# How to Plan a Survey

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#### Outline

- Quick Facts about Survey Designs
- Four Steps in Survey Planning
- References and Resources

#### Quick Facts about Survey Designs

- Definition: Survey is a method of gathering information from a sample of individuals.
- Sample size: It depends on what question the survey will answere, and how the result will be used.
- Data collection: mail, telephone interview, internet interview, in-person interview, focus group.
- Key question in survey planning: What's your outcome?

# Four Steps in Survey Planning

- Lay out the objective
- Design the questionnaire
- Pretest the questionnaire and field procedures
- Follow-up non-responders and conduct back-end analysis

### Step 1: Layout the objective

- It's important to make the sponsor (MMIC) a full participant in every planning step, especially in deciding the study objective.
- The objective should be specific, clear-cut, and unambiguous: "Are patients satisfied with their physician overall?" vs. "Do over 70% of the patients answer "excellent", "very good" or "good", on the question about their overall satisfaction with their physician?".
- Identify the respondent pool: a simple random sample of the patients from all the MMIC's 9000 subscribing physicians.

#### Step 2: Design the questionnaire

- The essential task is to convey the same information to all respondents about what is wanted.
- Example: For a question "were you robbed during the last six month?", many respondents are unaware of the legal distinction between "robbery" (involving personal confrontation) and "burglary" (involving breaking and entering but no confrontation). Therefore, the questions should be framed by several specific questions: Was something belong to you stolen such as: a) something you carry like luggage, wallet, purse, briefcase, book; b) clothing, jewelry, or calculator; c) bicycle or sports equipment; etc.
- Keep it SHORT

#### Step 3: Pretest the questionnaire and field procedures

- Conduct several small scale pilot studies (pre-field testing)
- Followed by a full scale "dress rehearsal" (field testing)
- Or just use an already validated patient satisfaction questionnaire

## Step 4: Non-responders follow-up and back-end analysis

An estimate from a survey is unlikely to exactly equal the true population quantity of interest for 3 reasons:

- The questions were mis-understood by some people: importance of validation
- Nonsampling error from non-respondents: Although imputation can be applied based on some assumptions, the assumptions can not be assessed from the sample itself
- Sampling error: the law of chances

#### Reference

- "What is a Survey", Fritz Scheuren
- "Design and Use of Questionnaires: a review of best practice applicable to surveys of health service staff and patients", Health Technology Assessment Programme
- "Designing Questionnaires and Data Collection Instruments", Steven R. Cummings
- Questionnaire Design, Theresa A. Scoott