core principles

Training for all users is critical to the success and sustainability of an eRegistry.

The eRegistry’s data quality depends on a cadre of staff that has been trained in a consistent, comprehensive, and competent manner. This learning package is intended for registry managers, custodians, IT staff, and data administrators involved in designing, implementing or supporting eRegistry training.

The eRegistry training strategy is based on user roles which include system administrators, IT support staff, super users, clinical providers, and supporting staff. Planning the training timeline, identifying participants, designing curriculum, defining learning objectives, developing materials, conducting the trainings, and formulating an evaluation plan require significant time, capacity, and resources.

Investment in training, however, will yield important returns in the long term for registry operations. Training is an ongoing, continuous process that should be designed with periodic updates and follow-up to ensure high data quality throughout the lifecycle of the registry. Providing support services in the post-training phase via monitoring and mentoring (i.e., help desk, call center), for example, will contribute to the ongoing training needs of registry data users and providers.

The eRegistry training component is essential to the short and long term success and sustainability of an eRegistry. On a pragmatic level, users at all levels should be trained to become proficient and knowledgeable users. To achieve lasting impact, training should highlight the immediate and ongoing value and benefits of the eRegistry system for improving clinical management, providing point of care decision support, and improving overall quality of care. During training, it should also be emphasized that the eRegistry is authorized, endorsed, and supported on a national level to ensure full compliance, cooperation, and commitment.
This step by step guide provides information on the phases of planning and developing a training program designed for data users and data providers involved with an eRegistry.

STEP 1: IDENTIFY CONTINGENCIES, NECESSARY REQUIREMENTS AND INFRASTRUCTURE

Numerous contingencies, requirements, and/or infrastructure need to be identified prior to the commencement of training. These ‘preconditions’ must be addressed before proceeding with training and may include the following:

- Hardware (i.e., personal computers, mobile phones, servers, etc.)
- Software (i.e. DHIS or other open source software platforms)
- Internet connectivity (availability and accessibility)
- RMNCH national guideline review and/or customization

STEP 2: FORM A PLANNING TEAM

Identify a training team and clarify roles and responsibilities for each team member. Team members may include RMNCH specialists, training facilitators, and/or IT staff. Although the training will emphasize mastery of the eRegistry system, other issues (e.g., legal, security, ethical issues) should be addressed so it is advisable to create a multidisciplinary team.
STEP 3: CREATE A WORKPLAN

The scope of work will vary from setting to setting depending on the goals of the project. The training work plan should outline basic logistics and should address the following:

- Timeline (i.e., sequence of trainings)
- Types of trainings
- Duration of training
- Number of participants
- Number of trainers
- Timeframe (i.e., training dates for each training target group)

Templates supporting training organization are listed below:

- Template: eRegistries Training Overview
- Template: eRegistries Training Workplan

STEP 4: DELINEATE TYPES OF TRAINING NEEDED

Multiple tiers of training are necessary for the optimal operation of an eRegistry. Target groups that require training include the following:

- system administrators and data users (IT staff, etc.)
- trainers (i.e., training of trainers)
- clinical providers and staff
- on-site training support

System administrators and data users should be trained on how to use, administer, and manage the system. Topics for this target group address issues such as configuring the organizational structure of the system, assigning user roles, and managing user access, and providing user support, to
name a few. Trainers, on the other hand, should receive guidance on facilitation and training techniques.

**STEP 5: DEVELOP TRAINING CURRICULUM**

The training curriculum should be tailored to each target group. System administrators, for example, require more advanced content given their responsibilities and greater computer literacy. Course content for trainers should include information on how to effectively deliver informative and motivational training. It is recommended to incorporate multiple learning formats such as presentations, hands-on exercises, case studies, and role play scenarios.

Adapting the training to the appropriate skill level of each targeted group is essential. Assessing computer skills of the intended audience will ensure appropriate language and level of training.

- **Template: eRegistries Training Curriculum**

The following tasks should be considered:

- Identify learning objectives
- Clarify steps needed to achieve each objective
- Identify basic content areas such as:
  - Computer basics
  - eRegistry patient history
  - eRegistry modules
  - Use of ‘I’ (i.e., information) buttons
  - eRegistry guideline support and clinical decision support
- Identify other content areas:
  - Ministry level support
  - Expert consultation input and background
  - Patient-provider communication and rapport
  - Data confidentiality and privacy
  - Data security strategies
  - Data utilization benefits
- On-site visits
- Help line, online support
- Ongoing training opportunities

**Use diverse learning formats such as:**
- Informational lectures
- Live (online) demonstrations
- Hands-on exercises
- Case studies
- Role playing exercises (e.g., patient-provider, trainer-trainee)

**Prepare training materials such as:**
- Presentations (see below for template)
- Quick reference guides
- User aids
- Case study examples
  - Template: eRegistries Training Case Study

**Contingency plans for connectivity problems**
- Delineate procedures for what to do when internet is unavailable
- Ensure consistent strategies to maintain eRegistry data integrity

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**eRegistry benefits**

*The eRegistry training component is essential to the short and long term success and sustainability of an eRegistry. On a pragmatic level, users at all levels should be trained to become proficient, knowledgeable users. To further users’ commitment, training should highlight the immediate and ongoing value and benefits of the eRegistry system. The data entry process should also emphasize the national endorsements for the eRegistry and alignment with maternal and child health goals.*
• Design communication for clinics regarding new computerized system:
  - Postcards
  - Letters
  - Brochure
  - Posters
    • Template: eRegistries Training Communication Poster

**STEP 6. ORGANIZE RESOURCES NEEDED FOR TRAINING**

Identify and organize all resources that are necessary for training including, but not limited to equipment and materials, venue arrangements, human resources, etc.

• Equipment and materials (i.e., computers, internet, paper, pens, etc.)
• Venue (i.e., offsite venue, refreshments, etc.)
• Trainers and support staff

**STEP 7. CONDUCT TRAININGS**

Conduct the trainings. Anticipate time limitations and prioritize topics. Make sure to allow time for participant feedback and evaluations. It is important to keep track of all trainers and participants who attend the training. Examples of supporting templates for trainings are listed below:

• Template: eRegistries Training Agenda and Log
• Template: eRegistries Trainee Agreement

**STEP 8. EVALUATE TRAINING**

Brief surveys provided at the end of the training or during a
break provide participants an opportunity to give valuable feedback on which formats, approaches, and content were most effective in learning how to use, manage, and benefit from the eRegistry. This feedback is critical for refining and modifying the training curriculum and materials for future trainings.

- Template: eRegistries Training Evaluation Form

**STEP 9. ORGANIZE SUPPORT (E.G., HELP DESK, ONLINE FAQS, CALL CENTER, ETC.)**

Training should be viewed as a continuous, ongoing process. Once training is completed, it is important to have strategies in place to offer support and address questions to maintain high data quality collection.
Local engagement and local capacity building is essential in the earliest stages to build a sense of ownership that will influence the long term sustainability of the project. Experience has shown that a successful implementation depends on a strong technical team in country that can set up and maintain the system over time.

Such a team needs to be trained from the start and take an active role in configuring the system to ensure in-country understanding of the design. While setting up the system with a team of external experts may be tempting as it’s much faster, taking time to involve a local team during this crucial stage is not only more sustainable, but will likely provide a system that better matches the reality on the ground.

One of the first trainings involves local system administrators so that they can learn how to set up user accounts, control user access, and manage program configurations and system maintenance.

Other key tasks include: learning how to provide timely support to users that report problems; keeping track of common problems and solutions; communicating solutions among the support team; and, testing and using the system to stay current of updates. Country ownership and local engagement are fundamental to the eRegistries approach.