My Vaccine Work In Progress

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Where I work.

- Population: 46,000
- Economy: Central Washington University, Kittitas Valley Healthcare, Suncadia, local government & schools, agriculture/farming
- Poverty: 18.6% (Washington state = 13.2%)
- Vaccinations: Mostly average or slightly below average in state
My work in progress

Three ways to make a difference:

- Enhance vaccine education and improve vaccination rates
- System improvements
- Community outreach & engagement
- Provider education & engagement
SYSTEM IMPROVEMENTS

- Inspiration from the 2013 National Vaccine Advisory Committee’s “Standards For Adult Immunization”
- Vaccine at every visit
- Vaccine status as a vital sign project
  - What was done
  - How it was done
  - How well it worked
  - What’s next?
Vaccine Status as a Vital Sign
John Merrill-Steskal, MD, FAAFP

Background
The goal of this project was to increase vaccination rates by vaccinating patients at every possible clinic visit. While family physicians typically are in agreement that it is desirable to vaccinate at every encounter, there are many missed opportunities. Busy clinic schedules, time constraints, complex patient medical problems, and the burden of documentation are among the barriers to vaccinating at every encounter.

Hypothesis
By displaying a patient’s vaccine status alongside traditional vital signs, medical assistants and clinicians can be alerted at every clinical encounter if vaccines are indicated. We expected that more vaccines would be administered if vaccine status information was made more visible. In addition, we were interested to learn if our approach would improve traditionally low-vaccine rates, such as those for adolescent HPV and MCV.

Methods
In order to improve vaccination rates at KHV Family Medicine - Ellensburg in rural Washington State, we customized our electronic health record (EHR) software so vaccine status was included and documented as a “vital sign” by the medical assistant as other vital signs were taken.

As part of every visit, the MA took the patient’s vital signs and then briefly opened the immunization module within the EHR to assess immunization status. If the MA viewed an alert that indicated a vaccine was not indicated or overdue, the “vaccines recommended” box was checked. If no alerts were seen, the “vaccines up-to-date” box was checked.

If vaccines were recommended, the MA discussed and recommended the vaccine to the patient. With the aid of standing orders the MA could administer the vaccine. If the patient was hesitant, the clinician also noted the need for vaccines and addressed this with the patient. This process occurred for every clinical encounter, regardless of chief complaint.

Results
All our vaccines are uploaded to the Washington State Immunization Registry. This allowed us to compare the total number of vaccines given by antigen for a 12-month period prior to our implementation. We compared these totals with the 12-month period after implementation.

Total vaccines given increased from 2,783 (32.5 per 1000 patient visits) to 4,053 (184 per 1000 patient visits).

We found the greatest positive effect upon adult vaccine PPSV23 which improved from 28 to 154 doses administered. HPV and MCV vaccine administration improved, but not as much as anticipated.

Discussion and Recommendations
Presenting vaccine status as a vital sign significantly improved vaccination rates in my family medicine clinic. The visual cue or reminder to address vaccine status combined with standing orders helped improve our vaccination rates. In addition, a vaccine “champion” both at the physician as well as at the MA/nurse level proved essential in establishing and maintaining new standard work within the clinic.

Our project had the most pronounced effect upon adult immunization PPSV23. A likely explanation for this is that older adults present to the clinic on average more frequently for care, creating more opportunities for vaccinations.

Implementing the presentation of vaccine as a vital sign in primary care clinics has the potential to significantly increase vaccine rates.

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Ellensburg Community Radio: Monthly live-streaming podcast

Facebook posts:

Tune into Ellensburg Community Radio: eburgradio.org, Friday at noon, for Dr. John’s Radio Show. When I was in medical school is was a far off dream: prevent cancer with a vaccine. And now it’s reality: cervical cancer is a preventable disease with the HPV Vaccine! … Yet it is under utilized. Learn more: Friday, March 2nd at noon!
PHYSICIANS CAN HELP INFLUENCE VACCINE OPINIONS BY ENGAGING PATIENTS ON SOCIAL MEDIA

Dr. John Merrill-Stekal has spent 22 years as a Family Medicine Physician. He believes that doctors can help promote healthy behaviors by becoming more engaged on social media. Throughout the past year, in an effort to help shape public perception on a variety of medical topics such as vaccines, Dr. Merrill-Stekal has begun hosting a monthly radio show, blogging at Triple Espresso MD, and contributing guest posts on other blogs such as KevinMD. We welcome his latest contribution:

Vaccine hesitancy: It’s time to go on offense
by John Merrill-Stekal, MD

The term “vaccine hesitancy” is a relatively recent term in medicine, a term used to describe patients who are worried about the safety, efficacy, or necessity of receiving immunizations. Vaccines are
Public presentations:

Community: Shingrix, HPV

Value of partnerships:

Kittitas County Public Health Department & Kittitas Valley Healthcare
PROVIDER EDUCATION & ENGAGEMENT

- Medical Student education
- Family Medicine Resident education
- Kittitas County Medical Society
  - Vaccine hesitancy discussion
- Daily huddles and pearls, and clinic culture that promotes vaccination
Spread the News
Thank you!
Changing Healthcare and Public Health Landscape

- Value-based payment
- Accountable Communities of Health
- Medicaid demonstration projects
- Patient engagement
- Public Health 3.0
  - Chief Health Strategist (leadership)
  - New strategic partnerships
  - Data, analytics and metrics
- Public health communication