

# Homebound Vaccination Cost Effective Analysis and Program Recommendations for the Virginia Beach Department of Public Health

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## Issue Identified

The Homebound Vaccination Program was established by the Virginia Beach Department of Public Health during the COVID-19 Pandemic, in order to provide the COVID-19 vaccination to individuals who were medically or socially homebound. This program was run until 2024 and began offering additional immunizations such as Flu and Meningococcal. A cost effective analysis was performed to determine the programmatic costs, structure, societal impact, and clinical demand to provide recommendations to leadership on the continuation, expansion, or elimination of the program.

## Outputs

- Quantified homebound population in Virginia Beach
- Calculated programmatic cost of providing the Homebound Vaccination Program
- Restructured program to fit job descriptions and grant allocations of duties performed
- Assisted Community Development Team in resource navigation for community members facing inequities in social determinants of health
- Established an Employee Lending Library and Wellbeing Station in the breakroom of the VBDPH



## Programmatic Structure of Homebound Vaccination Program Pilot

|                  | Scheduling  | Preparation   | Date of Service  | Service   | Post-Service   | Remit  |
|------------------|---|---|--|---|--|--|
| Patient          | Patient calls/is referred to receive Homebound Immunization services  |   | Patient notified of time of appointment  | Upon MRC arrival, is educated about the immunization they are receiving, sign Consent to Treat form, and receive vaccination  | Answer Feedback survey questions: Convenience of scheduling, quality of service provided, and any additional feedback  |  |
| IAP Nurse Senior | Calls patient to screen for Homebound Immunization eligibility per CMS guidelines, check patient vaccine series in Webvision, collect insurance information, and schedule patient for service based on vaccine availability   | Orders immunizations if necessary (See procurement lane), shares the address of service with Deputy Planner           | Gathers immunization materials**, checks out vaccine from stock, and confirms in Webvision that the patient has not received the immunization between date of scheduling and date of service |   | Enter information from patient forms into Webvision, to be billed to insurance and added to patient chart & Statewide immunization database                                  |  |
| Deputy Planner*  | Sends out a request to MRC personnel, and confirms two MRC volunteers for date of service   | Plans most efficient route for MRC personnel and notifies MRC personnel what time to arrive to VDH on date of service | Meets MRC personnel and shares route of services   |   |  |  |
| MRC Personnel**  | Two MRC personnel confirm availability for date of service  |   | Two confirmed MRC personnel arrive to VDH and meet the IAP Nurse Senior in the clinic to receive immunization materials and service route  | Arrive at patient home, educate patient about vaccine, have patient sign consent forms, administer the vaccine, and then wait 15 minutes for monitoring in case of adverse reaction | Ask Feedback Survey questions to patient/caregiver onsite, then return to VDH and return unused immunization materials** to IAP Nurse Senior, give forms to IAP Nurse Senior |  |
| Fiscal           |   |   |  |   |  | There is an email that comes every Monday from Truist Bank, which contains the remit of all the Medicare patients that needs to be posted at that time. Each patients name is researched in the Webvision portal to retrieve the client's ID number and ORG ID. Once information is located, the fiscal assistant can then post payment to patient's account according to the remit.**** |
| Procurement      | If an immunization needed for Homebound Vaccination services is out of stock in the clinic, the IAP Nurse Senior checks Lot Maintenance Report for vaccine stock and orders through the Pediatric and Adult Vaccine Order Form, faxed to the Central Department for chargeable immunizations, and the Division of Immunization for VFCM Adult Free, and State Free vaccines |   | Turnaround time for receiving is 3-4 days for non-frozen vaccines, and 2 weeks for frozen vaccines (COVID-19 and Varicella)  | FedEx delivers vaccines to Storeroom, and Storeroom personnel bring package to clinic   | IAP Nurse Senior and Pharmacist stock vaccines and update Lot Maintenance Report   |  |

\* Deputy Planner is performing the above Homebound Vaccination Program duties in lieu of the MRC Coordinator while the MRC Coordinator role is vacant.  
 \*\*MRC Vaccination Administration requirements meet the requirements of the VDH for immunization administration, and are therefore eligible to administer Immunizations on behalf of VDH in the case that an Immunization Nurse is not readily available to administer vaccines in-home for homebound patients.  
 \*\*\*2 Alcohol Pads, 2 Cotton Swabs, 1 Bandage, 1 25 gauge Syringe, 1 1" Needle, 1 Sharps Container, 1 Epi Pen, 1 Benadryl, Immunization, and CDC Prevacation Checklist for COVID-19 Vaccination and COVID-19 Vaccination Screening/Encounter Form (if patient is receiving COVID-19 Vaccine)  
 \*\*\*\*The majority of Homebound Vaccination Program recipients are Medicare enrollees. Medicare reimburses COVID-19, Flu, Hepatitis B, and Meningococcal vaccines at a 100% reimbursement rate, in addition to paying providers an additional in-home administration sum of \$38 per patient. There is no cost defect associated with providing homebound vaccination services to Medicare enrollees, so long as they are not enrolled in Medicare Part D.

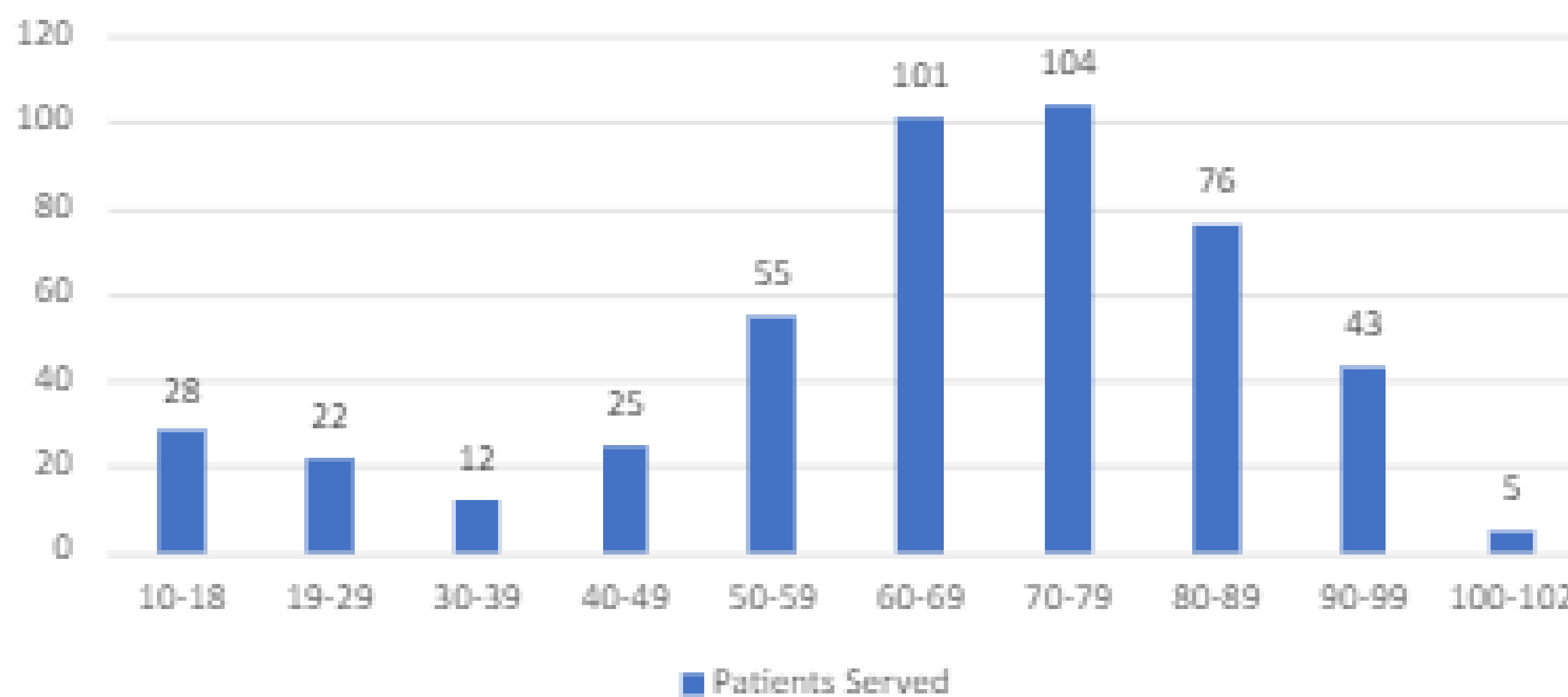
## Challenges

- Quantifying homebound population
- Determining demand for services
- Collecting programmatic pieces of Homebound Vaccination program lost during employee transition
- Restructuring program duties based on grant funding
- Extracting employee compensation data

## Additional Experiences

- Board of Health Quarterly Meeting
- All-Staff Meeting for VBDPH
- Biweekly Manager's Meetings
- Clinic Admin Meetings
- Clinic Huddles
- PrEP for Pride Panel at Glass Light Hotel in Norfolk
- Restaurant inspection field experience
- Aging In Place field experience
- Long Term Support Services field experience

Ages of Patients Served through the Homebound Vaccination Program from 2020-2024



The above figure shows the age demographics of patients previously served by the Homebound Vaccination Program, The bell curve shows that the majority of homebound patients were 60+, and utilize Medicare for health insurance. Beginning January 1, 2024, Medicare began paying providers an additional in-home administration fee for homebound immunization, which results in a profit gained for VBDPH, as the service is provided by volunteers. The additional in-home administration fee assists in covering administrative and operational costs associated with vaccination services not traditionally covered by vaccine reimbursement.

Stop The Bleed Certification Course, hosted by VBDPH MRC



Board of Health Quarterly Meeting at NSU with other Cohort 2 Academy Interns



Aging In Place Field Experience with Fabiola Mercado and VB EMS



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