SUMMER INTERNSHIP PROGRAM

at

NHM Gujarat, Gandhinagar

From 6th May 2024 to 5th July 2024

A REPORT BY

SRABANI CHATTOPADHYAY

Master of Business Administration

Hospital & Health Management

2023-25

under the Mentorship of

Mr. Alok Kumar Mathur

IIHMR UNIVERSITY

Ministry of Health & Family Welfare
Government of India

NATIONAL HEALTH MISSION

Certificate of Internship

This is to certify that ~~Mr./Miss~~. Dr. Srabani Chattopadhyay student of IIHMR University, Jaipur has successfully completed the Internship of MBA (Hospital and Health Management) from 06.05.2024 to 05.07.2024 at Routine Immunization, CoH, Gandhinagar

During the period of ~~his~~/her internship programme with us, ~~He~~/She has been exposed to different processes and was found diligent, hardworking & inquisitive.

We wish ~~him~~/her every success in life & career.

Mrs. K.M. Sheth, GAS
Programme Officer(Admin)
National Health Mission, Gujarat

Remya Mohan, IAS
Mission Director,
National Health Mission, Gujarat

IIHMR UNIVERSITY

IIHMR University Faculty Mentor Approval

This is to certify that **Dr. SRABANI CHATTOPADHYAY**_ of academic year **2023-25** of **INSTITUTE OF HEALTH MANAGEMENT RESEARCH** has prepared a poster with respect to her summer internship held during_May-June 2024.

She has carried out work as per the guidelines. Her poster is approved for presentation.

July 22, 2024

Date: 22nd July, 2024

(Signature of Faculty Mentor)

Dr. Alok Mathur
Associate Professor
IIHMR UNIVERSITY JAIPUR

NHM Gujarat: Developing IEC for Vaccination Programme

Organization History, Vision & Mission

History

The National Urban Health Mission (NUHM) was established in 2013 under the National Health Mission (NHM), which began in 2005. The Universal Immunisation Program (UIP), originally called the Expanded Programme on Immunization, started in 1978 and was renamed in 1985. The UIP extended its reach to rural, semi-rural, and semi-urban areas, not just urban regions. The UIP offers free vaccines for 12 vaccine-preventable diseases (VPDs) nationwide, with the Japanese Encephalitis vaccine given in areas where the disease is common.

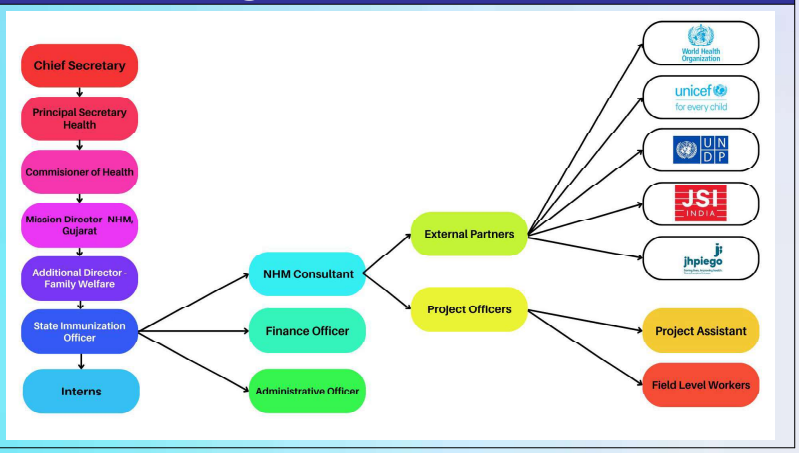
Vision

The National Health Mission aims to deliver healthcare that is accessible, fair, affordable, and high-quality to people in both urban and rural areas. It also strives to be accountable and responsive to the needs of the people.

Mission

The mission aims to make a functional public health system accountable to the community. This will be achieved through managing human resources, involving the community, decentralizing services, closely monitoring and evaluating standards, integrating programs related to health and others from the grassroots level upward, encouraging alterations, providing funding, and implementing actions to improve health outcomes.

Organization Structure



SWOT Analysis of Immunisation Programme

Strengths

- Collaboration between Govt and External Partners
- Good communication between stakeholders.
- Streamlined administration
- Strong Cold Chain infrastructure.
- Collaboration with multiple departments to enhance program outcomes with increased efficiency.
- Continuous monitoring is done to identify gaps and lapses.

Weakness

- Lack of refresher courses for ASHAs and FHWs.
- Low Immunisation Coverage in multiple districts.
- Inability of ASHAs and FHWs to convince beneficiaries for vaccination.
- Inappropriate settings of Outreach vaccination Session Sites (Mamta Diwas).
- Lack of awareness among parents and guardians related to vaccination schedule and benefits.
- Outsourcing of Health Equipment Repair Personnel.

Opportunities

- Developing strategies for vaccine hesitancy.
- Leverage technology for better education of field level workers and beneficiaries.
- Improve infrastructure of outreach session sites
- Increasing Pandemic Preparedness.
- Developing provision for transportation of beneficiaries to and from session sites.
- Provision of emergency vehicle in case of AEFI

Threats

- Vaccine hesitancy.
- Lack of knowledge among FHWs related to AEFI management.
- Incorrect data entry into HMIS, Techo+ or eVIN.
- Incorrect AEFI Causality Assessment due to poor quality of documents.

Suggestions

- Enhance linguistic inclusivity within the organization.
- Form an internal design team with the necessary expertise for IEC development and updates.
- Establish proper infrastructure and facilities at vaccination outreach sites.
- Increase the frequency of refresher courses for ASHAs and FHWs.
- Constitute a team to ensure appropriate supporting documents are sent/uploaded for AEFI Causality Assessment.

Learning and Value Additions

Difference between practical exposure at SIP organisation and theoretical understanding from IIHMR University

IIHMR-U	NHM Gujarat
• Helped us attain a theoretical understanding of a program's aim, usefulness, target, and beneficiaries. • Provided a bird's eye view of program planning, implementation and monitoring.	• Made us understand the details and logistics of program planning, implementation, and monitoring. • Provided an opportunity to understand the problems and gaps encountered on the field level.

Challenges

- Difficulty in communicating due to lack of understanding of local language.

Usefulness

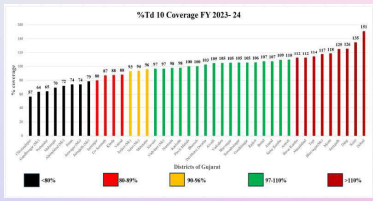
- Provided a practical experience related to the functioning of an organization.
- Provided an opportunity to gain hands on experience in program planning, implementation and evaluation.

Learnings

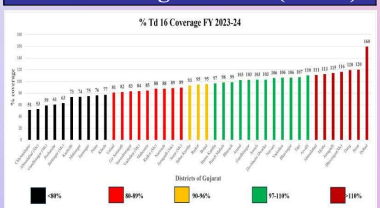
- Data triangulation
- IEC development
- HMIS, Techo+, eVIN, IDSP
- Data representation
- Cold Chain Management
- Report Writing
- Interdepartmental collaboration.
- Field Level Monitoring

IEC Developed

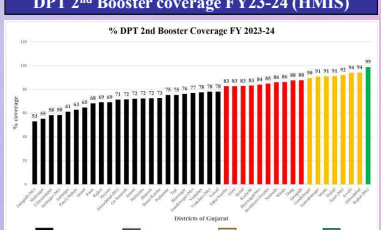
Td 10 coverage FY23-24 (HMIS)



Td 16 coverage FY23-24(HMIS)



DPT 2nd Booster coverage FY23-24 (HMIS)



Photos of campaign

Name: Dr. Srabani Chattopadhyay	**Roll Number: 1853**	**Organization Mentor: Dr. Kamlesh Parmar**
University Mentor Name: Mr. Alok Mathur	**Batch: MBA-HM 28**	**Designation: State Immunization Officer**

Weekly Report 1

Name of the Organisation: NHM Gujarat, Gandhinagar
Department of Summer Internship Program: Routine Immunization
Name of the Student: Srabani Chattopadhyay
Roll no: 1853 **Stream:** MBA- Hospital and Health Management (HM-28)
Week no: 1 **From:** 06th May 2024 **to** 11th May 2024

Activity Done	1. Viva on National Immunization Schedule 2. Meeting on Block Performance on vaccination uptake in Junagadh district (Medical Officer Review Meeting) 3. Review of paper and PPT on learnings and findings- Pertussis Outbreak, Amreli district, Gujarat State, India, December 2023- August 2024. 4. Field Visit on 8th May 2024 to Sector 3C- Mamta Session and following report submission 5. Meeting attended for Introduction of PCV-14 in UIP- by Dr. Pavan Kumar, Additional Commissioner, Immunization Division, MoHFW. 6. Rewriting of Abstract for Pertussis Outbreak Paper. 7. Unicef Vaccine Freezing Study Paper given to read.
Linking theory (Classroom learning) with practice at your organisation	• Learning the Immunization Schedule in the Demography module of 1st term helped me to learn the National Immunization Schedule in detail including the age of administration of vaccine, dose, route, and site and administration. • The module on Research Methods helped in the easy review of the pertussis outbreak paper and in preparing the modified abstract on the same paper. • The Field Visit helped us in linking our theoretical learnings to what is happening in the field. It also helped us understand the vaccine delivery structure from UPHC (urban PHC) to Vaccination sites (Mamta session sites), the various infrastructure required for the appropriate delivery of vaccine, and how data is recorded, entered, maintained, and communicated • The Meeting regarding the introduction of the PCV 14 vaccine helped us understand the various factors that have to be considered related to the cold chain

	for storage and distribution and vaccine efficacy, adverse effects, and administration.
Gaps identified on the working area.	• Preference of individuals to get vaccinated at private facilities due to heavy advertisement of painless vaccines. • Lack of transport facility to transport children and parents to vaccine camp or an emergency facility in case of severe adverse effects following immunization (AEFI). • Maintaining the correct temperature for the vaccine is difficult in the heat. • Van brings supplies only once a day in the morning at the start of the session, making temperature maintenance of vaccines difficult. • No proper waiting area for parents and children. • FHW not trained in AEFI. • Lack of use of sanitiser by FHW between vaccinations. • Very few participants in Gauravi Diwas (conducted by ASHA to promote menstrual hygiene among adolescent girls, from 3:00 pm to 5:00 pm at Mamta Session sites) due to heat.
Suggestions for improvement	✓ Provide AEFI training to FHW. ✓ Provide vans for transport to and from session sites. ✓ Provide additional training for counseling and data recording to ASHA and FHW. ✓ Appropriate selection of session site with toilet and waiting area facility. ✓ Van should bring a second vaccine carrier with appropriately frozen ice boxes around 12:30 pm to ensure correct temperature of vaccines is maintained.
Plan for the next week	Training at UNDP Cold Chain Management at Civil Hospital, Gandhinagar

Signature of the Student

Approved by the IIHMR University's Mentor

Weekly Report 2

Name of the Organisation: NHM Gujarat, Gandhinagar

Department of Summer Internship Program: Routine Immunization

Name of the Student: Srabani Chattopadhyay

Roll no: 1853 **Stream:** MBA- Hospital and Health Management (HM-28)

Week no: 2 **From:** 13th May 2024 **to** 18th May 2024

Activity Done	• Read National Immunisation Schedule • Data Sorting of Gujarat Districts • Attended meeting related to DPT 2nd Booster coverage and approval for administration of vaccine at school. • Presentation on Pertussis Outbreak Paper, followed by suggested modifications. • Acquired proficiency in data extraction from HMIS. • Calculation of % coverage of Hep B- 0 dose in districts of Gujarat from extracted data • Field Visit- Mamta Session at Swagat Afford, Sargassan. • Acquired proficiency in data extraction from Techo+ • Calculation of %BCG coverage and %FIC (full immunization coverage) of blocks of Junagadh district, and comparing uploaded data of %BCG coverage and %FIC between HMIS and Techo+. • Data Validation of Techo+ - Gujarat districts (Exercise 3) • Response analysis related to data validation questionnaire of Exercise 2 • HMIS – data extraction % BCG coverage per live birth and calculation • Data Extraction from HMIS & Techo+ for BCG, Hep B 0 dose, MR1, MR2, Penta-3, FIC, and institutional deliveries for analysis. • Data analysis done for above-extracted data and presentation done to compare difference in data between HMIS and Techo+ at subdistrict and block level. • Final presentation of pertussis outbreak paper. • Reformatting of data for presentation.

Linking theory (Classroom learning) with practice at your organisation	• The module on Health Policy and Health Delivery system, and Digital Health helped set the foundation for HMIS. • The module on National Health Program helped us understand the process by which data is recorded and maintained and the indicators based off which program is monitored and outcome is evaluated for future decisions. • The module on Demography helped us effectively calculate different rates and coverage percentages by providing us an understanding of the correct denominators to use for coverage (%) calculation.
Gaps identified on the working area.	• Lack of proper IEC related to vaccination. • Lack of BRIDGE Training among ASHA and ANM • ASHAs are usually present at Mamta session sites without ID cards and uniform • Appropriate hygiene protocols not followed at session sites (hand washing and sanitation) • 4 key message post vaccination not delivered by ASHA • Ice packs in vaccine carrier are not appropriately filled to the required level • Incorrect data entry into HMIS at ground level
Suggestions for improvement	• Increased focus on IEC to communicate and create awareness regarding different vaccines and the benefits of undergoing vaccination. • Organising refresher course for ASHA and ANM workers • Training to be given related hygiene maintenance. • Training for correct data entry into HMIS and Techo+ for field level workers (ASHA, ANM, AWW)
Plan for the next week	UNDP – Cold Chain Management at Civil Hospital, Gandhinagar

Signature of the Student

Approved by the IIHMR University's Mentor

Weekly Report 3

Name of the Organisation: NHM Gujarat, Gandhinagar
Department of Summer Internship Program: Routine Immunization
Name of the Student: Srabani Chattopadhyay
Roll no: 1853 **Stream:**MBA- Hospital and Health Management (HM-28)
Week no: 3 **From:** 20th May 2024 **to** 24th May 2024

Activity Done	• Reported to UNDP Project Office for Cold Chain Management and eVIN training. • Attended session on explanation of electrical CCE- temperature management, power supply, voltage, storage. • Discussion on VVM, Shake Test, Register Maintenance and data entry into eVIN. • Read Handbook on Cold Chain Management • Explained about vaccine arrangement in ILR • Explained about 6 types of transactions in eVIN register. • Discussion on CCE functioning- ILR, DF, WIC, WIF • Field Visit to DVS • Discussion on Forecasting- Vaccine Supply Chain Management • Field Visit to UHC, Sector 2- CCP • Field Visit to Government Primary School, Sector 2, for Mamta Session • Calculations done for given forecasting sum- calculating Working stock, Lead Time Stock, Buffer Stock, Maximum Stocks, Minimum Stock, Wastage Rate (%), Wastage Multiplication Factor (WMF), Stock to be Issued • Presentation made on RBSK paper • Discussion on eVIN Monthly State Dashboard • Read AVDS, Contingency Plans and Guidelines for CCP • Field Visit to UHC 2, for data entry into eVIN at CCP level.
Linking theory (Classroom learning) with practice at your organization	• Health Policy and Health Delivery System, Digital Health- introduction to concept of eVIN, AVDS.

Gaps identified on the working area.	• Inappropriate setting to conduct Mamta Session- lack of table to lay child during vaccination leading to difficulty in vaccination. • Few essentials missing from AEFI kit- one unit RL/NS, one disposable syring and adhesive tape- lack of checking AEFI kit before bringing it to session site. • Lack of remote monitoring of temperature of CCE on eVIN- No SIM card in temperature loggers attached to CCE, (decision to stop operating on Vodafone SIM cards at higher level of management, and lack of notice on alternate SIM card from decision makers). • ASHA not wearing her ID or uniform and not very well informed about her incentivization- increased gap between training and lack of conduction of refresher training course.
Suggestions for improvement	• Permanent centres for Mamta Session at urban areas needed to ensure availability of all requirements during session. Session cannot be conducted at Aanganwadi centres (not available in urban areas) or at Urban Health Centres (UHCs) to prevent overcrowding. • Daily checking of AEFI kit to ensure all products are available and usable. • Training of ASHA regarding her incentivization. • Introduction of new SIM cards for temperature loggers as soon as possible to allow for remote monitoring at all times of the day.
Plan for the next week	• Finalizing Topic for Poster Presentation • Presentation of ppt. made on Leveraging RBSK for adolescent Td vaccination.

Signature of the Student

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Weekly Report 4

Name of the Organisation: NHM Gujarat, Gandhinagar

Department of Summer Internship Program: Routine Immunization

Name of the Student: Srabani Chattopadhyay

Roll no: 1853 **Stream:** MBA- Hospital and Health Management (HM-28)

Week no: 4 **From:** 27th May 2024 **to** 1st June 2024

Activity Done	• Data Triangulation and calculation done for % MR1 and % MR2 coverage across all districts of Gujarat. • Presentation made on RBSK and Td vaccination amongst adolescents. • Meeting on the campaign for Td vaccination among adolescents. • Data Triangulation done for Chotta Udaipur from HMIS, Techo+ for the Financial Year April 2023 to March 2024 and April 2024. • Presentation of Data Triangulation done for Chotta Udaipur following suggested modifications. • Data Triangulation done and presentation on DPT 2nd Booster for Chotta Udaipur, PO RI input from field visit, Namoshree Yojana ANC registrations for FY 23-24, and NMNR (Non-Measles Non-Rubella) Discard rate for 2024. • Discussion on IEC material development with RBSK Team Officer regarding RBSK Td+DPT 2nd Booster vaccination drive for children and adolescents. • IEC material developed related to DPT 2nd Booster vaccination. • Modifications made to developed IEC. • Attended Meeting for IEC development.
Linking theory (Classroom learning) with practice at your organisation	• The module on Demography helped us understand the appropriate denominators for coverage calculation on HMIS and Techo+. • The Communications Planning & Management module helped us participate in the discussion related to IEC development for the Td vaccination drive and develop our sample IEC.

Gaps identified on the working area.	• Incorrect data entry into HMIS and Techo+ due to lack of training or understanding related to the portal. • Delayed data entry that can cause mismatching of data between the two portals. • Incorrect Targets/ELA mentioned for some vaccines on Techo+.
Suggestions for improvement	• Improve training of field-level Data Enterers to prevent data entry errors. • Refresher courses to be conducted more frequently to remind workers of the importance of on-time data entry.
Plan for the next week	• Participate in the Td and DPT 2nd Booster vaccination campaign for children and adolescents.

Signature of the Student

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Weekly Report 5

Name of the Organisation: NHM Gujarat, Gandhinagar

Department of Summer Internship Program: Routine Immunization

Name of the Student: Srabani Chattopadhyay

Roll no: 1853 **Stream:** MBA-Hospital and Health Management (HM-28)

Week no: 5 **From:** 3rd June 2024 **to** 7th June 2024

Activity Done	• Modifications made to developed IEC. • Meeting on RBSK Td + DPT 2nd Booster vaccination campaign IEC- for campaign and social media. • DPT 2nd Booster concept note made and following modifications done. • Proofreading of developed IEC (technical + grammatical) • Coordinating with designer regarding developed concept note and subsequent IEC- banner, leaflets, poster, social media. • Modifications made to developed IEC following proofreading. • Field Visit to Mamta Session- Om Kareshwar Temple- Sector 4A. • Meeting with Radio CT team for jingle script for Td + DPT 2nd Booster vaccination campaign. • Coordinating with IEC designer for modifications • Report written for field visit on 5th June 2024 • IEC made on LCDC (leprosy case detection campaign) • Meeting on other collaterals made for LCDC • Status Update from Radio CT for jingle script • IEC Action Plan developed for Td + DPT 2nd Booster vaccination campaign • Discussion on IEC Action Plan • Meeting at NHM Bhawan district and state VCCMs regarding cold chain stocking, storage, equipment, maintenance & feedback • Modifications made to LCDC IEC • Modifications made to Td + DPT 2nd Booster IEC following proofreading.

Linking theory (Classroom learning) with practice at your organisation	• Communication Planning & Management- helped us participate in IEC-related discussions and allowed us to participate in developing relevant IEC for the Td and DPT 2nd Booster vaccination campaign • Principles of Management- enhanced our communication with different program stakeholders and work under varying levels of management.
Gaps identified on the working area.	• No BCG Vaccine at Session Site • ASHA not sure about IFA doses among different age groups • Adrenaline dose chart not stuck behind AEFI kit lid. • Lack of Transport available to medical institution in case of AEFI • Poor quality of IEC developed by the designer agency due to lack of understanding about program and functioning method.
Suggestions for improvement	• Training of ASHAs and FHW by conducting refresher course. • IEC to be developed by personnel who have sound knowledge of program and beneficiaries. • Emergency vehicle should be present at session site to transport beneficiaries to medical institution in case of AEFI.
Plan for the next week	• Participate in Td and DPT 2nd Booster vaccination drive for adolescents and children.

Signature of the Student

Approved by the IIHMR University's Mentor

Weekly Report 6

Name of the Organisation: NHM Gujarat, Gandhinagar

Department of Summer Internship Program: Routine Immunization

Name of the Student: Srabani Chattopadhyay

Roll no: 1853 **Stream:** MBA-Hospital and Health Management (HM-28)

Week no: 6 **From:** 10th June 2024 **to** 15th June 2024

Activity Done	• Discussion regarding finalization of IEC- leaflets, social media- Td + DPT 2nd Booster campaign. • Modifications made to self developed and designer developed IEC. • Designing Tika Express. • NID- Polio Campaign IEC Design Modification and editing • Approval of Van design • Finalization of NID- Polio Campaign IEC- Poster and Banner • Finalization of Td10 & Td16 information note through Jhpiego • Modifications done to designer developed leaflet for Td + DPT 2nd Booster campaign. • Coordinating with Jhpiego State consultant for HR. • Finalization of Information note with attached Jhpiego developed IEC. • Field Visit for Mamta Session at Ambapur Koba Village. • Finalization of DPT 2nd Booster leaflet. • QR code generation and finalization of NID- Polio Diwas IEC. • Data Triangulation done for Arvalli district-subdistrict wise for FY 2023-2024 & Apr- May 2024. • Presentation and discussion on Arvalli Data Triangulation • Coordinating with Jhpiego for financial and HR support for Td + DPT vaccination campaign. • Google forms made for NID Session site monitoring- Booth + House to House. • Meeting to plan inaugural ceremony for Td + DPT 2nd Booster campaign on 18th June.

	• Discussion on inaugural banner, and badges, caps and bands for distribution. • Editing of cap and badge design using corelDraw and Canva. • Coordinating with designer for further badge design changes. • Approval of Google forms made for Booth and house to house monitoring for Polio Diwas (23rd and 24th June respectively) . • Designing and modification of standee (IEC) for Td vaccination. • Designing Td 10, 16 & DPT 2nd Booster vaccination campaign Banner for Inauguration Ceremony on 18th June.
Linking theory (Classroom learning) with practice at your organization	• The module on Communications Planning & Management helped us actively participate and provide insights on IEC designing. • The module on Demography helped us use the correct denominators for coverage percentage and dropout rate calculation.
Gaps identified on the working area.	• Old model of vaccine carriers still used in rural and outskirt areas. • Ice packs are completely frozen i.e. conditioning not done correctly. • ASHA was not wearing her ID card or uniform.
Suggestions for improvement	• Conducting training and refresher courses for ASHA and FHW. • Formulate a method of monitoring distribution of new model of vaccine carriers to ensure all areas have received them • Training of FHWs regarding stocking of vaccine carriers for both models and where conditioning of ice packs is needed.
Plan for the next week	• Participate in Td + DPT 2nd Booster Vaccination Campaign from 18th June • Participate in NID- Polio Diwas on 23rd and 24th June.

Signature of the Student

Approved by the IIHMR University's Mentor

Weekly Report 7

Name of the Organisation: NHM Gujarat, Gandhinagar
Department of Summer Internship Program: Routine Immunization
Name of the Student: Srabani Chattopadhyay
Roll no: 1853 **Stream:** MBA- Hospital and Health Management (HM-28)
Week no: 7 **From:** 17th June 2024 **to** 21st June 2024

Activity Done	• Designing NID Polio Diwas Badges • Management of Inaugural Ceremony for Td 10, Td 16 & DPT 2nd Booster Vaccination Campaign. • Finalization of NID Polio Diwas badge design. • Attended STFI meeting for MR campaign, Td & DPT vaccination campaign & NID Polio Diwas. • SIP Poster data analysis- Td 10, Td 16 & DPT 2nd Booster coverage % for FY 2023-2024. • Assembling of SIP Poster. • Modifications made to NID Polio Diwas Banner. • Finalization of NID Polio Diwas Banner. • Designing & finalization of cover page of Commissioner's file- for NID Polio Diwas. • Distribution of NID Polio Diwas information note • Coordinating with DPC/CPCs of Gujarat to update Td and DPT vaccine reporting sheet. • Presentation made on MR Surveillance.
Linking theory (Classroom learning) with practice at your organization	• Demography- helped in determining the suitable denominators for coverage % calculation. • Communications & Planning Management- helped me design appropriate IEC for NID Polio Diwas.
Gaps identified on the working area.	• DPC/CPCs should be notified to update reporting sheets within the stipulated time to allow for effective program monitoring.

Suggestions for improvement	• The reporting sheets sent to DPCs, and CPCs should mention the deadline for data to be updated to prevent data entry or no-response errors.
Plan for the next week	• Participate in NID Polio Diwas.

Signature of the Student

Approved by the IIHMR University's Mentor

Weekly Report 8

Name of the Organisation: NHM Gujarat, Gandhinagar
Department of Summer Internship Program: Routine Immunization
Name of the Student: Srabani Chattopadhyay
Roll no: 1853 **Stream:** MBA- Hospital and Health Management (HM-28)
Week no: 8 **From:** 24th June 2024 **to** 29th June 2024

Activity Done	• Participated in NID Polio Diwas- 23rd June • Presentation made for MR, Diptheria & Pertussis Surveillance. • Assembling of SIP Poster and Report • Coordinating with CPCs/DPCs to update reporting sheet for Td and DPT vaccination. • Literature Modification for leveraging RBSK for Td Adolescent Vaccination Drive Paper. • Field Visit to Sunshine Heights- II, Kudasan • Presentation made for CDHO meeting • IEC made for NCDCS program & following modifications • Attended AEFI meeting • Data Triangulation and presentation made for Hep B coverage- districtwise for RCHO meeting. • Reviewing available Cholera Vaccines- availability, dose, efficacy, route of administration, price etc.
Linking theory (Classroom learning) with practice at your organisation	• Communications Planning and Management module enabled to effectively design and create relevant IECs for the NPCDCS program. • The module on Demography helped me calculate vaccine coverage using relevant denominator. • Research Methodology module helped me effectively review articles on available cholera vaccines.
Gaps identified on the working area.	• Old model of vaccine carrier brought for outreach session site with unconditioned ice packs which creates higher chances of damage to vaccine • ASHA & FHW not sure about vial doses. • Improper stocking of vaccine carrier- one less Ziploc bag brought in carrier

	• Poor positioning of session site- in the basement of an apartment in front an elevator. Lack of waiting area and higher chances of contamination. • Poor quality or incorrect supporting documents attached to CIF and CRF forms in AEFI meeting which can prevent determination of AEFI cases.
Suggestions for improvement	• Conducting frequent refresher training courses for ASHA and FHW. • Arranging permanent outreach session sites with appropriate facilities for beneficiaries. • Monitoring whether correct documents are attached to CIF & CRF forms and if not attached, coordinating with responsible people to gain all required documents
Plan for the next week	• Assesmbling of SIP Report and Poster

Signature of the Student

Approved by the IIHMR University's Mentor

Compiled Report

Name of the Organisation: NHM Gujarat, Gandhinagar
Department of Summer Internship Program: Routine Immunization
Name of the Student: Srabani Chattopadhyay
Roll Number: 1853 **Stream:** MBA Hospital and Health Management (MBA HM-28)

Activity Done	• **Immunization Program Participation and Reporting** Participated in discussion related to the National Immunization Schedule, and meetings and reviews such as- CDHO meetings for block performance in vaccination uptake in Junagadh, ChottaUdepur, Panchmahal & Arvalli district, MR and DPT Surveillance in states of Gujarat, RCHO meeting to analyse % FIC and dropout rate for vaccines, and the introduction of PCV-14 in the Universal Immunization Program (UIP). In addition to this, I attended meetings related to the Td and DPT 2nd Booster vaccination campaign for children and adolescents to plan IECs and organize the inauguration event for the campaign launch. • **Cold Chain Management and eVIN** Engaged in Cold Chain Management and eVIN (Electronic Vaccine Intelligence Network) activities, including training sessions, field visits, and discussions on temperature management, vaccine storage, VVM (Vaccine Vial Monitor), and data entry into eVIN. Conducted calculations for vaccine forecasting, presented research findings, and participated in field visits to health facilities for practical implementation and data entry into eVIN at CCP (Cold Chain Point) levels. I also learnt about the guidelines related to cold chain management, contingency plans in case of equipment failure or malfunction and various AVDS (Alternate Vaccine Delivery System) to transport vaccines from the CCPs (Cold Chain Points) to outreach session sites. • **Data Triangulation, Analysis, and Presentation** I engaged in data triangulation and calculations to assess variations in vaccination coverage across multiple districts of Gujarat and conducted comparative analyses at both subdistrict and block levels. Utilizing HMIS and Techo+

	systems, I performed data extraction, sorting, analysis, and presentation for indicators such as Hep B-0 dose coverage, BCG coverage, and coverage percentages for other vaccines along with calculation of Full Immunisation Coverage (FIC). This allowed me to present comprehensive findings, including a detailed comparative analysis of immunization data. I also contributed to research activities by reviewing and refining abstracts for papers, including a study on a pertussis outbreak in Amreli district, Gujarat, Leveraging RBSK for Td vaccination among Adolescent due to increasing cases of diptheria amongt older children, and a study and presentation of a UNICEF report on vaccine freezing. • **IEC Material Development and Stakeholder Coordination** I was involved in designing and developing IEC (Information Education and Communication) materials for vaccination campaigns across Gujarat. This required revisions and editing to guarantee technical and grammatical accuracy. I worked together with designers to create effective banners, pamphlets, posters, and social media material supporting vaccines, notably for campaigns such as Td + DPT 2nd Booster, LCDC (leprosy case detection campaign), and NID-Polio Diwas. I also created banners, badges, hats, and bands for distribution, using design software such as CorelDraw and Canva to tweak designs and finalize QR codes for IEC items. I also played a key role in preparing and executing the launch ceremonies for the Td 10, Td 16, and DPT 2nd Booster immunization campaigns. • **Field Visits** During field visits, I conducted thorough session site monitoring to ensure comprehensive adherence to vaccination protocols. This included assessing the knowledge levels of ASHA and FHW personnel, verifying proper transportation and storage of vaccines, and confirming the availability of essential supplies such as appropriately stocked AEFI kits, blank Mamta Cards, Needle Hub Cutters, and availability of color-coded disposal bins for safe waste management. I also monitored the correct administration order of vaccines and ensured the communication of four key messages to beneficiaries, emphasizing crucial information related to vaccine benefits and safety measures. I also participated in monitoring the campaigns by ensuring timely updating of reporting sheets.

Linking theory (Classroom learning) with practice at your organisation	• **<u>Demography Module</u>:** The Demography module provided essential skills for public health management by teaching precise calculation techniques for coverage percentages and dropout rates using accurate denominators across HMIS and Techo+. It also imparted knowledge on the correct administration practices according to the National Immunization Schedule, detailing age-appropriate vaccine doses, routes, and sites. Additionally, the module facilitated understanding in selecting appropriate denominators critical for precise coverage percentage calculations. • **<u>Research Methods Module:</u>** The Research Methods module significantly streamlined the process of reviewing and analyzing the pertussis outbreak paper, Unicef vaccine Freezing study, & available literature on Cholera Vaccines. This module played a crucial role in allowing me to rewrite the abstract for the pertussis outbreak paper, rephrase the introduction for the Leveraging RBSK for Adolescent Td Vaccination Paper with significant additions and make a presentation on the pertussis outbreak paper and Unicef Vaccine Freezing Study following literature review. • **<u>Field Visit Experience:</u>** Participation in field visits bridged theoretical knowledge with practical experience by providing us an understanding of various technicalities present at the field level related to vaccine delivery, temperature maintenance and data recording. It also provided firsthand insights to help us identify gaps and lapses present in the system related to infrastructure and facilities. Field visits also helped us understand the status of training and knowledge among field level workers. It also provided us with an understanding of due list preparation, hygiene, vaccine administration and waste disposal protocols at field level and how microplans are made for outreach sessions. • **<u>Health Policy, Health Delivery Systems, and Digital Health Module:</u>**

	This module laid the foundational understanding of critical concepts such as eVIN(Electronic Vaccine Intelligence Network) and AVDS (Adverse Vaccine Events Following Immunization). They prepared me to utilize HMIS effectively for recording and monitoring health program data, ensuring efficient management of vaccination campaigns and health interventions. • **Communications Planning & Management Module:** The Communications Planning & Management module made a significant contribution in allowing me to develop Information, Education, and Communication (IEC) materials for different vaccination programs planned during the months of my internship. It permitted me to actively get involved and participate in discussions and meetings on IEC development for programs such as Td and DPT 2nd booster vaccination campaign for children and adolescents, and NID Polio Diwas. Furthermore, it improved my skill in creating and modifying effective IEC materials adapted for events like NID Polio Diwas, and NCD (Non Communicable Disease) Day with a focus on clear messages and engaging techniques for communication to increase public awareness, demand generation and participation. • **Principles of Management Module:** Enhanced communication skills and the ability to collaborate effectively with stakeholders were outcomes of the Principles of Management module. It equipped me with the necessary competencies to operate within diverse management frameworks, ensuring smooth coordination and implementation of public health initiatives. • **Classes on Ms Excel and PowerPoint:** The classes on Ms. Excel Enabled me to analyse, sort, format and represent data effectively.
Gaps identified on the working area.	• **Infrastructure, Facility and Demand related Issues:** The Mamta session sites face significant challenges due to a preference for private facilities, driven by extensive advertising of painless vaccines. There is a lack of transport to and from vaccine camps, coupled with inadequate

	temperature control and limited ice boxes. Most outreach session sites lacked facilities such as toilets, feeding rooms and waiting areas. According to guidelines, beneficiaries of vaccination have to wait 30 minutes post vaccination to allow for early response in case of AEFI. Two session sites lacked a bench to lay children for vaccination. These deficiencies hinder the overall effectiveness of health service delivery. • **Training and Capability Gaps:** There is a notable lack of training for frontline health workers in managing adverse effects following immunization (AEFI). Most vaccinators were not familiar with the four key messages, and those who were, did not communicate them to the beneficiaries. Ice packs that are kept in vaccine carriers to ensure proper temperature maintenance are inadequately filled. In some session sites, the ice packs were completely frozen (unconditioned ice packs) and were used with the old model of vaccine carriers which can result in damage to freeze-sensitive vaccines such as DPT, Td, Pentavalent & Hep B vaccines. Additionally, hygiene protocols were not adequately followed at the outreach session sites, such as the use of hand sanitizer between vaccinations. Vaccination-related data was entered late and not simultaneously following vaccination, increasing the chances of errors in data entry. FHWs should also be trained regarding doses available per vaccine vial for proper record keeping and data entry. Appropriate calculation of doses administered will allow for timely indent creation ensuring lack of stock of stock depletion. In some sessions, the female health worker (FHW) forgot to bring certain vaccines, disrupting immunization activities. In one session, certain items were missing from the AEFI kit, suggesting that the kits are not checked daily, which can lead to severe issues in case of an AEFI management. ASHAs are not well versed with the immunization schedule including dose, route and site of administration of vaccines. • **Operational and Management Issues:** Key operational challenges include deficiencies in Information, Education, and Communication (IEC) related to vaccination, and inadequate BRIDGE (Boosting Routine Immunization Demand Generation) training for ASHA and ANM personnel. ASHAs are often present without proper identification or uniforms. Additionally, issues such and incorrect data entry into the Health Management Information

	System (HMIS) and Techo+ negatively affect the quality and accuracy of immunization data and complicate monitoring. In addition this, very poor-quality or incorrect supporting documents were attached to CIF and CRF forms which negatively affected Causality Assessment in AEFI meetings. • **Logistical Challenges:** The sites struggle with poorly maintained registers and medical record-keeping standards. Participation in community health events, such as Gauravi Diwas, is low, partly due to environmental discomforts like extreme heat, further reducing community engagement and outreach efforts. The session sites face logistical hurdles, including the lack of essential infrastructure like tables for child vaccination and missing items in AEFI kits. In certain sessions the adrenaline and hydrocortisone dose charts that are to be administered in case of any AEFI were unavailable or not stuck to AEFI Kit lids. Some AEFI kits lacked AEFI reporting forms. Temperature monitoring is further compromised by the unavailability of SIM cards in Cold Chain Equipment (CCE) loggers under eVIN. Moreover, ASHAs often neglect uniform and identification protocols, and lack knowledge towards incentivization. • **Specific Immunization Challenges:** Challenges in immunization sessions include insufficient availability of BCG vaccines, uncertainty among ASHAs regarding IFA doses for different age groups. There are also inadequate transport options for AEFI cases that can result in delay in timely care leading to death of patients. • **Poorly Designed IEC Materials:** The effectiveness of immunization campaigns is hampered by inadequately designed Information, Education, and Communication (IEC) materials. These shortcomings often arise from the designer agency's limited understanding of the program's objectives and operational methods. This issue undermines efforts to effectively communicate vaccination benefits and procedural information to the community, thereby hindering engagement and compliance. • **Operational Improvements Needed:** DPC/CPCs should be promptly notified to update reporting sheets within the stipulated time to facilitate effective program monitoring and address any operational challenges.

Suggestions for improvement	**Logistics and Support for Immunization Sessions** 5. **Training Programs**: o Provide AEFI (Adverse Events Following Immunization) training, including management and reporting protocols. o Conduct training on hygiene protocols, proper stocking of vaccine carriers, and monitoring VVMs (Vaccine Vial Monitors) to ensure vaccine safety. o Ensure that staff are trained on temperature maintenance for vaccine carriers. 6. **Transport and Emergency Services**: o Arrange vans to transport beneficiaries to and from outreach session sites. o Ensure outreach session sites have emergency vehicles equipped with life-saving drugs and equipment to manage AEFI cases and facilitate transport to the nearest medical facility. **Enhancing Immunization Efforts** 7. **IEC Activities**: o Boost IEC (Information, Education, and Communication) activities to raise vaccine awareness and generate demand among different beneficiary groups. o Form an internal IEC design team to produce high-quality, timely IEC materials tailored to the target audience. 8. **Refresher Training**: o Conduct regular refresher training for ASHA and ANM workers to enhance their ability to generate demand for immunization. o Train FHWs (Female Health Workers), ASHAs, staff nurses, and pharmacists on the importance of timely data entry and the use of HMIS, Techo+, and eVIN. **Infrastructure and Operations** 9. **Mamta Sessions**:

	○ Establish permanent centers with appropriate facilities for Mamta Sessions (vaccination outreach sessions) in urban areas to meet all requirements and prevent overcrowding. ○ Conduct daily checks of AEFI kits at these centers to ensure all equipment is available for proper handling of any AEFI cases. 10. **Training and Documentation**: ○ Provide training for FHWs to bring necessary documents to session sites, including the Techo+ register, AEFI register, due list for the session, Head Count Survey Report, and Microplan. ○ Train FHWs on using different models of vaccine carriers, filling and conditioning ice packs, and preventing vaccine damage. ○ Additional training of ASHAs should be carried out to ensure they are aware about their incentives and enhance their capability to mobilize and motivate beneficiaries for vaccination. They should also be trained to be well versed with the National Immunisation Schedule, dose, route and site of vaccination. **Equipment and Technology** 11. **Vaccine Carriers**: ○ Ensure all SCs, PHCs/ UHCs, and CHCs receive new models of vaccine carriers that do not require ice pack conditioning. 12. **Temperature Monitoring**: ○ Replace discontinued SIM cards in temperature loggers for continuous remote monitoring of Cold Chain Equipment (CCE) temperatures via eVIN. **Monitoring and Reporting** 13. **Data Management**: ○ Ensure reporting sheets sent to DPCs (District Program Coordinators) and CPCs (City Program Coordinators) include deadlines for data updates to prevent data entry errors and no-response issues. 14. **Form Accuracy**:

	○ Additional training of ASHAs should be carried out to ensure they are aware about their incentives and enhance their capability to mobilize and motivate beneficiaries for vaccination. They should also be trained to be well versed with the National Immunisation Schedule, dose, route and site of vaccination. **Equipment and Technology** 11. **Vaccine Carriers:** ○ Ensure all SCs, PHCs/ UHCs, and CHCs receive new models of vaccine carriers that do not require ice pack conditioning. 12. **Temperature Monitoring:** ○ Replace discontinued SIM cards in temperature loggers for continuous remote monitoring of Cold Chain Equipment (CCE) temperatures via eVIN. **Monitoring and Reporting** 13. **Data Management:** ○ Ensure reporting sheets sent to DPCs (District Program Coordinators) and CPCs (City Program Coordinators) include deadlines for data updates to prevent data entry errors and no-response issues. 14. **Form Accuracy:** ○ Enhance the monitoring process for CIF (Case Investigation Form) and CRF (Case Reporting Form) to ensure forms are accurately filled out and include all relevant supporting documents in high-quality print. ○ Implement rigorous verification procedures to accurately determine AEFI causality.

Signature of the Student Prabanj

July 22, 2024

Approved by the IIHMR University's Men