Comparison of Influenza Vaccination Rate among children at Pediatric clinic over three seasons after intervention

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Abstract

• Background: CDC recommends the annual influenza vaccination for everyone 6 months of age and older. National vaccination rates for the pediatric population were:
  • 2013-2014 season: 58.8%
  • 2014-2015 season: 59.3%
  • 2015-2016 season: yet to be reported

• Methods: This is a QI project. A baseline was established in 1 season. Interventions of extended hours and education were added in the following 2 seasons. Rates were also evaluated for the at-risk patients with asthma/reactive airway disease

• Results: Vaccination rates similar to national average
  • 2013-2014: 58.7%
  • 2014-2015: 58.8%
  • 2015-2016: 57.9%

• Conclusion: Further intervention is necessary for significant rate improvements. Rates were consistent with national average.

Background

• There were 8367 influenza associated hospitalizations and 4 pediatric deaths in the 2015-2016 season in the U.S.
• Annual influenza vaccine is recommended for everyone 6 months of age or older.
• The vaccine is a trivalent or quadrivalent prediction of the season’s prevalent strains

• National Influenza vaccination rates
  • 2013-2014 season: 58.8%
  • 2014-2015 season: 59.3%
  • 2015-2016 season: yet to be reported

Methods

• This was a QI (quality improvement project)
  • No IRB approval needed
  • Retrospective and prospective assessment of influenza vaccination rates at Creighton University Children’s Clinic
  • Baseline rates established in August 2013- April 2014 season
  • Intervention August 2014- April 2015 season
  • Extended Clinic hours
  • Intervention August 2015- April 2016 season
  • Extended clinic hours + Education materials (CDC posters, handouts, presentation of the rates with intervention ideas)
  • Rates also evaluated for at-risk patients with asthma/RAD

Results

• 8367 influenza vaccinations and 4 pediatric deaths were reported in U.S. in the 2015-2016 season. Annually 20,000 children under 5 years require hospital care related to flu
• Rates for Asthmatics are similar to non asthmatics in 2015
• Overall there is a downward trend in influenza vaccination rate across seasons with increasing age (75% to 43%) (Table 1, Fig 1); 13-14 yr olds rate is significantly higher than 14-15 p<0.0001; and 14-15 yr olds was significantly higher than 15-16 p<0.0001. Among 13-15 yr olds those with asthma were vaccinated at a higher proportion than those without asthma p=0.0008. Among asthmatics 13-14 yr old rate is higher than 14-15 p=0.0248 and 15-16 yr olds p=0.0157

Discussion

• All 3 seasons the rates remained the same
• Intervention for high risk patients can be addressed earlier in season
• Vaccine reminders and other strategy are needed to increase the rate
• Updates to NIESIIS would allow more accurate evaluation

Conclusion

• We would like to thank Lynne Provendra for providing data, the Children’s Clinic staff for intervention, and the immunization task force for the funding.

Acknowledgements

References