

Improving Holter Placement within 72 hours on the Stroke Unit

Abstract theme: Quality and Safety in Hospital Medicine

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I would like my submission to be considered for Oral Presentation during the QI Pre-conference course on Thursday, September 24, 2015.

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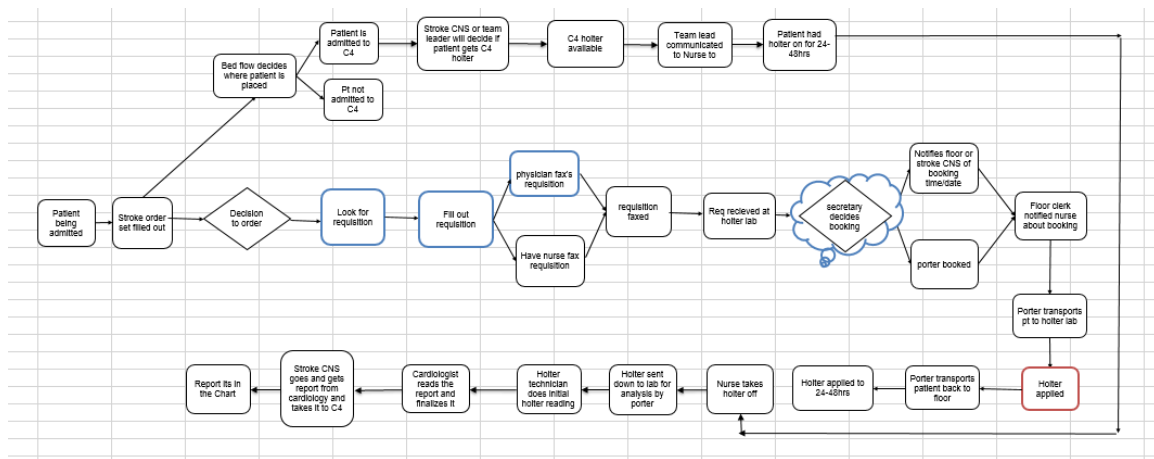
1)Background

According to the most recent stroke guidelines, it is recommended for patients with a diagnosis of ischemic stroke to undergo a holter within 72h of admission. Our pilot sample of 41 charts of patients admitted to the stroke unit from August to November 2014 with a diagnosis of ischemic stroke showed that only 26.8% of patients had a Holter monitor attached within 72 hours from admission.

2)Aim statement:

To improve the percentage of patients receiving a Holter Monitor within 72 hours of being admitted with a diagnosis of Stroke at Sunnybrook Hospital.

3)Process analysis



Main issues identified:

- Residents not being able to find the form, problems filling and faxing it
- Scheduling issues at the Holter clinic
- Incomplete utilization of 2 Holter Monitors located on Stroke Unit

4)Improvement and innovation

Our tests of change were multifaceted, and involved engaging the relevant stakeholders in the Holter Department to modify the form or its content:

1. Team meeting to review current Holter form and implementation of Stroke Order set including Holter requisition into Sunnycare (EMR):

- Adding date and time of holter request
- Printing Fax number on the form

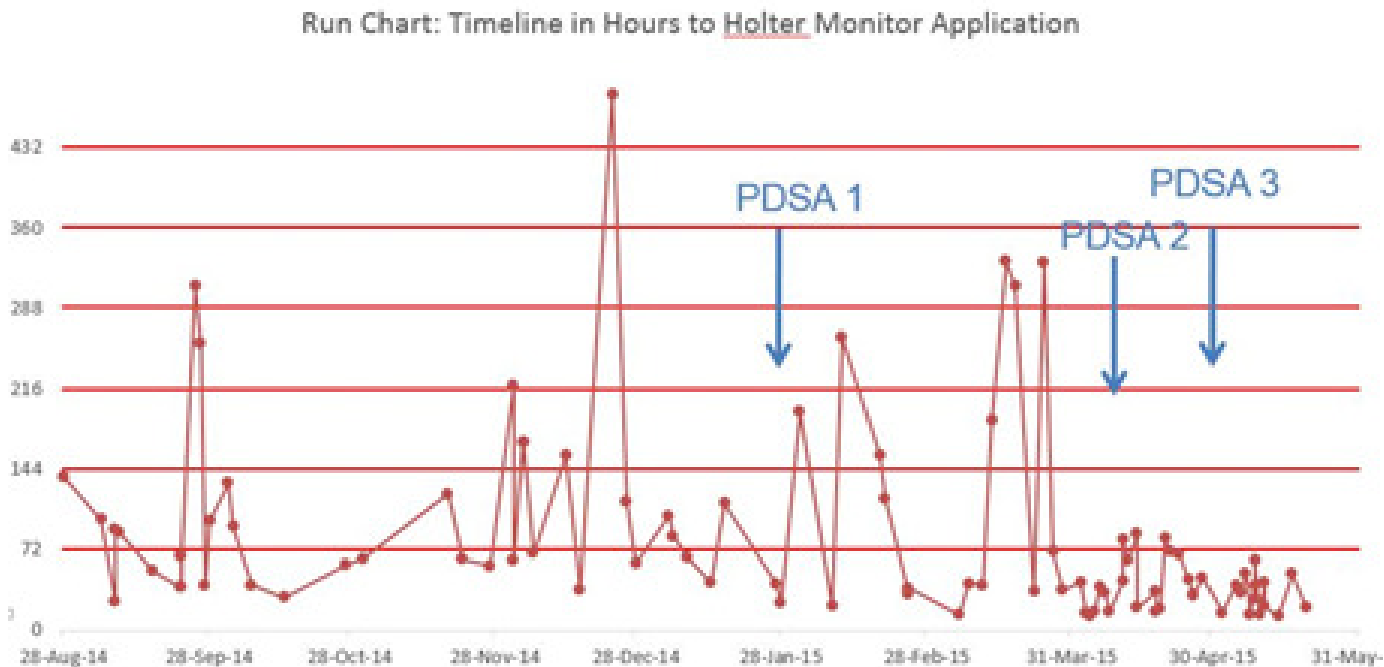
- Add Stroke as one of the indications for ordering a Holter
- Specify Duration (48 vs. 24 hours) and Location(Inpatient/Outpatient)

2. Multidisciplinary Holter Monitor Requisition Form Revision and stakeholder engagement meeting with Holter Department

3. New Holter Requisition Form implemented paperform and old forms discarded

4. Meeting with the stroke unit nurse leaders to explain the new changes and improve utilization of the designated stroke unit holters

5)Measures



A chart audit was performed using sign-out lists, charts and electronic-patient-records. The data was collected retrospectively for each patient. Each hospitalist was assigned a task to choose a convenient sample of 10 patients each month, from a period of August 2014 to May 2015. The only exclusion criteria was known atrial fibrillation. These results were validated with the Holter Department's and Nurses' records.

6)Project impact:

Our team was able to achieve a substantial increase in patients diagnosed with stroke

receiving a Holter monitor placed within 72 hrs. The mean application time in our last sample was 50h.

7) Implications and lessons learned:

We attribute our results to involving all the stakeholders who create and use the form to join in our initiative and attend our Quality Improvement meetings which led us to better understand their role and incorporate their suggestions for improvement. It truly is impressive to see that a change as simple and cost-effective as modifications to a form can impact patient care with this magnitude. Our goal is to continue with this initiative and monitor whether changes in technology and the ordering process affect the sustainability of our improvement once the champions of this change have moved on.