

# Module 2: Sampling

## Video 1 of 21: Module Overview and Coverage Error

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# At the End of the Module Participants Should...

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- ...understand the coverage properties of phone surveys
- ...know how to assess when to use phone numbers from previously collected surveys or panels
- ...be familiar with different telephone sampling methods
- ... know what to consider when choosing a sampling method
- ...understand the general steps in survey weighting for a phone survey
- ...be able to compute survey weights for phone surveys

# Module 2 - Table of contents

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- **Coverage error**
  - Sampling frames
  - Coverage bias
  - Coverage considerations for phone surveys
- **Phone numbers from panel or previously collected surveys**
  - Considerations about properties of panel or previously selected survey
  - Sampling and weighting implications
- **Random-Digit Dialing**
  - What is Random-Digit Dialing?
  - Mitofsky-Waksberg method
  - List-assisted designs
  - Dual frame designs
- **Phone number directories or listings**
  - Coverage considerations
  - Sampling considerations and weighting implications
  - Multiple frame approach
- **Weighting**
  - Overview of the basic steps in weighting
  - Design/Base weights
  - Nonresponse adjustment
  - Calibration
  - Weight trimming

# Coverage error

# Sampling frames

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Sampling

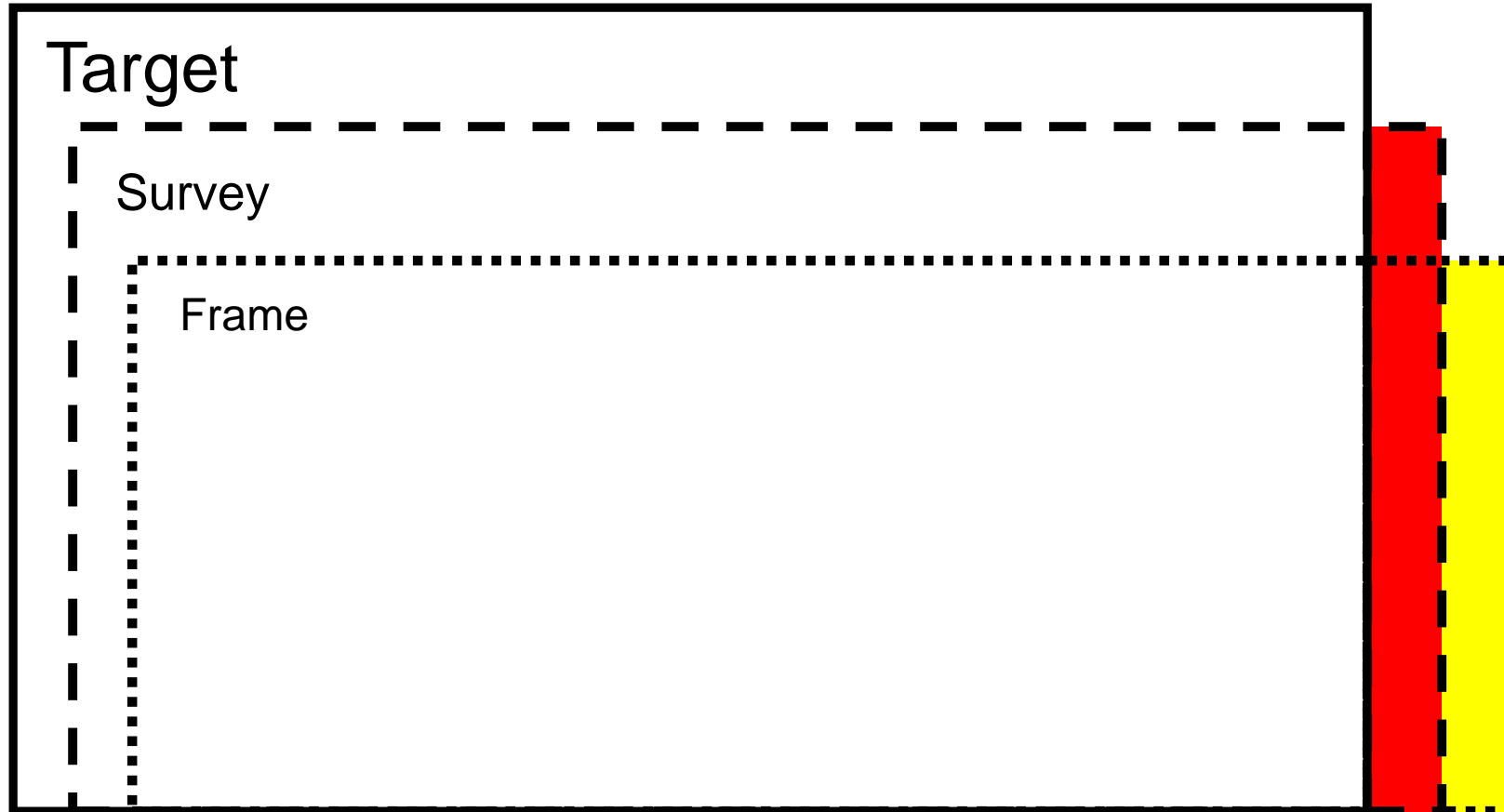


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# Population

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# Sampling Frames (I)

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- Frame: **set of materials and/or procedures** used to identify and select units from the population
- Rule links frame elements to population elements
- Accurate and up-to-date frames located in one location preferred
- Numbered, computerized lists are best.

# Sampling Frames (II)

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- Sampling frames can be a set of (or a combination of):
  - **Lists** (such as lists of members of professional organizations, business establishments, schools, hospitals or any other type of institution, or population or housing registry)
  - **Maps** (especially useful in face-to-face surveys when list frames of the population is not available)
  - **Procedures** (such as in Random Digit Dialing, RDD, where random phone numbers are generated to select a phone sample)

# Sampling Frames (III)

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- Face-to-face data collection usually relies on clustering to reduce survey costs
  - Lists and maps of geographical areas as frames
    - Area probability sampling
- Phone data collection generally don't need clustering
  - Different ways to create a sampling frame:
    - Use previously collected or append phone numbers from a high-quality baseline (usually face-to-face) survey
    - List of phones numbers from telecommunication companies or phone directories
    - Random Digit Dialing (RDD)



# Population and Sampling Frame Linkage

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- Six forms of linkage between population and sampling frame:

- one-to-one ← **Ideal**
  - one-to-none
  - none-to-one
  - many-to-one
  - one-to-many
  - many-to-many
- Frame deficiencies**
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*END OF VIDEO 1*