Vaccine Error

**Reported Incident** (details are modified to ensure confidentiality of the home and reporter)

A resident was prescribed the 13-valent pneumococcal conjugate vaccine (PNEU-C-13) PREVNAR 13™ immunization, to be followed 8 weeks later by the 23-valent pneumococcal polysaccharide vaccine (PNEU-P-23) PNEUMOVAX 23™ immunization. A chart review identified that the PNEU-P-23 immunization was recently given, but looking back through the medication administration record (MAR), the PNEU-C-13 immunization was not given, but rather had the notation “medication not available” on the MAR. Current guidance from Public Health Canada (Pneumococcal vaccine: Canadian Immunization Guide) indicates that PNEU-C-13 not be given until one year after PNEU-P-23, leaving the resident with incomplete vaccine protection for a year.

**ISMP Canada staff determined the following key contributing factors and considerations for improvement.**

It is the responsibility of medication safety leaders in long-term care to determine what, if any, actions for improvement are needed in their medication management processes.

**Key Contributing Factors**

- Presence of a conditional order (an order was written in which one element of the order was dependent upon another element (e.g. PNEU-C-13, then 8 weeks later PNEU-P-23)
- Unclear mechanism to follow up on medications not given due to lack of availability*
- No clear and ongoing warning that a medication (e.g. PNEU-C-13) was not given and needed to be obtained and administered before another medication (e.g. PNEU-P-23) was administered

**Considerations for Improvement**

- Ensure that critical sequencing and timing constraints are known to staff and there are processes and real-time decision supports (e.g. reminders) in place at point of storage and preparation
  - Labels on PNEU-C-13 packaging: “To be given prior to PNEU-P-23"
  - Automated reminders on MARs
  - Policy of double-checking sequencing of PNEU-C-13 and PNEU-P-23
- Formalize procedures for following up on unavailable medications
  - Non-availability should be immediately communicated to Pharmacy for resolution
  - MARs should be flagged, and outstanding medications be communicated from shift to shift until resolved

*There is the potential that the process to obtain consent for payment of vaccines that are not publically funded may delay the availability of the vaccine for administration.

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**Report an incident to ISMP Canada**  
[https://www.ismp-canada.org/err_ipr.htm](https://www.ismp-canada.org/err_ipr.htm)

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Pneumococcal vaccine: Canadian Immunization Guide [cited 2022 Jan 20]. Available from: Canada.ca  