



# DESIGNING EFFECTIVE AND EFFICIENT RESEARCH IN CHILD BEHAVIORAL HEALTH

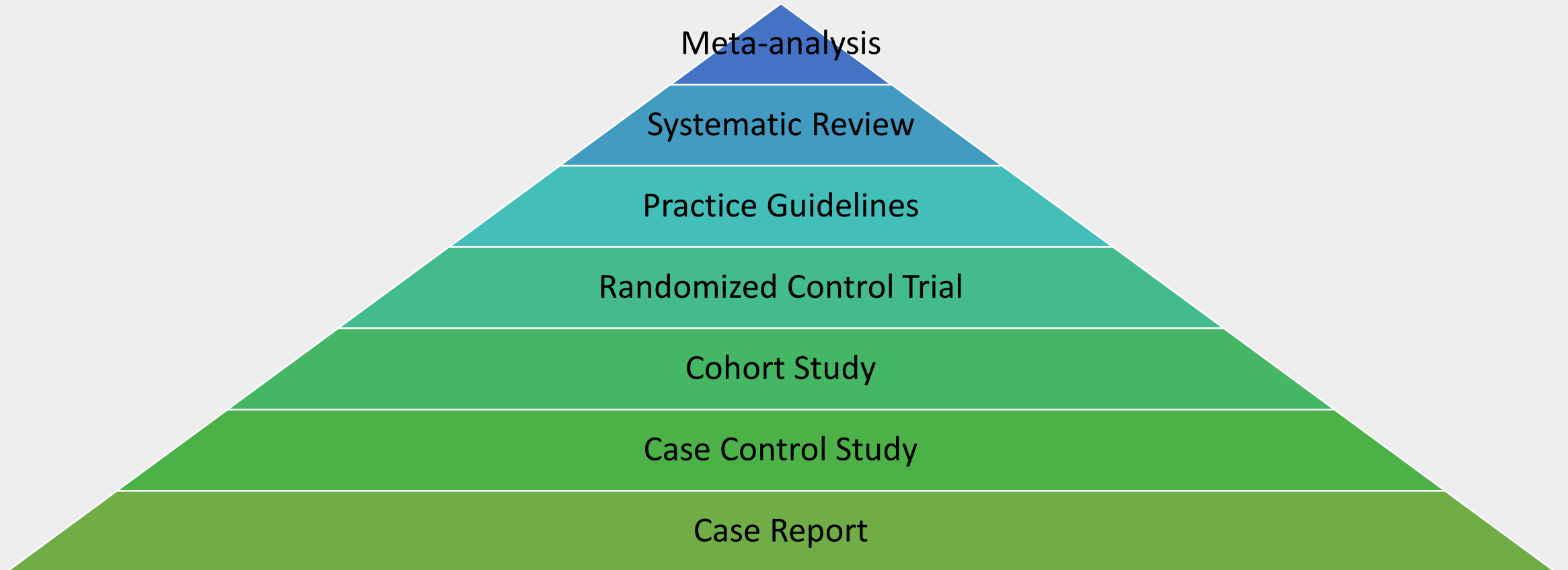
Implementing Randomized Control Trials in sub-Saharan Africa

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## RATIONALE

- Evidence-based child behavioral health is a complex issue
- Multiple factors influence child health outcomes
- In scarce-resource contexts, typically use existing programs to adapt and implement in local context
- Replication studies constitutes one of the basis for RCTs

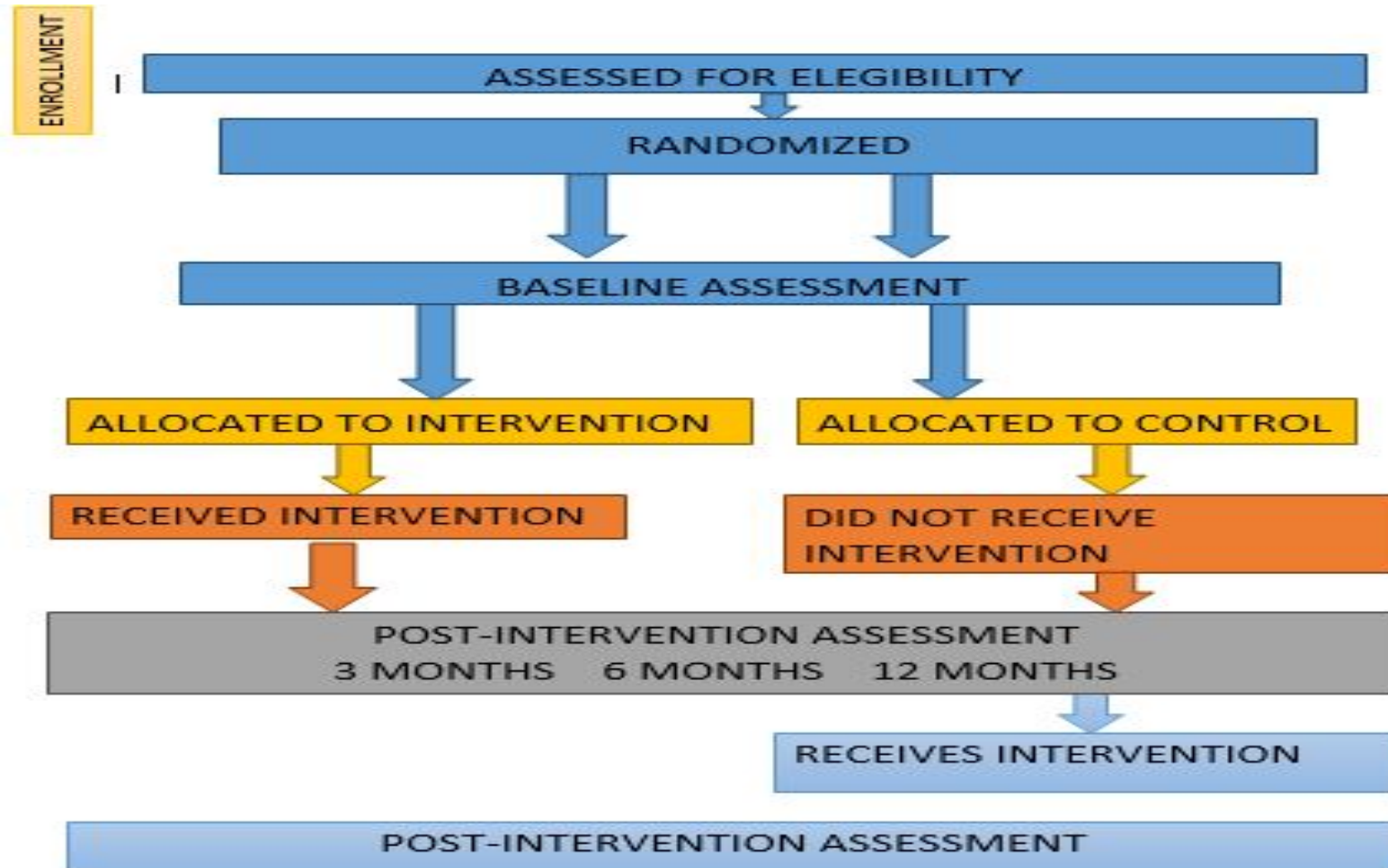
# EVALUATION DESIGNS



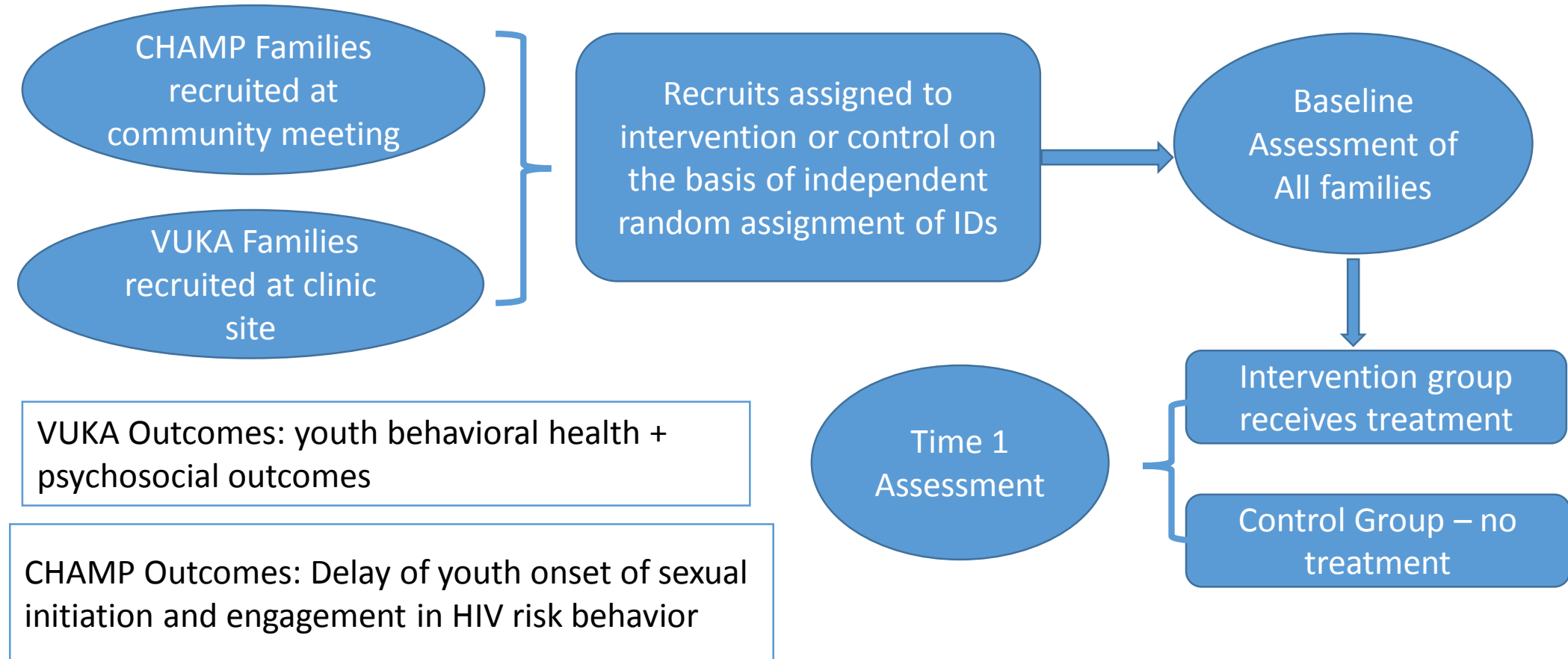
# What is an RCT?

- A study design that randomly assigns participants into an experimental group or a control group. As the study is conducted, the only expected difference between the control and experimental groups in a randomized controlled trial (RCT) is the outcome variable being studied

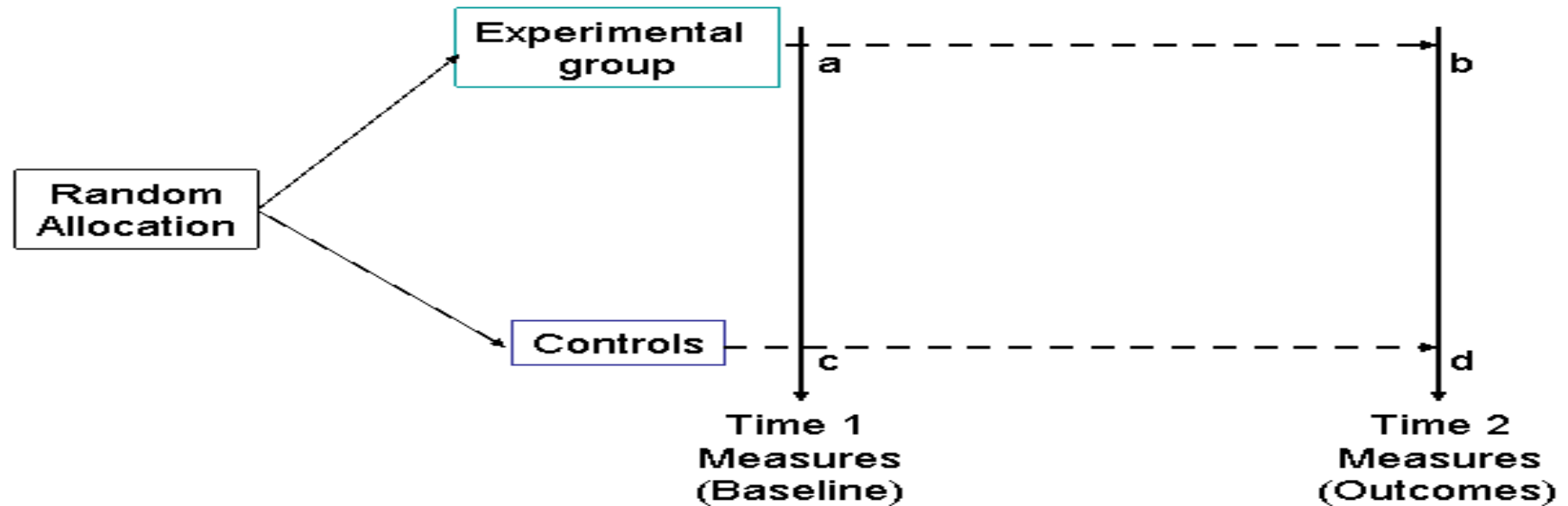
# Randomization Flowchart



# CHAMP / VUKA RANDOMIZATION



# Interpretation of RCT



**Effect measurement:  $(b - a) - (d - c)$**

**Note:**  
random allocation should make  $a = c$ ,  
but these are included in analysis to  
correct for any minor differences.

## FEASIBILITY OF RCTS

- RCTs are feasible when there is a clearly defined target population
- Participants can be randomly allocated to treatment and control groups, with little fear of contamination
- Treatment is applied in a standardized and uniform way
- The project setting remains relatively stable throughout the period of the trial
- RCTs may work better if the trial is of a short duration



## CONTROLLING FOR BIAS

- The primary characteristic of a RCT is controlling for SAMPLE SELECTION BIAS (most profound)
- Rigor of an evaluation is determined by how well one controls for sources of bias (measurement, fidelity, change in project environment, contamination of intervention and control arms)
- Rigorous evaluation of child behavioral programs is necessary to ensure that the intervention is scientifically valid and likely to be adopted
- Caveat is that quantitative methodology on its own cannot take account of implementation process in a context of complex social change