

Leveraging A Proctored, Self-collected COVID Testing Clinic And Non-traditional Staff To Expand Access For Symptomatic Students

Department of Student Health & Wellness

Samuel Holstege, BA, Meredith Hayden, MD, Kawai O. Tanabe, MPH, David Suarez
Department of Student Health and Wellness, University of Virginia, Charlottesville, VA

Introduction

Readily available and reliable COVID testing for symptomatic patients is a key component of an effective COVID mitigation strategy. Surges in demand for COVID testing, particularly with new variants, create challenges in maintaining adequate access to testing. Published evidence supports the use of self-collected mid-turbinate (MT) swabs for acute respiratory virus PCR testing, including SARS CoV-2. When collected within the first week of symptoms, proctored MT swab has $\geq 90\%$ sensitivity as compared to nasopharyngeal (NP) swab for SARS CoV-2 PCR testing. *This poster illustrates the University of Virginia's Student Health and Wellness (SHW) experience of using self-collected MT nasal swabs, proctored by trained, unlicensed staff to reliably and efficiently meet the demand for COVID testing in the student community.*

Program Design

- SHW hired and trained medical scribes in September 2021 (pre-health undergraduate, graduate, and gap year students) to proctor the MT patient self-collection.
- A "COVID test Only" appointment was created which could be scheduled online, by calling the clinic, or by a SHW provider or nurse.

- Schedule**
- Schedule "COVID Test Only" appointment.
 - Patient completes pre-test questionnaire online via the patient portal.

- Test**
- Patient meets with proctor, who walks them through the self-collected MT swab.
 - Proctor provides patient educational materials.

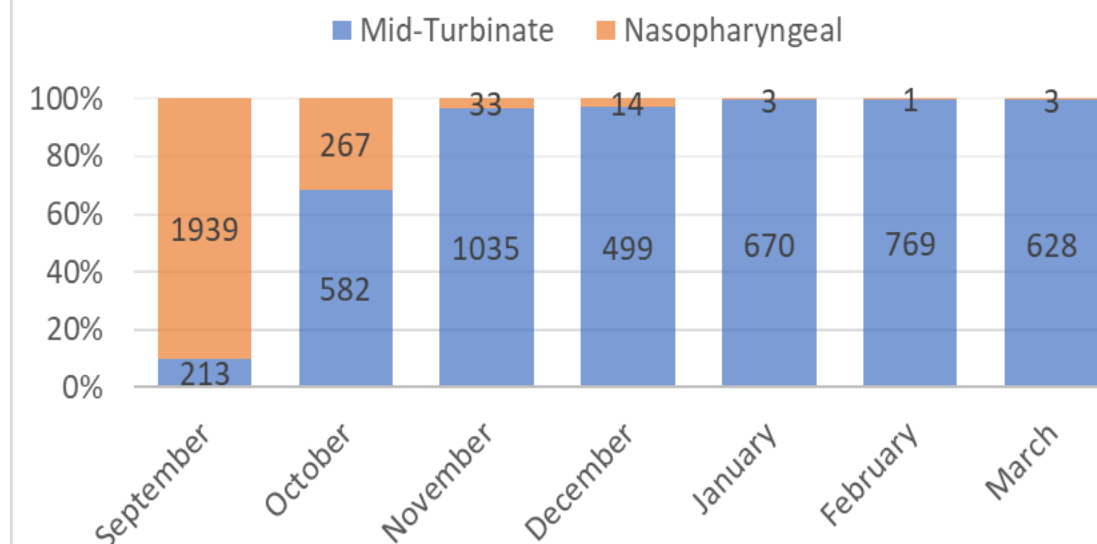
- Result**
- Results conveyed via patient portal.
 - Patients receive automated secure "positive" or "negative" result message with instructions for next steps.

Results

Table 1: Demographics of Students Utilizing SHW for COVID Testing

Demographics	Count (%)
Distinct students	4960
Average age	21.5
Gender	
Female	3169 (64)
Male	1788 (36)
Other	3 (<1)
Academic Level	
Undergraduate	3894 (78)
Graduate	1037 (21)
Other	29 (1)
Race/Ethnicity	
Asian	682 (14)
Black or African American	250 (5)
Hispanic	326 (6)
Multi-Race	253 (5)
White	2868 (58)
Other/Unknown	581 (12)

Figure 1: Proportion of COVID Tests by Type and Month



Discussion

- Between September 2021 and March 2022, approximately 6600 COVID tests were conducted among 4960 distinct symptomatic students at the University SHW; 64% were female (Table 1).
- MT swabs quickly became the predominant method for COVID testing (Figure 1).
- Self-scheduled appointments allows greater student control in scheduling, while decreasing calls to the reception staff.
- The online pre-test questionnaire allows for pertinent data collection without requiring 1:1 conversation with a health professional.
- Training medical scribes to serve as test proctors preserves core SHW staff time for more complex tasks.
- By utilizing a self-scheduled, proctored MT swab system, we significantly expanded testing access for symptomatic university students.



Future Directions and Implications

- MT self-collected swab may be considered for other respiratory virus detection in the college health population (ex. flu).
- Medical scribes can bolster core medical services staff, performing duties outside of medical transcription. Medical scribes may work directly with patients to obtain data and specimens as required by protocols, in both clinical and research applications.