

Comparison of Contact Methods to
Improve HPV Vaccination Rates

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The Team

- Kristen Estrada and Sydney Stroud: Data collection
- Melodie Smith, RN: Nurse lead and immunization expert
- Nurses in Family Medicine Clinic: Heavy lifting
- Hannah Rachford: Coordinator

The Clinic

- The Family Medicine Clinic at the University of Kansas is in a residency program with:
 - 21 faculty physicians (all are part-time in the clinic)
 - 27 resident physicians
 - Approximately 25 medical students on rotation
 - 1 nurse practitioner and 1 physician assistant (both part time)
 - 4 RNs, 8 LPNs, 1 MA
 - 1 social worker
 - 3 psychologists

Background

- Baseline rates of HPV vaccination have been low despite previous attempts at increasing the vaccination rate
- We queried the medical record for all patients ages 12-26
- Baseline measurements of HPV vaccine compliance were made
 - 1415 patients (47.5%) had received 1 vaccine
 - 1089 patients (36.6%) had received 2 vaccines
 - 843 patients (28.3%) had received 3 vaccines

2978 Total
patients

Study Design

- 200 random patients ages 20-26
- Randomized to 4 groups with 50 patients each to be contacted by:
 - MyChart: a message from the medical record
 - Email
 - U.S. mail (snail mail)
 - Telephone
- Kick-off educational session
- 2 attempts 2-3 months apart were made by each method

Study Design

- MyChart is the easiest to do as we are now able to send out group messages
- Email is similar to as patients are notified by Email when they have a MyChart message
- Tried to add texting but the ability to do this was not deemed compliant with privacy requirements at this time
- U.S. mail is more expensive but the letters can be group-generated through the medical record
- Phone is most expensive due to the time required of the staff
- Nurses performed these activities in their “spare” time

Results

- Patients contacted through “MyChart” – the electronic medical record
 - 5 received vaccine with 3 completing the series (10% received vaccine)
- Patients contacted through email
 - 3 received vaccine with 2 completing the series (6% received vaccine)
- Patients contacted through the U.S. mail
 - 10 received vaccine with 8 completing the series (20% received vaccine)
- Patients contacted by telephone
 - 20 received vaccine with 15 completing the series (40% received vaccine)

Final Data

- Upon completion of the study
 - 3790 Patients
 - 2125 had received 1 vaccine (56%)
 - 1591 had received 2 vaccines (41.9%)
 - 1088 had received 3 vaccines (28.7%)

Discussion

- The number of patients in this age range in our clinic increased markedly over the year 2978 to 3790.
- Vaccine completion increased from 1008 (33.8%) to 1320 (34.8%)
 - These numbers are not the same as the number who completed 3 vaccines as this reflects the changes in the recommendations and captures those who completed 2 vaccines and received their first before their 15th birthday

Discussion

- Patients contacted by telephone were much more likely to come for vaccination.
 - This may have been because of the personal contact and the ability to ask questions
- 2nd highest rate was with U.S. mail
- Both MyChart and email were not very effective but much more cost effective.

Discussion

- This is not consistent with previous studies regarding methods of contacting patients.
- For mammograms, MyChart and email were significantly more effective
- This could be because patients are accepting of this screen and needed only to be reminded.

Discussion

- Our vaccination numbers increased significantly in the entire clinic (beyond our 200 patients).
- This may have reflected increased awareness among the physicians and nurses as well as general community campaigns to increase HPV vaccination rates

Limitations of the Study

- Small sample group
- Large change in patient numbers over the year
- Variability in time spent with patient on the phone
- Ongoing vaccination improvement projects by the residents
- Did not record actual refusal rate