

# Overcoming COVID-19 vaccine disparities among disadvantaged older adults

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## Objective

Organize a student intervention aimed at combating disparities in access to the Covid-19 vaccine among disadvantaged older adults at UCHHealth.

## Introduction

The COVID-19 pandemic has disproportionately impacted older adults and racial/ethnic minority groups. When the COVID-19 vaccination roll-out began at UCHHealth in January 2021, patients were offered vaccination scheduling via online portals. They received an invitation for scheduling by lottery, and invitations expired after 48 hours. Despite well-intentioned equal opportunity via this method, the process was not equitable, particularly for older adults with lack of access to technology or limited English proficiency. Many older adults were missing their opportunity to schedule their vaccination.

## Methods for Intervention

- Recruitment of students from health professions schools
- Phone outreach occurred January 11<sup>th</sup> -April 14<sup>th</sup>, 2021
- Training sessions, question & answer sheets
- Adaptions were required due to evolving resources and policy changes
- Interpreter services
- Partnerships with local clinics & community partners

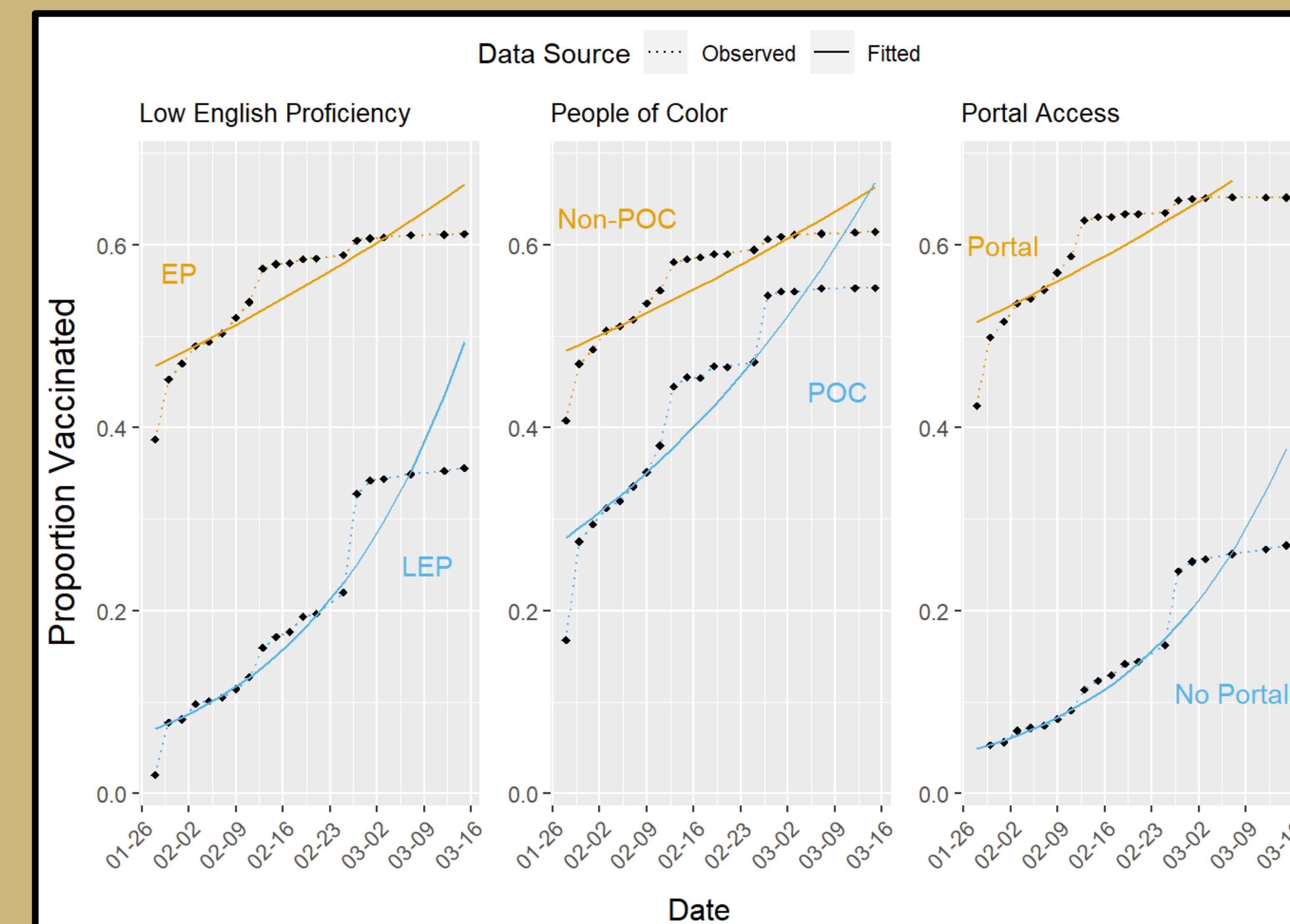
## Methods for Data Analysis

Poisson regression was used, adjusting for autocorrelation and overdispersion. Predictors were time and group indicator, and their interaction to assess whether vaccination proportions differed in complimentary groups. Analyses performed using R.

## Results

- Thirty-two students from the School of Medicine, Nursing, and Pharmacy at University of Colorado donated 500+ hours to call 2,263 patients
- Expected growth of vaccination proportion per day was significantly greater in all subgroups targeted by students:
  - limited English proficiency vaccination grew 1.035x [95% CI: (1.029, 1.042)] faster per day
  - persons of color vaccination grew 1.012x (1.009, 1.015) faster per day
  - patients without portal access vaccination grew 1.038x (1.031, 1.045) faster per day

## Proportion of Patients Vaccinated over Time for Three Underserved Groups



**Legend.** EP = English Proficiency, LEP = Low English Proficiency, Non-POC = Non-person of color, POC = Person of Color, Portal = Patient has access to the online portal, No Portal = Patient without access to online portal

## References

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## Discussion

The effectiveness of this multi-component outreach relied on dedicated interprofessional student volunteers alongside community partnerships. Constant change in public policy and access to resources during an evolving pandemic required flexibility and adaptability for this intervention to succeed. Students worked on short notice and 48-hour invitation deadlines to quickly contact patients with an active portal invitation. Mass vaccination events and outreach clinics for underserved patients provided opportunities for students to directly schedule patients.

## Conclusions

- This outreach project is a successful example of a person-centered approach to overcome health inequities in vaccine access
- We advocate for overcoming systems that may unintentionally cause gaps in vaccination proportions among vulnerable groups, particularly in context of COVID-19 booster vaccinations.

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