Overview of Injection Safety Assessment

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Three requirements of the assessment

- Simplicity
  - Assessment is intended to be as simple as possible
  - It can be conducted rapidly with limited resources
- Standardization
  - Number of items in the checklist that suggest if the procedure is safe
  - Simply data management and analysis
- Flexibility
  - Compatible process
  - If the sampling procedure is followed the results will be more representative of primary and secondary health settings

Objectives of the assessment

- To identify unsafe injection practices that may lead to infections and that should be targeted by interventions to improve injection safety
- To determine whether facilities where procedure are performed meet necessary requirement for practices, equipment, supplies and waste disposal
- To determine whether key steps of the procedure are performed according to recommended best practices
- To estimate the proportion of facilities where procedures are safe

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Methodology (study type and procedures)

- Type of study
  - Cross sectional
- Types of procedures to be assessed
  - Injections
  - Phlebotomies
  - Lancet procedures
  - Intravenous injections
  - Infusions

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Methodology (types of providers and facilities)

- Types of providers
  - Doctors
  - Nurses
  - Nurse midwife
  - Laboratory technicians
- Types of facilities
  - Primary Health Centres
  - Second level facilities
  - EPI services
  - Private practitioners/clinics

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Methodology (sampling)

- Sampling of health facilities
  - To be finalized a month in advance to ensure their suitability and existence
  - Planning travel
  - Securing administrative permissions
- Sampling unit and technique
  - Health facility will be the sampling unit
  - Two stage cluster sample is feasible
  - Weighted through probability proportional to population size
  - Equal number of sampling units within each cluster

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Methodology (sample size)

- Sample size
  - Eight districts to be selected with a probability proportional to population size
  - Districts where a large number of hepatitis cases are reported should be included
- Total sample size: 160 facilities
  - 80 health facilities from the list of public facilities
  - 10 facilities from each district to be selected randomly
  - 80 private facilities; if a complete list is not available a mapping exercise is recommended in each district before the assessment
  - Replacement criteria to be set in advance

Methodology (human subject)

- Even though the tool is designed for the assessment of injections, phlebotomies, lancet procedures during routine health care delivery
- Planners should check with MOH or donor organization (if any) for the need of ethical review and clearance

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Methodology (planning for field)

- Planning
  - At least two to three weeks in advance the following should be finalized:
  - List of health facilities (both private and public)
  - Recruitment and configuration of field teams
  - Number of days required to complete the data collection
  - Monitoring mechanism
  - Administrative permissions

Data management

- Depending on the technical expertise Epi Info or Epi Data may be used to enter and analyse the data
- Epi Info can also be a choice
- Data analysis to be performed at 95% confidence interval

Reporting

- Indicate the source of data such as observations, interview with injection provider with patients and etc
- Questions: whole wording of questions can be used while presenting results
- Denominator for each section should be mentioned e.g. the number of injection providers
- Order of results can be changed according to preference or suitability

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