

# New Colposcopy referrals to a tertiary hospital on the Gold Coast based on HPV subtype and eligibility for HPV vaccination following the introduction of the Cervical Screening Test (CST) on 1 December 2017.



Ellie Mckay<sup>1</sup>, Nino Abuladze<sup>1</sup>, Dayle Rundle-Thiele<sup>1</sup>,  
Christopher Arthur<sup>1</sup>, Graeme Walker<sup>1</sup>.  
<sup>1</sup>Gold Coast University Hospital,  
Queensland.

Author Contact Email:  
[Ellie.Mckay@health.qld.gov.au](mailto:Ellie.Mckay@health.qld.gov.au)

## Introduction

Following the introduction of the Cervical Screening Test (CST) on 1 December 2017, we have experienced a significant increase in the number of Colposcopy referrals (see Figure 1).

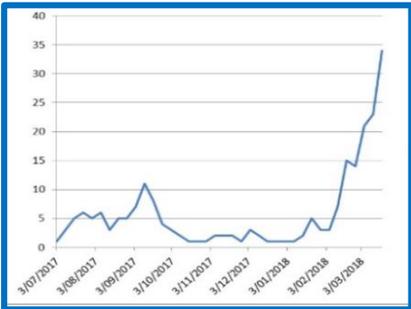


Figure 1: Rate of new referrals to Colposcopy at Gold Coast University Hospital following the introduction of the CST.

## Objectives

To assess the relationship between eligibility for HPV vaccination and in the indication for referral to Colposcopy.

## Methods

A retrospective audit of new Colposcopy referrals to a tertiary hospital on the Gold Coast because of a positive CST between 1 December 2017 and 28 February 2018. Referrals were separated into 3 groups:

- **Group 1:** Eligible for HPV vaccination (born after 1994)
- **Group 2:** Eligible for catch-up vaccination (born 1981-1993)
- **Group 3:** Ineligible for HPV vaccination (born 1980 or earlier)

HPV subtypes were separated into HPV 16/18, HPV 'Other' and both HPV16/18 and 'Other'. Separate Chi squared analyses were used to compare the rate of HPV subtypes within each group.

## Results

There were a total of **143** new referrals

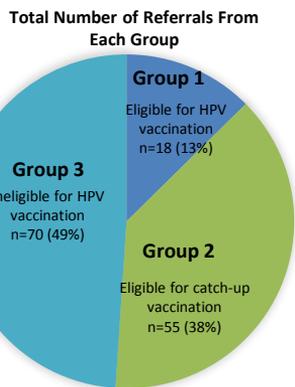


Figure 2: Total number of referrals from each age group category (based on eligibility for HPV vaccination)

**Group 1** had the highest rate of HPV 'Other' (n=14, 78%) compared with Group 2 (n=26, 48%) and Group 3 (n=15, 21%), p<0.001

**Group 3** had a significantly higher rate of HPV 16/18 only positive results (n=44, 63%) compared with Group 2 (n=20, 37%) and Group 1 (n=3, 17%), p<0.001

## Conclusion

Those eligible for vaccination had the lowest number of referrals and a significantly lower rate of HPV 16/18 but higher rate of HPV 'Other'. Those ineligible for HPV vaccination had the highest number of referrals and a significantly higher rate of HPV 16/18. This is consistent with predicted post vaccination infection patterns.