Description

- Waiting time in HUM Emergency Room is very long due to lack of resources and overcrowding.
- This generates important delays in the management of the patients’ conditions.
- Primary evaluation for ER visits shows mean waiting time for patients being 130.4 minutes. *
- And the patients who left the ER before seeing a doctor or receiving any medical care reached 7%.*
- We worked on that project in hope of decreasing potentially avoidable morbidity and mortality related to long wait times.

*A Mirebalais University Hospital statistics (EMR) and Patients Charts review

Aims and Objectives

Aim: Improve waiting time, and reduce potentially avoidable morbidity and mortality for patients in ER at HUM

Objectives:
- Decrease by 30% or more the mean waiting time for patients “triaged” in ER at HUM, over a 4 month period
- Decrease by 50% or more the percentage of patients in ER at HUM who left without seeing a doctor, over a 4 month period

Methods

- Our team used Continuous Quality Improvement Method to investigate and analyze problems, and to plan and implement strategies:
  - Education of the ER personel about the Efficient use of the “Rack” *
  - Implementation of Electronic Triage System
- We did retrospective surveys, of 4-weeks course each, using random samples of ER HUM patients charts
- Collected datas were then reported and analyzed to determine mean waiting time and percentage of patients who left without seeing any doctor

*Rack : Place where the patients charts are collected after triage, awaiting for doctor to call patient in for evaluation/admission

Cause and effect diagram

<table>
<thead>
<tr>
<th>Equipments</th>
<th>Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inadequate use of the “Rack”</td>
<td>Delays due to Labs</td>
</tr>
<tr>
<td></td>
<td>Triage system not adapted to reality</td>
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<td>Not enough bed available in the ward for admission</td>
<td>Inadequate patient transfer procedures from other health centers and clinics</td>
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<td>Limited resources</td>
<td>Lack of care provider</td>
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<td></td>
<td>Personnel burnout</td>
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<table>
<thead>
<tr>
<th>Environment</th>
<th>People</th>
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- Mean waiting time for ER triaged patients: 130.4 min.
  - PLWSD*: 7%

Results

Evolution of mean waiting time of patients triaged in HUM ER

Evolution of percentage of Patients who Left Without Seeing a Doctor

The impact of our strategies compared to our objectives

- First Strategy (T1) / Efficient use of the “Rack” provided:
  - 17.6% reduction of the mean waiting time for HUM ED visits
  - 72.9% reduction of the percentage of PLWSD
- Second Strategy (T2) / Electronic Triage System provided:
  - An additional reduction of 17.6% of the mean waiting time
  - An additional 12.8% reduction of the percentage of PLWSD

Outcomes and Lessons Learned

Outcomes
- Our strategies allowed us to reach a 34.7% reduction of the mean waiting time and 85.7% reduction of the percentage of patients who left without seeing a doctor, in a 4 month period

Lessons learned
- Communication and team work is a key factor to success
- Building on the team strength to address weakness helped reach objectives
- Education is a crucial aspect in quality improvement

Acknowledgements

- Our mentors, our incredible project team, HUM ED leadership, HUM ED staff, HUM Quality Improvement Committee, IT team, HUM health information and statistics staff