

2020 Nonresponse Followup Quality Assurance

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Quality Assurance Branch

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Outline

- Goals of the 2020 NRFU Quality Assurance Plan
- Overview of the 2020 NRFU Quality Assurance Plan
- NRFU Reinterview
- Progress expectations
- CIG Update Slides

2020 NRFU Quality Assurance Goals

The goals of the 2020 NRFU quality assurance are:

- Detect and deter falsification by enumerators.
- Detect and correct poor quality work.

If we discover an enumerator has falsified data or is performing poor quality work, we rework all of their eligible cases that have not already been selected for reinterview (RI).

- Detecting issues quickly is important.
- The RI program requires efficient coordination between the ACOs for the field work, NPC for the clerical work, and the RCCs for handling hard fail recommendations.

NRFU Case Types

NRFU has several types of cases; the following are the only ones eligible for quality control:

- Field Verification (FV) – Confirmation of addresses that did not match the MAF during the Non-ID process.
- Household Interview – Followup on nonresponding households.

The same staff does all types of cases – no separate staff for reinterview.

- They cannot reinterview their own work.

Quality Control – High Level Flow

- SMaRCS receives data from NRFU Production cases on a flow throughout the operation.
- SMaRCS samples and delivers selected cases to ECaSE OCS at least once daily.
- Reinterview cases are assigned to enumerators nightly.
- SMaRCS receives data from QC cases daily.
- SMaRCS performs computer matching.
- SMaRCS facilitates clerical matching and final case resolution, as needed.
- At the end of NRFU, SMaRCS informs Response Processing which cases were worked by enumerators that failed, and Response Processing uses the QC data for those cases.

Sampling for QC

The budget for the NRFU QC program is five percent of the NRFU production workload.

We select 5% of Field Verification cases.

All production household interview NRFU cases are matched to administrative records associated with that MAF ID to see if the production interview generally agrees with administrative records. If so, we conclude the enumerator likely completed the case correctly and render it ineligible for reinterview.

For cases that do not match adequately to administrative records, we select cases for reinterview via random and analytic sampling techniques.

Household RI Sample Selection

Random — a systematic sample of each enumerator's cases are selected.

- 1 of the first 3 eligible cases, then every 40th case after that.

Analytic — enumerators whose work differs significantly from other enumerators in the same geographic area are identified and a sample of cases are selected.

- Examples: Duration of interview, household roster size, distance from the housing unit using GPS.

DSSD will monitor to ensure we are selecting an appropriate amount of reinterview cases.

Reinterview Cases in the Field

Personal visit only – we are not using a centralized telephone operation to attempt reinterview.

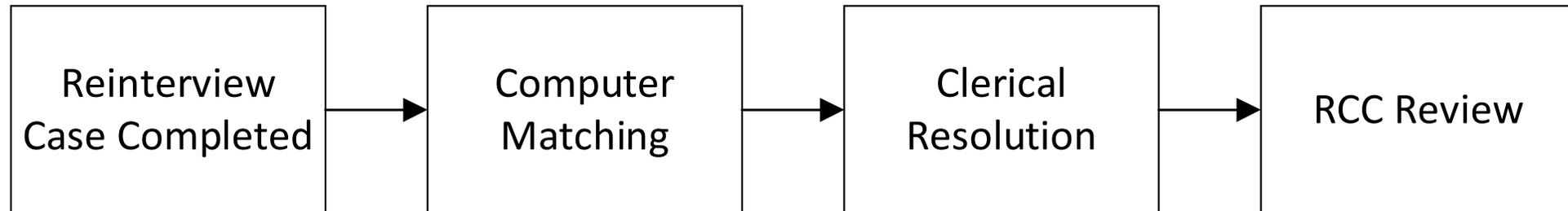
Enumerators can make up to 6 attempts to complete a reinterview case.

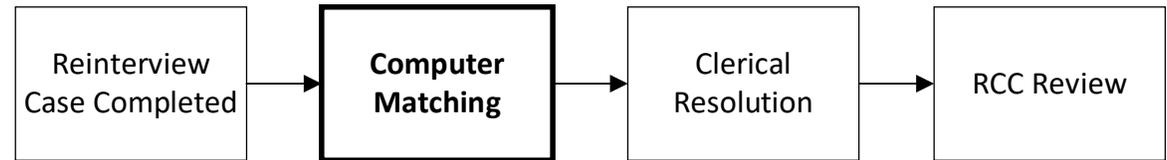
We do not seek proxies outside the household if we cannot find the original respondent.

Key Question: Were you contacted by an enumerator?

- If so, we collect: Housing unit status, population count, and roster names.
- If not or unsure: Conduct a full NRFU interview.

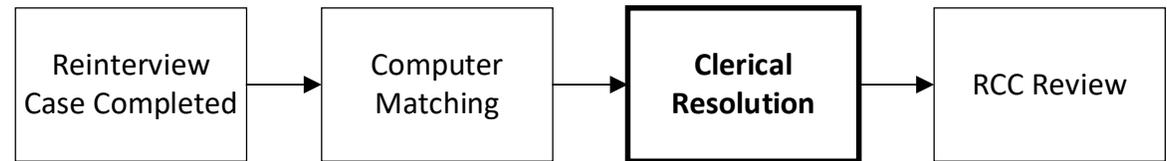
Case Flow After Reinterview Case is Complete





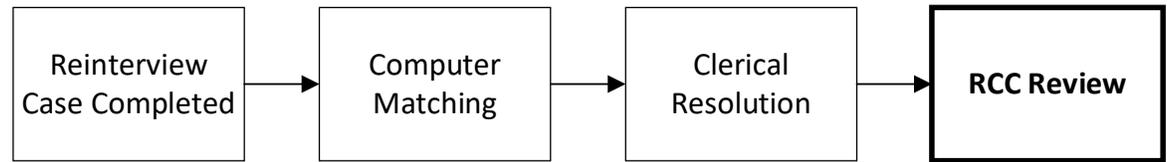
Computer Matching in SMaRCS

- Data collected during the RI are compared to data collected during the original interview (OI).
- If the reinterview case is a noninterview, the case is marked Reinterview Noninterview (RINI) and is complete.
- SMaRCS checks for consistency of responses at the household level, then person level.
- If the data are consistent (within some tolerance), the case passes and is finished.
- Otherwise, the case is deferred to clerical resolution.



Clerical Resolution at NPC

- Clerks review cases with the Defer outcome from the computer match stage.
- Clerks randomly select an enumerator and work on their deferred cases.
- Clerks also review related cases for the enumerator and access commercial data to help resolve a case.
- Clerks review cases and assign outcome codes of:
 - **Pass**—original case verified with no suspicion of falsification.
 - **Fail**—review indicates a data problem, original data cannot be verified, or unintentional violation of procedures by the enumerator.
 - An enumerator with six or more fail outcomes is referred to the Regional Census Center (RCC) as a Performance Fail.
 - **Hard Fail Recommendation**—clerk and supervisor at NPC believe deliberate falsification or intentional violation of procedures by the enumerator. These are also referred to the RCC.
- Clerks can select additional cases for reinterview when they suspect falsification but need more information.



RCC Review

- Regional Census Center (RCC) staff will review hard fail recommendation cases and performance fails.
- If the RCC confirms the performance fail or hard fail recommendation, all of the enumerator's eligible cases not previously selected are selected for reinterview, and the enumerator cannot be assigned additional cases.
- To reduce the amount of rework, especially late in the operation, it's important to get the reinterview cases and matching done as quickly as possible.
- RCCs also have the option of failing an enumerator that is suspected of falsification by means other than RI results ("Non-RI Fail").

What to expect during the NRFU RI operation

- Reinterview is budgeted for a sample size of 5% of the NRFU total workload, so we may exceed 5% of the eligible cases but remain within budget.
- We select one of the first three cases for every enumerator, which will increase the reinterview and clerical workloads at the start of the operation.
- We expect clerical resolution will initially have more cases than clerks can handle after NRFU starts in full production in August, then they will catch up as the operation progresses.
- Compared to 2010, we expect proportionally more Hard Fail or Fail cases will be recorded, due to the new sampling algorithms and the use of administrative records to confirm the enumerator's work was satisfactory.

Update Slides

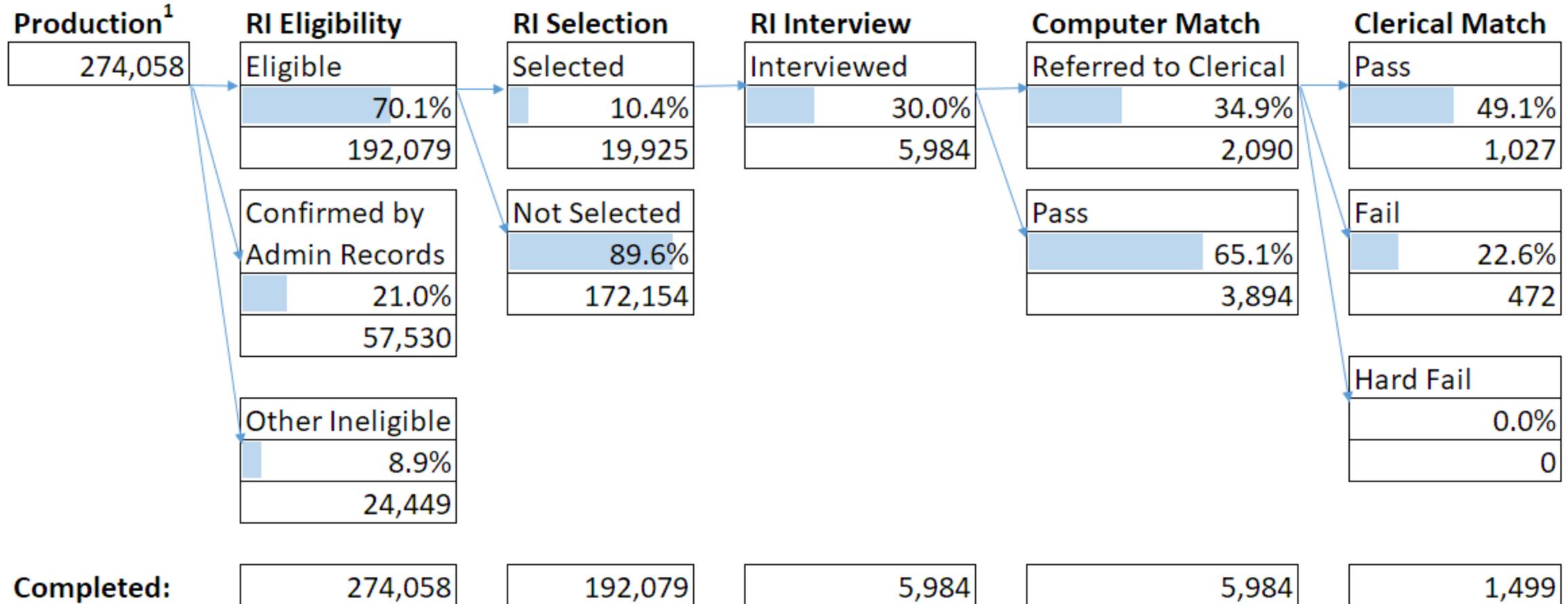
- Daily Updates
- Deep Dive
- Additional slides will be incorporated, as needed.

2020 NRFU Reinterview Overview

NRFU Reinterview Progress – Case Level

Note: These data may differ from other reports due to time lag.

Data as of: 7/30/2020, 2 am
Source: SMarCS



¹ Cases completed and received by SMarCS

2020 NRFU Reinterview Overview

NRFU RI Clerical Resolution Daily Progress

Note: These data may differ from other reports due to time lag.

Data as of: 7/30/2020, 2 am
Source: SMarCS

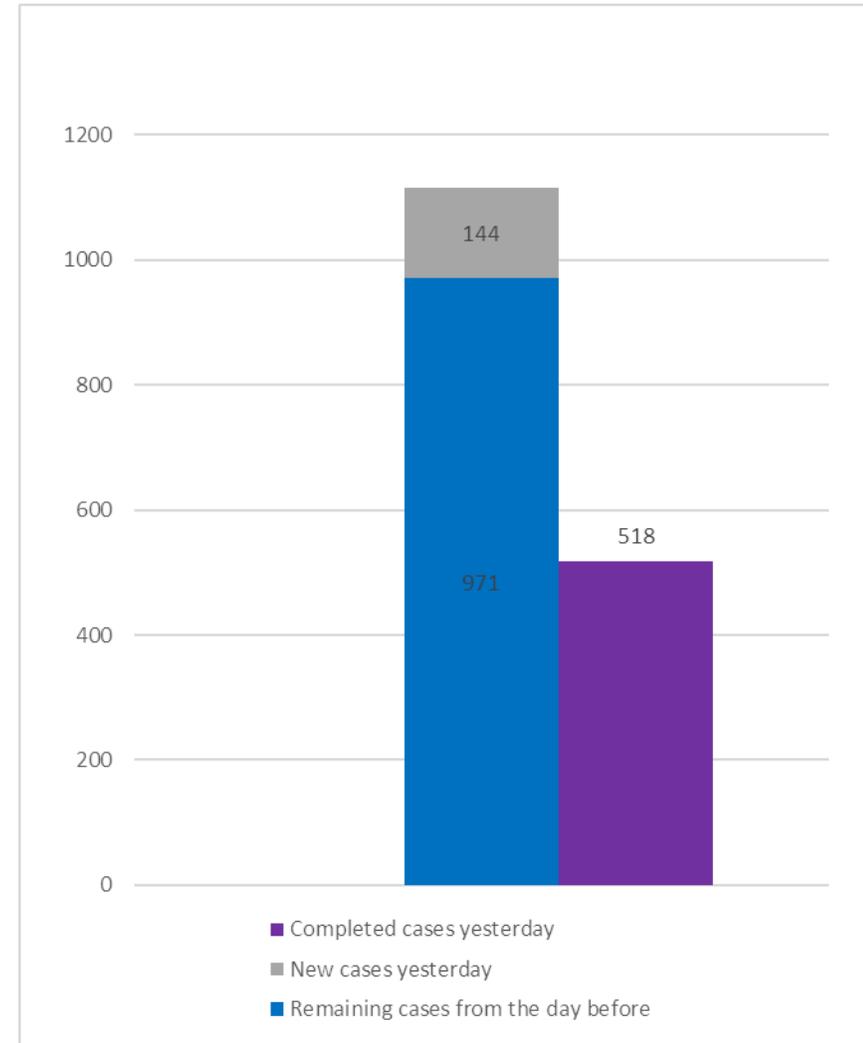


	Added 07/29	Carried Over to 07/29	Total
Cases in Workload ¹	144	971	1,115
Worked ²	7	511	518
Remaining ²	137	460	597
Active Clerks ³	-	-	33

¹ At the start of the day

² At the end of the day

³ Clerks who worked at least 1 case yesterday



2020 NRFU Reinterview Overview

NRFU RI Clerical Resolution Progress

Note: These data may differ from other reports due to time lag.

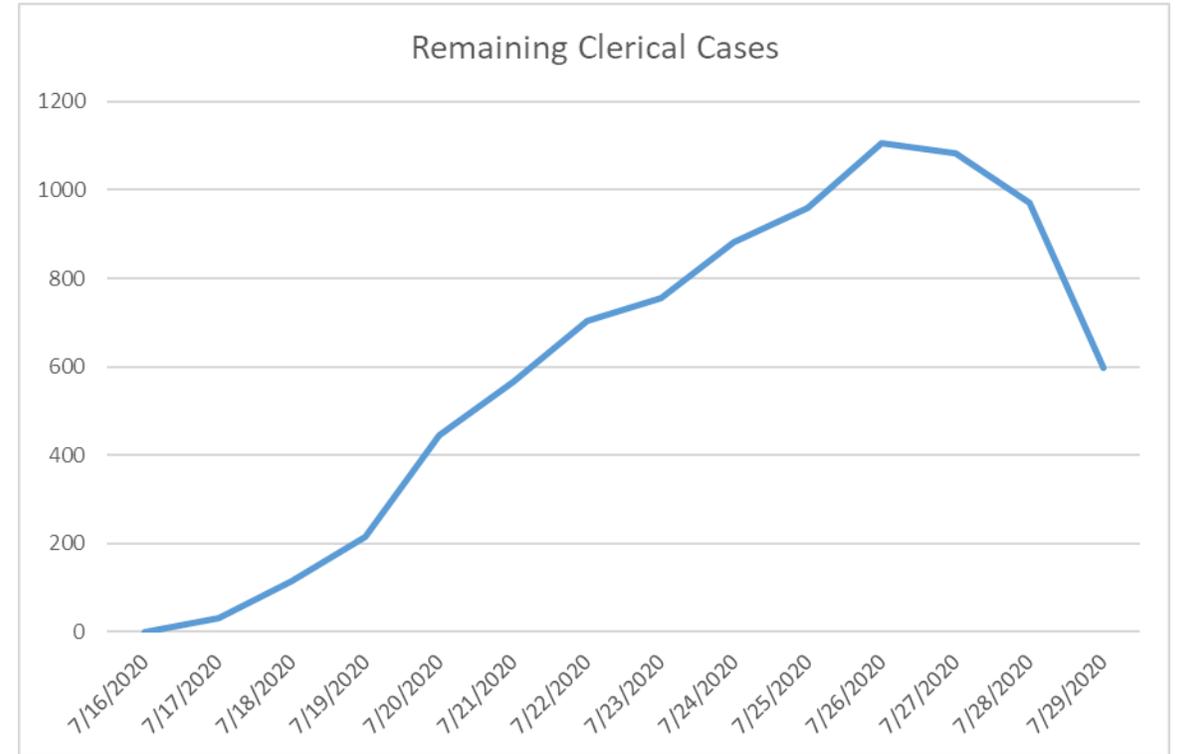
Data as of: 7/30/2020, 2 am
Source: SMarCS



	Overall
Total Clerical Cases	2090
Cases Worked	1493
Cases Remaining	597
Average Cases Worked Per Day ¹	136
Clerks ²	66

¹ Starting from 7/18/2020

² Any clerk who worked at least one case during the operation.



Deep Dive Slides

2020 NRFU Reinterview Overview

NRFU FV QC Results – Case Level

Note: These data may differ from other reports due to time lag.

Data as of: 7/30/2020, 2 am
Source: SMarCS 

	FV	
	Count	Percent
Completed Production	2,619	-
Selected for QC	130	5.0%
Completed QC and Computer Match ¹	11	100.0%
Passed	8	72.7%
Failed	0	0.0%

Notes:

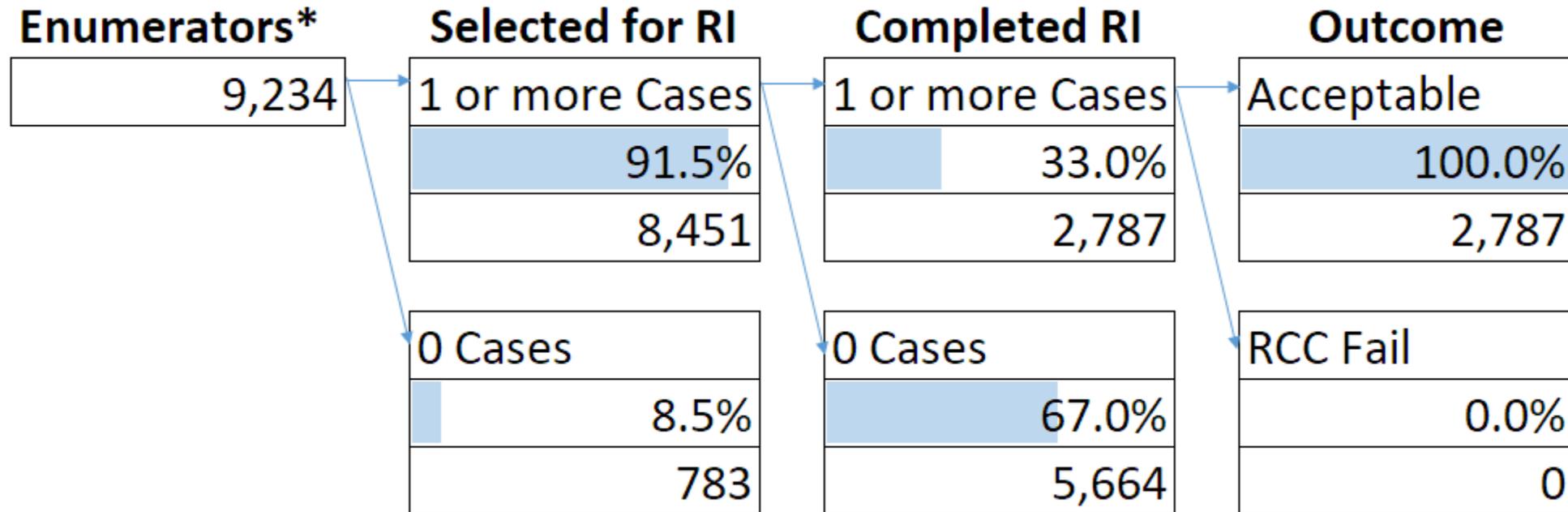
1. Pass and Fail counts may not add to the total number of computer matches due to Quality Control Incomplete outcomes.

2020 NRFU Reinterview Overview

NRFU Reinterview Progress – Enumerators

Note: These data may differ from other reports due to time lag.

Data as of: 7/30/2020, 2 am
Source: SMarCS



*With at least one NRFU HH case completed.

Questions?

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NRFU Operation Dates

- NRFU soft launch starts July 1
- QC operation soft launch starts July 17
- NRFU production: August 11-October 24
- QC operation: August 12-October 31

Training and Evaluation

All enumerators undergo online and classroom training for every type of case.

Post-training assessments and field observations for low scoring enumerators.

NPC clerical resolution training.

Performance Alerts and Reports

ECaSE Operations Control System (OCS) will monitor field activities in the operation, by comparing the work of each enumerator to the work of all enumerators under the same Census Field Manager (CFM).

The Sampling, Matching, Review, and Coding System (SMaRCS) will provide NPC, RCC, and HQ staff with reports to assist in managing the NRFU RI workload throughout the NRFU operation, providing processing status of the RI cases, and progress of NRFU RI data collection.

Field Verification – Quality Control

- **Field Verification selection:**
 - All completed FV cases are eligible for QC.
 - Select five percent of the eligible FV cases using systematic sample.
- **Enumerators complete FV QC cases.**
 - The FV QC enumerator will conduct the same procedures as the FV enumerator in order to determine the existence of an address.
- **SMaRCS performs computer matching of FV QC cases.**
 - FV computer matching outcome codes: Pass, Fail and QC Incomplete (no clerical).
 - If the outcome of the FV and FV QC cases do not match, a second FV QC case is generated and sent to the field.
 - The result of the second FV QC attempt is then matched against the original FV data using the same matching criteria, and assign a Pass or Fail outcome (no clerical).

Household Interview – Reinterview Analytic Sampling

- We expect this to be the largest proportion of cases selected.
- **Enumerator-level tests** – Compares the body of the enumerator’s work to other enumerators within the same geographic area.
- **Case-level tests** – Examines characteristics of the cases to select cases that appear to be unusual.

Examples of Analytic Sampling Tests

Enumerator-level tests	Case-level tests
Average duration time of completed interviews	Duration of interview
Average GPS distance from the enumeration device to the housing unit	GPS distance from the housing unit
Distribution of administrative records match rate	No matches to administrative records
Distribution of population count in the households	Population count of 0 when unit status is occupied or null
Distribution of contact attempt event codes	Unsuccessful attempts on a case per event codes
Distribution of housing unit status; occupied, vacant, or delete	Type of housing unit status
Distribution of respondent phone numbers; valid, invalid, missing, or null.	Duplicate, invalid, or missing phone numbers
	Population count given differs from roster count

Household Interview – Reinterview Respondents

- Personal visit only – we are not using a centralized telephone operation to attempt reinterview.
- Enumerators can make up to 6 attempts to complete a reinterview case.
- The goal is to confirm the original interview, not necessarily the data.
- If the original respondent is a member of the household:
 - Attempt to contact the original respondent.
 - If the within-household respondent cannot be contacted, we will attempt to interview another person in the household.
 - If we cannot contact anyone in the household, the case becomes a reinterview noninterview.
- If the original respondent is a proxy:
 - Attempt to contact the proxy to confirm the original interview took place.
 - If we cannot contact the original proxy, the case becomes a reinterview noninterview
- RI does not seek out new proxies outside the household.

Hard Fail Recommendation

- Possible outcomes from RCC review of hard fail recommendation cases:
 - Pass — RCC verifies the original data with no suspicion of falsification.
 - Fail — RCC determines a problem with the data and the original data cannot be verified, or there is unintentional violation of procedures by the enumerator, but there is no sign of deliberate falsification.
 - Hard Fail — RCC determines that the case shows deliberate falsification or intentional violation of procedures by the enumerator.
- If Hard Fail status is confirmed, all remaining eligible cases will be placed into the RI workload and no further cases will be assigned to the enumerator.

Performance Fail

- Multiple fail outcomes may indicate overall poor performance by the enumerator.
- If the enumerator receives six Fails, SMaRCS emails the RCC.
- The RCC may provide feedback to the enumerator.
- If the RCC confirms a performance fail, the system prevents further cases from being assigned to the enumerator.
- SMaRCS will select all of the enumerator's eligible cases that have not already been selected for any other RI into Rework RI.
- DSSD will monitor enumerators who continue to receive Fail outcomes and report to FLD.

Non-RI Fail

- RCC manager may assign a Non-RI Fail code to an enumerator suspected of falsification for reasons other than RI results.
- When an enumerator receives a Non-RI Fail, the RCC manager must enter notes in SMaRCS that provide clear evidence of falsification or intentional violation of procedures.
- The system prevents further cases from being assigned to the enumerator.
- SMaRCS will select all of the enumerator's eligible cases that have not already been selected for any other RI into Rework RI.