COVID-19 Homebound Vaccination Strategies for Dually Eligible Individuals

Introduction

The COVID-19 public health emergency (PHE) has led to an increase in the number of homebound older adults at heightened risk for infection with SARS-CoV-2.[1] In addition, the COVID-19 PHE has disproportionately affected individuals dually eligible for Medicare and Medicaid, racial and ethnic minority groups, and individuals with disability.[2] Dually eligible individuals across several demographic categories (i.e., race, age, sex, disability, and end-stage renal disease status) have been hospitalized with COVID-19 at considerably higher rates than their Medicare-only counterparts in the same demographic group.[3] In order to better support dually eligible homebound individuals at greater risk of COVID-19 infection, health plans and providers must understand the needs of various subgroups of dually eligible individuals, improve methods and processes to identify homebound members, and adopt creative vaccine strategies outside of traditional care settings.

Homebound Individuals

"Homebound individuals" include beneficiaries that have physical, cognitive, or behavioral health limitations, or social risk factors (e.g., transportation, internet or communications asset limitations, rural or travel distance), and/or are restricted because of adaptive technology, mobility devices, or needs (e.g., mechanical ventilators, etc.) that make leaving the home a challenge.

Background

In July 2021, the Centers for Medicare & Medicaid Services (CMS) Medicare-Medicaid Coordination Office (MMCO) spoke to 39 Medicare-Medicaid plans (MMPs) to gather challenges, lessons learned, and best practices regarding COVID-19 vaccination for homebound members. The intent was to identify and share promising practices amongst plans and providers serving dually eligible individuals. Some plans provided more enterprise-level responses such as unique aspects of their plan working with local and state programs, state Medicaid offices, and Community-Based Organizations (CBOs). Others provided more granular-level responses such as individual strategies of providers and care teams. This spotlight focuses on four strategies that MMPs used to increase vaccinations for homebound individuals: improved member identification, enhanced targeted outreach, use of strategic partnerships, and creative data sharing and collection. Throughout this document you will find a variety of challenges, innovations, and successes identified for each strategy.

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[1] Ankuda, C. K., Leff, B., Ritchie, C. S., Siu, A. L., & Ornstein, K. A. (2021). Association of the COVID-19 Pandemic with the Prevalence of Homebound Older Adults in the United States, 2011–2020. JAMA Internal Medicine. Retrieved from https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2783103.

[2] Centers for Disease Control and Prevention (2021). COVID-19: People with Disabilities. Retrieved from https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-disabilities.html.

[3] Centers for Medicare & Medicaid Services. (2021). Preliminary Medicare COVID-19 Data Snapshot (Data from 1/1/20 -11/20/21). Retrieved from https://www.cms.gov/files/document/medicare-covid-19-data-snapshot-fact-sheet.pdf.

1) Improved Member Identification

Plans broadened their definition of homebound members to improve identification, targeting, monitoring, and reporting. Most plans' pre-COVID-19 definition of "homebound" was defined in conventional terms such as the CMS Home Health Care "skilled need" definition or Long-Term Services and Supports (LTSS) state Medicaid Waiver eligibility criteria. Many plans expanded their definition of "homebound" beyond the conventional definition used by state Medicaid waivers, to better capture all individuals that needed additional services and supports during COVID-19.

Most plans utilized Health Risk Assessments (HRAs) as a key source to proactively identify members that are homebound. Plans also identified homebound members through care transitions and/or changes in condition. Additionally, some plans worked with their community partners to identify homebound members, with the community partners then managing outreach to those members for vaccination efforts. Plans that did not work with community partners supplemented their identification methods by using provider referrals, care transition notifications, and changes in member's condition. Many plans created fields in their care management systems to make their homebound populations easier to track and identify. Once identified, the plan developed care coordination and action plans to address the needs of the member.

Challenges with Member Identification

- As state enrollment files often do not provide information identifying individuals as homebound, many plans had to create their own processes to identify these members.

- One of the most common challenges for plans was identifying which members had already been vaccinated. Claims data often did not reflect accurate vaccination status since not all vaccine providers tracked member insurance information. Care managers reported that during member outreach, they identified members who appeared in the claims data as unvaccinated, but who stated that they had already received the vaccine. To address this, most plans supplemented claims data with self-reported vaccination status.

- Lack of a single, Healthcare Common Procedure Coding System (HCPCS)[4] and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM)[5] code to efficiently identify members who are homebound made it difficult to easily create reports on this population. Thus, plans had to use proxy codes (see table below) to identify homebound members and conduct targeted outreach to obtain their vaccination status.

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[4] The Healthcare Common Procedure Coding System (HCPCS) is a collection of codes that represent procedures, supplies, products, and services which may be provided to Medicare beneficiaries and to individuals enrolled in private health insurance programs. Definition retrieved from https://hcpcs.codes/.

[5] The International Classification of Diseases, Clinical Modification (ICD-CM) is used to code and classify morbidity data from the inpatient and outpatient records, physician offices, and most National Center for Health Statistics (NCHS) surveys. Definition retrieved from https://www.cdc.gov/nchs/icd/index.htm.

Innovations with Member Identification

Innovative Use of Data

- Seventy-eight percent of plans identified homebound individuals through analytics in some form. Several plans significantly changed their analytics approach to respond to COVID-19. Some newly introduced proprietary and/or publicly validated predictive analytic tools to strengthen their identification of homebound members. Proprietary and/or publicly validated predictive analytics tools plans used include the Minority Health [Social Vulnerability Index (SVI),](#) from the Centers for Disease Control and Prevention (CDC), and the Department of Health and Human Services (HHS) [Office of Minority Health SVI](#). These tools allowed plans to identify neighborhoods that would benefit from targeted vaccination outreach and other support services. While data analytics can support homebound member identification, case manager (CM) input and the use of claims data still played an important part in identifying these members.

- Some plans developed COVID-19 dashboards that included metrics to capture and track the vaccination status of homebound members, allowing for quick identification of members for proactive outreach. One plan used their COVID-19 dashboard data to link members to appropriate services, supports, and resources.

Successes with Member Identification

Developing New Processes as a Result of Innovative Use of Data

- Prior to the COVID-19 PHE, plan CMs would identify homebound members through HRAs, psychosocial assessments, referrals, and assessments completed during transitions of care. The COVID-19 PHE drove plans to add data analytic measures in addition to traditional methods to broaden their ability to identify homebound members. See below for more detailed information on common codes, such as HCPCS and ICD-10 codes, used to identify homebound members.

- Plans that expanded their data analytics capabilities had greater specificity and confidence that they could identify homebound and vulnerable members.

HCPS & ICD-10 Codes Used to Identify Homebound Members

HCPCS Code Categories	ICD-10 Dx Code Categories
• **E0244:** Raised Toilet Seat • **E0430-E0440:** Oxygen-Devices • **A4300-A4360:** Catheter and Urinary Related • **A7000- A7408:** Respiratory Supplies • **E0776-E0791:** IV Infusion Supplies • **E0250-E0361:** Hospital Bed and Accessories • **E0621-E0642:** Patient Lift • **E0465-E0466:** Home Ventilator • **K0011-K0014:** Wheelchair Power • **A0080, A0090, A0100, A0110, A0120, A031, A0140, A0160:** Non-Emergency Transportation with Non-Dialysis Trips with more than 6 trips in the last 12 months	• **A80:** Acute poliomyelitis • **A81:** Atypical virus infections of central nervous system • **F02:** Dementia in other diseases classified elsewhere • **F20:** Schizophrenia • **G10:** Huntington's disease • **G12:** Spinal muscular atrophy and related syndromes • **G20:** Parkinson's disease • **G30:** Alzheimer's disease • **G32:** Other degenerative disorders of nervous system in diseases classified elsewhere • **G37:** Other demyelinating diseases of central nervous system • **G60:** Hereditary and idiopathic neuropathy • **G61:** Inflammatory polyneuropathy • **G71:** Primary disorders of muscles • **G81:** Hemiplegia and hemiparesis • **R53:** Malaise and fatigue • **S06:** Intracranial injury • **S88:** Traumatic amputation of lower leg • **G82:** Paraplegia (paraparesis) and quadriplegia (quadriparesis) • **G83:** Other paralytic syndromes • **G93:** Other disorders of brain • **I12:** Hypertensive chronic kidney disease • **I50:** Heart failure • **I63:** Cerebral infarction • **I67:** Other cerebrovascular diseases • **I69:** Sequelae of cerebrovascular disease • **J96:** Respiratory failure, not elsewhere classified • **L89:** Pressure ulcer • **M33:** Dermatopolymyositis • **N18:** Chronic kidney disease (CKD) • **P94:** Disorders of muscle tone of newborn • **Q05:** Spina bifida • **S14:** Injury of nerves and spinal cord at neck level • **S78:** Traumatic amputation of hip and thigh • **Z99:** Dependence on enabling machines and devices, not elsewhere classified

Source: LA Care Health Plan

2) Enhanced Targeted Outreach

Plans connected homebound members with services to meet their health needs during the PHE and removed logistical barriers to encourage access to COVID-19 vaccinations for members and their caregivers. Many plans adapted emergency preparedness plans and created new dashboards and reporting systems in order to better conduct targeted outreach to serve their members. Plans also used multipronged approaches to educate their members and caregivers about COVID-19 infection, prevention, vaccination, and disparity-related issues.

Challenges with Targeted Outreach

- Ninety-one percent of plans had emergency plans for their members in place pre-COVID-19. However, most of the emergency preparedness plans were specific to natural disasters and/or environmental issues (e.g., fires, floods, power outages, and hurricanes). Thus, the emergency plans required adaptations to better support member outreach during the PHE.

- Most plans did not cover any cost of vaccination for caregivers if they received it at home, which made messaging and outreach to homebound members more difficult because not everyone in a household could be vaccinated through an in-home visit.

- Nearly all plans had a lack of comprehensive data on vaccination status from their states. Medicare FFS covers vaccinations for Medicare beneficiaries, which meant MMPs could not rely on claims data to learn who had been vaccinated or when and which vaccine was administered. This made it difficult to identify which members needed outreach to encourage completion of a second vaccination.

Innovations with Targeted Outreach

Engaging Caregivers to Support Targeted Outreach for Homebound Members

- Most plans provided caregivers with the education, resources, and local community services for vaccination if the caregiver expressed interest. This included providing caregivers with information on where to get a vaccine, and some plans helped schedule their appointments.

- To address vaccine hesitancy in caregivers and members, plans provided education on inaccurate perceptions or false information, sometimes in the form of Frequently Asked Questions (FAQs), and reminded members who received their first dose to ensure they completed their second dose.

- One plan offered a training series to CMs that prepared them to have discussions with members and their caregivers on making informed decisions about COVID-19 vaccinations. They based the series on facts about COVID-19 and the vaccine, motivational interviewing, and overcoming member and caregiver vaccine hesitancy.

Overcoming Vaccine Hesitancy

- One plan established a 20-minute COVID-19 Prevention and Counseling code that encouraged primary care physicians to address vaccine education and hesitancy by allowing them to bill for that service.

COVID-19 Dashboards and Monitoring

- Many plans shared COVID-19 dashboard weekly reports internally across the enterprise to bring attention to areas (either geographic or among certain populations) where disparities in vaccine uptake existed. Plans shared these reports to increase awareness and engage staff across all levels. Some plans used new "Homebound Vaccination" sections in their COVID-19 dashboards to easily track their progress in encouraging vaccination for this subgroup of members.

- Health plans generated new data management approaches to integrate outside data from state and community-based organizations into their vaccine data collection and targeted education efforts.

- Plans incorporated additional data for homebound members into their dashboards in order to view information about other prevalent risk factors such as: Asthma, Diabetes, Chronic Obstructive Pulmonary Disease (COPD), Congestive Heart Failure (CHF), Cancer, Chronic Kidney Disease, End Stage Renal Disease (ESRD), Sickle Cell Anemia, Smoking, Human Immunodeficiency Virus (HIV), Social Vulnerability Index (SVI), Languages Spoken, and Zip Code.

Successes with Targeted Outreach

Adapting Existing Emergency Preparedness Plans

- Several plans anticipate continued use of their revised approaches for other incident events such as natural disasters (e.g., floods, fires, hurricanes, wide grid power outages, etc.)

- Plans intend to continue to utilize new COVID-19 databases for members who are homebound or who require transportation. They can also use these databases for other vaccination efforts (COVID-19, flu, etc.) and for CMs' and Social Workers' reference in maximizing care coordination efforts.

- Some plans experienced success with sharing their emergency preparedness plans and operations through state/regional collaboratives with other health plans.

Engaging Caregivers to Support Targeted Outreach for Homebound Members

- Plans experienced greater success in vaccinating homebound members when they also coordinated vaccine services and resources for caregivers. For members that elected to seek in-clinic vaccination and were accompanied by caregivers, their caregivers were also offered vaccination.

Overcoming Vaccine Hesitancy

- Most plans focused on educating all staff, both member facing and non-member facing, about COVID-19 infection, prevention, vaccination, and disparity-related issues. Plans created vaccine hesitancy training for staff to increase their education and comfort with COVID-19 vaccination options and improve understanding of potential barriers or hesitancy from members. These plans used the CDC as their trusted source for COVID-19 information, supplemented with information from their respective state health departments.

- Plans took a very focused approach to addressing vaccine hesitancy with their members, such as developing scripts for staff and devoting more time on the phone with members, which resulted in improved vaccine acceptance and completion rates.

3) Use of Strategic Partnerships

How plans partnered with CBOs, public health agencies, local and corporate pharmacy chains, and faith-based organizations varied by state and region. Plans that had significant collaborations in place with these organizations prior to the COVID-19 PHE could adapt more quickly to meet the needs of their homebound members.

Percentage of Responses Indicating Organizational Partnerships

Organization	% of Yes Responses
Community-Based Organizations (e.g., Area Agency on Aging)	74%
Local Health Departments	63%
State Government	54%
Federally Qualified Health Centers (FQHCs)	50%
Home-based Primary or Palliative Care Partners or Vended Contractors	43%
Hospitals and/or Emergency Medicine Providers	42%
Pharmacies	40%
Home Healthcare Agencies	33%
State Medical Board	16%

Challenges with Strategic Partnerships

Identifying and Engaging Key Partners

- Some plans focused on finding and linking members with in-home vaccine vendors. However, identifying which vendors to work with was challenging because it required regular coordination and communication about logistics and data sharing. Plans that worked with third party vendors found that success required multiple entities to coordinate, such as public health organizations, home health agencies, CBOs, and private emergency medicine vendors.

- Delays in state certification for homebound vaccination vendors, as well as operational logistics with vaccine management (e.g., refrigeration, multiple-dose vials), posed additional challenges.

Innovations with Strategic Partnerships

Identifying and Engaging Key Partners

- One plan partnered with local pharmacies to create pop-up vaccine clinics for homebound individuals, specifically those with intellectual or developmental disabilities. Through additional partnership with service providers, the plan held these clinics at locations familiar to members and allowed for vaccine administration to support members' unique needs. For example, individuals were vaccinated in their cars to support members with ambulation difficulties or behavioral challenges.

- One plan partnered with local health departments and community agencies to identify and refer homebound members, conduct member educational outreach regarding vaccination, and help set up transportation to existing vaccine administration sites.

Working Directly with Providers and Community Members to Address Hesitancy and Other Barriers to Vaccine Uptake

- Plans worked with hospitals and skilled nursing facility (SNF) providers, when possible, to support at-home COVID-19 vaccination for homebound members.

- A smaller number of plans worked directly with primary care physicians (PCPs). One plan's Chief Medical Officer (CMO) reported that members found PCPs – in addition to family, friends, and clergy – to be the most trusted and influential sources of information regarding vaccines.

Financial Incentives Aligned with Medicare FFS Reimbursement

- A few plans offered incentives to promote primary care visits to address vaccine concerns and provide education, including the creation of a new Current Procedural Terminology (CPT) code for COVID-19 Prevention and Counseling.

Successes with Strategic Partnerships

Identifying and Engaging Key Partners

- Plans found that mobile vans and Emergency Medical Technician (EMT) vendors had the most success at reaching and vaccinating members.

- Overall, plans that fostered strong working relationships and partnerships with local organizations encouraged greater community trust and this was a valuable way to address vaccine hesitancy.

Working Directly with Providers and Community Members to Address Hesitancy and Other Barriers to Vaccine Uptake

- Some plans arranged transportation for homebound individuals who could travel to in-clinic vaccinations.

- Plans worked with community health partners and health outreach workers to refer homebound members to homebound vaccine programs.

4) Creative Data Sharing and Collection

Data sharing between health plans and other organizations varied and largely depended upon state infrastructure and data systems in place for COVID-19 vaccination status. Nearly half of the plans interviewed shared homebound membership information with their states, and in some cases, with local health departments or community organizations.

Challenges with Data Sharing and Collection

- Though plans received claims data from states, they found that they needed creative and innovative methods to supplement this data to understand members' vaccination status.

Successes with Data Sharing and Collection

- Most plans incorporated new data sources and analytic approaches to aid in identification of homebound members. For example, plans used county data on Adult Protective Services (APS) which includes information on adults with dementia, physical or medical frailty, and developmental disabilities; Area Agency on Aging (AAA) data on the distribution of home delivered meals; and claims data to identify members on a ventilator, using oxygen, and/or using a wheelchair.