



Barrier-free Testing of Health Care Workers during a surge in COVID-19 cases: Role and Utility

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Introduction:

- During the third wave of COVID-19 in Galway University Hospitals, there was dramatic increase in requests per week for COVID-19 testing amongst staff.
- The Occupational Health Referral system was overwhelmed.
- To combat this demanding workload for the occupational health department and to maximise available staffing levels, the Infectious Diseases department set up a walk-in, no-barrier service for healthcare worker (HCW) COVID-19 testing.

Method:

- A healthcare systems engineering approach to redesigning the COVID-19 testing service was undertaken in November 2020 to create resilience in the service.
- Barrier-free, walk-in COVID-19 testing was introduced from January 4th 2021.
- Data was collected from a prospectively maintained database of all HCWs being tested in Galway University Hospitals for COVID-19 between January 4th 2021 and May 2nd 2021.
- Data was obtained from both Occupational Health referrals and in the 'Walk in' clinic including both negative and positive test results in each referral pathway.

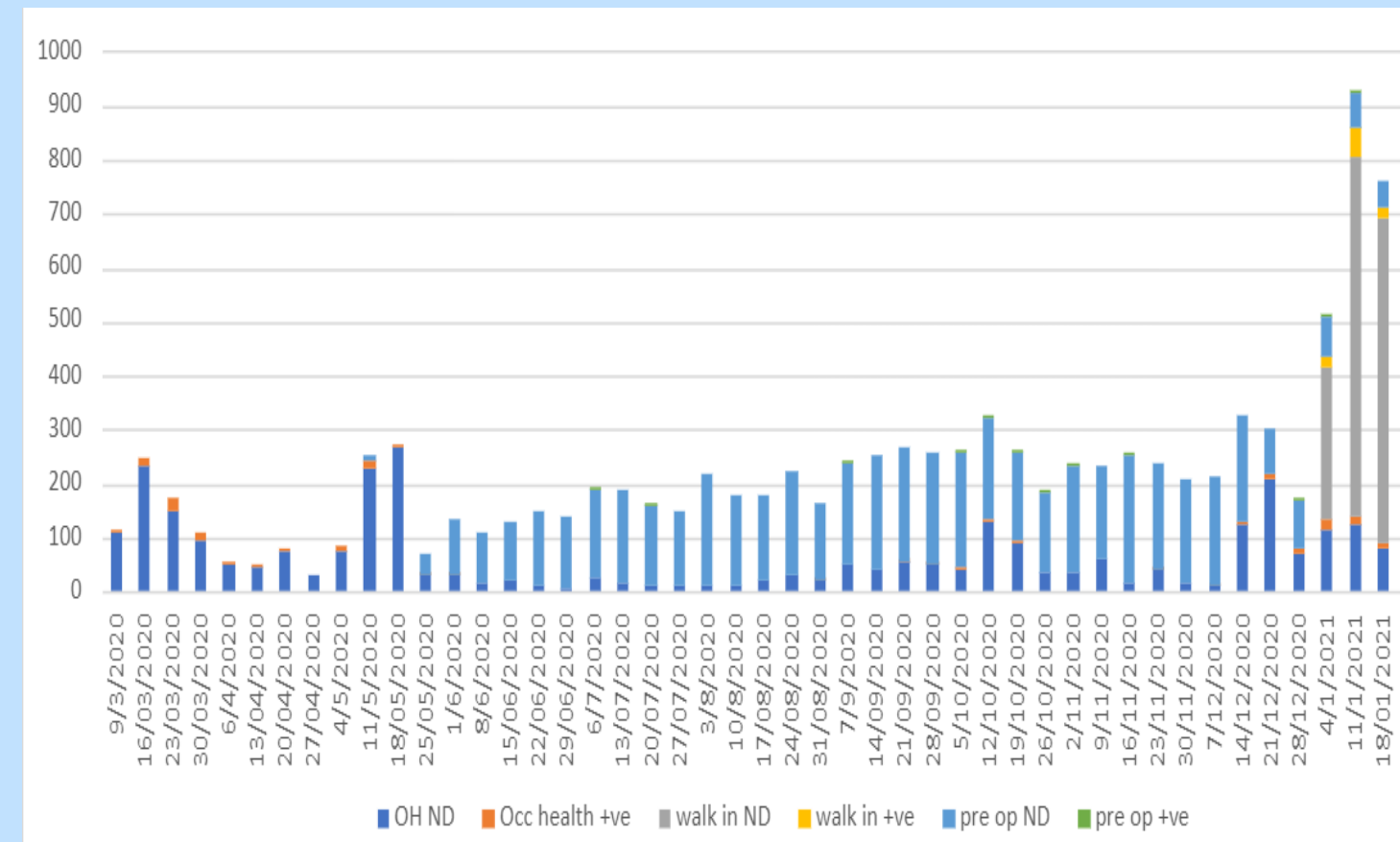


Figure 1 shows the swabs performed on HCWs in GUH from 9/3/2020 to 25/1/2021

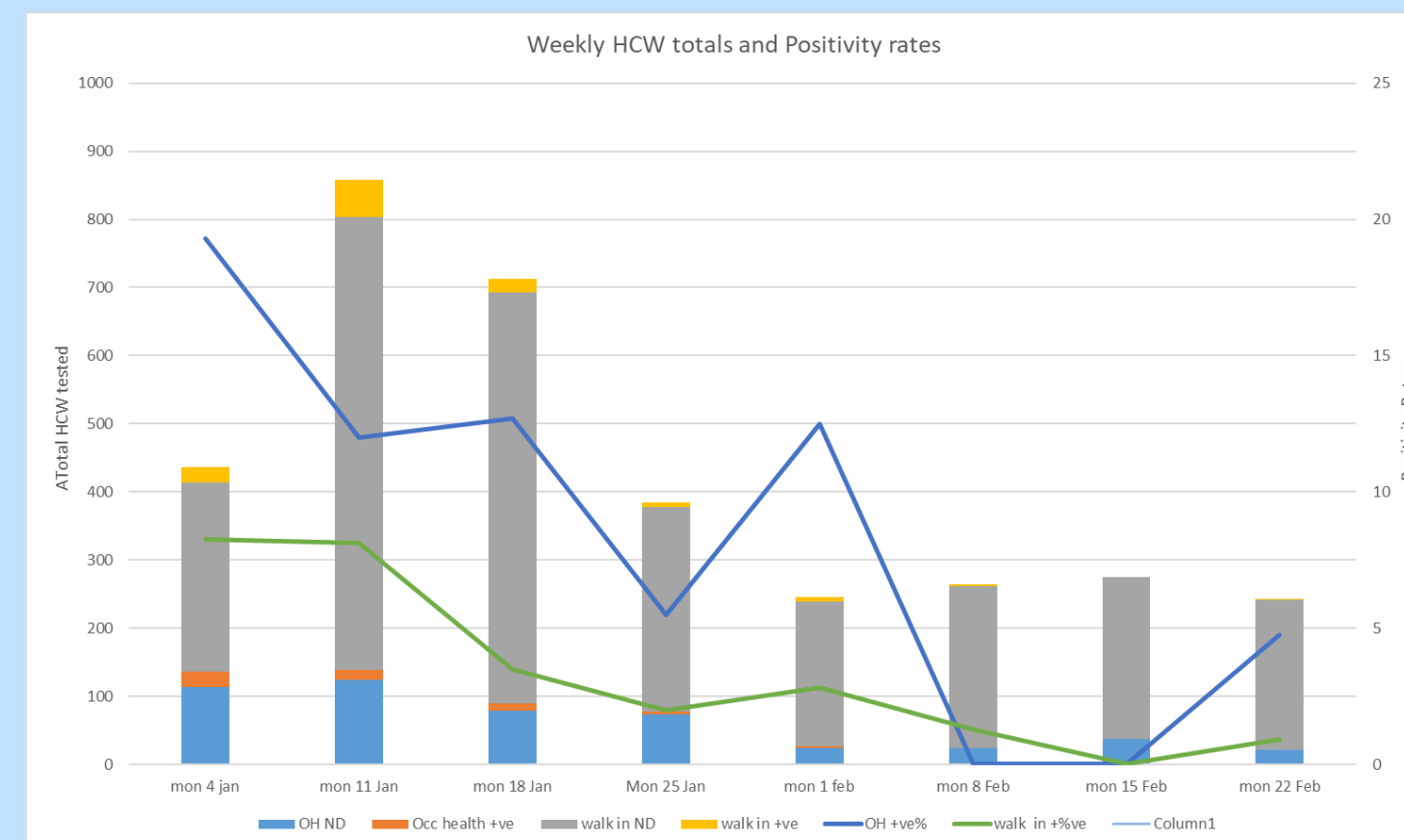


Figure 2 shows weekly HCW totals and positivity swabs from 04/01/2021 to 22/02/2021.

Results:

- System capacity trebled to handle a peak of 900 requests per week.
- From January 4th to May 2nd 2021, 3858 HCWs were tested, 3265 (84.6%) in the walk-in service and 593(15.4%) via Occupational health referral system with an overall positivity rate of 4.59%.
- Of the 177 who tested positive for COVID-19, 117 (66.1%) were diagnosed from the walk-in clinic versus 60 (33.9%) from occupational health referral system.
- 3.58% of the walk-in HCWs were positive and 10.11% of the Occupational Health referrals were positive.
- During peak demand (week beginning 11th January), 858 HCWs were tested for COVID-19, with 54/665 (8.1%) walk-in HCWs testing positive whilst 15/124 (12%) Occupational health referred HCWS tested positive.

Discussion:

- COVID-19 HCW testing is a crucial component in maintaining the safety of staff and patient care whilst ensuring continuity of Healthcare service delivery
- Our data highlights the important role of removing barriers to testing, as evidenced by the uptake rates and positivity rates of HCWs availing of the walk-in service, especially during peak surge periods.
- Barrier-free COVID-19 testing systems approach adapted here continues to be deliverable and is being used to cope with the May 2021 Cyber Attack¹.

References:

[1]"COVID-19 walk-in test centres", *Www2.hse.ie*, 2021. [Online]. Available: <https://www2.hse.ie/conditions/coronavirus/testing/covid-19-walk-in-test-centres.html>.