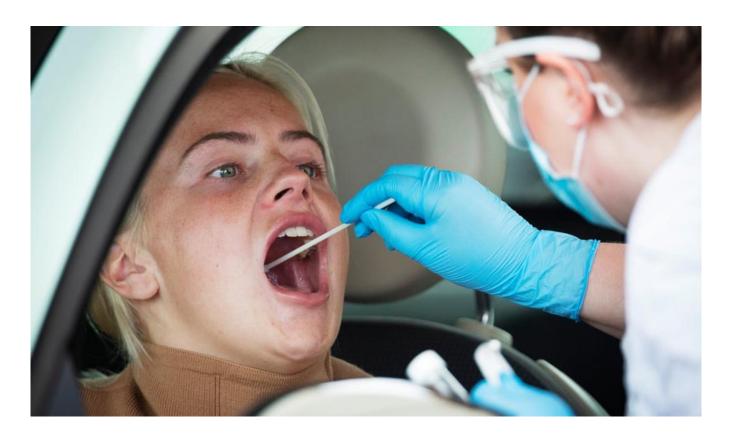
The simple innovations are often the most effective: Improving pre-surgical Covid-19 swab protocol

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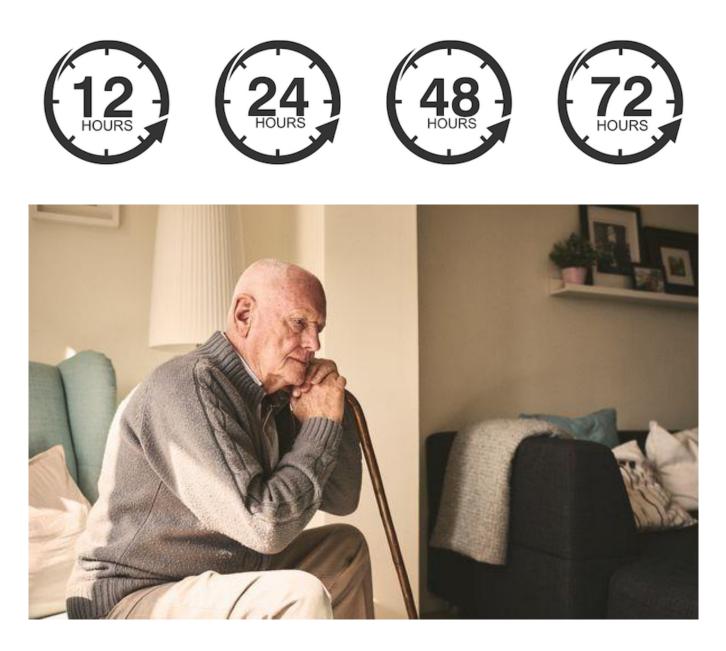
Background

The otolaryngology department at the Royal Gwent Hospital follow the guidelines suggested by the Royal College of Surgeons(1) - patients should have a Covid-19 viral swab within 72 hours of elective surgery.



It was found that numerous surgeries were delayed because swab results fell out of this 72-hour window.

An audit was started to see whether swabs taken on specific days had an impact on surgical delay.



Analysis

A 4-week period analysed showed that there was no relationship between the day the swab was taken and the day of the surgery.

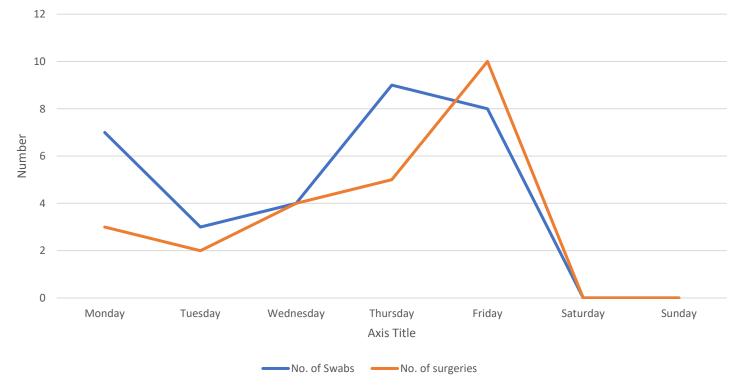
15 of the 31 swabs (48%) taken for elective procedures had result outside of the 72 hours.

Due to this, expensive same-day swabs were used to allow surgery to proceed.

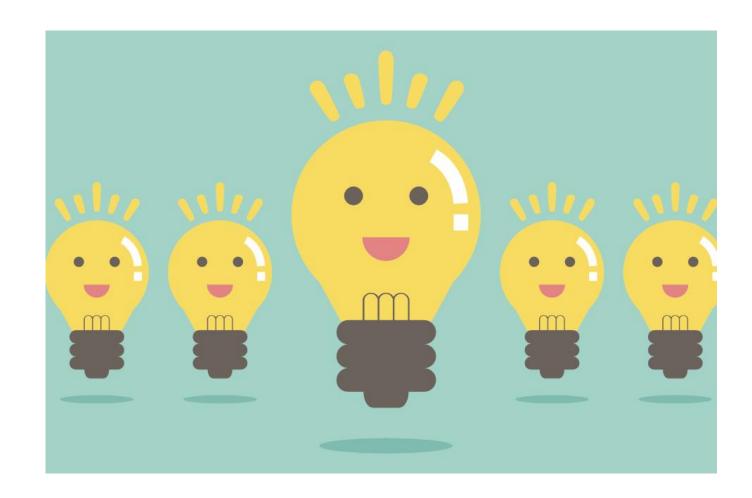
Waiting for results caused numerous surgeries to be delayed impacting on the physical and mental health of patients and providing less training opportunities for surgical trainees.

Day	No. of Swabs	No. of surgeries
Monday	7	3
Tuesday	3	2
Wednesday	4	4
Thursday	9	5
Friday	8	10
Saturday	0	0
Sunday	0	0

Relationship of days swabs were taken and Surgical days -**Pre-intervention**



Intervention



A simple intervention was initiated.

An was exerted effort was made in appropriately timing when the swabs was taken in relation when surgery was to commence.

Swabs were taken within a maximum 72 hour of before the surgery was to start.

This meant swabs had to be taken on the weekend ,7 of which were taken on a Sunday





Outcomes

The following 4 weeks analysed showed a significant improvement.

5 of the 67 swabs taken (7.5%) for elective procedures had a result outside of the 72-hour window resulting in less delays and more training opportunities.

Day	No. of Swabs	No. of surgeries
Monday	5	6
Tuesday	31	3
Wednesday	5	9
Thursday	11	5
Friday	7	25
Saturday	1	0
Sunday	7	0

The graph below shows that a high proportion of surgeries took place on Fridays, keeping inline with the intervention most swabs were taken on a Tuesday – 72 hours before.

