Introduction

7-year-old vaccine coverage in Island Health has persisted below 70%, which is less than the Island Health coverage target of 73%. High population-level vaccine coverage is important for establishing herd immunity against vaccine-preventable diseases. In early 2023, Island Health implemented a phone reminder system to contact guardians of 4 to 6-year-old children if vaccines were due. Vaccine coverage remained below target so school-based immunization clinics (SBICs) for grades 1 and 2 were implemented at select schools to improve vaccine coverage and access.

Objectives

- Increase 7-year-old vaccine coverage to 73% and increase access to school-entry vaccines.
- Qualitative feedback on the SBICs differed?
- Increase vaccination coverage to 73% in grades 1 & 2.
- Increase vaccination coverage among Gr. 1 & 2.
- Improve access to vaccinations.
- Population of focus: Gr. 1 & 2 students in Island Health
- Intervention: SBICs in schools with vaccine coverage <73% in Gr. 1 and/or 2, implemented by 12 public health units
- Timeline: May & June 2023

Methods

Island Health piloted SBICs for grades 1 and 2 students in the 2022/2023 school year. Vaccine coverage was defined as proportion of students who were up-to-date for vaccines for their age based on the provincial schedule. Schools were eligible if vaccine coverage was less than 73% in either grades 1 or 2 and health units identified schools in which clinics were likely to have a larger impact. Health units planned and implemented clinics in May-June 2023. Schools and health units varied in whether guardians could attend, when and if phone or letter consents were used. Vaccine coverage data for their age based on the provincial schedule. Schools were eligible if vaccine coverage was likely to have a larger impact. Health units planned and implemented clinics in May-June 2023. Schools and health units varied in whether guardians could attend, when and if phone or letter consents were used. Vaccine coverage data was pulled from Panorama before and after clinics for all schools and participating and non-participating schools were compared. Projected vaccine coverage was determined by applying the percentage point difference pre & post SBICs in participating schools to the non-participating schools in corresponding health units. Qualitative feedback on the SBICs was collected from health unit staff and analyzed using thematic analysis.

Results: Quantitative

<table>
<thead>
<tr>
<th>Participation in Gr. 1 &amp; 2 SBICs:</th>
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<tr>
<td>25 out of 71 (35%) schools with coverage &lt;73% participated in the SBICs</td>
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<tr>
<td>Out of 805 eligible students, approximately 236 were immunized</td>
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Quantitative Results Summary:

- 9 percentage point ↑ in coverage at participating schools across Island Health
  - 9 percentage point ↑ among Gr. 1, 8 percentage point ↑ among Gr. 2
  - 4 percentage point ↑ at participating schools & 1 percentage point ↑ at non-participating schools, by health unit
- 1 percentage point ↑ overall coverage (participating & non-participating), by health unit
- −29% of those eligible became up-to-date

Participating schools % coverage pre & post SBICs by health unit

Discussion & Lessons Learnt

Grades 1 & 2 SBICs contributed to a 2 to 13 percentage point increase in vaccine coverage across participating schools in Island Health. Even though health units already provided phone reminders for immunizations earlier in the year, SBICs were still highly effective in boosting coverage even further. The SBICs increased vaccine coverage among Grade 1 & 2 students in Island Health to the 7-year-old target of 73%, demonstrating the impact that a relatively small but directed campaign can have. Additionally, these SBICs increased access to school-entry vaccines as they did not require travel to a health unit or guardian present. The contrary, SBICs were resource-intensive to plan & staff, which can be a barrier to implementation for some health units. Further. The addition of a grades 1 & 2 SBIC requires coordination with pre-existing immunization activities & campaigns.

This QI project highlights the importance of multi-faceted approaches to increase vaccine access & coverage. Given the effectiveness of the grades 1 & 2 SBICs, Island Health will continue to implement them at select schools, with potential for future expansion.

Recommendations for future campaigns:
- Integrate SBICs with phone reminders to streamline immunization outreach
- Consider SBICs in younger grades (such as kindergartners) to provide earlier protection
- Allow health units time and flexibility to integrate grades 1 and 2 SBICs into their existing work
- Create and share resources & training around immunizing children without their guardians present

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