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Routine Immunizations in Chester, VT

Wyll Everett

Family Medicine Rotation February and March, 2018

Dr. Robert Schwartz; Chester Health Center, Chester, VT

- **Problem identification:** immunizations are a key aspect of the primary prevention of deadly and costly diseases. Despite this, vaccination rates are still low in Vermont.
 - The goal of this project is to investigate the rates of vaccination in the community and reasons why patients refuse recommended vaccinations, with the intention to suggest methods primary care physicians can use to improve vaccination rates.

Description of Need:

- In 2016, 38.4% of Vermonters had up to date adult vaccinations: pneumonia for those 18-64 years old with increased risk and over 65 years old, Td and Tdap over those over 18 years old, and shingles for those over 60 years old¹
- Cumulative monthly average of influenza coverage for those older than 6 months was 47.3% in the 2016-2017 flu season in Vermont²

Cost

- Influenza causes over 30 million outpatient visits in a season costing over \$10 billion in direct medical expenses with up to 49,000 deaths³
- Pneumococcal pneumonia results in over 445,000 hospitalizations per year in the U.S.⁴
- ▶ 1 in 3 Americans with develop shingles, 1 to 4% will require hospitalization⁵
- Vermont has a universal vaccination program that provides all vaccinations for free with a combination of funding from health insurers and federal funds.⁶

Community Perspective

Summary of comments by Elizabeth Beach, a local hospital administrator

- ► The vaccines are available
- We have a system in place to collect data about the rates of vaccination and we discuss how to improve these rates often
- We have put out new and improved educational paperwork
- Barriers: media attention of "anti-vaxxers" and cost of vaccinations (not everyone is covered by the state supply)
- > Ways to improve: improving awareness of resources, individualized follow-up with patients who decline vaccinations

Summary of comments by Christine Edwards, a medical assistant/community member:

- > There are multiple levels of personal interaction and counseling about immunizations
- > Length of relationship with the physician seems to increase the rate of vaccination
- Barriers: patients do not always come in—you cannot counsel them or give them a vaccine if they do not go to the doctor. Persistent fear of side effects.
- Ways to improve: broader shift in publicity and public information from potential side effects (whether true or not) to "they (vaccinations) are a good idea."

Intervention & Methodology

- Investigated available data on vaccination rates in Vermont and Windsor County, VT
- Reviewed literature on best practices for promoting vaccination.
- Developed a presentation featuring vaccination rate, cost, and best practices data designed for an educational session with the staff of Chester Health Center
- Led the educational session to promote changes in practices to better promote routine vaccinations among the patient population

Results/Data

- Immunizations:
 - 2016-2017 flu season in Chester, VT, flu vaccine claims rate of 28.09% with Windsor County having 38.64%⁷
 - Data for Tdap and pneumonia are known to the health network
- Suggested Improvements:
 - Follow the CDC's AFIX model
 - Determine adequate incentives for providers and patients
 - Evaluate current success of office/network
 - Implement a more extensive reminder system
 - Promote individualized counseling and recommendations for routine immunizations

Evaluation of Effectiveness and Limitations

- A data collection system that tracks vaccination rates is already in place and would be the ideal method of measuring the impact of this and future interventions.
- This project promoted positive conversations between those most involved in improving vaccination rates in a rural area.
 - It emphasized the need for change
 - It provided ideas to be discussed and acted upon
- This project was limited in that it was focused on a single community practice despite the problem being present both state and nation wide. Also, it did not focus on active implementation of new procedures and observation of a response.

Recommendations for Future Interventions/Projects

- Future projects could include:
 - Focused evaluation of the efficacy of current measures used to promote immunizations
 - Assessment and implementation of cost-effective incentive programs
 - Public outreach to promote accurate knowledge about vaccinations
 - Community Medical School model:
 - School programs
 - ► Town hall meetings

References

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