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Improving Hepatitis B Vaccination Rates in Nephrology Patients with Chronic Kidney Disease: A QI Initiative

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Plan

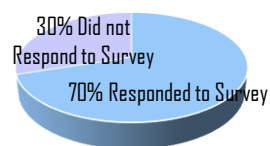
- Hepatitis B vaccination is an important health maintenance preventative measure for patients with chronic kidney disease (CKD).
- Prior to initiating dialysis, hepatitis B vaccination administration is proven to be more effective than waiting until patients begin dialysis treatments.
- Efficacy and immune response of the hepatitis B vaccine is greater when kidney function is greater.
- To better improve hepatitis B vaccine administration among the CKD stage 4 population, education measures and Epic modifiers will be implemented to achieve change.
- Nursing knowledge and Hepatitis B vaccine administration will improve after implementation of these measures

Do

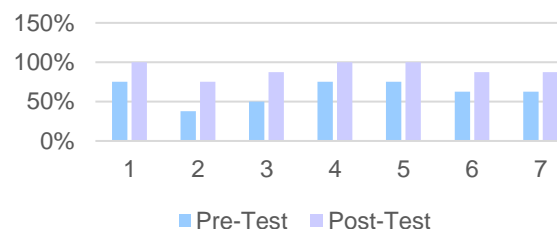
- Nephrology Nursing staff will take part in video education regarding Hepatitis B vaccine importance in the CKD stage 4 population.
- Nurses will be given education handouts as well as statistics on Hepatitis B and the vaccine among the CKD stage 4 population.
- Pre/Post Survey data will be collected
- Nephrology nursing staff will implement "Hepatitis B Vaccine Candidate" modifiers in patient's Epic charts to better flag for Hepatitis B vaccine administration candidates
- 6 week time-frame
- Pre/Post Implementation data will be collected

Study

Nurse Survey Response



Nurse Pre-Test/Post-Test % Knowledge Increase



Overall Increase in Hepatitis B Vaccine Administration Rates



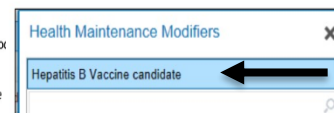
Epic Modifier Instructions:

Persons at risk for infection by percutaneous or mucosal exposure to blood

- Current or recent injection-drug users
- Household contacts of HBsAg-positive persons
- Residents and staff of facilities for developmentally disabled persons
- Health care and public safety personnel with reasonably anticipated risk for exposure to blood or blood contaminated body fluids
- Hemodialysis patients and pre-dialysis, peritoneal dialysis, and home dialysis patients
- Persons with diabetes aged 19-59 years; persons with diabetes aged ≥60 years at the discretion of the treating clinician

Patients previously documented with CKD, any stage, automatically had the Hepatitis B topic added to their Health Maintenance. With the CDC's updates, the rules used to determine patient risk were also updated, removing the CKD diagnosis from evaluation. The Hepatitis B topic was automatically removed for this patient cohort. Clinicians can now add a modifier in Health Maintenance to add the Hepatitis B immunization topic to patients identified in a pre-dialysis status. This functionality assists staff in determining the next valid dose for the series, and it displays in MyChart for patient information.

Go to Health Maintenance, choose the "Edit Modifiers" tool and add "Hepatitis B Vaccine candidate".



Epic Modifier

The modifier is included in the Hepatitis B Risk Immunization rule, so the series will display as a "risk" series in Health Maintenance.

Hepatitis B Vaccines (2 of 4 - Risk Engerix-B 4-dose series)

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A full list of references and clinical project paper available upon request

Act

- Nursing staff knowledge increased as a result of the education video and handout.
- Although marginal, the implementation of the Epic Modifier showed increased rates of Hepatitis B vaccine administration in the CKD stage 4 population.
- Any tools to improve outcomes even marginally are acceptable interventions to provide the best care and outcomes for our patients.
- This Epic modifier tool will continue to be used in the nephrology clinic to help flag patients who would benefit from the Hepatitis B vaccination while they still have some residual kidney function.

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