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## **Addressing HPV and HBV immunizations in pediatric acute sexual assault care**

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## Addressing HPV and HBV immunizations in pediatric acute sexual assault care

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**IRB Number (if applicable):** n/a

**Describe role of Submitting/Presenting Trainee in this project (limit 150 words):** Trainee assisted with design, implementation, and analysis of the research project.

### **Problem Statement/Question, Background/Project Intent (Aim Statement), Methods (include PDSA cycles), Results, Conclusions limited to 500 words**

**Problem Statement/Question:** Victims of sexual assault are at increased risk for acquiring sexually transmitted infections (STIs), including Hepatitis B virus (HBV) and Human papillomavirus (HPV). These immunizations are not curative, but each are >95% effective at preventing infections by the included viruses. The Center for Disease Control and Prevention recommends that children who are victims of sexual abuse/assault, receive the HPV and HBV immunizations at the time of their initial medical evaluation for sexual abuse/assault. Knowing that child sexual assault victims are at increased risk for repeat assault, number of lifetime sex partners, and of being lost-to-follow-up, in addition to having lower odds of being screened for cervical cancer, it is important for these immunizations to be provided at the time of their initial medical examinations. HBV and HPV immunizations have not been offered to patients seen for acute sexual assault examinations in our emergency department.

**Background/Project Intent (Aim Statement):** Using quality improvement (QI) methods, our aim was to increase administration of HPV and HBV immunization rates for victims of acute sexual assault, seen in our emergency department, from 0% to 50% in 6 months.

**Methods (include PDSA cycles):** The immunization initiative was undertaken as a QI project. The baseline rate of offered HPV and HBV immunizations for acute sexual assault victims seen in our emergency department was 0%. Our initial intervention involved education for SANE nurses, emergency room providers/staff and pharmacy. We also added the two immunizations to the order set for the sexual assault forensic exam (SAFE). Data was tracked and updates on immunizations rates were provided to the SANE nurses. PDSA cycles were used to implement additional interventions to further increase HPV and HBV immunization rates.

**Results:** HPV and HBV were first offered as part of the SAFE exam in the emergency department on April 1, 2020. In the first month of being offered, 55% of eligible patients received the HPV immunization and 45% received the HBV immunization. The immunization rate decreased to 45% HPV and 40% HBV in May. This decrease was the result of low pharmacy stock, due to communication difficulty between multiple hospital campuses, and delay in

getting the immunizations from the pharmacy to the bedside. Our second intervention involved meeting with the pharmacy to improve communication regarding immunization stock and improvement in speed of immunization to the bedside. Improvement in HPV rates were seen the following month with a rate of 80% and 50% for HBV. The SANE nurses reported lower rates of immunizations due to confusion regarding who could provide consent for immunizations. Our third intervention implemented included focused education on who could provide consent for immunizations.

**Conclusions:** Using multiple PDSA cycles, the HPV and HBV immunization rates for acute sexual assault victims seen in the emergency department increased from 0% to 50% (HPV) and 43% (HBV) over a 6-month period.