

# Technologies and Data Collection Strategies Used to Collect Emerging Data on a Rapid Response COVID-19 Supplement

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## FedCASIC Conference

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# Agenda

**01** Background on the MCBS and the COVID-19 Pandemic

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**02** Overview of the MCBS COVID-19 Rapid Response Supplements

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**03** Innovations for Rapid Implementation

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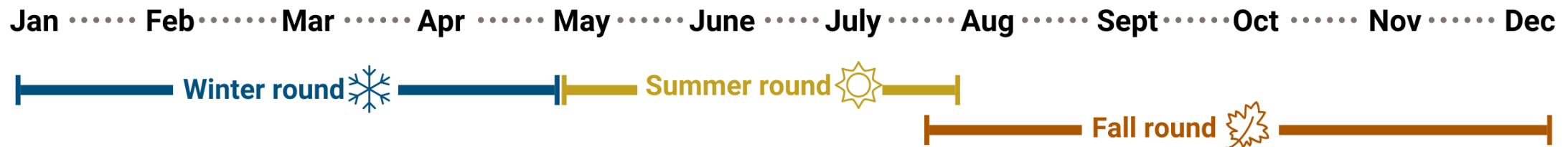
# Background on the MCBS and the COVID-19 Pandemic

The Medicare Current Beneficiary Survey (MCBS) is a continuous, multi-purpose longitudinal survey.

- The MCBS represents the population of Medicare beneficiaries aged 65 and over and beneficiaries aged 64 and under with certain disabling conditions living in the United States.
- The MCBS is sponsored by the Office of Enterprise Data and Analytics (OEDA) of the Centers for Medicare & Medicaid Services (CMS) and is conducted through a contract with NORC at the University of Chicago (NORC).
- The MCBS is designed to aid CMS in administering, monitoring, and evaluating the Medicare program. The MCBS is the most comprehensive and complete survey available on the Medicare population and is essential in providing important information on beneficiaries that is not otherwise collected through operational or administrative data from the Medicare program.
- The MCBS primarily focuses on economic and beneficiary topics including health care use and health care access barriers, health care expenditures, and factors that affect health care utilization.

The MCBS is continuously in the field throughout the year.

- The MCBS uses a rotating panel sample design and is designed to be representative of the population of all Medicare beneficiaries for the survey year.
- Each sampled beneficiary is interviewed up to three times per year over a four year period, creating a continuous profile of selected beneficiaries' health care experiences.



When the COVID-19 pandemic emerged, CMS needed an accelerated process for collecting data on the impact of the crisis on Medicare beneficiaries.

- On January 31, 2020, the Secretary of the Department of Health and Human Services (HHS) determined that a Public Health Emergency (PHE) exists for the United States to aid the nation's healthcare community in responding to COVID-19.
- Older people and people of all ages with severe chronic medical conditions – like heart disease, lung disease and diabetes, for example – seemed to be at higher risk of developing serious COVID-19 illness.<sup>1</sup>
- With the emergence of the COVID-19 pandemic in the U.S., CMS was uniquely positioned to collect timely and vital information on how the pandemic was impacting the Medicare population by utilizing the MCBS.

<sup>1</sup>Public Health Emergency Declarations". U. S. Department of Health & Human Services. Last reviewed January 12, 2021. <https://www.phe.gov/emergency/news/healthactions/phe/Pages/default.aspx>.

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# Overview of the MCBS COVID-19 Rapid Response Supplements

CMS took advantage of the MCBS panel design by planning a series of rapid response surveys as a supplement to the main MCBS.

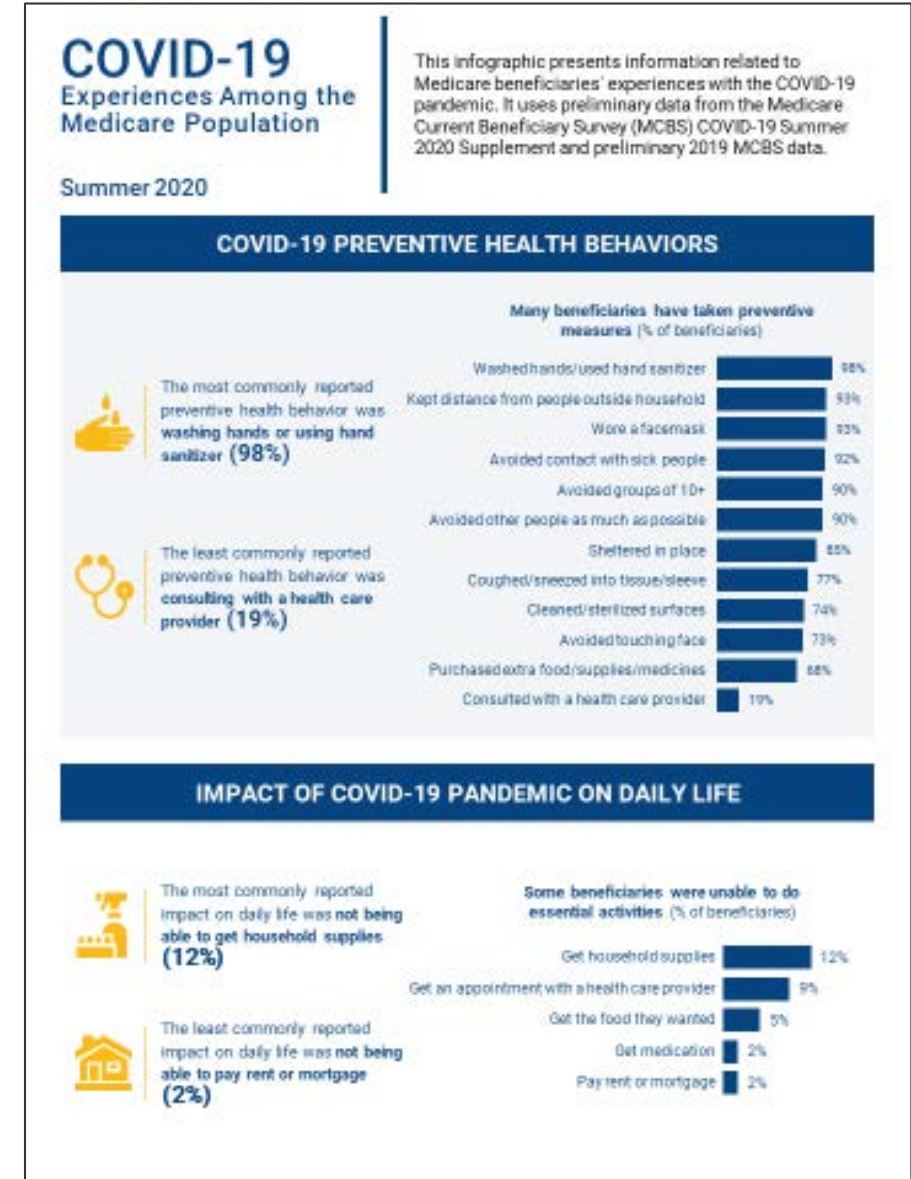
### **Field Test: COVID-19 Summer 2020 Supplement**

- Field period: June 10 to July 15, 2020, simultaneous to main MCBS data collection
- Mode: Phone
- Sample: Existing MCBS sampled beneficiaries who were continuously enrolled in Medicare from the beginning of 2020 and were alive, eligible for and enrolled in Medicare at the time of their interview in Summer 2020.
- Questionnaire: 15 minute standalone survey on topics specific to the impact of COVID-19 pandemic on Medicare beneficiaries' lives.



Public Use File (PUF) and Data Snapshot were publicly released two months after the close of data collection.

- 11,114 completed interviews
- Response rate: 78.9%
- PUF and Data Snapshot released in September 2020
  - <https://www.cms.gov/medicare-current-beneficiary-survey-summer-2020-covid-19-data-snapshot>



Based on the success of the Summer 2020 field test, two more Supplements were conducted using similar methods.

### **COVID-19 Fall 2020 Supplement**

- Field period: October 5 to November 15, 2020
- 9,686 completed interviews (response rate: 72.6%)
- PUF and Data Snapshot released in January 2021
  - <https://www.cms.gov/research-statistics-data-systems/mcbs-public-use-file/medicare-current-beneficiary-survey-fall-2020-covid-19-data-snapshot>

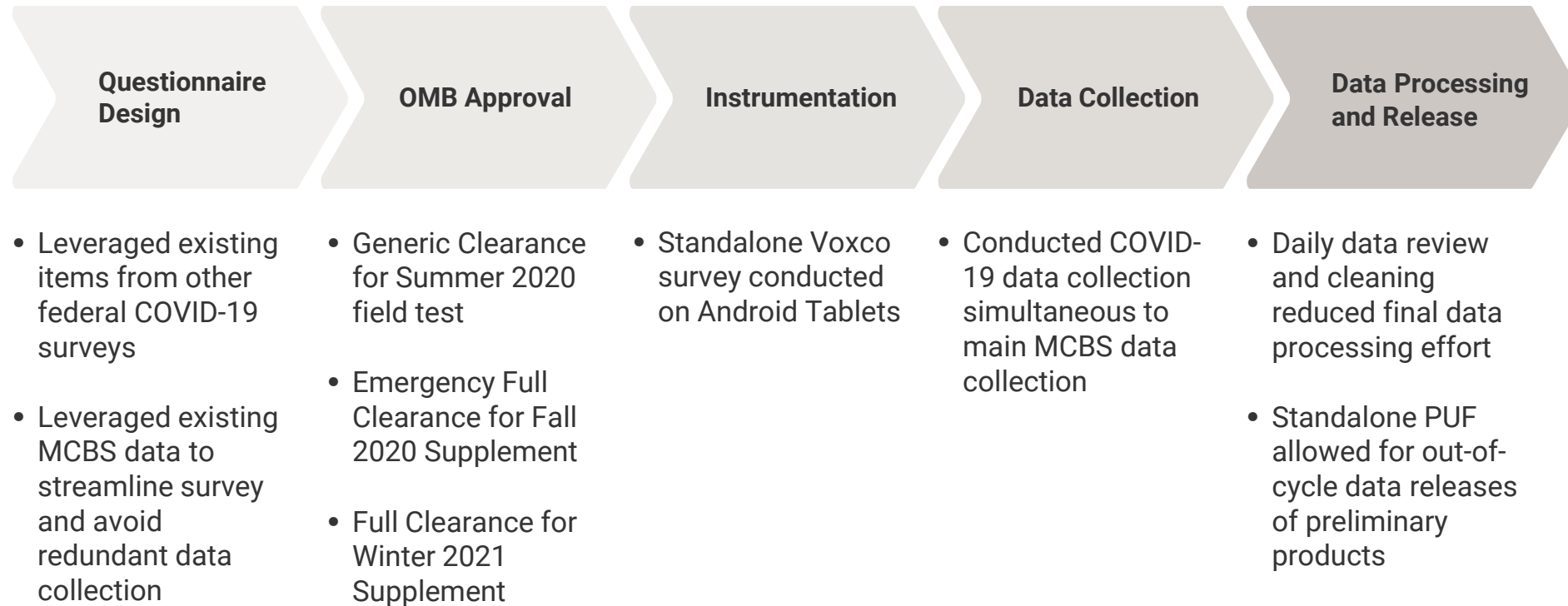
### **COVID-19 Winter 2021 Supplement**

- Field period: March 1 to April 25, 2021
- PUF and Data Snapshot forthcoming in July 2021

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# Innovations for Rapid Implementation

Innovations at every stage of the survey led to successful rapid implementation.



Leveraging tested items from other national surveys and existing MCBS content allowed CMS to expedite and streamline questionnaire development.

- **Collaborated with other surveys to use existing questionnaire items**
  - National Center for Health Statistics (NCHS) Research and Development Survey (RANDS) shared drafts with CMS as they wrote, tested, and revised their survey.
  - National Health Interview Survey (NHIS) also shared items under development.
- **Streamlining supplemental data collection with existing questionnaire items from the MCBS**
  - Because respondents were existing MCBS sampled beneficiaries, beneficiaries' demographics, chronic conditions, and smoking status were already available from prior MCBS interviews to append to the COVID-19 survey data.

## Leveraged multiple OMB clearance vehicles to support testing and implementation of the COVID-19 Supplement.

- **CMS tested the Summer 2020 Supplement under the MCBS Generic Clearance (0938-1275).**
  - Provided an opportunity to conduct a large-scale standalone field test of COVID-19 items and methodology under an accelerated timeframe.
- **Due to the successful results of the Summer 2020 Supplement field test and the critical need for data on the pandemic, CMS was granted Emergency Clearance OMB approval (0938-1379).**
- **For the Winter 2021 and subsequent Supplements, CMS added the COVID-19 Supplements to the main MCBS data collection clearance (0938-0568).**
  - This allowed CMS to continue collection of important COVID-19 data through 2021 and beyond, either as a Supplement or eventually migrating relevant items into the main MCBS.

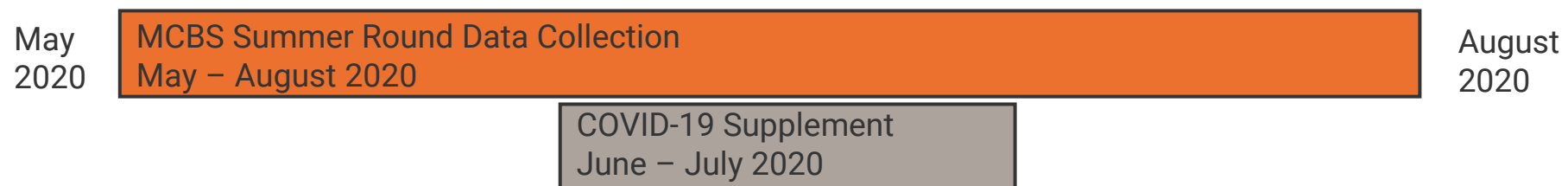
NORC looked for the software that would allow the fastest turnaround and most nimble solution.

- The main MCBS questionnaire instrument is administered via laptop in-person or over the phone. The main MCBS instrument is programmed in an advanced software package ideal for complicated skip patterns and data structures.
- The COVID-19 Supplements used a web-based Voxco questionnaire administered over the phone by interviewers using Android tablets. This had a number of advantages:
  - A standalone survey in Voxco offered more nimble programming, testing, and data extractions and lent itself well to a simple survey like the COVID-19 Supplement. Also allowed NORC to leverage in-house expertise in Voxco.
  - MCBS interviewers already had tablets that they were using for non-interviewing tasks like time tracking.
  - The tablets could be patched and Voxco deployed remotely without requiring laptop installers.
  - NORC mobile case management system was readily available and similar in look and feel to that used on the laptops, allowing for easy adoption by field interviewers.

All three COVID-19 Supplements were conducted simultaneous to MCBS main data collection but consisted of shorter field periods.

- The short field period enabled rapid data collection, which allowed for expedited release of the data.
- Collecting data in parallel with the main MCBS led to efficiencies, allowing field interviewers to make contact for both interviews at once or follow-up on recent interviews.

### COVID-19 Summer 2020 Supplement Overlap with Main MCBS Data Collection





Respondents were divided into groups based on the type of interview(s) the respondent required, allowing for more efficient contacting.

### COVID-19 Supplement Contacting Strategy

| Group                                   | Contacting Strategy   |
|---|---|
| <b>Cases not eligible for main MCBS</b> | Cases that were no longer eligible for main MCBS because of the MCBS eligibility criteria but were eligible for the COVID-19 Supplement.  |
| <b>Main MCBS Early Completes</b>        | Cases that had already completed their main MCBS interview by the time of the start of the COVID-19 Supplement so required a COVID-19 interview as follow-up.   |
| <b>Main MCBS Not Yet Complete</b>       | Cases that had not yet completed the main MCBS interview at the time of the start of the COVID-19 Supplement so field interviewers could attempt to do the interviews simultaneously or could schedule them separately. |

- The ability to complete the main MCBS and COVID-19 Supplement interviews simultaneously proved to be a major asset in securing participation in both interviews.
- Of the Summer 2020 Supplement interviews that were completed with respondents in the “Main MCBS Not Yet Complete” group, field interviewers reported completing the main MCBS and COVID-19 interviews on the same day for 67% of cases.

Standalone data products allowed for expedited out-of-cycle data releases of preliminary products.

- **The Voxco survey platform allowed for near real-time data review and cleaning.**
  - Data required minimal processing post data collection.
- **MCBS COVID-19 PUFs and infographics were standalone products that could be released with preliminary weights, ahead of the forthcoming Limited Data Set (LDS) files.**
  - The PUFs used preliminary weights because MCBS weights are typically based on a full calendar year of Medicare enrollment.
  - PUFs combined COVID-19 Supplement data with variables on demographics, chronic conditions, and smoking status collected during prior MCBS interviews.
  - The PUFs cannot be merged together or with other MCBS PUFs.
- **COVID-19 Supplement data will also be released as part of the MCBS LDS files with final weights.**
  - COVID-19 Supplement data on the LDS can be merged with the main MCBS LDS segments including extensive data on health status and functioning, preventive health behaviors, and social determinants of health.
  - The LDS files will contain the final weights.

The success of the COVID-19 Supplements has shown that this can be a model for future data collection of emerging topics.

- **This method is best suited for content additions that:**
  - Require a field period that is inconsistent with the main MCBS data collection rounds, or
  - Require either a different subpopulation or eligible population from the main MCBS, or
  - Would benefit from a different data collection mode from the main MCBS, or
  - Require release of the data products on a faster timeline than the main MCBS.
  
- **MCBS is already utilizing this methodology for other opportunities.**
  - In Winter 2021, used the MCBS COVID-19 Supplement protocols and questionnaire to survey a new sample of Medicare beneficiaries enrolled in Next Generation Accountable Care Organizations (NGACOs).

## COVID-19 PUFs:

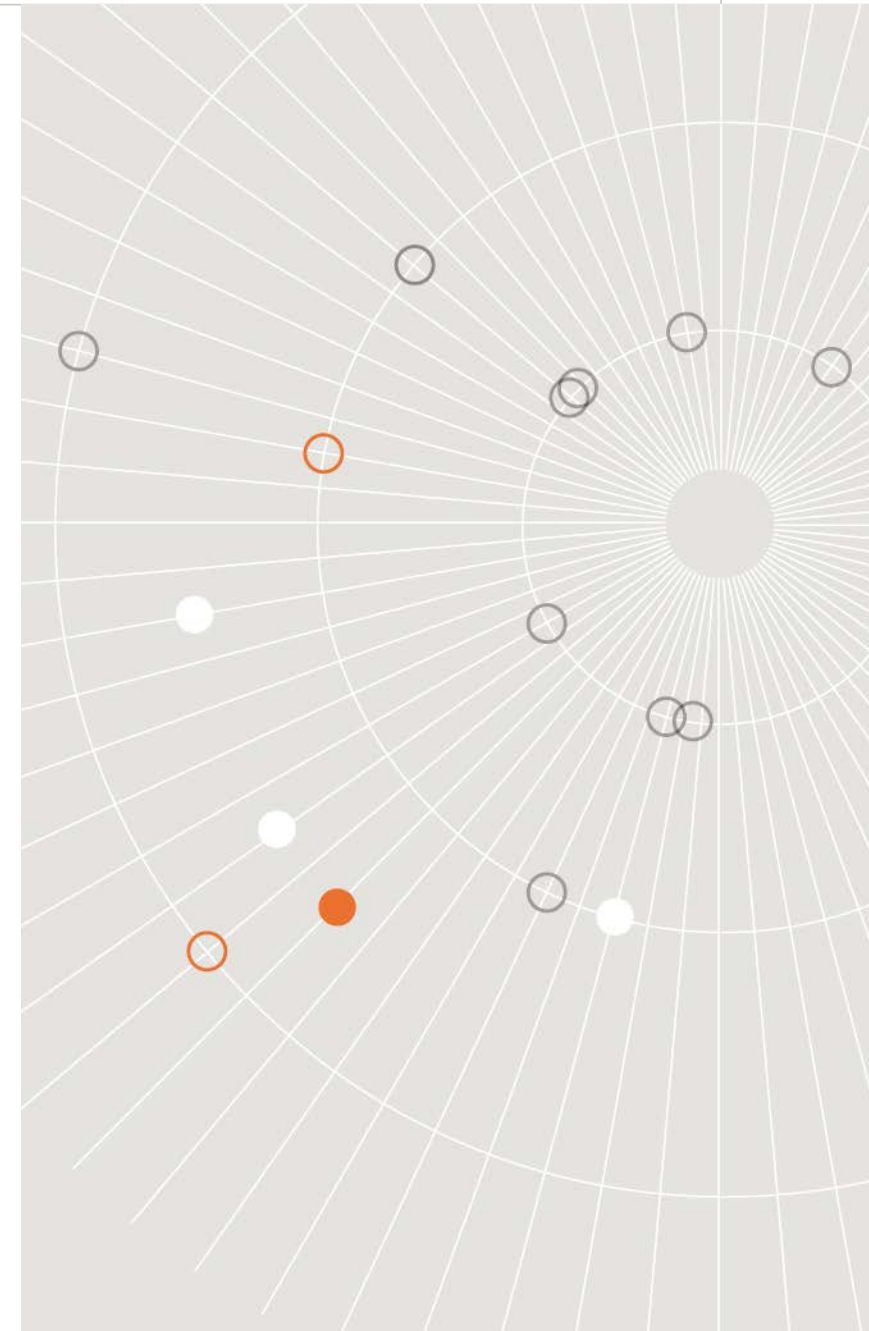
- <https://www.cms.gov/Research-Statistics-Data-and-Systems/Downloadable-Public-Use-Files/MCBS-Public-Use-File>

## Data Snapshots:

- Summer 2020 Supplement: <https://www.cms.gov/medicare-current-beneficiary-survey-summer-2020-covid-19-data-snapshot>
- Fall 2020 Supplement: <https://www.cms.gov/research-statistics-data-systems/mcbs-public-use-file/medicare-current-beneficiary-survey-fall-2020-covid-19-data-snapshot>

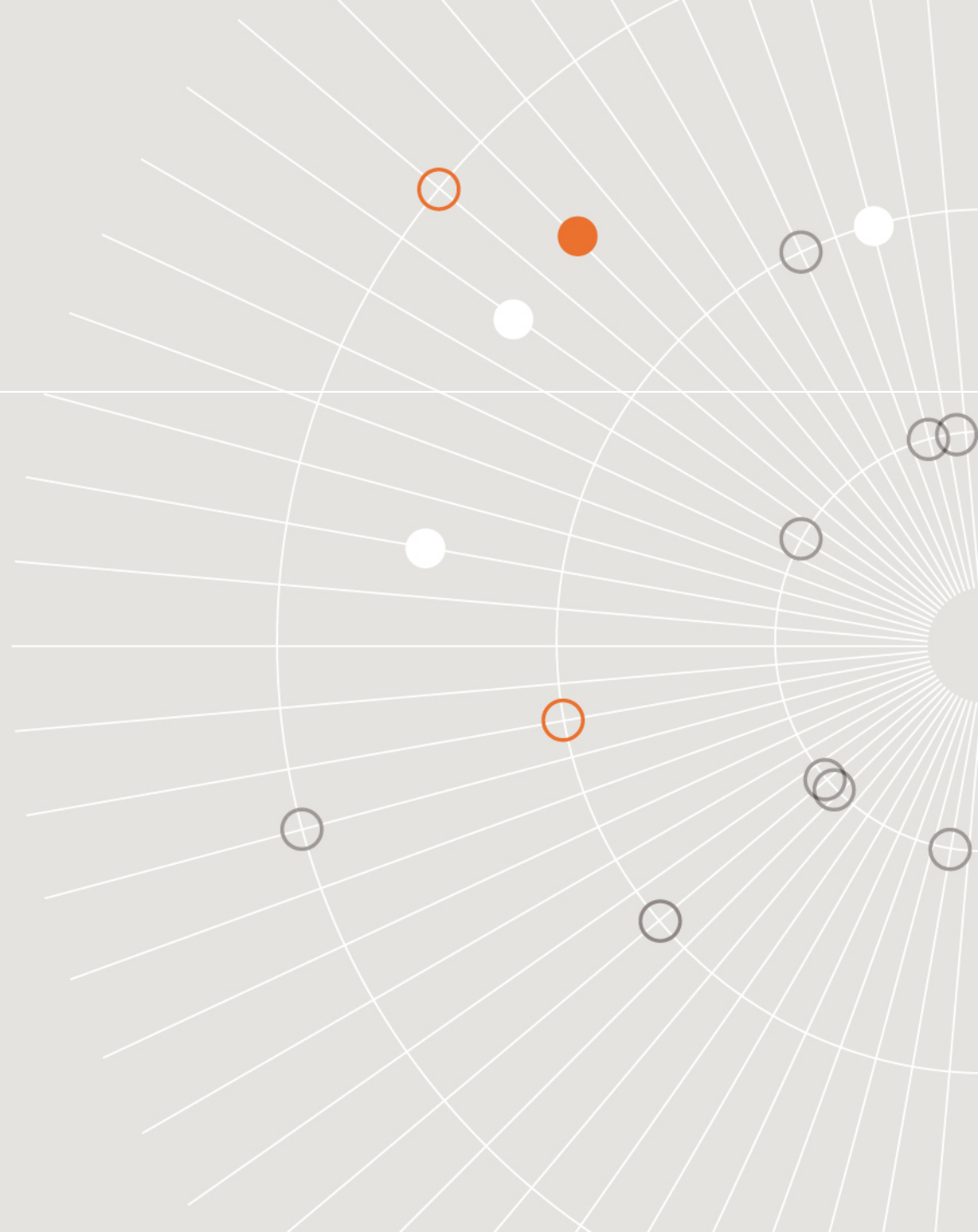
## Data Tool:

- <https://mcbs-covid.norc.org/>



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Questions?



# Thank you.

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