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Implementing Tdap Vaccine Administration Protocol in a Pilot LVHN Family Medicine Clinic

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Introduction and Objectives

- Vaccines are an effective way at preventing the development and transmission of diseases¹.
- The national vaccination rate against tetanus with any form of a tetanus vaccine, including the tetanus, diphtheria, and pertussis vaccine (Tdap) is 63.4%, with an opportunity rate of 81.6%².
- Missed opportunity rate in LVPG - Lehigh Macungie Family Medicine was 90% while the national missed opportunity rate is 18.4%.
- This Quality Improvement (QI) project was developed to:
 - Provide a standard of care for patients requesting Tdap immunization.
 - Reduce the risk of exposure and transmission of pertussis and risk of tetanus to patients.
 - Improve overall Tdap vaccination rate within the LVHN clinic.

Methods

Literature Review

- Literature review on vaccines, immunization practices, workflow improvement, tetanus, and QI development and improvement was done prior to implementing the protocol.

Baseline Data Collection

- A baseline for the missed opportunity rate for the Tdap vaccine was determined by analyzing 201 eligible patient Electronic Health Records (EHR).

Education

- Protocol and information pertaining to the diseases the Tdap vaccine prevents were presented to the clinical staff of the pilot clinic.

Review of Progress

- Data was collected and analyzed weekly after protocol was implemented. Reminders to continue use of protocol were sent to pilot clinic as needed.

Results

Table 1: Opportunity Rate of Clinic Before protocol was introduced

Tdap Baseline Opportunity Rate	
Eligible and did not receive Vaccine	179
Eligible and Received Vaccine	22
Percent who received vaccine	10.95%

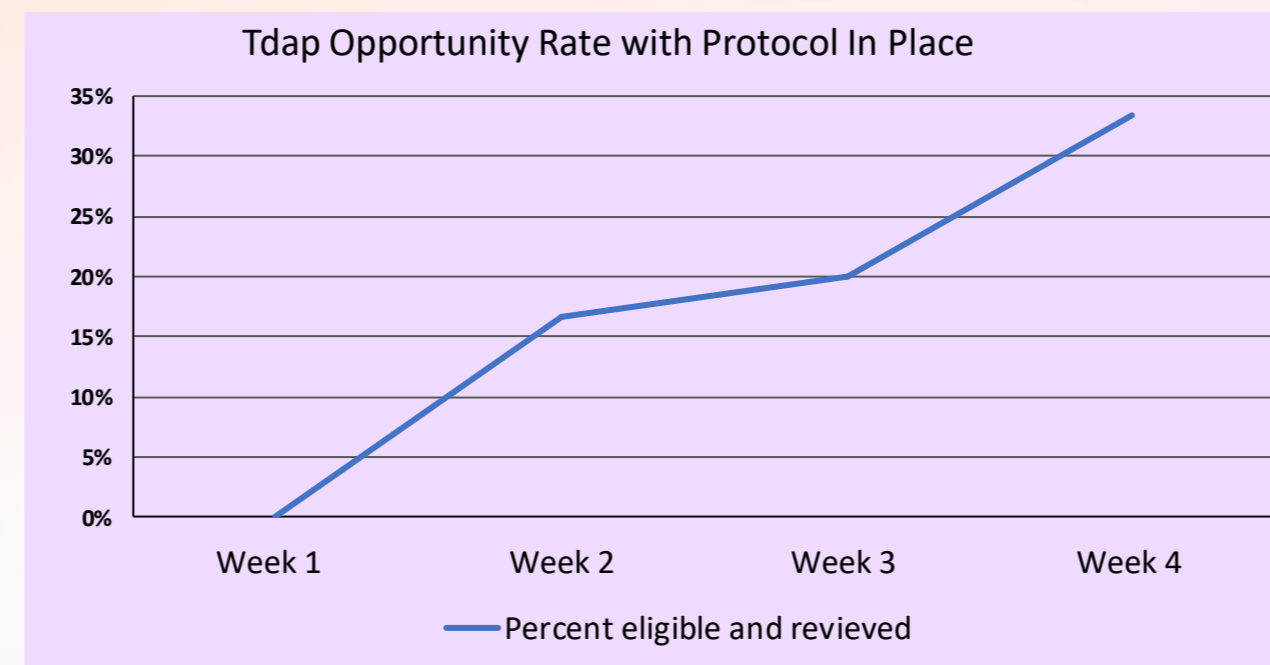


Figure 1: Opportunity Rate of Clinic After protocol was introduced

Table 2: Vaccination numbers for those eligible for the Tdap vaccine and covered by Medicare

	Total patients	Covered by Medicare	Medicare and Vaccinated
Ages 12-17	1	0	0
Ages 18-64	87	5	0
Ages: 65+	37	36	1
Total	125	41	1

Tdap is not able to be administered within the clinic for those covered by Medicare because it is considered a pharmacy benefit. Those patients must be sent out to a pharmacy to receive the vaccine.

Conclusion

- The protocol was effective in increasing opportunity vaccination rate for the Tdap vaccine from 10% to 33%.
- Patients covered by Medicare accounted for approximately 30% of the missed opportunity rate.
- Protocol must be well received and promoted by entire clinical staff in order to be effective³.
- Limitations to the QI included:
 - Staff feeling uncomfortable administering vaccine.
 - No in person education was provided for the clinic.

Future Directions

- Take feedback from clinical staff and analyze what worked well and what didn't work well within the protocol and adjust accordingly.
- Move protocol to other LVHN clinics with the same goal of increasing Tdap vaccination opportunity rates.
- Further education of staff to the protocol, effectiveness and importance of vaccines, and anything else they are concerned with.
- Working with pharmacies and insurance allowing for patients covered under Medicare to receive the vaccine in the clinic.

References

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