Human Papillomavirus Vaccine Uptake in Adolescent Female Medicaid Enrollees — New Hampshire, 2007
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Objectives

• Assess HPV vaccine uptake among NH adolescent females through analysis of Medicaid data
• Evaluate for differences between ages and counties
• Determine vaccine series completion
• Establish baseline for comparison to future years

Methods

• NH 2007 Medicaid dataset analyzed (NH does not have a vaccine registry)
• Current Procedural Terminology code for HPV vaccine administration used to identify HPV vaccine recipients
• Calculated percentages and 95% CI for vaccine uptake at state, age, and county level and completion of vaccine series at state level using Poisson distribution
• Used chi square test to assess statistical differences in age- and county-specific vaccine uptake

Calculation of vaccine uptake

• Denominator: average Medicaid population enrollment during 2007, females, aged 11–18 years
• Numerator: received ≥ 1 HPV vaccine during 2007

Calculation of completion of vaccine series

• Denominator: received ≥ 1 HPV vaccine during January 1–June 30, 2007
• Numerator: received ≥ 3 HPV vaccines during 2007

Results

HPV Vaccine

• June 2006: FDA approved quadrivalent vaccine
• Commercially known as Gardasil® and only vaccine currently licensed for use in US
• Contains 4 types of HPV:
  • 16 and 18 – oncogenic and associated with 70% of cervical cancers
  • 6 and 11 – non-oncogenic and cause 90% of genital warts
• 3-dose series is given at 0, 2, and 6 months in time
• Advisory Committee on Immunization Practices guidelines:
  • 3-dose series routine administration to females aged 11–12 years
  • 3-dose ‘catch-up’ series to females aged 13–26 years

Discussion

Limitations

• Administrative data sets do not provide all medically relevant information
• Database might not capture all vaccination events for each individual due to Medicaid enrollees falling in and out of eligibility during a calendar year
• Difficulty in evaluating access to providers as a factor affecting county-specific vaccine uptake
• Potential underestimation of vaccine series completion by late completers, because 2008 data was not yet available

Conclusions

• HPV vaccine uptake 20% among NH adolescent Medicaid enrollees
• Vaccine uptake unevenly distributed between ages and counties
• Vaccine series completed by only 26% of those who received an HPV vaccine in the first 6 months of 2007

Recommendations

• Continue surveillance of vaccine uptake
• Conduct studies to determine reasons for differences in uptake by county and evaluate risk factors for low uptake
• Conduct follow-up assessment of vaccine series completion to account for late completers
• Work with providers, patients, or parents to increase uptake of well-care visits and the HPV vaccine

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