AN ASSESSMENT OF HUMAN PAPILLOMAVIRUS (HPV) VACCINE SERIES COMPLETION AND ON-TIME DOSING IN ONTARIO’S GRADE 8 HPV VACCINATION PROGRAM

W Ting Lim,1 Kim Sears,1 Leah M Smith,2 Guoyuan Liu,1 Linda E Lévesque1.
1Queen’s University; 2McGill University
10.1136/jech-2013-203098.15

Introduction Proper administration of the human papilloma virus (HPV) vaccine (three doses at 0, 2, and 6 months) will likely influence the vaccine’s effectiveness and the impact of provincial vaccination programs on adolescent health.

Objectives To assess HPV vaccine series completion and on-time dosing in Canada’s largest publicly funded, school-based vaccination program.

Methods Using Ontario’s administrative health and immunization databases, we identified a population-based cohort of all girls eligible for Ontario’s Grade 8 HPV vaccination program in the 2007/08-2009/10 program years who initiated the three-dose vaccination series. Vaccine exposure was ascertained for two relevant time windows: Grade 8 and Grades 8–9. To assess series completion, we determined the number of doses each girl received and calculated the percentage that received all three. To assess on-time dosing, the number of days between doses (1–2, 2–3, 1–3) was calculated and categorized (e.g., too short, on schedule, too long) based on the manufacturer’s recommendations. Analyses were also stratified by program year.

Results Based on the data available at the time of analysis (i.e., from 21 of Ontario’s 36 health regions), we identified a cohort of 55,798 girls who initiated the vaccination series. Series completion in the Grade 8 window was high (81.8%) and increased approximately 6% in Grade 9. Series completion was similar across the three program years. 70.8%, 98.5%, and 86.1% of girls were classified as ‘on schedule’ for dosing intervals 1–2, 2–3, and 1–3, respectively; 70.0% of girls received all three doses in perfect accordance with dosing recommendations. Stratification by program year revealed that on-time dosing was high in the first two years of the program (85.6% and 80.6%), but dropped to 42.1% in the 2009/10 program year when H1N1 vaccination programs were prioritized.

Conclusions Publicly funded, school-based HPV immunization programs overcome financial and accessibility barriers to healthcare, creating an ideal setting in which vaccine use be optimized. Indeed, our results indicate this approach to program delivery is enabling the vast majority of girls who initiate the vaccination series to successfully complete it as recommended.