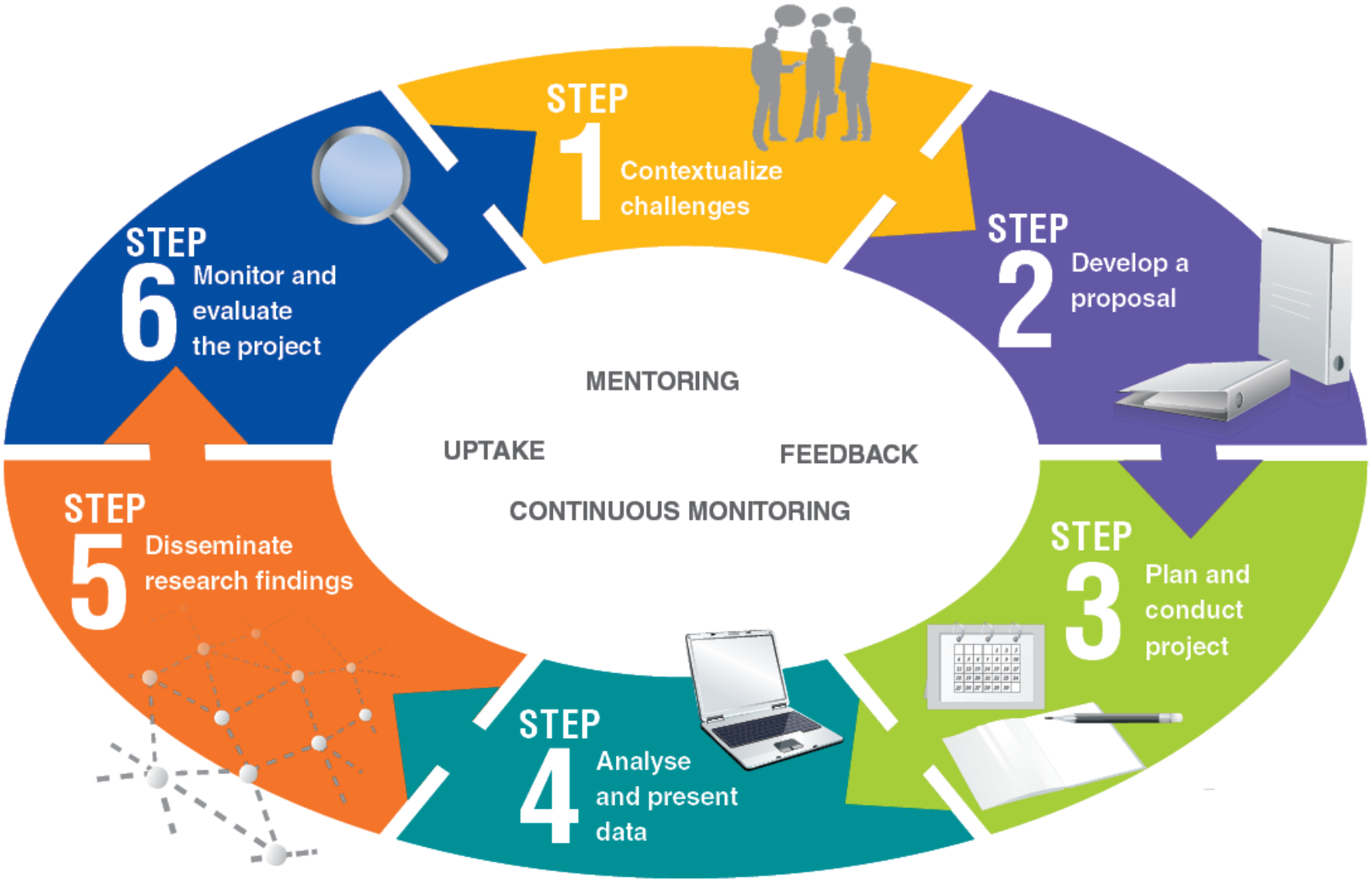
Module 4b: Qualitative data collection, analysis and presentation

TDR For research on diseases of poverty
UNICEF • UNDP • World Bank • WHO

World Health Organization

Six steps in the IR process



Presentation outline and Key concepts

Expected outcomes

Key concepts

1. Qualitative data collection
2. Analysis of qualitative data
3. Presentation of qualitative data

Application of key concepts

Expected outcomes

Able to describe:

- Appropriate sampling strategies, qualitative data collection techniques and tools
- Data analysis processes in a qualitative studyVarious options for data presentation

Key concept 1: Data collection–*Sampling*

Sampling strategies

- **Purposive sampling – sample selected intentionally**
  - Convenience sampling
  - Snowball sampling
  - Maximum variation
  - Outliers
  - Intensity sampling
  - Homogenous sampling

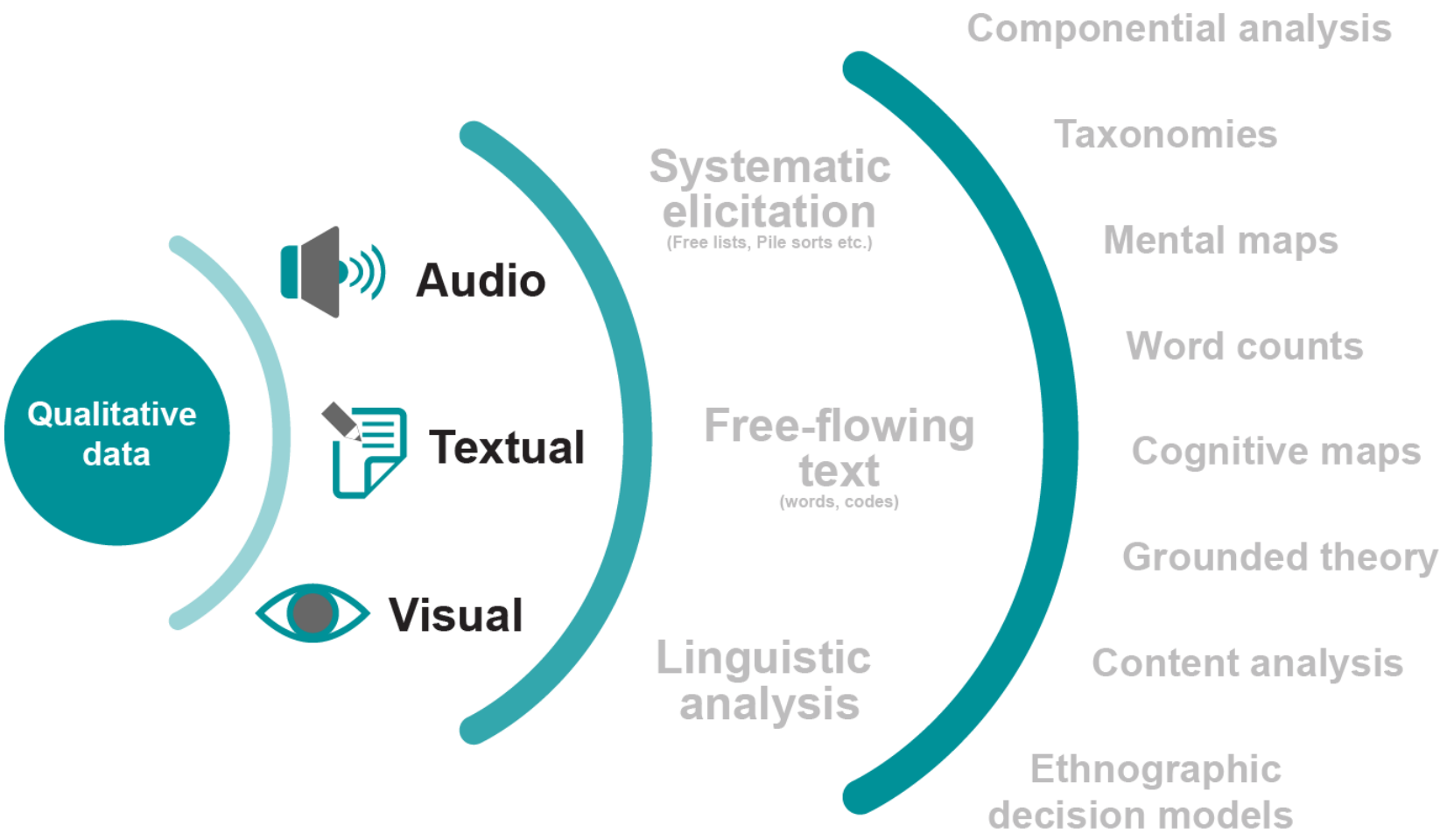
Key concept 1: Data collection

Method

Depends on:

- research questions
- study objectives
- specific information you are interested in

Key concept 1: Data collection



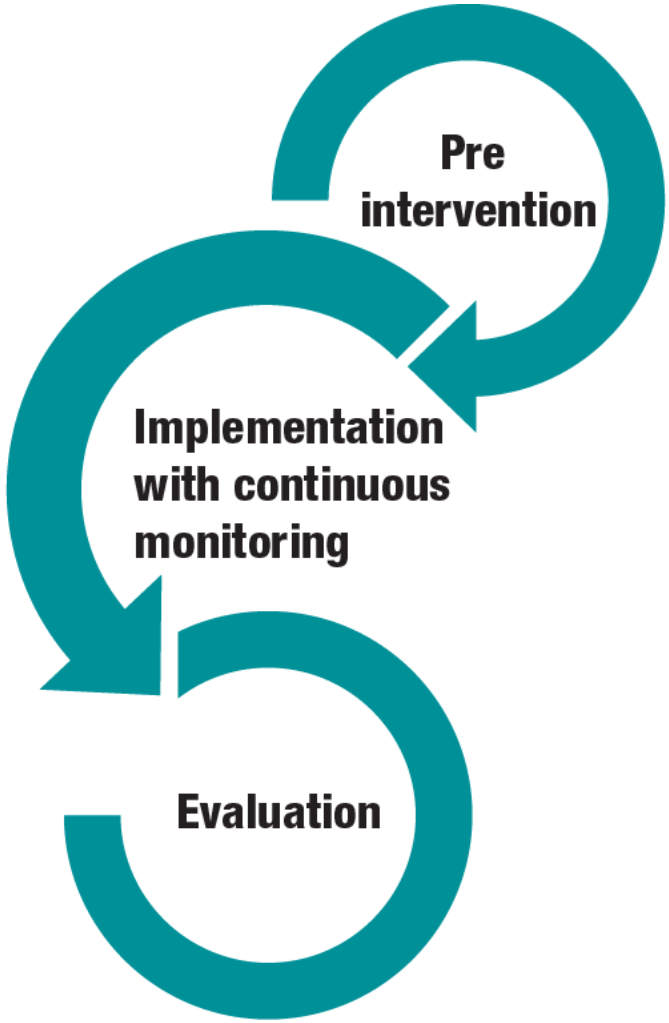
Adapted from Ryan & Bernard (2000) – Data management and analysis methods : Handbook of qualitative research

Key concept 1: Data collection

Qualitative techniques in the IR process

Interviews
Discussions
Observations

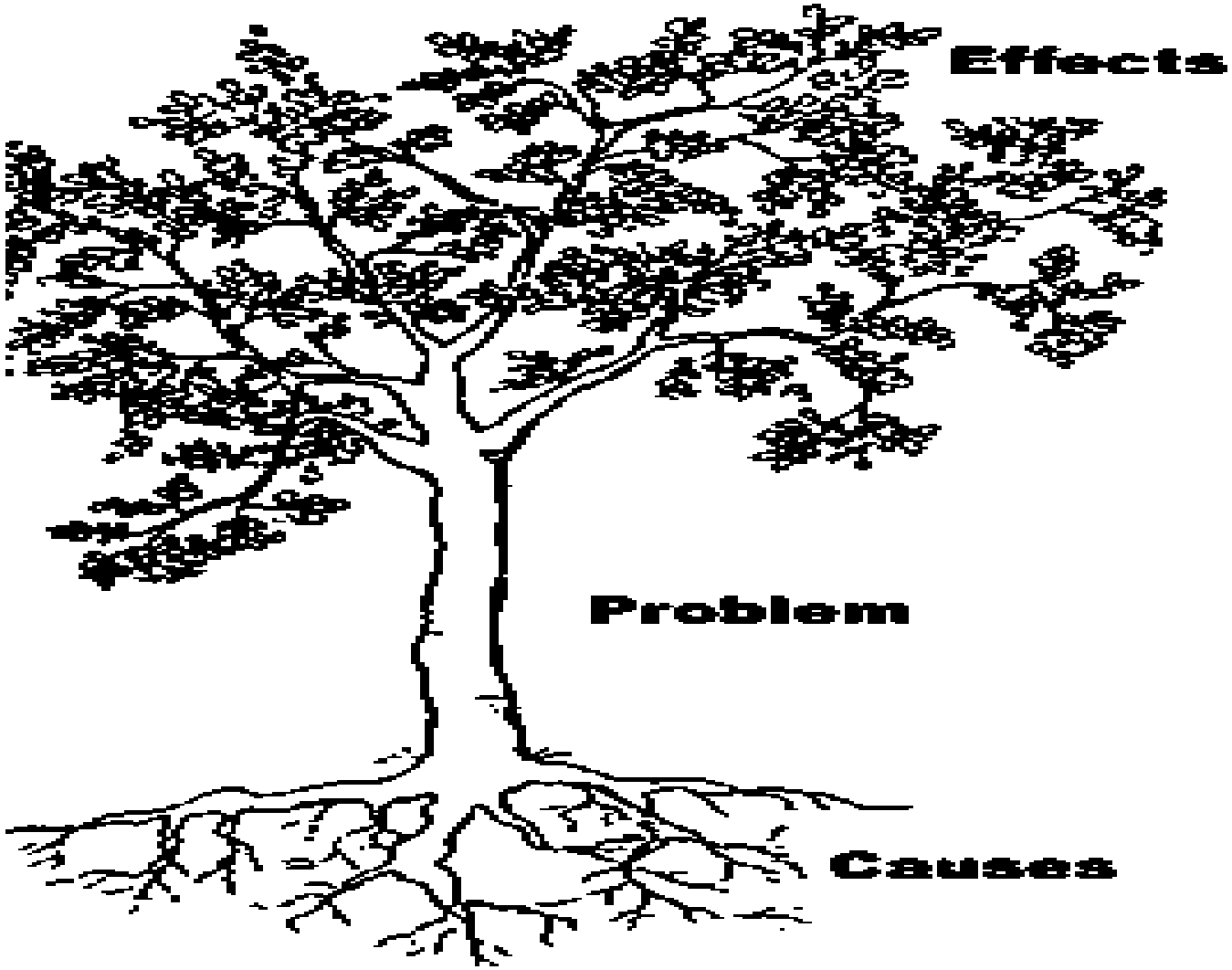
Vignette
Diagrams
Photo voice
Transect walk
Problem trees
Community map
Seasonal calendar
Ranking and scoring
Systematic data



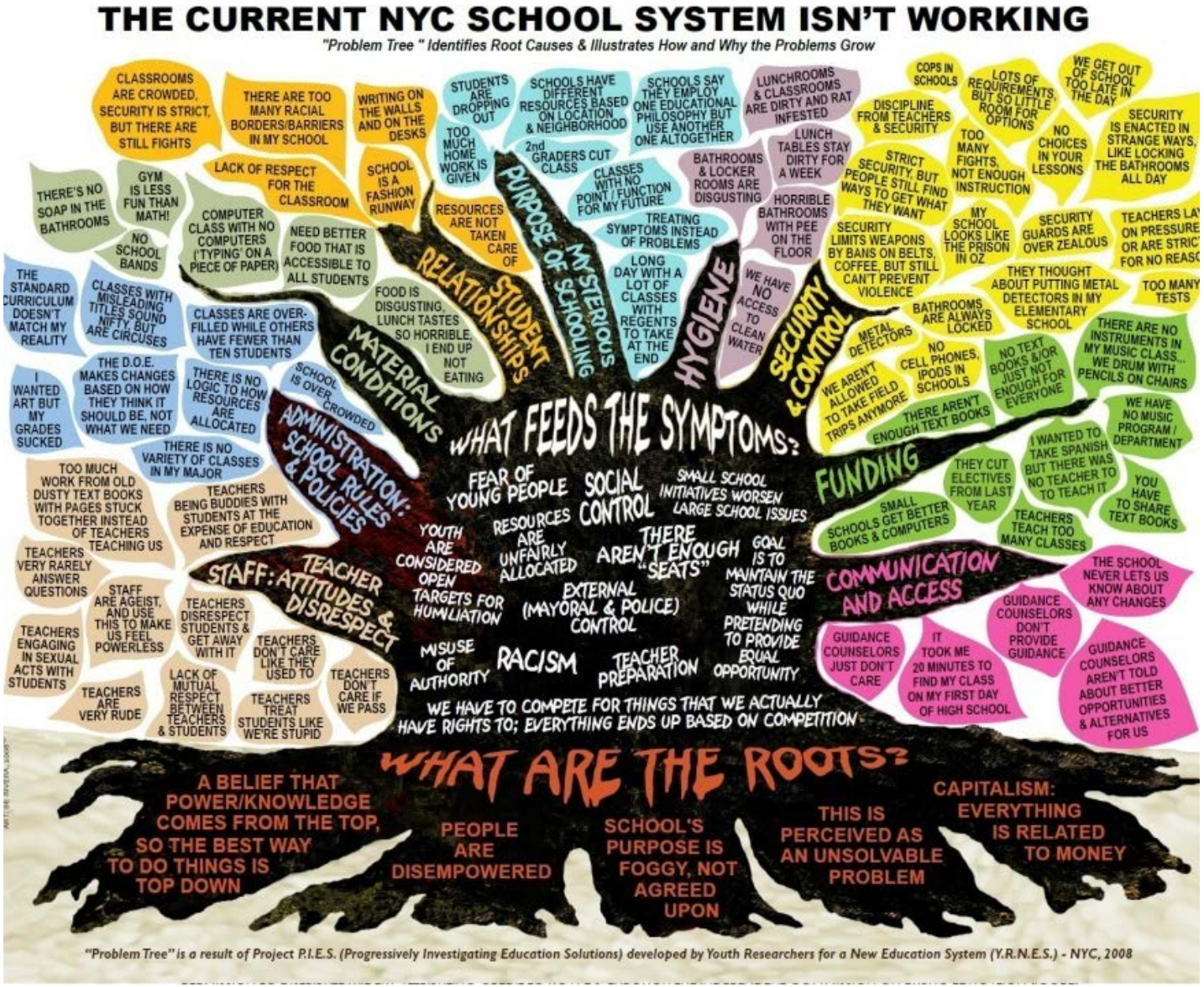
Key concept 1: Data collection
IN-DEPTH INTERVIEW

Key concept 1: Data collection
TRANSECT WALK

Key concept 1: Data collection
PROBLEM TREE



Key concept 1: Data collection: PROBLEM TREE



Key concept 1: Data collection
PROBLEM TREE / GROUP DISCUSSION

Key Concept 1: Data Collection
VIGNETTE

Box 1. **An example of a specific health state vignette**

"A woman of about your age. Recently she was treated for breast cancer which involved surgery to remove her breast and underarm glands. She takes a daily tablet as continuing treatment. She now finds herself in physical health as good as before with the exception of occasional discomfort around her chest wall and stiffness in her shoulder as a result of the treatment. The nature of the surgery means that she must now take extra care with her appearance, especially with the clothes she can wear. Mentally, her state of health has also returned to its former level. She is not unduly anxious about her diagnosis of cancer."

Example presented by Ritu Sadana at the WHO informal consultation in January 2000 (17).

Key concept 1: data collection (FGD)

Before data collection

- Have your data collection tool ready
- Make appointments early
- Ensure you adhere to selection criteria
- Agree on an appropriate venue
  - e.g. easy to access, no distractions, neutral place

Key concept 1: Data collection
FOCUS GROUP DISCUSSION

Key concept 1: Data collection Discussion guide

Topic guide for FGD with adult men and women about community attitudes and perceptions towards antimalarial combination treatments (ACT)

FGD IDNO: | | | | | | | | | | | | | |

Audio IDNO: | | | | | | | | | | | | | | AUD

Date of interview:____/____/_____ (DD /MM/ YYYY)

District:_____**Community:**_____

Malaria Transmission Season (circle): High / Low

FGD type (circle): Adult men / Adult women and / or pregnant women / Caretakers / Other_____

FGD No (circle): 1 2 3

No of FGD participants: | |

Moderator:_____**Note-taker:** _____

Introduction:

I am_____from_____(moderator)

I am_____from_____(note-taker)

Introduce group using first name

Demographic details – using first name for discussion

General purpose of the study To understand participants experiences with some health problems in the community and the kinds of health care they use

Key concept 1: Data collection (FDG)

Ground rules

- Only one person talks at a time
- It is important for us to hear everyone's ideas and opinions
- There are no right or wrong answers to questions
- It is important for us to hear all sides of an issue – the positive and the negative
- Turn cell phones off
- Confidentiality is assured
- Any questions?
- Consent

Key concept 1: Data collection (FGD)

During data collection

- Carefully record data, field notes, documents, tape recordings
- Write out detailed notes immediately after data collection
- Transcribe tapes systematically
- Describe and document data collection process as rigorously as possible

Reflection activity

Key concept 2: Data analysis

1. Detailed description of techniques and methods used to select respondents and generate data
2. Carefully specified analysis, with attention to issues of validity and reliability
3. Triangulation

Key Concept 2: Data analysis

Qualitative data analysis steps

- Transcribing / Translating verbatim
- Coding
- Annotating (Comments)

Key concept 2: Data analysis

Analysis of qualitative data

- Manual data analysis
- Software-assisted data analysis:
  - Atlas-ti
  - Nvivo
  - MaxQDA
  - Etc.

Key concept 2: Data analysis

Analysis of textual material

The basic process for the analysis of text includes:

- Identification of similar phrases, themes and relationships between themes
- Identification of similarities and differences between population sub-groups
- Initial attempts to generalize
- Critical review and revision

Key concept 2: Data analysis

Thematic analysis

There are four stages in theme analysis:

- Identify main issues raised by the interviewees – the themes
- Group more detailed topics within each of these themes to construct a taxonomy of sub-categories
- Specify what was actually said, the components within each sub-category
- Exploration of inter-relationships between the various themes

Key concept 2: Data analysis

Thematic analysis

Theme identification

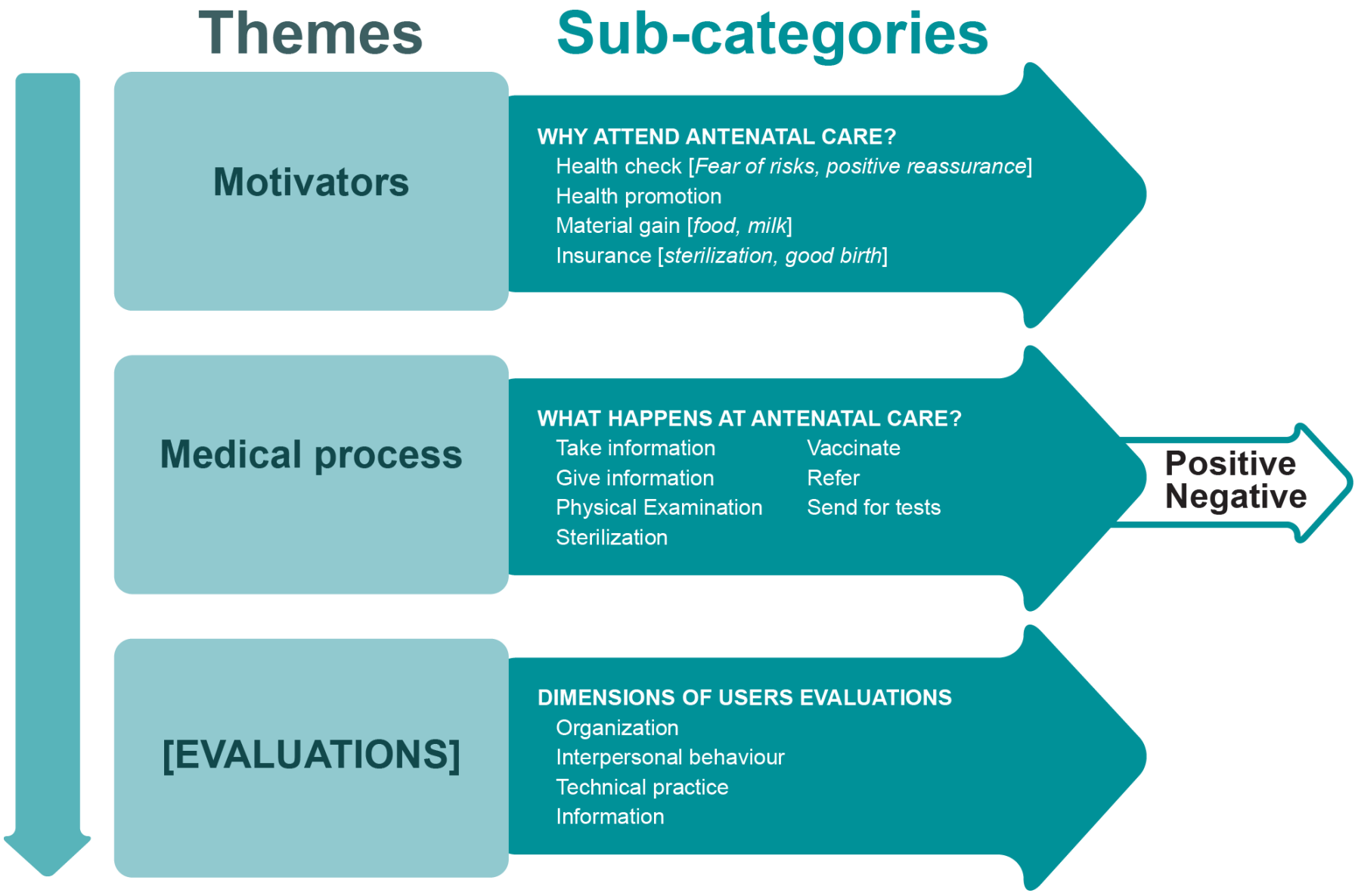
Index texts, identifying topics line-by-line

Collate these topics across all interviews to identify a preliminary list

Some will recur more frequently than others and some of the latter can be classified as sub-topics

Systematically combine related topics to develop a list of just a few fairly broad themes

Key concept 2 : Data analysis
potential themes from a study exploring experiences at antenatal care



Key concept 2: Data analysis

Coding schemes

Following an initial analysis, many analysts apply a systematic coding procedure

Codes are assigned to specific occurrences of words or phrases within a document

Key concept 2: Data analysis

Developing a code book

Codebook Version: 7 December 2010	
Name	**Description**
01. Illness Narrative Interview (INI)	THIS CODE USED FOR INI ONLY to capture information specific to the most recent malaria or fever. Code information about quality of care, drug supply, etc. into the appropriate tree nodes for Drug shop (DS), Health Facilities (HF), Prayer Groups (PG), Self-Treatment (ST), or Traditional Healers (TH)
INI 1st symptom	THIS CODE IS USED FOR INI ONLY to document symptoms of first symptoms of the most recent episode of malaria or fever
INI 1st tx source-DS	THIS CODE IS USED FOR INI ONLY to capture the respondent's 1st choice of treatment for their recent fever episode when it was a drug shop like a pharmacy, chemical seller and drug peddlers.
INI 1st tx source-HF	THIS CODE IS USED FOR INI ONLY to capture the respondent's 1st choice of treatment for their recent fever episode when the person sought for care at a HF such as a mission, private, public health facilities

Key concept 2:
Summary extract from manual analysis

	Focus group discussion			
	Village A Women	Village A men	Village B women	Village B men
MALSIGN	Hot body Yellow eyes White lips	Bloody stool Hot body Yellow eyes	Hot body White lips Yellow eyes Bloody stool	Hot body Yellow eyes White lips
MALCAUSE	Mosquitoes Fresh mangoes	Mosquitoes Standing in the heat Fresh mangoes	Mosquitoes Standing in the heat	Fresh mangoes Mosquitoes

Key concept 2: Data analysis

Extract from software (Nvivo)

Affordability

<Documents\Female FGDs\FGD With Female Group 21> - § 4 references coded [2.72% Coverage]

Reference 1 - 1.20% Coverage
R14-You know, you are usually asked to swallow the two together, so if people are complaining, it is about the two medicines. Some time ago, the artesunate alone was given to people but now they have added amodiaquine to it for people to swallow. So the complain is about the two.

Reference 2 - 0.47% Coverage
M-How much is the medicine?

R14-We have registered with National Health Insurance Scheme so I will not know.

Key concept 2: Data analysis

Summary

- Objectives
- Transcribe
- Use information from all the techniques
- Incorporate all notes and observations
- Code
- Sub-themes
- Matrix

Key concept 2: Data analysis

Summary

Triangulation

Various topics/themes based on objectives of study

Add quotes, proverbs, local sayings

Key concept 3 : Presentation of data

Prose/text

Community recognition of drug side-effects

Generally, there was poor recognition of drug side-effects/adverse reactions. They were often associated with:

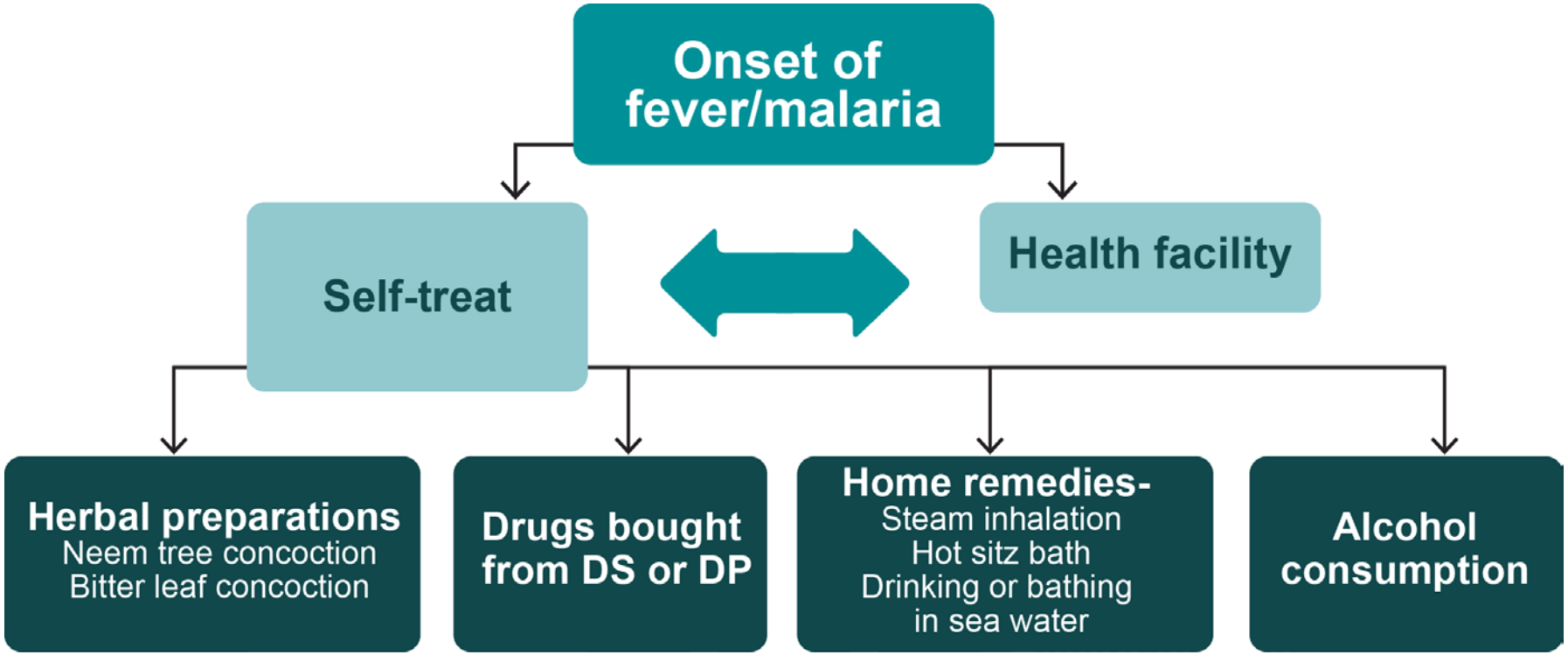
Drug not good person's blood

" When you immediately see that, it means that it is just not good for your blood, you must not take that drug anymore, and you must change it." (A 25 year old JHS graduate)

Drug not good for person's biological make up

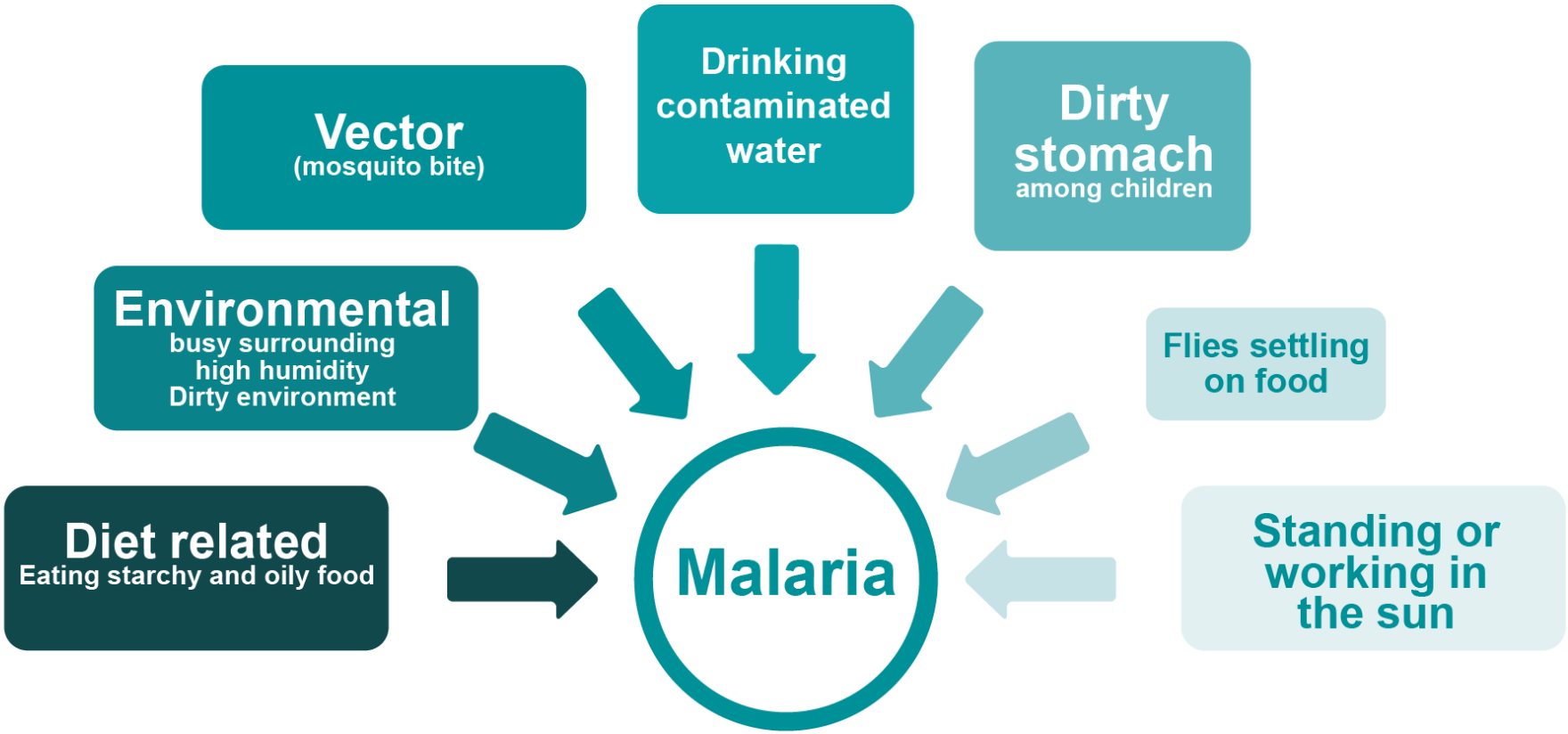
Key concept 3:
Presentation of data - graphic presentation

Treatment seeking for simple malaria



Key concept 3:
Presentation of data

Community perception- Causes of malaria



Reflection activity

In your research team, discuss:

How you plan to analyse your qualitative data?

How will you ensure validity and reliability of your data?

What kind of analysis will you undertake?

Will you be using any software for your data analysis?

Discuss the reasons for your decision to use (or not use) software for your analysis.

How will you present your data?

Application of Key concepts

Example:
Innovative Participatory Health Education [IPHE] in South Sudan

An educational inivative and solution for Improving the life of girls and women worldwide by the reproductive and child health research unit [RCRU]

http://www.rcru.org/j/index.php/rcruprojects/img-iphe