Identifying optimal strategies for improving Human Papilloma Virus immunization rates in young-adult KPNC members

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| Challenge | **According to the CDC, 34,800 women and men are diagnosed with an HPV-related cancer annually. Though HPV vaccination could prevent >90% of HPV-related cancers, current KPNC HPV immunization rates for 13 year-old's (a HEDIS metric) is ~50% and the rates are far lower for older teens and young adults: ~24% for males and ~45% for females aged 18-26.**  |
| Existing Evidence | Numerous initiatives have been attempted for improving HPV vaccination rates among a variety of populations, with generally only very modest success. Knowledge gaps still exist for the evaluation of specific initiatives aimed at young adults to increase awareness and uptake of the HPV vaccine. Understanding the relative performance of alternative strategies to promote HPV immunization in this population will be crucial to improving HPV immunization rates. The RAU makes possible formal rapid-cycle testing of alternative approaches for care delivery, consistent with the Learning Healthcare System. |
| Target Population | Young adult KPNC members (aged 18-26) |
| Intervention or Exposure | Alternative methods for improving uptake of HPV vaccine (a secure message from KPNC, a secure message from a PCP, or a mailed letter from a PCP); these strategies will be compared with a randomized controlled trial with the endpoint of HPV immunization rates over 3 months |
| **Outcomes/Key Findings** | We conducted a randomized trial of the three notification strategies, randomizing 7,718 young adults. After 3 months, 86 patients (3.5%) who received no additional outreach obtained an immunization, compared with 114 (4.6%) who received the second secure message (p=0.05) and 126 (5.1%) who received the mailed letter (p=0.006). We concluded that none of these strategies showed sufficient success to recommend; in particular, more expensive strategies such as hard-copy USPS mailings did not perform sufficiently well to justify their costs. However, the successful conduct of this rapid-cycle, randomized trial showed that such evaluations are feasible, providing actionable data to inform implementation strategies. |
| **Resulting Action/Change** | More study is needed to identify better recruitment strategies for prevention efforts in this population. Standard notification methods do not appear promising. |
| Additional Recommendations | Further trials of alternative strategies and more research to gain better insights into how to motivate this important but difficult population. |
| Implementation Tools  | None at this time. |
| Implementation Measurement | None at this time. |
| Reference | Pending (manuscript submitted) |