

A Multi-faceted, Iterative Program to Increase COVID-19 Vaccine Uptake in a Midwestern HIV Clinic

Rachelle Carr, MA

Samantha Jones, CSW

Dr. Sara H. Bares

Nicole Regan APRN

Daniel Cobos RN

Daniel Cramer APRN

Christine Tran APRN

Valentina Orduna

Dr. Nada Fadul

University of Nebraska Medical Center

Division of Infectious Diseases, Department of Internal Medicine

Omaha, NE 68106

20
22

NATIONAL
RYAN WHITE
CONFERENCE
ON HIV CARE & TREATMENT

Background

- The National Institutes of Health Office of AIDS Research recommends that patients living with HIV be prioritized for the COVID-19 vaccination due to high rates of co-morbidities and sociodemographic risk factors that place them at increased risk for severe disease.¹
- However, when COVID-19 vaccines were introduced in 2021, they were not evenly distributed specifically to those in high-risk medical categories in Nebraska, and HIV clinics were not included in the state's COVID-19 vaccine delivery system.
- As a result, barriers to vaccine uptake emerged and interventions to mitigate them were needed.

Methods

- A multi-faceted and iterative program aimed at improving COVID-19 vaccine uptake was implemented at the University of Nebraska Medical Center's (UNMC) HIV clinic in Omaha, Nebraska, in January 2021.
- Outreach interventions were continuously revised based on patient and staff feedback as well as updated data and vaccine availability.
- A multidisciplinary task force was established in late January 2021 and met on a weekly basis to provide:
 - Staff and patient education
 - Linkage to COVID-19 vaccines for patients
 - Review and analysis of vaccine completion rates

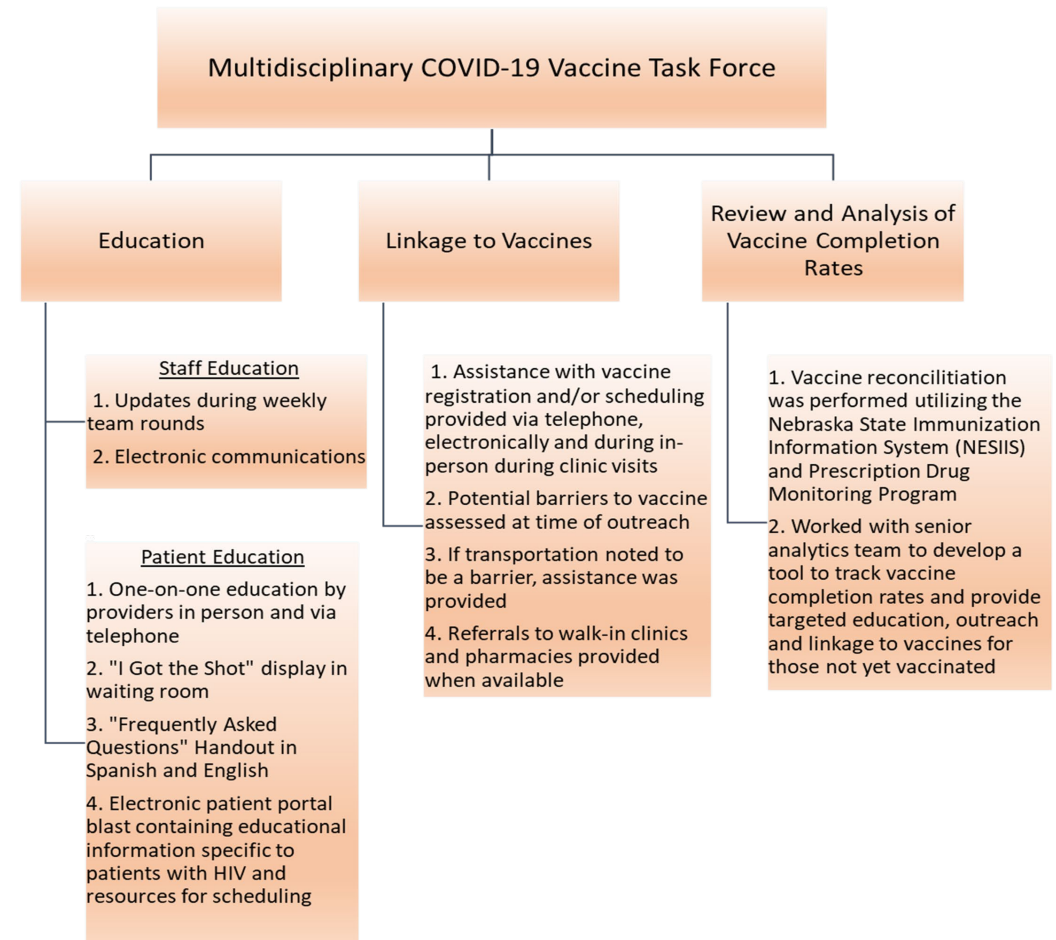


Figure 1. Multidisciplinary COVID-19 Vaccine Task Force efforts were divided in to three overarching domains

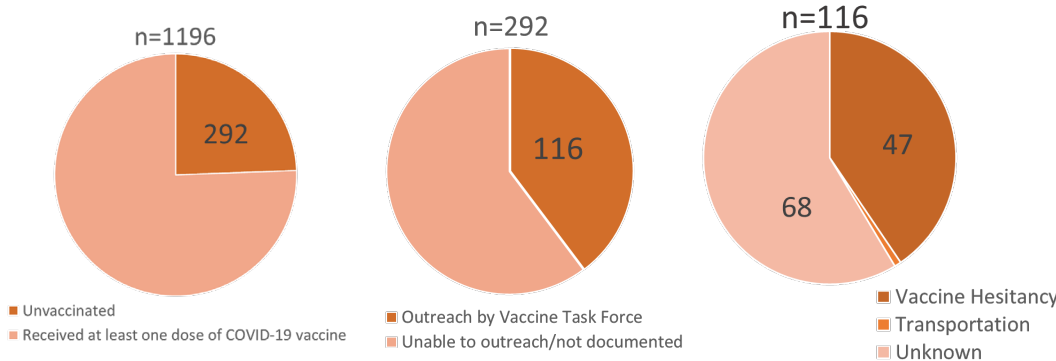
Results from 2021

- 6/4/21: 1188 patients of the UNMC HIV Clinic are adults (18+) and were therefor eligible for the COVID-19 vaccine, but availability was on a rolling basis by age group, profession, county and ultimately comorbidities.
- 76% male, 45.8% non-white, median age 48, and 73% had income less than 400% of federal poverty level.
- 63.1% (n=751) had received at least one dose and 59.3% (n=705) had completed the two-dose series by 6/4/21.
- In comparison, 49.32% of the population in the state of Nebraska had initiated their vaccine series, with 43.12% completing the vaccine series by that same date (6/4/21)
- 8/31/21: 1196 patients – 292 (24.4%) had not received any dose of the COVID-19 vaccine. The Vaccine Task Force documented outreach to 116 of these unvaccinated patients (39.7%), of which 47 patients (40.5%) cited vaccine hesitancy as their main barrier to receiving the COVID-19 vaccine.

Figure 2. Of the 292 unvaccinated patients at UNMC HIV Clinic, 116 of them received documented outreach from the Vaccine Task Force. Of those outreached, 47 of the patients cited vaccine hesitancy as the reason for not getting vaccinated.

| 'As of' Date | Amount of Doses | UNMC HIV Clinic | State of NE (18+) ³ |
|---|-------------------|-----------------|--------------------------------|
| As of 6/4/21 (n=1188 for HIV clinic) | At least one dose | 63.1% (751) | 49.32% |
| As of 6/24/21 (n=1188 for HIV clinic) | Fully vaccinated | 59.3% (705) | 43.12% |
| As of 8/31/21 (n=1196 for HIV clinic) | At least one dose | 75.6% (904) | 71.7% |
| As of 8/31/21 (n=1196 for HIV clinics) | Fully vaccinated | 72.3% (865) | 65.6% |

Table 1. COVID-19 Vaccine Completion Rates at UNMC HIV clinic compared to State of Nebraska. First timepoint is data at time of abstract submission. Second timepoint reflects additional progress made since time of abstract submission.



Additional data results: 6/15/22

- As of 6/15/22: 1258 patients, 77% (n=952) have received their initial series (2 Moderna, 2 Pfizer, or 1 J&J) and 52% (n=652) have received their additional booster (1 Moderna, 1 Pfizer, or J&J), while 3% (n=37) have received a 4th dose
- Total number of patients that have not received any COVID-19 vaccine series, 15% (n=193)



Dr. Sara Hurtado Bares, Associate Professor, Division of Infectious Diseases

Table 2. *Updated* COVID-19 Vaccine Completion Rates at UNMC HIV Clinic as Compared to State of Nebraska by Date

| 'As of' Date | Initial or Additional | UNMC HIV Clinic | State of Nebraska (18+) |
|------------------------|-----------------------------|-----------------|-------------------------|
| As of 6/15/22 (n=1258) | Initial series | 77% (952) | 64% |
| As of 6/15/22 (n=1258) | Received additional booster | 52% (652) | 33% |

Conclusions

- A multi-faceted and iterative program to improve COVID-19 vaccine uptake in a high-risk patient population resulted in high rates of vaccine completion.
- In August 2021, the UNMC HIV Clinic started offering mRNA COVID-19 vaccine in clinic one day a week.
 - Identified patients per the guidelines at that time, who had not initiated vaccine series, needed 2nd dose or may be eligible for 3rd dose due to advanced and untreated HIV disease ²
 - Targeted COVID-19 vaccination outreach interventions to decrease vaccine hesitancy and engaged patients at UNMC HIV clinic for vaccinations, where patients are familiar with staff and office processes.
- In October 2021, UNMC HIV Clinic has been offering the mRNA vaccine, any day of the week to patients.

What got us here.....

A Multi-faceted, Iterative Program to Increase COVID-19 Vaccine Uptake in a Midwestern HIV Clinic

Sara H. Bares, MD¹, Nichole Regan, APRN², Rachele Carr¹, Daniel Cobos, MPH, RN², Daniel Cramer, APRN², Samantha Jones¹, Valentina Orduña¹, Christine Tran, DNP², Nada Faful, MD¹
¹Division of Infectious Diseases, Department of Internal Medicine, University of Nebraska Medical Center, Omaha, NE 68106
²Specialty Care Center, Nebraska Medicine, Omaha, NE 68106

BACKGROUND

- The National Institutes of Health Office of AIDS Research recommend that patients with HIV be prioritized for COVID-19 vaccination due to high rates of co-morbidities and sociodemographic risk factors that place them at increased risk for severe disease.¹
- However, COVID-19 vaccines were not distributed specifically to those in high-risk medical categories in Nebraska, and HIV clinics were not included in the state's COVID-19 vaccine delivery system.
- As a result, barriers to vaccine uptake emerged and interventions to mitigate them were needed.

METHODS

- A multi-faceted and iterative program aimed at improving COVID-19 vaccine uptake was implemented at the University of Nebraska Medical Center's (UNMC) HIV clinic in Omaha, Nebraska, in January 2021.
- A multidisciplinary task force was established in late January 2021 and met on a weekly basis to provide:
 - staff and patient education
 - linkage to COVID-19 vaccines for patients
 - review and analysis of vaccine completion rates
- Outreach interventions were continuously revised based on patient and staff feedback as well as updated data and vaccine availability.

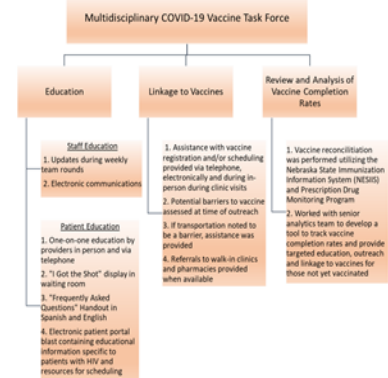


Figure 1. Multidisciplinary COVID-19 Vaccine Task Force efforts were divided into three overarching domains.



A multi-faceted and iterative program to improve COVID-19 vaccine uptake at a Midwestern HIV Clinic resulted in high rates of vaccine completion.



Take a picture to view the full abstract

RESULTS

- All 1188 patients of the UNMC HIV clinic are adults (18+) and were therefore eligible for the COVID-19 vaccine, but availability was on a rolling basis by age group, profession, county, and, ultimately, comorbidities.
- 76% were male, 45.8% non-white, median age 48, and 73% had income less than 400% of federal poverty level.
- Of the 1188 eligible patients, 63.1% (n=751) had received at least one dose of the COVID-19 vaccine and 59.3% (n=705) had completed the COVID-19 vaccine series by June 4, 2021. In comparison, 49.32% of the population of the state of Nebraska had initiated the COVID-19 vaccine series and 43.12% had completed the vaccine series by that same date.¹

Table 1. COVID-19 Vaccine Completion Rates at UNMC HIV Clinic as Compared to State of Nebraska by Date

| Date | UNMC HIV Clinic | State of NE (18+) ¹ |
|---------------------------------------|---|--------------------------------|
| As of 6/4/21 (n=1188 for HIV clinic) | At least one dose: 63.1% (751) Fully vaccinated: 59.3% (705) | 49.32% 43.12% |
| As of 8/31/21 (n=1196 for HIV clinic) | At least one dose: 75.6% (904) Fully vaccinated: 72.3% (865) | 71.7% 65.6% |

Table 1. COVID-19 Vaccine Completion Rates at UNMC HIV clinic compared to State of Nebraska. First timepoint is data at time of abstract submission. Second timepoint reflects additional progress made since time of abstract submission.

- As of 8/31/21, 292 patients (24.4%) have not received any dose of COVID-19 vaccine. The Vaccine Task Force has documented outreach to 116 of these unvaccinated patients (39.7%), of which 47 patients (40.5%) cited vaccine hesitancy as main barrier to receiving a COVID-19 vaccine to date.

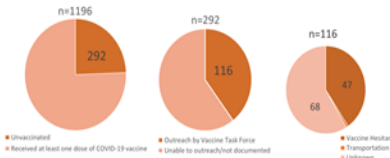


Figure 2. Of the 292 unvaccinated patients at UNMC HIV Clinic, 116 of them received documented outreach from the Vaccine Task Force. Of those outreach, 47 of the patients cited vaccine hesitancy as the reason for not getting vaccinated.

CONCLUSIONS

- A multi-faceted and iterative program to improve COVID-19 vaccine uptake in a high-risk patient population resulted in high rates of vaccine completion.
- Next step: as of August 12, 2021, the UNMC HIV Clinic offers mRNA COVID-19 vaccine in the clinic one day per week.
 - Identifying patients who have not initiated vaccine series, need to complete 2nd dose of mRNA series, or may be eligible for 3rd dose of mRNA vaccine due to advanced and untreated HIV disease²
 - Developing targeted COVID-19 vaccination outreach interventions to decrease vaccine hesitancy and engage patients at HIV clinic for vaccination, where they are most familiar with staff and processes

REFERENCES

- Guidance for COVID-19 and People With HIV. US DHHS. Last updated 2/26/21
- COVID-19 Vaccines for Moderately to Severely Immunocompromised People. CDC. Last updated 9/2/21
- NYT COVID vaccine start data



References

- Guidance for COVID-19 and People with HIV. US DHHS. Last updated 2/26/21
- COVID-19 Vaccines for Moderately to Severely Immunocompromised People. CDC. Last updated 9/2/21
- NYT COVID vaccine start data