COLLABORATIVE PROTOTYPES & LESSONS LEARNED DURING THE COVID-19 VACCINE ROLLOUT

Statewide Hospital-Home Care Collaborative for COVID-19 and Beyond

PREPARED IN COLLABORATION WITH THE FOLLOWING PARTNERS







This collaboration was made possible through the generous support from the Mother Cabrini Health Foundation.





ABOUT THE STATEWIDE HOSPITAL-HOME CARE COLLABORATIVE

Hospitals and home care providers have long worked together to tackle the major problems facing the healthcare system. As part of these efforts, the Home Care Association of New York State Education and Research (HCA E&R), Healthcare Association of New York State (HANYS), and Iroquois Healthcare Association (IHA) developed a Statewide Hospital-Home Care Collaborative under a grant from the Mother Cabrini Health Foundation.

The purpose of this collaborative is to improve hospital-home care synchronization for front-end, pre-acute hospital care and post-hospital care, recovery and long-term support. As part of this work, HCA E&R, HANYS and IHA curated and hosted a series of webinars featuring prototypes of hospital and home care collaboration models that can be emulated by other providers statewide — working together, across settings.

The associations also created an online library of resources and tools to assist hospital-home care collaborative development, offer technical assistance and provide further education.

Interprofessional collaboration is the practice of approaching patient care from a team-based perspective and requires all care team members to engage with each other to work together toward a shared goal.¹ Collaboration between healthcare entities is imperative to meet the needs of New Yorkers during a public health crisis such as the COVID-19 pandemic.

The purpose of this report is to reflect on the lessons learned and best practices of the 10 regional vaccination hubs during the vaccine rollout period and share what worked and what could be improved upon to prepare for the next public health emergency and to use identified collaborative strategies to address community health needs across the continuum.

¹Johnson & Johnson, The Importance of Interprofessional Collaboration in Healthcare; January 2016, <u>https://nursing.inj.com/getting-real-nursing-today/the-importance-of-interprofessional-collaboration-in-healthcare</u>.

TABLE OF CONTENTS

01 Introduction

02

- New York State's Approach to Pandemic
- Vaccine Hub Collaboration

03

Best Practices & Lessons Learned

06

The Need for Continued Collaboration Across Health Systems in New York

07

Detailed Vaccine Hub Summaries

08 New York City Long Island

15 Mid-Hudson Valley

22 Capital Region 27 North Country

35 Southern Tier

41 Central New York

45 Finger Lakes

Mohawk Valley

32

48 Western New York

54 Contact Information

55 NYS Vaccine Hub Map





INTRODUCTION

The COVID-19 pandemic presented tremendous challenges for New York state's healthcare systems. Despite these challenges, exceptional collaboration took place between local and regional health departments, government officials, hospitals, health systems, retail and independent pharmacies, healthcare workers and volunteers, all working together toward a shared goal: to get as many people as possible vaccinated as quickly and equitably as possible.

To share lessons learned, HCA E&R, HANYS and IHA invited the vaccine hub leaders to share their experiences with the development and execution of

this collaborative effort. The associations appreciate their willingness to share their experiences widely in an effort to strengthen collaborative approaches in healthcare beyond vaccination.

This report presents major challenges experienced while bringing together these collaborative groups, differences in approaches, best practices and lessons learned. HCA E&R, HANYS, and IHA hope that elements of this collaborative work can be applied to address future healthcare challenges.

NEW YORK STATE'S APPROACH To the covid-19 pandemic

Regional vaccination hubs were established to help facilitate vaccination once Phase 2 of the state's plan began in early 2021. The regional hubs, led by hospital systems, worked with community leaders to develop regional vaccination networks that guided vaccine administration. While vaccination started with hospital personnel, essential workers and those most at risk, the scope of the project was set to expand dramatically, as the stated goal of the hub approach was to vaccinate as many people as quickly and equitably as possible.

In developing regional implementation plans, the hubs worked with local stakeholders and their communities to build trust in the vaccines and meet each region's unique needs. Despite the unprecedented challenges of the COVID-19 pandemic, health systems and communities were able to work together to help vaccinate more than 16,928,000² New Yorkers, to date.

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VACCINE HUB COLLABORATION

Vaccine hub leaders have graciously provided their input about their efforts during the COVID-19 pandemic vaccine distribution. Hub leaders have highlighted organizational methods, best practices, lessons learned and collaborative efforts that have continued since the vaccine hubs disbanded, as well as future opportunities for collaboration.

The hub-specific summaries detail the development and execution of the collaborative efforts. The following is a summary of overarching themes common to multiple hubs.

² New York State Department of Health, "Vaccination Progress to Date," <u>https://coronavirus.health.ny.gov/vaccination-progress-date</u>.

BEST PRACTICES & LESSONS LEARNED

ESSENTIAL COLLABORATION: THINK OUTSIDE THE BOX

The vaccine hubs engaged both traditional and non-traditional partners who had the capacity to help. Retail and independent pharmacies, community-based organizations, faith-based organizations, business leaders and others were essential vaccination partners, reaching homebound patients and other underserved populations. Local retail and independent pharmacies acted as trusted healthcare hubs in some communities, as many New Yorkers live within walking distance of a pharmacy. Pharmacies and other community-based organizations used their role as trusted neighborhood healthcare providers to combat vaccine hesitancy and bring vaccines into the community.

CLEAR COMMUNICATION

- Clear and consistent communication between collaborative partners and the community was essential for these efforts.
- Organizations must work together for a cohesive communications strategy to meet the project goals. An organized reporting structure and single points of contact for reporting and communication can reduce duplicative work, uncertainty, miscommunication and frustration.
- All parties should be involved in the beginning planning process as soon as possible to avoid unnecessary delays. Inclusivity can save time and build trust among partners and within the community.

- With an uptick in online scams and phishing emails, it was challenging to do initial outreach to new partners. In these instances, assistance from known connections and recognized leaders is helpful.
- Having designated point persons for projects is a best practice to ensure streamlined communication and avoid duplication.

BEST PRACTICES & LESSONS LEARNED - CONTINUED

ENSURING ACCESS AND INCLUSION: THE HEALTH EQUITY TASK FORCE

Each hub created a health equity task force (HETF) to organize the equitable distribution of vaccines. Some HETFs were as large as 80 or more members representing a variety of community stakeholders. This helped ensure community stakeholders' voices were heard on how best to reach out and include more community members in the vaccine rollout process. HETF members were extremely supportive in providing resources, access points, insight and guidance through the rollout.

- The HETFs assisted in breaking down transportation barriers, reaching the homebound population and mitigating vaccine hesitancy.
- Targeted, community-based messaging was more effective than mass media in reaching the underserved.
- Many of these HETF groups have continued to meet regularly, changing their focus from vaccines to other health concerns.

The HETF could be used to address myriad health challenges in any setting.

REGIONAL DIFFERENCES

Each region is different with diverse populations and needs. What works in Massapequa might not work in Massena. Knowing the community can help to deliver the right approach. Local leaders can utilize their knowledge and networks to build a successful collaborative effort that works best for their geographic area and communities.

There may be no "one-size-fits-all" approach that will have the intended outcomes in all areas. Certain restrictions or regulations might work for one area of the state but could negatively affect progress in another area. Take into consideration geographical differences and resources needed in specific areas at the beginning of the planning process to ensure success.

HOMEBOUND POPULATION

In the event of a crisis or pandemic, the needs of the homebound population cannot be understated. Reaching the homebound population poses unique challenges. Providing medical care to individuals who are homebound is resource-intensive, especially in rural areas. Providing services in the home requires time, resources, staffing and the means to transport medications/vaccines at appropriate temperatures. In some areas, reaching one individual could take up to two hours, one way.

A sustainable process is needed to ensure homebound patients have access to healthcare, especially in emergency situations. Mobile services and leveraging home care nurses were great strategies for reaching the homebound, especially in areas with limited transportation.

BEST PRACTICES & LESSONS LEARNED - CONTINUED

IMPACT OF LIMITED BROADBAND ACCESS

Many older adults and individuals living in rural areas don't have access to broadband. Many who have broadband access cannot navigate a computer. This makes accessing health information and registering for appointments difficult or impossible.

VACCINE HESITANCY

All hubs experienced unprecedented and surprising vaccine hesitancy in their communities. A significant percentage of the population opposed receiving the vaccination. Vaccine misinformation fed these concerns, as well as generational concerns about "experimental" treatments.

To address concerns about vaccines and other healthcare treatments, word must come from trusted community members/partners and "people who look like me." The hubs had to address ways to reach those who might be hesitant to receive treatments or who didn't have access to reliable information and methods for obtaining and getting to appointments.

UNIVERSAL DATA TOOLS

Data and information sharing are essential for successful collaboration and planning. The vaccine hubs would have preferred that data and information sharing existed at the start to better support planning and strategy development.

Collaborative projects such as this need universal scheduling and data tools for ongoing planning and expansion. While everyone in the collaborative is working toward the same goals, they all need to be aligned with access to necessary information and data. Data can show what resources are needed in specific areas, such as transportation, the number of vaccines or other medical resources and personnel required. A centralized, real-time reporting system and database would help to speed up the planning process and ensure the initiative continues to move forward to serve as many people as equitably as possible.

Working from already established plans for similar initiatives so that efforts do not have to start from scratch when there is no time to spare would be invaluable. Organizations willing to share any knowledge, advice or prior planning initiatives could help to speed up planning and execution.

PREPARATION FOR THE FUTURE

New York providers can use collaboration and leadership lessons learned to address challenges collaboratively in communities, organizations and hospitals — in the event of another crisis or pandemic or to meet everyday healthcare system needs. Through this collaboration, organizations developed a greater understanding of their region, identified helpful and willing partners, developed strategies to overcome various challenges and made networking connections that could be leveraged in the future. Hub regions have continued their collaborative efforts to address other areas of healthcare in their communities.

THE NEED FOR CONTINUED Collaboration Across Health Systems in New York

The COVID-19 crisis highlighted a fragmented healthcare system in New York that was not prepared for a pandemic of this scale. Despite these challenges, New York's healthcare providers, government officials and community volunteers rose to the occasion and worked collaboratively to get millions of New Yorkers vaccinated — a truly remarkable feat.

New Yorkers came together to help each other and serve communities at a time of high need. When challenged with vaccinating as many people as equitably as possible, healthcare leaders came up with unique ideas and executed them. The fight is not over — collaboration and communication must continue so the healthcare system and professionals can be ready for the next crisis. Through vaccination efforts, opportunities were identified for future collaboration. For example, collaboration efforts can build on existing partnerships to continue or develop initiatives to address disease prevention and the social determinants of health. A number of regional vaccine hubs have already begun efforts in diabetes, mental health, maternal health, cancer, substance use, obesity, safe hospital discharge, eating disorders and heart disease.

Community engagement opportunities can build trust and expand communication to address unique needs. The vaccine hub collaborative proved innovative partnerships across healthcare systems and providers are a powerful tool to meet the needs of the population.





NEW YORK CITY



REGION 1 COORDINATOR: Greater New York Hospital Association

Carla Nelson

Associate Vice President Ambulatory Care & Population Health Greater New York Hospital Association Hub Communications Lead

ORGANIZATION AND DEVELOPMENT

Greater New York Hospital Association (GNYHA) reached out to member hospitals that served as vaccinators. Additionally, GNYHA engaged community health centers, community-based organizations, local pharmacies, faithbased organizations and other stakeholders through enhanced communication channels. Key to these efforts was the New York City Department of Health and Mental Hygiene (DOHMH) and the New York City Office of Emergency Management. To ensure that efforts were not duplicated, GNYHA first met daily, then three times weekly with leadership from both agencies.

New York City stakeholders have historically come together in times of crisis. While none of the participants were unexpected, this was an unprecedented communication and implementation effort. The focus was to ensure broad, clear communication across New York City and amplify existing messaging and education from communities and DOHMH.

BEST PRACTICES AND LESSONS LEARNED

COMMUNITY PHARMACIES

Community pharmacies were key to the vaccination effort. GNYHA worked with a significant number of pharmacies to transfer vaccine doses and to connect them to community-based organizations for pop-up community sites. The most public success story was that of Rossi Pharmacy, as seen in <u>The New York Times</u>. Ambar Keluskar, a pharmacist in Brooklyn, took vaccine doses to the homebound population and others who were struggling to find appointments. He vaccinated more than 150 people in one day in an effort to not waste doses.

NEW YORK CITY

Best Practices and Lessons Learned – continued

ONLINE PRESENCE

GNYHA quickly developed a website and newsletter and leveraged its membership and contacts from its Health Information Tool for Empowerment from health and social services organizations throughout New York City, Long Island and Westchester County. GNYHA also created a dedicated email address for members of the public who had vaccine-related questions and an internal team to answer inquiries within 24 hours.

COMMUNICATION AND ORGANIZATION

Communication was significant to GNYHA's effort to inform vaccinators and the public about the changing vaccination rules and requirements. GNYHA ensured that unused vaccine was transferred and reallocated to vaccinators who were able to quickly use the vaccine supply. GNYHA maintained a list of communities, community organizations and pharmacies that wanted pop-up sites and would encourage vaccine supply to go to those areas when possible and feasible.

GNYHA's connections with vaccinators allowed the association to easily assist people seeking second doses when they could not return to their original vaccine location. GNYHA wound down these communications as vaccine availability increased but could easily stand up these processes again in the event of another emergency.



CULTIVATION AND EXECUTION CHALLENGES

COMMUNICATION AND ORGANIZATION

It was vital for GNYHA to coordinate with DOHMH and troubleshoot challenges and concerns together. As vaccines were deployed, several community coalitions emerged to communicate vaccine supply, distribution, reallocation and other concerns. It was important to keep track of the various coalition meetings and assigning a staff member to participate and partner with DOHMH to address concerns was helpful.

As a hospital association, GNYHA was uniquely positioned to call upon its member hospitals to fill gaps in certain neighborhoods and partner with community-based organizations to create pop-up vaccine locations and deliver vaccine education. Another challenge was convening New York City vaccinators, as they were also working to build out large-scale vaccination clinics. Vaccinators were subject to countless rapidly changing requirements, and it was sometimes difficult for them to find time to hear about new rules, ask questions and change practices while they were working to vaccinate New Yorkers.

MISINFORMATION

New York City's vaccine hub covered urban and suburban areas. Specific communities within both types of areas were impacted by a disproportionate number of COVID-19 cases and misinformation. In both, it was critical for community-based organizations, healthcare providers and hospitals to do community outreach and education to ensure that vaccines were equitably reaching everyone.

NEW YORK CITY

CULTIVATION AND EXECUTION: REACHING UNDERSERVED POPULATIONS

New York's community-based organizations undertook significant efforts to reach the diverse communities that were disproportionately affected by COVID-19 to provide vaccine education and address misinformation. Many faith-based organizations stepped up to bring information, and in some cases pop-up vaccine clinics, to worshipers. Many GNYHA member hospitals reached out to community-based organizations to facilitate scheduling and travel to vaccine appointments in underserved communities and communities of color.

Some hospitals reserved vaccine appointments specifically for community-based organizations that scheduled on behalf of their clients, which helped address the digital divide when it came to electronic scheduling. DOHMH established a mobile vaccine program for individuals who were homebound or otherwise needed to be vaccinated at home.

Many of the vaccine distribution challenges took place in the initial weeks when supply was limited, appointment scheduling was complex and driven by technology and vaccinators were standing up locations amid changing rules. This required effective communication to ensure that communities understood when and where they could be vaccinated, where direct assistance with vaccine scheduling could be provided and the availability to have vaccinator questions answered about the most recent requirements.

As vaccine supply grew, efforts shifted to ensuring that doses were reaching under-vaccinated communities. Community-based and faithbased organizations were critical to this effort, and many hospitals partnered with other organizations for broader community reach.

SUSTAINABLE COLLABORATION AND FUTURE OPPORTUNITIES

Hospitals are accustomed to community collaborations, many of which were catalyzed by the previous iteration of the 1115 Medicaid Waiver program, the Delivery System Reform Incentive Payment program. As New York looks to its next waiver, which aims to develop social determinants of health networks to address health-related social needs, hospital/community collaborations will be critical to refer patients, particularly those with higher medical and social risks, to community partners who can address social needs.

The vaccine effort helped GNYHA and its member hospitals build on existing partnerships with community-based organizations and connect with new partners. Some of these partnerships have continued to support high-risk patients and people with social needs. Others may further build with the anticipated 1115 Medicaid waiver program.

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REGION 2 — COORDINATOR: NORTHWELL HEALTH Brian O'Neill

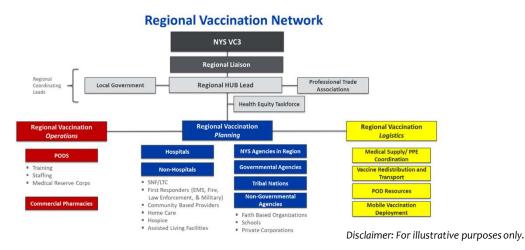
Vice President, Crisis Management Northwell Health Hub Coordination Center Logistics

ORGANIZATION AND DEVELOPMENT

Northwell Health separated the vaccine program into a dedicated vaccine coordination center reporting to the health system's emergency operations center. This vaccination coordination center provided oversight and management of the regional hub and was structured with clinical operations, logistics and planning divisions.

The clinical operations division was divided into regions for Nassau and Suffolk counties, then divided into hospitals, skilled nursing facilities and other clinical partners. The planning division was divided into a data team and non-clinical partners (schools, healthcare associations, faith-based programs, governmental entities, chambers of commerce, representatives from the Tribal Nations and other community-based entities).

At the onset of the vaccination program, Northwell expected primary care groups to be active participants; however, many offices on Long Island were either only seeing patients through telehealth, closed or were hesitant to participate because of the vaccine storage requirements. The faith-based community leaders wanted to participate early on and were extremely supportive, offering resources, access points and guidance throughout the rollout. The unexpected participants were part of the Health Equity Task Force (HETF).



BEST PRACTICES AND LESSONS Learned

HEALTH EQUITY TASK FORCE

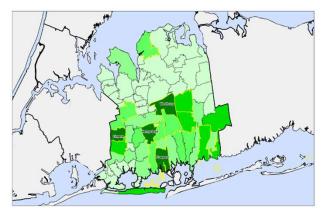
The HETF is a best practice. Northwell has continued to meet with this group regularly and has transitioned its focus from COVID-19 to additional disease strategies.

EARLY COORDINATION

Northwell Health has reviewed the hub's successes, challenges, and areas for improvement. As the vaccine distribution began, all of the hub's worked tirelessly on rapid deployment. The early coordination of community partners has been identified as an area for improvement. Collaboration with the Office for People with Developmental Disabilities (OPWDD), homebound agencies, and closer coordination with state regional staff of DOH and Department of Homeland Security and Emergency Services would have streamlined the vaccine rollout for these vulnerable groups.

DATA DRIVEN STRATEGY

Northwell Health's early success in vaccine distribution was driven by the constant review of data. The Vaccination Coordination Center used actual COVID positivity rates by zip code, CDC's Social Vulnerability Index, and vaccination compliance rates to identify communities that needed vaccine and locations where all residents could easily access a point of distribution. Together with their Long Island municipal partners, Northwell Health was able to rapidly deploy points of dispensing and vaccines in communities hit the most by COVID.



Disclaimer: For illustrative purposes only.

	Nassau County	Suffolk County	Long Island Region
Total Population	1,356,509	1,483,832	2,840,341
Clinically Excluded Population Under 16	(257,123)	(277,183)	(534,306)
Total Eligible Population Requiring Vaccine	1,099,386	1,206,649	2,306,035
Eligible Population to receive @ 75%	824,540	904,987	1,729,527
Phase 1A Prioritized/High Risk Population			
Vaccinated by 1/31/21	(125,807)	(113,589)	(239,396)
Balance of Population to be Vaccinated	698,733	791,398	1,490,131
Total Doses Required (Population x2)	1,397,466	1,582,796	2,980,262
Vaccines per Month (5 months)	279,493	316,559	596,052
Vaccines per Week (20 weeks)	65,215	73,864	139,079
Vaccines per Day (150 days)	9,316	10,552	19,868

Figure 2: Vaccination of 75% of Long Island's Eligible Population

Disclaimer: For illustrative purposes only.

CULTIVATION AND EXECUTION CHALLENGES

STAFFING AND INCLUSION

The idea for the hub model was based on the original New York State Bioterrorism Regional Resource Center developed in 2002 by Dennis Whalen, Senior Vice President, State Government Affairs, Northwell Health, so the hospitals in the area were familiar with the concept. It was challenging for hospitals to staff regional vaccination programs in the community, as they were simultaneously managing COVID-19 surges, high staff absenteeism and significant financial struggles. Some hospitals were working directly with the state or local health department and did not include the hub in the addresses or locations of their points of dispensing, limiting situational awareness.

In the future, Northwell suggested ensuring state and local departments of health (DOH) plans include this conceptual model with clear objectives, scope, strategies and resource recommendations by region, so hubs are not a foreign concept when it is game time.

RURAL AND URBAN AREAS

The hubs had to consider access to vaccination as a priority regardless of the area served. The farming communities on Long Island's east end required a different access strategy than apartment complexes in Hempstead. The strategy for rural communities involved fewer vaccines, with mobile health units or teams set up within farming programs. This was where the HETF was of tremendous assistance; the Latino Advocacy Organization of Eastern Long Island, a member of the HETF, assisted with reaching out to their members and obtaining strategic locations for distribution.

CULTIVATION AND EXECUTION: REACHING UNDERSERVED POPULATIONS

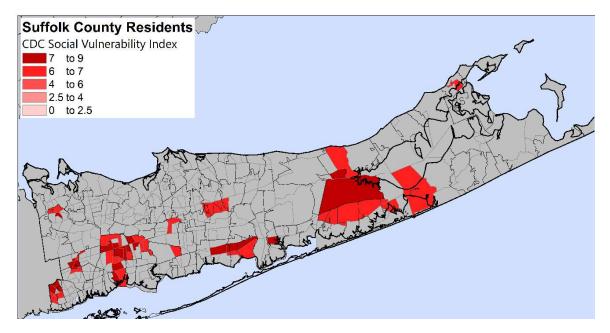
The faith-based community leadership were excellent partners and assisted with access strategies to minority communities. The Northwell Health house calls program developed a homebound vaccination strategy that delivered both vaccines and antibody infusions. Regional coordination with OPWDD and other individuals with disabilities was recognized as an area that needs improvement — it should be clear who coordinates what program before another crisis occurs.

... the group has expanded its focus to address other health priorities exacerbated by COVID-19, such as mental health, cancer, diabetes, obesity and maternal health.

SUSTAINABLE COLLABORATION AND FUTURE OPPORTUNITIES

The COVID-19 pandemic taught Northwell the importance of trust, relationships and creating a great partnership ecosystem with a group of organizations that can work together to address public health emergencies. The health system could not have made the advancements it made without these partnerships with trusted government, community, faith-based and tribal leaders.

The establishment of Northwell's HETF to ensure the equitable distribution of the vaccine was such a success that the group has expanded its focus to address other health priorities exacerbated by COVID-19, such as mental health, cancer, diabetes, obesity and maternal health.



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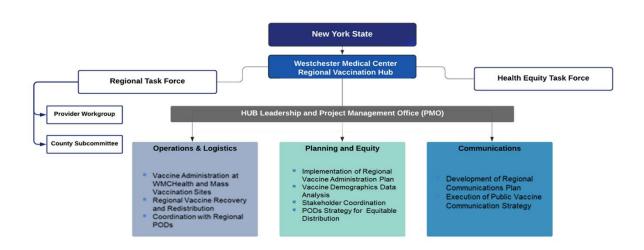


REGION 3 - COORDINATOR: WESTCHESTER MEDICAL CENTER Jean-Paul Vallet

Vice President, Network Planning Westchester Medical Center Health Executive Leader, Hub Project Management

ORGANIZATION AND DEVELOPMENT

The Mid-Hudson Valley (MHV) hub leadership saw its primary role as providers of vaccine information to all healthcare providers and stakeholders within the region and as communicators of questions, concerns and feedback from hub providers to DOH and other state officials. Organizationally, several steps were taken beginning with the hub's organizational structure, led by the project management office.



With regard to the hub participants, five main groups were created, each focusing on specific stakeholders within the region/hub.

	Regional Taskforce	482 Members	 Hospitals, Physician Practices FQHCs, County Health Departments NYS Staff and Regional Liaison
۵	Provider Workgroup	453 Members	 Physician Practices; Long Term Care Associations, FQHCs, Hospitals
稟	Health Equity Taskforce	78 Members	 Community Based Organizations including Faith-based Community Partners, FQHC, OMH, OASAS, OPWDD
*	County Executive Subgroup	29 Members	 County Executives and Local Health Departments (LHDs)
<u>~</u>	Project Management Workgroup	19 Members	WMCHealth Leadership Including HUB Project Management Office

These groups became the primary, regular channels for communicating throughout the hub. Each group had a standing weekly call and covered information areas including the amount of weekly vaccine allocation to the hub; new or updated state and/or federal guidance and; vaccine site updates (mass vaccine sites or points of dispensing within the region). PowerPoint slides were developed each week to present this and any other relevant information.

The MHV hub experienced enthusiastic and dedicated support and participation from almost all stakeholders within the region. The most unexpected participants were religious organizations including the Orthodox Jewish community and various Black churches/congregations that have traditionally expressed resistance or hesitancy toward vaccines. Despite this, these groups became active participants in the hub and vaccination effort.

One of the biggest surprises was the degree to which local and regional competitors were able to put aside competitive concerns and work closely together for a sustained period of time to achieve a single, common goal. The MHV region includes eight counties and many hospitals and physician groups that vie for the same market. The COVID-19 crisis caused a breakdown of these competitive walls and providers willingly worked together.

BEST PRACTICES AND LESSONS LEARNED

VACCINE DIRECTORY

The hub real-time directory was made available to all residents via the Westchester Medical Center (WMC) Health website which identified vaccination locations. The directory included a list and map of the region and was updated weekly so that residents could easily identify providers who had received vaccine allocations for the week. Using the computer mouse, community members could hover over the provider shown on the map and receive that provider's contact information to easily contact them for availability and to schedule an appointment.

ORGANIZATION EMAIL LISTS

Specific email lists were created to ensure that all hub participants and stakeholders received relevant and timely information. There were separate lists for each main group in addition to lists for specific groups. The MHV hub created a dedicated email address to correspond with hub participants. It was a central point of contact for participants with questions and was used by the hub staff to disseminate real-time information regarding DOH guidance, regulatory information and best practices.

POINTS OF CONTACT

To facilitate communication, project management office staff found it very helpful to identify primary points of contact at each partner organization who could quickly respond and serve as a resource for their organization.

REDISTRIBUTION

Early in the vaccination phase of the COVID-19 crisis, the effort to redistribute vaccine doses throughout the hub was problematic, due mostly to the excessive distribution and reporting oversight and requirements. The hub team was responsible for coordinating and often carrying out the redistribution effort; however, it had fairly restricted access to vaccine doses. This situation improved over time.

CULTIVATION AND EXECUTION CHALLENGES

COMPETING PRIORITIES

The main challenge was that many participants had competing priorities and represented different interests across the region. For example, physician and provider groups were concerned with receiving vaccine doses to vaccinate patients, whereas churches and community organizations were most concerned with current guidance and establishing points of dispensing at their facilities. To help address this issue, project management office staff undertook efforts to demonstrate that the collaborative hub model was optimal in dealing with the unprecedented COVID-19 crisis. Efforts included one-on-one calls with various participants or smaller groups of hub participants to address their specific priorities while encouraging them to actively participate in the overall hub process.

COMMUNICATION

A primary challenge was the lack of current or accurate contact information for all hub participants. It took a considerable amount of "grunt work" to compile accurate contact lists for members of the different workgroups and for stakeholders in general. Regular follow-up has been helpful in maintaining accurate contact lists to facilitate communication.

RURAL

EXECUTION

There was rarely enough qualified staff available in rural areas to distribute vaccines and/or to stand up, operationalize and staff points of dispensing on an ongoing basis. The COVID-19 crisis required an all-hands-on-deck approach and many of the rural areas in the MHV hub could not adequately respond.

TRANSPORTATION

The MHV hub region includes some large rural areas, especially in Sullivan County, northwest Orange County and western Ulster County. The transport and delivery of vaccines were difficult in these remote areas and presented overall challenges to accessing rural populations.

ACCESS

Given the large areas and transportation issues, more points of dispensing were required to provide access to vaccines for fewer people. In addition, the lower socio-economic levels of the population meant that many people did not have cars and faced challenges with transportation to the points of dispensing.

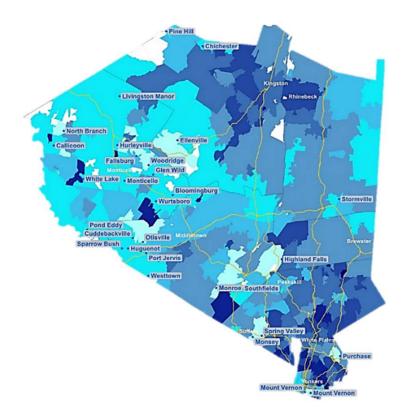
CULTIVATION AND EXECUTION: REACHING UNDERSERVED COMMUNITIES

The primary effort to reach minorities and diverse communities was through the health equity task force (HETF). This group had nearly 80 participants, met virtually every week and was chaired by a member of the hub project management office. The meetings had a regular agenda that included information on new or updated guidance, location of points of dispensing, other vaccine access matters and weekly hub vaccine allocation by provider type and vaccination rates. The HETF also provided a forum in which to receive feedback from participants on challenges faced by various minority populations.

The MHV hub implemented a variety of tactics to reach minority populations, including:

MAPPING

A combination of ZIP code-level population mapping software and vaccine administration data enabled the microtargeting of locations with the lowest vaccination rates within the Mid-Hudson Valley. Color-coded maps easily displayed areas of lower vaccination rates and provided an opportunity to target these areas for pop-up sites and pursue community outreach efforts. A sample map is presented below.



Cultivation and Execution: Reaching Underserved Communities - continued

MOBILE VACCINE REGISTRATION

The MHV hub used a large van to travel to different locations and engage underserved populations. Vaccine information and educational materials were distributed and 15 vaccine appointment registration events were held in partnership with the HETF, resulting in several hundred scheduled appointments.

211 HELPLINE PARTNERSHIP

The MHV hub partnered with the United Way's 211 Call Center. This service provided timely hub-specific COVID-19 and vaccine information on a 24/7 basis in more than 200 languages. Over 5,300 calls were answered as a result of this service.

COMMUNITY CONVERSATIONS

Community engagement efforts were made to provide educational materials, answer questions and address overall vaccine hesitancy. For example, multiple "Walk the Line" vaccine education community conversation events were held at outdoor food distribution sites. An additional 25 virtual education events were held throughout the hub region.

Over 5,300 calls were answered as a result of this service.

FOREIGN LANGUAGES

Information was made available in multiple foreign languages and disseminated via social media, handouts and advertisements.

The MHV hub also worked to specifically address different populations:

HOMEBOUND

The MHV hub partnered with county governments, emergency medical services companies and home care services organizations to identify homebound residents and provide access to vaccines.

INTELLECTUAL DISABILITIES

The hub partnered with organizations that care for this patient population (such as the Center for Discovery in Sullivan County) to coordinate a pop-up vaccination site at their location or arrange transportation for residents to be vaccinated at an existing site.

MINORITY POPULATIONS

The hub partnered with Black and Hispanic churches and Jewish synagogues to provide information and vaccine access.

MENTAL ILLNESS

The MHV hub partnered with mental health providers and county agencies that treat this population to arrange for vaccines to be administered on-site or at dedicated times and locations.

Cultivation and Execution: Reaching Underserved Communities - continued

STUDENTS

College-age students were a challenge as many were not New York state residents, yet still wanted to be vaccinated. The MHV hub partnered with local colleges to either coordinate a pop-up vaccination site on campus or arrange transportation for students to get vaccinated at existing points of dispensing.

NURSING HOMES

The hub partnered with nursing home administrators and staff to ensure that residents had access to vaccines and maintained ongoing outreach efforts until all residents had been vaccinated, including coordinating on-site delivery of vaccine doses.

SUSTAINABLE COLLABORATION AND FUTURE OPPORTUNITIES

Westchester Medical Center, located in Valhalla, New York is the flagship hospital of the WMC Health Network made up of 1,700 beds and 9 hospitals spread over 7 campuses. WMC serves as the primary trauma center for the eight-county Mid-Hudson Region and receives a significant number of transfers from community hospitals throughout the region.

From a regional collaboration standpoint, the COVID-19 pandemic pushed WMC to view healthcare differently. In the future, rather than having smaller community hospitals utilize non-patient care areas to treat patients or be forced to cease elective services as done during COVID-19, WMC sees the benefit in creating and maintaining a more regionalized approach, with the ability to flex up to provide the capacity the region needs so other community hospitals can continue providing their regular services without interruption.

WMC has begun to pursue the development of a fivefloor critical care tower on its campus that will provide an additional 128 intensive care unit-capable beds to help support needs throughout the region.

The MHV hub efforts have resulted in ongoing partnerships with regional providers and stakeholders, including with county health departments, community organizations, nursing homes and physician groups. This has resulted in improved communication and understanding of available healthcare resources and helped identify areas of improvement. Communication with the HETF has continued regarding issues beyond vaccinations to help identify challenges and solutions for minority and underserved populations. The MHV hub efforts have resulted in ongoing partnerships with regional providers and stakeholders...



REGION 4 — COORDINATOR: ALBANY MEDICAL CENTER Ruth Leslie

Director, Joint Commission Accreditation and Certification Hub Regional Planning Lead, Capital Region Vaccine Network

ORGANIZATION AND DEVELOPMENT

The Department of Health's NYS Regional Vaccination Implementation Plan provided the guiding principles for planning from which the hub could determine the basic required structure and some of the activities for which it was responsible. These include supporting vaccination by the hub and other vaccinators, coordinating the health equity and regional advisory task forces, addressing vaccine hesitancy and creating the Capital Region Vaccine Network (CRVN). The CRVN needed to be scalable, built quickly, and include a wide variety of vaccinators to assure access.

Faced with this enormous task, the hub hospital turned immediately to eight local health departments for their counsel and expertise. Within days of accepting the hub assignment from DOH, Albany Medical Center was actively meeting with the local health departments daily to share information, obtain point of dispensing expertise and strategize the next steps.

Capital Region independent pharmacies and the Center for Disability Services were unexpected vaccination partners in the Capital Region. The independent pharmacies utilized their role as trusted neighborhood healthcare providers to combat vaccine hesitancy and bring vaccines into the community, to homes and to congregate living locations. The Center for Disability Services mobilized its small group of registered nurses to provide vaccinations at the center and in congregate settings for people with intellectual and developmental disabilities. All CRVN participants worked to re-distribute vaccines to these vaccination partners in order to vaccinate people in their own neighborhoods, homes, or in the case of the Center, in a setting that cares for this specialized population.

BEST PRACTICES AND LESSONS LEARNED

DAILY PLANNING CALLS

Whether sharing vaccination best practices, troubleshooting scheduling issues, managing public expectations or developing criteria for community points of dispensing, the daily planning call was the best place to identify and share lessons learned and best practices.

PROACTIVITY

While the ability to vaccinate was restricted to hospitals only initially, the CRVN identified and added vaccination partners to a daily planning meeting quickly to keep pace with the expansion of eligible populations for vaccination. For example, the CRVN added a representative of one of the Capital District's largest primary care provider groups (non-hospital) in anticipation of the practice becoming a direct recipient of the vaccine. While that did not occur for months, this representative worked with the CRVN to coordinate the re-distribution of the vaccine to practices within the group, increasing the hub's vaccination locations and improving access.

SCHEDULING

Investing in a secure, dependable scheduling tool that could be scaled to accommodate the whole region or state would have been a game changer if it were available at the beginning of the vaccination effort. Valuable time and effort were spent trying to manage the limitations of the clinical data management system. Most of the CRVN vaccinators ended up adopting their own scheduling systems. As a group, they worked toward a universal tool alongside the Alliance for Better Health, but the solution came too late to assist vaccinators in managing their larger points of dispensing. As a result, each vaccinator stayed with their own scheduling solutions for the duration of the vaccination effort.

VACCINE COMPETITION AND TECHNOLOGY Literacy

From the first day the vaccine became available and lasting through the first couple of months of the vaccine rollout, a surprising dynamic was created when vaccine demand far exceeded availability. Competition for vaccine appointments was fierce and the limitations of clinical data management systems created a new unintended disparity for receipt of the vaccine – those who had access to computers and were computer literate had an edge in getting vaccine appointments over those who didn't.

CULTIVATION AND EXECUTION Challenges

ELIGIBILITY AND COMMUNICATION

For the first three months of the project, changes to vaccination eligibility criteria were weekly, daily, and at times, hourly. As with any public health crisis, the information changed in real-time, making communication essential to success. To address this, Albany Medical Center's planning group met seven days a week to react to the latest guidance, troubleshoot issues and anticipate the next moves. Meeting frequency decreased as the vaccine became more accessible and real-time communication needs decreased.



Cultivation and Execution Challenges - CONTINUED

MULTIPLE GROUPS TO MANAGE

Standing up the CRVN, the HETF and the Regional Advisory Task Force (RATF) concurrently was challenging. While the CRVN was composed of providers for the purposes of vaccination and the HETF members came together initially using the former delivery system reform incentive payment Performing Provider System framework, the RATF was a more nebulous group to assemble. The RATF was a large group of stakeholders and meetings were largely informational. Specific requests for assistance were handled outside of this committee, so the RATF largely served as a vehicle for communication with regional stakeholders.

VACCINE HESITANCY

The depth and strength of vaccine hesitancy were unprecedented and surprising. High percentages of the population were vehemently opposed to being vaccinated, notwithstanding prior successful vaccination for childhood diseases. Vaccine misinformation fed these concerns, as well as generational concerns about "experimental" treatments. For the vaccine-hesitant, educational campaigns did not seem particularly impactful. Only fears of job or social loss seemed to persuade the most hesitant individuals.

URBAN

It was especially important in urban areas to engage representatives from the different populations living and working in those communities. Smaller points of dispensing were generally more acceptable for vaccination within urban communities. In addition, inviting vaccinators who represented the community was a successful strategy. Engaging community leaders and holding points of dispensing in trusted community locations such as churches and schools also worked. Lack of access to wi-fi or electronic devices made scheduling challenging for some urban communities.

RURAL

When vaccine demand was at its highest, people were traveling out of their communities and seeking vaccination in other locations, including in rural environments. This phenomenon reduced the capacity in those rural communities to access vaccination close to home. Lack of transportation was a barrier to vaccination for some rural communities. Overall, there were fewer locations that offered vaccines to rural communities, challenging rural residents to travel outside of their communities to get vaccinated, if they were able.

CULTIVATION AND EXECUTION: REACHING UNDERSERVED POPULATIONS

First, the CRVN used various sources of data to identify ZIP codes and specific neighborhoods within those ZIP codes with low social vulnerability indexes, low vaccination rates or both. Municipal employees and county public health workers often provided local knowledge of underserved populations that needed special focus. Vaccine outreach efforts to increase vaccine acceptance and combat vaccine hesitancy were targeted in these areas.

Eventually, the CRVN partnered with SUNY Albany to create an interactive, web-based map of vaccination rates by ZIP code, making areas with lower vaccination rates easier to identify. As populations became eligible, the CRVN convened workgroups with stakeholders to address the needs of special populations. Stakeholders included New York state agency representatives, home care associations, community organizations and the Capital District Transportation Authority. These workgroups convened, collaborated and disbanded as vaccination goals were achieved.

Examples include:

- Working with the HETF members and other community groups, the CRVN utilized churches, schools and other gathering places in neighborhoods with low vaccination rates to encourage vaccination acceptance.
- The CRVN worked with Capital District Latinos to provide vaccination in a small neighborhood setting, using administrative help and vaccinators fluent in Spanish. The CRVN helped Capital District Latinos obtain consent forms and educational materials in Spanish to improve their understanding of the process and vaccination rates. Capital District Latinos directly vaccinated 1,724 people at 41 clinics and referred 527 others to different vaccinators.
- The CRVN worked very closely with the Center for Disability Services and New York State Industries for the
 Disabled to provide vaccines for over 5,000 intellectually and developmentally disabled individuals living in
 the community and in congregate settings. For many reasons, mass vaccination sites were not appropriate
 for many of these high-risk individuals. The Center for Disability Services and New York State Industries for
 the Disabled worked together to vaccinate individuals with intellectual and developmental disabilities in
 settings that were best suited to handle their special needs.
- The CRVN collaborated with independent pharmacies, retail pharmacies and county mass vaccination sites to
 either transport older adults to vaccination sites or assign pharmacies to vaccinate residents of senior
 housing buildings. While many older adults were able to obtain vaccination by going to mass vaccination
 sites, those who live in congregate locations were able to be vaccinated without leaving their residences.
 Capital district transportation authority offered transportation to these community members free of charge.

SUSTAINABLE COLLABORATION AND FUTURE OPPORTUNITIES

This experience has laid the foundation for future collaborations, whether for public health response or for routine healthcare issues common to all providers. When DOH gave the approval to disband the hub structure in June 2021, the CRVN continued weekly meetings for an additional eight months. As vaccination continued and vaccine redistribution was still an active and ongoing activity, the group continued to meet to share information and vaccine. The group used the forum to collaborate with colleagues in their own counties and within the eight-county Capital Region in a way that was not envisioned prior to the COVID -19 vaccine rollout.

The CRVN has remained an active group to this day; making extra vaccines available or checking with vaccination providers across the region for excess prior to ordering additional supplies.

The type of crosscollaborative workgroups used during the vaccine rollout period could be used successfully to target a multitude of complex healthcare issues. When the Capital Region hub released the HETF from future meetings, the community groups making up the task force requested that the group continue to meet but shift the focus from vaccine equity and hesitancy to a wider range of social issues. Not only has the group continued to meet, but Albany Medical Center created a new position, the Director of Community Engagement, to direct the work of this group. This role acts as a liaison with the community groups and builds upon good will and collaboration solidified during the vaccination effort. Together, members have worked on building trust, increasing access to healthcare and addressing social determinants of health.

The type of cross-collaborative workgroups used during the vaccine rollout period could be used successfully to target a multitude of complex healthcare issues. Over the past year, it has become increasingly difficult to discharge patients who are eligible for skilled nursing placement into the community. Without a community bed or a family that can manage the patient safely at home, the patient must stay in the hospital until safe discharge can be arranged, driving up the average length of stay and consuming scarce resources.

Similar issues exist for patients with chronic mental health and intellectual and/or developmental disabilities. Workgroups that involve stakeholders representing all aspects of the discharge conundrum could be effective in identifying barriers and implementing short, medium and long-term solutions that address the issues. One barrier to this approach is the lack of singular focus that these workgroups had during the vaccine rollout. Unified by the common goal of vaccination, workgroups were efficient and readily solved problems. For workgroups to be successful in the post-COVID-19 period, their goals and methods must align, a feat that is very challenging to achieve and maintain.



REGION 5 — COORDINATOR: Champlain Valley Physicians Hospital

Hope Plavin Consultant Adirondack Health Institute Hub Planning, Drafting and Communications

Wouter Rietsema

Vice President, Champlain Valley Physicians Hospital Hub Leader

ORGANIZATION AND DEVELOPMENT

The most important initial outreach was to the local health department directors who had concerns with a hospital leading the vaccination efforts, given that these activities are historically public health functions and not acute care hospital functions. These initial calls and subsequent reliance on local health department plans as the basis of the regional plan helped reassure and pave the way to great collaboration.

Additional personal outreach and communications to hospitals, federally qualified health centers and regional pharmacy providers that leveraged established relationships in the North Country resulted in a cohesive and comprehensive group that actively participated in individual and group discussions on an ongoing basis. Regularly scheduled calls were established for communications and updates, and all members were afforded access to a shared information resource, BaseCamp, to ensure communications were not limited to the calls.

Smaller independent pharmacies played a significant and not initially anticipated role in ensuring access to vaccines. In many communities, these pharmacies are a healthcare hub. In addition, the regional United Ways played a significant role in helping to organize and encourage the participation of multiple social care providers.

BEST PRACTICES AND LESSONS LEARNED

UTILIZING COMMUNITY ORGANIZATIONS

The hospital found benefit in using the individuals and organizations with the knowledge, understanding and connections to the specific populations it wanted to reach. The local health departments had long-term connections to migrant labor sites in each region, and with small community-based organizations that have trusted relationships with smaller sub-communities. Organizing these entities so they can lean on and learn from one another was extremely helpful and led to longer-term partnerships that have since continued today. Champlain Valley Physicians Hospital (CVPH) was fortunate to have an extensive network of community-based partners willing and able to lend their expertise, experience and connections to ensure the engagement of all populations, including those hardest to reach and most difficult to engage.

MAPPING AS A TOOL

Maps were one of the most important and useful tools developed and shared during the pandemic. Maps provided the information needed to efficiently distribute often-limited vaccine supplies, such as population by age and gender, location of vaccine sites and location of people in need of vaccine. While mapping is not a new tool to the accountable care organization it was a new tool to the community at large. The expert staff at the accountable care organization were able to use multiple data sets to create regional maps that detailed the following on a real-time basis:

Maps were one of the most important and useful tools developed and shared during the pandemic.

- number of new cases/100,000;
- points of distribution;
- number of persons vaccinated initial, two doses and boosted;
- enrolled vaccine providers;
- population within a five-mile drive of a vaccine site;
- pharmacies;
- hospitals;
- low-income housing sites;
- social vulnerability index; and
- bus lines.

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Based on its own informal post-public health emergency survey CVPH learned and emphasized the following in the event of future such emergencies:

DIRECT COMMUNICATION

While general messaging was important, there was great value in direct communication with vulnerable individuals. Direct communication was more effective than mass media. General messaging laid the groundwork, but targeted and tailored follow-up might have been more effective. Increasing or improving direct contact (more boots on the ground) with the individuals CVPH considered vulnerable would have been beneficial.

Best Practices and Lessons Learned - continued

LOCAL POLITICAL SUPPORT

Having more local public officials on board with messaging would have helped CVPH's efforts. The health system had a state liaison to county governments but informed rather than leveraged these bodies. Counties with support from local government leaders had more success overall.

DATA TRACKING

Having measurable objectives would have helped to manage and direct resources and track the effectiveness of outreach efforts. Available data were never granular enough to tell if CVPH's public service announcements and other outreach efforts made a difference in smaller minority and diverse communities. Vaccination data from the regional health information organizations improved this situation somewhat. Racial information was optional for those signing up for a vaccine; it would have been better if it was required.

MOBILE RESOURCES

More and consistent mobile vaccination resources would have helped tremendously, especially in neighborhoods with lower-income populations who could not travel and lacked good vaccine information.

LOCAL AND REGIONAL COLLABORATIVE VALUE

There was an acknowledgment of the tremendous value of building effective regional coalitions that are cooperative, cohesive and get things accomplished. CVPH came to appreciate the role and value of public health departments and the need to invest more in their efforts.

INCENTIVES

Incentives didn't make much of a difference in getting people vaccinated. Convenience seemed to be more of a driver.

CULTIVATION AND EXECUTION CHALLENGES

The CVPH team members continually reminded themselves that as acute care providers, they had no real authority, power or knowledge related to mass vaccination principles. Therefore, their ability to influence behavior rested on respect, empathy and open and direct communication. The team continually acknowledged and leveraged the experience of the local health departments and emergency preparedness staff with the expertise to respond to the public health emergency. This led to the trust among all participants needed to execute this massive endeavor with no new money or resources.

Given the urgency of the emergency coupled with a desire to participate, assist and utilize many years of planning and expertise, the region was fortunate to have had no major challenges in bringing the group together. This speaks to a long history of collaboration throughout the region and of partners willing and able to work together to achieve a common goal.

Cultivation and Execution Challenges - Continued

RURAL

Rural challenges included transportation, a widely dispersed population and information-sharing issues for those in the region without broadband. The state mass vaccination site in Plattsburgh only allowed vehicle traffic. People without a vehicle were turned away initially. State partners wanting to do special "pop-up" events seemed unaware of the distances that people might need to travel and how those distances posed a significant barrier. These distances were equally a challenge for local health departments that did not have the resources to set up points of dispensing in smaller towns and villages.

CULTIVATION AND EXECUTION: REACHING UNDERSERVED POPULATIONS

The CVPH-led initiative included the development of a health equity task force composed of social care providers from throughout the region. Using the HETF as an organizing vehicle, CVPH targeted the following groups for unique or distinct messaging: individuals with disabilities; religious organizations; not-for-profit organizations; people in need/vulnerable due to poverty and other issues such as mental illness, individuals experiencing homelessness, individuals with substance use, children aged five to 11, older adults and Black, indigenous people and people of color.

This group worked together to create public service announcements for radio and television showcasing those with disabilities who had been vaccinated. These highlighted the importance of vaccination to protect that population and reassure that individuals were not harmed by the vaccine. The CVPH hub also:

- developed informational flyers for a six-steps campaign (take the six steps to staying healthy);
- created a website that housed all PSAs and flyers;
- emailed groups for the government (county, towns, villages), community-based organizations and religious organizations;
- posted Facebook ads;
- developed brochures;
- attended local events to share information;
- made phone calls to more than 600 people with disabilities; and
- created a hotline for physicians to ensure prompt response to any questions they might have related to vaccine access, targeted priority populations, etc.

CVPH made a focused attempt to target communications and outreach to best reach vulnerable populations with the hope and goal of high rates of vaccination.

In the North Country there are no real dominant or clustered minority, diverse or otherwise "equity challenged" populations. One exception would be the St. Regis Mohawk tribe, which elected to handle its own vaccination efforts. The other exception was the Amish community, which largely refused vaccination efforts. Local health departments had to step away from efforts to avoid straining their contact with these groups, which is needed to achieve other public health aims. Otherwise, most members of minority or diverse populations are scattered and not collectives or communities that can be accessed as a whole. The best tools were the public service announcements featuring people who are minorities and leveraging community groups serving "micro populations" through the United Ways and the HETF.



SUSTAINABLE COLLABORATION AND FUTURE Opportunities

Many of the novel collaborative efforts initiated during the early days of the pandemic have remained. Community and clinical providers have continued to make phone calls to those with disabilities, CVPH continued to run public service announcements, distributed flyers, sent emails, operated a doctor hotline and promoted telehealth. Other ideas and concepts developed should be funded, such as mobile or pop-up clinics, to bring services to the areas where the most vulnerable people live.

All involved highly valued the hub collaborative model to ensure access to care and treatment. The North Country region, like many, has continued to face challenges engaging vulnerable populations in developing plans for emergency preparedness that consider the unique needs of those who are adversely affected by large events. The hub allowed a more diverse set of public health, clinical and social support providers to work collaboratively, share resources and lessons learned and deliver better and more effective care and services as a community.

Collaborations such as those developed for the vaccine response are likely to be effective in other arenas. The regional accountable care organization has shifted to focus efforts on diabetes and most of the region's local health departments have preventing chronic disease as one of their priorities on their county health assessments. CVPH has started discussions about whether it could create a regional communications collaborative with public health and medical messaging in this area, incorporating managed care organizations.

For local health departments that are stretched thin, this could provide a significant benefit. The region already has a collaborative funded with a three-year Health Resources and Services Administration (HRSA) grant around care transitions and was just awarded a follow-up HRSA grant around workforce to support care management. A regional approach incorporating providers, payers and local health departments might be successful at attracting other grant funding in other areas.

The hub allowed a more diverse set of public health, clinical and social support providers to work collaboratively, share resources and lessons learned and deliver better and more effective care and services as a community.

MOHAWK VALLEY



REGION 6 — COORDINATOR: MOHAWK VALLEY MEDICAL CENTER Lisa Volo

Director, Population Health Mohawk Valley Health System Hub Planning Team Lead

ORGANIZATION AND DEVELOPMENT

Mohawk Valley Health System's (MVHS) senior leadership identified key hub leaders in the following areas: hub lead, health equity task force lead, planning lead, logistics lead, operational lead, emergency medical services lead and subject matter experts within MVHS to support regional partners. Subject matter experts included clinical, infection prevention, supply chain, registration, statistical, pharmacy and information technology leaders.

To develop a regional plan, manage vaccine distributions/redistributions and provide overall leadership of the hub functions, MVHS established a regional task force comprised of community health departments, elected officials, health systems and provider organizations. To execute, the MVHS operations lead facilitated the Mohawk Valley Hub operations task force, a committee of more than 150 vaccinating provider organizations. The task force was responsible for distributing and deciphering vaccine guidance, developing and executing a regional point of dispensing plan and working directly with the HETF to ensure equitable distribution of vaccines to minority communities.

Faith-based leaders, community-based organizations, home care organizations and ambulance corps were the keys to success. Faith-based leaders were essential in developing points of dispensing locations for minority communities and addressing vaccine hesitancy. Home care organizations and ambulance corps served as mobile units with significant flexibility to reach minority, rural and homebound individuals.

The deep and trusting relationships MVHS built with stakeholders was a pleasant surprise. This was true of both community members from minority communities as well as the local health departments, many of whom MVHS had no prior contact. This initiative showed what a committed group of people can do together, knowing that any actions taken will impact the community. Many of these stakeholders continue to rely on the hub for assistance in all areas of community health.

MOHAWK VALLEY

BEST PRACTICES AND LESSONS LEARNED

GRASSROOTS ACTION BY THE HETF

The HETF was the true source of success through the active facilitation of grassroots action. Faith community members reached out to members of the HETF, who connected with MVHS to set up community-based points of dispensing. The Utica and Rome branches of the National Association for the Advancement of Colored People (NAACP) held town halls for which they asked for experts, etc. This entire initiative was driven by each member of the HETF.

MOBILIZE RESOURCES

A key takeaway for healthcare was that services needed to be taken to the community, particularly underrepresented and minority communities. The hub needed to educate, screen and provide access to services where community members live, play, work and worship. MVHS used ambulance partners and community paramedicine to expand the resources available to the community.

EXPANDED PARTNERSHIPS

Expanding partnerships with other healthcare providers such as home care providers, ambulance corps and federally qualified healthcare centers earlier in the planning process would have been helpful.

CULTIVATION AND EXECUTION CHALLENGES

LIMITED RESOURCES

Provider resources to address rural areas were more limited and difficult to obtain. Hubs had limited access to data to help target these limited resources in urban or rural areas, which was needed when vaccines were critically limited.

MISINFORMATION AND MISTRUST

It was a challenge to overcome vaccine misinformation and mistrust among minority populations. One of the most effective ways to work through this was with the faith community. We heard about an older Black man whose son is a doctor and encouraged him to get a vaccine, which he refused to do. However, once the man's pastor told him to get a vaccine, he went out and got one. Another challenge was language and cultural barriers to the refugee population in Oneida County. The deployment of community navigators "who are like me" helped to overcome these challenges.



MOHAWK VALLEY

CULTIVATION AND EXECUTION: REACHING UNDERSERVED POPULATIONS

A key initiative among the HETF was the engagement of community navigators, managed by The Refugee Center and funded with local grants, then CDC funding. These navigators were extremely helpful in going into and educating communities, which was then followed by pop-up vaccine points of dispensing in those neighborhoods. Working with the Latino Association, The Refugee Center, Black Leadership Coalition, the Utica and Rome branches of the NAACP, local houses of worship and others, MVHS held a series of educational town halls via Zoom. Several were conducted specific to a certain culture/ethnic group, e.g., Spanish, Karen and Somali.

Another significant initiative was the partnership with ambulance corps and home care agencies to establish mobile points of dispensing teams with flexibility that static sites/providers could not offer. Mobile teams targeted minority pop-up locations, rural communities and the homebound. In total, 19 community points of dispensing were held in Oneida County with nearly 2,000 vaccines administered.

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SUSTAINABLE COLLABORATION AND FUTURE OPPORTUNITIES

Initiatives to prevent disease, address mental health and other identified community health needs can benefit from this type of collaboration. For two years, MVHS has facilitated the HETF and related workgroups to ensure access to and equitable distribution of COVID-19 vaccines to vulnerable populations, with an emphasis on people of color. The HETF and its related minority/refugee workgroup brought together a variety of community organizations to initially focus on educating vulnerable populations and making vaccines available in neighborhoods and community locales to ensure vaccination was accessible and convenient.

The HETF has largely been successful because of the commitment and innovation of the organizational leaders engaged in this initiative and a mutual desire to build on this infrastructure to address public health issues in communities of color. The HETF partners recently expanded initiatives to address heart disease in the region by obtaining funding through the Mother Cabrini Health Foundation and evolving the HETF into the Partnership to Combat Heart Disease. To date of this writing, the partnership has conducted 12,000 community education contacts and screened more than 4,000 individuals for hypertension.



REGION 7 — COORDINATOR: United health services

Christina Dolan

Director, Public Policy and Program Development United Health Services Hospitals, Inc. Hub Overall Planning, Health Equity Task Force

Richard Keehle, Jr.

Associate Vice President, Support Services & Supply Chain United Health Services Hospitals, Inc. Hub Operations and Logistics

ORGANIZATION AND DEVELOPMENT

Four groups were convened to execute the mission of the Southern Tier Regional Vaccination Network, which was to "safely and securely store, distribute and administer the COVID-19 vaccine to essential healthcare workers, vulnerable populations, and the community at large in the Southern Tier Region through effective teamwork and collaboration with regional community partners, bringing an end to the scale of the COVID-19 pandemic."

The willingness of some organizations to assist where public health projects were outside their area of expertise, like Commerce Chenango, was surprising and very positive. At the same time, the lack of cooperation from organizations that would be expected to help was unanticipated. Some of this was due to a lack of understanding of the hub's role, concern over liability, belief that they should be in a leadership role and a perceived lack of resources.

REGIONAL ADVISORY TASK FORCE

A broad range of regional stakeholders representing each of the eight counties in the region were invited to participate in the advisory task force led by the United Health Services (UHS) administration. Members were selected who:

- could access and mobilize vaccination resources;
- could communicate quickly and effectively to a broad audience;
- had trusted relationships with marginalized populations; and/or
- had established large networks of groups and organizations with an emphasis on public health.

This group was made up of eight county executives, 15 hospital CEOs; leaders from the Care Compass Network, chamber of commerce, local health department, local Office of Emergency Management; a New York State Department of Health liaison and the governor's regional representative.

Organization and Development - Continued

HEALTH EQUITY TASK FORCE

A HETF was led by co-chairs from the United Way of Broome County and the American Civic Association. The HETF was comprised of representatives of people with disabilities, long-term care facilities, faith-based organizations, education, higher education, rural health, agriculture, health clinics and providers, not-for-profits and others with a commitment to diversity, equity and inclusion. The HETF met weekly and was divided into two workgroups focusing on points of dispensing placement and operation and education and outreach.

VACCINE PROVIDER GROUP

A Southern Tier Regional Vaccination Network group met daily via Webex, led by UHS administration and pharmacy leaders. Any registered COVID-19 vaccine provider was invited to participate. Attendees included local health departments, hospitals, community clinics, retail pharmacies and DOH representatives.

The agenda included updates from the state on vaccine storage, distribution and administration requirements and communication on which providers had excess vaccines that could be redistributed or needed additional vaccines to supply their points of dispensing. Providers communicated any questions, requests and suggestions about the vaccine process to DOH representatives. Transport arrangements were made for specific vaccine redistribution. The group has remained active.

REGIONAL EDUCATION AND ENGAGEMENT COUNCIL

This group met biweekly via Webex, led by UHS administration and UHS community relations leaders. The council collaborated on message, materials and website development; planning; and hosting public events. Membership included all hospital marketing leads, local health department communications leads and representatives from local community agencies representing marginalized or difficult-to-reach populations.

BEST PRACTICES AND LESSONS LEARNED

MESSAGING AND ACCESS

Not-for-profits and faith-based organizations have trusted relationships with their communities and can be effective messengers, but they need resources to develop outreach and points of dispensing implementation tools. It is important to engage other community partners to assist with targeted message development and community engagement that resonates with the community.

Best Practices and Lessons Learned - Continued

PLANNING AND COORDINATION

For the future, it is important to design policy and programs so that nursing homes can give their own vaccines to staff and residents. Nursing homes have staff that can administer vaccines, but they need storage, the ability to prebook in quantities they can use and training. Additionally, bringing vaccines out to the community is ideal but staffing is a challenge. Deliberate planning in collaboration with local health departments and local healthcare providers to identify resources and plan the use of those resources, especially in rural communities or when addressing homebound needs, is necessary. Defining specific roles of the hub, local health department, office of emergency management, local government and vaccine providers would be helpful in task management. Additionally, if UHS were to participate in a similar initiative in the future, it would ask the governor's regional representative to make initial contact to introduce the hub to other local entities.

HUB LOCATION CHOICE

Consider what other types of organizations can be vaccination hubs. During a pandemic and public health emergency, hospital resources were stretched to the max. A hub organization needs the capability to convene, network, plan, organize, communicate and share resources. A hospital was a great choice, but not necessarily while it was simultaneously managing inpatient surges and short staffing at crisis levels.

OTHER HELPFUL INITIATIVES

Additional helpful initiatives included inclusive technology, removing transportation barriers by offering free public transportation to vaccine appointments, making greater use of retail pharmacies from the beginning as most people live within five miles of a pharmacy, allowing walk-ins from the beginning and co-hosting pop-up points of dispensing with organizations that serve target groups. Point of dispensing initiatives could be bundled with other services if possible (e.g., food pantry, school supply giveaway).

People want to be vaccinated in a place and by people they trust, not necessarily at a county fair. People trust their medical providers when it comes to their health. It should be made as easy as possible for providers to vaccinate their patients and community.

CULTIVATION AND EXECUTION CHALLENGES

INFORMATION SHARING

Some organizations understandably mistrusted the process from the start. Local health departments have experience in executing flu vaccination points of dispensing and have community vaccination plans in place, but it was challenging for the hub to access the local health departments' information for planning purposes. To work through this challenge, the state may have benefitted from initially tapping into the local health departments' expertise from their previously developed points of dispensing procedures.

Cultivation and Execution Challenges - Continued

COMMITMENT OF RESOURCES

Vaccinators and space to administer vaccines were difficult to come by. Liability was a major concern; if addressed earlier, some additional organizations may have participated. Finding physicians and registered nurses to staff points of dispensing was very difficult at times.

HUB LOCATION

The 10 regional vaccination hubs aligned with the Regional Economic Development Councils. Aligning with DOH regions instead may have alleviated some initial confusion and communication difficulty.

URBAN:

LANGUAGE

There was a large emphasis on equity, but the state did not provide vaccine resources in other languages. The hub located vaccine fact sheets in other languages from the manufacturers, posted them on the hub website and printed them to bring to points of dispensing. The state vaccine registration website was in English only. Member organizations of the HETF who could speak other languages volunteered to register people for vaccines. This put individuals in a sensitive situation where private information (e.g., HIV status) had to be disclosed to a stranger so that they could register for a vaccine.

MESSAGING

The state's messaging, "Shout It from the Rooftops", did not fully resonate with upstate, urban audiences. It was clearly focused on New York City.

RURAL:

MESSAGING

The state messaging did not fully resonate with rural audiences.

DISTRIBUTION AND WASTE

The vaccine redistribution process was initially very cumbersome, resulting in vaccine waste and delays in administering vaccines. Rural areas are less densely populated, and the demand was unpredictable. Flexibility in redistribution was needed earlier.

PRIORITIZING

As far out as week nine of the hub operations (Feb. 14, 2021), hospitals were only allowed to vaccinate healthcare workers and Office for People with Developmental Disabilities (OPWDD) residents and staff. Significant outreach was done to canvass hospitals and OPWDD congregate care populations to continue vaccination but there was no significant demand at this point. Flexibility was needed to allow hospitals to use the remaining vaccines to move on to other priority areas, like the 65+ population. This was not allowed, which delayed vaccinating this vulnerable population that is more prevalent in this rural area.

Cultivation and Execution Challenges - Continued

TRANSPORTATION

The GetThere program of the Rural Health Network of South-Central NY expanded its coverage area to offer transportation services to anyone in the Southern Tier Region needing a ride to a vaccine appointment. This was integral to providing rural access.

BROADBAND

Many older adults and rural individuals don't have access to broadband, making getting information about and registering for vaccines difficult or impossible. Commerce Chenango spearheaded an effort through which community members could use a track phone to call Commerce Chenango, which would register them for a vaccine clinic. The United Way's 211 Susquehanna Region and Broome County Office for Aging also registered individuals who called in needing help. These efforts mitigated an identified need, but they were not sustainable.

HOMEBOUND

Reaching homebound individuals was resourceintensive, making it difficult to meet state expectations. Delaware County is largely rural and the size of Rhode Island. It can take two hours, one-way, to drive to one homebound individual's home. In areas where vaccinators are already in extremely short supply, devoting the resources required to vaccinate one individual was extremely challenging.



CULTIVATION AND EXECUTION: Reaching Underserved Populations

OUTREACH

UHS conducted outreach to OPWDD congregate care/housing sites to administer vaccines at homes and for senior and low-income housing organizations to administer vaccines at multi-unit housing complexes. Home care staff administered vaccines to home care patients. Outreach to the Amish communities was through the local health departments. Α comprehensive agricultural plan developed and implemented to organize farms and farmworker outreach and vaccine administration included 13 agricultural organizations to cover the entire region. Vaccines were administered to farmworkers on-site. The hub brought points of dispensing to urban faithbased organizations and organizations serving underrepresented populations.

PARTNERSHIPS

The UHS hub partnered with municipalities in engaging the community and identifying locations for points of dispensing, and with schools across the region to administer vaccines onsite in urban, rural and ZIP codes with low vaccination rates.

MEDIA

Peer-to-peer/farmworker-to-farmworker video clips were developed and distributed in the agricultural community. The hub produced public service announcements featuring diverse clinicians and approached media markets across the region for support. The hub developed and launched www.SouthernTierVax.org which included information on all points of dispensing locations (not just mass vax sites), education and outreach videos and tools and vaccine information in 26 languages.

Cultivation and Execution: Reaching Underserved Populations - Continued

NURSING HOMES

The hub coordinated delivery or transported vaccines to 26 nursing homes several times a week, serving residents and staff. The hub staff traveled almost 6,000 miles across the region to acquire and transport vaccines to meet these needs.

CHALLENGES AND SOLUTIONS

The UHS hub needed messaging in multiple languages to appeal to rural and upstate audiences. Many people did not realize the vaccine was free and believed they could not afford it. The hub needed data on local vaccination rates to inform where to prioritize resources. A sustainable process is needed to ensure nursing home and homebound access. The process that took place was resource-intensive and unsustainable. Flexibility and assistance were needed to find staff to administer vaccines. In most cases, insurance wasn't billed at pop-up points of dispensing because the process was too cumbersome for the amount of reimbursement.

UHS needed vaccination options to be as flexible as possible and used basic principles to guide the hub's work. It would have been helpful if UHS did not have to turn away anyone who wanted to be vaccinated or make someone return multiple times to vaccinate themselves and their family members because they were in different priority categories. It would have been beneficial to allow walk-ins and to have made phone registration possible, discreet and easy.

SUSTAINABLE COLLABORATION AND FUTURE OPPORTUNITIES

As a hub hospital, UHS built relationships with all of the other hospitals and local health departments in its region that did not exist prior to the hub collaborative. The UHS hub is now more comfortable approaching other community organizations to collaborate on projects as opportunities arise and is hopeful that out of this experience other organizations will also perceive UHS as more approachable.

Hospitals became more open-minded about community collaboration. Equity and quality of life are inextricable. The hospital system and the social services systems must be more inclusive in order to make meaningful improvements to quality and population health status. But the social services system also struggles with capacity. Recognizing that these systems must integrate resources to move toward sustainability and equity is integral to the vaccination work. This type of collaboration could have a far-reaching impact on maternal/child health initiatives, vaccination, eating disorders, mental health, senior health, substance use disorder, obesity and many other areas. This type of collaboration could have a far-reaching impact on maternal/child health initiatives, vaccination, eating disorders, mental health, senior health, substance use disorder, obesity and many other areas.



REGION 8 — COORDINATOR: SUNY UPSTATE MEDICAL UNIVERSITY HOSPITAL Brian Pratt

Clinical Operations Officer SUNY Upstate Medical University Hospital Hub Lead

ORGANIZATION AND DEVELOPMENT

To lead hub activities, Upstate Medical University Hospital selected an internal team made up of high-performing executives and managers who demonstrated successful leadership during the pandemic. This team engaged multiple regional stakeholders to operationalize vaccination efforts. This began with the local departments of health and hospitals in the five-county region and expanded to include retail pharmacies, skilled nursing facilities and physician practices. Daily, followed by weekly meetings, provided real-time updates, clarified priorities and facilitated the movement of vaccines to the points of immediate need and use.

To support vaccination equity and overcome hesitancy, Amy Tucker, MD, Chief Medical Officer, took the lead on developing and implementing the regional health equity task force in partnership with Syracuse Deputy Mayor Sharon Owens and a prominent area healthcare organizer, LaToya Jones. A group of community leaders graciously agreed to participate. The group was selected to represent a wide array of vulnerable populations and community stakeholders, including those representing special populations, labor, people with disabilities, chambers of commerce, community healthcare providers, healthcare centers and federally qualified health centers, faith-based organizations, school systems and mental health organizations.

The HETF met weekly and supported processes, communication and vaccination events that overcame barriers and maximized vaccination rates among vulnerable communities. Additionally, the HETF mapped testing sites across the region to close access gaps.

There are countless stories of individuals, groups and organizations that went far beyond what anyone would have reasonably expected. The resiliency and tenacity of the health system staff and community partners on the HETF were a pleasant and wonderful surprise. The reticence of skilled nursing facilities and long-term care facilities to independently maintain vaccine programs for their residents and patients also proved surprising.

BEST PRACTICES AND LESSONS LEARNED

COMMUNICATION

Rich and frequent communication proved helpful. A significant driver for reaching difficult-to-reach or vaccinehesitant people was the presence of credible, trusted and accessible leaders to coordinate outreach and peer accountability for showing up to vaccine events.

RETAIL PHARMACIES

Externally, retail pharmacies were successful at meeting the needs of their communities. Independent pharmacies led successful vaccination campaigns in areas within the region where both vaccine access and vaccine hesitancy were a significant challenge. They offered ongoing mass vaccination events, put together a pop-up clinic under short notice to meet DOH requests and creatively found ways to meet the needs of the region.

Large retail pharmacies also proved to be outstanding partners in providing sustained vaccine access and ensuring everyone in the region was able to complete their course of vaccination. It would have been great from the beginning to have brought them in as a first-round vaccinating partner with full access to all eligible populations.

DATA SHARING

As a hub that is also a state entity, Upstate Medical University Hospital was aggregating and sharing similar datasets with several entities. Finding ways to standardize and automate those data extractions would have been worthwhile much earlier in the process. It would have been especially helpful during this period of rapidly changing guidance and definitions.

CULTIVATION AND EXECUTION CHALLENGES

If communication was the underlying issue, this is also the solution: clear, open, transparent communication.

COMMUNICATION

Information sharing, regulatory priorities and bureaucratic processes all posed barriers, in some cases so much so that eligible vaccine providers elected not to become a vaccination site. If communication was the underlying issue, this is also the solution: clear, open, transparent communication.

URBAN

Among vaccine-hesitant groups, the ability to use local trusted community leaders and settings in which community members felt comfortable proved more successful in urban and Native American communities than in more traditional rural areas that lacked such resources.

Cultivation and Execution Challenges - Continued

RURAL

Operationalizing getting shots into arms was more difficult in rural areas due to lower numbers and restrictions on the use of vaccine vials.

Both settings were very similar in the sense of hesitancy and ability to travel to the vaccine.

CULTIVATION AND EXECUTION: REACHING UNDERSERVED COMMUNITIES

The HETF was very creative, using mobile units, pop-up clinics, churches, etc. The hub was able to coordinate vaccinating a Native American group not participating in Indian Health Services. SUNY Upstate had the benefit of two physicians who lead in the provision of care to individuals with mental illness and those experiencing homelessness. The physicians were able to bring the vaccine to their populations of concern; one of these doctors literally went door-to-door after using part of a vial, to find arms to close out the vial.

Upstate also leveraged groups of physicians with dedicated expertise in and commitment to caring for refugees and immigrants. The hospital leveraged trusted community partners to provide education and vaccination opportunities for a variety of underrepresented individuals. Home health agencies and local health departments were able to support vaccination for homebound populations within the region. Agencies like Arise and the Accessibility Resource Center were strong supporters in ensuring individuals with intellectual disabilities were afforded proper access to vaccines.

The HETF, local health departments and vaccine provider network facilitated communication efforts, reducing the usual barriers that underrepresented populations usually have to access and communication. Friction points were primarily centered on staffing and resources necessary to deliver a small number of vaccination doses to specific populations. Events required a high degree of planning and preparation and required placing vaccination doses on an expiry clock that was inflexible. The hospital found that having a trusted grassroots leader/advocate for a given community made the difference in a successful vs. lackluster event.

When all parties have a common goal and an inclusive operating structure, the available solutions are amplified as they collaborate and combine resources.

SUSTAINABLE COLLABORATION AND FUTURE OPPORTUNITIES

The HETF has continued to meet monthly to address ongoing healthcare issues of concern to the community. The hub has seen the focus, membership and engagement shift to more broadly encompass drivers of wellness, community education and access to knowledge and services.

Public health emergencies and crises, overburdened health systems, and scarcity of fiscal and personnel resources have common features that should be instructive. Namely, they can no longer operate independently of each other. There needs to be open, ongoing objective dialogue at the local and regional levels that includes stakeholders, like during the peak of hub activities. When all parties have a common goal and an inclusive operating structure, the available solutions are amplified as they collaborate and combine resources.

As the region's tertiary care and only academic medical center, Upstate learned how to engage with and coordinate activities with surrounding local health departments. This skill has proven beneficial as the medical center is standing up a regional response to monkeypox, including the delivery of TPOXX.

There is significant ground to cover in raising community health literacy, developing a concept of wellness and preventive care, ensuring appropriate access to care in the most appropriate locations and achieving stability in the medical center's capacity to staff all the necessary roles to make this happen. Some of these activities are long-term investments; however, the return on investment will have a significant benefit to the community while shifting the posture from a reactive crisis state to one of proactive, integrated efficiency.

FINGER LAKES



REGION 9 — COORDINATOR: UNIVERSITY OF ROCHESTER MEDICAL CENTER Nancy M. Bennett, MD, MS

Professor of Medicine, Director of the Center for Community Health and Prevention University of Rochester School of Medicine and Dentistry

Hub Leader, Co-chair of the Finger Lakes COVID-19 Vaccination Task Force

ORGANIZATION AND DEVELOPMENT

The University of Rochester Medical Center (URMC) and the Center for Community Health Prevention identified leads for logistics, data, operations and communications, and established a well-rounded team. Initially, they met daily but the frequency decreased as the need subsided. The URMC hub established a vaccinator task force that included all local health directors in the region, all hospitals and all vaccinators, including federally qualified health centers and pharmacies. The hub also established communication tools, including a website and daily emails to stay connected to the group and the community.

The business community was very active and supportive. In particular, the Rochester Chamber of Commerce took a leadership role in disseminating information and supporting businesses throughout the community in their vaccination efforts. Wegmans, a locally owned large grocery store chain, also played a key role. Wegmans participated in the task force, provided vaccines through their pharmacies/stores, held public clinics in other sites, vaccinated food workers throughout the community and provided onsite clinics at multiple businesses.

BEST PRACTICES AND LESSONS LEARNED

Best practices included:

- deep community engagement;
- establishing equity as a goal from the beginning;
- never too much communication;
- expert data acquisition, management and dissemination; and
- team building without micro-management set clear roles and give experts autonomy in fulfilling those roles, strong and responsive leadership and institutional support for the mission.

URMC used multiple forms of communication including texts, websites and email for seamless communication.

FINGER LAKES

CULTIVATION AND EXECUTION CHALLENGES

LACK OF TIME AND BANDWIDTH

Finding time and capacity was difficult. To address this, URMC kept meetings short and focused, and used multiple forms of supplemental communication including website, email and texts for asynchronous communication.

THE DIGITAL DIVIDE

A major challenge in working with the public was the digital divide. Although many were convinced that the digital divide was no longer a major issue, URMC found that it was critical to communicate through traditional methods e.g., television, radio, flyers, phone banks, etc.

RURAL AND URBAN AREA CHALLENGES

The hub's rural partners faced multiple issues related to the accessibility of healthcare facilities and vaccination centers. In addition, centers and facilities were understaffed and therefore found it difficult to provide the same level of service as the more highly-resourced urban areas. Trust was a critical issue in both urban and rural areas. However, the breadth of the task force helped in addressing this issue, especially in urban areas. Although the vaccine uptake was lower in inner-city communities, it was generally better than in rural areas. URMC focused on urban areas from the beginning and in retrospect should have done more in the rural areas from the start.

CULTIVATION AND EXECUTION: REACHING UNDERSERVED POPULATIONS

POP-UP CLINICS

The URMC hub had a combination of larger inner-city clinics in multiple locations and smaller pop-ups in hard-hit neighborhoods at churches, community centers and community-based organizations. The hub also partnered with federally qualified health centers from the start.

MOBILE VACCINATIONS

During this effort, URMC provided vaccinations to people who were homebound, institutions with vulnerable populations and specific under-resourced community groups.

LOGISTICAL CHALLENGES

A significant challenge was for some of these organizations and settings to understand the logistical challenges of administering vaccines — the safety and documentation issues in particular. This sometimes created stress between the hub and the community groups but was addressed with thorough and sensitive communication explaining the processes.

FINGER LAKES

Cultivation and Execution: Reaching Underserved Populations - Continued

COVID-19 VACCINATION TASK FORCE

The hub worked with a leader of the Black community to establish a COVID-19 Vaccination Task Force that included representation from health departments, community-based organizations, faith communities, schools, hospitals, other health services and essentially every vulnerable group in the community. The task force provided a forum for oversight of hub activities and ensured input from all portions of the community.

SUSTAINABLE COLLABORATION AND FUTURE OPPORTUNITIES

Clearly, this collaboration was extraordinary and occurred in the setting of an emergency. It was essentially funded by URMC – with all staff lent from their "day jobs" and a dedicated, volunteer-based task force. The effort focused on a time-limited and very specific goal. The model could be effective for community approaches to any number of challenges – prevention of chronic disease, mental health, maternal child health, the opioid crisis, etc.

The Rochester community engages in this sort of collaboration routinely, but the lack of dedicated staff and resources makes these collaborations less effective. While URMC considered continuing the task force to address other community health challenges the organization decided that it would be redundant with many other activities already going on in the community.

The community-wide collaboration continues in the form of biweekly meetings between county government and hospitals to address ongoing healthcare challenges, including nursing home issues, emergency department crowding, staffing issues, etc. Vaccine data acquisition, management and dissemination continues. The model could be effective for community approaches to any number of challenges – prevention of chronic disease, mental health, maternal child health, the opioid crisis, etc.

All partners have returned to their "day jobs" but the spirit of collaboration continues and URMC's commitment to the community has strengthened in many forms. URMC has expanded its pre-existing community advisory council to include representation from rural and surrounding communities. URMC's community had strong community health leadership and interventions prior to the vaccine efforts and these continue. In truth, everyone is tired – from COVID-19, from vaccine efforts, from huge healthcare challenges due to staffing shortages, bed availability, inflation, etc., but everyone continues to work together to try to improve health outcomes in the community.

For communities that do not already have the same level of community health planning and intervention, this model would be helpful. In particular, the overarching task force that set the priorities and ensured input from all stakeholder communities and hub staff resulted in effective and successful implementation. The perennial issue with community coalitions and task forces is the absence of the implementation staff. Both are required for successful change and implementation of health improvement efforts.



REGION 10 — COORDINATOR: Catholic Health System

Mark Sullivan

President and Chief Executive Officer Catholic Health System, Hub Leader

Michael Cain, M.D.

Dean, State University at Buffalo (UB) School of Medicine (Former), Hub Leader

Thomas Quatroche, Ph.D.,

Chief Executive Officer Erie County Medical Center, Hub Leader

Rebecca McCormick-Boyle

Chief Integration Officer Catholic Health System, Hub Coordinator

ORGANIZATION AND DEVELOPMENT

In December 2020, Governor Cuomo's Vaccine Task Force appointed Mark Sullivan as the Region 10 Vaccine Hub leader, for the COVID Vaccine roll-out. Several weeks later, community dynamics led to the addition of Dr. Michel Cain, University of Buffalo's (UB) Medical School Dean, and Tom Quatroche, CEO of Erie County Medical Center (ECMC), as co-leaders. The three worked well in partnering together and established an effective Region 10 coordinating team.

Region 10 utilized the template provided by the Albany task force to establish its organizational structure. The key components included the three leaders, coordinator, public relations, data analytics, planning, operations and logistics. The hub was largely staffed by the Catholic Health System. UB provided a physician leader and data analytics expert while ECMC contributed logistical support.

Early in the effort the three leaders and coordinator met daily, and the coordinating team met once or twice daily. Later in the effort when vaccine supply became prevalent, the meeting frequency decreased to several times a week and then weekly prior to the hub wrap-up.

In the early phases of the vaccine roll-out, representatives of the Albany task force met with the hub leaders and coordinators via teleconference several times a week. Meeting frequency decreased as the vaccine supply stabilized.

As vaccine supply became more prevalent and demand decreased, the need for a Regional Hub diminished. In May, Region 10 proposed the responsibility for coordinating vaccine distribution and administration be turned over to the local health departments across the 5 counties. The state approved and the hub ceased operating at the end of May.

BEST PRACTICES AND LESSONS LEARNED

HUB STRUCTURE

The organizational structure provided by the Albany task force worked well. Daily meetings were held from early December 2020 through the end of May 2021, and minutes were maintained to increase coordination and transparency. A collaboration site was established for posting and sharing information and documents in progress to maintain seamless communication. Although the three-way command and control between Catholic Health, UB and ECMC complicated the situation, the leadership team functioned well together.

LOCAL LEADERSHIP

Regional county leadership was surprised that health systems were appointed as leads, which created challenges. The hub's leadership reached out to the regional leaders and established ongoing teleconferences to provide leaders with regionspecific updates and any new information from the Albany task force.

LOCAL HEALTH DEPARTMENT COORDINATION

The hubs' UB-appointed physician was prominent in the medical community and well-known to the local health department leaders across the counties. The hub's physician leader established regular meetings with the local health departments to share information and solicit input on developing plans. These meetings became a best practice and ideasharing venue that crossed traditional county boundaries. It also facilitated the identification of sites where vaccines not being used in one county might be moved to another county before its postthaw expiration. Interestingly, some counties were more willing to assist in this cross-county transfer of thawed vaccine than others.

VACCINE PROVIDER COMMUNICATION

Organizations wishing to serve as vaccine administrators were registered; this included hospitals, clinics, and pharmacies. The supply and distribution were uncertain and the new vaccine management procedures were unknown to many. The hub established periodic teleconference meetings and email communications to increase communication with projected providers. The hub also included an area within its web space specifically for registered providers and a generic email address to which providers could send questions and comments.

WEBSITE

A Region 10 website established a central information source for the general public and a provider-specific portal. An area was established for those who wished to volunteer for the vaccine effort.

VACCINE FINDER

When the vaccination categories expanded but vaccine availability was still limited, people spent significant time calling various local health departments, grocery chains and pharmacies searching for vaccines. The hub data coordinator led a UB graduate student effort to create the "Vaccine Hound," which utilized web-based analytic algorithms to search for available vaccines and post locations on one central site for the region.

DATA ANALYTICS

To overcome the absence of data analytics, the data coordinator analyzed the data for the region as it became available. Her expertise in this area was extraordinary and spanned an understanding of specific demographic groups as well as logistics theory and distribution modeling. On several occasions, her findings were forwarded to the state for ongoing action planning.

CULTIVATION AND EXECUTION CHALLENGES

POLITICS

Local and state politics influenced the hub stand-up and continued to periodically influence vaccine distribution and decision-making. This hampered ability to perform at the highest level for the betterment of the community.

COMMUNICATION DELAYS AND CONFUSION

Slow decision making led to a decrease in collaboration between the hub and the state. When plans were requested from the hub and provided, the response was delayed, resulting in the plans becoming obsolete. A governor's liaison was appointed to the hubs to provide daily updates and clarify questions, however, some information proved unreliable. The regional department of health leader was not involved directly with the hub but was involved with a different state-run vax site, leading to confusion for the public and those running the hub.

PUBLIC HEALTH AND EMERGENCY MANAGEMENT

This public health emergency highlighted the critical importance of public health and emergency management functions. The approach to planning for a public health emergency response without seeking input from local regional stakeholders and experts was surprising. Catholic Health was honored to be appointed but equally surprised (to local county government) at the decision to assign vaccine distribution coordination to health system leaders versus public health system leadership. At the start, this decision put county government at odds with the concept of hubs and the operations being led by Health Systems, which they learned to work through. From a funding and lessons learned standpoint, public health collaboratives had proven to work in the past, such as H1N1. By all reports, these organizations were quite effective in meeting their intended objectives. Sadly, once funding stopped, so too did the sustained collaboration across regions. Also following H1N1, across the country, local health departments established pandemic and vaccination protocols which were not drawn upon or referenced for this public health emergency.

FINANCIAL BURDEN

Most New York State hubs were state or local government-sponsored health systems. Catholic Health, however, is a non-government sponsored not-for-profit organization. Coordinating the Regional hub entailed significant investment and cost, exceeding \$250,000.

DATA

Data were remarkably unavailable throughout the hub effort. The state described working with a contractor to analyze data, however, the hubs did not receive hub-specific break out information. Population-specific information was requested from the hub that might have been more easily procured via the contractor or other central resources. The hub was never able to obtain information from regional health information organizations or consultants hired by the state. These data would have expedited getting vaccines in arms and would have helped to proactively address future needs and care gaps.

Cultivation and Execution Challenges - Continued

RURAL VERSUS URBAN

The rural local health department budgets were far less than the most densely populated urban county budgets. This impacted the local health department's ability to staff mass vaccine efforts as well as their ability to either bring vaccines to people or transport people to the vaccines.

NURSING HOME RESIDENT AND STAFF VACCINATION

The federal government managed the initial one-dose vaccine administration in nursing homes. There were no plans for ongoing vaccinations for this at-risk and ever-changing population. The hub requested to vaccinate nursing home, rehabilitation and high-risk discharge patients but was unable to do so due to restrictions. Instead, the hubs had to play 'catch up' when the vaccination of these populations became allowed. The nursing home effort was a resource intense effort; obtaining nursing home contacts, calling to determine the numbers of staff and patients who needed the vaccine, obtaining the vaccine, delivering the vaccine and finally coordinating the second vaccine where needed. Partnering with the hubs in the initial planning for this evolution would have helped to prepare for the roll-out and plan accordingly, rather than having to jump right in without proper time to plan.

VACCINE MANAGEMENT POLICIES

Strict vaccine management policies created discrepancies and inequities in delivering vaccines to the best of the hub's ability. The mandate for not wasting while simultaneously not giving the vaccine to a person in a non-authorized category created significant logistical problems. When pharmacies had a vial portion remaining, they had to request permission from the state to administer it to a non-category person seeking a vaccine. These policies led to a significant end-of-day shuffling of vaccines from site to site.

CULTIVATION AND EXECUTION: REACHING UNDERSERVED POPULATIONS

Members of the health equity task force (HETF) reached out to underserved communities to share information about the benefits of vaccination and addressed any questions or concerns. Members of the HETF were members of the community and had the benefit of internal knowledge of whom to reach out to in order to initiate efforts. Members used their connections to facilitate conversations and to create plans to vaccinate. The HETF held virtual town halls with over 500 people to share information that the state had shared, to keep everyone updated and on the same page. The HETF had many calls with the Farm Bureau, bishops from the Amish and Mennonite communities and other underserved populations to understand the demographic and their needs and preferences. Members spent a lot of time on calls listening to the needs of the communities on how and where they wanted to be served. The state missed the opportunity to better serve the communities and expedite the vaccine distribution by not leveraging its bureaus for available data on vulnerable populations who fit into vaccine eligible categories.

Cultivation and Execution: Reaching Underserved Populations - Continued

Delivering vaccines to individuals with mental illness, intellectual disabilities and people who are homebound proved challenging. Those who were mobile and had access to the internet and could navigate technology to book their appointments were able to get vaccinated. This public health emergency compelled outside-of-the-box thinking in many circumstances. Untraditional avenues for how and where to vaccinate the public were identified and explored. The hub saw the opportunity to offer patients the vaccine upon hospital discharge as well as the opportunity for thousands of homecare nurses to bring vaccines on their home visits. Due to hub and vaccine management restrictions, these ideas were unable to be implemented; in some cases, ideas took months to get approval.

Rural areas presented more vaccine hesitancy. Rural counties in Western NY, home to over 1.6 million people, are complex and include the farm bureau, migrant workers and the Mennonite community to whom specific efforts to reach were made. Allegany County is not densely populated, and this led to challenges in receiving vaccines. There was a struggle to get pop-up vaccination sites in Niagara County for diverse populations. When one site was established and ready to go, with expressed need and interest from the community, the challenge then became receiving enough vaccine supply. The hub advocated until the appropriate number of vaccines were received.

SUSTAINABLE COLLABORATION & FUTURE OPPORTUNITIES

Through this effort, new lines of communication have been opened and network connections have been made that were not previously intact. The relationships and networks built during this time stand, and health equity is still a topic of discussion among our partners. Although everyone went back to their roles, everybody left with the awareness of whom to call and how to stay in contact.

The relationships and networks built during this time stand, and health equity is still a topic of discussion among our partners.

CONCLUSION

This document has been provided to share collaboration experiences of the vaccination hubs that were established in New York state for the purpose of COVID-19 vaccination, to highlight the lessons learned, takeaway concepts and collaborative solutions to meet and address community health needs across the continuum.



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NEW YORK STATE Vaccine hub map





PREPARED IN COLLABORATION WITH THE FOLLOWING PARTNERS







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