

# Goggles awareness and adherence: A quality improvement initiative

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## INTRODUCTION

With COVID-19 on the rise, the requirement for eye protection in all patients' rooms was necessary for additional protection. Therefore, an institutional policy mandated the use of shields or goggles in all patients' rooms. The goal of our Goggles QI project is to improve resident adherence to this hospital policy.

## METHODS

To achieve our aim, first, we conducted a formal poll of PGY-1, 2, and 3 residents on their current use of goggles when interacting with patients. Initial surveillance revealed that most residents were non-adherent to the use of goggles in patients' rooms, and when they were, they depended upon multiple replacements throughout the day. Using this data, we utilized a custom A3 template to develop and implement our QI project.

## Planning & Implementation

According to pre-implementation survey results, approximately 80% of residents conveyed that encumbrance and difficulty with storage were the major obstacles to goggles use. In addition to storage difficulty, about 75% of residents noted that their goggles were regularly and easily misplaced and subsequently lost, requiring frequent daily replacements. Utilizing the information mentioned above, we decided to initiate a project that we predicted would: 1. Improve adherence to goggles use among the residents, 2. Decrease the number of goggles replaced daily, and, 3. Reduce the overall cost of equipment for the hospital by reducing the goggles replacement rate. As a result, our first PDCA began with providing residents with locker hooks and eyewear strings to optimize storage and retention throughout the day.

## GRAPHS

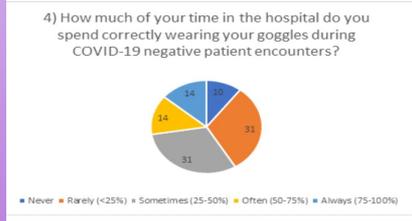


Figure 1: shows improvement in % of residents wearing goggles in patients rooms post implementation

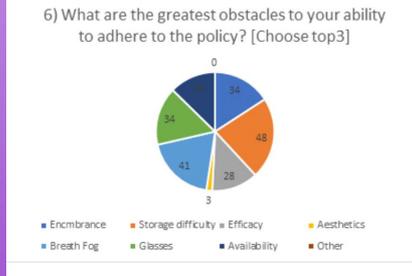
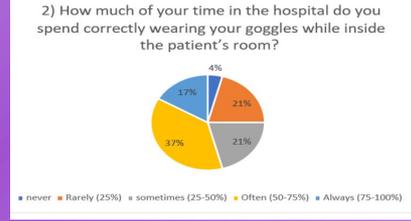


Figure 2 shows decrease in encumbrance and storage difficulty voted by residents post implementation

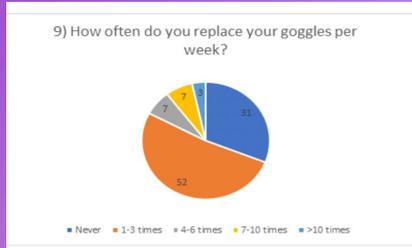
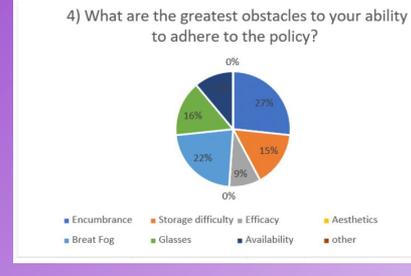
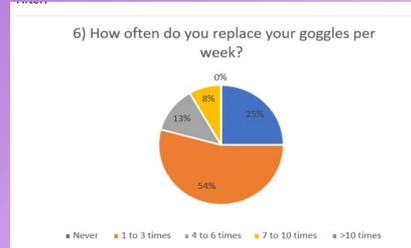


Figure 3 shows a decrease in placement of goggles per week among residents



## RESULTS (PDCA #1)

A post-implementation survey revealed a 80% reduction in goggle replacement after introducing the string and hook utilities. The post-implementation survey also demonstrated an increase in overall adherence to the goggles from 50% to 58%. There was a decrease in residents' encumbrance rate from 34% to 27% after implementing the goggles string and hook to our project. There was also a significant decrease in those who voted for storage difficulty from 48 to 15%. Overall, our post-implementation survey exhibited increased awareness of the hospital policy regarding the goggles policy among the residents, increased adherence rate to goggles use, and decreased replacements per day and week. However, we would like to improve our adherence rate further.

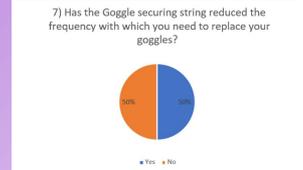


Figure 4 shows 50% reduction in replacement

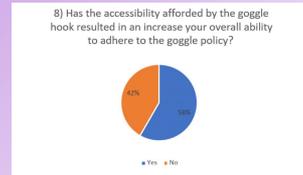


Figure 5 shows increase in overall adherence

## FUTURE IMPLICATIONS

We aim to continue to improve the adherence rate further with an end goal of 100% adherence and continued reduction in goggle replacement. Further PDCA cycles are planned to achieve this, with future efforts geared towards adding visual signage and point-of-care reminders.