Clarkston Community Health Center Quality Improvement Initiative: Optimizing Patient Flow

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Aim Statement
Reduce patient wait time and total time at the Clarkston Community Health Center by 25 percent by May 1st, 2016

Background
The Clarkston Community Health Center (CCHC) is a non-profit 501(c)3 organization founded in 2013 to provide affordable primary and preventative healthcare to the uninsured refugee and indigent population of the Clarkston community, a major refugee resettlement area located just outside the city of Atlanta. The clinic is staffed by volunteer health professionals and students. In March 2016, the Institute of Healthcare Improvement (IHI) Emory Chapter partnered with CCHC to improve clinic processes and patient flow at this quickly growing clinic. The IHI Quality Improvement (QI) Team identified three core areas of potential improvement in the clinic: patient flow, volunteer coordination, and patient forms. With support from CCHC, the IHI QI Team used a Plan-Do-Study-Act (PDSA) approach to implement multiple, rapid PDSA cycles to improve the three core areas identified with expectations of decreasing average patient wait time as well as improving the subjective experience of the CCHC staff, volunteers, and patients during clinic hours.

Analysis

Figure 2: (A) The process flow map shows how patients moved through the clinic. (B) The spaghetti diagram also demonstrates patient flow and help elucidate areas of congestion.

Figure 3: The IHI QI Team ran two rapid PDSA cycles for patient forms, four PDSA cycles for patient flow, and three PDSA cycles for volunteer coordination between April 3, 2016, and May 1st, 2016.

Plan Do Study Act

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Baseline Conditions

Medical Surveys
Medical students had confusion regarding patient order
Nursing volunteers had difficulty seeing basket where patients charts were placed upon checking in
CCHC staff and volunteers perceived the patient intake forms to be redundant and lengthy

Figure 1: The IHI QI Team attended clinic at CCHC two weeks before initiating any PDSA cycles to gather baseline information. (A) Subjective information was collected through surveys of CCHC volunteers and staff. (B) The QI Team reviewed historical data from the previous two months regarding average number of patients per day and average time spent visiting CCHC. (C) Average patient times at each stage of the clinic visit were recorded as well on 3/27/16.

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Lessons Learned
• Although target goal of reducing clinic time by 25% was not reached, the average total clinic time decreased by 9 minutes.
• Overall a subjective improvement in clinic experience:
  • 78% of CCHC staff members felt the checklist stickers on patient forms improved the process of managing charts
  • 67% surveyed found the revised patient intake and consultations forms were easier to understand than the previous forms
  • CCHC staff subjectively perceived improvements in communication, faster processes, more organized and better flow of patients
• Future Directions (to be implemented in Fall 2016):
  • Checklist sticker: continue to update as processes change
  • Patient form: continue to update and translate condensed form (main languages: Nepali, Burmese, Arabic)
  • Volunteer coordination: recommend single volunteer registration site that hold orientation tutorials, sign in sheet, etc.