Best Practices in Quality Control: Mail Surveys and Data Entry

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Who are we?

• University of Wisconsin Survey Center
  Mail and Data Entry Department

• Department Responsibilities

• Staff
  • Supervisors
  • 15 staff to assemble mailings / data enter questionnaires
  • 4 shift leader staff to prepare mailings / lead data entry
  • Prepare and post 5000 + mail items weekly
  • Provide 300+ mail intake and data entry hours weekly
Best Practices in Quality Control Overview

- Recent growth
- Mailing process walkthrough
- Data entry process walkthrough
- Questions & looking to the future
Recent Growth!

- Moving from medium shop -> medium/large shop
- Increased variety of mailings / SAQs
- Additional use by other survey modes - CATI, CAPI, Web
- Increased mail volumes
- Need to adapt and standardize quality control methods
QC Balance

• Clients’ goal (data integrity within budget)

• M&DE’s goals (growing staff’s abilities)

• Takes a structured, organized, QC system
Why 10% Quality Control?

• Dedicated & specialized staff
  • Invested in the UWSC
  • High level of training & feedback
• Editing process for some data entry projects pre-screens questionnaires
• Diminishing returns
  • 10% quality control catches most systematic errors
  • Virtually no errors found in 2\textsuperscript{nd} pass studies
    • MIDUS had caught error rate of 0.14%
Mailing Process Walkthrough
Preparation: Mail Documentation Form

• Project Director provides mail department with mailing specifications
  • Quantities expected
  • Timing & deadlines
  • Materials required
  • Assembly instructions
Mailing Flowchart

1. Mailing Requested
2. Materials Gathered
3. Mailing Prototype Prepared
4. Set Sheet Created
5. Labeling
6. 10% Quality Control
7. Assembly
8. 10% Quality Control
9. Stamping
10. 10% Quality Control
11. Mailing Posted
Materials Gathered

- Prepared in advance
  - Grouped in 20’s & 100’s
  - Questionnaires pre-folded
  - Shift Leader prints labels & cover letters
  - (optional) Stamps & incentives pre-pulled and stored
Mailing Prototype Prepared

• Shift Leader assembles prototype mailing for review
  • Based off of Mail Documentation Form
  • Acts as model for staff to recreate
  • Detailed for weighing purposes (postage)
Set Sheet Created

- Shift Leader creates Set Sheet
  - Organizes mailing into ‘sets’ of 100
  - Creates stopping points for quality control
## Set Sheet

### P0000: Test

N = 550

<table>
<thead>
<tr>
<th>Set #</th>
<th>Initials</th>
<th>Case ID Range</th>
<th>QC</th>
<th>Cash $$$</th>
<th>Sealing</th>
<th>Outgoing Stamps</th>
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<tbody>
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<td>1</td>
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<td>101 - 200</td>
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</tbody>
</table>

N = 50
Labeling

- Staff begin labeling
  - “Sign-out” for a set of 100
  - Shift Leader available for questions
  - Mailing Prototype referenced for label placement
Labeling Quality Control

- Shift Leader conducts 10% quality control
  - High quality presentation
  - Internal consistency
  - Systematic error prevention
Assembly

- Staff proceed to assembly
  - “Sign-out” for a set of 100
  - Materials arranged in order at staging area
  - Mailing Prototype referenced for item order
  - (optional) Incentive pulled as needed
Assembly Quality Control

• Shift Leader conducts 10% quality control
  • High quality presentation
  • Standardization
Sealing & Stamping

- Staff complete mailing by sealing and stamping
- “Sign-out” for a set of 100
- Stamps pulled as needed
Stamping Quality Control

- Shift Leader conducts final 10% quality control
  - High quality presentation
  - Proper postage adhered
Data Entry Process Walkthrough
How do we build a successful Data Entry QC System?

- Organize and standardize
Specification Document Created

- Basic Specification Document (Basic DE Specs)
- Project specific specs
Initial Training

- Project specific data entry training
- Supervisor/Shift Leader prepares training
- “Front load” quality control
  - 100% QC of initial production cases
  - Increased focus on feedback
Data Entry Production & Ongoing Quality Control

- Certified staff proceed with data entry
- Shift Leaders conduct ongoing quality control
  - Goal: 10% of cases verified by Shift Leader
    - Data accuracy
    - Systematic errors
    - Focus on early feedback
Inventory & Reconciliation

- Shift Leader prepares for data delivery
- Physical questionnaires inventoried
- Physical questionnaires matched with entered data
- Complete 10% quality control
Data Entry Delivered

- Given to project directors and programmers
- Data Entry Operators (DEO’s) final project feedback
Technology Assistance

- Database in development to help assist with:
  - Pulling of random 10% of DE’d cases
  - Quality Control reporting of errors
  - Data Operator Feedback Reports
  - Project trend errors
Quality Control Database

- Ability for Supervisors to generate reports on staff accuracy & efficiency
Quality Control Database

- Database to review quality control progress on projects
Looking to the Future

- New technology for data entry feedback
- “Fit for use” review of 10% quality control
- New ways to structure quality control
Thank You!

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