

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 2nd pass studies
 - MIDUS had caught error rate of 0.14%

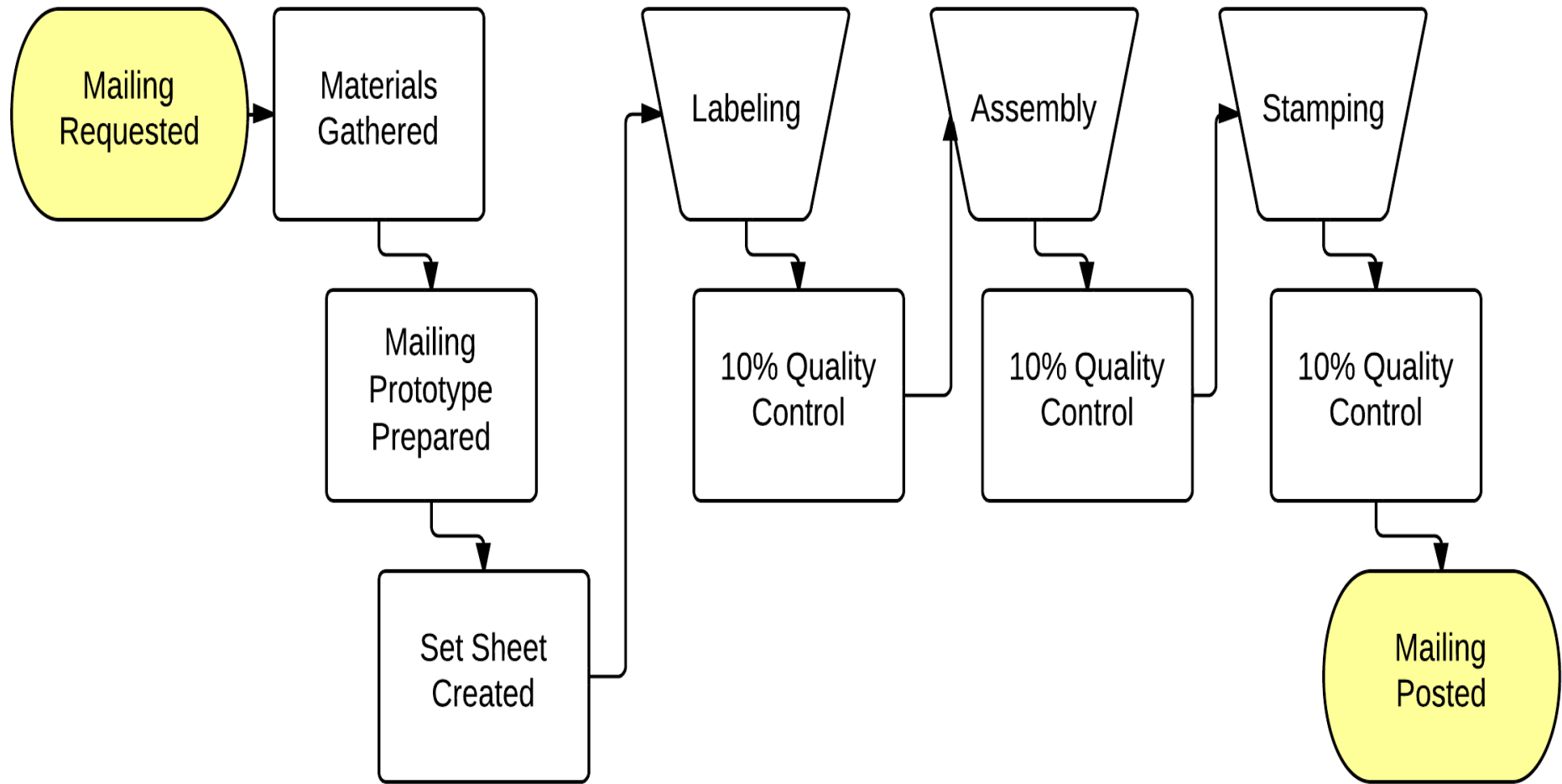


Mailing Process Walkthrough

Preparation: Mail Documentation Form

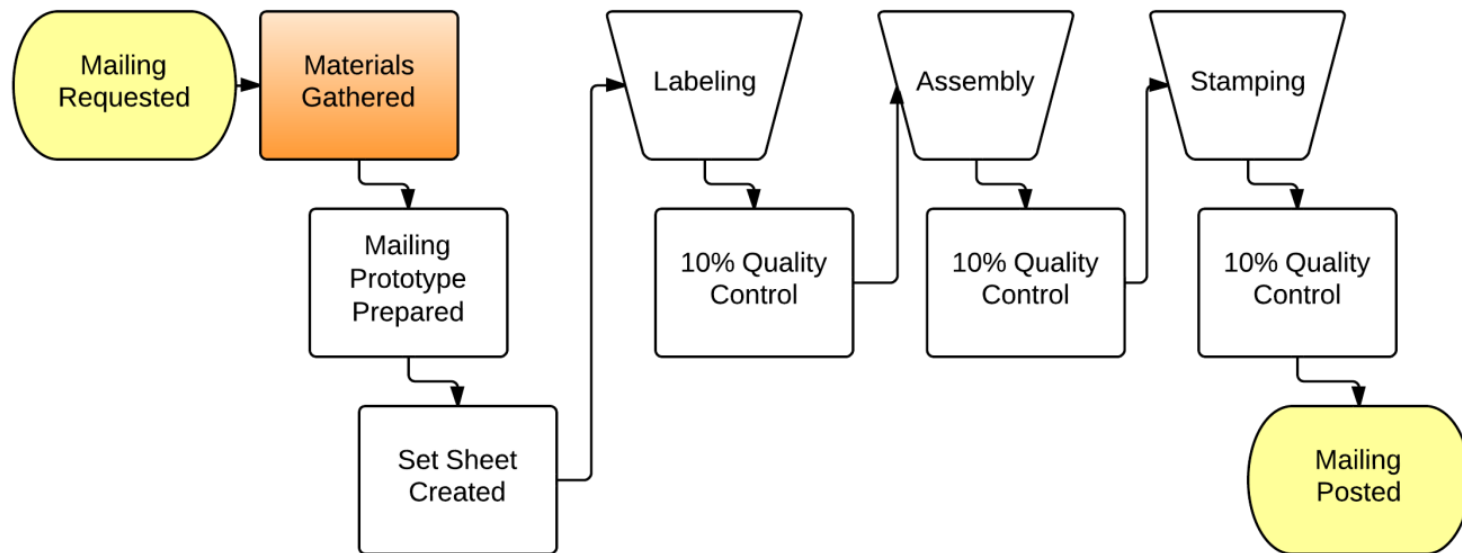
- Project Director provides mail department with mailing specifications
 - Quantities expected
 - Timing & deadlines
 - Materials required
 - Assembly instructions

Mailing Flowchart



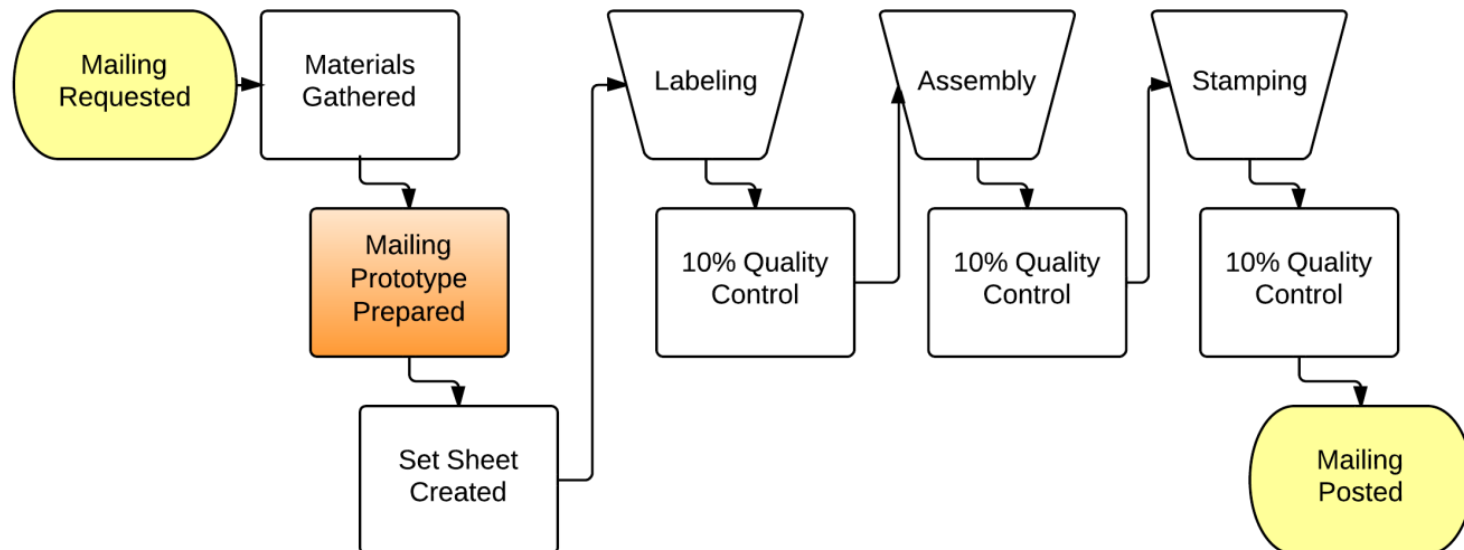
Materials Gathered

- 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



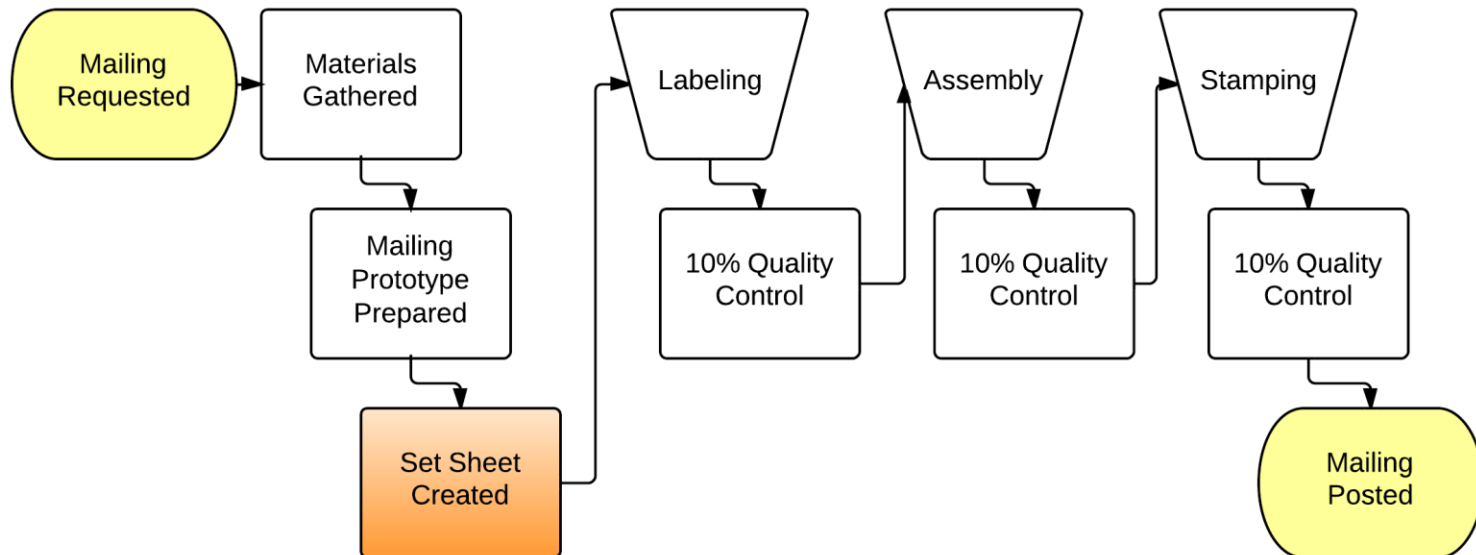
Mailing Prototype Prepared

- 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

Post Date: _____

Posted by: _____

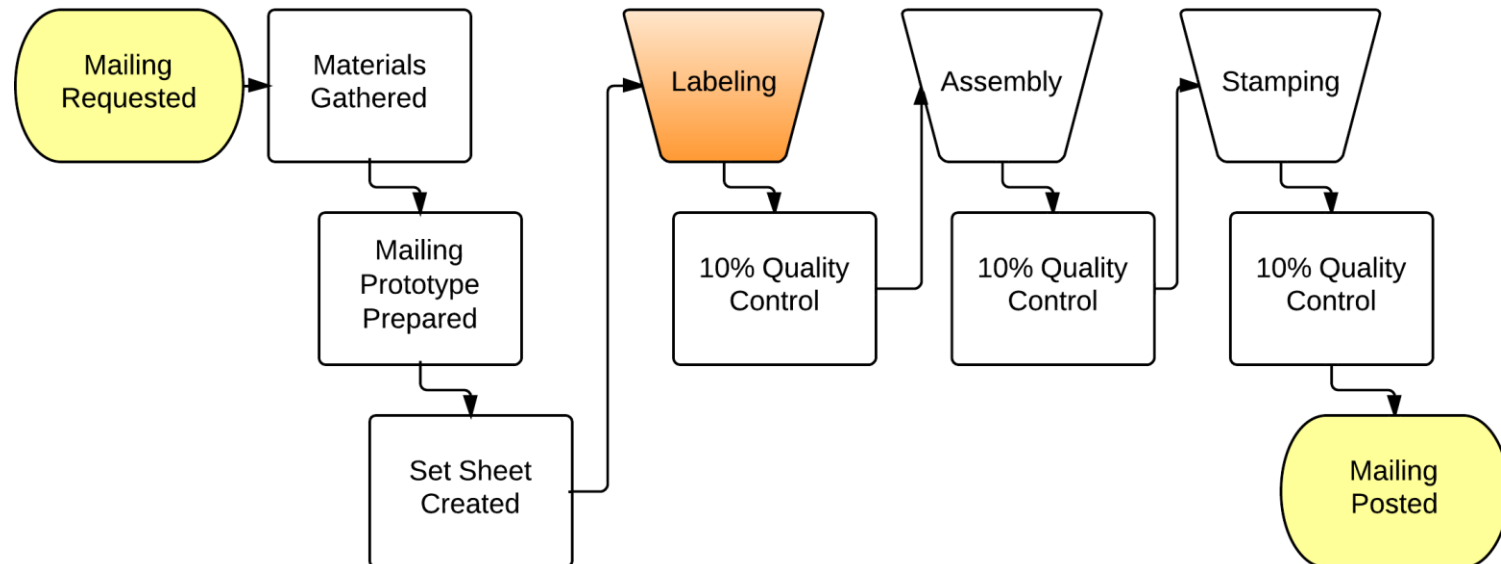
ASSEMBLY

Set #	Initials	Case ID Range	QC	Cash \$\$\$	Sealing	Outgoing Stamps
1		101 - 200				
2		201 - 300				
3		301 - 400				
4		401 - 500				
5		501 - 600				
6		601 - 650				
7						
8						
9						
10						
11						
12						

N = 50

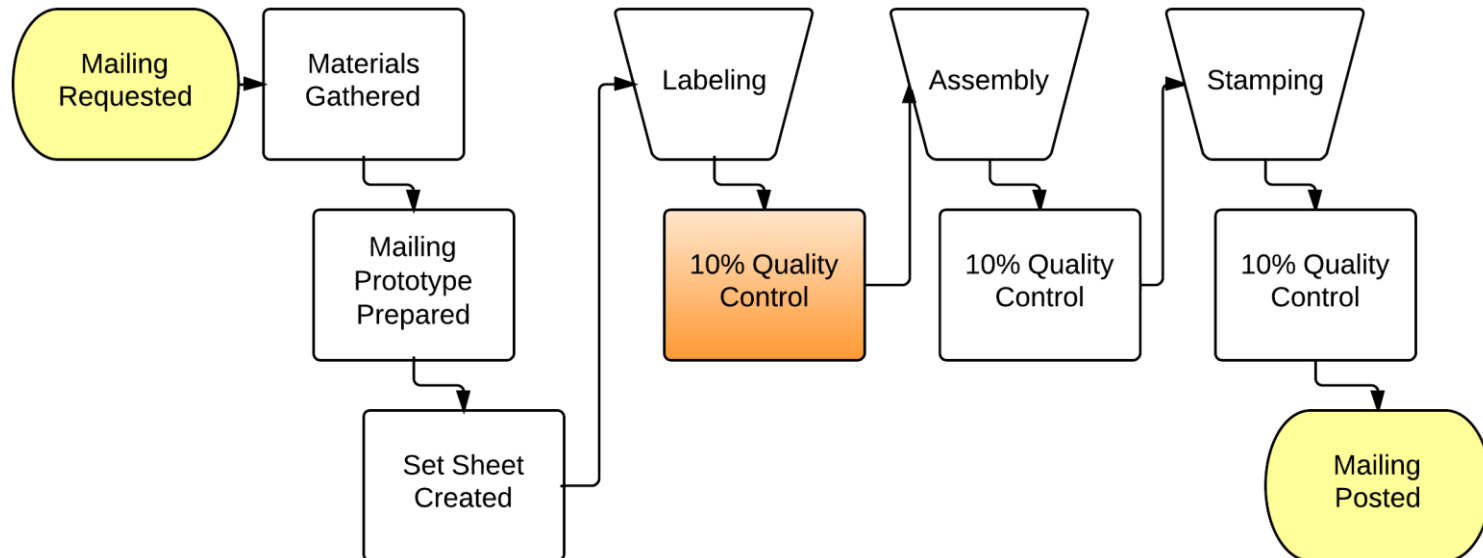
Labeling

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



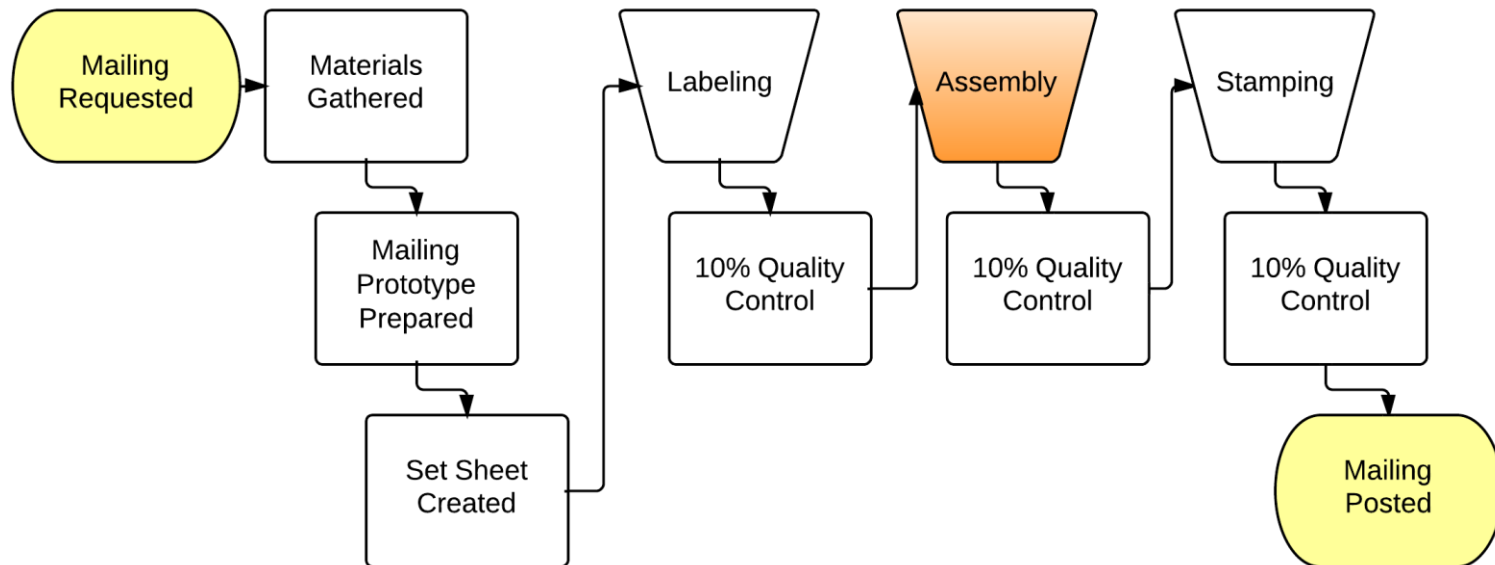
Labeling Quality Control

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



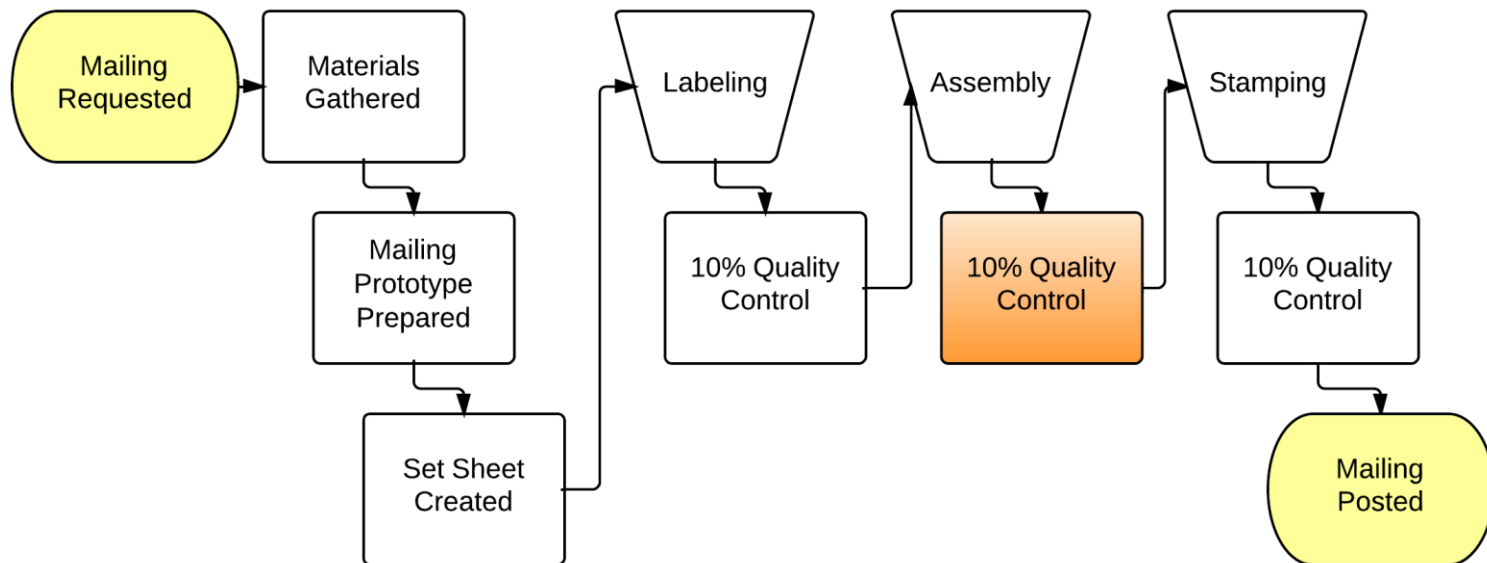
Assembly

- 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



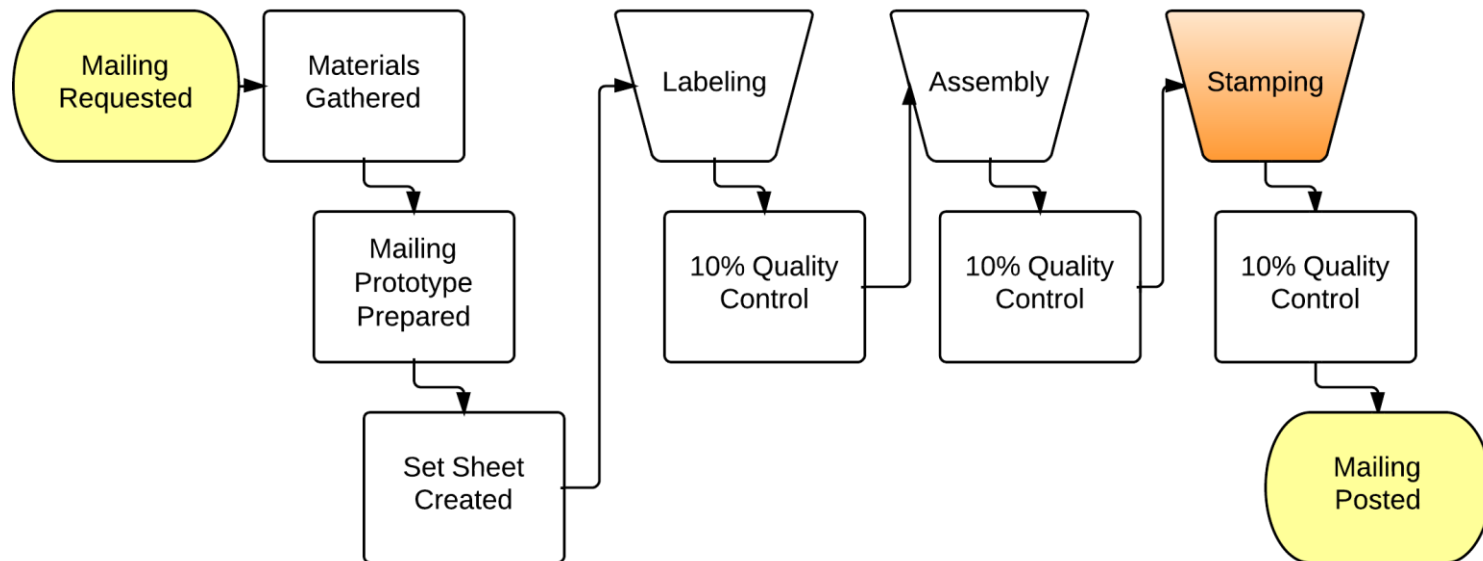
Assembly Quality Control

- Shift Leader conducts 10% quality control
 - High quality presentation
 - Standardization



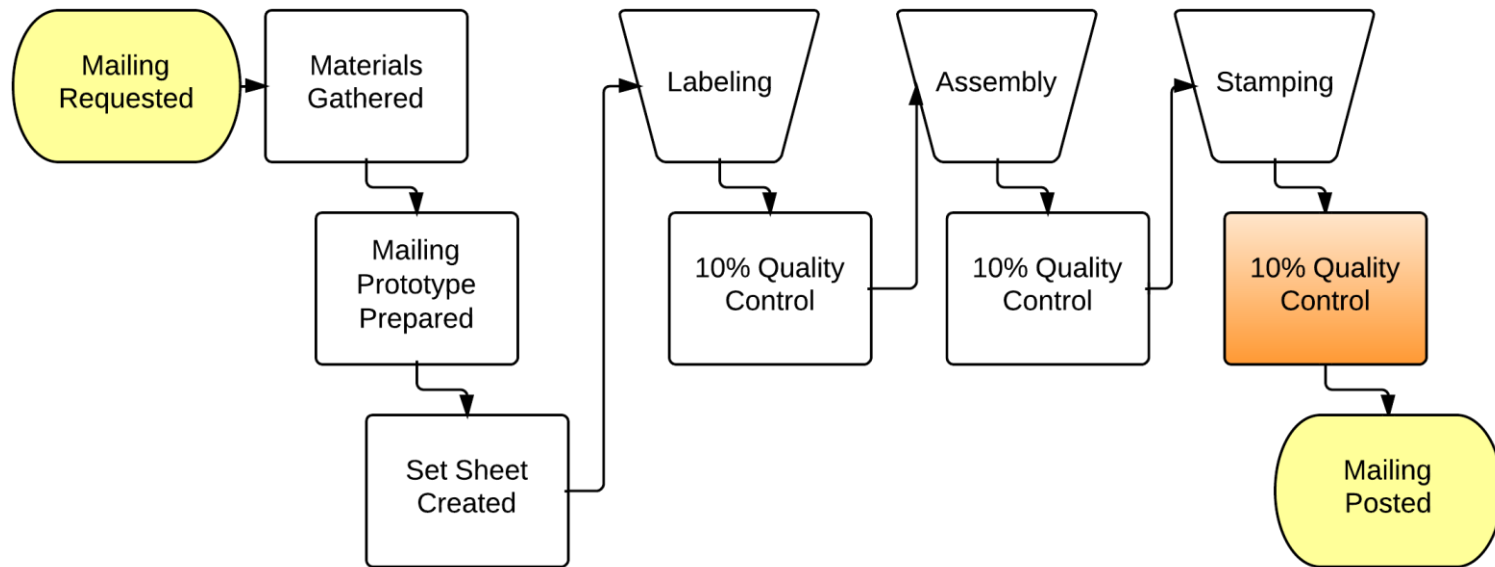
Sealing & Stamping

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



Stamping Quality Control

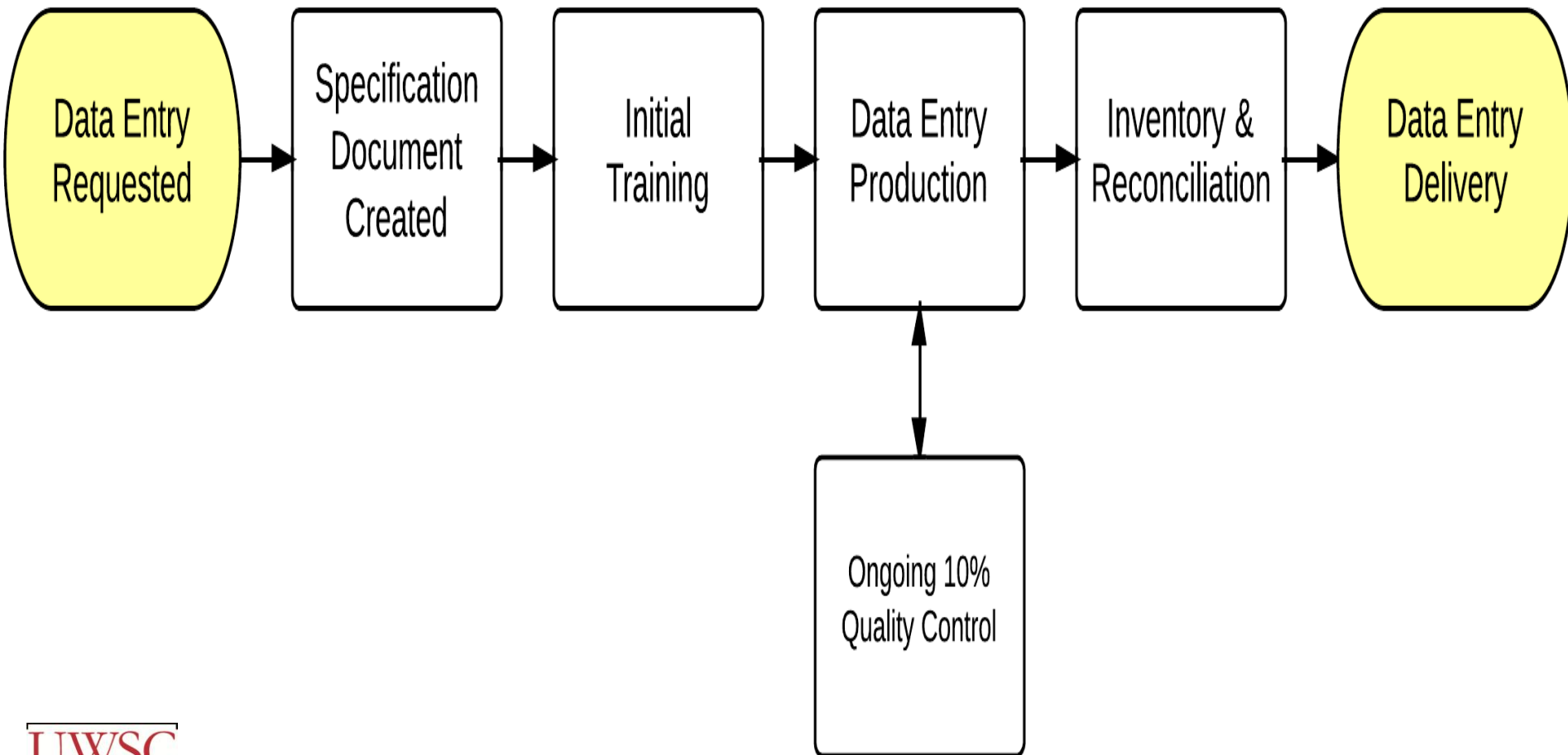
- Shift Leader conducts final 10% quality control
 - High quality presentation
 - Proper postage adhered



Data Entry Process Walkthrough

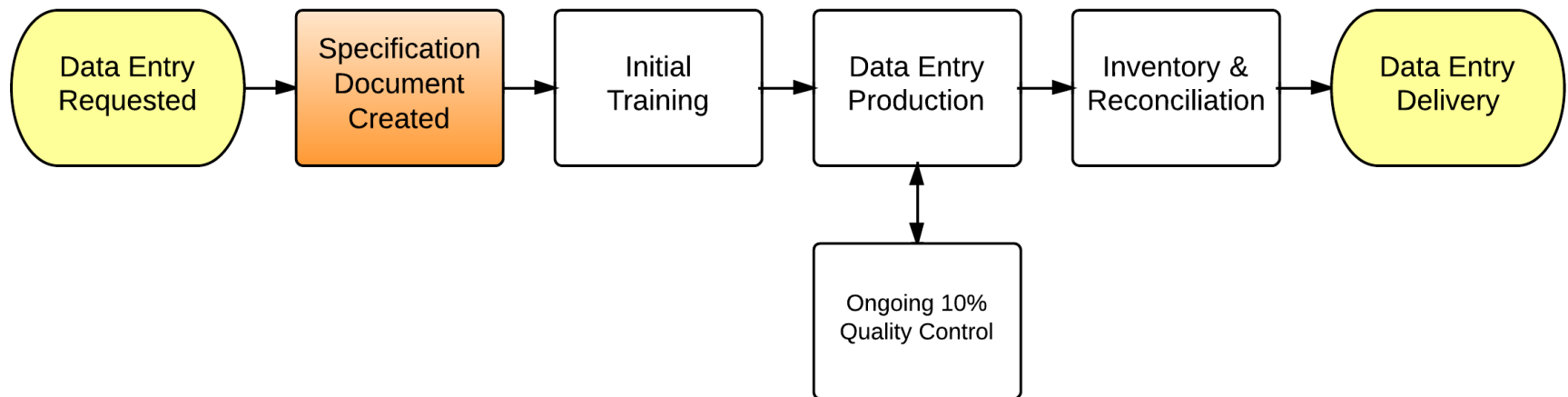
How do we build a successful Data Entry QC System?

- Organize and standardize



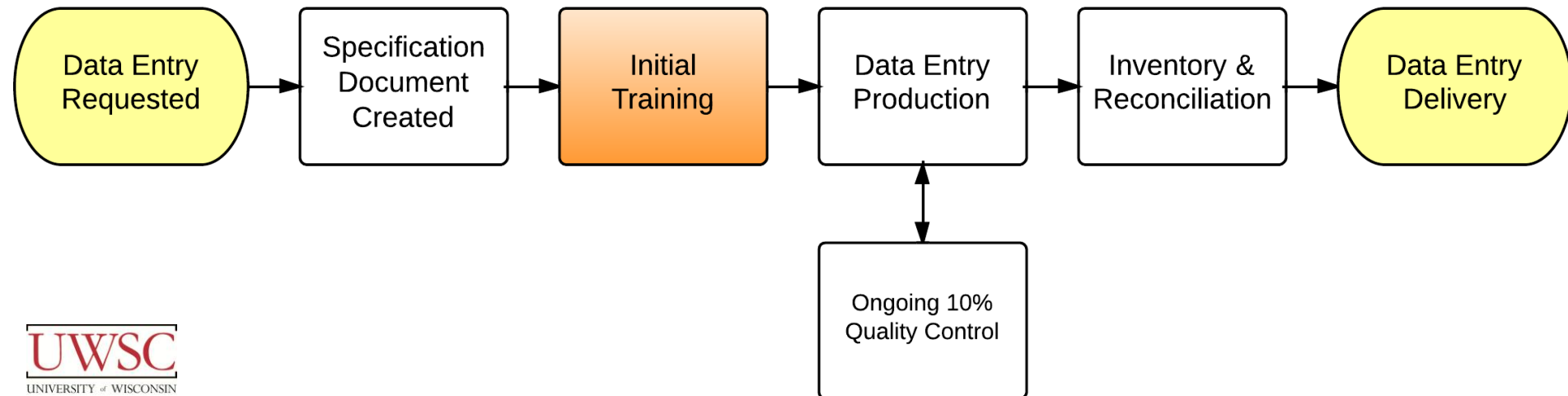
Specification Document Created

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



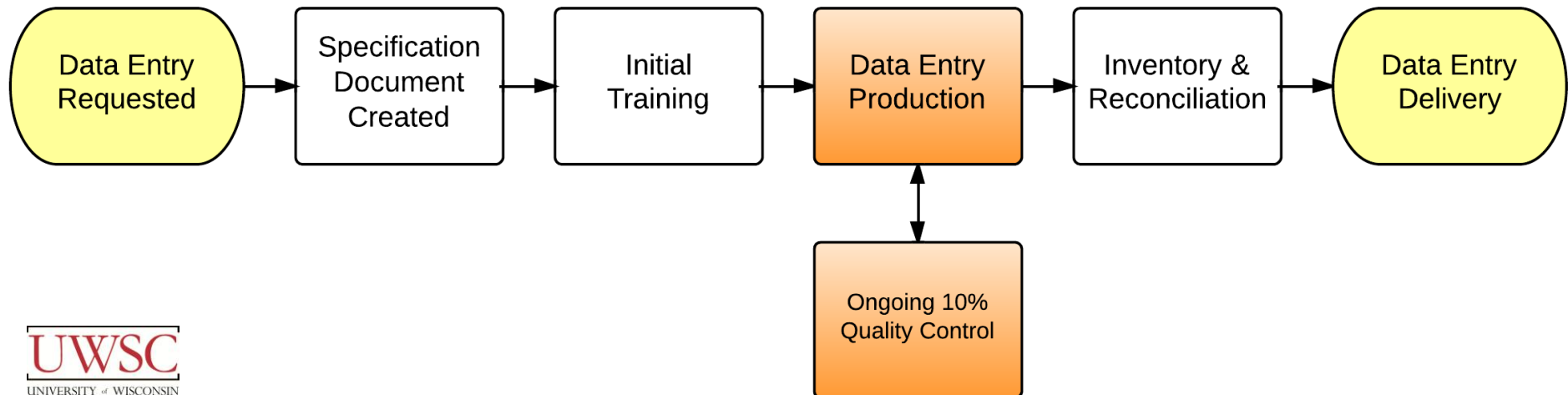
Initial Training

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



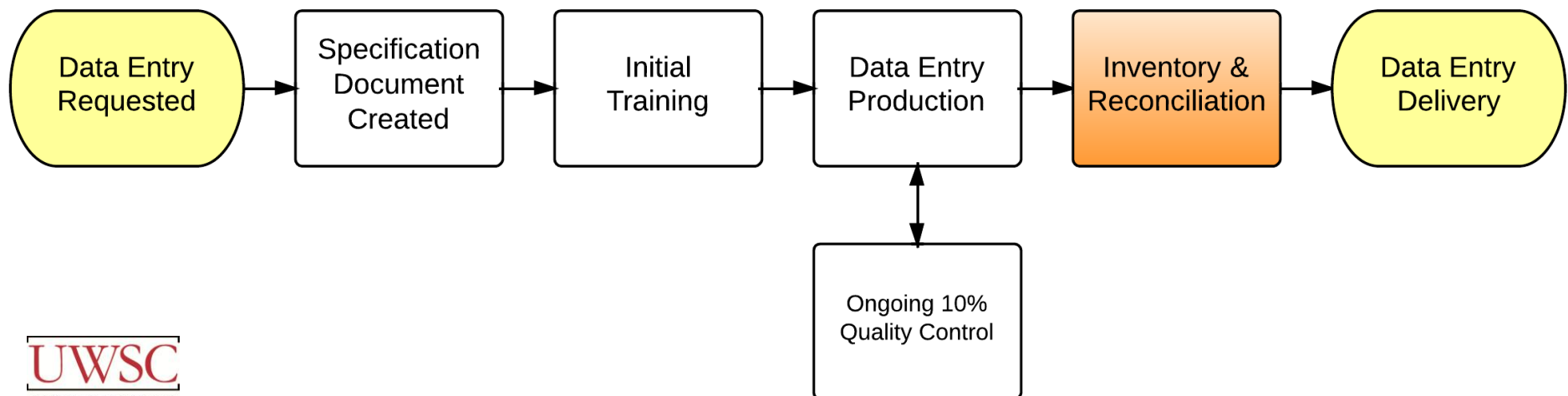
Data Entry Production & Ongoing Quality Control

- 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



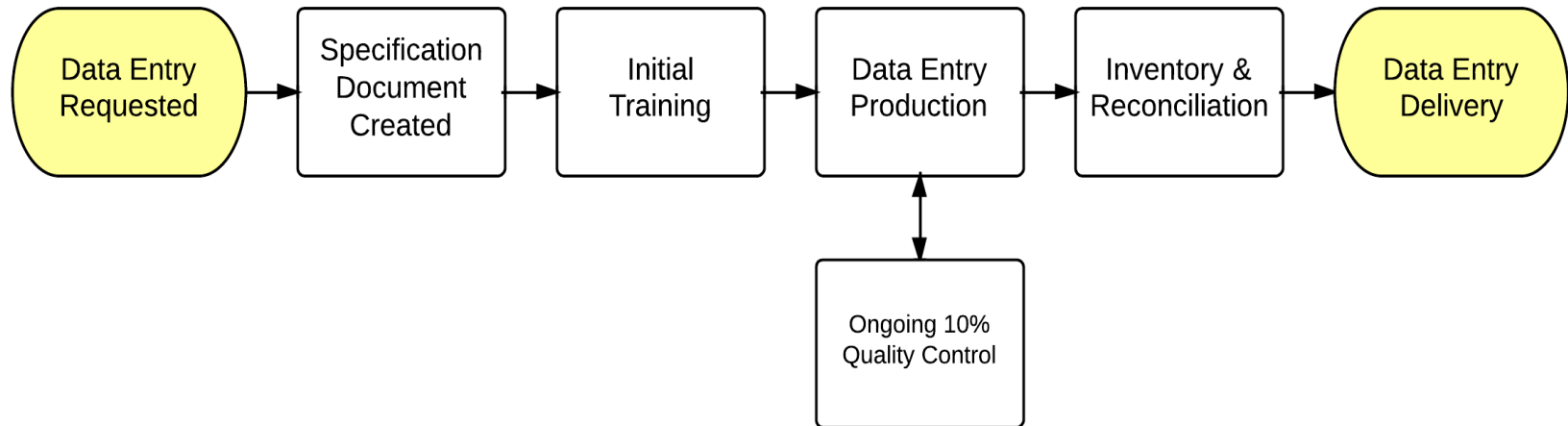
Inventory & Reconciliation

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



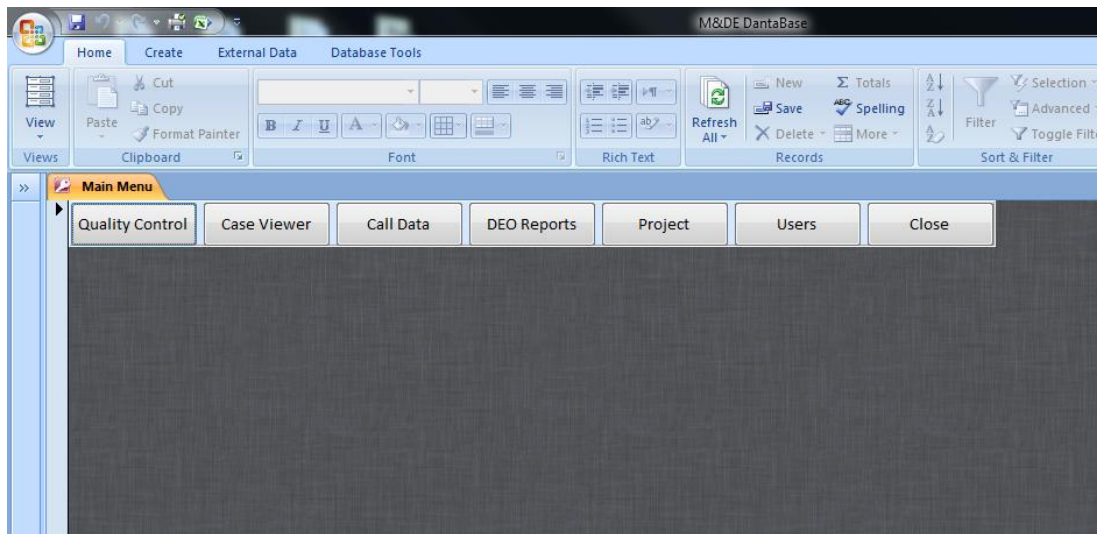
Data Entry Delivered

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



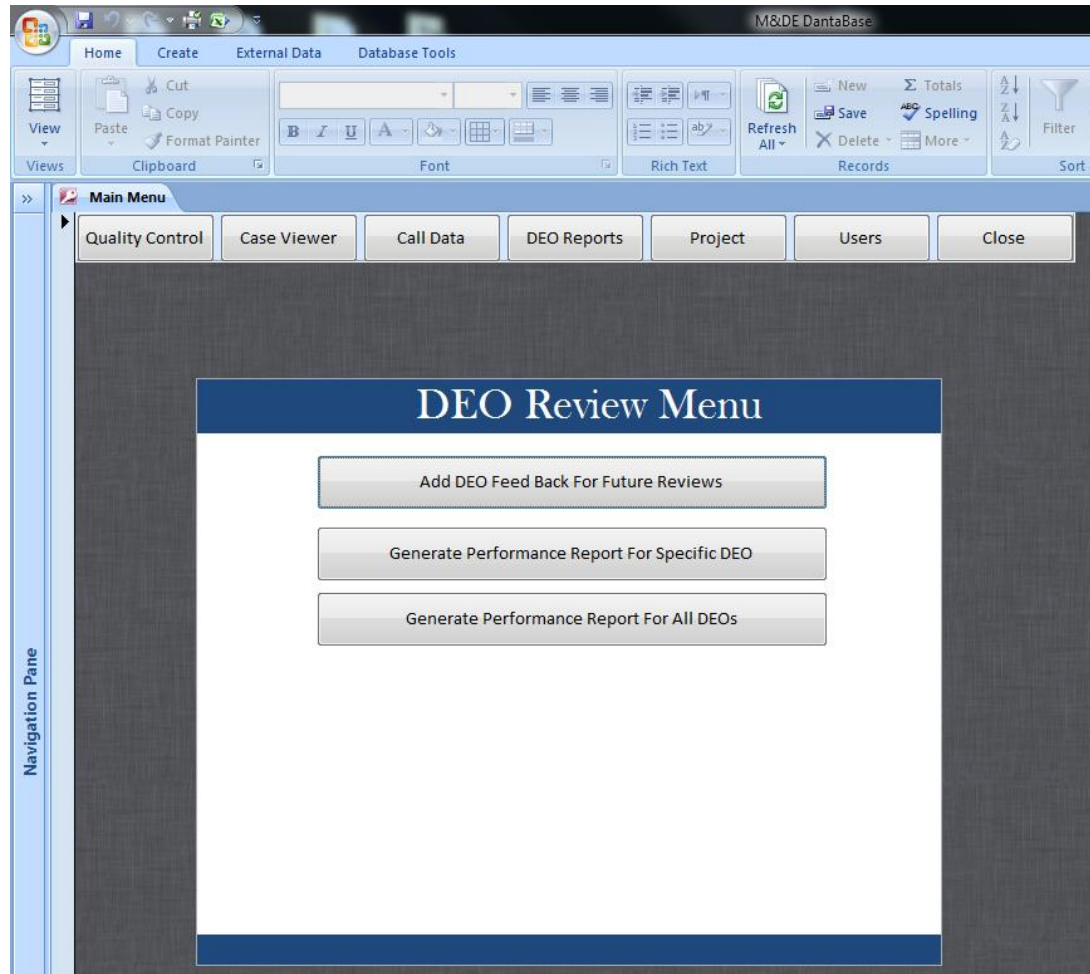
Technology Assistance

- 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

The screenshot shows a web application interface for the Quality Control Database. At the top, there is a navigation bar with "Main Menu" and "Quality Control" tabs. Below this, a form allows users to select a project from a dropdown menu, which currently shows "p9980". To the right of the dropdown, there are three labels: "Number of cases in stage MIDDLE:", "Number of cases in stage READY:", and "Number of cases flagged for QC:". Below the dropdown, it says "Project Selected: p9980". On the left side, there is a "Filter Cases" section with six radio button options: "Filter by Case Identifier" (selected), "Filter by Stage", "Filter by Initial Entry DEO", "Filter by Verification DEO", "Filter by Initial Entry Date", and "Filter by Verification Date". Below the filter section are three buttons: "Filter", "Clear Filter", and "Close". A green button labeled "Cases Not Filtered" is also present. On the right side, there is a table with the following headers: CSID, STAGE, 1ST DEO, 2ND DEO, 1ST DATE, 2ND DATE, QC CASE, and QC STATUS. The table body is currently empty.

Navigation Pane

Main Menu Quality Control

Please Select A Project: p9980

Number of cases in stage MIDDLE:

Number of cases in stage READY:

Number of cases flagged for QC:

Project Selected: p9980

Filter Cases

- ☒ Filter by Case Identifier
- ☐ Filter by Stage
- ☐ Filter by Initial Entry DEO
- ☐ Filter by Verification DEO
- ☐ Filter by Initial Entry Date
- ☐ Filter by Verification Date

Filter Clear Filter Close

Cases Not Filtered

CSID	STAGE	1ST DEO	2ND DEO	1ST DATE	2ND DATE	QC CASE	QC STATUS

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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