Hepatitis B Vaccination Initiative for Acute Care Dialysis Patients
Stony Brook University Hospital, Stony Brook, New York
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Stony Brook Demographics
- Stony Brook University Medical Center
  - Level 1 Adult and Pediatric Trauma Center for Suffolk County, LI, NY
  - 605 Beds

- Dialysis Unit
  - 4 Chair Acute only Hemodialysis Unit
  - 4 Renal Replacement Therapy Programs that we either directly perform or manage
    - Acute HD-3861 cases in 2017
    - 2882 to HD Unit
    - 979 Bedside HD
    - Continuous Renal Replacement Therapy (CRRT)-326 days of treatment managed in 2017
    - Peritoneal Dialysis (PD)-200 treatments performed in 2017
    - Pediatrics-data included in acute/bedside/CRRT statistics

Study Info
Objectives: To create a process to identify all dialysis patients who receive Renal Replacement Therapy (RRT) at Stony Brook University Medical Center that are Hepatitis B surface Antibody negative and initiate vaccination series prior to discharge.

Methods: We performed a Quality Improvement project involving a retrospective chart review of hospitalized patients receiving RRT at our Academic Medical Center over twelve months (Q3 and Q4 of 2016. And Q1 and Q2 of 2017).

Results: 575 charts reviewed. Of those 491 were on HD, 24 were on PD, and 60 were on CRRT. 82% were known ESRD patients and 18% of the patients were being treated for AKI.

Conclusion: Through this study we were able to improve the workflow process for identification of Hepatitis B AB negative patients and create an immunization process, including an immunization card (pending approval from the SBUMC forms committee). Communication within Dialysis Unit improved by creating a log for Hepatitis results. Communication with patient's community dialysis center also improved. We are continuing to collaborate with IT to discuss and optimize documentation enhancements.

Next Steps: Upon approval of the Immunization card, initiate the immunization process that we have identified. Educate floor nursing staff of process of patient identification and which patients meet criteria for Hepatitis B vaccination series initiation.

Algorithm

DOH Info

Conclusion

% Patients Identified by Results

- Positive
- Negative
- Undetermined

Hepatitis B Immunization Record

Name:

<table>
<thead>
<tr>
<th>Dose</th>
<th>Type of Vaccine</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Hepatitis B</td>
</tr>
<tr>
<td>2</td>
<td>Hepatitis B</td>
</tr>
<tr>
<td>3</td>
<td>Hepatitis B</td>
</tr>
<tr>
<td>4</td>
<td>Hepatitis B</td>
</tr>
</tbody>
</table>

Hepatitis B Core Ab
Hepatitis B Surface Ab
Hepatitis B Surface Ag
Hepatitis C Ab

If:

- Hepatitis B Surface Ab negative
  - Advise Team: Initiate first in series of Hepatitis B vaccinations, if indicated
  - Vaccine to be administered by primary RN
  - Enter results into log. Make copy of results for dialysis chart

- If needed, update Immunization Card
- Update list of events in the chart for patient
- Document in patient's chart the Hepatitis B vaccination series initiated

Hepatitis B Installation

- Vaccinate all susceptible patients against hepatitis B.
  - Ten to twelve months after last dose.
  - If antibody < 10, consider patient susceptible, associate with an additional three doses of vaccine and reinforce adherence to ART.
  - If antibody is > 10, consider patient immune, and select actively.
  - Give booster doses of vaccine and follow 80% of all patients and confirm to select actively.

- Make sure the Hepatitis B Immunization record is accurate and up to date