

Serial RADT Testing in Healthcare Workers

The Efficacy of RADT on the Asymptomatic Group

Authors: Sophie Trainor¹, Dr. Ryan Crawford², Dr. Eoghan de Barra^{1,2}

Number of staff tested: 28

Department of Infectious Diseases and Tropical Medicine (RCSI)¹, Beaumont Hospital, Dublin, Ireland²

INTRODUCTION

A rapid antigen test is a rapid diagnostic test suitable for point-of-care testing that directly detects the presence or absence of an antigen. Although the sensitivity of RADT (Rapid Antigen Detection Testing) is less likely than that of a PCR test, this may be mitigated by serial RADT testing. This project aimed to ascertain if serial RADT would be useful in the detection of asymptomatic cases of Covid-19 in Health Care Workers, thus protecting patients and staff. Hospital staff volunteered in a Dublin University Hospital to carry out Serial RADT (self-testing) at home.

METHOD

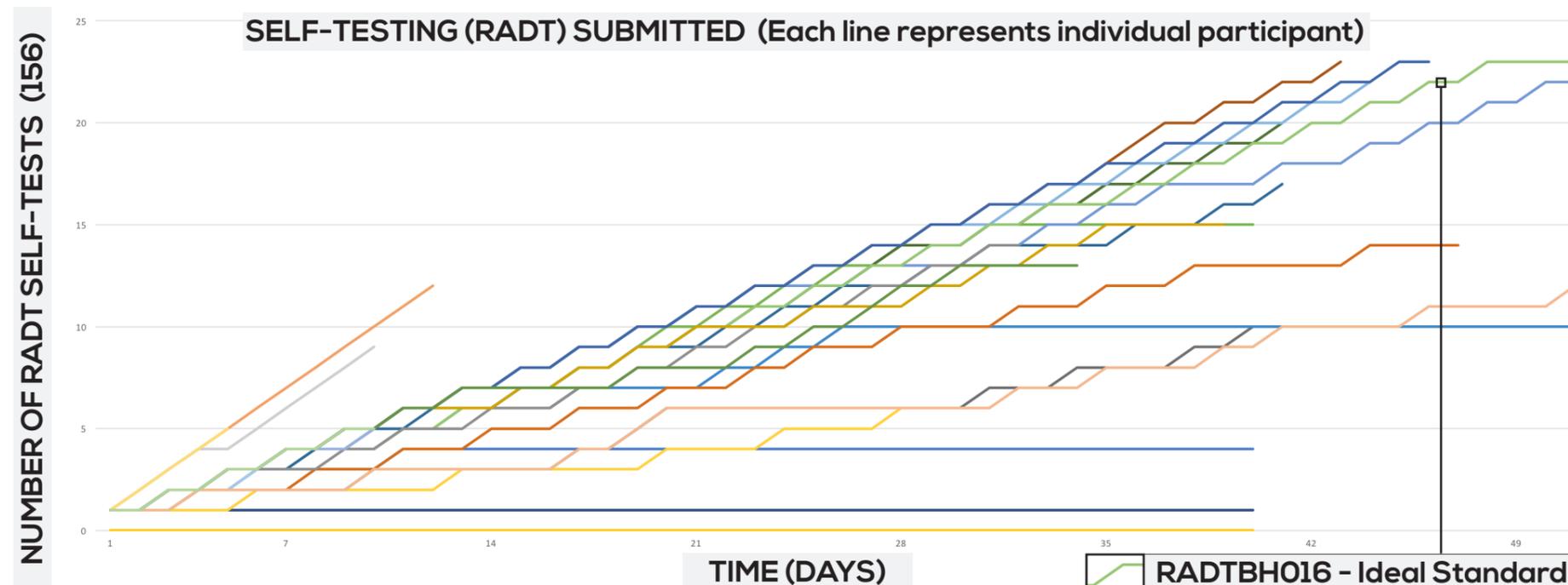
In this descriptive study, participants were asked to test and upload their results every 48 hours to a data base.



RESULTS

- Out of 28 staff members who were enrolled, 156 uploads were provided.
- 1 tested positive with the RADT and received a positive PCR. 153 tests were negative and 2 tests were invalid.
- 50% of participants were consistent with the recommended testing period which was every 48 hours, every two weeks.
- 21% of participants dropped off the study during the two weeks period prior to completing the two weeks.
- 36% of participants uploaded all tests required during the testing period.
- Subject No.16 (RADTBH016) (see graph) met the ideal standard (7 tests every 48 hours over two weeks) of self-testing.
- 64.29% of participants completed greater than 75% of the number of tests required.

SELF TESTING (RADT)



CONCLUSION

Among asymptomatic staff, only one was confirmed RADT and PCR positive. The number of tests ranged from 1-30 per participant. This is potentially a useful risk mitigation tool but needs re enforcement to ensure consistent use, such as text reminders and poster/information reminders around the hospital.