarpur. The unit has continually made efforts to advise the authorities from the Health Department, Bihar to adopt the MCCD Form 4 and Form 4A as prescribed by the Office of Registrar General of India. USCOD was also able to identify that the Form 2 Death Report was not been filled in Bihar and has highlighted this challenge to the authorities for necessary action.



❖ **Advocacy meeting with the Director of Census Operations, Bihar for discussing the adoption of MCCD Form 4 and 4A across Bihar as suggested by the Office of Registrar General of India**

The USCOD and CDC Foundation team met with Shri Ramachandrudu in December 2022. A visit was scheduled at the Office of Directorate General of Census Operations, Bihar on 2nd February 2022. A follow-up discussion was conducted regarding the adoption of MCCD Form 4 and 4 A standardized formats across the state of Bihar and unifying the process of MCCD. Further discussions to facilitate the implementation of MCCD training programs for medical colleges and state government healthcare facilities and measures required to implement MCCD training programs for state government & medical colleges doctors across Bihar.



❖ **USCOD at the Bihar Oncology Summit, February 2023**

USCOD presented the importance of the Medical Certification of Cause of Death data, Registration of the Birth and Death Act, and the various types of MCCD forms used in death registration at the Bihar Oncology Summit conference held on the 4th & 5th February 2023 in the presence of Deputy Chief Minister of Bihar, Additional Chief Secretary, Health Secretary & other officials from Health Department of Bihar. 440 delegates from across the state were present for this event, a collaborative effort of the Bihar State Health Department and HBCH & RC, Muzaffarpur.



❖ **Mandatory Inclusion of USCOD MCCD e-Learning Course into Interns' Curriculum at Darbhanga Medical College and Hospital (DMCH), Bihar, January 2023**

Department of Preventive and Social Medicine, in collaboration with the USCOD, made the MCCD e-Learning course mandatory for the interns at Darbhanga Medical College with the support of the Dean, DMCH and coordinated by the Department of Preventive and Social Medicine

❖ **MCCD Orientation training for the junior residents, senior residents, and faculties posted in Darbhanga Medical College, Bihar, February 2023**

USCOD was able to organize a capacity-building training session for the junior residents, senior residents, consultants, medical officers, and faculties from the Preventive and Social Medicine department (PSM), Pathology, Paediatrics, Orthopaedics, Anaesthesia, Forensic, General Surgery Obstetrics, and Gynaecology representing from each department at Darbhanga Medical College on 28th February in which a total of 90 participants attended the workshop.



❖ **MCCD Orientation training for the junior residents, senior residents, and faculties posted in Government Medical College and Hospital (GMCH), Purnea, Bihar-May 2023**

- ❖ The unit organized face-to-face orientation sessions for the junior residents, senior residents, consultants, faculties from the Preventive and Social Medicine department (PSM), Pathology, Paediatrics, Orthopaedics, Anaesthesia, Forensic, General Surgery Obstetrics and Gynaecology at GMCH and Katihar Medical College and Hospital (KMCH), Purnea. With the support of the Indian Medical Association (IMA) private practitioners from Purnea also participated in the workshop. A total of 85 delegates participated in the workshop



- ❖ **Training of nurses on Death report-form 2 at Homi Bhabha Cancer & Research Centre (HBCH & RC), Muzaffarpur, Bihar, May2023**

15 Nursing officers at Homi Bhabha Cancer & Research Centre (HBCH & RC), Muzaffarpur, Bihar was trained on death report (form 2) on 10th May 2023



- ❖ **Mandatory completion of eLearning course for interns of SKMCH, Muzaffarpur and DMCH in Bihar-(September 2023)**

A MCCD training is planned for late September at Shri Krishna Medical College and Hospital (SKMCH), Muzaffarpur and Darbhanga Medical College and Hospital (DMCH), both in Bihar. USCOD has discussed a proposal to conduct a MCCD quality assessment study at DMCH. Both the institutions have made the USCOD MCCD eLearning course mandatory for the interns.

- ❖ **MCCD Orientation training for the junior and senior faculty from departments of Paediatrics, Gynaecology and Community medicine at Darbhanga Medical College and Hospital (DMCH), Bihar-(14th October 2023)**

USCOD has conducted interns and consultants training at government run Darbhanga Medical College and Hospital previously. Another batch of doctors including junior and senior faculty from departments of Paediatrics, Gynaecology, Community Medicine were training at DMCH on 14th October. Total number of attendees were 80.

❖ **Training of doctors and baseline assessment of MCD forms filled by them at HBCHRC, Muzaffarpur-2nd and 23rd December 2023**

USCOD has conducted two training for doctors of HBCHRC, Muzaffarpur for MCD following the baseline assessment of quality of MCD forms. The baseline assessment has helped in identifying the areas of MCD that require more training and support for the doctors. On 2nd December number of participants were 38 and on 23rd December it was 16



ToT training at state level nominated doctors will be trained and the same pool of doctors carry forward the same training in their respective institutes for MCD & ICD-10.

USCOD has been working in Bihar since 2022 to improve registration completeness by advocating for standard MCD forms 4 and 4A, building doctors' capacity, and establishing ICD-10 mortality coding teams. These efforts are in collaboration with the Bihar State Health Department and other agencies.

The standardization of forms marks a significant milestone for both the state and USCOD, with the forms now accepted and implemented statewide. To sensitize and build the capacity of doctors, meetings were conducted with various stakeholders, including the Additional Chief Secretary of Health and the Government of Bihar, to nominate a nodal person to streamline activities.

Visits were made to two hospitals, Shri Krishna Medical College and Hospital and Sadar Hospital, along with the Director of Economics and Statistics and local registrars. These visits aimed to create institutional capacity for doctors to be MCD trainers, review the forms used for MCD, and were followed by a meeting with the Honourable Minister for Planning and Development, Government of Bihar, and the Principal Secretary of Planning and Development. This successful

meeting concluded with the Principal Secretary supporting the recruitment of 10 mortality codes within the state.

Members of USCOD and the CDC Foundation visited two major high-load hospitals and medical colleges in Patna—Indira Gandhi Institute for Medical Sciences and Patna Medical College and Hospital—to understand the current MCCD and CRVS practices. They advocated for collaboration to onboard global best practices.

First State level meeting for strengthening cause of death - May 2024

Following the formal collaboration and with the Bihar Health Department, Department of Economics and Statistics and Directorate of Census Operations and USCOD to strengthen CRVS system in Bihar, a high-level 1st state meeting for strengthening cause of death was organised. Further to meeting USCOD has received nominations of doctors from medical colleges who will be trained as institutional MCCD trainers by USCOD. This MCCD ToT is scheduled for end of May. As a part of the MCCD ToT, the participants will also receive training for conducting a MCCD systems assessment for their respective institution. This assessment will gather information on whether the institution has adopted the MCCD Form 4 and 4A as instructed by the health department, how many doctors are working and how many are trained in MCCD, if ICD 10 mortality coding is followed, etc. Along with the medical colleges, USCOD will parallelly support the assessment of MCCD process for high case load district hospitals. These assessments will support the authorities in better implementation of policies, capacity building, monitoring of CRVS. These assessments will also form a routine within each institution in the long run.

Following the progress of hiring of ICD Coders by the DES, the RGI has received the letter from DES for approval and guidance on the hiring

First round of assessment of MCCD forms- June 2024

The first round of assessments of MCCD process for high case load district hospitals was carried out at 15 institutions in Bihar on 6th June. DCO officials supported by USCOD members conducted an inspection in sixteen mentioned government healthcare institutions including Medical Colleges & Sadar Hospitals to review the institutional compliance to the implementation of the standard Medical Certification of Cause of Death (MCCD) Forms and ICD -10 Coding practices for all the institutional registered deaths from January 2023 onwards. Out of fifteen, thirteen institutions were inspected based on a 11-question questionnaire. This survey report consists of the compiled findings observed during inspection of all thirteen healthcare facilities. The DCO intends to use these inspection findings to improvise strategies and measures to ensure all institutions adopt the standard MCCD forms. DCO also intends to use these results as a needs assessment for determining the areas that need to be focused upon in order to strengthen CRVS and MCCD data for the state of Bihar.

❖ **State level Training of Trainers Program for Medical Certification of Cause of Death Data, Patna, 22nd & 23rd August 2024.**

USCOD organised a two-day Training of Trainers workshop for Medical Certification of Cause of Death. The inauguration of this workshop was led by the Special Secretary, Health Department, Bihar; Director of Census Operations, Bihar; Ex Dean Academics, All India Institute for Medical Sciences (AIIMS) Patna; Officer In-charge State Health Society, Bihar; Officer In-charge, Tata Memorial Centre, Muzaffarpur Bihar. During the inauguration the dignitaries spoke regarding the status of MCCD and CRVS in Bihar, need for collaborative efforts to strengthen cause of death data in Bihar, Role of capacity Building for strengthening cause of death, Physicians' responsibility in MCCD and CRS.

The aim of this workshop was to equip healthcare professionals with the necessary skills to accurately document causes of death. A total of 78 participants attended the two-day ToT workshop.

This workshop was attended by doctors nominated from 12 state government medical colleges and two central government medical colleges in Bihar. The nominated doctors belonged to the department of preventive and social medicine, forensic medicine and toxicology as well as clinical departments like medicine and anaesthesia. Along with the doctors, few participants were nominated from medical records including medical records managers and data entry operators.

❖ **MCCD training for Nurses at Homi Bhabha Cancer Hospital and Research Centre (HBCHRC), Muzaffarpur**

USCOD has identified the potential of engaging nursing staff as a mean of monitoring the real time quality of MCCD filled by physicians. USCOD conducted a comprehensive training program for nurses at Homi Bhabha Cancer Hospital and Research Centre (HBCHRC) and in Muzaffarpur. The first batch of 30 nurses at HBCHRC received training on November 20, 2024. Additionally, in Muzaffarpur, training was successfully completed and USCOD has trained 216 nurses thus far at Homi Bhabha Cancer Hospital & Research Centre (HBCHRC).

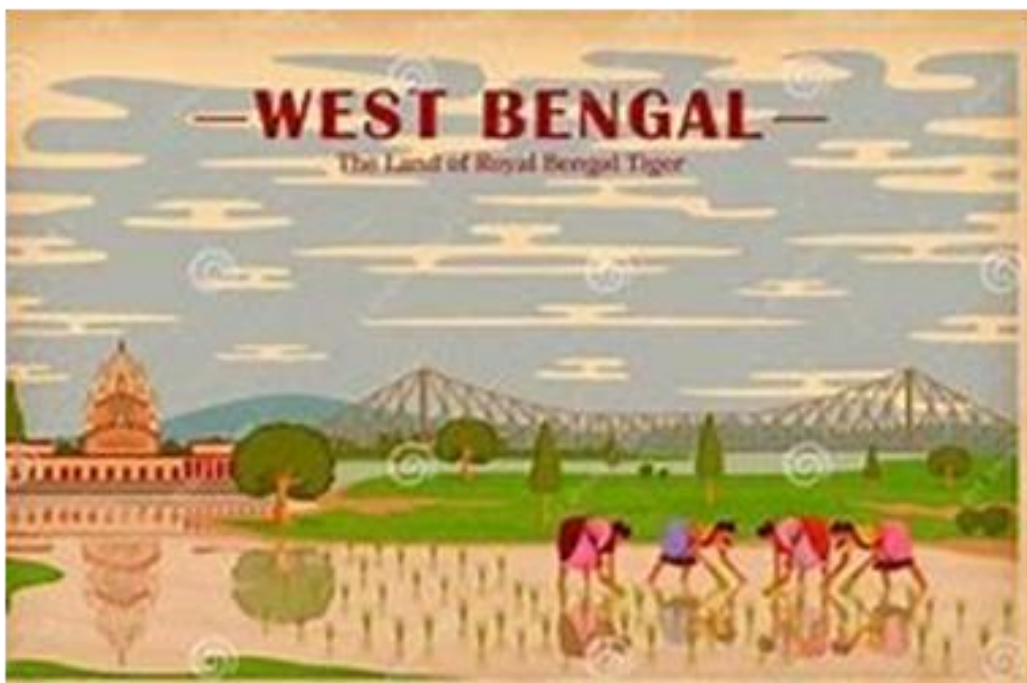
❖ **MCCD Training of Doctors at Purnia Medical college, Bihar**

USCOD conducted MCCD training at Purnia Medical College, Bihar. USCOD trained 37 doctors, all of whom successfully completed the orientation program.

❖ **Training of Medical officers of HBCHRC, Muzaffarpur**

USCOD conducted training for medical officers of HBCHRC, Muzaffarpur on Medical Certificate of Cause of Death (MCCD) on 8 Feb 2025.

STATE 04: WEST BENGAL



***West Bengal**, located in the eastern part of India, is known for its rich cultural heritage, historical significance, and diverse landscapes ranging from the Himalayan mountains to the Bay of Bengal coastline. The state has made significant strides in healthcare, particularly in enhancing its public health infrastructure and services. The government's proactive initiatives have resulted in improved health indicators, such as increased life expectancy and decreased infant mortality rates. One of the notable achievements is the robust death registration system, ensuring accurate and comprehensive documentation of vital statistics. This system aids in better policy formulation and resource allocation, ultimately contributing to the state's overall health and well-being. West Bengal's commitment to health and administrative efficiency stands as a testament to its progressive outlook and dedication to improving the quality of life for its residents.*

ACTIVITIES UNDERTAKEN

- ❖ **MCCD Orientation training for state government doctors across West Bengal in collaboration with the State Health Department, West Bengal**

Doctors were nominated from all 23 districts of West Bengal to participate in the MCCD Orientation training. The State Health Department particularly supported and prioritised training of doctors for MCCD in order to improve and strengthen the output of cause of death and mortality data at a state level. This training saw the participation of 96 doctors who attended virtually. The training included expert sessions from the USCOD Master Trainers, CDCF Technical

Advisors and was inaugurated by the officials of the State Health Department. The Inaugural session provided a great platform for the high-level officials and policy makers to sensitize and motivate their doctors to sincerely undergo this one-day training in order to contribute to the CRVS system within the state and on a larger picture, the healthcare policies and programme planning in the state. Mr Rupam Banerjee, Joint Secretary- Department of Health & Family Welfare, Govt. of West Bengal provided his encouraging opening remarks followed by Prof. (Dr) Debasis Bhattacharyya, Director of Medical Education Department of Health & Family Welfare Govt. of West Bengal who emphasized on the importance of physicians' responsibility for good quality cause of death data. Dr Siddhartha Niyogi, Director of Health Services Department of Health & Family Welfare Govt. of West Bengal presented the problem statement for MCCD from the state and discussed the death registration system of West Bengal. The inaugural session was followed by the core training sessions.

❖ **Virtual MCCD Training for Doctors of Private Institutions in West Bengal (15th May 2023)**

Following the training of government doctors, a second MCCD Orientation training was conducted in West Bengal for doctors from private medical institutes in West Bengal. This training was attended by 87 doctors virtually.

❖ **MCCD Training at North Bengal Medical College (26th to 27th May 2023)**

The third and fourth training sessions that were organized in the state of West Bengal took place on the 26th and 27th May respectively. On 26th May 55 doctors were trained face-to-face at the North Bengal Medical College as a part of the orientation training. On 27th May the first batch of interns at the North Bengal Medical College participated in a one-day MCCD orientation training. Further the unit has met with the principal of the North Bengal Medical College and briefed regarding the activities carried out by the unit as well as provided him with a roadmap of further MCCD capacity building for his institute



❖ **Virtual MCCD training of the 1st batch of interns from Private and Government Medical Collages of West Bengal-(12th October 2023)**

The West Bengal Health Department has collaborated with USCOD for training of 4000 medical interns of government and private medical colleges across the state for MCCD. USCOD conducted

a virtual MCCD training for the first 150 interns on 12th October. A pre and post test knowledge assessment was conducted as well.

Virtual MCCD training of the 2nd batch of interns from Private and Government Medical Collages of West Bengal-(1st November 2023)

Second batch of 254 interns were trained on 1st November. A pre and post MCCD knowledge assessment was carried out with a google form-based questionnaire. The unit has shared the ICD Coding Capacity Survey questionnaire with the State Health Department.

Virtual MCCD training of the interns from Private and Government Medical Collages of West Bengal-(8th and 19th December 2023)

USCOD conducted a virtual MCCD training for the third batch of 100 interns on 8th December and fourth batch of 205 interns on 19th December. A pre and post MCCD knowledge assessment was carried out with a google form-based questionnaire.

Virtual MCCD training for interns conducted at AIIMS Kalyani, Calcutta National Medical College & Hospital, Nil Ratan Sarkar Medical College & Hospital, and Government Medical College on April 26th, 27th, 29th, and 30th, 2024, respectively, for a total of 717 participants.

Collaboration between SBHIVS, DCO and State Health Department of Government of West Bengal MCCD & ICD -10 capacity building by USCOD.

UPCOMING STATES

STATE 05: ASSAM



Assam, a northeastern state of India, is known for its rich cultural heritage and diverse population. The state is characterized by its lush greenery, tea gardens, and the Brahmaputra River that flows through its heart. Despite its natural beauty, Assam faces significant health challenges. The state has made strides in improving healthcare infrastructure, but issues such as high rates of infectious diseases, maternal and child health concerns, and inadequate healthcare facilities persist. Death registration in Assam has seen improvements in recent years, but challenges remain in ensuring complete and accurate reporting. Efforts are ongoing to enhance the accuracy and timeliness of death registration through better training of field workers and improved systems for issuing death certificates. Addressing these issues is crucial for the state's overall health and development, as accurate death registration is vital for effective public health planning and resource allocation.

ACTIVITIES UNDERTAKEN

- As a new state under USCOD, a project coordinator has been hired and stationed in Guwahati, Assam who is supporting the USCOD activities in Ass. At present the coordinator is working on the state framework of MCCD for Assam along with a 6 month plan of activities.
- Initial engagement meetings have been held with the Director of Census Operation, Assam and the Chief Registrar of Births & Deaths, Directorate of Health Services, Assam.
- 37 Resident doctors of Dr B. Borooah Cancer Institute (BBCI), a unit of Tata Memorial Centre, Mumbai has been trained on MCCD.
- USCOD has carried out a MCCD orientation training program for resident doctors of Dr Bhubaneswar Borooah Cancer Institute (BBCI), Tata Memorial Centre, Guwahati, Assam. As a part of this training junior and senior resident doctors of BBCI are trained in MCCD in batches on every Saturday.
- In the month of August, 2 trainings were conducted where a total of 53 resident doctors were trained.
- In September, USCOD successfully completed MCCD orientation training for all 78 Senior and Junior Resident Doctors from 10 Disease Management Groups at the Dr. Bhubaneswar Borooah Cancer Institute, a unit of the Tata Memorial Centre in Guwahati, Assam.

STATE 06: PUNJAB



Punjab, a state in northern India, is renowned for its rich cultural heritage, vibrant traditions, and significant contributions to India's agricultural success, particularly in wheat and rice production. The state boasts a robust healthcare infrastructure with numerous hospitals, medical colleges, and specialized healthcare facilities that provide quality medical services to its residents. Punjab has made commendable progress in enhancing healthcare accessibility, with various initiatives aimed at improving maternal and child health, controlling communicable diseases, and promoting overall well-being.

One of the notable achievements in Punjab is the improvement in death registration processes. The state has implemented measures to ensure more accurate and timely registration of deaths, which is crucial for maintaining reliable vital statistics. Efforts to increase public awareness, coupled with the training of healthcare providers and field workers, have significantly improved the completeness and accuracy of death registrations. These positive strides contribute to better public health planning and resource allocation, ultimately enhancing the health outcomes and quality of life for the people of Punjab.

ACTIVITIES UNDERTAKEN

USCOD has expanded its efforts to the state of Punjab. This expansion began with an orientation training in MCCD for the doctors of HBCH & RC Mullanpur and Sangrur centres. This training was attended by 30 resident doctors.

- ❖ **MCCD training for CME & for resident doctors of Homi Bhabha Cancer Hospital and Research Centre, Mullanpur and Homi Bhabha Cancer Hospital, Sangrur- July 2024**

On 5th July USCOD conducted a CME training on MCCD at Government Medical College, Amritsar for medical officers from government district hospitals in Amritsar. For this session USCOD also collaborated with senior MCCD trainers from the Central Bureau of Health Intelligence (CBHI). Around 200 doctors attended this session.

USCOD conducted a batch-wise MCCD training for resident doctors of Homi Bhabha Cancer Hospital and Research Centre, Mullanpur and Homi Bhabha Cancer Hospital, Sangrur. These two are units of Tata Memorial Centre. These sessions were conducted on 7th, 9th and 13th July. A pre and post knowledge-based assessment and case-based assessment was done. There was a 36% improvement in the quality of MCCD cases filled as a part of the assessment. There was a 6% improvement in the MCCD knowledge assessment assessed using a 20-question questionnaire.

❖ **MCCD orientation training was conducted for medical interns of the Punjab Institute for Medical Sciences, Jalandhar, Punjab.**

A MCCD orientation training program was organised for the interns of the Punjab Institute for Medical Science, Punjab. A total of 85 interns attended this training online via digital learning platform of the medical college.

❖ **Prospective Collaboration Meeting with Ambedkar Institute of Health Sciences, Mohali**

A collaborative meeting was conducted with Ambedkar Institute of Health Sciences, Mohali with the view to collaborate for organizing the MCCD trainings and to support for Quality assessment of the forms certified therein.

STATE 07: HARYANA



Haryana, located in northern India, is strategically positioned between Delhi and Punjab, characterized by its substantial agricultural and industrial development. The state is administratively divided into 22 districts, each contributing to its diverse socio-economic environment. Despite its economic advancements, Haryana faces notable challenges in the healthcare sector. While there have been improvements in health infrastructure, disparities remain, particularly affecting rural populations.

Health indicators in Haryana reflect a mixed scenario. The state has achieved reductions in infant mortality rates and increases in life expectancy. However, there are significant concerns related to the prevalence of non-communicable diseases and unequal access to healthcare services. The death registration system in Haryana has undergone enhancements aimed at increasing the accuracy and completeness of death certificates. Nevertheless, challenges persist in ensuring timely and precise death registration, which affects the quality of vital statistics and public health planning. Addressing these issues is crucial for improving health outcomes and informing effective public health strategies.

ACTIVITIES UNDERTAKEN

The unit has collaborated with the Director General of Health Services, Haryana for conducting a MCCD Training of Trainers program in the state of Haryana. This program would train 150 doctors in three batches at the State Institute for Health and Family Welfare, Chandigarh. These nominated doctors are from the civil hospitals and govt. medical colleges.

STATE 08: NAGALAND



Nagaland is a north-eastern state of India known for its rich cultural heritage and diverse ethnic communities. The state is characterized by its hilly terrain and lush green landscapes, contributing to its scenic beauty and unique environment. Despite its relatively small geographical size and population, Nagaland is notable for its vibrant traditions, festivals, and community-driven lifestyle.

In terms of health status, Nagaland has made significant strides in recent years. The state has focused on improving healthcare infrastructure, with an emphasis on primary healthcare services and the establishment of health centres in rural areas. The introduction of various health programs has led to improvements in maternal and child health, as well as in the management of communicable diseases. The state has also made progress in enhancing healthcare accessibility and quality, with efforts directed towards the training of healthcare professionals and the implementation of health awareness campaigns.

One of the positive aspects of Nagaland's health system is its commitment to improving death registration processes. The state has made strides in addressing the challenges related to accurate and complete death certification. This includes ongoing efforts to train field workers and medical professionals in proper death certification practices and to streamline the registration process. Enhanced training and awareness have contributed to more accurate cause of death reporting and better data collection, which are crucial for public health planning and intervention.

ACTIVITIES UNDERTAKEN

❖ State Level Advocacy Meeting for MCCD/ CRVS and Medical Certification of Cause of Death Training of Trainers for State Government Doctors in Nagaland

A state level meeting for orientation of stakeholders on MCCD and CRVS was organized at Kohima, Nagaland on 7th September 2022. The launch of the MCCD/ CRVS program in Nagaland was launched during this meeting by Hon'ble Chief Secretary Shri J Alam, IAS, Govt. of Nagaland. Key officials from the Dept. of Health and Family Welfare and the Dept. of Statistics and Economics, Govt of Nagaland. Presentations to outline the current situation of MCCD and Death Registration were done by the state government officials. Considering the need of the hour deliberations were made to implement a robust state-wide training and capacity building program for Nagaland. The orientation meeting was followed by a MCCD Training of Trainers session for state government doctors from 12 districts and staff of the dept. of statistics and economics. A total of 50 participants attended this training.



STATE 09: ANDHRA PRADESH

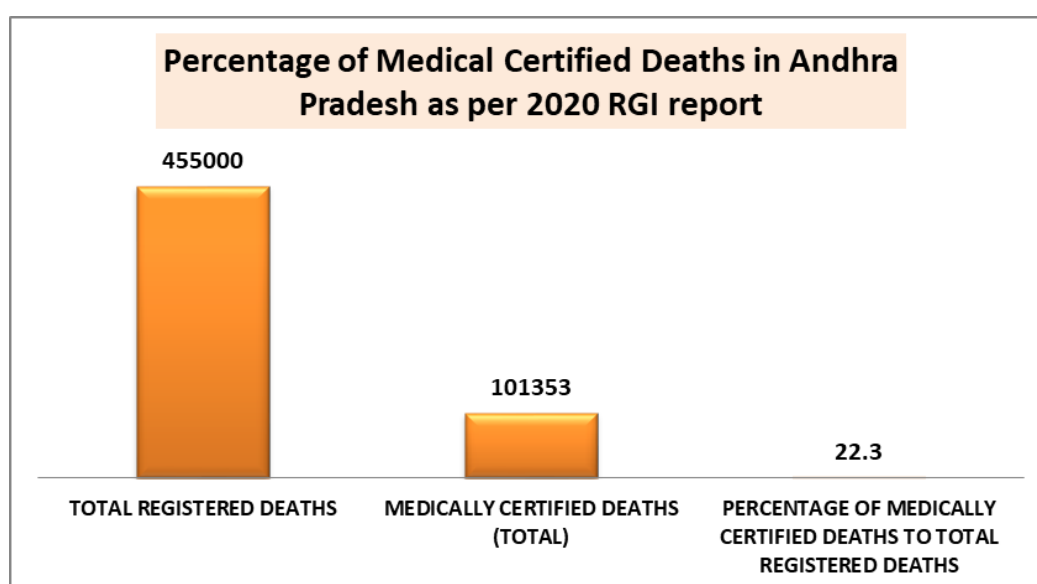


Andhra Pradesh, located on the southeastern coast of India, is renowned for its rich cultural heritage and dynamic economic growth. The state has made significant strides in healthcare and public health, reflecting its commitment to improving the well-being of its residents. Notably, Andhra Pradesh has achieved remarkable progress in the area of health status and death registration.

The state has implemented robust health initiatives and policies aimed at enhancing the overall quality of healthcare services. With a focus on accessible and affordable healthcare, Andhra Pradesh has seen considerable improvements in various health indicators, including a decline in infant mortality rates and increased life expectancy. The state's health infrastructure includes an extensive network of hospitals and clinics, both public and private, ensuring that a broad spectrum of medical services is available to its population.

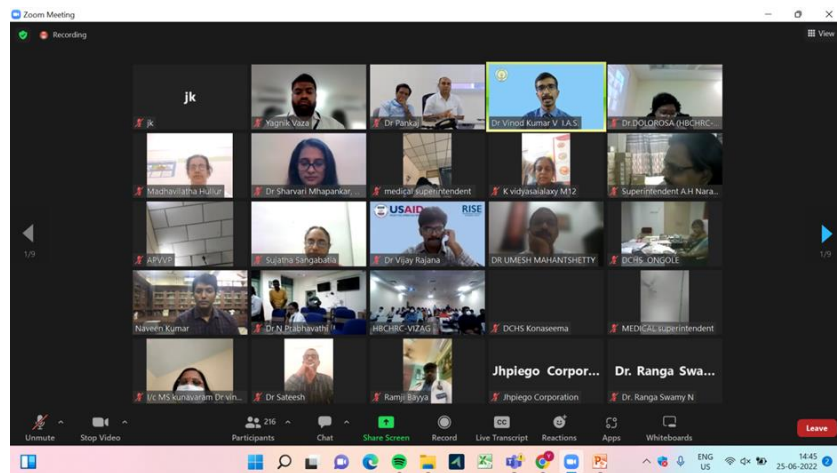
In terms of death registration, Andhra Pradesh has excelled in establishing a comprehensive system for documenting and certifying deaths. The state's commitment to accurate and timely death registration has been facilitated by the integration of technology in the process. This has led to better data collection and management, which in turn supports effective public health planning and intervention. The state's efforts in improving death registration processes have contributed to more reliable vital statistics, aiding in the formulation of targeted health policies and resource allocation.

Andhra Pradesh's advancements in healthcare and death registration highlight its dedication to fostering a healthier population and a well-organized health information system. These positive aspects reflect the state's ongoing efforts to enhance public health outcomes and ensure the efficient functioning of its health services.



ACTIVITIES UNDERTAKEN

The USCOD organised a half day educational training for Medical Certification of Cause of Death and the importance of cause of death data for the state government doctors of Andhra Pradesh. This training was organised in association with the Andhra Pradesh Vaidya Vidhana Parishad, Public Health Department, Govt. of Andhra Pradesh. The program was launched in the presence of dignitaries from the State Health Department of Andhra Pradesh and the Tata Memorial Centre. The unit's efforts behind this training were aimed at orienting the state government officials and doctors regarding the importance of cause of death data in order to ensure that such training programs are sustained within the state in the longer run. Around 333 doctors from the Andhra Pradesh state health services attended this training in the presence of the Commissioner of Andhra Pradesh Vaidya Vidhana Parishad (APVVP). Around 60 doctors were stationed attended this training in person at the HBCH & RC, Tata Memorial Centre, Vizag



STATE 10: ODISHA



Odisha, located on the eastern coast of India, is known for its rich cultural heritage, diverse landscapes, and growing economic potential. The state is characterized by its scenic beauty, including beaches, rivers, and lush forests. It is also home to a range of ethnic groups and traditional communities, contributing to its vibrant cultural mosaic.

In recent years, Odisha has made significant strides in improving its health infrastructure and services. The state has expanded its healthcare facilities, including the establishment of new hospitals and clinics, and the enhancement of existing ones. Odisha's government has prioritized healthcare access and quality, leading to better health outcomes for its residents.

One of the key achievements in Odisha's healthcare system is the improved death registration process. The state has implemented several initiatives to streamline and enhance the accuracy of death registrations. This includes the introduction of digital registration systems and training programs for field workers and healthcare providers. These efforts have contributed to more accurate and timely recording of death data, which is crucial for public health planning and intervention.

Odisha's focus on maternal and child health, communicable disease control, and preventive care has shown positive results. The state has seen improvements in various health indicators, such as reduced infant and maternal mortality rates. Public health campaigns and vaccination programs have played a significant role in these advancements.

ACTIVITIES UNDERTAKEN

Orientation session of medical students regarding the Medical Certification of Cause of Death at Pandit Raghunath Murmu Medical College & Hospital, Mayurbhanj, Odisha-(10th August 2023)

In line with this advancement, the unit provided an orientation session to sensitize 165 medical students at Pandit Raghunath Murmu Medical College & Hospital, Mayurbhanj, Odisha.

One-day district level training of the doctors from Khordha district at NISER, Jatni, Bhubaneswar, Odisha-(4th October 2023)

Odisha is a new state added to the scope of USCOD work. As a part of its outreach program, USCOD trained 45 doctors from the Khordha district by organizing a one-day district-level training program at Jatni on 4th October 2023.

One-day district level training programs of doctors at Khordha District hospital, Jatni, Bhubaneswar, Odisha-(6th October 2023)

A one-day district-level training program for 70 doctors was conducted at District Hospital on 6th October 2023

GENDER EQUITY PROJECT

About the study

A retrospective quantitative study was conducted at MPMMCC & HBCH- Varanasi and HBCH & RC, Muzaffarpur.

The study aimed to analyse age and sex wise distribution of 2680 (1535-males, 1145-females) cancer deaths data reported from January 2019 to December 2022 at MPMMCC & HBCH-Varanasi

125 (64-males,61-females) cancer mortality reported from September 2021 to December 2022 at HBCH & RC, Muzaffarpur

Results

The study revealed that Mouth & oral cavity cancer 265 (17.2%) was the leading cause of cancer death in males, while breast cancer 215 (18.7%) was the leading cause in females.

634 (23.6%) of cancer deaths occurred in the age group of 45-54 years for both sexes.

Among paediatric cases, acute lymphoblastic leukaemia was the most common cause of cancer deaths.

Conclusion and recommendations

The study also highlighted that more females 486 (42.4%) died in the late or metastatic phase as compared to males 467 (30.4%).

Therefore, there is a need for further investigation into the reasons for late presentations.

The findings emphasize the importance of awareness programs targeting the leading causes of cancer deaths to reduce the disease burden in the region.

Achievements: A poster has been presented in Indian Cancer Congress (ICC 2023), International Conference on Public Health & Healthcare system (ICPHHS) and disseminated in NaSTACON 2024 conference

The findings of the Gender Equity Phase-I study have been disseminated to Community Health Workers (CHW) as well as the Chief Medical Officer. The aim of disseminating the findings was to strengthen community engagement between healthcare services and the community, as well as enhance CHWs skills and understanding of gender sensitive health practices.

Moving forward, in the second phase of our Gender Equity Project, we have initiated a collaboration with the Gender Equity unit of Johns Hopkins School of Public Health. This collaboration centers on a research study titled "Differential Health Care Seeking Behavior with Delayed Cancer Presentation Among Males and Females." This study aims to systematically investigate the disparities in healthcare-seeking behaviors between males and females who present with cancer at a delayed stage. Through a rigorous analysis, we seek to identify the underlying factors contributing to these gender-specific delays. Our objective is to develop evidence-based strategies to mitigate these delays, ultimately enhancing cancer detection and treatment outcomes for both men and women.

Title: Difference in Health Care Seeking Behavior with Delayed Presentation of Cancer Among Males & Females

Aim:

To understand the combined influence of socio-cultural context on behavioral patterns among male and female cancer patients in healthcare utilization.

Objectives:

Quantitative:

To determine the proportion of patients with delayed presentation reporting at MPMCC & HBCH and the association with socio-demographic factors.

Qualitative:

To explore the role of gender in the delayed presentation of head and neck and breast cancer.

Methodology:

Study Design: A mixed-method approach combining quantitative and qualitative components.

Study Location: Mahamana Pandit Madan Mohan Malaviya Cancer Centre (MPMCC) & Homi Bhabha Cancer Hospital (HBCH), Varanasi, UP.

USCOD INTERNATIONAL REPRESENTATIONS

The United Nations Economic Commission for Africa and Vital Strategies invited representatives from India for a Global CRVS Experts Workshop on Operationalizing Holistic Approaches to CRVS System Strengthening, Kigali, Rwanda and

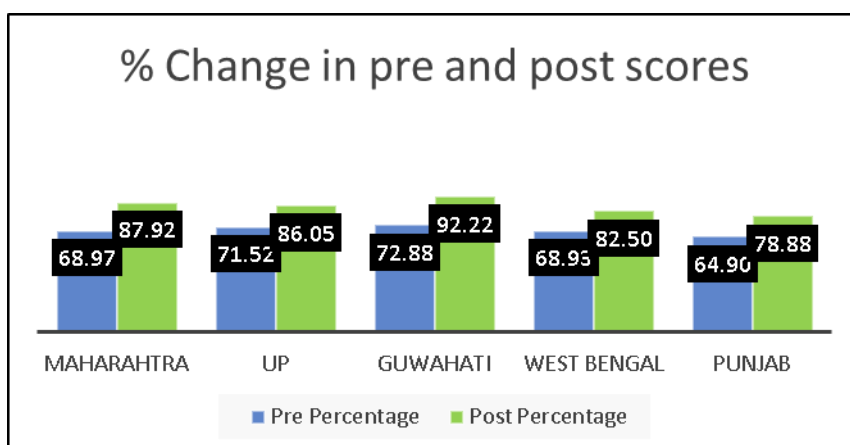
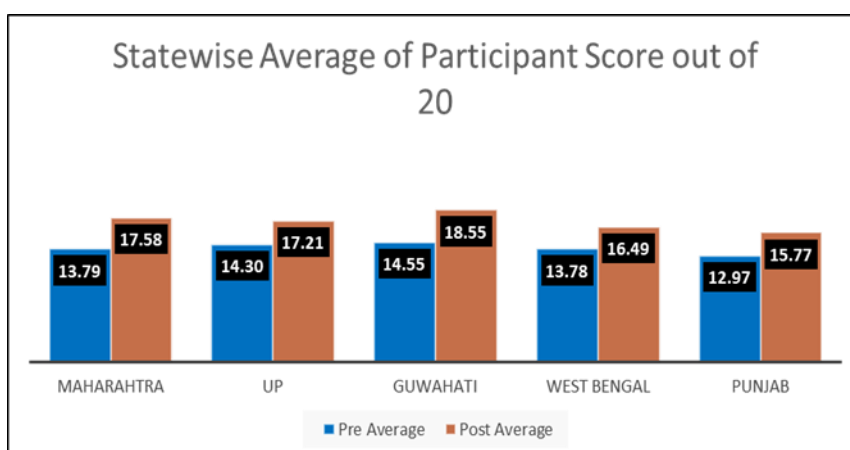
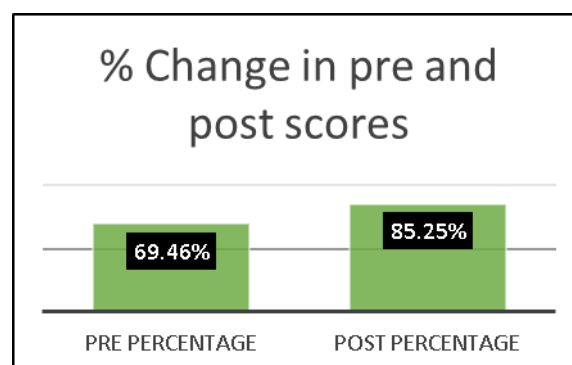
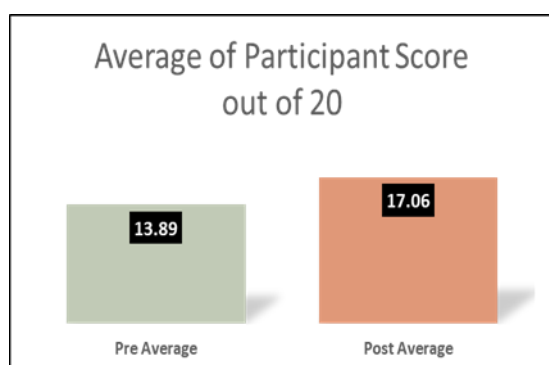
USCOD team attended the Global CRVS Experts Workshop on Operationalizing Holistic Approaches to CRVS System Strengthening, Kigali, Rwanda. The workshop provided a dynamic space for CRVS experts to share insights, delve into nuanced discussions, and explore innovative solutions necessary for holistic CRVS system strengthening. Strengthening CRVS systems is a complex process requiring collaboration across various sectors, namely health, civil registration, national statistics, and ID. This workshop provided a hands-on and case-based learning opportunity for aligning CRVS system strengthening strategies to the UN Principles and Recommendations for a Vital Statistics Systems, and the UN Legal Identity Agenda. The key focus of the workshop was Interoperability between the civil registration agency and the health sector and the ID system. Dr Yagnik Vaza and Dr Sharvari Mhapankar represented USCOD at the 5-day workshop. The following strategic outcomes were deliberated upon through presentations, Rwanda health facility visits, panel discussions and group work- USCOD presented on the Timely & Quality Statistics on Causes of Death Based on Civil Registration Data Produced and

Disseminated in India in the form of a moderated panel discussion alongside 3 other countries including Zambia, Sri Lanka and Kenya.

IMPACT ANALYSIS FOR MCCD TRAINING

Assessment of knowledge of MCCD pre and post MCCD training

Assessment of MCCD knowledge pre and post MCCD training using a 20-question questionnaire where each question carried 1 point. This assessment has been thus far done for 1088 participants from across 5 states. Findings of the same are below-



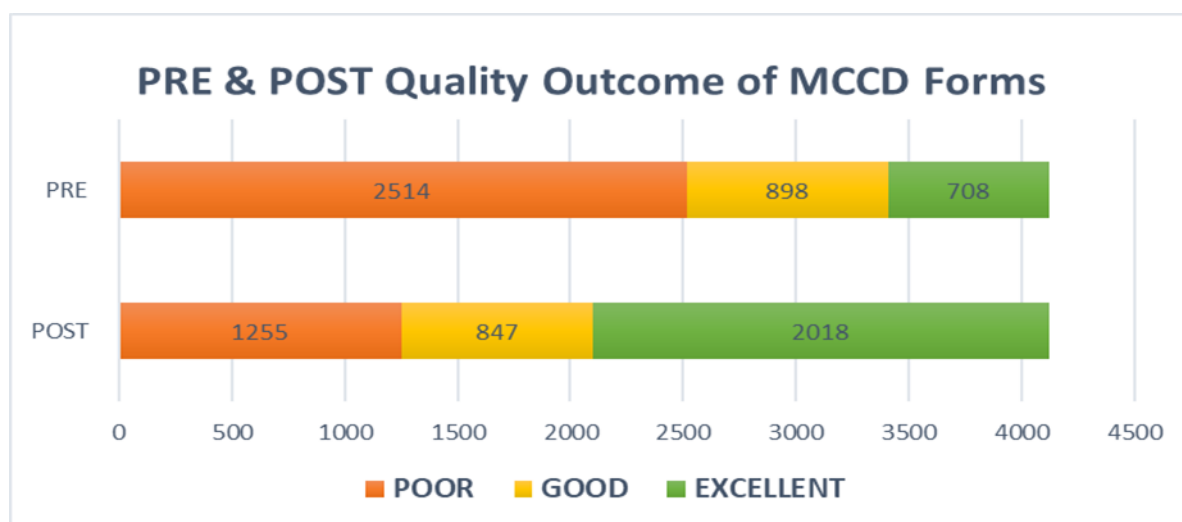
CATEGORY	OUTCOME ASSESSMENT			
	Pre MCCD training program		Post MCCD training program	
	Number of Forms	Percentage	Number of Forms	Percentage
POOR	2514	61.02%	1255	30.46%
GOOD	898	21.80%	847	20.6%
EXCELLENT	708	17.18%	2018	49.0%
Total forms	4120	100%	4120	100%

Assessment of practice of filling MCCD pre and post MCCD training

A total of **824 medical practitioners** were trained in person as well as online mode. The MCCD standard practices and had undergone the pre & post training 5 sample case template solving and filling up of MCCD Form 4 each. Assessment of 5 sample case templates were done, filled pre & post training by each medical practitioner respectively, making a total of 4120 forms filled by 824 practitioners pre training & 4120 forms filled post training, thus in total 8240 forms were assessed. The MCCD filled by the participants was analysed using an Excel based quality assessment tool. Following criteria were assessed for this assessment-

Error Type	Sr. No	Variable
Minor Errors	1	Missing time interval from onset to death in any of the lines?
	2	Abbreviations used in the entries in any of the lines?
Major Errors	1	Multiple causes of death recorded in any of the lines of Part 1?
	2	Illegible handwriting in any of the lines?
	3	Incorrect or clinically improbable chain of events leading to death in Part 1?
	4	The first condition entered in the lowest used line of Part 1 cannot be an underlying cause*
	5	(a) Was the death due to an accident, violence, poisoning or other external cause? (b) For deaths due to external causes, i.e. accident/violence/poisoning, were the circumstances missing? (how the event occurred, intent, activity, place of occurrence)
	6	(a) Was the death due to a neoplasm? (b) For deaths due to neoplasms, additional details were missing (site, morphology, behavior)?

Results of the assessment-



USCOD RESEARCH

- Assessment of MCCD quality in a tertiary care center in Bihar
- Impact evaluation of MCCD training and needs assessment for improving cause of death data quality in a tertiary hospital in Mumbai
- Mortality Coding Capacity assessment survey in 8 states across India
- MCCD quality assessment in 24 wards of Mumbai with MCGM
- ICD Coding Quality assessment in Mumbai with MCGM
- Evaluating the barriers and facilitators for implementing interventions to strengthen cause of death data in tertiary healthcare facilities in a Metropolitan City in India- A mixed method study
- To evaluate the effect of various Medical Certificate of Causes of Death training methods on the outcome quality of Medical Certificate of Causes of Death data
- Implementing the IRIS automated coding system in improving the accuracy of ICD – 10 mortality coding and barriers faced while implementing the IRIS software for mortality coding data in a Tertiary Care Hospital.
- To assess the impact of medical certification of cause of death errors on ascertaining the underlying cause of disease through an automated mortality coding software

CHALLENGES & LESSONS LEARNT

USCOD has been working in collaboration with the Department of Health, Directorate of Census Operations, Department of Medical Education, Department of Economics and Statistics, Municipal Corporations, Chief Registrars for births and deaths across the 10 states. Through the collaborative efforts across the last 3 years, efforts are underway to strengthen cause of death in an institutionalised and sustainable manner. Although there have been successes on this mission, the challenges remain as follows that require combined brainstorming and attention for improvement-

1. Education for Medical Certification of Cause of Death and Civil Registration and Vital Statistics is provided at the level of undergraduate medical school level from a largely forensic purpose. The knowledge of CRVS from a public health perspective is still lacking. This can be improved by introducing an overview of MCCD and CRVS processes including legal implications, standard guidelines and public health importance as a part of Medical Curriculum at the undergraduate as well as post-graduate level.
2. Migration of doctors and staff is a challenge when it comes to training and capacity building. In order to address this, it has been observed and suggested to create a pool of trainers for MCCD and ICD Coding within institutions who are on a permanent tenure and they may carry out training within their institutions in a cascading manner.
3. Lack of skilled manpower is a challenge. In order to best utilise the current human resource, robust capacity building and hand-holding programs need to be designed.
4. Needs assessment is a challenge. This could be resolved with routine monitoring and evaluation as well as impact assessment mechanisms.

WAY FORWARD

- Currently the unit broadly works in collaboration with the government and private health, medical education, census operations authorities at the level of individual states. USCOD aims at continuing its ongoing efforts of national level engagement.
- Continue and improve MCCD e-learning advocacy. The unit has proposed to the National Medical to include the MCCD e-learning Module within the curriculum of medical interns in order to ensure a sustainable structured MCCD training of the most junior doctors uniformly across the nation.
- Continue capacity building efforts for ICD Mortality Coding
- Expand the efforts for inclusion of AYUSH (alternative medicine practitioners legally permitted to certify deaths in India) for MCCD capacity building. Currently the unit has engaged with the AYUSH leaders at the state level beginning with Maharashtra.
- India has a decentralized system for CRVS. Therefore, the unit continues to advocate for the “One Nation, One Software” goal to strengthen the CRVS system in India.
- Support the process of standardization of forms used in MCCD in India and adoption of the WHO MCCD Form 2016 (engagement with the Office of Registrar General of India ongoing)
- Develop and improvise on training resources suitable for dissemination beyond the country to the rest of Asia Pacific Region.
- The unit has proposed an impact analysis of the MCGM coding efforts.
- Initiating the Gender Equity Phase 1 study at ACTREC, Navi Mumbai



Tata Memorial Center, Mumbai



**Advanced Center for Cancer Treatment,
Research and Education, Navi Mumbai**



**Center for Cancer Epidemiology,
Navi Mumbai**

Do's	Don'ts
Correctly fill all information in MCCD Name of the deceased should be written in full & in block capital letters	Do not delay in making MCCD
Make cause of death chain of events and remember cancer may not be the underlying cause of death in all cancer patients. ALWAYS INCLUDE TIME INTERVAL	Do not write brought dead in MCCD. Line 1(a) cannot be kept vacant; don't leave blank lines above lines that have been filled
Mention cause of deaths which has relevant ICD codes	Do not write Abbreviations
Consult seniors/ attending doctor if not sure what is the sequence of events	Do not mention mode of death as cause of death
Certifying doctor should provide complete his/her information	Do not provide illegible handwriting
Please handover only the lower part of the MCCD to the relatives.	Do not hesitate in asking seniors

Dr. Yagnik Vaza

USCOD Country Coordinator

Email ID: coordinator.uscod@actrec.gov.in

Tel. No.: +91-22-27405000/ 5854

Mob. No.: 98195 61665

Dr. Sharvari Mhapankar

USCOD Liaison Officer

Email ID: liaison.uscod@actrec.gov.in

Tel. No.: +91-22-27405000/ 5854

Mob. No.: 98190 42512