

# Designing a Survey Tool to Determine when Administrative Data can Substitute for Survey-Collected Data

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# What is the MCBS?

- The Medicare Current Beneficiary Survey (MCBS) is a continuous, multipurpose survey of a nationally representative sample of the Medicare population, conducted by the Centers for Medicare & Medicaid Services (CMS) through a contract with NORC at the University of Chicago.
- The MCBS collects data from Medicare beneficiaries at three points per year for four consecutive years.
  - Beneficiaries living in both community and facility settings.
- The survey covers many topics including health care utilization and expenditures, all sources of health insurance coverage, and health status and functioning.
- MCBS data are made available via two annual releases of Limited Data Set (LDS) files that contain roughly 40 linkable data sets and over 2,000 variables.
- A public use file is also available.

# Background

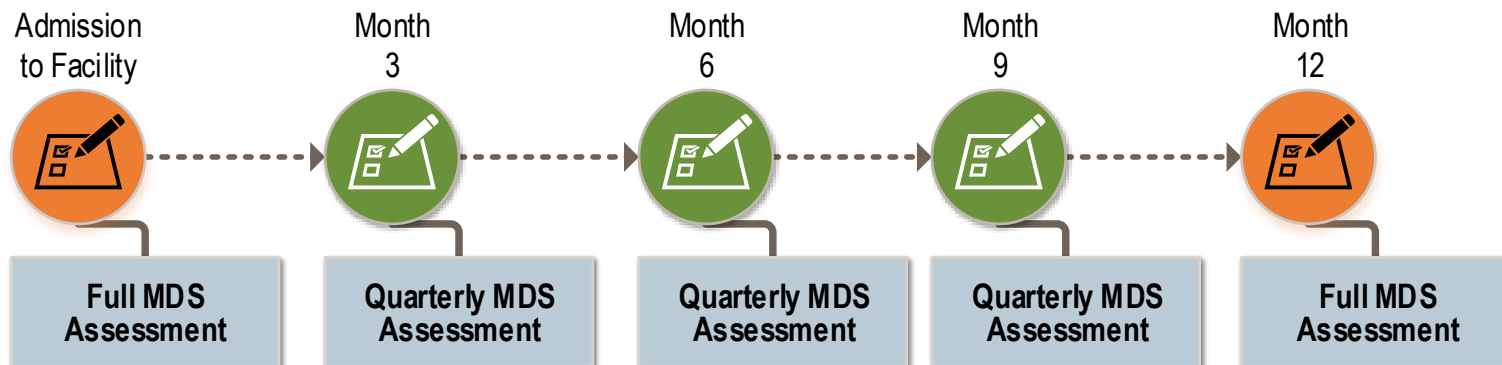
- The MCBS Facility interview collects data about beneficiaries who reside in long-term care settings **from facility staff and medical documentation.**
- Certain questions in the survey are redundant with existing administrative data sources that Medicare- and Medicaid-certified facilities regularly report to CMS.
  - About 40% of the cases eligible for the MCBS Facility interview reside in Medicare- or Medicaid-certified nursing facilities
  - The rest reside in other types of long-term care facilities, such as group homes, assisted living, and rehabilitation centers.

# Administrative Data Sets

- Identified two CMS administrative data sets with potential to replace portions of survey-collected data;
  - Long-term Care Minimum Data Set (MDS), and
  - Certification and Survey Provider Enhanced Reporting (CASPER)
- If we knew these administrative data sets were available for a case during the interview, we could skip redundant questions and use the administrative data in place of those items.

# Long-term Care Minimum Data Set (MDS)

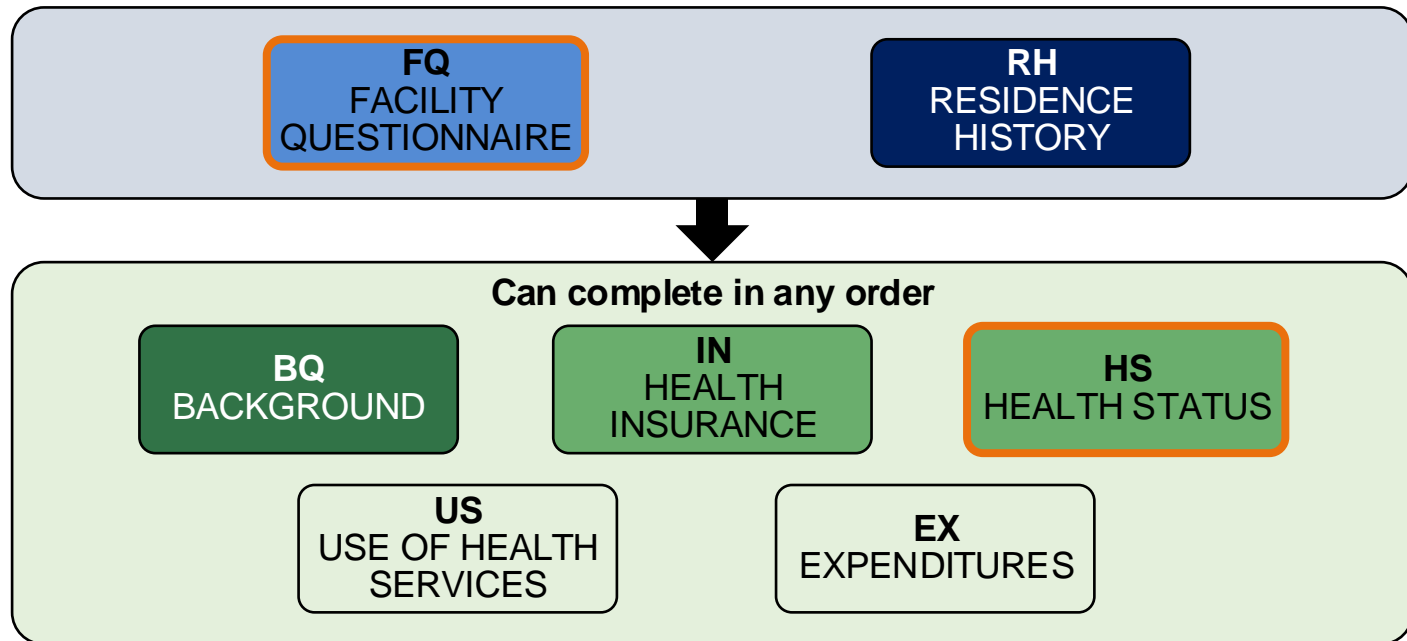
- Federally-mandated health assessment of residents living in Medicare- and Medicaid-certified nursing homes
- Beneficiary-level data source, including information about hearing, speech, vision, functional status, active diagnoses, and health conditions
- Full MDS assessment is completed for residents upon admission to CMS Certified facilities and then annually thereafter.



# Certification and Survey Provider Enhanced Reporting (CASPER)

- Supports certification and regulatory function of CMS
- Every nursing home in the U.S. that is certified to provide services under Medicare, Medicaid, or both is included in CASPER data
- Provider-level data source, including facility name, address, number of certified beds, types of services provided, aggregate of resident health conditions
- All certified facilities are assigned a CMS Certification Number (CCN), which is used when billing Medicare and Medicaid for services

# Redundancy with Administrative Data



- 25% of Facility Questionnaire (FQ) section variables overlap exactly with CASPER
- 40% of Health Status (HS) section variables overlap exactly with the MDS

# Potential to Use Administrative Data in Real Time Data Collection

- MCBS, MDS, and CASPER are operationally linked:



- If a facility is certified by Medicare/Medicaid then they will be in the CASPER dataset and will be required to conduct an MDS for every beneficiary
- During the interview, we need to verify that a facility has a CMS certification number to be confident we will have admin data for the case during data processing



# Options for Use of Administrative Data in Real Time Data Collection

1. Process and preload paradata about MDS assessments prior to fielding for verification during the interview
  - Two-month lag between facility submission and posting by CMS
2. Confirm facility identifiers via a lookup tool using CASPER as data source:
  - Certification status changes less frequently than beneficiaries move between facilities, making it more stable than MDS for our purposes
  - CMS Certification number is well known by facility staff
  - Links to MDS by CMS Certification Number; one-to-one relationship

# Solution: CMS Certification Number (CCN) Lookup Tool

## Data Collection

## Data Processing

Collect CCN from facility staff using CASPER lookup tool

If facility reports a CCN, skip 129 of 682 questions

Facility reports date of most recent MDS assessment

Use CCN and Medicare Bene ID to match MCBS to MDS

Use date of most recent assessment to identify correct MDS assessment

Insert MDS and CASPER data into survey data files in place of skipped survey questions

# CMS Certification Number (CCN) Lookup Features

- Instrument routing will determine which cases are eligible for the lookup based on reported facility type
- Source file:
  - CASPER filtered to active nursing homes only
  - Variables: CMS Certification Number (CCN), facility name, facility street address
  - Plan to refresh data source annually
- User can search on key contact information variables and combinations of variables through a singular search field
- Approximate string matching algorithm prioritizes which records to display by likelihood of match
- “Not Found” button for use when the facility reports a CCN but interviewer cannot find it in the lookup

# Draft CMS Certification Number (CCN) Lookup

Video filmed by Tristan Lutz, NORC

# Conclusions

- Benefits:
  - The ability to skip questionnaire items and replace with administrative data will **reduce burden for approximately 40% of annual facility cases**
  - For cases with administrative data, changes to the Facility instrument flow are expected to **reduce Facility interview administration time by approximately 15 minutes**
- Current Status:
  - Completed a pilot test of the CCN lookup process, which confirmed this approach will be successful and provided feedback on improving the design of the lookup
  - Planning for changes to the Facility instrument and associated data processes for implementation in 2019 and 2020

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Thank You!

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