Every Newborn Action Plan Metrics
Linked with
Ending Preventable Maternal Mortality

Data Collector Training Programme
Session 1.1:
Overview of Training Syllabus

#EveryNewborn #Endingstilbirths #maternalhealth
Session Planning

- **Purpose:** Outline overall course details and plans
- **Target Audience:** All data collectors & supervisors
- **Length of session:** 45 mins + 30 mins for quiz
- **Type of session:** (classroom / practical)
- **Resources / tools required:** Projector, slide deck, training handbook, additional materials/ resource pack.
Structure of this session

- Course Objectives
- Maintaining Data Quality
- Assessment Criteria
- Overview of sessions
- Timetable
- Pre-training knowledge quiz
Primary Training Objective
Participants should be able to competently conduct facility-based observations and data collection using the study tools (both in simulation and in a clinical setting).

Specifics Training Objectives
1. The training will address the following key steps to becoming a competent data collector:
2. Understand the purpose, objectives, plans for this study and the value of your role of data collector.
3. Recognise the value of reliable and high-quality data.
4. Review of data collection tools.
5. Learn how to complete the data collection tools completely and accurately
6. Gain skills in performing clinical observations/ maternal interviews/ data extraction or verification
7. Obtain competency by practising data collection and clinical observation skills.
Data Quality Management

By the end of this training, participants should be able to:

- Explain the importance of objective, standardised observation of clinical service delivery.
- Describe informed consent and why it is important.
- Describe how competency in observation is determined.
- Describe how criteria are used to determine skills performance.
- Describe the process used to develop adequate inter-rater reliability.
Assessment Criteria

Demonstrate the ability to conduct clinical observation and use of data collection tools according to protocol

- Course participants should demonstrate the ability to follow study protocols in their use and administration of all tools and checklists, and achieve at least 80% (preferably higher) when evaluated for inter-rater reliability.

Knowledge of the study, observation methods, and related concepts

- Course participant should pass the final knowledge quizz with score of 80% or higher.
Take Pre-course knowledge quiz

Objective: To test participants baseline knowledge

Time: 30 mins

Handouts / Materials: Knowledge quiz question paper; clock; pens

Instructions:
- All course participants should take the quiz as an individual without conferring with others. Participants should complete the quiz in silence and answers should be all their own work. The facilitator should mark and score the quiz results, saving the scores to compare with the post quiz knowledge test.
- No question papers or answer sheets should be removed from the room.
Every Newborn Action Plan Metrics
Linked with
Ending Preventable Maternal Mortality

Data Collector Training Programme
Session 1.2:
Introduction to the Study

Add date and place
Hattie, Georgia, Country teams

#EveryNewborn #Endingstilbirths #maternalhealth
Session Planning

- **Purpose:** Outline background to the study
- **Target Audience:** All data collectors & supervisors
- **Length of session:** 30 mins
- **Type of session:** (classroom / practical)
- **Resources / tools required:**
  Projector, slide deck, training handbook, additional materials/ resource pack.
Structure of this session

- Background to the study
- What is the Every Newborn Action Plan?
- What is the purpose of the study?
- How long will it take?
- How will the findings be used and disseminated?
BACKGROUND TO THE STUDY
At the end of the Millennium Development Goals era...

No woman should die while giving life
303,000 die

No baby stillborn
2.6 million die

No newborn born to die
2.7 million die

No child dying or stunted
3.2 million die

Progress slower than for child or maternal mortality

Almost 9 million deaths, two-thirds related to birth
Marker of equity, and especially quality of care
From 8 MDGs to …17 SDGs

Making the case for health will have to be smarter – economic, environmental
Global Strategy for women, children & ADOLESCENTS (2016-2030)

1. **SURVIVE**
   End preventable deaths for women, newborns, children and stillbirths

2. **THRIVE**
   Realize highest attainable standard of health

3. **TRANSFORM**
   Achieve transformative and sustainable change
### Local context

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>POPULATION (000)</strong></td>
<td></td>
<td>160,996</td>
<td>28,514</td>
<td>53,470</td>
</tr>
<tr>
<td><strong>TOTAL MATERNAL DEATHS</strong></td>
<td></td>
<td>5,200 ('13)</td>
<td>1,100 ('13)</td>
<td>7,900 ('13)</td>
</tr>
<tr>
<td><strong>NMR /1000 LIVE BIRTHS</strong></td>
<td></td>
<td>23</td>
<td>22</td>
<td>19</td>
</tr>
<tr>
<td><strong>STILLBIRTH RATE /1000 LIVE BIRTHS</strong></td>
<td></td>
<td>36 ('09)</td>
<td>23 ('09)</td>
<td>26 ('09)</td>
</tr>
</tbody>
</table>
What is the Every Newborn Action Plan?

- Based on evidence published in *The Lancet Every Newborn* series
- It is supported by 197 countries through a World Health Assembly resolution.
- It aims to help countries in reaching the Sustainable Development Goal (SDG) target of fewer than 12 newborn deaths per 1000 live births,
- And the ENAP target of fewer than 12 stillbirths per 1,000 total births by 2030.
- It is also closely linked to the Ending Preventable Maternal Mortality plan
- It aims to encourage government leaders, policymakers and program managers to improve quality of care, and end preventable maternal and newborn deaths, and stillbirths.
What is the Purpose of the Study?

- To assess the quality of maternal and newborn health care in order to provide recommendations to national and global health facility monitoring systems.

Without this, investors (both governments and partners), program managers and advocates lack the reliable information needed to monitor the quality of care, prioritize use of resources, and hold the health system to account.
How will the results be used?

We expect this study to generate a better understanding of the current practices of care at birth, and for small or sick babies.

- To help reduce maternal and newborn mortality, and preventable stillbirths in Tanzania, Bangladesh and Nepal.
- To improve clinical outcomes for mothers and babies, and reduce preventable deaths and stillbirths.
- To improve and prioritise quality of care

These results will also be presented to the World Health Assembly as part of the ENAP, and will inform recommendations to improve the quality of maternal and newborn healthcare across the globe.
Implementation and Communication

How long will it take?

- Facility-based observation data collection completed by March 2018
- Overall research programme including feasibility testing completed by December 2018

How will the results be shared?

- Local
  Research team: internal webpage, information seminars, team meetings, workshops
  Participants: hospital notice board, simple language summary, hospital periodic journal, local newspaper etc.

- National
  Internal webpage, national and regional conferences, webinars, meetings and workshops, policy briefs, national advisory committee.

- International
  Peer reviewed journals, blogs, news updates, consortium websites, reports, briefing summaries, conferences, webinars, UN events and key global meetings including the World Health Assembly.
Where to get more information

Lancet *Every Newborn* series: [http://www.thelancet.com/series/everynewborn](http://www.thelancet.com/series/everynewborn)


BMC Pregnancy and Childbirth series: [http://www.biomedcentral.com/bmcpregnancychildbirth/supplements/15/s2](http://www.biomedcentral.com/bmcpregnancychildbirth/supplements/15/s2)


MARCH MOOC: [http://www.lshtm.ac.uk/study/freeonlinecourses/women-children-health/index.html](http://www.lshtm.ac.uk/study/freeonlinecourses/women-children-health/index.html)

UNICEF: [www.childmortality.org](http://www.childmortality.org)

MARCH [http://march.lshtm.ac.uk/](http://march.lshtm.ac.uk/)

Healthy Newborn Network: [http://www.healthynewbornnetwork.org/page/newborn-numbers](http://www.healthynewbornnetwork.org/page/newborn-numbers)

Thanks to

- This work would not have been possible without more than 80 partners involved in the Every Newborn Action Plan and particularly those on the ENAP metrics coordination group.

- Technical inputs from the Coverage Task teams, participants of the WHO meeting and 33 authors on the paper.

Multi-partner plan and will take multi-country, multi partner action to work!
Every Newborn Action Plan Metrics
Linked with
Ending Preventable Maternal Mortality

Data Collector Training Programme
Session 1.3

The Data Collection Team
Session Planning

- **Purpose:** Ensure all data collectors understand their roles and responsibilities within the team and how they relate to other team members

- **Target Audience:** Data collectors & supervisors

- **Length of session:**
  - Presentation 45 mins
  - Activity B (45 mins)

- **Type of session:** (classroom / practical)

- **Resources / tools required:**
  - Projector, slide deck, training handbook, supporting materials/resource pack, marker pens and paper.
Aims & Learning Outcomes

1. To have a clear understanding of the structure and make-up of the team
2. To have a clear understanding of the roles and responsibilities within the team
3. To understand the flow of mothers and babies through the health facility and how this relates to data collection
Data collection team

- Study site coordinator
- Supervisors
- Tracking officers (TO)
- L&D ward
- KMC ward observers
- Register data extractors
- Case note verifiers
- Interviewers
- Video data extractors (Nepal)
Structure of data collection team

- Study Site Coordinator
- Supervisor
- Tracking Officer
- KMC observer
- KMC register extractor
- L&D observer
- L&D register extractor
- Interviewer
- ACS note verifier
- Neonatal infection note verification
# Roles and Responsibilities

<table>
<thead>
<tr>
<th>Role</th>
<th>Key responsibilities</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisors</td>
<td>Ensure all stages of data collection are conducted smoothly and to high quality</td>
<td>Everywhere</td>
</tr>
<tr>
<td>Tracking officers (TO)</td>
<td>Enrol mother/babies, collect informed consent, assign to observers, ensure smooth data collection and flow</td>
<td>Admission to L&amp;D ward/OT and admission to KMC ward</td>
</tr>
<tr>
<td>L&amp;D ward observers</td>
<td>Observe mothers on L&amp;D ward/OT and collect all relevant data</td>
<td>L&amp;D ward/operating theatre</td>
</tr>
<tr>
<td>KMC ward observers</td>
<td>Observe mothers on KMC ward and collect all relevant data</td>
<td>KMC ward</td>
</tr>
<tr>
<td>Register data extractors</td>
<td>Complete the L&amp;D/KMC data extraction forms</td>
<td>L&amp;D and/or KMC ward</td>
</tr>
<tr>
<td>Case note verifiers</td>
<td>Complete the ACS/neonatal infection verification forms</td>
<td>PNC and sepsis ward</td>
</tr>
<tr>
<td>Interviewers</td>
<td>Interview consented mothers pre-discharge</td>
<td>PNC ward</td>
</tr>
<tr>
<td>Video data extractors (Nepal)</td>
<td>Extract data from videos</td>
<td>Office..</td>
</tr>
</tbody>
</table>
Data flow and location

Consented but not observed

Consented mothers

L&D ward

Admission

Tracking Officer

Refused consent

L&D observer

Operating theatre

Born else-where

L&D register extractor

Consented mothers

KMC ward

Birth else-where

KMC observer

KMC register extractor

PNC ward

Consented mothers

TO

TO

TO

TO

TO

TO

TO

TO

TO

TO

TO

Discharge

Interviewer

Neonatal infection note verification

If GA<34 weeks - ACS note verifier

Consented but not observed

Consented mothers

Sepsis ward

TO
Data collected

- L&D ward indicators
- KMC ward indicators
- Neopatal infection case notes
- All interventions
- Follow-up info

Location

- Admission
- L&D ward
- KMC ward (includes inborn and outborn)
- Neonatal/sepsis ward
- Operating theatre

Data collector

- L&D observe
- L&D register extractor
- KMC observe
- KMC register extractor
- ACS observe
- Neopatal infection note verifier
- Interviewer
- Data collector

For babies born elsewhere with neonatal infection

Tracking officer

ACS note verifier
Activity B: Overview and Structure of data collection team (45 mins)

The trainers will now lead you through a group work activity to consolidate what you have learnt in this section 3 of the training.

Objective: To give you the opportunity to understand the flow of mothers/babies and location of data collectors through the health facility.

Handouts:
Title badges for each data collector you have in your team e.g. L&D observer, data extractor, tracking office. NB. Tablets are not needed.
Place markers- printed sign for each location of data collection, e.g. “Admission”, “L&D ward”, “KMC ward”, “PNC ward”, “Sepsis ward”

Time: 45 minute (roughly 30 minutes walking through different scenarios and 15 minutes for questions and discussion)
Every Newborn Action Plan Metrics
Linked with
Ending Preventable Maternal Mortality

Data Collector Training Programme
Session 1.4

The Data Collection Team

#EveryNewborn #Endingstillbirths #maternalhealth
Session Planning

- **Purpose:**
  Ensure all data collectors understand what high quality data is and how to collect it. Ensure data collectors are familiar with the steps needed to maintain confidentiality.

- **Target Audience:** Data collectors & supervisors

- **Length of session:**
  Presentation 45 mins

- **Type of session:** (classroom / practical)

- **Resources / tools required:**
  Projector, slide deck, training handbook, supporting materials/resource pack, marker pens and paper.
Aims & Learning Outcomes

1. Data collectors will appreciate the value of high quality data and know how to improve the quality of their data collection

2. Data collectors will understand how to ensure confidentiality while carrying out data collection
# 1 Goal:
Observations/interviews/data extraction/data verification is valid and reliable!
Data Quality

- Data are only valuable if they are of high quality.

- The quality of the data determines the usefulness of the results.

- **Reliability**: in research reliability means “repeatability” or “consistency”.
  - A measure is reliable if it would give us the same result over and over again.

- **Validity**: refers to the degree to which data reflects what actually happened.
Common Data Collection Errors

- Misunderstanding the difference between “Didn’t happen” or “Don’t know”— “Didn’t happen” is to be used when you observed that an action was not done
e.g. you observe that bag and mask ventilation was not used on a baby who was not breathing
“Don’t know” is to be used when you do not know the answer
e.g. you could not see whether the baby was dried or not

- Missing/unreadable data

- Data entered incorrectly

- Delay in data entry

Can you think of any other reasons for errors in data?
Inter-rater reliability

- Inter-rater reliability is the extent to which two or more data collectors agree.
- In an ideal world two data collectors would be present for each data entry so that their data could be compared.
- For logistical reasons this isn’t possible.
- Instead: your supervisor will conduct double entry for 10% of cases.
Inter-rater reliability

Goal for observers & interviewers: min. agreement of 80%

Goal for extractors & verifiers: min. agreement of 95%
Confidentiality

- **Confidentiality** refers to the *treatment of information* that an individual has disclosed in a relationship of trust and with the expectation that it will not be divulged to others without permission.

- You will be collecting personal and sensitive information on the mother and baby.

- Everything you observe, read, hear during data collection should be kept confidential and not shared or discussed with others.
Confidentiality

What actions can you think of to ensure confidentiality?

- Do not discuss with other data collectors information about a mother/baby unless you need to for the study.
- If you need to discuss a mother/baby with another data collector, use their study ID not their name.
- Find a quiet place with some privacy to discuss a mother/baby with another data collector so that you are not over heard.
- If a relative, friend, or someone you know comes to the health facility, please alert the supervisor or tracking officer. You should not collect data on someone you know.
- Do not discuss health workers or their behaviour with other data collectors or outside of the health facility.
- If there has been an event which you are required to report (as per clinical incidence guidelines) you should make sure this is only shared with your supervisor.
- Never take pictures/videos or collect any other information unrelated to the study!
Quick Quiz

- What is the difference between reliability and validity?
- What things can commonly cause data errors?
- How will supervisors assess the accuracy of the data you are collecting?
- In the context of this study, why is confidentiality important?
- What will you do if you are asked to observe a mother on KMC and you realise you have met her before at your sister’s birthday party?
- You witnessed an clinical event with out appropriate response while on the L&D ward- who will you tell and how will you go about telling them?
DISCUSSION
Every Newborn Action Plan Metrics
Linked with
Ending Preventable Maternal Mortality

Data Collector Training Programme
Module 1
Section 1.5 & 1.6

Tablet and App use

#EveryNewborn #Endingstilbirths #maternalhealth
Session Planning

1. **Purpose:**
   Ensure data collectors know and understand how to use the tablet and are confident in using ENAP app

2. **Target Audience:** Everyone

3. **Length of session:**
   - Presentation: part i (60 mins)
   - Presentation: part ii (90 mins)
   - Activity C (90 mins)

1. **Type of session:** (classroom / practical)

2. **Resources / tools required:**
   - Projector, training manual, tablets with app installed
Aims & Learning Outcomes

1. Understand how to operate the tablet and use the tablet’s basic functions
2. Learn how to take care of a tablet on a daily basis
3. Understand how the ENAP data collection system works
4. Learn the basic elements of the ENAP app
5. Practice data collection using ENAP app
PRESENTATION PART I: TABLET USE

(60 MINUTES)
Tablets overview - introduction

- You will use a 10” screen tablet in L&D and 7” in all other locations.
- All tablets have some functions that are not necessary for data collection.
- You should not use functions of the tablet that are not necessary for data collection. Using extra features will severely reduce the battery life and can interact with the ENAP app functioning, leading to problems.
- To respect the privacy of the patients do not use camera or listen to music or record any sounds.
Tablets overview

(A) Front Camera - takes self-portraits/videos of yourself (will not be used during this project).

(B) Power/Lock Button - turns the device on/off, restarts it, or locks/wakes up the screen.

(C) Volume Buttons - adjusts the volume of your device (will not be used during this project).

(D) Memory Card Slot - optional memory card for removable file storage (will not be used during this project).

(E) Back Key - Returns to the previous screen, or closes a dialog box, menu, or keyboard.

(F) Home Button - Returns to the Home screen.

(G) Recent Key - Displays recent apps (will not be used during this project).
Tablets overview

(A) Microphone - records audio and detects voice commands (*will not be used during this project*).

(B) USB Charger/Accessory Port - connects the USB charger.

(C) Headset Jack - connects a headset (*will not be used during this project*).

(D) Rear Camera - takes pictures and record videos (*will not be used during this project*).

(E) Flash - illuminates subjects in low-light environments when taking a photo or recording video (*will not be used during this project*).

(F) Speaker - plays music and other sounds (*will not be used during this project*).

(G) Speaker - play music and other sounds (*will not be used during this project*).
Tablet home screen overview

- Status bar
- Widget
- App shortcuts
- Home screen indicator
- Primary app shortcuts
- App folder
- Apps list
Tablet – basic gestures

- Tap
- Tap and hold (and drag)
- Swipe
- Pinch-to-zoom
- Double tap
Tablet – text and numbers
Maintenance - charging
Maintenance – basic rules

Storage

• Keep it in the dry place, if possible in wooden cabinet. Always store the device in the lockable storage to protect it against theft.

Cleaning

• Clean the screen with a dry soft cloth only. A clean piece of cotton fabric works well.
• Never use any chemicals to clean the screen — especially alcohol, ammonia, or solvents.

Physical protection

• Use a protective case. The case will protect from breaking by fall.
• Dropping your tablet on the floor or hitting it against sharp and dull edges will cause physical damage (break or crack the screen or body of the tablet, battery damage), leading to partial or complete malfunctioning of the device, requiring its full replacement.
Maintenance – basic rules

Digital protection

• Do not attempt to install any additional software.
• As instructed, do not give your log in details (user name and password) to anyone, including your colleagues.
• Your login details are person specific and are assigned on individual basis.
• If you have forgotten your login details, please contact your supervisor.

Device lost or malfunctioning

• If the tablet is lost or stolen, it is your responsibility to notify your manager as soon as possible.
• If your device is malfunctioning, please notify your manager as soon as possible. Your device might require complete reset and reconfiguration, or replacement.
• You can only attempt to reboot device, by turning it OFF and ON. If possible, do not forget to synchronise the data, otherwise, your data might be partially or completely lost.
Basic functions - practice

Turning your device ON and OFF

• To turn on your device, press and hold the **Power key**. To turn off your device, press and hold the **Power key** and select **Power off → OK**.

• When the tablet is ON, press the power button once it is locked and it will be closed. To unlock, first press the power / home button, then the lock / unlock screen will appear on the tablet.

• Unlocking any side of the screen with the finger pressure will be unlocked. If the screen does not work for some time (5 minutes), the screen will close automatically.

Unlocking the device

• When you do not use the device, your device turns off the touch screen and automatically locks the touch screen to prevent any unwanted device operations.

• To manually lock the touch screen, press the Power key. To unlock, turn on the screen by pressing the Power key, tap anywhere on the screen, and then flick your finger in any direction.
Basic functions - practice

Connecting to Wi-Fi – ON and OFF

• Your device will be configured to use the Wi-Fi or 3/4G connection. In case you have lost connectivity, to connect to Wi-Fi, follow the steps:

1. Tap the Apps icon in the top right corner of the tablet.
2. In the list locate the Settings icon (if you can’t see it try scrolling left/right).
3. Tap on Wi-Fi to see the local wireless networks (make sure Wi-Fi is turned on, by sliding the switch at the top on the screen).
4. Tap the network you want to connect to and enter the wireless key.
5. Tap on Wi-Fi and turn it OFF
Basic functions - practice

Screen brightness adjustment

Turning off the sound

• To make sure your device is in the silent mode, adjust the device’s volume by pressing the Volume key down.
• Alternatively, select and drag the sliders to adjust the volume level to the minimum.
Troubleshooting

Flight mode ON and OFF

• In **Flight mode**, your connection to all wireless networks is disabled.

• The **Flight Mode** is usually being activated in areas where wireless devices are prohibited, such as aeroplanes.

• To synchronise and keep the data up-to-date, your tablet needs to be connected to the network.

• If your network connection is disabled, your device might be in the **Flight mode**.

• To activate or deactivate **Flight mode**, go to Settings → more settings, and then check the check box next to **Flight mode**.
Troubleshooting

Device doesn’t turn ON

• If the battery is completely discharged, you cannot turn on the device, even with the USB power adapter connected.
• Allow a depleted battery to charge for a few minutes before you try to turn on the device.
• Always charge the battery only with the original charger provided with the tablet to exclude the possibility of physical damage.

Network or service error message

• When you are in areas with weak signals or poor reception, you may lose reception.
• Move to another area and try again.
Concluding remarks

If you still experience problems...

- Turn your device OFF and ON
- Make sure your tablet is charged
- If that doesn’t help, please contact your supervisor
PRESENTATION PART II: ENAP APP USE
(90 MINUTES)
ENAP APP overview – flow

1. Tracker
   - Registration
     - L & D
     - KMC
     - Infection
   - Monitoring the patient flow
   - Patient assignment for observation

2. Observer
   - Data Sync

3. MRS
   - Data Sync

4. Extractor
   - Data Sync

Internet

Web Service

Country Database

Site Management & Monitoring

http://chu.icddrb.org/enap/
ENAP APP overview – roles
ENAP APP overview – logging in

Logging in

ENAP Indicator Validation Study
Azimpur MCHTI Hospital
Bangladesh

Username:
101

Password:

Login

Version: 1.0, Built on: 04042017
Unique ID: 104
ENAP APP overview – data entry

Text box

4. Hospital ID/Registration Number

Radio button

1. Was the data collection team present in the selected cluster as per plan?  
   🗼 Yes  🗼 No

2. Did you meet with the supervisor,  🗼 Yes  🗼 No inquired about the progress and identified any difficulties in data collection as per plan?
ENAP APP overview – data entry

Check box

37. Maternal complications diagnosed or known at time of admission

- [ ] None/Not Recorded
- [x] Hypertensive disease of pregnancy
- [x] Hypertension
- [ ] Pre-eclampsia
- [ ] Other Hypertensive disease of pregnancy not specified
- [x] Ante partum haemorrhage
- [ ] Not known
- [ ] Other complication specify

Drop-down list

11. Religion of the Mother
- 1-Muslim
- 2-Hindu
- 3-Buddhist
- 4-Christian
- 5-Chinese
- 6-Jewish
- 7-Others

12. Address

- a. District
- b. Upazila/Thana
- c. Union/Ward
ENAP APP overview – data entry

Auto-complete field

<table>
<thead>
<tr>
<th>Medicine type</th>
<th>01-Antibiotic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antibiotic Type</td>
<td>12-Penicillins</td>
</tr>
<tr>
<td>Generic name</td>
<td>Ampicillin and Cloxacillin:004</td>
</tr>
<tr>
<td>Date Prescribed</td>
<td>Ticarcillin and Clavulonic acid:...</td>
</tr>
<tr>
<td></td>
<td>Cloxacillin:014</td>
</tr>
<tr>
<td></td>
<td>Carbenecillin/ Ticarcillin:016</td>
</tr>
</tbody>
</table>

Date field

2. Date

[Calendar showing May 2017 with 11/05/2017 highlighted]
ENAP APP overview – data entry

Time

3. Time  16:05

3:32 PM

2  31  AM
3 : 32  PM
4  33

Keypad

Alphabetic

Numeric

THE LANCET

#EveryNewborn
**ENAP APP – colour coding**

<table>
<thead>
<tr>
<th>Color</th>
<th>Used in</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green</td>
<td>OB,MRS,DE,ACS,VER</td>
<td>When required action is completed / Observed-Done</td>
</tr>
<tr>
<td>Red</td>
<td>OB,MRS,DE,ACS,VER</td>
<td>When action is incomplete / Observed-Not Done</td>
</tr>
<tr>
<td>Orange</td>
<td>Patient</td>
<td>Patient switching button</td>
</tr>
<tr>
<td>White</td>
<td>Observation Module</td>
<td>Don’t know</td>
</tr>
<tr>
<td>Yellow</td>
<td>Observation Module</td>
<td>Selected Tab</td>
</tr>
</tbody>
</table>
ENAP APP – opening the app
ENAP APP – logging in

Logging in

ENAP Indicator Validation Study
Azimpur MCHTI Hospital
Bangladesh

101

Password

Login

Version: 1.0, Built on: 04042017
Unique ID : 104

- Tracker
- Observer
- Interviewer
- Data Extractor and Verifier
Tracker: Logging in

ENAP Indicator Validation Study
Azimpur MCHTI Hospital
Bangladesh

101
Password

Login

Version: 1.0, Built on: 04042017
Unique ID: 104
Tracker: registering and tracking

1. Labour and Delivery Registration
2. KMC Registration
3. Infection Registration
Tracker: patient assign

- Study ID: 150000003
  - Name: solima
  - Age: 20 years
  - Hospital ID: DHAKA, x, y, z
  - Observer: User 2

- Study ID: 150000002
  - Name: rekha
  - Age: 20 years
  - Hospital ID: KUSHTIA, x, y, z
  - Observer: User 2

- Study ID: 150000001
  - Name: Lipi
  - Age: 30 years
  - Hospital ID: DHAKA, x, y, z
  - Observer: User 5

- Study ID: 102000006
  - Name: Bindu
  - Age: 25 years
  - Hospital ID: DHAKA, 0001, 0001, 0001
  - Observer: User 5

- Study ID: 102000004
  - Name: Faija Banu
  - Age: 20 years
  - Hospital ID: DHAKA, 0001, 0001, 0001
  - Observer: User 5

Options:
- Assign
- Close
1.3. By clicking on **DATA SYNC** button, he/she can able to sync registered patient information into the country specific server. To do this, make sure that internet connection is available.

1.4. By clicking on **EXIT**, you can exit from ENAP application.
Observer: L&D observation

ENAP Indicator Validation Study
Azimpur MCHTI Hospital
Bangladesh

User ID
Password
Login

Version: 1.0, Built on: 03052017
Device ID: 147

ENAP Indicator Validation Study

LABOUR AND DELIVERY OBSERVATION

KMC OBSERVATION

DATA SYNC

EXIT
Observer: L&D observation

Patient Details
Observer: L&D observation

Labour and Delivery Patient

- **solima**
  - Study ID: 150000003
  - Hospital ID: 1234
  - Age: 20 years
  - Location: DHAKA, x, y, z

- **rekha**
  - Study ID: 150000002
  - Hospital ID: 1234
  - Age: 20 years
  - Location: KUSHTIA, x, y, z

- **Faija Banu**
  - Study ID: 102000004
  - Hospital ID: 56467
  - Age: 20 years
  - Location: DHAKA, 0001, 0001, 0001

- **omkarp basnet**
  - Study ID: 102000004
  - Hospital ID: 12345
  - Age: 25 years
  - Location: DHAKA, 0001, 0001, 0001

Patient Switching
Observer
Observer: pause and stop and reassign
Observer: KMC

- ENAP Indicator Validation Study
  - Labour and Delivery Observation
  - KMC Observation
  - Data Sync
  - Exit
Observer: KMC observation
Observer: KMC
Interviewer
Data extractor

ENAP Indicator Validation Study
Azimpur MCHTI Hospital
Bangladesh

Version: 1.0, Built on: 03052017
Device ID: 147

User ID
Password
Login

DATA EXTRACTION
DATA SYNC
EXIT
Data extractor

**Registration (Total: 13)**

**Data Extraction**

- **Study ID**: 1500000002
- **Hospital ID**: 5678
- **Asif**
  - Age: 8 days
  - Male
  - DHAKA, x, y, z

- **Study ID**: 1500000004
- **Hospital ID**: 1234
- **Rahima**
  - Age: 28 years
  - DHAKA, x, y, z

**Options**

- All Patient
- Completed
- Incomplete
- Labour and Delivery Patient
- KMC Patient
- Infection Patient

**Labour and Delivery: Data Extraction**

1. Date of data extraction: 08/05/2017
2. Gestational age (completed weeks): Not readable, Not recorded
3. Antenatal corticosteroids use documented as administered?: Yes, No, Not readable, Not recorded, Not possible to record
4. Estimated date of delivery (solar calendar): Not readable, Not recorded
5. Uterotonic administered for active management of the 3rd stage of labour?: Yes, No, Not readable, Not recorded
6. Number of Birth: One, Two, Three
7. Estimated blood loss in ml: Not readable, Not recorded
Activity C: Initial practise using the tablet and app

- **Instructions:**
  The trainer will now lead you through exercises that allow you to practice using the tablets and app, these exercises may not reflect the roles you will go on to do but they provide practice in app use.

- **Objective:** to ensure data collectors understand how to use the tablet and app for data collection.

- **Time:** 90 mins total
- **Handouts / Materials:** fully charged tablets with the ENAP app installed

- **Exercise 1 (30 minutes):** practicing tablet and app basics
- **Exercise 2 (20 minutes):** role playing as a tracking officer and a mother
- **Exercise 2 (20 minutes):** data entry as an observer on the LD ward
- **Questions and discussion session (20 minutes)**
DISCUSSION
Every Newborn Action Plan Metrics
Linked with
Ending Preventable Maternal Mortality

Data Collector Training Programme
Session 1.8:

Procedure for Life Threatening Events where no appropriate action is being taken

#EveryNewborn #Endingstilbirths #maternalhealth
Session Planning

- **Purpose:** Outline background to the study

- **Target Audience:** All data collectors & supervisors

- **Length of session:** 45 mins

- **Type of session:** classroom

- **Resources / tools required:**
  Projector, slide deck, training handbook, additional materials/ resource pack, critical incident forms, copy of the algorithm (last slide)
Aims & Structure of this session

- Define what is a life threatening event & what is meant by ‘no appropriate action being taken’ in this context
- Outline the procedure:
  - when to intervene
  - how to intervene
  - what next within the clinical setting & for patient safety
  - follow up & next steps required for data quality & research agenda
- Discussion: ethical, legal, clinical & data quality issues
- Role play activity: some example events to run through
- Identify and address any concerns, challenges or questions from the data collection team
What is a Clinical Alert?

- You will find clinical alert integrated into the KMC and, Labour and Delivery observer checklist app.

- They are automatically triggered on input of related clinical observations and will pop up on your screen.

- The flag will remind you of your responsibility during life threatening events directly associated with your observation.

- Once you are sure patient safety is not compromised, you can clear or resolve a clinical alert and continue your observation by.....
What is a life threatening event in this context?

This is any life threatening clinical incident that occurs in the absence of direct and appropriate care from facility healthcare providers.

- **To who do you have a duty of care?**
  - research study participants
  - other patients admitted to the study facilities

- **What is direct and appropriate care?**
  Care should be given by qualified registered healthcare providers and in accordance with local clinical guidelines

  *(these will be agreed at facility level ahead of commencing data collection)*
Events with no Clinical Alert

Discussion / group activity (10 mins):
Please discuss and provide examples of when and why you may wish to intervene in the absence of a clinical alert flag?

Example answers to be revealed following discussion:

• All cases of clinical shock not receiving appropriate care: obstructive (e.g. PE), cardiogenic, disruptive (anaphylaxis, septicemia), hypovolemic (hemorrhage, severe dehydration)
• Any failure to initiate resuscitation actions (adult or newborn) where required.
• Any undiagnosed or untreated obstetric or newborn emergency. (e.g APH, placenta previa, eclampsia / pre-eclampsia, hellp syndrome, cord prolapse, obstructed labor, fetal bradycardia, shoulder dystocia, mal-presentation, PPH, retained placenta, tears / trauma, etc.)
• Where clinical action may cause serious harm (e.g. wrong drug or overdose)
**Procedure**

If Clinical Alert appears during your observation, follow instruction to either:

- Alert health-worker responsible
  - Appropriate action taken by facility staff
  - Continue observation
- Health-worker does not take appropriate action
  - CALL FOR HELP
    - INSERT name & how to contact senior clinical staff
  - Appropriate action taken by facility staff
  - Continue observation
- Help does not come immediately
  - Provide direct clinical care
- Help arrives, but does not implement appropriate actions
  - Complete clinical incident form & follow up with data quality supervisor
  - Complete clinical incident form & follow up with data quality supervisor
Clinical incident forms

- What is it and where can I find it?
  This is a mandatory form that should be completed with support from your supervisor and in all cases indicated by the procedures.

- How do you complete it?
  Paper-based form (from your supervisor)

- What next?
  Contact the named responsible from hospital management team and ensure they have a copy of the clinical incident form

- What happens with this information?
  This information should be escalated to country and LSHTM level and will form the basis of monthly case reviews

<table>
<thead>
<tr>
<th>Section I Patient’s details</th>
<th>Write or circle when applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tracker/data extractor</td>
<td>Name __________________________</td>
</tr>
<tr>
<td>Facility</td>
<td>Name __________________________</td>
</tr>
<tr>
<td>Participant ID</td>
<td>________________________________</td>
</tr>
<tr>
<td>Mother observed during labour &amp; delivery or KMC?</td>
<td>L &amp; D __</td>
</tr>
<tr>
<td>Patient’s name</td>
<td>________________________________</td>
</tr>
<tr>
<td>Patient’s age</td>
<td>__ years</td>
</tr>
<tr>
<td>Patient’s Date of birth</td>
<td>DD/MM/YYYY</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section II Time of Incident Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of clinical incident</td>
</tr>
<tr>
<td>Time health worker responsible alerted to problem</td>
</tr>
<tr>
<td>Time incident escalated to senior clinical staff as identified in the local SOP</td>
</tr>
<tr>
<td>Time observation stopped</td>
</tr>
<tr>
<td>If relevant, time observer initiated provision of direct clinical care</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section III Facility staff in attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health worker Responsible</td>
</tr>
<tr>
<td>Role</td>
</tr>
<tr>
<td>Role</td>
</tr>
<tr>
<td>Role</td>
</tr>
</tbody>
</table>

CLINICAL INCIDENT FORM

Please complete all fields noting that these details are not part of your observation. They will be collected after any life-threatening incident where SOP was initiated in the failure of facility staff to act in accordance with agreed procedures. You may use notes from your observation or the patient records (inpatient notes and drug charts) if required.

Insert screen shot of Clinical Incident form
Activity E: Role Play

Objective: To give students the opportunity to practice using the procedure algorithm / clinical incident forms.

Instructions (30 mins):

1. Break into teams of three.
2. Identify one person to be the data collector, one to be the research subject, and one person to watch. Each participant will have the opportunity to play each of the three roles: data collector, research subject, watching.
3. Conduct a role play using the algorithm and testing different clinical scenarios you have experienced in your own practise.
4. Work together to identify any clinical or ethical challenges you may face and potential solutions.
Discussion (30 minutes)

- Ethical issues (ie. Patient safety)
- Legal issues (ie. permit to practice)
- Data quality issues (ie. Introducing bias)
- Etc.
Summary:
Life-Threatening Event where no appropriate action is being taken

- **When should I intervene?**
  During any life threatening scenario where local staff are not taking the appropriate action, or when instructed by a clinical alert.

- **What should I do?**
  You should follow the procedure algorithm for these events, instructions provided by a clinical alert will direct you to the correct part of the algorithm.

- **What is a clinical incident form?**
  This is a mandatory form that should be completed with support from your supervisor and in all cases indicated by the procedure algorithm.

- **What next?**
  Your supervisor will contact the named responsible from hospital management team and ensure they have a copy of the clinical incident form. This form will also be used as part of incident review management at facility, country and international level.
QUESTIONS & DISCUSSION